


BUILDING AUTOMATION  
CONTROL TECHNOLOGY  
SENSOR TECHNOLOGY

**alre**



**HEATING TECHNOLOGY**  
energy-efficient and timeless



# ALRE HEATING TECHNOLOGY. **COMFORTABLE TEMPERATURE** IN EVERY ROOM.

In our range of heating technology products, you can find the perfect thermostat for any requirement. Configurable daily programs with display controllers ensure energy-efficient heating. Our surface-mounted thermostats are among the slimmest in the world and are hallmarked by timeless design, quality and long service life. They control and monitor the temperature in offices, homes, hotels and hospitals. Assorted variants meet any requirement. Our flush-mounted thermostats fit all switch ranges and are available in various RAL colours for optimal colour matching.

**alre thermostats:  
designed and made in Germany.**

## APPLICATION **EXAMPLES:**

- + Hot water underfloor heating
- + Electric underfloor heating systems
- + Natural stone heating systems
- + Night storage heating systems
- + Tiled stove heating systems
- + Partial air conditioners
- + Mobile radiators
- + Accessories such as terminal strips and actuators



## OVERVIEW

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### ROOM/FLOOR TEMPERATURE CONTROLLERS

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### TERMINAL STRIPS FOR HEATING MANIFOLDS / VALVE ACTUATORS

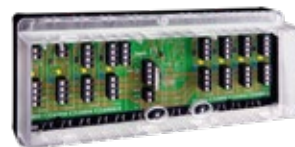
|                                     |    |
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**ROOM TEMPERATURE CONTROLLER, SURFACE-MOUNTED ULTRA-SLIM, RTBSB**



**ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSU**



**TERMINAL STRIP FOR HEATING MANIFOLD**



**ROOM/FLOOR TEMPERATURE CONTROLLER HTRUU**



## HEATING CONTROLLER OVERVIEW

| TYPE   | RTBSB-  |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----|
|  | 001.000 | 001.002 | 001.010 | 001.026 | 001.045 | 001.048 | 001.062 | 001.065 | 001.086 | 001.096 | 001.110 | 001.202 | 001.500 | 001.910 | 001.910/2 | 001.948/1 | 201.000 | 201.002 | 201.010 | 201.034 | 201.062 | 201.065 | 201.202 | 201.500 | 001.401 | 001.411 |    |
| PAGE   | 8       | 8       | 9       | 9       | 9       | 10      | 10      | 10      | 10      | 11      | 11      | 11      | 11      | 12      | 12        | 13        | <?>     | <?>     | <?>     | <?>     | <?>     | <?>     | <?>     | <?>     | <?>     | 18      | 19 |
| <b>HOUSING DESIGN</b>                        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Berlin 1000                                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           | X       | X       | X       | X       | X       | X       | X       | X       |         |         |    |
| Berlin 2000                                  | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X         | X         |         |         |         |         |         |         |         |         |         |         |    |
| Berlin 3000                                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Berlin flush-mounted                         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Berlin 2000 with plug                        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         | X       | X       |    |
| <b>SENSOR</b>                                |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Bimetal (NC contact)                         | X       | X       |         |         |         |         | X       |         | X       | X       |         | X       | X       |         |           |           | X       | X       |         | X       | X       |         | X       | X       | X       | X       | X  |
| Bimetal (toggler)                            |         |         | X       | X       | X       | X       |         | X       |         |         | X       |         |         | X       | X         | X         |         |         | X       |         |         | X       |         |         |         |         |    |
| NTC, internal                                |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| NTC, external                                |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| NTC for floor monitoring                     |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| <b>CONTROL TYPE</b>                          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Heating controller                           | X       | X       | X*      | X*      | X*      | X*      | X       | X*      | X       | X       | X*      | X       | X       | X*      | X*        | X*        | X       | X       | X*      | X       | X       | X*      | X       | X       | X       | X       | X  |
| Cooling function                             |         |         | X       |         | X       | X       |         | X       |         |         | X       |         |         | X       | X         | X         |         |         | X       |         |         | X       |         |         |         |         |    |
| Cooling function with fan output             |         |         |         | X       |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Model with clock                             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| <b>PIPE SYSTEM</b>                           |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Air conditioning controller in 2-pipe system |         |         | X       | X       | X       | X       |         | X       |         |         | X       |         |         | X       | X         | X         |         |         | X       |         |         | X       |         |         |         |         |    |
| Air conditioning controller in 4-pipe system |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| <b>APPLICATION</b>                           |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Natural stone heating                        |         |         |         |         |         |         |         |         | X       | X       |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Tiled stove heating                          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Electric direct heating systems              |         |         |         |         |         |         |         |         | X       | X       |         |         |         |         |           |           |         |         |         |         |         |         |         |         | X       | X       |    |
| Electric floor heating                       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Night storage heater                         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Hot water floor heating                      | X       | X       | X       | X       | X       | X       | X       | X       |         |         | X       | X       | X       | X       | X         | X         | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X  |
| Partial air conditioner                      |         |         | X       | X       | X       | X       |         | X       |         |         | X       |         |         | X       | X         | X         |         |         | X       |         |         | X       |         |         |         |         |    |
| <b>FEATURES</b>                              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Output 'Temperature reduction'               |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Input 'Temperature reduction'                |         | X       |         |         |         |         | X       |         |         |         | X       |         | X       | X       |           |           | X       |         |         | X       |         |         | X       |         |         |         |    |
| Switch 'On/Off'                              |         |         |         | X       |         |         | X       |         |         |         |         |         |         |         |           |           |         |         |         | X       |         |         |         |         |         |         |    |
| Switch 'Heating/Cooling'                     |         |         |         |         |         |         |         | X       |         |         |         |         |         |         |           |           |         |         |         |         |         | X       |         |         |         |         |    |
| Switch 'Heating/Off/Cooling'                 |         |         |         |         |         |         |         |         | X       |         |         |         |         |         |           |           |         |         |         |         |         |         | X       |         |         |         |    |
| Switch 'Reduction/Comfort/Automatic'         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Switch 'Auxiliary heating'                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Display                                      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Display with backlighting                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Indicator lamp 'Heating'                     |         |         |         |         |         |         | X       |         |         | X       |         |         |         |         |           |           |         |         |         |         | X       | X       |         |         |         |         |    |
| Indicator lamp 'Reduction'                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Indicator lamp 'Auxiliary heating'           |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| <b>TECHNOLOGY</b>                            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Control range -20 ... +30 °C                 |         |         |         |         | X       |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Control range 5 ... 30 °C                    | X       | X       | X       | X       |         |         | X       | X       | X       | X       | X       | X       | X       | X       | X         |           | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X  |
| Control range 10 ... 42 °C                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Control range 10 ... 50 °C                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| Control range 10 ... 60 °C                   |         |         |         |         |         | X       |         |         |         |         |         |         |         |         |           | X         |         |         |         |         |         |         |         |         |         |         |    |
| Control range 20 ... 80 °C                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |           |         |         |         |         |         |         |         |         |         |         |    |
| 3000 W switching power                       |         |         |         |         |         |         |         |         | X       | X       |         |         |         |         |           |           |         |         |         |         |         |         |         |         | X       | X       |    |
| Internal setting                             |         |         |         |         |         |         |         |         |         |         |         |         |         | X       | X         | X         |         |         |         |         |         |         |         |         |         |         |    |
| 2-wire connection                            |         |         |         |         |         |         |         |         |         |         |         |         | X       |         |           |           |         |         |         |         |         |         |         |         | X       |         |    |
| 24 V~  |         |         |         |         |         |         |         |         |         |         | X       |         |         |         | X         |           |         |         |         |         |         |         |         | X       |         |         |    |
| 230 V~                                       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       |         |         | X       | X       |           |           | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X  |
| 24 V~ or 230 V~                              |         |         |         |         |         |         |         |         |         | X       |         |         |         |         | X         |           |         |         |         |         |         |         |         |         |         |         |    |

x\* Heating controllers using normally open valve actuators

# HEATING CONTROLLER OVERVIEW

| TYPE   | RTBSU-  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---|
|  | 401.000 | 401.002 | 401.010 | 401.034 | 401.052 | 401.062 | 401.063 | 401.065 | 401.075 | 401.086 | 401.202 | 401.210 | 401.262 | 401.265 | 401.902 |   |
| PAGE   | 24      | 25      | 25      | 25      | 26      | 26      | 26      | 26      | 27      | 27      | 27      | 28      | 28      | 28      | 29      |   |
| <b>HOUSING DESIGN</b>                        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Berlin 1000                                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Berlin 2000                                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Berlin 3000                                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Berlin flush-mounted                         | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x |
| Berlin 2000 with plug                        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| <b>SENSOR</b>                                |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Bimetal (NC contact)                         | x       | x       |         | x       | x       | x       |         |         | x       | x       | x       |         | x       |         |         | x |
| Bimetal (toggler)                            |         |         | x       |         |         |         | x       | x       |         |         |         | x       |         | x       |         |   |
| NTC, internal                                |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| NTC, external                                |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| NTC for floor monitoring                     |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| <b>CONTROL TYPE</b>                          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Heating controller                           | x       | x       | x*      | x       | x       | x       | x       | x*      | x       | x       | x       | x*      | x       | x*      | x       | x |
| Cooling function                             |         |         | x       |         |         |         | x       | x       |         |         |         | x       |         | x       |         |   |
| Cooling function with fan output             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Model with clock                             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| <b>PIPE SYSTEM</b>                           |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Air conditioning controller in 2-pipe system |         |         | x       |         |         |         | x       | x       |         |         |         | x       |         |         | x       |   |
| Air conditioning controller in 4-pipe system |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| <b>APPLICATION</b>                           |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Natural stone heating                        |         |         |         |         |         |         |         |         |         | x       |         |         |         |         |         |   |
| Tiled stove heating                          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Electric direct heating systems              |         |         |         |         |         |         |         |         |         | x       |         |         |         |         |         |   |
| Electric floor heating                       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Night storage heater                         |         |         |         |         | x       |         |         |         |         |         |         |         |         |         |         |   |
| Hot water floor heating                      | x       | x       | x       | x       |         | x       | x       | x       | x       |         | x       | x       | x       | x       | x       | x |
| Partial air conditioner                      |         |         | x       |         |         |         | x       | x       |         |         |         | x       |         | x       |         |   |
| <b>FEATURES</b>                              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Output 'Temperature reduction'               |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Input 'Temperature reduction'                |         | x       | x       |         |         | x       |         |         | x       |         | x       |         | x       |         |         | x |
| Switch 'On/Off'                              |         |         |         |         |         | x       |         |         |         |         |         |         | x       |         |         |   |
| Switch 'Heating/Cooling'                     |         |         |         |         |         |         |         | x       |         |         |         |         |         |         | x       |   |
| Switch 'Heating/Off/Cooling'                 |         |         |         |         |         |         | x       |         |         |         |         |         |         |         |         |   |
| Switch 'Reduction/Comfort/Automatic'         |         |         |         |         |         |         |         |         | x       |         |         |         |         |         |         |   |
| Switch 'Auxiliary heating'                   |         |         |         |         | x       |         |         |         |         |         |         |         |         |         |         |   |
| Display                                      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Display with backlighting                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Indicator lamp 'Heating'                     |         |         |         | x       |         | x       |         |         |         |         |         |         | x       |         |         |   |
| Indicator lamp 'Reduction'                   |         |         |         |         |         |         |         |         | x       |         |         |         |         |         |         |   |
| Indicator lamp 'Auxiliary heating'           |         |         |         |         | x       |         |         |         |         |         |         |         |         |         |         |   |
| <b>TECHNOLOGY</b>                            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Control range -20 ... +30 °C                 |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Control range 5 ... 30 °C                    | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x |
| Control range 10 ... 42 °C                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Control range 10 ... 50 °C                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| Control range 10 ... 60 °C                   |         |         |         |         | x       |         |         |         |         |         |         |         |         |         |         | x |
| Control range 20 ... 80 °C                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| 3000 W switching power                       |         |         |         |         |         |         |         |         |         | x       |         |         |         |         |         |   |
| Internal setting                             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         | x |
| 2-wire connection                            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| 24 V~  |         |         |         |         |         |         |         |         |         |         |         | x       | x       | x       | x       |   |
| 230 V~                                       | x       | x       | x       | x       | x       | x       | x       | x       | x       | x       |         |         |         |         |         | x |
| 24 V~ or 230 V~                              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |



# HEATING CONTROLLER OVERVIEW

| TYPE | FTR     |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|      | 101.000 | 101.002 | 101.010 | 101.034 | 101.052 | 101.062 | 101.063 | 101.065 | 101.075 | 101.086 | 101.202 | 101.210 | 101.262 | 101.265 | 101.902 |
| PAGE | 44      | 45      | 45      | 45      | 46      | 46      | 46      | 46      | 47      | 47      | 47      | 48      | 48      | 48      | 49      |

## HOUSING DESIGN

|                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Berlin 1000           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Berlin 2000           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Berlin 3000           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Berlin flush-mounted  | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Berlin 2000 with plug |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

## SENSOR

|                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bimetal (NC contact)     | x | x |   | x | x | x |   |   | x | x | x |   | x |   | x |
| Bimetal (toggle)         |   |   | x |   |   |   | x | x |   |   |   | x |   | x |   |
| NTC, internal            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| NTC, external            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| NTC for floor monitoring |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

## CONTROL TYPE

|                                  |   |   |    |   |   |   |   |    |   |   |   |    |   |    |   |
|----------------------------------|---|---|----|---|---|---|---|----|---|---|---|----|---|----|---|
| Heating controller               | x | x | x* | x | x | x | x | x* | x | x | x | x* | x | x* | x |
| Cooling function                 |   |   | x  |   |   |   | x | x  |   |   |   | x  |   | x  |   |
| Cooling function with fan output |   |   |    |   |   |   |   |    |   |   |   |    |   |    |   |
| Model with clock                 |   |   |    |   |   |   |   |    |   |   |   |    |   |    |   |

## PIPE SYSTEM

|  |  |  |   |  |  |  |   |   |  |  |  |   |  |   |  |
|--|--|--|---|--|--|--|---|---|--|--|--|---|--|---|--|
| Air conditioning controller in 2-pipe system |  |  | x |  |  |  | x | x |  |  |  | x |  | x |  |
| Air conditioning controller in 4-pipe system |  |  |   |  |  |  |   |   |  |  |  |   |  |   |  |

## APPLICATION

|                                 |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |
|---------------------------------|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|
| Natural stone heating           |   |   |   |   |  |   |   |   |   | x |   |   |   |   |   |
| Tiled stove heating             |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |
| Electric direct heating systems |   |   |   |   |  |   |   |   |   | x |   |   |   |   |   |
| Electric floor heating          |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |
| Night storage heater            |   |   |   |   |  | x |   |   |   |   |   |   |   |   |   |
| Hot water floor heating         | x | x | x | x |  | x | x | x | x |   | x | x | x | x | x |
| Partial air conditioner         |   |   | x |   |  |   | x | x |   |   |   | x |   | x |   |

## FEATURES

|                                      |   |  |   |  |  |   |   |   |   |  |   |  |   |   |  |
|--------------------------------------|---|--|---|--|--|---|---|---|---|--|---|--|---|---|--|
| Output 'Temperature reduction'       |   |  |   |  |  |   |   |   |   |  |   |  |   |   |  |
| Input 'Temperature reduction'        | x |  |   |  |  | x |   |   |   |  | x |  | x | x |  |
| Switch 'On/Off'                      |   |  | x |  |  | x |   |   |   |  |   |  |   |   |  |
| Switch 'Heating/Cooling'             |   |  |   |  |  |   |   | x |   |  |   |  |   |   |  |
| Switch 'Heating/Off/Cooling'         |   |  |   |  |  |   | x |   |   |  |   |  |   |   |  |
| Switch 'Reduction/Comfort/Automatic' |   |  |   |  |  |   |   |   |   |  |   |  |   |   |  |
| Switch 'Auxiliary heating'           |   |  |   |  |  |   |   |   |   |  |   |  |   |   |  |
| Display                              |   |  |   |  |  |   |   |   |   |  |   |  |   |   |  |
| Display with backlighting            |   |  |   |  |  |   |   |   |   |  |   |  |   |   |  |
| Indicator lamp 'Heating'             |   |  |   |  |  |   | x |   | x |  |   |  |   |   |  |
| Indicator lamp 'Reduction'           |   |  |   |  |  |   |   |   |   |  |   |  |   |   |  |
| Indicator lamp 'Auxiliary heating'   |   |  |   |  |  |   |   |   |   |  |   |  |   |   |  |

## TECHNOLOGY

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Control range -20 ... +30 °C |   |   |   | x |   |   |   |   |   |   |   |   |   |   |   |
| Control range 5 ... 30 °C    | x | x | x |   |   | x | x | x | x | x | x | x | x | x |   |
| Control range 10 ... 42 °C   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Control range 10 ... 50 °C   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Control range 10 ... 60 °C   |   |   |   |   |   | x |   |   |   |   |   |   |   |   | x |
| Control range 20 ... 80 °C   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 3000 W switching power       |   |   |   |   |   |   |   | x | x |   |   |   |   |   |   |
| Internal setting             |   |   |   |   |   |   |   |   |   |   |   |   | x | x | x |
| 2-wire connection            |   |   |   |   |   |   |   |   |   |   |   | x |   |   |   |
| 24 V~                        |   |   |   |   |   |   |   |   |   |   | x |   |   |   |   |
| 230 V~                       | x | x | x | x | x | x | x | x | x |   |   | x | x |   |   |
| 24 V~ or 230 V~              |   |   |   |   |   |   |   |   |   | x |   |   |   |   | x |

# HEATING CONTROLLER OVERVIEW

| TYPE | HTRRUu  | HTRRB-  | HTRRBu- | RTERU-  |            | FETR       |            |         |         |         |
|------|---------|---------|---------|---------|------------|------------|------------|---------|---------|---------|
|      | 210.021 | 011.010 | 011.410 | 110.021 | 110.117/21 | 010.715#21 | 010.715#00 | 101.700 | 101.715 | 101.716 |
| PAGE | 63      | 66      | 66      | 68      | 20         | 70         | 70         | 71      | 71      | 71      |

## HOUSING DESIGN

|                       |   |   |   |   |   |   |   |   |   |   |
|-----------------------|---|---|---|---|---|---|---|---|---|---|
| Berlin 1000           |   |   |   |   |   |   |   |   |   |   |
| Berlin 2000           |   | x | x |   |   |   |   |   |   |   |
| Berlin 3000           |   |   |   | x | x |   |   |   |   |   |
| Berlin flush-mounted  | x |   |   |   |   | x | x | x | x | x |
| Berlin 2000 with plug |   |   |   |   |   |   |   |   |   |   |

## SENSOR

|                          |   |   |   |   |   |   |   |   |   |   |
|--------------------------|---|---|---|---|---|---|---|---|---|---|
| Bimetal (NC contact)     |   |   |   |   |   |   |   |   |   |   |
| Bimetal (toggler)        |   |   |   |   |   |   |   |   |   |   |
| NTC, internal            | x |   |   |   | x |   |   |   |   |   |
| NTC, external            | x | x | x | x |   | x | x | x | x | x |
| NTC for floor monitoring | x |   |   |   |   |   |   |   |   |   |

## CONTROL TYPE

|                                  |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|
| Heating controller               | x | x | x | x | x | x | x | x | x | x |
| Cooling function                 |   |   |   |   |   |   |   |   |   |   |
| Cooling function with fan output |   |   |   |   |   |   |   |   |   |   |
| Model with clock                 | x |   |   | x | x |   |   |   |   |   |

## PIPE SYSTEM

|  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
| Air conditioning controller in 2-pipe system |  |  |  |  |  |  |  |  |  |  |
| Air conditioning controller in 4-pipe system |  |  |  |  |  |  |  |  |  |  |

## APPLICATION

|                                 |   |   |   |   |   |   |   |   |   |   |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|
| Natural stone heating           | x |   |   |   | x |   |   |   |   |   |
| Tiled stove heating             |   |   | x |   |   |   |   |   |   |   |
| Electric direct heating systems | x |   |   |   | x |   |   |   |   |   |
| Electric floor heating          | x | x |   | x |   | x | x | x | x | x |
| Night storage heater            |   |   |   |   |   |   |   |   |   |   |
| Hot water floor heating         | x |   |   | x | x | x | x | x | x | x |
| Partial air conditioner         |   |   |   |   |   |   |   |   |   |   |

## FEATURES

|                                      |  |   |  |   |   |   |   |   |   |   |
|--------------------------------------|--|---|--|---|---|---|---|---|---|---|
| Output 'Temperature reduction'       |  |   |  | x | x |   |   |   |   |   |
| Input 'Temperature reduction'        |  | x |  |   |   | x | x | x | x | x |
| Switch 'On/Off'                      |  |   |  |   | x | x | x |   | x | x |
| Switch 'Heating/Cooling'             |  |   |  |   |   |   |   |   | x |   |
| Switch 'Heating/Off/Cooling'         |  |   |  |   |   |   |   |   |   |   |
| Switch 'Reduction/Comfort/Automatic' |  |   |  | x | x |   |   |   |   |   |
| Switch 'Auxiliary heating'           |  |   |  |   |   |   |   |   |   |   |
| Display                              |  |   |  |   | x |   |   |   |   |   |
| Display with backlighting            |  |   |  | x |   |   |   |   |   |   |
| Indicator lamp 'Heating'             |  |   |  |   |   | x | x | x | x | x |
| Indicator lamp 'Reduction'           |  |   |  |   |   |   |   | x | x | x |
| Indicator lamp 'Auxiliary heating'   |  |   |  |   |   |   |   |   |   |   |

## TECHNOLOGY

|                              |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|
| Control range -20 ... +30 °C |   |   |   |   |   |   |   |   |   |   |
| Control range 5 ... 30 °C    | x | x | x |   | x |   |   |   |   |   |
| Control range 10 ... 42 °C   |   |   |   | x |   |   |   |   |   | x |
| Control range 10 ... 50 °C   |   |   |   |   |   | x | x |   | x |   |
| Control range 10 ... 60 °C   |   |   |   |   |   |   |   | x |   |   |
| Control range 20 ... 80 °C   |   |   |   |   |   |   |   |   |   |   |
| 3000 W switching power       |   |   |   |   |   |   |   |   |   |   |
| Internal setting             |   |   |   |   |   |   |   | x |   |   |
| 2-wire connection            |   |   |   |   |   |   |   |   |   |   |
| 24 V~                        |   |   |   |   |   |   |   |   |   |   |
| 230 V~                       | x | x | x | x | x | x | x | x | x | x |
| 24 V~ or 230 V~              |   |   |   |   |   |   |   |   |   |   |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB

## SURFACE-MOUNTED INSTALLATION – DESIGN BERLIN 2000

**TECHNICAL DATA**

|  |  |
|--|--|
| <b>Design:</b>                           | Berlin 2000  |
| <b>Surface finish:</b>                   | matt   |
| <b>Housing colour:</b>                   | pure white, like RAL 9010  |
| <b>Housing material:</b>                 | ABS plastic  |
| <b>Storage temperature:</b>              | –20 ... +70 °C   |
| <b>Permissible atmospheric humidity:</b> | Max. 95% rel. humidity, non-condensing                             |
| <b>Electrical connection:</b>            | screw-type terminals 0.12 mm <sup>2</sup> to 2.5 mm <sup>2</sup>   |
| <b>Mounting/ attachment:</b>             | surface- / wall-mounting (4-hole assembly on flush-mounted socket) |
| <b>Protection rating:</b>                | IP30   |
| <b>Safety and EMC:</b>                   | according to DIN EN 60730  |
| <b>Average power consumption:</b>        | < 0.5 W  |
| <b>Switching element:</b>                | bimetallic contact   |
| <b>Sensor:</b>                           | bimetal  |
| <b>General features:</b>                 | thermal feedback   |

**APPLICATION**


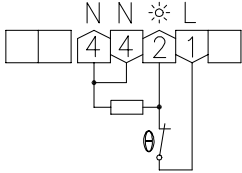

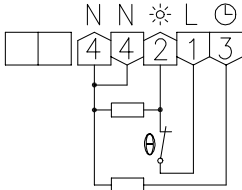
Control or monitoring of temperatures in closed spaces. Suitable for all heating systems.

Valve actuator: normally closed. If normally open heating valves are available, they should be connected with the cooling output of the change-over switch (toggler).

Up to a maximum of 10 actuators for valves can be connected (normally closed, NC); with a toggler, on the NO contact, up to 5 units (in this context, please check the switching capacity listed in the technical specifications).

Installation note: Owing to the existing wiring space in the controller itself, installation on a flush-mounted socket is recommended, but it can also be performed on a plane, non-conducting substrate.

Explanations of technical terms can be found in the annex to the product catalogue or at [www.alre.de](http://www.alre.de).


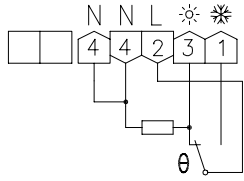

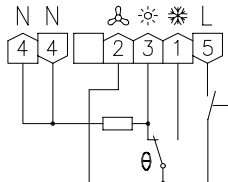

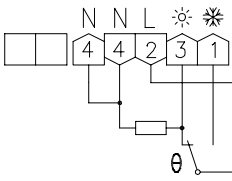
| TYPE/IMAGE  | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|---|---|---------|
|  | MA010000 | <b>General features:</b> Mechanical range limitation; scale: Degrees Celsius; external setting<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Ambient temperature:</b> 0 to 30 °C<br><b>Protection class:</b> II, if properly mounted<br><b>Max. switching current:</b> 10 (4) A<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 2300 W<br><b>Switching contact:</b> NC contact (max. 10 actuators)<br><b>Output signal:</b> switching (230 VAC, 50 Hz)<br><b>Control function:</b> Heating<br><b>Control range:</b> 5 to 30 °C<br><b>Hysteresis:</b> Approx. 0.5 K at a temperature change of max. 4 K/h   |  |         |
|  | MA010100 | <b>General features:</b> ECO function; mechanical range limitation; scale: degrees Celsius; external setting<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Ambient temperature:</b> 0 to 30 °C<br><b>Protection class:</b> II, if properly mounted<br><b>Max. switching current:</b> 10 (4) A<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 2300 W<br><b>Switching contact:</b> NC contact (max. 10 actuators)<br><b>Output signal:</b> switching (230 VAC, 50 Hz)<br><b>Control function:</b> Heating<br><b>Control range:</b> 5 to 30 °C<br><b>Hysteresis:</b> Approx. 0.5 K at a temperature change of max. 4 K/h<br><b>Input 'temperature reduction':</b> Approx. 4 K (230 VAC, 50 Hz) |  |         |





# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB


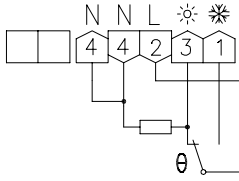

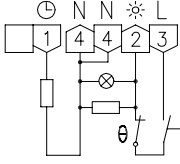

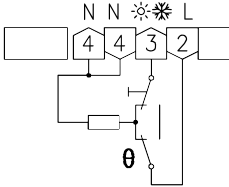

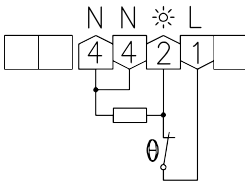
## SURFACE-MOUNTED INSTALLATION – DESIGN BERLIN 2000

| TYPE/IMAGE   | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|--|----------|---|---|---------|
| RTBSB-001.010<br>   | MA010200 | <p><b>General features:</b> Mechanical range limitation; scale: degrees Celsius; external setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching current:</b> Heating (terminal 3) 10 (4) A, cooling (terminal 1) 5 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> Terminal 3: 2300 W, terminal 1: 1150 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 10 actuators output terminal 3, max. 5 actuators output terminal 1)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating or cooling</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> Approx. 0.5 K at a temperature change of max. 4 K/h</p>  |    |         |
| RTBSB-001.026<br>   | MA010900 | <p><b>General features:</b> mechanical range limitation; scale: Degrees Celsius; <b>on / off switch</b>; external setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching current:</b> Heating (terminal 3) 10 (4) A, cooling (terminal 1) 5 (2) A, fan (terminal 2) 5 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> terminal 3: 2300 W, terminal 1: 1150 W, terminal 2: 1150 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 10 actuators output terminal 3, max. 5 actuators output terminal 1)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz); fan permanently operating (230 VAC, 50 Hz) if device has been switched on</p> <p><b>Control function:</b> Heating or cooling</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> Approx. 0.5 K at a temperature change of max. 4 K/h</p> |    |         |
| RTBSB-001.045<br> | MA011200 | <p><b>General features:</b> Mechanical range limitation; scale: Degrees Celsius; external setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> -20 to +30 °C</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching current:</b> Heating (terminal 3) 10 (4) A, cooling (terminal 1) 5 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> terminal 3: 2300 W, terminal 1: 1150 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 10 actuators output terminal 3, max. 5 actuators output terminal 1)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating or cooling</p> <p><b>Control range:</b> -20 to +30 °C</p> <p><b>Hysteresis:</b> Approx. 1.5 K at a temperature change of max. 4 K/h</p>  |  |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB


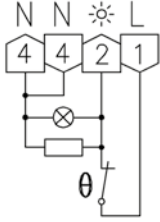

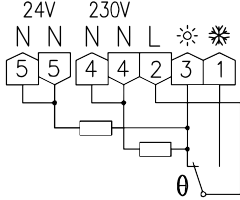

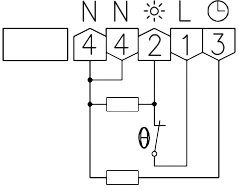

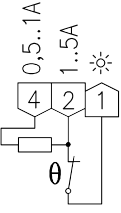
## SURFACE-MOUNTED INSTALLATION – DESIGN BERLIN 2000

| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
|    | MA011300 | <p><b>General features:</b> Mechanical range limitation; scale: Degrees Celsius; external setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 10 to 60 °C</p> <p><b>Protection class:</b> II, if properly mounted Max. switching current: heating (terminal 3) 10 (4) A, cooling (terminal 1) 5 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> terminal 3: 2300 W, terminal 1: 1150 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 10 actuators output terminal 3, max. 5 actuators output terminal 1)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating or cooling</p> <p><b>Control range:</b> 10 to 60 °C</p> <p><b>Hysteresis:</b> approx. 1.5 K at a temperature change of max. 4 K/h</p> |    |         |
|    | MA012400 | <p><b>General features:</b> ECO function; 'heating' display; mechanical range limitation; scale: degrees Celsius; on / off switch; external setting</p> <p><b>Input temperature reduction:</b> approx. 4 K (230 VAC, 50 Hz)</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching current:</b> 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Output signal:</b> heating, switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> Approx. 0.5 K at a temperature change of max. 4 K/h</p>                      |    |         |
|  | MA010600 | <p><b>General features:</b> mechanical range limitation; scale: degrees Celsius; heating / cooling switch; external setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching current:</b> 5 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 1150 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 5 actuators)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating or cooling</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> Approx. 0.5 K at a temperature change of max. 4 K/h</p>  |  |         |
|  | MA010800 | <p><b>General features:</b> mechanical range limitation; 3000 W switching power, for electric direct heating systems, natural stone heating; multi-digit display 1 to 6; external setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching current:</b> 13 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 3000 W</p> <p><b>Switching contact:</b> NC contact</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> heating</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> approx. 1 K at a temperature change of max. 4 K/h</p> <p><b>Accessories:</b> can be combined with plug-in socket JZ-19</p>                  |  |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB


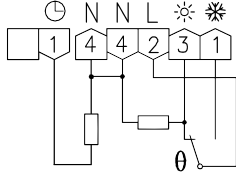

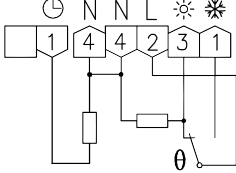
## SURFACE-MOUNTED INSTALLATION – DESIGN BERLIN 2000

| TYPE/IMAGE  | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|---|---|---------|
|    | MA012500 | like RTBSB-001.086, but with 'heating' display (LED red)  |    |         |
|    | MA012701 | <p><b>General features:</b> Mechanical range limitation; scale: degrees Celsius; external setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz or 24 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> II, if properly mounted; with 24 V, protection class III</p> <p><b>Max. switching current:</b> heating (terminal 3) 230 VAC 10 (4) A or 24 VAC 2 (2) A, cooling (terminal 1) 5 (2) A or 24 VAC 2 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 24 VAC, 50 Hz</p> <p><b>Switching power:</b> Terminal 3: 2300 W at 230 VAC, 48 W at 24 VAC, terminal 1: 1150 W at 230 VAC, 48 W at 24 VAC</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 5 actuators)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz or 24 VAC, 50 Hz)</p> <p><b>Output signal:</b> cooling, switching (230 VAC, 50 Hz or 24 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating or cooling</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> Approx. 0.5 K at a temperature change of max. 4 K/h</p> |    |         |
|  | MA011700 | <p><b>General features:</b> ECO function; mechanical range limitation; scale: degrees Celsius; external setting</p> <p><b>Operating voltage:</b> 24 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> III</p> <p><b>Max. switching current:</b> 1 (1) A</p> <p><b>Max. switching voltage:</b> 24 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 24 VAC, 50 Hz</p> <p><b>Switching power:</b> 24 W</p> <p><b>Switching contact:</b> NC contact (max. 5 actuators)</p> <p><b>Output signal:</b> switching (24 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> approx. 0.5 K at a temperature change of max. 4 K/h</p> <p><b>Input temperature reduction:</b> approx. 4 K (24 VAC, 50 Hz)</p>   |  |         |
|  | MA013401 | <p><b>General features:</b> 2-wire room temperature controller; mechanical range limitation; multi-digit display * to 6; external setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching current:</b> 1 A or 5 A (see circuit diagram)</p> <p><b>Min. switching current:</b> 0.5 A or 1 A (see circuit diagram)</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 230 W or 1150 W (see circuit diagram)</p> <p><b>Switching contact:</b> NC contact</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> approx. 1 K at a temperature change of max. 4 K/h (load-dependent)</p>   |  |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB


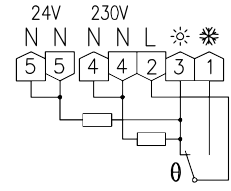
## SURFACE-MOUNTED INSTALLATION – DESIGN BERLIN 2000

| TYPE/IMAGE   | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|--|----------|---|---|---------|
| RTBSB-001.910<br>   | MA012000 | <p><b>General features:</b> ECO function; scale: Degrees Celsius; internal setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching current:</b> heating (terminal 3) 10 (4) A, cooling (terminal 1) 5 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> Terminal 3: 2300 W, terminal 1: 1150 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 10 actuators output terminal 3, max. 5 actuators output terminal 1)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating or cooling</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> Approx. 0.5 K at a temperature change of max. 4 K/h</p> <p><b>Input 'temperature reduction':</b> Approx. 4 K (230 VAC, 50 Hz)</p> |  |         |
| RTBSB-001.910/2<br> | MA012100 | <p><b>General features:</b> ECO function; scale: Degrees Celsius; internal setting</p> <p><b>Operating voltage:</b> 24 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> III</p> <p><b>Max. switching current:</b> 1 (1) A</p> <p><b>Max. switching voltage:</b> 24 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 24 VAC, 50 Hz</p> <p><b>Switching power:</b> 24 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 3 actuators)</p> <p><b>Output signal:</b> switching (24 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating or cooling</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> approx. 0.5 K at a temperature change of max. 4 K/h</p> <p><b>Input temperature reduction:</b> approx. 4 K (24 VAC, 50 Hz)</p>   |  |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB

## SURFACE-MOUNTED INSTALLATION – DESIGN BERLIN 2000

| TYPE/IMAGE   | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|--|----------|---|---|---------|
| RTBSB-001.948/1<br> | MA012600 | <p><b>General features:</b> Scale: degrees Celsius; internal setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz or 24 VAC, 50 Hz</p> <p><b>Ambient temperature: 10 to 60 °C</b></p> <p><b>Protection class:</b> II, if properly mounted; with 24 V, protection class III</p> <p><b>Max. switching current:</b> heating (terminal 3) 230 VAC 10 (4) A or 24 VAC 2 (2) A, cooling (terminal 1) 5 (2) A or 24 VAC 2 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 24 VAC, 50 Hz</p> <p><b>Switching power:</b> terminal 3: 2300 W at 230 VAC, 48 W at 24 VAC, terminal 1: 1150 W at 230 VAC, 48 W at 24 VAC</p> <p><b>Switching contact:</b> changeover switch (toggler, max. 10 actuators output terminal 3, max. 5 actuators output terminal 1)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz or 24 VAC, 50 Hz)</p> <p><b>Control function:</b> heating or cooling</p> <p><b>Control range:</b> 10 to 60 °C</p> <p><b>Hysteresis:</b> approx. 1.5 K at a temperature change of max. 4 K/h</p> |  |         |

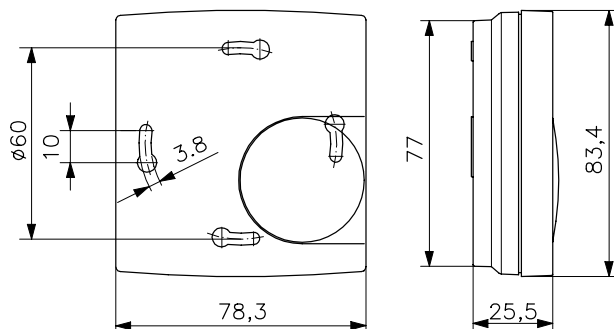
Accessories: terminal strips V00xx, suitable valve actuators ZB00A



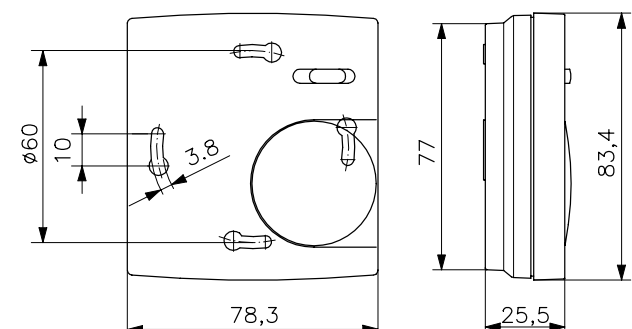
You can find other / similar controllers with outputs for heating / cooling and noiseless controllers in the Air Conditioning Technology chapter (note: applies to KTRTB, for example)

### ILLUSTRATIONS

RTBSB



RTBSB with switch





# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB

## SURFACE-MOUNTED 'SUPER-THIN' INSTALLATION – DESIGN BERLIN 1000

**TECHNICAL DATA**

|  |   |
|--|---|
| <b>Design:</b>                           | Berlin 1000   |
| <b>Surface finish:</b>                   | glossy  |
| <b>Housing colour:</b>                   | pure white, like RAL 9010   |
| <b>Housing material:</b>                 | ABS plastic   |
| <b>Ambient temperature:</b>              | 0 ... 30 °C   |
| <b>Storage temperature:</b>              | -20 ... +70 °C  |
| <b>Permissible atmospheric humidity:</b> | Max. 95% rel. humidity, non-condensing                            |
| <b>Electrical connection:</b>            | screw-type terminals 0.33 mm <sup>2</sup> to 1.5 mm <sup>2</sup>  |
| <b>Mounting / attachment:</b>            | Surface / wall mounting (4-hole assembly on flush-mounted socket) |
| <b>Protection rating:</b>                | IP30  |
| <b>Safety and EMC:</b>                   | according to DIN EN 60730   |
| <b>Average power consumption:</b>        | < 0.25 W  |
| <b>Max. switching current:</b>           | 2 (1) A   |
| <b>Switching element:</b>                | bimetallic contact  |
| <b>Sensor:</b>                           | bimetal   |
| <b>Control range:</b>                    | 5 ... 30 °C   |
| <b>Hysteresis:</b>                       | approx. 0.5 K at a temperature change of max. 4 K/h               |
| <b>General features:</b>                 | mechanical range limitation; thermal feedback; external setting   |

**APPLICATION**


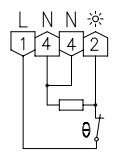



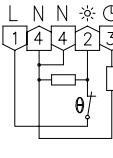
Control or monitoring of temperatures in closed spaces.

Valve actuator: normally closed. If normally open heating valves are available, they should be connected with the cooling output of the changeover switch (toggler).

Up to a maximum of 10 actuators for valves can be connected (normally closed, NC); with a toggler, on the NO contact, up to 5 units (in this context, please check the switching capacity listed in the technical specifications).

Installation note: Owing to the existing wiring space in the controller itself, installation on a flush-mounted socket is recommended, but it can also be performed on a plane, non-conducting substrate.


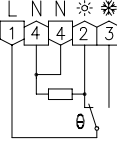

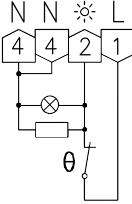

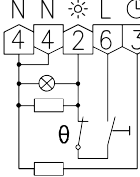

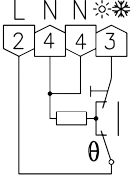


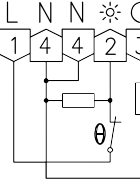
Explanations of technical terms can be found in the annex to the product catalogue or at [www.alre.de](http://www.alre.de).

| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
|  | MA300000 | <b>General features:</b> scale: degrees Celsius<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Protection class:</b> II, if properly mounted<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 460 W<br><b>Switching contact:</b> NC contact (max. 10 actuators)<br><b>Output signal:</b> switching (230 VAC, 50 Hz)<br><b>Control function:</b> heating   |  |         |
|  | MA300008 | Like RTBSB-201.000 but with multi-digit display 1 to 6   |   |         |
|  | MA300800 | Like RTBSB-201.000 but with housing colour: Traffic / studio white, similar to RAL 9016  |   |         |
|  | MA300100 | <b>General features:</b> ECO function; scale: degrees Celsius<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Protection class:</b> II, if properly mounted<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 460 W<br><b>Switching contact:</b> NC contact (max. 10 actuators)<br><b>Output signal:</b> switching (230 VAC, 50 Hz)<br><b>Control function:</b> heating<br><b>Input temperature reduction:</b> approx. 3 K (230 VAC, 50 Hz) |  |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB


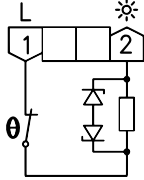
## SURFACE-MOUNTED 'SUPER-THIN' INSTALLATION – DESIGN BERLIN 1000

| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
|    | MA300200 | <p><b>General features:</b> scale: Degrees Celsius</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 460 W</p> <p><b>Switching contact:</b> changeover switch (toggler, max. 10 actuators (NC contact), max. 5 actuators (NO contact))</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating or cooling</p>   |    |         |
|    | MA301400 | <p><b>General features:</b> 'heating' display; scale: degrees Celsius</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 460 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> heating</p>   |    |         |
|    | MA300400 | <p><b>General features:</b> ECO function; 'heating' display; scale: degrees Celsius; <b>on/off switch</b></p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 460 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> heating</p> <p><b>Input temperature reduction:</b> approx. 3 K (230 VAC, 50 Hz)</p> |   |         |
|  | MA300500 | <p><b>General features:</b> Climate controller for 2-pipe systems, especially heat pumps; scale: Degrees Celsius; 'heating/cooling' switch</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 460 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 5 actuators)</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> Heating or cooling</p>              |  |         |
|  | MA300502 | Like RTBSB-201.065 but with multi-digit display 1 to 6   |   |         |
|  | MA302100 | <p><b>General features:</b> ECO function; scale: degrees Celsius</p> <p><b>Operating voltage:</b> 24 VAC, 50 Hz</p> <p><b>Protection class:</b> III</p> <p><b>Max. switching voltage:</b> 24 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 24 VAC, 50 Hz</p> <p><b>Switching power:</b> 48 W</p> <p><b>Switching contact:</b> NC contact (max. 5 actuators)</p> <p><b>Output signal:</b> switching (24 VAC, 50 Hz)</p> <p><b>Control function:</b> heating</p> <p><b>Input temperature reduction:</b> approx. 3 K (24 VAC, 50 Hz)</p>   |  |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB




## SURFACE-MOUNTED 'SUPER-THIN' INSTALLATION – DESIGN BERLIN 1000

| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
|  | MA304000 | <p><b>General features:</b> 2-wire room temperature controller; multi-digit display * to 6</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Ambient temperature:</b> 0 to 30 °C</p> <p><b>Protection class:</b> II, if properly mounted</p> <p><b>Max. switching current:</b> 20 mA</p> <p><b>Min. switching current:</b> 5 mA</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 4.6 W (max. 2 actuators)</p> <p><b>Switching contact:</b> NC contact</p> <p><b>Output signal:</b> switching (230 VAC, 50 Hz)</p> <p><b>Control function:</b> heating</p> <p><b>Control range:</b> 5 to 30 °C</p> <p><b>Hysteresis:</b> approx. 0.5 K at a temperature change of max. 4 K/h (load-dependent)</p> |  |         |

Accessories: terminal strips VOOxx, suitable valve actuators ZBOOA

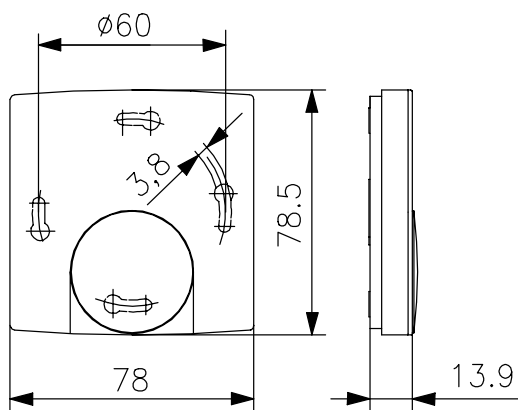


You can find other / similar controllers with outputs for heating/cooling and noiseless controllers in the 'Air Conditioning Technology' chapter (note: applies to KTRTB, for example).

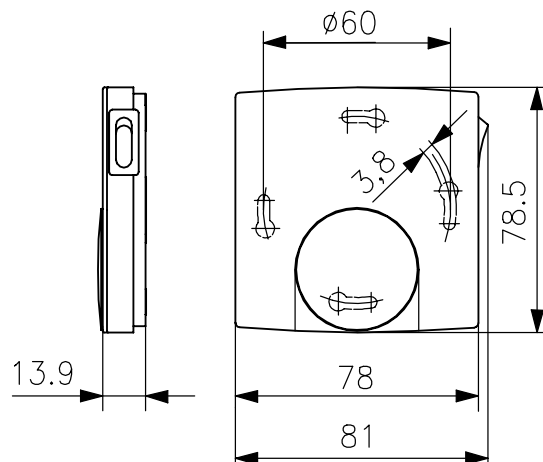
| ACCESSORIES   | ITEM NO. | FEATURES  | EURO/PG |
|---|----------|---|---------|
|   | MN990006 | Adapter frame for mounting room temperature controllers of the Berlin 1000 series in flush-mounted sockets up to 80x80 mm |         |
|  | MA990000 | Adjusting knob for B1000 series devices, scale: Degrees Celsius, pure white glossy  |         |
|  | MA990001 | Adjusting knob for B1000 series devices, multi-digit display 1 to 6, pure white glossy                                    |         |

### ILLUSTRATIONS

RTBSB-201.xxx / KTRTB



RTBSB-201.xxx with ON / OFF switch at the side









# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB

## SURFACE-MOUNTED OR PLUG-IN INSTALLATION – DESIGN BERLIN



### TECHNICAL DATA



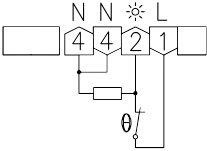

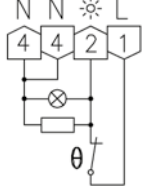

|  |   |
|--|---|
| <b>Design:</b>                           | Berlin 2000                                       |
| <b>Surface finish:</b>                   | matt  |
| <b>Housing colour:</b>                   | pure white, like RAL 9010                         |
| <b>Housing material:</b>                 | ABS plastic                                       |
| <b>Operating voltage:</b>                | 230 V AC, 50 Hz                                   |
| <b>Ambient temperature:</b>              | 0 ... 30 °C                                       |
| <b>Storage temperature:</b>              | -20 ... +70 °C                                    |
| <b>Permissible atmospheric humidity:</b> | Max. 95% rel. humidity, non-condensing            |
| <b>Protection rating:</b>                | IP30  |
| <b>Protection class:</b>                 | II for loads of protection classes I and II       |
| <b>Safety and EMC:</b>                   | according to DIN EN 60730                         |
| <b>Max. switching voltage:</b>           | 230 V AC, 50 Hz                                   |
| <b>Min. switching voltage:</b>           | 230 V AC, 50 Hz                                   |
| <b>Switching element:</b>                | bimetallic contact                                |
| <b>Switching contact:</b>                | NC contact  |
| <b>Output signal:</b>                    | switching (230 VAC, 50 Hz)                        |
| <b>Sensor:</b>                           | bimetal   |
| <b>Control function:</b>                 | Heating   |
| <b>Control range:</b>                    | 5 ... 30 °C                                       |
| <b>Hysteresis:</b>                       | approx. 1 K at a temperature change of max. 4 K/h |

### APPLICATION

For controlling the room temperature for radiators, heating chimneys, direct electric heating systems, marble heating systems etc.

Attention! For loads > 2,300 W, the wall socket must be designed for 16 A (danger of fire).


The plugs are designed in such a way that they can also be used in sockets with a central pin (for example, as used in France).

| TYPE/IMAGE   | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|--|----------|--|---|---------|
| JZ-19<br>         | MN990003 | <b>General features:</b> plug-in socket (as with RTBSB-001.411 / RTBSB-001.474) completely pre-wired<br><b>Mounting / attachment:</b> can be fitted with room thermostats RTBSB-001.xxx<br><b>Protection rating:</b> depends on the pre-fitted room thermostat<br><b>Protection class:</b> depends on the pre-fitted room thermostat<br><b>Max. switching current:</b> depends on the pre-fitted room thermostat<br><b>Switching power:</b> 3000 W   |   |         |
| RTBSB-001.086<br> | MA010800 | <b>General features:</b> mechanical range setting; 3000 W switching power for electric direct heating systems, natural stone heating; thermal feedback; multi-digit display 1 to 6; external setting<br><b>Electrical connection:</b> screw-type terminals 0.12 mm <sup>2</sup> to 2.5 mm <sup>2</sup><br><b>Average power consumption:</b> <0.5 W<br><b>Max. switching current:</b> 13 (4) A<br><b>Switching power:</b> 3000 W<br><b>Accessories:</b> can be combined with plug-in socket JZ-19   |  |         |
| RTBSB-001.096<br> | MA012500 | like RTBSB-001.086, but with 'heating' display (LED red)   |  |         |
| RTBSB-001.401<br> | MA013100 | <b>General features:</b> mechanical range limitation; 3000 W switching power for electric direct heating systems, natural stone heating; multi-digit display 1 to 6; external setting<br><b>Electrical connection:</b> Schuko adapters<br><b>Mounting / attachment:</b> optionally surface/wall mounting (4-hole assembly on flush-mounted socket) or with adapter plate (2-hole assembly) for wall hanging<br><b>Average power consumption:</b> <0.1 W<br><b>Max. switching current:</b> 13 (4) A<br><b>Switching power:</b> 3000 W<br><b>Connecting cable:</b> 1.5 m |   |         |



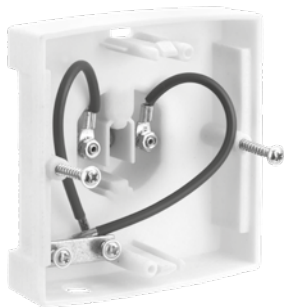
# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSB

## SURFACE-MOUNTED OR PLUG-IN INSTALLATION – DESIGN BERLIN

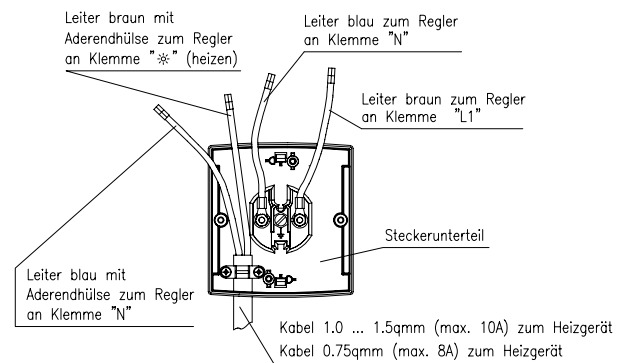
| TYPE/IMAGE  | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM | EURO/PG |
|---|----------|---|-----------------|---------|
|  | MA013200 | <p><b>General features:</b> mechanical range limitation; 3000 W switching power for electric direct heating systems, natural stone heating; multi-digit display 1 to 6; external setting</p> <p><b>Electrical connection:</b> pre-fitted Schuko plug-in socket JZ-19 at the controller, 1.5-m cable with Schuko coupling</p> <p><b>Mounting/attachment:</b> ready-to-plug</p> <p><b>Average power consumption:</b> &lt;0.1 W</p> <p><b>Max. switching current:</b> 13 (4) A</p> <p><b>Switching power:</b> 3000 W</p> <p><b>Hysteresis:</b> approx. 1 K at a temperature change of max. 4 K/h</p> |                 |         |

### ILLUSTRATIONS

Plug-in socket



Plug-in socket

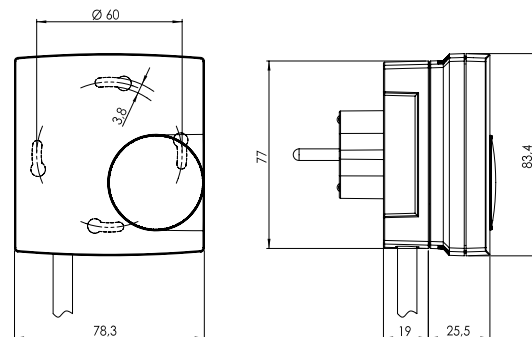


RTBSB-001.411



RTBSB-001.411

(Different from dimensions of RTBSB-001.401)



RTBSB-001.401





# ROOM TEMPERATURE CONTROLLER WITH CLOCK, ELECTRONIC, HTRRBu

## SURFACE-MOUNTED INSTALLATION – BERLIN 3000



### TECHNICAL DATA

|  |  |
|--|--|
| <b>Design:</b>                           | Berlin 3000  |
| <b>Surface finish:</b>                   | matt   |
| <b>Housing colour:</b>                   | pure white, like RAL 9010  |
| <b>Housing material:</b>                 | ABS plastic  |
| <b>Operating voltage:</b>                | 230 V AC, 50 Hz  |
| <b>Ambient temperature:</b>              | 0 ... 30 °C  |
| <b>Storage temperature:</b>              | -20 ... +70 °C   |
| <b>Permissible atmospheric humidity:</b> | Max. 95% rel. humidity, non-condensing   |
| <b>Electrical connection:</b>            | screw-type terminals   |
| <b>Mountin / attachment:</b>             | surface/wall mounting or by means of an adapter plate on a flush-mounted socket IP30 |
| <b>Protection rating:</b>                | II, if properly mounted  |
| <b>Protection class:</b>                 | according to DIN EN 60730  |
| <b>Safety and EMC:</b>                   | Heating (terminal 4) 8 (2) A, cooling (terminal 3) 100 mA                            |
| <b>Max. switching current:</b>           | 230 V AC, 50 Hz  |
| <b>Max. switching voltage:</b>           | 230 V AC, 50 Hz  |
| <b>Min. switching voltage:</b>           | terminal 4: 1840 W, terminal 3: 23 W   |
| <b>Switching power:</b>                  | relay  |
| <b>Switching element:</b>                | NO contact   |
| <b>Switching contact:</b>                | heating, switching (230 VAC, 50 Hz)  |
| <b>Output signal:</b>                    | NTC  |
| <b>Sensor:</b>                           | Heating  |
| <b>Control function:</b>                 | 5 ... 30 °C  |
| <b>Control range:</b>                    | < 1 K  |
| <b>Hysteresis:</b>                       | symbol display   |
| <b>Display type:</b>                     | switching (230 VAC, 50 Hz) (for pilot function)                                      |

### APPLICATION

For time-dependent control of temperatures in closed spaces. Suitable for all heating systems.

Valve actuator: normally closed.

It can be used as a master (pilot regulator) for the temperature reduction of other controllers. Controllers of series FETR, RTBSU and RTBSB are suitable as slaves (satellite controllers).

Programming procedures for every day, familiar from mechanical timers, by means of 'electronic tabs'. Shortest switching time 15 min.

**Load setting:** The control accuracy is influenced by the different levels of intrinsic heating of the controller depending on the magnitude of the heating load. By inputting the heating load, this influence is compensated and the control accuracy is retained.

**General features:** pilot function; ECO function, ECO value adjustable; 'ECO' display; 'on/off' display; 'heating' display; digital actual value display; child-safe features; power reserve (approx. 4–7 days); load setting; actual value correction / measured value correction; learning function; valve protection; holiday setting; party setting; automatic adjustment to standard / daylight savings time; mechanical range limitation; scale: degrees Celsius; reduction / comfort / automatic button; external setting; operation using direct-dial buttons; on / off button; information button; party function button; holiday setting button.

| TYPE/IMAGE | ITEM NO. | FEATURES | EURO/PG |
|------------|----------|----------|---------|
|------------|----------|----------|---------|

|                   |          |  |  |
|-------------------|----------|--|--|
| HTRRBu 110.117/21 | MA600003 |  |  |
|-------------------|----------|--|--|



| ACCESSORIES | ITEM NO. | FEATURES | EURO/PG |
|-------------|----------|----------|---------|
|-------------|----------|----------|---------|

|       |          |   |  |
|-------|----------|---|--|
| JZ-17 | MN990001 | <b>Surface finish:</b> matt<br><b>Colour:</b> pure white, like RAL 9010<br><b>Material:</b> ABS plastic<br><b>General features:</b> adapter plate for mounting devices on flush-mounted sockets (including fastening screws for mounting the controller on the adapter plate) |  |
|-------|----------|---|--|

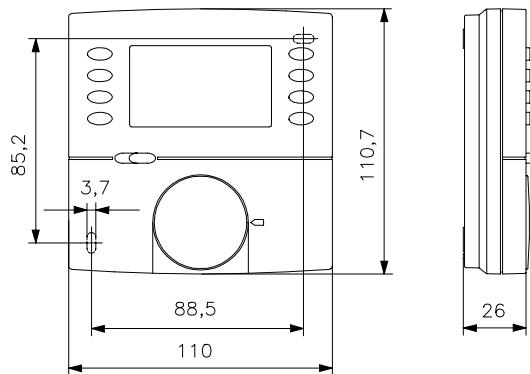


# ROOM TEMPERATURE CONTROLLER WITH CLOCK, ELECTRONIC, HTRRBu

## SURFACE-MOUNTED INSTALLATION – BERLIN 3000

### ILLUSTRATIONS

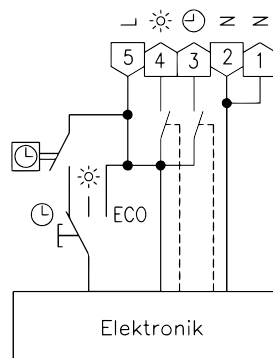
HTRRBu 110.XXX



#### Factory setting:

- setback temperature 17 °C
- Continuous time display
- Programme display using switching segments enabled
- Child-safe features disabled
- Automatic adjustment to summer / winter time enabled
- °C display, valve and pump protection disabled
- Learning function disabled
- Heating load 0.0 kW
- Comfort times:  
Mon – Fri 5 am – 9 am / 4 pm – 10 pm,  
Sat / Sun 6 am – 10 pm

HTRRBu 110.XXX circuit diagram





## YOUR **BENEFITS** AT A GLANCE

- + Simple electrical connection without screws
- + New terminals for quick and easy installation
- + Simplified wiring through colour-coded terminals
- + Time-saving modular design: Practical installation sequence for controller, frame and cover
- + Low installation volume for convenient and quick installation in flush-mounted sockets
- + Temperature can be controlled even without a cover
- + Closed design
- + Suitable for all conventional switch ranges
- + Up to 20 per cent subsidy with BAFA funding

# NEW AT ALRE – THE NEXT GENERATION BIMETAL CONTROLLER

The new and optimised room controller offers you a number of advantages that make mounting and attachment considerably easier. This can save you time, and above all, costs.

## OVERVIEW TYPE COMPARISON – FTR UND RTBSU:

| ITEM NO. | TYPE           | ITEM NO. | TYPE             | REMARKS                   |
|----------|----------------|----------|------------------|---------------------------|
| UA010017 | FTR 101.000#00 | UA090000 | RTBSU-401.000#00 |                           |
| UN010009 | FTR 101.000#21 | UA090014 | RTBSU-401.000#21 |                           |
| UA010134 | FTR 101.002#00 | UA090001 | RTBSU-401.002#00 |                           |
| UA010222 | FTR 101.010#00 | UA090002 | RTBSU-401.010#00 |                           |
| UA012404 | FTR 101.034#07 | UA090004 | RTBSU-401.034#00 | + JZ-016.000              |
| UA012405 | FTR 101.034#55 | UA090004 | RTBSU-401.034#00 | + JZ-016.100              |
| UA010702 | FTR 101.052#21 | UA090015 | RTBSU-401.052#21 |                           |
| UA010811 | FTR 101.062#00 | UA090003 | RTBSU-401.062#00 |                           |
| UA011000 | FTR 101.063#00 | UA090006 | RTBSU-401.063#00 |                           |
| UA010910 | FTR 101.065#00 | UA090007 | RTBSU-401.065#00 |                           |
| UA010415 | FTR 101.075#00 | UA090008 | RTBSU-401.075#00 |                           |
| UA010615 | FTR 101.086#00 | UA090009 | RTBSU-401.086#00 |                           |
| UN010607 | FTR 101.086#21 | UA090016 | RTBSU-401.086#21 |                           |
| UA012008 | FTR 101.202#00 | UA090010 | RTBSU-401.202#00 |                           |
| UN102009 | FTR 101.202#21 | UA090010 | RTBSU-401.202#00 | + JZ-001.000 + JZ-090.900 |
| UA012301 | FTR 101.210#00 | UA090011 | RTBSU-401.210#00 |                           |
| UA012500 | FTR 101.262#00 | UA090012 | RTBSU-401.262#00 |                           |
| UA012501 | FTR 101.262#21 | UA090012 | RTBSU-401.262#00 | + JZ-035.000 + JZ-090.900 |
| UA012600 | FTR 101.265#00 | UA090017 | RTBSU-401.265#00 |                           |
| UA013000 | FTR 101.902#07 | UA090013 | RTBSU-401.902#07 |                           |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSU

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP



### TECHNICAL DATA

|  |   |
|--|---|
| <b>Design:</b>                           | Berlin UP   |
| <b>Housing material:</b>                 | PA6 plastic   |
| <b>Ambient temperature:</b>              | 0 ... 30 °C   |
| <b>Storage temperature:</b>              | -20 ... +70 °C  |
| <b>Permissible atmospheric humidity:</b> | Max. 95% rel. humidity, non-condensing  |
| <b>Electrical connection:</b>            | Spring-loaded terminals (lever actuation type)  |
| <b>Mounting / attachment:</b>            | In flush-mounted socket – with suitable cover set, can be adapted to fit virtually any switch range (deep flush-mounted socket recommended) |
| <b>Protection rating:</b>                | IP30  |
| <b>Protection class:</b>                 | II, if properly mounted; with 24 VAC, protection class III  |
| <b>Safety and EMC:</b>                   | according to DIN EN 60730   |
| <b>Max. power consumption:</b>           | < 0.5 W   |
| <b>Switching element:</b>                | bimetallic contact  |
| <b>Output signal:</b>                    | switching   |
| <b>Sensor:</b>                           | bimetal   |
| <b>Control range:</b>                    | 5 ... 30 °C   |
| <b>Setting range:</b>                    | 5 ... 30 °C   |
| <b>Hysteresis:</b>                       | approx. 0.5 K at a temperature change of max. 4 K/h   |
| <b>General features:</b>                 | thermal recirculation; multi-digit display  |

### APPLICATION


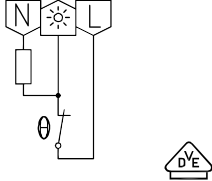

Control or monitoring of temperatures in closed, dry spaces. Suitable for all heating systems.

Valve actuator: normally closed. If normally open heating valves are available, they should be connected to the cooling output of the changeover switch (toggler), e.g., RTBSU-401.010

Up to a maximum of 10 actuators for valves can be connected (normally closed, NC); up to 5 units on the toggler with a NO contact.

In terms of visual aesthetics, the basic controllers (RTBSU-401xxx#00), in combination with a 55x55 mm / 70x70 mm cover set, fit perfectly in many switch ranges without the use of an insert frame.

The basic controllers (RTBSU-401.xxx#00) in combination with a 50x50 mm cover set fit in nearly all switch ranges with the use of an insert frame.


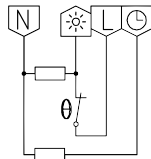


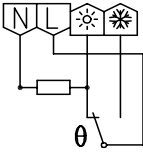


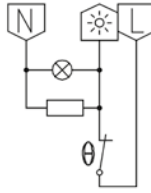

| TYPE/IMAGE   | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|--|----------|--|---|---------|
| <b>RTBSU-401.000#00</b><br>Comparison type:<br>FTR 101.000#00<br> | UA090000 | <b>General features:</b> mechanical range limitation; external setting; protective cap; VDE-tested<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Max. switching current:</b> 10 (4) A<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 2300 W<br><b>Switching contact:</b> NC contact (max. 10 actuators)<br><b>Control function:</b> heating<br><br>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range [cover sets]') and are not included in the delivery.<br><b>Suitable set no.: JZ-001.xxx, e.g.:</b><br>cover set 50x50 mm, pure white, glossy: JZ-001.000<br>cover set 55x55 mm, pure white, glossy: JZ-001.100<br><b>BUSCH-JAEGER cover set</b><br>Reflex SI / SI Linear, pure white, glossy: JZ-001.200 / BJ |  |         |
| <b>RTBSU-401.000#21</b><br>Comparison type:<br>FTR 101.000#21<br> | UA090014 | like RTBSU-401.000#00 but scope of delivery as follows:<br>Controller, alre frame 'Berlin' (neutral), cover 50x50 mm, pure white (like RAL 9010), glossy   |   |         |





# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSU


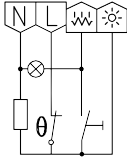

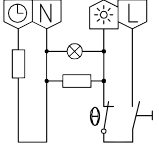


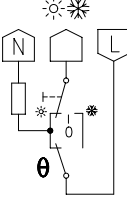


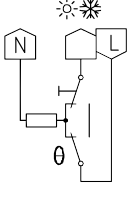

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE  | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|---|---|---------|
| <b>RTBSU-401.002#00</b><br>Comparison type:<br>FTR 101.002#00<br>                      | UA090001 | <p><b>General features:</b> ECO function; mechanical range limitation; external setting; protective cap; VDE-tested</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Control function:</b> Heating</p> <p><b>Input 'temperature reduction':</b> Approx. 4 K (230 VAC, 50 Hz)</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range [cover sets]') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-001.xxx, e.g.:</b><br/>           cover set 50x50 mm, pure white, glossy: JZ-001.000<br/>           cover set 55x55 mm, pure white, glossy: JZ-001.100</p> <p><b>BUSCH-JAEGER cover set</b><br/>           Reflex SI / SI Linear, pure white, glossy: JZ-001.200 / BJ</p>   |       |         |
| <b>RTBSU-401.010#00</b><br>Comparison type:<br>FTR 101.010#00<br>                     | UA090002 | <p><b>General features:</b> mechanical range limitation; external setting; protective cap; VDE-tested</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> Heating terminal 10 (4) A, cooling terminal 5 (2) A</p> <p><b>max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> Heating terminal: 2300 W, Cooling terminal: 1150 W</p> <p><b>Switching contact:</b> Changeover switch (togglers, max. 10 actuators output heating, max. 5 actuators output cooling)</p> <p><b>Control function:</b> Heating or cooling</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range [cover sets]') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-001.xxx, e.g.:</b><br/>           cover set 50x50 mm, pure white, glossy: JZ-001.000<br/>           cover set 55x55 mm, pure white, glossy: JZ-001.100</p> <p><b>BUSCH-JAEGER cover set</b><br/>           Reflex S / SI Linear, pure white, glossy: JZ-001.200 / BJ</p> |      |         |
| <b>RTBSU-401.034#00</b><br>Comparison type:<br>FTR 101.034#07/<br>FTR 101.034#55<br> | UA090004 | <p><b>General features:</b> 'heating' display; mechanical range limitation; external setting; protective cap,</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Control function:</b> Heating</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-016.xxx, e.g.:</b><br/>           50x50 mm cover set, pure white, glossy: JZ-016.000<br/>           cover set 55x55 mm, pure white, glossy: JZ-016.100</p>  |   |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSU

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE   | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG   |
|--|----------|--|---|---|
| <b>RTBSU-401.052#21</b><br>Comparison type:<br>FTR 101.052#21<br>   | UA090015 | <b>General features:</b> 'Auxiliary heating' display; mechanical range limitation; <b>auxiliary heating switch</b> ; external setting<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Max. switching current:</b> the total current (heating + auxiliary heating) may not exceed 10 (4) A<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> the total power output (heating + auxiliary heating) may not exceed 2300 W<br><b>Switching contact:</b> NC contact (max. 10 actuators)<br><b>Control function:</b> Heating<br><b>Scope of delivery:</b> Controller, alre frame 'Berlin' (neutral), cover 50x50 mm, pure white (like RAL 9010), glossy |    |   |
| <b>RTBSU-401.062#00</b><br>Comparison type:<br>FTR 101.062#00<br>   | UA090003 | <b>General features:</b> ECO function; 'heating' display; mechanical range limitation; 'on/off' switch; external setting; protective cap; VDE-tested<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Max. switching current:</b> 10 (4) A<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 2300 W<br><b>Switching contact:</b> NC contact (max. 10 actuators)<br><b>Control function:</b> heating<br><b>Input 'temperature reduction':</b> approx. 4 K (230 VAC, 50 Hz)  |    |    |
| <b>RTBSU-401.063#00</b><br>Comparison type:<br>FTR 101.063#00<br> | UA090006 | <b>General features:</b> Climate controller for 2-pipe systems, mechanical range limitation; 'heating/off/cooling' switch; external adjustment; protective cap<br><b>Operating voltage:</b> 230 V AC, 50 Hz<br><b>Max. switching current:</b> 5 (2) A<br><b>Max. switching voltage:</b> 230 V AC, 50 Hz<br><b>Min. switching voltage:</b> 230 V AC, 50 Hz<br><b>Switching power:</b> 1150 W<br><b>Switching contact:</b> Changeover switch (max. 5 actuators)<br><b>Control function:</b> Heating or cooling   |  |  |
| <b>RTBSU-401.065#00</b><br>Comparison type:<br>FTR 101.065#00<br> | UA090007 | <b>General features:</b> climate controller for 2-pipe systems, especially heat pumps; mechanical range limitation; 'heating/cooling' switch; external setting; protective cap<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Max. switching current:</b> 5 (2) A<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 1150 W<br><b>Switching contact:</b> Changeover switch (toggler, max. 5 actuators)<br><b>Control function:</b> heating or cooling   |  |  |

Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range [cover sets]') and are not included in the delivery.

**Suitable set no.: JZ-035.xxx, e.g.:**

cover set 50x50 mm, pure white, glossy: JZ-035.000

cover set 55x55 mm, pure white, glossy: JZ-035.100

**BUSCH-JAEGER cover set**

Reflex SI/SI Linear, pure white, glossy: JZ-035.200 /BJ

For cover sets see the separate overview 'alre flush-mounted range (cover sets)', not included in the delivery.

**Suitable set no.: JZ-038.xxx, e.g.:**

cover set 50x50 mm, pure white, glossy: JZ-038.000

cover set 55x55 mm, pure white, glossy: JZ-038.100

Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.

**Suitable set no.: JZ-037.xxx, e.g.:**

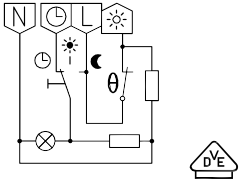
cover set 50x50 mm, pure white, glossy: JZ-037.000

cover set 55x55 mm, pure white, glossy: JZ-037.100



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSU


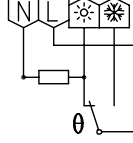

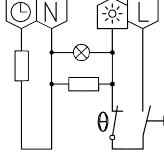

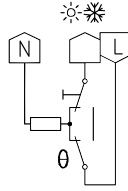
## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE   | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|--|----------|---|---|---------|
| <b>RTBSU-401.075#00</b><br>Comparison type:<br>FTR 101.075#00<br>   | UA090008 | <b>General features:</b> ECO function; 'reduction' display; mechanical range limitation; <b>switch for reduction/heating / reduction via external timer' switch</b> ; external setting; protective cap; VDE-tested<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Max. switching current:</b> 10 (4) A<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 2300 W<br><b>Switching contact:</b> NC contact (max. 10 actuators)<br><b>Control function:</b> Heating<br><b>Input 'temperature reduction':</b> Approx. 4 K (230 VAC, 50 Hz) |    |         |
| <b>RTBSU-401.086#00</b><br>Comparison type:<br>FTR 101.086#00<br>  | UA090009 | <b>General features:</b> mechanical range limitation; 3000 W switching power, for electric direct heating systems, natural stone heating; external setting; protective cap<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Max. switching current:</b> 13 (4) A<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 3000 W<br><b>Switching contact:</b> NC contact<br><b>Control function:</b> Heating   |    |         |
| <b>RTBSU-401.086#21</b><br>Comparison type:<br>FTR 101.086#21<br> | UA090016 | like RTBSU-401.086#00 but scope of delivery as follows:<br>Controller, alre frame 'Berlin' (neutral), cover 50x50 mm, pure white (like RAL 9010), glossy  |   |         |
| <b>RTBSU-401.202#00</b><br>Comparison type:<br>FTR 101.202#00<br> | UA090010 | <b>General features:</b> ECO function; mechanical range limitation; external setting; protective cap<br><b>Operating voltage:</b> 24 VAC / 50 Hz, 24 VDC<br><b>Max. switching current:</b> 1 (1) A<br><b>Max. switching voltage:</b> 24 VAC / 50 Hz, 24 VDC<br><b>Min. switching voltage:</b> 24 VAC / 50 Hz, 24 VDC<br><b>Switching power:</b> 24 W<br><b>Switching contact:</b> NC contact (max. 5 actuators)<br><b>Control function:</b> heating<br><b>Input 'temperature reduction':</b> approx. 4 K (24 VAC / 50 Hz, 24 VDC)   |  |         |




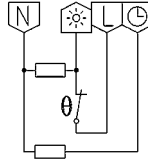
# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSU

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE   | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|--|----------|---|---|---------|
| <b>RTBSU-401.210#00</b><br>Comparison type:<br>FTR 101.210#00<br>   | UA090011 | <p><b>General features:</b> mechanical range limitation; external setting; protective cap</p> <p><b>Operating voltage:</b> 24 VAC / 50 Hz, 24 VDC</p> <p><b>Max. switching current:</b> 1 (1) A</p> <p><b>Max. switching voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Min. switching voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Switching power:</b> 24 W</p> <p><b>Switching contact:</b> Changeover switch (togglers, max. 5 actuators)</p> <p><b>Control function:</b> Heating or cooling</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range [cover sets]') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-001.xxx, e.g.:</b><br/>           cover set 50x50 mm, pure white, glossy: JZ-001.000<br/>           cover set 55x55 mm, pure white, glossy: JZ-001.100</p> <p><b>BUSCH-JAEGER cover set</b><br/>           Reflex SI / SI Linear, pure white, glossy: JZ-001.200 / BJ</p>   |    |         |
| <b>RTBSU-401.262#00</b><br>Comparison type:<br>FTR 101.262#00<br>  | UA090012 | <p><b>General features:</b> ECO function; 'heating' display; mechanical range limitation; 'on/off' switch; external setting; protective cap</p> <p><b>Operating voltage:</b> 24 VAC / 50 Hz</p> <p><b>Max. switching current:</b> 1 (1) A</p> <p><b>Max. switching voltage:</b> 24 VAC / 50 Hz</p> <p><b>Min. switching voltage:</b> 24 VAC / 50 Hz</p> <p><b>Switching power:</b> 24 W</p> <p><b>Switching contact:</b> NC contact (max. 5 actuators)</p> <p><b>Control function:</b> heating</p> <p><b>Input temperature reduction:</b> approx. 4 K (24 VAC / 50 Hz)</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-035.xxx, e.g.:</b><br/>           cover set 50x50 mm, pure white, glossy: JZ-035.000<br/>           cover set 55x55 mm, pure white, glossy: JZ-035.100</p> <p><b>BUSCH-JAEGER cover set</b><br/>           Reflex SI / SI Linear, pure white, glossy: JZ-035.200 / BJ</p> |    |         |
| <b>RTBSU-401.265#00</b><br>Comparison type:<br>FTR 101.265#00<br> | UA090017 | <p><b>General features:</b> climate controller for 2-pipe systems, especially heat pumps; mechanical range limitation; 'heating/cooling' switch; external setting; protective cap</p> <p><b>Operating voltage:</b> 24 VAC / 50 Hz, 24 VDC</p> <p><b>Max. switching current:</b> 1 (1) A</p> <p><b>Max. switching voltage:</b> 24 VAC / 50 Hz, 24 VDC</p> <p><b>Min. switching voltage:</b> 24 VAC / 50 Hz, 24 VDC</p> <p><b>Switching power:</b> 24 W</p> <p><b>Switching contact:</b> Changeover switch (togglers, max. 5 actuators)</p> <p><b>Control function:</b> Heating or cooling</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range [cover sets]') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-037.xxx, e.g.:</b><br/>           cover set 50x50 mm, pure white, glossy: JZ-037.000<br/>           cover set 55x55 mm, pure white, glossy: JZ-037.100</p>  |  |         |




# ROOM TEMPERATURE CONTROLLER, MECHANICAL, RTBSU FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
| RTBSU-401.902#07<br>Comparison type:<br>FTR 101.902#07<br> | UA090013 | <b>General features:</b> ECO function; internal setting<br><b>Operating voltage:</b> 230 VAC, 50 Hz<br><b>Max. switching current:</b> 10 (4) A<br><b>Max. switching voltage:</b> 230 VAC, 50 Hz<br><b>Min. switching voltage:</b> 230 VAC, 50 Hz<br><b>Switching power:</b> 2300 W<br><b>Switching contact:</b> NC contact (max. 10 actuators)<br><b>Control function:</b> Heating<br><b>Input 'temperature reduction':</b> Approx. 4 K (230 VAC, 50 Hz)<br><b>Scope of delivery:</b> Controller, cover 50x50 mm, pure white (like RAL 9010), glossy |  |         |

For model RTBSU-401.xxx#21, the protective cap is not included in the delivery.

Accessories terminal strips VOOxx, suitable valve actuators ZBOOA, suitable cover sets: see separate overview 'alre flush-mounting range (cover sets)'

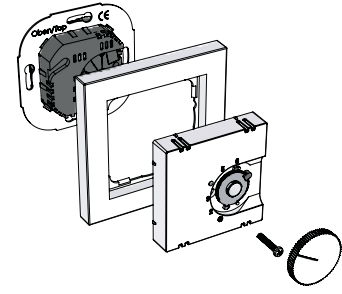
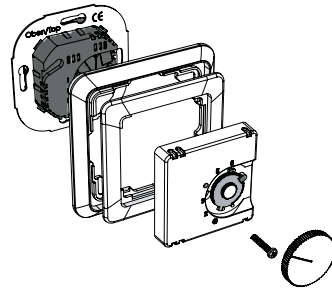
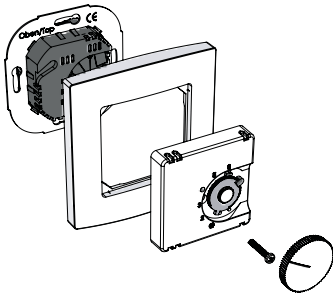
| TYPE/IMAGE  | ITEM NO. | FEATURES  | EURO/PG |
|---|----------|---|---------|
| JZ-090.900<br> | VV000025 | <b>General features:</b> alre frame 'Berlin' (neutral) for all flush-mounted controllers with cover 50x50 mm<br><b>Design:</b> Berlin<br><b>Surface finish:</b> Glossy<br><b>Colour:</b> Pure white, like RAL 9010<br><b>Material:</b> PC plastic |         |
| JZ-090.100  | VV000048 | like JZ-090.900, but for all flush-mounted controllers in combination with 55x55 mm cover   |         |
| JZ-090.910  | VV000010 | as for JZ-090.900, but colour similar to RAL 1013   |         |

## ILLUSTRATIONS

alre frame 'Berlin' (#21 types)

with 50x50 insert frame

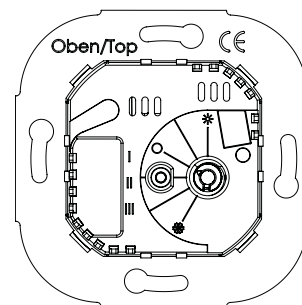
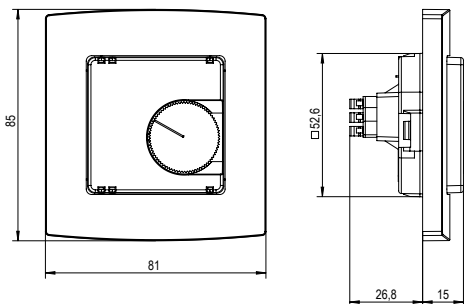
without 55x55 insert frame



## ILLUSTRATIONS

RTBSU with alre frame 'Berlin' (RTBSU-401.xxx#21 types)

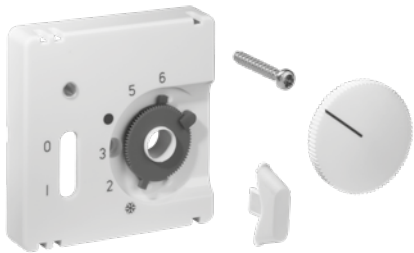
RTBSU scale for temperature adjustment without cover set



**ALRE FLUSH-MOUNTED RANGE** (50 X 50 MM COVER SETS)ALL BASIC TYPES AND SUITABLE COVER SETS **50 X 50 MM**

| BASIC TYPE       | 50x50 mm cover set<br><b>PURE WHITE (RAL 9010)<br/>GLOSSY</b> |          | 50x50 mm cover set<br><b>PURE WHITE (RAL 9010)<br/>MATT</b> |          | 50x50 mm cover set<br><b>PEARL WHITE (RAL1013)<br/>GLOSSY</b> |          | EURO/<br>PG |
|------------------|---|----------|---|----------|---|----------|-------------|
|                  | Cover set   | Item no. | Cover set   | Item no. | Cover set   | Item no. |             |
| RTBSU-401.000#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| RTBSU-401.002#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| RTBSU-401.010#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| RTBSU-401.034#00 | JZ-016.000  | UN990139 | –   | –        | –   | –        |             |
| RTBSU-401.062#00 | JZ-035.000  | UN990169 | JZ-035.001  | UN990193 | JZ-035.010  | UN990177 |             |
| RTBSU-401.063#00 | JZ-038.000  | UN990170 | JZ-038.001  | UN990194 | JZ-038.010  | UN990178 |             |
| RTBSU-401.065#00 | JZ-037.000  | UN990171 | JZ-037.001  | UN990195 | JZ-037.010  | UN990179 |             |
| RTBSU-401.075#00 | JZ-036.000  | UN990172 | JZ-036.001  | UN990196 | JZ-036.010  | UN990180 |             |
| RTBSU-401.086#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| RTBSU-401.202#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| RTBSU-401.210#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| RTBSU-401.262#00 | JZ-035.000  | UN990169 | JZ-035.001  | UN990193 | JZ-035.010  | UN990177 |             |
| RTBSU-401.265#00 | JZ-037.000  | UN990171 | JZ-037.001  | UN990195 | JZ-037.010  | UN990179 |             |

In flush-mounted socket, it can be adapted to fit virtually any switch range.

| BASIC TYPE       | 50x50 mm cover set<br><b>TRAFFIC/STUDIO<br/>WHITE (RAL 9016)<br/>GLOSSY<br/>(JZ-xxx.020)</b> |          | 50x50 mm cover set<br><b>TRAFFIC/STUDIO<br/>WHITE (RAL 9016)<br/>MATT<br/>(JZ-xxx.021)</b> |          | EURO/<br>PG | Cover set (example), individually foil-wrapped  |
|------------------|--|----------|--|----------|-------------|---|
|                  | Cover set  | Item no. | Cover set  | Item no. |             |   |
| RTBSU-401.000#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |  |
| RTBSU-401.002#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |   |
| RTBSU-401.010#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |   |
| RTBSU-401.062#00 | JZ-035.020   | UN990185 | JZ-035.021   | UN990201 |             |   |
| RTBSU-401.063#00 | JZ-038.020   | UN990186 | JZ-038.021   | UN990202 |             |   |
| RTBSU-401.065#00 | JZ-037.020   | UN990187 | JZ-037.021   | UN990203 |             |   |
| RTBSU-401.075#00 | JZ-036.020   | UN990188 | JZ-036.021   | UN990204 |             |   |
| RTBSU-401.086#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |   |
| RTBSU-401.202#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |   |
| RTBSU-401.210#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |   |
| RTBSU-401.262#00 | JZ-035.020   | UN990185 | JZ-035.021   | UN990201 |             |   |
| RTBSU-401.265#00 | JZ-037.020   | UN990187 | JZ-037.021   | UN990203 |             |   |

**SEE THE PRODUCT FINDER FOR ALL COVER SOLUTIONS AND SPECIAL COLOURS**

## ALRE FLUSH-MOUNTED RANGE (55 X 55 MM COVER SETS)

ALL BASIC TYPES AND SUITABLE COVER SETS **55 X 55 MM**

| BASIC TYPE       | 55x55 mm cover set<br><b>PURE WHITE<br/>(RAL 9010) GLOSSY</b><br>(JZ-xxx.100) |          | 55x55 mm cover set<br><b>PURE WHITE<br/>(RAL 9010) MATT</b><br>(JZ-xxx.101) |          | 55x55 mm cover set<br><b>PEARL WHITE<br/>(RAL1013) GLOSSY</b><br>(JZ-xxx.110) |          | EURO/<br>PG | 55x55 mm cover set<br><b>TRAFFIC/STUDIO<br/>WHITE (RAL 9016)<br/>GLOSSY</b><br>(JZ-xxx.120) |          | EURO/<br>PG |
|------------------|---|----------|---|----------|---|----------|-------------|---|----------|-------------|
|                  | Cover set   | Item no. | Cover set   | Item no. | Cover set   | Item no. |             | Cover set   | Item no. |             |
| RTBSU-401.000#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110  | UN990060 |             | JZ-001.120  | UN990086 |             |
| RTBSU-401.002#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110  | UN990060 |             | JZ-001.120  | UN990086 |             |
| RTBSU-401.010#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110  | UN990060 |             | JZ-001.120  | UN990086 |             |
| RTBSU-401.034#00 | JZ-016.100  | UN990140 | -   | -        | -   | -        |             | -   | -        |             |
| RTBSU-401.062#00 | JZ-035.100  | UN990173 | JZ-035.101  | UN990197 | JZ-035.110  | UN990181 |             | JZ-035.120  | UN990189 |             |
| RTBSU-401.063#00 | JZ-038.100  | UN990174 | JZ-038.101  | UN990198 | JZ-038.110  | UN990182 |             | JZ-038.120  | UN990190 |             |
| RTBSU-401.065#00 | JZ-037.100  | UN990175 | JZ-037.101  | UN990199 | JZ-037.110  | UN990183 |             | JZ-037.120  | UN990191 |             |
| RTBSU-401.075#00 | JZ-036.100  | UN990176 | JZ-036.101  | UN990200 | JZ-036.110  | UN990184 |             | JZ-036.120  | UN990192 |             |
| RTBSU-401.086#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110  | UN990060 |             | JZ-001.120  | UN990086 |             |
| RTBSU-401.202#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110  | UN990060 |             | JZ-001.120  | UN990086 |             |
| RTBSU-401.210#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110  | UN990060 |             | JZ-001.120  | UN990086 |             |
| RTBSU-401.262#00 | JZ-035.100  | UN990173 | JZ-035.101  | UN990197 | JZ-035.110  | UN990181 |             | JZ-035.120  | UN990189 |             |
| RTBSU-401.265#00 | JZ-037.100  | UN990175 | JZ-037.101  | UN990199 | JZ-037.110  | UN990183 |             | JZ-037.120  | UN990191 |             |

Can be adapted to fit many switch ranges in flush-mounted sockets (for a current overview of the suitable frames and insert frames.

## ALRE FLUSH-MOUNTED RANGE (70 X 70 MM COVER SETS)

ALL BASIC TYPES AND SUITABLE COVER SETS **70 X 70 MM**

| BASIC TYPE       | 70x70 mm cover set<br><b>PURE WHITE<br/>(RAL 9010) GLOSSY</b><br>(JZ-xxx.400) |          | 70x70 mm cover set<br><b>PEARL WHITE<br/>(RAL1013) GLOSSY</b><br>(JZ-xxx.410) |          | EURO/<br>PG | 70x70 mm cover set<br><b>TRAFFIC/STUDIO WHITE<br/>(RAL 9016) GLOSSY</b><br>(JZ-xxx.420) |          | EURO/<br>PG |
|------------------|---|----------|---|----------|-------------|---|----------|-------------|
|                  | Cover set   | Item no. | Cover set   | Item no. |             | Cover set   | Item no. |             |
| RTBSU-401.000#00 | JZ-001.400  | UN990141 | JZ-001.410  | UN990145 |             | JZ-001.420  | UN990149 |             |
| RTBSU-401.002#00 | JZ-001.400  | UN990141 | JZ-001.410  | UN990145 |             | JZ-001.420  | UN990149 |             |
| RTBSU-401.010#00 | JZ-001.400  | UN990141 | JZ-001.410  | UN990145 |             | JZ-001.420  | UN990149 |             |
| RTBSU-401.034#00 | JZ-016.400  | UN990142 | JZ-016.410  | UN990146 |             | JZ-016.420  | UN990150 |             |
| RTBSU-401.062#00 | JZ-035.400  | UN990143 | JZ-035.410  | UN990147 |             | JZ-035.420  | UN990151 |             |
| RTBSU-401.065#00 | JZ-037.400  | UN990144 | JZ-037.410  | UN990148 |             | JZ-037.420  | UN990150 |             |
| RTBSU-401.086#00 | JZ-001.400  | UN990141 | JZ-001.410  | UN990145 |             | JZ-001.420  | UN990149 |             |
| RTBSU-401.202#00 | JZ-001.400  | UN990141 | JZ-001.410  | UN990145 |             | JZ-001.420  | UN990149 |             |
| RTBSU-401.210#00 | JZ-001.400  | UN990141 | JZ-001.410  | UN990145 |             | JZ-001.420  | UN990149 |             |
| RTBSU-401.262#00 | JZ-035.400  | UN990143 | JZ-035.410  | UN990147 |             | JZ-035.420  | UN990151 |             |
| RTBSU-401.265#00 | JZ-037.400  | UN990144 | JZ-037.410  | UN990148 |             | JZ-037.420  | UN990150 |             |

Can be adapted to fit many switch ranges in flush-mounted sockets (for a current overview of the suitable frames and insert frames.



ALL BASIC TYPES AND SUITABLE COVER SETS FOR **BUSCH-JAEGER REFLEX SI/SI LINEAR / BUSCH-DURO 2000 SI / FUTURE / SOLO / AXCENT / CARAT**  
WITHOUT INSERT FRAME

| BASIC TYPE       | BUSCH-JAEGER cover set<br><b>REFLEX SI/SI LINEAR<br/>PURE WHITE (RAL 9010)<br/>GLOSSY</b><br>(JZ-xxx.200 / BJ) |          | BUSCH-JAEGER cover set<br><b>BUSCH-DURO 2000 SI/SI<br/>LINEAR PEARL WHITE<br/>(RAL 1013) GLOSSY</b><br>(JZ-001.210 / BJ) |          | EURO/<br>PG | BUSCH-JAEGER cover set<br><b>FUTURE LINEAR/SOLO/<br/>AXCENT/CARAT TRAFFIC/<br/>STUDIO WHITE (RAL 9016)<br/>GLOSSY</b><br>(JZ-001.320 / BJ) |          | EURO/<br>PG |
|------------------|--|----------|--|----------|-------------|--|----------|-------------|
|                  | Cover set  | Item no. | Cover set  | Item no. |             | Cover set  | Item no. |             |
| RTBSU-401.000#00 | JZ-001.200 / BJ  | G9990490 | JZ-001.210 / BJ  | G9990491 |             | JZ-001.320 / BJ  | G9990493 |             |
| RTBSU-401.002#00 | JZ-001.200 / BJ  | G9990490 | JZ-001.210 / BJ  | G9990491 |             | JZ-001.320 / BJ  | G9990493 |             |
| RTBSU-401.010#00 | JZ-001.200 / BJ  | G9990490 | JZ-001.210 / BJ  | G9990491 |             | JZ-001.320 / BJ  | G9990493 |             |
| RTBSU-401.062#00 | JZ-035.200 / BJ  | G9990499 | -  | -        |             | -  | -        |             |
| RTBSU-401.086#00 | JZ-001.200 / BJ  | G9990490 | JZ-001.210 / BJ  | G9990491 |             | JZ-001.320 / BJ  | G9990493 |             |
| RTBSU-401.202#00 | JZ-001.200 / BJ  | G9990490 | JZ-001.210 / BJ  | G9990491 |             | JZ-001.320 / BJ  | G9990493 |             |

Can be adapted to fit the corresponding BUSCH-JAEGER switch ranges in flush-mounted sockets.

SPECIAL COLOURS **ALUMINIUM / ANTHRACITE**

| ALRE CON-<br>TROLLER<br>TYPES | MANUFACTURER<br>SWITCH RANGE  | COLOUR/<br>SURFACE FINISH | 50X50 MM<br>INSERT FRAME* | ALRE COVER<br>SET: TYPE | (ITEM NO.) | EURO/<br>PG |
|-------------------------------|-------------------------------|---------------------------|---------------------------|-------------------------|------------|-------------|
| RTBSU-401.000#00              | BERKER<br>S.1 / B.3 / B.7     | aluminium / matt          | not required              | JZ-001.131 / BE         | (UN990114) |             |
| RTBSU-401.002#00              |                               | anthracite / matt         | not required              | JZ-001.141 / BE         | (UN990115) |             |
| RTBSU-401.010#00              | BUSCH-JAEGER<br>future linear | aluminium silver / glossy | 1746 / 10-83              | JZ-001.030 / BJ         | (UN990108) |             |
| RTBSU-401.086#00              |                               | anthracite / glossy       | 1746 / 10-81              | JZ-001.040 / BJ         | (UN990109) |             |
| RTBSU-401.202#00              | GIRA<br>System 55             | aluminium / matt          | not required              | JZ-001.131 / GI         | (UN990110) |             |
| RTBSU-401.210#00              |                               | anthracite / matt         | not required              | JZ-001.141 / GI         | (UN990111) |             |
|                               | JUNG<br>Series A              | aluminium / glossy        | not required              | JZ-001.130 / JU         | (UN990112) |             |
|                               |                               | anthracite / matt         | not required              | JZ-001.141 / JU         | (UN990113) |             |
|                               | MERTEN<br>System M            | aluminium / matt          | not required              | JZ-001.131 / ME         | (UN990116) |             |
|                               |                               | anthracite / matt         | not required              | JZ-001.141 / ME         | (UN990117) |             |

\*) must be ordered from switch manufacturer or electronics wholesaler

Further details and information on available cover sets can be found online at [www.alre.de](http://www.alre.de) or in the catalogue.



## ADAPTATION OF ALRE FLUSH-MOUNTED CONTROLLERS

| MANUFACTURER            | RANGE                                       | COLOUR RAL 9010<br>(surface finish)                    | ADAPTATION possible<br>using '55x55', '70x70' or<br>'BJ' cover sets<br>(without insert frame) | Only ADAPTATION with<br>'50x50' cover set requires<br>an insert frame from the<br>manufacturer |
|-------------------------|---|--|---|--|
| BERKER                  | S.1   | polar white (matt)                                     | x   | 1109 19 19   |
| BERKER                  | S.1   | polar white (glossy)                                   | x   | 1109 90 89   |
| BERKER                  | Arsys                                       | polar white (glossy)                                   |   | 1108 01 69   |
| BERKER                  | B.3   | aluminium / polar white (matt)                         | x   | 1109 19 19   |
| BERKER                  | B.3   | aluminium / polar white (glossy)                       | x   | 1109 90 89   |
| BERKER                  | B.7   | glass / polar white (matt)                             | x   | 1109 19 19   |
| BERKER                  | B.7   | glass / polar white (glossy)                           | x   | 1109 90 89   |
| BERKER                  | Q.1 / Q.3                                   | polar white (velvet)                                   |   | 1109 60 79   |
| BERKER                  | K.1   | polar white (glossy)                                   |   | 1108 71 09   |
| BUSCH-JAEGER            | Reflex SI / SI Linear                       | alpine white (glossy)                                  | x   | 1746-214-101   |
| BUSCH-JAEGER            | Busch-balance SI                            | alpine white (glossy)                                  | x   | 1746-914-101   |
| BUSCH-JAEGER            | impuls                                      | alpine white (glossy)                                  |   | 1746 / 10-74   |
| BUSCH-JAEGER            | solo / future linear / axcent / etc.        | studio white – see RAL 9016 below                      |   |  |
| Elso                    | Joy   | pure white (glossy)                                    | x   | 363084   |
| Elso                    | Fashion / Riva / Scala                      | pure white (glossy)                                    |   | 203084   |
| GIRA                    | surface switch                              | pure white (glossy)                                    | x   | 0282 112   |
| GIRA (System 55)        | Standard / E2                               | pure white (semi-gloss)                                | x   | 0282 27  |
| GIRA (System 55)        | Standard / E2 / E3                          | pure white (glossy)                                    | x   | 0282 03  |
| GIRA (System 55)        | E22   | pure white (glossy)                                    | x   | 0282 03  |
| GIRA (System 55)        | Event                                       | pure white (semi-gloss) + opaque...                    | x   | 0282 27  |
| GIRA (System 55)        | Event                                       | pure white (glossy) + opaque...                        | x   | 0282 03  |
| GIRA (System 55)        | Esprit                                      | pure white (semi-gloss) + glass,<br>aluminium...       | x   | 0282 27  |
| GIRA (System 55)        | Esprit                                      | pure white (glossy) + glass,<br>aluminium...           | x   | 0282 03  |
| GIRA                    | S-Color                                     | pure white (high-gloss)                                |   | 0282 40  |
| JUNG                    | CD 500 / CD plus                            | alpine white (glossy)                                  |   | CD 590 Z WW  |
| JUNG                    | A 500 / A 550 / AS 500 / A plus / A flow    | alpine white (glossy)                                  | x   | A 590 Z WW   |
| JUNG                    | LS 990                                      | alpine white (glossy)                                  | x   | LS 961 Z WW  |
| JUNG                    | LS plus                                     | alpine white (glass)                                   | x   | LS 961 Z WW  |
| JUNG                    | A creation                                  | alpine white (glossy)                                  | x   | A 590 Z WW   |
| JUNG                    | LS Design                                   | alpine white (glossy)                                  | x   | LS 961 Z WW  |
| MERTEN (System M)       | M-Smart, M-Plan, M-Pure                     | polar white (matt)                                     | x   | 5181 19  |
| MERTEN (System M)       | M-Smart, M-Plan, M-Creativ, M-Pure          | polar white (glossy)                                   | x   | 5185 19  |
| MERTEN (System Basis)   | 1-M / Atelier-M                             | polar white (glossy)                                   | x   | 5185 19  |
| MERTEN (Surface System) | Artec / Antik                               | polar white (glossy)                                   |   | 5160 99  |
| MERTEN                  | 1-M / M-Smart / M-Plan /<br>M-Pure / D-Life | active white – see RAL 9016<br>below or product finder |   |  |
| PEHA                    | Standard                                    | pure white (glossy)                                    |   | 80.670.02 ZV   |
| PEHA                    | Dialog                                      | pure white (glossy)                                    |   | 95.670.02 ZV   |
| PEHA                    | Aura  | pure white (matt) / glass                              |   | 20.670.02 ZV   |
| PEHA                    | Badora                                      | pure white (glossy)                                    |   | 11.670.02 ZV   |

| MANUFACTURER | RANGE                       | COLOUR RAL 9016<br>(surface finish) | ADAPTATION possible<br>using '55x55', '70x70' or<br>'BJ' cover sets<br>(without insert frame) | Only ADAPTATION with<br>'50x50' cover set requires<br>an insert frame from the<br>manufacturer |
|--------------|-----------------------------|-------------------------------------|---|--|
| BUSCH-JAEGER | solo / future linear        | studio white (RAL 9016, glossy)     | x   | 1746 / 10-84   |
| BUSCH-JAEGER | future linear               | studio white (RAL 9016 matt)        |   | 1746 / 10-884  |
| BUSCH-JAEGER | impuls                      | studio white (RAL 9016 matt)        |   | 1746 / 10-774  |
| BUSCH-JAEGER | axcent                      | studio white (RAL 9016, glossy)     | x   | 1746 / 10-84   |
| BUSCH-JAEGER | carat (glass, bronze, gold) | studio white (RAL 9016, glossy)     | x   | 1746 / 10-84   |
| BUSCH-JAEGER | alpha (nea / exclusive *)   | studio white (RAL 9016, glossy)     |   | 1746 / 10-24G  |
| BUSCH-JAEGER | alpha (nea / exclusive *)   | studio white (RAL 9016 matt)        |   | 1746 / 10-24   |
| MERTEN       | M-Smart, M-Plan, M-Pure     | active white (RAL 9016, glossy)     | x   | 5185 25  |
| MERTEN       | 1-M / Atelier-M             | active white (RAL 9016, glossy)     | x   | 5185 25  |
| MERTEN       | D-Life                      | lotus white (RAL 9016)              | x   | MEG4500-6035   |
| PEHA         | Standard                    | arctic                              |   | D 80.670 ZV AW   |

\*) During assembly, you need to remove 4 plastic tabs located at the rear of the frame

**NOTE:** Most switch ranges are designed in a colour similar to RAL 1013, 9016 or 1013, although different switch manufacturers use different designations for this colour. Coloured, glass and aluminium frames are also combined with white jacks or plugs so that controllers with white covers can also be integrated into these frames. Check the precise application in each individual case. The frames have different surface qualities (matt/glossy). For design reasons, the cover of the controller should have the same quality as the frame. We accept no liability for slight variations in colour and surface finish or for accuracy of fit. When installing devices into multi frames, always assemble the temperature controllers at the lowest position.

**'50x50 controller':** The housing covers of the 50x50 controllers are 50x50 mm in size. Using a 50x50 mm insert frame, they can be integrated into nearly all light switch ranges in accordance with DIN 49075. The 50x50 mm insert frames must be ordered from the light switch manufacturer or from a wholesaler. The order number of the insert frame corresponding to the switch range in question can be found in the column 'Only for adaptation with '50x50' cover set'.

**'55x 55/70x70 controller':** The housing covers of the 55x55/70x70 controllers are 55x55/70x70 mm in size. Many light switch ranges have inner dimensions of 55x55 mm/70x70 mm. Therefore, the 55x55/70x70 controllers can be installed directly in these light switch frames without the use of an insert frame. See the column 'Adaptation with '55x55/70x70' cover set' to determine whether the 55x55/70x70 controller fits in the given light switch model (x).

All information regarding switch manufacturers' product lines and item numbers was last updated in 12/2022 | No liability is assumed for the information provided. | Technical specifications subject to change.



# PRODUCT FINDER ALRE COVER SETS

## FOR SWITCH RANGES FROM BERKER

### INTEGRATION EXAMPLES



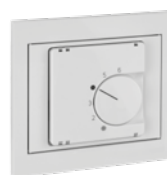
RTBSU – in S. 1



RTBSU – in B. 3



RTBSU – in B. 7



RTBSU – in K. 1



RTBSU – in Arsys

| TYPE ALRE  | BERKER RANGE  | COLOUR (RAL)/ SURFACE FINISH  | ALRE COVER SET                | COVER SET ITEM NO.        | INSERT FRAME 50X50* | EURO/ PG     |
|--|---|-------------------------------|-------------------------------|---------------------------|---------------------|--------------|
| RTBSU-401.000#00<br>RTBSU-401.002#00<br>RTBSU-401.010#00<br>RTBSU-401.086#00<br>RTBSU-401.202#00<br>RTBSU-401.210#00<br><br>Standard (without switch) | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) glossy | JZ-001.100 (55x55, glossy)    | UN990050                  | not required        |              |
|  | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) matt   | JZ-001.101 (55x55, matt)      | UN990055                  | not required        |              |
|  | Arsys   | polar white (RAL 9010) glossy | JZ-001.000 (50x50, glossy)    | UN990035                  | 1108 01 69          |              |
|  | Q. 1 / Q. 3   | polar white (RAL 9010) velvet | JZ-001.001 (50x50, matt)      | UN990040                  | 1109 60 79          |              |
|  | K. 1  | polar white (RAL 9010) glossy | JZ-001.000 (50x50, glossy)    | UN990035                  | 1108 71 09          |              |
|  | S. 1  | white (RAL 1013) glossy       | JZ-001.110 (55x55, glossy)    | UN990060                  | not required        |              |
|  | Arsys   | white (RAL 1013) glossy       | JZ-001.010 (50x50, glossy)    | UN990045                  | 1108 01 02          |              |
|  | S. 1 / B. 3 / B. 7  | aluminium/matt                | JZ-001.131 / BE               | UN990114                  | not required        |              |
|  | S. 1 / B. 3 / B. 7  | anthracite/matt               | JZ-001.141 / BE               | UN990115                  | not required        |              |
|  | RTBSU-401.034#00<br><br>(LED) | S. 1 / B. 3 / B. 7            | polar white (RAL 9010) glossy | JZ-016.100 (55x55 glossy) | UN990140            | not required |
| Arsys  |   | polar white (RAL 9010) glossy | JZ-016.000 (50x50 glossy)     | UN990139                  | 1108 01 69          |              |
| K.   |   | polar white (RAL 9010) glossy | JZ-016.000 (50x50 glossy)     | UN990139                  | 1108 71 09          |              |
| RTBSU-401.062#00<br>RTBSU-401.262#00<br><br>(ON/OFF switch, LED)  | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) glossy | JZ-035.100 (55x55 glossy)     | UN990173                  | not required        |              |
|  | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) matt   | JZ-035.101 (55x55 matt)       | UN990197                  | not required        |              |
|  | Arsys   | polar white (RAL 9010) glossy | JZ-035.000 (50x50 glossy)     | UN990169                  | 1108 01 69          |              |
|  | Q. 1 / Q. 3   | polar white (RAL 9010) velvet | JZ-035.001 (50x50 matt)       | UN990193                  | 1109 60 79          |              |
|  | K. 1  | polar white (RAL 9010) glossy | JZ-035.000 (50x50 glossy)     | UN990169                  | 1108 71 09          |              |
|  | S. 1  | white (RAL 1013) glossy       | JZ-035.110 (55x55 glossy)     | UN990181                  | not required        |              |
|  | Arsys   | white (RAL 1013) glossy       | JZ-035.010 (50x50 glossy)     | UN990177                  | 1108 01 02          |              |
| RTBSU-401.063#00<br><br>(Switch H / OFF / C)  | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) glossy | JZ-038.100 (55x55 glossy)     | UN990174                  | not required        |              |
|  | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) matt   | JZ-038.101 (55x55 matt)       | UN990198                  | not required        |              |
|  | Arsys   | polar white (RAL 9010) glossy | JZ-038.000 (50x50 glossy)     | UN990170                  | 1108 01 69          |              |
|  | Q. 1 / Q. 3   | polar white (RAL 9010) velvet | JZ-038.001 (50x50, matt)      | UN990194                  | 1109 60 79          |              |
|  | K. 1  | polar white (RAL 9010) glossy | JZ-038.000 (50x50 glossy)     | UN990170                  | 1108 71 09          |              |
|  | S. 1  | white (RAL 1013) glossy       | JZ-038.110 (55x55 glossy)     | UN990182                  | not required        |              |
|  | Arsys   | white (RAL 1013) glossy       | JZ-038.010 (50x50 glossy)     | UN990178                  | 1108 01 02          |              |
| RTBSU-401.065#00<br>RTBSU-401.265#00<br><br>(H / C switch)  | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) glossy | JZ-037.100 (55x55 glossy)     | UN990175                  | not required        |              |
|  | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) matt   | JZ-037.101 (55x55 matt)       | UN990199                  | not required        |              |
|  | Arsys   | polar white (RAL 9010) glossy | JZ-037.000 (50x50 glossy)     | UN990171                  | 1108 01 69          |              |
|  | Q. 1 / Q. 3   | polar white (RAL 9010) velvet | JZ-037.001 (50x50, matt)      | UN990195                  | 1109 60 79          |              |
|  | K. 1  | polar white (RAL 9010) glossy | JZ-037.000 (50x50 glossy)     | UN990171                  | 1108 71 09          |              |
|  | S. 1  | white (RAL 1013) glossy       | JZ-037.110 (55x55 glossy)     | UN990183                  | not required        |              |
| RTBSU-401.075#00<br><br>(3-way switch, LED)   | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) glossy | JZ-036.100 (55x55 glossy)     | UN990176                  | not required        |              |
|  | S. 1 / B. 3 / B. 7  | polar white (RAL 9010) matt   | JZ-036.101 (55x55 matt)       | UN990200                  | not required        |              |
|  | Arsys   | polar white (RAL 9010) glossy | JZ-036.000 (50x50 glossy)     | UN990172                  | 1108 01 69          |              |
|  | Q. 1 / Q. 3   | polar white (RAL 9010) velvet | JZ-036.001 (50x50, matt)      | UN990196                  | 1109 60 79          |              |
|  | K. 1  | polar white (RAL 9010) glossy | JZ-036.000 (50x50 glossy)     | UN990172                  | 1108 71 09          |              |
|  | S. 1  | white (RAL 1013) glossy       | JZ-036.110 (55x55 glossy)     | UN990184                  | not required        |              |
| Arsys  | white (RAL 1013) glossy   | JZ-036.010 (50x50 glossy)     | UN990180                      | 1108 01 02                |                     |              |

\*) must be ordered from switch manufacturer or electronics wholesaler







# PRODUCT FINDER ALRE COVER SETS

## FOR SWITCH RANGES FROM BUSCH-JAEGER

### INTEGRATION EXAMPLES



RTBSU – in Reflex SI      RTBSU –  
in Busch-balance SI      RTBSU – in future linear      RTBSU – in solo      RTBSU – in alpha nea

| TYPE ALRE  | BERKER RANGE   | COLOUR (RAL)/<br>SURFACE FINISH | ALRE COVER SET                 | COVER SET<br>ITEM NO.          | INSERT<br>FRAME<br>50X50* | EURO/<br>PG  |
|--|--|---------------------------------|--------------------------------|--------------------------------|---------------------------|--------------|
| <br>Standard (without switch) | RTBSU-401.000#00<br>RTBSU-401.002#00<br>RTBSU-401.010#00<br>RTBSU-401.086#00<br>RTBSU-401.202#00<br>RTBSU-401.210#00 | <b>Reflex SI / SI Linear</b>    | alpine white (RAL 9010) glossy | JZ-001.200 / BJ                | G9990490                  | not required |
|  | <b>Busch-balance SI</b>  | alpine white (RAL 9010) glossy  | JZ-001.100 (55x55, glossy)     | UN990050                       | not required              |              |
|  | <b>impuls</b>  | alpine white (RAL 9010) glossy  | JZ-001.000 (50x50, glossy)     | UN990035                       | 1746 / 10-74              |              |
|  | <b>future linear / solo / axcent / carat</b>   | studio white (RAL 9016) glossy  | JZ-001.320 / BJ                | G9990493                       | not required              |              |
|  | <b>future linear</b>   | studio white (RAL 9016) matt    | JZ-001.021 (50x50, matt)       | UN990100                       | 1746 / 10-884             |              |
|  | <b>alpha nea</b>   | studio white (RAL 9016) glossy  | JZ-001.020 (50x50, glossy)     | UN990071                       | 1746 / 10-24G             |              |
|  | <b>alpha nea</b>   | studio white (RAL 9016) matt    | JZ-001.021 (50x50, matt)       | UN990100                       | 1746 / 10-24              |              |
|  | <b>Duro 2000 SI / SI Linear</b>  | white (RAL 1013) glossy         | JZ-001.210 / BJ                | G9990491                       | not required              |              |
|  | <b>future linear / solo / carat</b>  | ivory white (RAL 1013) glossy   | JZ-001.010 (50x50, glossy)     | UN990045                       | 1746 / 10-82              |              |
|  | <b>alpha nea</b>   | ivory white (RAL 1013) glossy   | JZ-001.010 (50x50, glossy)     | UN990045                       | 1746 / 10-22G             |              |
|  | <b>impuls</b>  | ivory white (RAL 1013) glossy   | JZ-001.010 (50x50, glossy)     | UN990045                       | 1746 / 10-72              |              |
|  | <b>future linear</b>   | aluminium silver/glossy         | JZ-001.030 / BJ                | UN990108                       | 1746 / 10-83              |              |
|  | <b>future linear</b>   | anthracite/glossy               | JZ-001.040 / BJ                | UN990109                       | 1746 / 10-81              |              |
|  | <br>(LED)                         | RTBSU-401.034#00                | <b>Busch-balance SI</b>        | alpine white (RAL 9010) glossy | JZ-016.100 (55x55 glossy) | UN990140     |
| <b>impuls</b>  |  | alpine white (RAL 9010) glossy  | JZ-016.000 (50x50 glossy)      | UN990139                       | 1746 / 10-74              |              |
| <br>(ON OFF switch, LED)    | RTBSU-401.062#00<br>RTBSU-401.262#00   | <b>Reflex SIcSI Linear</b>      | alpine white (RAL 9010) glossy | JZ-035.200 / BJ                | G9990492                  | not required |
|  | <b>Busch-balance SI</b>  | alpine white (RAL 9010) glossy  | JZ-035.100 (55x55 glossy)      | UN990173                       | not required              |              |
|  | <b>impuls</b>  | alpine white (RAL 9010) glossy  | JZ-035.000 (50x50 glossy)      | UN990169                       | 1746 / 10-74              |              |
|  | <b>future linear / solo / axcent / carat</b>   | studio white (RAL 9016) glossy  | JZ-035.020 (50x50 glossy)      | UN990185                       | 1746 / 10-84              |              |
|  | <b>future linear</b>   | studio white (RAL 9016) matt    | JZ-035.021 (50x50 matt)        | UN990201                       | 1746 / 10-884             |              |
|  | <b>alpha nea</b>   | studio white (RAL 9016) glossy  | JZ-035.020 (50x50 glossy)      | UN990185                       | 1746 / 10-24G             |              |
|  | <b>alpha nea</b>   | studio white (RAL 9016) matt    | JZ-035.021 (50x50 matt)        | UN990201                       | 1746 / 10-24              |              |
|  | <b>Duro 2000 SI / SI Linear</b>  | white (RAL 1013) glossy         | JZ-035.010 (50x50 glossy)      | UN990177                       | 1746-212-101              |              |
|  | <b>future linear / solo / carat</b>  | ivory white (RAL 1013) glossy   | JZ-035.010 (50x50 glossy)      | UN990177                       | 1746 / 10-82              |              |
|  | <b>alpha nea</b>   | ivory white (RAL 1013) glossy   | JZ-035.010 (50x50 glossy)      | UN990177                       | 1746 / 10-22G             |              |
|  | <b>impuls</b>  | ivory white (RAL 1013) glossy   | JZ-035.010 (50x50 glossy)      | UN990177                       | 1746 / 10-72              |              |
|  | <br>(Switch H / OFF / C)          | RTBSU-401.063#00                | <b>Reflex SI / SI Linear</b>   | alpine white (RAL 9010) glossy | JZ-038.000 (50x50 glossy) | UN990170     |
| <b>Busch-balance SI</b>  |  | alpine white (RAL 9010) glossy  | JZ-038.100 (55x55 glossy)      | UN990174                       | not required              |              |
| <b>impuls</b>  |  | alpine white (RAL 9010) glossy  | JZ-038.000 (50x50 glossy)      | UN990170                       | 1746 / 10-74              |              |
| <b>future linear / solo / axcent / carat</b>   |  | studio white (RAL 9016) glossy  | JZ-038.020 (50x50 glossy)      | UN990186                       | 1746 / 10-84              |              |
| <b>future linear</b>   |  | studio white (RAL 9016) matt    | JZ-038.021 (50x50 matt)        | UN990202                       | 1746 / 10-884             |              |
| <b>alpha nea</b>   |  | studio white (RAL 9016) glossy  | JZ-038.020 (50x50 glossy)      | UN990186                       | 1746 / 10-24G             |              |
| <b>alpha nea</b>   |  | studio white (RAL 9016) matt    | JZ-038.021 (50x50 matt)        | UN990202                       | 1746 / 10-24              |              |
| <b>Duro 2000 SI / SI Linear</b>  |  | white (RAL 1013) glossy         | JZ-038.010 (50x50 glossy)      | UN990178                       | 1746-212-101              |              |
| <b>future linear / solo / carat</b>  |  | ivory white (RAL 1013) glossy   | JZ-038.010 (50x50 glossy)      | UN990178                       | 1746 / 10-82              |              |
| <b>alpha nea</b>   |  | ivory white (RAL 1013) glossy   | JZ-038.010 (50x50 glossy)      | UN990178                       | 1746 / 10-22G             |              |
| <b>impuls</b>  |  | ivory white (RAL 1013) glossy   | JZ-038.010 (50x50 glossy)      | UN990178                       | 1746 / 10-72              |              |



## PRODUCT FINDER ALRE COVER SETS

### FOR SWITCH RANGES FROM BUSCH-JAEGER

#### INTEGRATION EXAMPLES



RTBSU – in Reflex SI



RTBSU – in Busch-balance SI





RTBSU – in future linear



RTBSU – in solo



RTBSU – in alpha nea

| TYPE ALRE  | BUSCH-JAEGER RANGE                           | COLOUR (RAL)/ SURFACE FINISH   | ALRE COVER SET            | COVER SET ITEM NO. | INSERT FRAME 50X50* | EURO/ PG |
|--|--|--------------------------------|---------------------------|--------------------|---------------------|----------|
| RTBSU-401.065#00<br>RTBSU-401.265#00<br><br><br>(H/ C switch) | <b>Reflex SI/ SI Linear</b>                  | alpine white (RAL 9010) glossy | JZ-037.000 (50x50 glossy) | UN990171           | 1746-214-101        |          |
|  | <b>Busch-balance SI</b>                      | alpine white (RAL 9010) glossy | JZ-037.100 (55x55 glossy) | UN990175           | not required        |          |
|  | <b>impuls</b>                                | alpine white (RAL 9010) glossy | JZ-037.000 (50x50 glossy) | UN990171           | 1746/10-74          |          |
|  | <b>future linear / solo / axcent / carat</b> | studio white (RAL 9016) glossy | JZ-037.020 (50x50 glossy) | UN990187           | 1746/10-84          |          |
|  | <b>future linear</b>                         | studio white (RAL 9016) matt   | JZ-037.021 (50x50 matt)   | UN990203           | 1746/10-884         |          |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) glossy | JZ-037.020 (50x50 glossy) | UN990187           | 1746/10-24G         |          |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) matt   | JZ-037.021 (50x50 matt)   | UN990203           | 1746/10-24          |          |
|  | <b>Duro 2000 SI/ SI Linear</b>               | white (RAL 1013) glossy        | JZ-037.010 (50x50 glossy) | UN990179           | 1746-212-101        |          |
|  | <b>future linear / solo / carat</b>          | ivory white (RAL 1013) glossy  | JZ-037.010 (50x50 glossy) | UN990179           | 1746/10-82          |          |
|  | <b>alpha nea</b>                             | ivory white (RAL 1013) glossy  | JZ-037.010 (50x50 glossy) | UN990179           | 1746/10-22G         |          |
|  | <b>impuls</b>                                | ivory white (RAL 1013) glossy  | JZ-037.010 (50x50 glossy) | UN990179           | 1746/10-72          |          |
| RTBSU-401.075#00<br><br><br>(3-way switch, LED)             | <b>Reflex SI/ SI Linear</b>                  | alpine white (RAL 9010) glossy | JZ-036.000 (50x50 glossy) | UN990172           | 1746-214-101        |          |
|  | <b>Busch-balance SI</b>                      | alpine white (RAL 9010) glossy | JZ-036.100 (55x55 glossy) | UN990176           | not required        |          |
|  | <b>impuls</b>                                | alpine white (RAL 9010) glossy | JZ-036.000 (50x50 glossy) | UN990172           | 1746/10-74          |          |
|  | <b>future linear / solo / axcent / carat</b> | studio white (RAL 9016) glossy | JZ-036.020 (50x50 glossy) | UN990188           | 1746/10-84          |          |
|  | <b>future linear</b>                         | studio white (RAL 9016) matt   | JZ-036.021 (50x50 matt)   | UN990204           | 1746/10-884         |          |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) glossy | JZ-036.020 (50x50 glossy) | UN990188           | 1746/10-24G         |          |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) matt   | JZ-036.021 (50x50 matt)   | UN990204           | 1746/10-24          |          |
|  | <b>Duro 2000 SI/ SI Linear</b>               | white (RAL 1013) glossy        | JZ-036.010 (50x50 glossy) | UN990180           | 1746-212-101        |          |
|  | <b>future linear / solo / carat</b>          | ivory white (RAL 1013) glossy  | JZ-036.010 (50x50 glossy) | UN990180           | 1746/10-82          |          |
|  | <b>alpha nea</b>                             | ivory white (RAL 1013) glossy  | JZ-036.010 (50x50 glossy) | UN990180           | 1746/10-22G         |          |
|  | <b>impuls</b>                                | ivory white (RAL 1013) glossy  | JZ-036.010 (50x50 glossy) | UN990180           | 1746/10-72          |          |

\*) must be ordered from switch manufacturer or electronics wholesaler

For BJ future/solo there are also 55x55 insert frames (for use with alre 55x55 cover set) – BJ item no. 1747-84 (studio white) and 1784-82 (ivory white)

Note: Busch-Jaeger central disc cannot be used with alre RTBSU.



## PRODUCT FINDER ALRE COVER SETS

FOR SWITCH RANGES FROM ELSO

### INTEGRATION EXAMPLES



RTBSU – in Joy









RTBSU – in Fashion



RTBSU – in Riva



RTBSU – in Scala

| TYPE ALRE  | ELSO RANGE   | COLOUR (RAL) / SURFACE FINISH | ALRE COVER SET                | COVER SET ITEM NO.         | INSERT FRAME 50X50* | EURO / PG    |
|--|--|-------------------------------|-------------------------------|----------------------------|---------------------|--------------|
| <br>Standard (without switch) | RTBSU-401.000#00<br>RTBSU-401.002#00<br>RTBSU-401.010#00 | <b>Joy</b>                    | pure white (RAL 9010) glossy  | JZ-001.100 (55x55, glossy) | UN990050            | not required |
|  | RTBSU-401.086#00<br>RTBSU-401.202#00<br>RTBSU-401.210#00 | <b>Joy</b>                    | pearl white (RAL 1013) glossy | JZ-001.110 (55x55, glossy) | UN990060            | not required |
|  |  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy  | JZ-001.000 (50x50, glossy) | UN990035            | 203084       |
|  |  | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy | JZ-001.010 (50x50, glossy) | UN990045            | 203080       |
| <br>(LED)                     | RTBSU-401.034#00   | <b>Joy</b>                    | pure white (RAL 9010) glossy  | JZ-016.100 (55x55 glossy)  | UN990140            | not required |
|  |  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy  | JZ-016.000 (50x50 glossy)  | UN990139            | 203084       |
| <br>(ON / OFF switch, LED)  | RTBSU-401.062#00<br>RTBSU-401.262#00                     | <b>Joy</b>                    | pure white (RAL 9010) glossy  | JZ-035.100 (55x55 glossy)  | UN990173            | not required |
|  |  | <b>Joy</b>                    | pearl white (RAL 1013) glossy | JZ-035.110 (55x55 glossy)  | UN990181            | not required |
|  |  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy  | JZ-035.000 (50x50 glossy)  | UN990169            | 203084       |
|  |  | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy | JZ-035.010 (50x50 glossy)  | UN990177            | 203080       |
| <br>(Switch H / OFF / C)    | RTBSU-401.063#00   | <b>Joy</b>                    | pure white (RAL 9010) glossy  | JZ-038.100 (55x55 glossy)  | UN990174            | not required |
|  |  | <b>Joy</b>                    | pearl white (RAL 1013) glossy | JZ-038.110 (55x55 glossy)  | UN990182            | not required |
|  |  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy  | JZ-038.000 (50x50 glossy)  | UN990170            | 203084       |
|  |  | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy | JZ-038.010 (50x50 glossy)  | UN990178            | 203080       |
| <br>(H / C switch)          | RTBSU-401.065#00<br>RTBSU-401.265#00                     | <b>Joy</b>                    | pure white (RAL 9010) glossy  | JZ-037.100 (55x55 glossy)  | UN990175            | not required |
|  |  | <b>Joy</b>                    | pearl white (RAL 1013) glossy | JZ-037.110 (55x55 glossy)  | UN990183            | not required |
|  |  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy  | JZ-037.000 (50x50 glossy)  | UN990171            | 203084       |
|  |  | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy | JZ-037.010 (50x50 glossy)  | UN990179            | 203080       |
| <br>(3-way switch, LED)     | RTBSU-401.075#00   | <b>Joy</b>                    | pure white (RAL 9010) glossy  | JZ-036.100 (55x55 glossy)  | UN990176            | not required |
|  |  | <b>Joy</b>                    | pearl white (RAL 1013) glossy | JZ-036.110 (55x55 glossy)  | UN990184            | not required |
|  |  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy  | JZ-036.000 (50x50 glossy)  | UN990172            | 203084       |
|  |  | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy | JZ-036.010 (50x50 glossy)  | UN990180            | 203080       |

\*) must be ordered from switch manufacturer or electronics wholesaler



# PRODUCT FINDER ALRE COVER SETS

## FOR SWITCH RANGES FROM GIRA

### INTEGRATION EXAMPLES



RTBSU – in Standard 55



RTBSU – in E2



RTBSU – in Event



RTBSU – in surface switch



RTBSU – in E22

| TYPE ALRE                        | GIRA RANGE   | COLOUR (RAL)/ SURFACE FINISH            | ALRE COVER SET                          | COVER SET ITEM NO.           | INSERT FRAME 50X50*       | EURO/ PG     |              |
|----------------------------------|--|---|---|------------------------------|---------------------------|--------------|--------------|
| <p>Standard (without switch)</p> | RTBSU-401.000#00<br>RTBSU-401.002#00<br>RTBSU-401.010#00 | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) glossy            | JZ-001.100 (55x55, glossy)   | UN990050                  | not required |              |
|                                  | RTBSU-401.086#00<br>RTBSU-401.202#00<br>RTBSU-401.210#00 | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) matt              | JZ-001.101 (55x55, matt)     | UN990055                  | not required |              |
|                                  |  | Surface switch <b>NEW</b>               | pure white (RAL 9010) glossy            | JZ-001.400 (70x70 glossy)    | UN990141                  | not required |              |
|                                  |  | Standard 55 / Event / Esprit / ClassiX  | cream white (RAL 1013) glossy           | JZ-001.110 (55x55, glossy)   | UN990060                  | not required |              |
|                                  |  | System 55                               | aluminium/matt                          | JZ-001.131 / GI              | UN990110                  | not required |              |
|                                  |  | System 55                               | anthracite/matt                         | JZ-001.141 / GI              | UN990111                  | not required |              |
|                                  |  | RTBSU-401.034#00                        | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) glossy | JZ-016.100 (55x55 glossy) | UN990140     | not required |
| <p>(LED)</p>                     |  | Surface switch <b>NEW</b>               | pure white (RAL 9010) glossy            | JZ-016.400 (70x70 glossy)    | UN990142                  | not required |              |
|                                  | RTBSU-401.062#00<br>RTBSU-401.262#00                     | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) glossy            | JZ-035.100 (55x55 glossy)    | UN990173                  | not required |              |
| <p>(ON/OFF switch, LED)</p>      |  | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) matt              | JZ-035.101 (55x55 matt)      | UN990197                  | not required |              |
|                                  |  | Surface switch <b>NEW</b>               | pure white (RAL 9010) glossy            | JZ-035.400 (70x70, glossy)   | UN990143                  | not required |              |
|                                  |  | Standard 55 / Event / Esprit / ClassiX  | cream white (RAL 1013) glossy           | JZ-035.110 (55x55 glossy)    | UN990181                  | not required |              |
|                                  |  | System 55                               | anthracite / matt                       | JZ-035.141 / GI              | UN990205                  | not required |              |
|                                  |  | RTBSU-401.063#00                        | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) glossy | JZ-038.100 (55x55 glossy) | UN990174     | not required |
| <p>(Switch H/OFF/C)</p>          |  | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) matt              | JZ-038.101 (55x55 matt)      | UN990198                  | not required |              |
|                                  |  | surface switch                          | pure white (RAL 9010) glossy            | JZ-038.000 (50x50 glossy)    | UN990170                  | 0282 112     |              |
|                                  |  | Standard 55 / Event / Esprit / ClassiX  | cream white (RAL 1013) glossy           | JZ-038.110 (55x55 glossy)    | UN990182                  | not required |              |
|                                  |  | RTBSU-401.065#00<br>RTBSU-401.265#00    | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) glossy | JZ-037.100 (55x55 glossy) | UN990175     | not required |
|                                  |  | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) matt              | JZ-037.101 (55x55 matt)      | UN990199                  | not required |              |
| <p>(H/C switch)</p>              |  | Surface switch <b>NEW</b>               | pure white (RAL 9010) glossy            | JZ-037.400 (70x70 glossy)    | UN990144                  | not required |              |
|                                  |  | Standard 55 / Event / Esprit / ClassiX  | cream white (RAL 1013) glossy           | JZ-037.110 (55x55 glossy)    | UN990183                  | not required |              |
|                                  |  | RTBSU-401.075#00                        | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) glossy | JZ-036.100 (55x55 glossy) | UN990176     | not required |
| <p>(3-way switch, LED)</p>       |  | Standard 55 / E2 / E22 / Event / Esprit | pure white (RAL 9010) matt              | JZ-036.101 (55x55 matt)      | UN990200                  | not required |              |
|                                  |  | surface switch                          | pure white (RAL 9010) glossy            | JZ-036.000 (50x50 glossy)    | UN990172                  | 0282 40      |              |
|                                  |  | Standard 55 / Event / Esprit / ClassiX  | cream white (RAL 1013) glossy           | JZ-036.110 (55x55 glossy)    | UN990184                  | not required |              |

\*) must be ordered from switch manufacturer or electronics wholesaler

\*\*) for GIRA surface switches, there are also 55x55 insert frames (for the use of alre 55x55 cover set) – GIRA item no. 0289 112 (pure white) and 0289 111 (cream white)



# PRODUCT FINDER ALRE COVER SETS

## FOR SWITCH RANGES FROM JUNG

### INTEGRATION EXAMPLES



RTBSU – in AS 500



RTBSU – in A 500



RTBSU – in A plus



RTBSU – in A creation



RTBSU – in LS-design

| TYPE ALRE   | JUNG RANGE   | COLOUR (RAL) / SURFACE FINISH                         | ALRE COVER SET                 | COVER SET ITEM NO.         | INSERT FRAME 50X50* | EURO / PG    |
|---|--|---|--------------------------------|----------------------------|---------------------|--------------|
| <br>Standard<br>(without switch) | RTBSU-401.000#00<br>RTBSU-401.002#00<br>RTBSU-401.010#00<br>RTBSU-401.086#00<br>RTBSU-401.202#00<br>RTBSU-401.210#00 | AS 500 / A 500 / A 550 / A creation / A plus / A flow | alpine white (RAL 9010) glossy | JZ-001.100 (55x55, glossy) | UN990050            | not required |
|   | CD 500 / CD plus   | alpine white (RAL 9010) glossy                        | JZ-001.000 (50x50, glossy)     | UN990035                   | CD 590 Z WW         |              |
|   | LS 990 / LS design / LS plus <b>NEW</b>  | alpine white (RAL 9010) glossy                        | JZ-001.400 (70x70 glossy)      | UN990141                   | not required        |              |
|   | AS 500   | white (RAL 1013) glossy                               | JZ-001.110 (55x55, glossy)     | UN990060                   | not required        |              |
|   | CD 500 / CD plus   | white (RAL 1013) glossy                               | JZ-001.010 (50x50, glossy)     | UN990045                   | 590 Z               |              |
|   | LS 990 / LS design / LS plus <b>NEW</b>  | white (RAL 1013) glossy                               | JZ-001.410 (70x70, glossy)     | UN990145                   | not required        |              |
|   | AS 550 / A flow  | snow white matt                                       | JZ-001.101 (55x55, matt)       | UN990055                   | not required        |              |
| <br>(LED)                       | RTBSU-401.034#00   | AS 500 / A 500 / A 550 / A creation / A plus / A flow | alpine white (RAL 9010) glossy | JZ-016.100 (55x55 glossy)  | UN990140            | not required |
|   | CD 500 / CD plus   | alpine white (RAL 9010) glossy                        | JZ-016.000 (50x50 glossy)      | UN990139                   | CD 590 Z WW         |              |
|   | LS 990 / LS design / LS plus <b>NEW</b>  | alpine white (RAL 9010) glossy                        | JZ-016.400 (70x70 glossy)      | UN990142                   | not required        |              |
| <br>(ON/OFF switch, LED)       | RTBSU-401.062#00<br>RTBSU-401.262#00   | AS 500 / A 500 / A 550 / A creation / A plus / A flow | alpine white (RAL 9010) glossy | JZ-035.100 (55x55 glossy)  | UN990173            | not required |
|   | CD 500 / CD plus   | alpine white (RAL 9010) glossy                        | JZ-035.000 (50x50 glossy)      | UN990169                   | CD 590 Z WW         |              |
|   | LS 990 / LS design / LS plus <b>NEW</b>  | alpine white (RAL 9010) glossy                        | JZ-035.400 (70x70, glossy)     | UN990143                   | not required        |              |
|   | AS 500   | white (RAL 1013) glossy                               | JZ-035.110 (55x55 glossy)      | UN990181                   | not required        |              |
|   | CD 500 / CD plus   | white (RAL 1013) glossy                               | JZ-035.010 (50x50 glossy)      | UN990177                   | 590 Z               |              |
|   | LS 990 / LS design / LS plus <b>NEW</b>  | white (RAL 1013) glossy                               | JZ-035.410 (70x70 glossy)      | UN990147                   | not required        |              |
|   | AS 550 / A flow  | snow white matt                                       | JZ-035.101 (55x55 matt)        | UN990197                   | not required        |              |
| <br>(Switch H / OFF / C)       | RTBSU-401.063#00   | AS 500 / A 500 / A 550 / A creation / A plus / A flow | alpine white (RAL 9010) glossy | JZ-038.100 (55x55 glossy)  | UN990174            | not required |
|   | CD 500 / CD plus   | alpine white (RAL 9010) glossy                        | JZ-038.000 (50x50 glossy)      | UN990170                   | CD 590 Z WW         |              |
|   | LS 990 / LS design / LS plus   | alpine white (RAL 9010) glossy                        | JZ-038.000 (50x50 glossy)      | UN990170                   | LS 961 Z WW **      |              |
|   | AS 500   | white (RAL 1013) glossy                               | JZ-038.110 (55x55 glossy)      | UN990182                   | not required        |              |
|   | CD 500 / CD plus   | white (RAL 1013) glossy                               | JZ-038.010 (50x50 glossy)      | UN990178                   | 590 Z               |              |
|   | LS 990 / LS design / LS plus   | white (RAL 1013) glossy                               | JZ-038.010 (50x50 glossy)      | UN990178                   | LS 961 Z **         |              |
|   | AS 550 / A flow  | snow white matt                                       | JZ-038.101 (55x55 matt)        | UN990198                   | not required        |              |
| <br>(H / C switch)             | RTBSU-401.065#00<br>RTBSU-401.265#00   | AS 500 / A 500 / A 550 / A creation / A plus / A flow | alpine white (RAL 9010) glossy | JZ-037.100 (55x55 glossy)  | UN990175            | not required |
|   | CD 500 / CD plus   | alpine white (RAL 9010) glossy                        | JZ-037.000 (50x50 glossy)      | UN990171                   | CD 590 Z WW         |              |
|   | LS 990 / LS design / LS plus <b>NEW</b>  | alpine white (RAL 9010) glossy                        | JZ-037.400 (70x70 glossy)      | UN990144                   | not required        |              |
|   | AS 500   | white (RAL 1013) glossy                               | JZ-037.110 (55x55 glossy)      | UN990183                   | not required        |              |
|   | CD 500 / CD plus   | white (RAL 1013) glossy                               | JZ-037.010 (50x50 glossy)      | UN990179                   | 590 Z               |              |
|   | LS 990 / LS design / LS plus <b>NEW</b>  | white (RAL 1013) glossy                               | JZ-037.410 (70x70, glossy)     | UN990148                   | not required        |              |
|   | AS 550 / A flow  | snow white matt                                       | JZ-037.101 (55x55 matt)        | UN990199                   | not required        |              |
| <br>(3-way switch, LED)        | RTBSU-401.075#00   | AS 500 / A 500 / A 550 / A creation / A plus / A flow | alpine white (RAL 9010) glossy | JZ-036.100 (55x55 glossy)  | UN990176            | not required |
|   | CD 500 / CD plus   | alpine white (RAL 9010) glossy                        | JZ-036.000 (50x50 glossy)      | UN990172                   | CD 590 Z WW         |              |
|   | LS 990 / LS design / LS plus   | alpine white (RAL 9010) glossy                        | JZ-036.000 (50x50 glossy)      | UN990172                   | LS 961 Z WW **      |              |
|   | AS 500   | white (RAL 1013) glossy                               | JZ-036.110 (55x55 glossy)      | UN990184                   | not required        |              |
|   | CD 500 / CD plus   | white (RAL 1013) glossy                               | JZ-036.010 (50x50 glossy)      | UN990180                   | 590 Z               |              |
|   | LS 990 / LS design / LS plus   | white (RAL 1013) glossy                               | JZ-036.010 (50x50 glossy)      | UN990180                   | LS 961 Z **         |              |
|   | AS 550 / A flow  | snow white matt                                       | JZ-036.101 (55x55 matt)        | UN990200                   | not required        |              |

\*) must be ordered from switch manufacturer or electronics wholesaler

\*\*\* if necessary, the manufacturer JUNG will change the colour of alpine white from RAL 9010 to RAL 9016



# PRODUCT FINDER ALRE COVER SETS

## FOR SWITCH RANGES FROM MERTEN

### INTEGRATION EXAMPLES



RTBSU – in 1-M



RTBSU – in M-Smart



RTBSU – in M-Plan



RTBSU – in Artec



RTBSU – in Antik

| TYPE ALRE  | MERTEN RANGE   | COLOUR (RAL) / SURFACE FINISH                       | ALRE COVER SET                | COVER SET ITEM NO.         | INSERT FRAME 50X50* | EURO/ PG     |
|--|--|---|-------------------------------|----------------------------|---------------------|--------------|
| <br>Standard (without switch) | RTBSU-401.000#00<br>RTBSU-401.002#00<br>RTBSU-401.010#00<br>RTBSU-401.086#00<br>RTBSU-401.202#00<br>RTBSU-401.210#00 | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ | polar white (RAL 9010) glossy | JZ-001.100 (55x55, glossy) | UN990050            | not required |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | polar white (RAL 9010) matt                         | JZ-001.101 (55x55, matt)      | UN990055                   | not required        |              |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | active white (RAL 9016) glossy                      | JZ-001.120 (55x55, glossy)    | UN990086                   | not required        |              |
|  | D-Life <b>NEW</b>  | lotus white (RAL 9016) glossy                       | JZ-001.420 (70x70, glossy)    | UN990149                   | not required        |              |
|  | System design: Artec, Antik  | polar white (RAL 9010) glossy                       | JZ-001.000 (50x50, glossy)    | UN990035                   | 5160 99             |              |
| <br>Standard (without switch) | RTBSU-401.034#00   | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ | polar white (RAL 9010) glossy | JZ-016.100 (55x55 glossy)  | UN990140            | not required |
|  | System design: Artec, Antik  | polar white (RAL 9010) glossy                       | JZ-016.000 (50x50, glossy)    | UN990139                   | 5160 99             |              |
|  | D-Life <b>NEW</b>  | lotus white (RAL 9016) glossy                       | JZ-016.420 (70x70, glossy)    | UN990150                   | not required        |              |
|  | System design: Artec, Antik  | polar white (RAL 9010) glossy                       | JZ-016.000 (50x50, glossy)    | UN990139                   | 5160 99             |              |
|  | D-Life <b>NEW</b>  | lotus white (RAL 9016) glossy                       | JZ-016.420 (70x70, glossy)    | UN990150                   | not required        |              |
| (LED)  | RTBSU-401.062#00<br>RTBSU-401.262#00   | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ | polar white (RAL 9010) glossy | JZ-035.100 (55x55 glossy)  | UN990173            | not required |
| 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | polar white (RAL 9010) matt  | JZ-035.101 (55x55 matt)                             | UN990197                      | not required               |                     |              |
| 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | active white (RAL 9016) glossy   | JZ-035.120 (55x55 glossy)                           | UN990189                      | not required               |                     |              |
| D-Life <b>NEW</b>  | lotus white (RAL 9016) glossy  | JZ-035.420 (70x70, glossy)                          | UN990151                      | not required               |                     |              |
| System design: Artec, Antik  | polar white (RAL 9010) glossy  | JZ-035.000 (50x50 glossy)                           | UN990169                      | 5160 99                    |                     |              |
| <br>(ON / OFF switch, LED)  | RTBSU-401.063#00   | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ | polar white (RAL 9010) glossy | JZ-038.100 (55x55 glossy)  | UN990174            | not required |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | polar white (RAL 9010) matt                         | JZ-038.101 (55x55 matt)       | UN990198                   | not required        |              |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | active white (RAL 9016) glossy                      | JZ-038.120 (55x55, glossy)    | UN990190                   | not required        |              |
|  | D-Life   | lotus white (RAL 9016) glossy                       | JZ-038.020 (50x50 glossy)     | UN990186                   | MEG4500-6035        |              |
|  | System design: Artec, Antik  | polar white (RAL 9010) glossy                       | JZ-038.000 (50x50 glossy)     | UN990170                   | 5160 99             |              |
| <br>(Switch H / OFF / C)    | RTBSU-401.065#00<br>RTBSU-401.265#00   | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ | polar white (RAL 9010) glossy | JZ-037.100 (55x55 glossy)  | UN990175            | not required |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | polar white (RAL 9010) matt                         | JZ-037.101 (55x55 matt)       | UN990199                   | not required        |              |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | active white (RAL 9016) glossy                      | JZ-037.120 (55x55, glossy)    | UN990191                   | not required        |              |
|  | D-Life <b>NEW</b>  | lotus white (RAL 9016) glossy                       | JZ-037.420 (70x70, glossy)    | UN990150                   | not required        |              |
|  | System design: Artec, Antik  | polar white (RAL 9010) glossy                       | JZ-037.000 (50x50 glossy)     | UN990171                   | 5160 99             |              |
| <br>(H / C switch)          | RTBSU-401.075#00   | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ | polar white (RAL 9010) glossy | JZ-036.100 (55x55 glossy)  | UN990176            | not required |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | polar white (RAL 9010) matt                         | JZ-036.101 (55x55 matt)       | UN990200                   | not required        |              |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | active white (RAL 9016) glossy                      | JZ-036.120 (55x55, glossy)    | UN990192                   | not required        |              |
|  | D-Life   | lotus white (RAL 9016) glossy                       | JZ-036.020 (50x50 glossy)     | UN990188                   | MEG4500-6035        |              |
|  | System design: Artec, Antik  | polar white (RAL 9010) glossy                       | JZ-036.000 (50x50 glossy)     | UN990172                   | 5160 99             |              |
| <br>(3-way switch, LED)     | RTBSU-401.075#00   | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ | polar white (RAL 9010) glossy | JZ-036.100 (55x55 glossy)  | UN990176            | not required |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | polar white (RAL 9010) matt                         | JZ-036.101 (55x55 matt)       | UN990200                   | not required        |              |
|  | 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | active white (RAL 9016) glossy                      | JZ-036.120 (55x55, glossy)    | UN990192                   | not required        |              |
|  | D-Life   | lotus white (RAL 9016) glossy                       | JZ-036.020 (50x50 glossy)     | UN990188                   | MEG4500-6035        |              |
|  | System design: Artec, Antik  | polar white (RAL 9010) glossy                       | JZ-036.000 (50x50 glossy)     | UN990172                   | 5160 99             |              |
| 1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ  | white (RAL 1013) glossy  | JZ-036.110 (55x55 glossy)                           | UN990184                      | not required               |                     |              |
| System design: Artec, Antik  | white (RAL 1013) glossy  | JZ-036.010 (50x50 glossy)                           | UN990180                      | 5160 94                    |                     |              |

\*) must be ordered from switch manufacturer or electronics wholesaler  
 Note: Merten central plates cannot be used with alre FTR.





# CONTROLLERS FOR ALL SWITCH RANGES

Integration examples in switch ranges with or without insert frame



**ADAPTATION EXAMPLE  
BERKER (S.1)**



**ADAPTATION EXAMPLE  
JUNG (AS 500)**



**ADAPTATION EXAMPLE  
BUSCH-JAEGER  
(REFLEX SI LINEAR)**



**ADAPTATION EXAMPLE  
BERKER B.3 ALUMINIUM**



**ADAPTATION EXAMPLE  
GIRA (SURFACE SWITCH)**

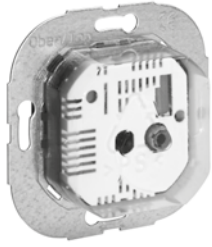


**ADAPTATION EXAMPLE  
BERKER (K.1)**



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, FTR

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP



### TECHNICAL DATA

|  |  |
|--|--|
| <b>Design:</b>                           | Berlin UP  |
| <b>Housing material:</b>                 | PC plastic   |
| <b>Ambient temperature:</b>              | 0 ... 30 °C  |
| <b>Storage temperature:</b>              | -20 ... +70 °C   |
| <b>Permissible atmospheric humidity:</b> | max. 95% rel. humidity, non-condensing   |
| <b>Electrical connection:</b>            | screw-type terminals   |
| <b>Mounting/ attachment:</b>             | in flush-mounted socket – with cover set 50x50 mm or 55x55 mm, can be used with almost all switch ranges (deep flush-mounted socket recommended) |
| <b>Protection rating:</b>                | IP30   |
| <b>Protection class:</b>                 | II, if properly mounted; with 24 VAC, protection class III   |
| <b>Safety and EMC:</b>                   | according to DIN EN 60730  |
| <b>Max. power consumption:</b>           | < 0.5 W  |
| <b>Switching element:</b>                | bimetallic contact   |
| <b>Output signal:</b>                    | switching  |
| <b>Sensor:</b>                           | bimetal  |
| <b>Control range:</b>                    | 5 ... 30 °C  |
| <b>Setting range:</b>                    | 5 ... 30 °C  |
| <b>Hysteresis:</b>                       | approx. 0.5 K at a temperature change of max. 4 K/h  |
| <b>General features:</b>                 | thermal feedback; multi-digit display<br>* ... 6   |

### APPLICATION

Control or monitoring of temperatures in closed, dry spaces. Suitable for all heating systems.


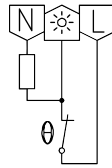

Valve actuator: normally closed. If normally open heating valves are available, they should be connected to the cooling output of the changeover switch (toggler), e.g., FTR 101.010.

Up to a maximum of 10 actuators for valves can be connected (normally closed, NC); with a toggler, on the NO contact, up to 5 units.

In terms of visual aesthetics, the basic controllers, in combination with a 55x55 mm cover set, fit perfectly in many switch ranges without an insert frame.

The basic controllers, in combination with a 50x50 mm cover set, fit in nearly all switch ranges with the use of an insert frame.


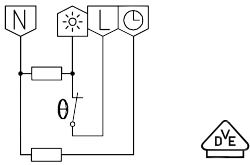

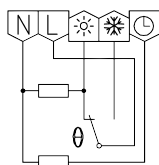

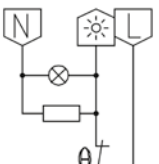

Other complete devices (#21 types) with alre frame 'Berlin' (neutral), 50x50 mm cover (pure white, like RAL 9010, glossy) upon request.

| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
| FTR 101.000#00<br> | UA010017 | <p><b>General features:</b> mechanical range limitation; external setting; protective cap; contact hazard protection cover plate; VDE-tested</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Control function:</b> Heating</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-001.xxx, for example:</b><br/>cover set 50x50 mm, pure white, glossy: JZ-001.000<br/>cover set 55x55 mm, pure white, glossy: JZ-001.100</p> <p><b>BUSCH-JAEGER cover set</b><br/>Reflex SI/ SI Linear, pure white, glossy: JZ-001.200/BJ<br/>future linear, solo, axcent, carat, studio white (RAL 9016), glossy; JZ-001.320/BJ</p> |  |         |
| FTR 101.000#21<br> | UN010009 | like FTR 101.000#00, but with scope of delivery: Controller, alre frame 'Berlin' (neutral), cover 50x50 mm, pure white (like RAL 9010), glossy   |   |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, FTR


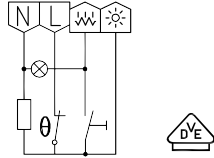

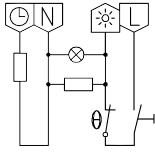

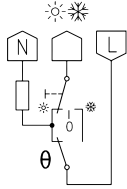

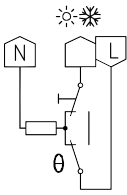
## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
|    | UA010134 | <p><b>General features:</b> ECO function; mechanical range limitation; external setting; protective cap; contact hazard protection cover plate; VDE-tested</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Control function:</b> heating</p> <p><b>Input temperature reduction:</b> approx. 4 K (230 VAC, 50 Hz)</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-001.xxx, for example:</b><br/> cover set 50x50 mm, pure white, glossy: JZ-001.000<br/> cover set 55x55 mm, pure white, glossy: JZ-001.100</p> <p><b>BUSCH-JAEGER cover set</b><br/> Reflex SI/SI Linear, pure white, glossy: JZ-001.200/BJ<br/> future linear, solo, axcent, carat, studio white (RAL 9016), glossy; JZ-001.320/BJ</p>  |    |         |
|   | UA010222 | <p><b>General features:</b> ECO function; mechanical range limitation; external setting; protective cap; contact hazard protection cover plate; VDE-tested</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> heating terminal 10 (4) A, cooling terminal 5 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> heating terminal: 2300 W, Cooling terminal: 1150 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 10 actuators output heating, max. 5 actuators output cooling)</p> <p><b>Control function:</b> heating or cooling</p> <p><b>Input temperature reduction:</b> approx. 4 K (230 VAC, 50 Hz)</p> <p>Cover sets are offered in various designs(see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-001.xxx, for example:</b><br/> cover set 50x50 mm, pure white, glossy: JZ-001.000<br/> cover set 55x55 mm, pure white, glossy: JZ-001.100</p> <p><b>BUSCH-JAEGER cover set</b><br/> Reflex SI/SI Linear, pure white, glossy: JZ-001.200/BJ<br/> future linear, solo, axcent, carat, studio white (RAL 9016), glossy; JZ-001.320/BJ</p> |   |         |
|  | UA012404 | <p><b>General features:</b> 'heating' display; mechanical range limitation; external setting; contact hazard protection cover plate</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Control function:</b> heating</p> <p><b>Scope of delivery:</b> controller, cover 50x50 mm, pure white (like RAL 9010), glossy</p>   |  |         |
|  | UA012405 | like FTR 101.034#07 but with 55x55 mm cover  |   |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, FTR


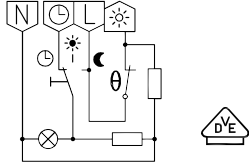

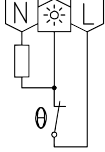


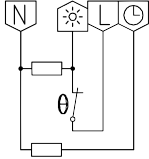

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE  | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|---|---|---------|
|    | UA010702 | <p><b>General features:</b> 'Auxiliary heating' display; mechanical range limitation; <b>auxiliary heating switch</b>; external setting</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> the total current (heating + auxiliary heating) may not exceed 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> the total power output (heating + auxiliary heating) may not exceed 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Control function:</b> Heating</p> <p><b>Scope of delivery:</b> controller, alre frame 'Berlin' (neutral), cover 50x50 mm, pure white (like RAL 9010), glossy</p>  |    |         |
|    | UA010811 | <p><b>General features:</b> ECO function; 'heating' display; mechanical range limitation; <b>on / off switch</b>; external setting; protective cap; contact hazard protection cover plate; VDE-tested</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Control function:</b> Heating</p> <p><b>Input 'temperature reduction':</b> Approx. 4 K (230 VAC, 50 Hz)</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-002.xxx, e.g.:</b><br/>cover set 50x50 mm, pure white, glossy: JZ-002.000<br/>cover set 55x55 mm, pure white, glossy: JZ-002.100</p> <p><b>BUSCH-JAEGER cover set</b><br/>Reflex SI/SI Linear, pure white, glossy: JZ-002.200 / BJ (only for FTR)</p> |    |         |
|  | UA011000 | <p><b>General features:</b> climate controller for 2-pipe systems, mechanical range limitation; <b>heating / off / cooling switch</b>; external setting; protective cap; contact hazard protection cover plate</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 5 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 1150 W</p> <p><b>Switching contact:</b> changeover switch (max. 5 actuators)</p> <p><b>Control function:</b> Heating or cooling</p> <p>For cover sets see the separate overview 'alre flush-mounted range (cover sets)', not included in the delivery.</p> <p><b>Suitable set no.: JZ-012.xxx, for example:</b><br/>50x50 mm cover set, pure white, glossy: JZ-012.000<br/>cover set 55x55 mm, pure white, glossy: JZ-012.100</p>   |  |         |
|  | UA010910 | <p><b>General features:</b> climate controller for 2-pipe systems, especially heat pumps; mechanical range limitation; <b>heating / cooling switch</b>; external setting; protective cap; contact hazard protection cover plate</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 5 (2) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 1150 W</p> <p><b>Switching contact:</b> Changeover switch (togglers, max. 5 actuators)</p> <p><b>Control function:</b> Heating or cooling</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-004.xxx, e.g.:</b><br/>cover set 50x50 mm, pure white, glossy: JZ-004.000<br/>cover set 55x55 mm, pure white, glossy: JZ-004.100</p>  |  |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, FTR


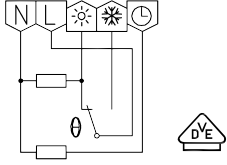

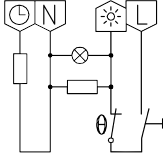

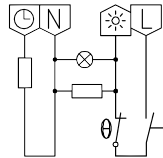

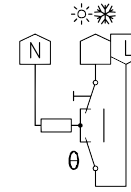
## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE  | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|---|---|---------|
|    | UA010415 | <p><b>General features:</b> ECO function; 'reduction' display; mechanical range limitation; <b>switch for reduction/heating/reduction via external timer</b>; external setting; protective cap; contact hazard protection cover plate; VDE-tested</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Control function:</b> heating</p> <p><b>Input temperature reduction:</b> approx. 4 K (230 VAC, 50 Hz)</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-003.xxx, e.g.:</b><br/> cover set 50x50 mm, pure white, glossy: JZ-003.000<br/> cover set 55x55 mm, pure white, glossy: JZ-003.100</p>  |    |         |
|    | UA010615 | <p><b>General features:</b> mechanical range limitation; 3000 W switching power, for electric direct heating systems, natural stone heating; external setting; protective cap; contact hazard protection cover plate</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 13 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 3000 W</p> <p><b>Switching contact:</b> NC contact</p> <p><b>Control function:</b> Heating</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-001.xxx, for example:</b><br/> cover set 50x50 mm, pure white, glossy: JZ-001.000<br/> cover set 55x55 mm, pure white, glossy: JZ-001.100</p> <p><b>BUSCH-JAEGER cover set</b><br/> Reflex SI/SI Linear, pure white, glossy: JZ-001.200/BJ<br/> future linear, solo, axcent, carat, studio white (RAL 9016), glossy; JZ-001.320/BJ</p>   |    |         |
|  | UN010607 | <p>like FTR 101.086#00, but with scope of delivery: Controller, alre frame 'Berlin' (neutral), cover 50x50 mm, pure white (like RAL 9010), glossy</p>   |   |         |
|  | UA012008 | <p><b>General features:</b> ECO function; mechanical range limitation; external setting; protective cap; contact hazard protection cover plate</p> <p><b>Operating voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Max. switching current:</b> 1 (1) A</p> <p><b>Max. switching voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Max. switching voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Switching power:</b> 24 W</p> <p><b>Switching contact:</b> NC contact (max. 5 actuators)</p> <p><b>Control function:</b> Heating</p> <p><b>input temperature setback:</b> approx. 4 K (24 VAC/50 Hz, 24 VDC)</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-001.xxx, for example:</b><br/> cover set 50x50 mm, pure white, glossy: JZ-001.000<br/> cover set 55x55 mm, pure white, glossy: JZ-001.100</p> <p><b>BUSCH-JAEGER cover set</b><br/> Reflex SI/SI Linear, pure white, glossy: JZ-001.200/BJ<br/> future linear, solo, axcent, carat, studio white (RAL 9016), glossy; JZ-001.320/BJ</p> |  |         |
|  | UN102009 | <p>like FTR 101.202#00, but with scope of delivery: Controller, alre frame 'Berlin' (neutral), cover 50x50 mm, pure white (like RAL 9010), glossy</p>   |   |         |



# ROOM TEMPERATURE CONTROLLER, MECHANICAL, FTR

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP


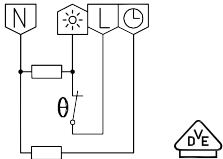
| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
|    | UA012301 | <p><b>General features:</b> ECO function; mechanical range limitation; external setting; protective cap; contact hazard protection cover plate</p> <p><b>Operating voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Max. switching current:</b> 1 (1) A</p> <p><b>Max. switching voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Min. switching voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Switching power:</b> 24 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 5 actuators)</p> <p><b>Control function:</b> heating or cooling</p> <p><b>Input temperature reduction:</b> Approx. 4 K (24 VAC/50 Hz, 24 VDC)</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-001.xxx, for example:</b><br/> cover set 50x50 mm, pure white, glossy: JZ-001.000<br/> cover set 55x55 mm, pure white, glossy: JZ-001.100</p> <p><b>BUSCH-JAEGER cover set</b><br/> Reflex SI/SI Linear, pure white, glossy: JZ-001.200/BJ<br/> future linear, solo, axcent, carat, studio white (RAL 9016), glossy; JZ-001.320/BJ</p> |    |         |
|   | UA012500 | <p><b>General features:</b> ECO function; 'heating' display; mechanical range limitation; on/off switch; external setting; protective cap; contact hazard protection cover plate</p> <p><b>Operating voltage:</b> 24 VAC/50 Hz</p> <p><b>Max. switching current:</b> 1 (1) A</p> <p><b>Max. switching voltage:</b> 24 VAC/50 Hz</p> <p><b>Min. switching voltage:</b> 24 VAC/50 Hz</p> <p><b>Switching power:</b> 24 W</p> <p><b>Switching contact:</b> NC contact (max. 5 actuators)</p> <p><b>Control function:</b> heating</p> <p><b>Input temperature reduction:</b> approx. 4 K (24 VAC/50 Hz)</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-002.xxx, e.g.:</b><br/> cover set 50x50 mm, pure white, glossy: JZ-002.000<br/> cover set 55x55 mm, pure white, glossy: JZ-002.100</p> <p><b>BUSCH-JAEGER cover set</b><br/> Reflex SI/SI Linear, pure white, glossy: JZ-002.200/BJ (only for FTR)</p>  |   |         |
|  | UA012501 | <p>like FTR 101.262#00, but with scope of delivery: Controller, alre frame 'Berlin' (neutral), cover 50x50 mm, pure white (like RAL 9010), glossy</p>  |  |         |
|  | UA012600 | <p><b>General features:</b> Climate controller for 2-pipe systems, especially heat pumps; mechanical range limitation; heating/cooling switch; external setting; protection cap; contact hazard protection cover plate</p> <p><b>Operating voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Max. switching current:</b> 1 (1) A</p> <p><b>Max. switching voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Max. switching voltage:</b> 24 VAC/50 Hz, 24 VDC</p> <p><b>Switching power:</b> 24 W</p> <p><b>Switching contact:</b> Changeover switch (toggler, max. 5 actuators)</p> <p><b>Control function:</b> Heating or cooling</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-004.xxx, e.g.:</b><br/> cover set 50x50 mm, pure white, glossy: JZ-004.000<br/> cover set 55x55 mm, pure white, glossy: JZ-004.100</p>   |  |         |







# ROOM TEMPERATURE CONTROLLER, MECHANICAL, FTR

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
|  | UA013000 | <p><b>General features:</b> ECO function; internal setting;<br/>contact hazard protection cover plate</p> <p><b>Operating voltage:</b> 230 VAC, 50 Hz</p> <p><b>Max. switching current:</b> 10 (4) A</p> <p><b>Max. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Min. switching voltage:</b> 230 VAC, 50 Hz</p> <p><b>Switching power:</b> 2300 W</p> <p><b>Switching contact:</b> NC contact (max. 10 actuators)</p> <p><b>Control function:</b> Heating</p> <p><b>Input 'temperature reduction':</b> Approx. 4 K (230 VAC, 50 Hz)</p> <p><b>Scope of delivery:</b> controller, cover 50x50 mm, pure white (like RAL 9010), glossy</p> |  |         |

Accessories: terminal strips V00xx, suitable valve actuators ZB00A, suitable cover sets: see separate overview 'alre flush-mounting range (cover sets)'

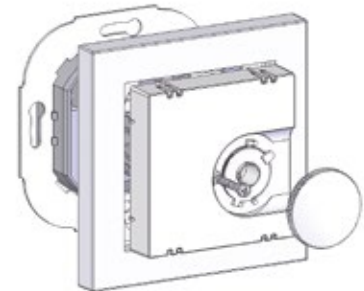
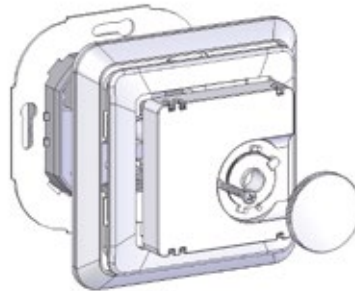
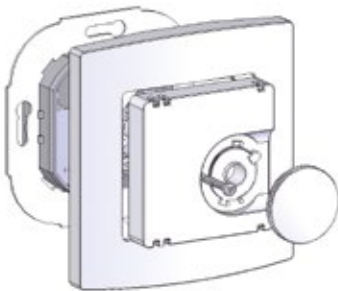
| TYPE/IMAGE   | ITEM NO. | FEATURES   | EURO/PG |
|--|----------|--|---------|
|   | VV000025 | <p><b>General features:</b> alre frame 'Berlin' (neutral) for all flush-mounted controllers with cover 50x50 mm</p> <p><b>Design:</b> Berlin</p> <p><b>Surface finish:</b> Glossy</p> <p><b>Colour:</b> Pure white, like RAL 9010</p> <p><b>Material:</b> PC plastic</p> |         |
|  | VV000048 | <p><b>Features:</b> like JZ-090.900, but for all flush-mounted controllers with 55x55 mm cover</p>   |         |
| JZ-090.910   | VV000010 | as for JZ-090.900, but colour similar to RAL 1013  |         |

### ILLUSTRATIONS

alre frame 'Berlin' (#21 types)

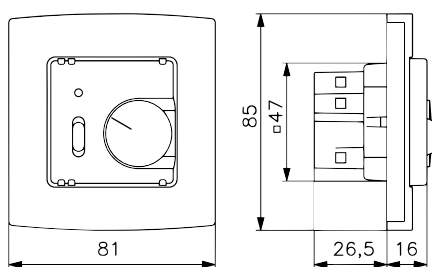
with 50x50 insert frame

without 55x55 insert frame

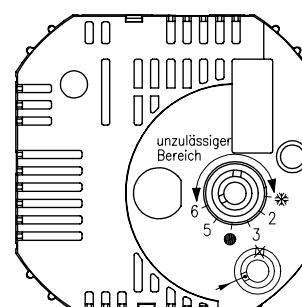


### ILLUSTRATIONS

FTR with alre frame 'Berlin' (FTR 101.xxx#21 types)



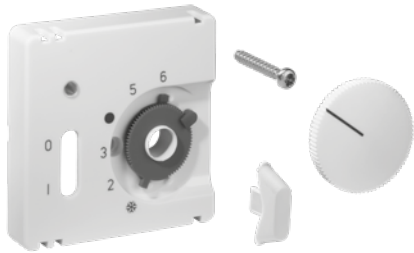
FTR 101.902#07 contact hazard protection cap with setting range (internal setting)



**ALRE FLUSH-MOUNTED RANGE** (50 X 50 MM COVER SETS)ALL BASIC TYPES AND SUITABLE COVER SETS **50 X 50 MM**

| BASIC TYPE     | 50x50 mm cover set<br><b>PURE WHITE (RAL 9010)<br/>GLOSSY</b> |          | 50x50 mm cover set<br><b>PURE WHITE (RAL 9010)<br/>MATT</b> |          | 50x50 mm cover set<br><b>PEARL WHITE (RAL1013)<br/>GLOSSY</b> |          | EURO/<br>PG |
|----------------|---|----------|---|----------|---|----------|-------------|
|                | Cover set   | Item no. | Cover set   | Item no. | Cover set   | Item no. |             |
| FTR 101.000#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| FTR 101.002#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| FTR 101.010#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| FTR 101.062#00 | JZ-002.000  | UN990036 | JZ-002.001  | UN990041 | JZ-002.010  | UN990046 |             |
| FTR 101.063#00 | JZ-012.000  | UN990107 | JZ-012.001  | UN990132 | JZ-012.010  | UN990133 |             |
| FTR 101.065#00 | JZ-004.000  | UN990037 | JZ-004.001  | UN990042 | JZ-004.010  | UN990047 |             |
| FTR 101.075#00 | JZ-003.000  | UN990038 | JZ-003.001  | UN990043 | JZ-003.010  | UN990048 |             |
| FTR 101.086#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| FTR 101.202#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| FTR 101.210#00 | JZ-001.000  | UN990035 | JZ-001.001  | UN990040 | JZ-001.010  | UN990045 |             |
| FTR 101.262#00 | JZ-002.000  | UN990036 | JZ-002.001  | UN990041 | JZ-002.010  | UN990046 |             |
| FTR 101.265#00 | JZ-004.000  | UN990037 | JZ-004.001  | UN990042 | JZ-004.010  | UN990047 |             |

In flush-mounted socket, it can be adapted to fit virtually any switch range.

| BASIC TYPE     | 50x50 mm cover set<br><b>TRAFFIC/STUDIO<br/>WHITE (RAL 9016)<br/>GLOSSY<br/>(JZ-xxx.020)</b> |          | 50x50 mm cover set<br><b>TRAFFIC/STUDIO<br/>WHITE (RAL 9016)<br/>MATT<br/>(JZ-xxx.021)</b> |          | EURO/<br>PG | Cover set (example), individually foil-wrapped                                       |
|----------------|--|----------|--|----------|-------------|--|
|                | Cover set  | Item no. | Cover set  | Item no. |             |  |
| FTR 101.000#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |  |
| FTR 101.002#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |  |
| FTR 101.010#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |  |
| FTR 101.062#00 | JZ-002.020   | UN990072 | JZ-002.021   | UN990101 |             |  |
| FTR 101.063#00 | JZ-012.020   | UN990134 | JZ-012.021   | UN990135 |             |  |
| FTR 101.065#00 | JZ-004.020   | UN990073 | JZ-004.021   | UN990103 |             |  |
| FTR 101.075#00 | JZ-003.020   | UN990074 | JZ-003.021   | UN990102 |             |  |
| FTR 101.086#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |  |
| FTR 101.202#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |  |
| FTR 101.210#00 | JZ-001.020   | UN990071 | JZ-001.021   | UN990100 |             |  |
| FTR 101.262#00 | JZ-002.020   | UN990072 | JZ-002.021   | UN990101 |             |  |
| FTR 101.265#00 | JZ-004.020   | UN990073 | JZ-004.021   | UN990103 |             |  |

**SEE THE PRODUCT FINDER FOR ALL COVER SOLUTIONS AND SPECIAL COLOURS**



## ALRE FLUSH-MOUNTED RANGE (55 X 55 MM COVER SETS)

ALL BASIC TYPES AND SUITABLE COVER SETS **55 X 55 MM**

| BASIC TYPE     | 55x55 mm cover set<br><b>PURE WHITE<br/>(RAL 9010) GLOSSY</b><br>(JZ-xxx.100) |          | 55x55 mm cover set<br><b>PURE WHITE<br/>(RAL 9010) MATT</b><br>(JZ-xxx.101) |          | Design 55x55 mm<br><b>PEARL WHITE<br/>(RAL1013) GLOSSY</b><br>(JZ-xxx.110) |          | EURO/<br>PG | Cover set 55x55 mm<br><b>TRAFFIC/STUDIO<br/>WHITE (RAL 9016)<br/>GLOSSY</b><br>(JZ-xxx.120) |          | EURO/<br>PG |
|----------------|---|----------|---|----------|--|----------|-------------|---|----------|-------------|
|                | Cover set   | Item no. | Cover set   | Item no. | Cover set  | Item no. |             | Cover set   | Item no. |             |
| FTR 101.000#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110   | UN990060 |             | JZ-001.120  | UN990086 |             |
| FTR 101.002#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110   | UN990060 |             | JZ-001.120  | UN990086 |             |
| FTR 101.010#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110   | UN990060 |             | JZ-001.120  | UN990086 |             |
| FTR 101.062#00 | JZ-002.100  | UN990051 | JZ-002.101  | UN990056 | JZ-002.110   | UN990061 |             | JZ-002.120  | UN990088 |             |
| FTR 101.063#00 | JZ-012.100  | UN990123 | JZ-012.101  | UN990136 | JZ-012.110   | UN990137 |             | JZ-012.120  | UN990138 |             |
| FTR 101.065#00 | JZ-004.100  | UN990052 | JZ-004.101  | UN990057 | JZ-004.110   | UN990062 |             | JZ-004.120  | UN990089 |             |
| FTR 101.075#00 | JZ-003.100  | UN990053 | JZ-003.101  | UN990058 | JZ-003.110   | UN990063 |             | JZ-003.120  | UN990090 |             |
| FTR 101.086#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110   | UN990060 |             | JZ-001.120  | UN990086 |             |
| FTR 101.202#00 | JZ-001.100  | UN990050 | JZ-001.101  | UN990055 | JZ-001.110   | UN990060 |             | JZ-001.120  | UN990086 |             |
| FTR 101.262#00 | JZ-002.100  | UN990051 | JZ-002.101  | UN990056 | JZ-002.110   | UN990061 |             | JZ-002.120  | UN990088 |             |
| FTR 101.265#00 | JZ-004.100  | UN990052 | JZ-004.101  | UN990057 | JZ-004.110   | UN990062 |             | JZ-004.120  | UN990089 |             |

Can be adapted to fit many switch ranges in flush-mounted sockets (for a current overview of the suitable frames and insert frames).

ALL BASIC TYPES AND SUITABLE COVER SETS FOR **BUSCH-JAEGER REFLEX SI/ SI LINEAR/ BUSCH-DURO 2000 SI/ FUTURE/ SOLO/ AXCENT/ CARAT** WITHOUT INSERT FRAME

| BASIC TYPE     | BUSCH-JAEGER cover set<br><b>REFLEX SI/SI LINEAR<br/>PURE WHITE (RAL 9010)<br/>GLOSSY</b><br>(JZ-xxx.200/BJ) |          | BUSCH-JAEGER cover set<br><b>BUSCH-DURO 2000 SI/SI<br/>LINEAR PEARL WHITE<br/>(RAL 1013) GLOSSY</b><br>(JZ-001.210/BJ) |          | EURO/<br>PG | BUSCH-JAEGER cover set<br><b>FUTURE LINEAR/SOLO/<br/>AXCENT/CARAT TRAFFIC/<br/>STUDIO WHITE (RAL 9016)<br/>GLOSSY</b><br>(JZ-001.320/BJ) |          | EURO/<br>PG |
|----------------|--|----------|--|----------|-------------|--|----------|-------------|
|                | Cover set  | Item no. | Cover set  | Item no. |             | Cover set  | Item no. |             |
| FTR 101.000#00 | JZ-001.200/BJ  | G9990490 | JZ-001.210/BJ  | G9990491 |             | JZ-001.320/BJ  | G9990493 |             |
| FTR 101.002#00 | JZ-001.200/BJ  | G9990490 | JZ-001.210/BJ  | G9990491 |             | JZ-001.320/BJ  | G9990493 |             |
| FTR 101.010#00 | JZ-001.200/BJ  | G9990490 | JZ-001.210/BJ  | G9990491 |             | JZ-001.320/BJ  | G9990493 |             |
| FTR 101.062#00 | JZ-002.200/BJ  | G9990492 | -  | -        |             | -  | -        |             |
| FTR 101.086#00 | JZ-001.200/BJ  | G9990490 | JZ-001.210/BJ  | G9990491 |             | JZ-001.320/BJ  | G9990493 |             |
| FTR 101.202#00 | JZ-001.200/BJ  | G9990490 | JZ-001.210/BJ  | G9990491 |             | JZ-001.320/BJ  | G9990493 |             |

Can be adapted to fit the corresponding BUSCH-JAEGER switch ranges in flush-mounted sockets.

## SPECIAL COLOURS **ALUMINIUM / ANTHRACITE**

| ALRE CONTROLLER TYPES | MANUFACTURER SWITCH RANGE     | COLOUR/ SURFACE FINISH    | 50X50 MM INSERT FRAME* | ALRE COVER SET: TYPE | (ITEM NO.) | EURO/ PG |
|-----------------------|-------------------------------|---------------------------|------------------------|----------------------|------------|----------|
| FTR 101.000#00        | BERKER<br>S.1/B.3/B.7         | aluminium / matt          | not required           | JZ-001.131 / BE      | (UN990114) |          |
| FTR 101.002#00        |                               | anthracite / matt         | not required           | JZ-001.141 / BE      | (UN990115) |          |
| FTR 101.010#00        | BUSCH-JAEGER<br>future linear | aluminium silver / glossy | 1746 / 10-83           | JZ-001.030 / BJ      | (UN990108) |          |
| FTR 101.086#00        |                               | anthracite / glossy       | 1746 / 10-81           | JZ-001.040 / BJ      | (UN990109) |          |
| FTR 101.202#00        | GIRA<br>System 55             | aluminium / matt          | not required           | JZ-001.131 / GI      | (UN990110) |          |
| FTR 101.210#00        |                               | anthracite / matt         | not required           | JZ-001.141 / GI      | (UN990111) |          |
|                       | JUNG<br>Series A              | aluminium / glossy        | not required           | JZ-001.130 / JU      | (UN990112) |          |
|                       |                               | anthracite / matt         | not required           | JZ-001.141 / JU      | (UN990113) |          |
|                       | MERTEN<br>System M            | aluminium / matt          | not required           | JZ-001.131 / ME      | (UN990116) |          |
|                       |                               | anthracite / matt         | not required           | JZ-001.141 / ME      | (UN990117) |          |

\*) must be ordered from switch manufacturer or electronics wholesaler

Further details and information on available cover sets can be found online at [www.alre.de](http://www.alre.de) or in the catalogue.

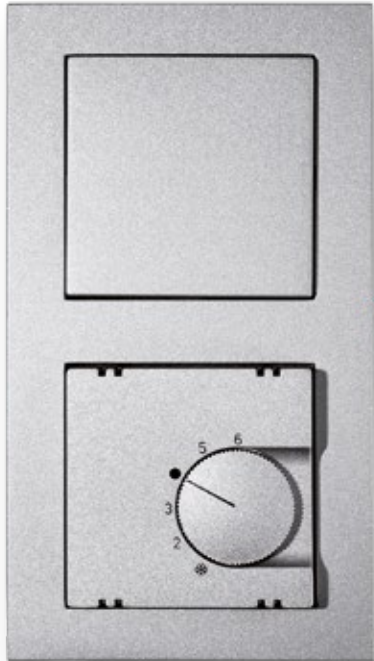
# CONTROLLERS FOR ALL SWITCH RANGES

Integration examples in switch ranges with or without insert frame



**ADAPTATION EXAMPLES  
BERKER**

**ADAPTATION EXAMPLES  
BUSCH-JAEGER**



**ADAPTATION EXAMPLES  
GIRA**

**ADAPTATION EXAMPLES  
JUNG**

**ADAPTATION EXAMPLES  
MERTEN**



## ADAPTATION OF ALRE FLUSH-MOUNTED CONTROLLERS

| MANUFACTURER            | RANGE                                       | COLOUR RAL 9010<br>(surface finish)                    | ADAPTATION using<br>55x55 or BJ cover<br>sets possible<br>(without insert frame) | Only ADAPTATION with<br>'50x50' cover set requires<br>an insert frame from the<br>manufacturer |
|-------------------------|---|--|--|--|
| BERKER                  | S.1   | polar white (matt)                                     | x  | 1109 19 19   |
| BERKER                  | S.1   | polar white (glossy)                                   | x  | 1109 90 89   |
| BERKER                  | Arsys                                       | polar white (glossy)                                   |  | 1108 01 69   |
| BERKER                  | B.3   | aluminium / polar white (matt)                         | x  | 1109 19 19   |
| BERKER                  | B.3   | aluminium / polar white (glossy)                       | x  | 1109 90 89   |
| BERKER                  | B.7   | glass / polar white (matt)                             | x  | 1109 19 19   |
| BERKER                  | B.7   | glass / polar white (glossy)                           | x  | 1109 90 89   |
| BERKER                  | Q.1 / Q.3                                   | polar white (velvet)                                   |  | 1109 60 79   |
| BERKER                  | K.1   | polar white (glossy)                                   |  | 1108 71 09   |
| BUSCH-JAEGER            | Reflex SI / SI Linear                       | alpine white (glossy)                                  | x  | 1746-214-101   |
| BUSCH-JAEGER            | Busch-balance SI                            | alpine white (glossy)                                  | x  | 1746-914-101   |
| BUSCH-JAEGER            | impuls                                      | alpine white (glossy)                                  |  | 1746 / 10-74   |
| BUSCH-JAEGER            | solo / future linear / axcent / etc.        | studio white – see RAL 9016 below                      |  |  |
| Elso                    | Joy   | pure white (glossy)                                    | x  | 363084   |
| Elso                    | Fashion / Riva / Scala                      | pure white (glossy)                                    |  | 203084   |
| GIRA                    | surface switch                              | pure white (glossy)                                    |  | 0282 112   |
| GIRA (System 55)        | Standard / E2                               | pure white (semi-gloss)                                | x  | 0282 27  |
| GIRA (System 55)        | Standard / E2 / E3                          | pure white (glossy)                                    | x  | 0282 03  |
| GIRA (System 55)        | E22   | pure white (glossy)                                    | x  | 0282 03  |
| GIRA (System 55)        | Event                                       | pure white (semi-gloss) + opaque...                    | x  | 0282 27  |
| GIRA (System 55)        | Event                                       | pure white (glossy) + opaque...                        | x  | 0282 03  |
| GIRA (System 55)        | Esprit                                      | pure white (semi-gloss) + glass,<br>aluminium...       | x  | 0282 27  |
| GIRA (System 55)        | Esprit                                      | pure white (glossy) + glass, aluminium...              | x  | 0282 03  |
| GIRA                    | S-Color                                     | pure white (high-gloss)                                |  | 0282 40  |
| JUNG                    | CD 500 / CD plus                            | alpine white (glossy)                                  |  | CD 590 Z WW  |
| JUNG                    | A 500 / A 550 / AS 500 / A plus / A flow    | alpine white (glossy)                                  | x  | A 590 Z WW   |
| JUNG                    | AS 550 / A flow                             | snow white matt  | x  | A 590 Z WWW  |
| JUNG                    | LS 990                                      | alpine white (glossy)                                  |  | LS 961 Z WW  |
| JUNG                    | LS plus                                     | alpine white (glass)                                   |  | LS 961 Z WW  |
| JUNG                    | A creation                                  | alpine white (glossy)                                  | x  | A 590 Z WW   |
| JUNG                    | LS Design                                   | alpine white (glossy)                                  |  | LS 961 Z WW  |
| MERTEN (System M)       | M-Smart, M-Plan, M-Pure                     | polar white (matt)                                     | x  | 5181 19  |
| MERTEN (System M)       | M-Smart, M-Plan, M-Creativ, M-Pure          | polar white (glossy)                                   | x  | 5185 19  |
| MERTEN (System Basis)   | 1-M / Atelier-M                             | polar white (glossy)                                   | x  | 5185 19  |
| MERTEN (Surface System) | Artec / Antik                               | polar white (glossy)                                   |  | 5160 99  |
| MERTEN                  | 1-M / M-Smart / M-Plan /<br>M-Pure / D-Life | active white – see RAL 9016<br>below or product finder |  |  |
| PEHA                    | Standard                                    | pure white (glossy)                                    |  | 80.670.02 ZV   |
| PEHA                    | Dialog                                      | pure white (glossy)                                    |  | 95.670.02 ZV   |
| PEHA                    | Aura  | pure white (matt) / glass                              |  | 20.670.02 ZV   |
| PEHA                    | Badora                                      | pure white (glossy)                                    |  | 11.670.02 ZV   |

| MANUFACTURER | RANGE                       | COLOUR RAL 9016<br>(surface finish) | ADAPTATION using<br>55x55 or BJ cover<br>sets possible<br>(without insert frame) | Only ADAPTATION with<br>'50x50' cover set requires<br>an insert frame from the<br>manufacturer |
|--------------|-----------------------------|-------------------------------------|--|--|
| BUSCH-JAEGER | solo / future linear        | studio white (RAL 9016, glossy)     | x  | 1746 / 10-84   |
| BUSCH-JAEGER | future linear               | studio white (RAL 9016 matt)        |  | 1746 / 10-884  |
| BUSCH-JAEGER | impuls                      | studio white (RAL 9016 matt)        |  | 1746 / 10-774  |
| BUSCH-JAEGER | axcent                      | studio white (RAL 9016, glossy)     | x  | 1746 / 10-84   |
| BUSCH-JAEGER | carat (glass, bronze, gold) | studio white (RAL 9016, glossy)     | x  | 1746 / 10-84   |
| BUSCH-JAEGER | alpha (nea / exclusive *)   | studio white (RAL 9016, glossy)     |  | 1746 / 10-24G  |
| BUSCH-JAEGER | alpha (nea / exclusive *)   | studio white (RAL 9016 matt)        |  | 1746 / 10-24   |
| MERTEN       | M-Smart, M-Plan, M-Pure     | active white (RAL 9016, glossy)     | x  | 5185 25  |
| MERTEN       | 1-M / Atelier-M             | active white (RAL 9016, glossy)     | x  | 5185 25  |
| MERTEN       | D-Life                      | lotus white (RAL 9016)              |  | MEG4500-6035   |
| PEHA         | Standard                    | arctic                              |  | D 80.670 ZV AW   |

\*) During assembly, you need to remove 4 plastic tabs located at the rear of the frame

**NOTE:** Most switch ranges are designed in a colour similar to RAL 1013, 9016 or 1013, although different switch manufacturers use different designations for this colour. Coloured, glass and aluminium frames are also combined with white jacks or plugs so that controllers with white covers can also be integrated into these frames. Check the precise application in each individual case. The frames have different surface qualities (matt/glossy). For design reasons, the cover of the controller should have the same quality as the frame. We accept no liability for slight variations in colour and surface finish or for accuracy of fit. When installing devices into multi frames, always assemble the temperature controllers at the lowermost position.

**'50x50 controller':** The housing covers of the 50x50 controllers are 50x50 mm in size. Using a 50x50 mm insert frame, they can be integrated into nearly all light switch ranges in accordance with DIN 49075. The 50x50 mm insert frames must be ordered from the light switch manufacturer or from a wholesaler. The order number of the insert frame corresponding to the switch range in question can be found in the column "Only for adaptation with '50x50' cover set".

**'55x55 controller':** The housing covers of the 55x55 controllers are 55x55 mm in size. Many light switch ranges have inner dimensions of 55x55 mm. Therefore, the 55x55 controllers can be installed directly in the light switch frame without the use of an insert frame. See the column 'Adaptation with 55x55 cover set' to determine whether the 55x55 controller fits in the given light switch model (x).

All information regarding switch manufacturers' product lines and item numbers was last updated in 12/2022 | No liability is assumed for the information provided. | Technical specifications subject to change.



# PRODUCT FINDER ALRE COVER SETS

## FOR SWITCH RANGES FROM BERKER

### INTEGRATION EXAMPLES



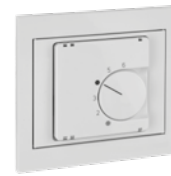
FTR – in S. 1



FTR – in B. 3







FTR – in B. 7



FTR – in K. 1



FTR – in Arsys

| TYPE ALRE  | BERKER RANGE   | COLOUR (RAL)/<br>SURFACE FINISH | ALRE COVER SET                | COVER SET<br>ART. NO.      | INSERT<br>FRAME<br>50X50* | EURO/<br>PG  |
|--|----------------|---------------------------------|-------------------------------|----------------------------|---------------------------|--------------|
| FTR 101.000#00   | S. 1/B. 3/B. 7 | polar white (RAL 9010) glossy   | JZ-001.100 (55x55, glossy)    | UN990050                   | not required              |              |
| FTR 101.002#00   | S. 1/B. 3/B. 7 | polar white (RAL 9010) matt     | JZ-001.101 (55x55, matt)      | UN990055                   | not required              |              |
| FTR 101.010#00   | Arsys          | polar white (RAL 9010) glossy   | JZ-001.000 (50x50, glossy)    | UN990035                   | 1108 01 69                |              |
| FTR 101.086#00   | Q. 1/Q. 3      | polar white (RAL 9010) velvet   | JZ-001.001 (50x50, matt)      | UN990040                   | 1109 60 79                |              |
| FTR 101.202#00   | K. 1           | polar white (RAL 9010) glossy   | JZ-001.000 (50x50, glossy)    | UN990035                   | 1108 71 09                |              |
| <br>Standard (without switch) | S. 1           | white (RAL 1013) glossy         | JZ-001.110 (55x55, glossy)    | UN990060                   | not required              |              |
|  | Arsys          | white (RAL 1013) glossy         | JZ-001.010 (50x50, glossy)    | UN990045                   | 1108 01 02                |              |
|  | S. 1/B. 3/B. 7 | aluminium/matt                  | JZ-001.131 / BE               | UN990114                   | not required              |              |
|  | S. 1/B. 3/B. 7 | anthracite/matt                 | JZ-001.141 / BE               | UN990115                   | not required              |              |
|  | FTR 101.062#00 | S. 1/B. 3/B. 7                  | polar white (RAL 9010) glossy | JZ-002.100 (55x55, glossy) | UN990051                  | not required |
| FTR 101.262#00   | S. 1/B. 3/B. 7 | polar white (RAL 9010) matt     | JZ-002.101 (55x55, matt)      | UN990056                   | not required              |              |
| <br>(ON/OFF switch, LED)     | Arsys          | polar white (RAL 9010) glossy   | JZ-002.000 (50x50, glossy)    | UN990036                   | 1108 01 69                |              |
|  | Q. 1/Q. 3      | polar white (RAL 9010) velvet   | JZ-002.001 (50x50, matt)      | UN990041                   | 1109 60 79                |              |
|  | K. 1           | polar white (RAL 9010) glossy   | JZ-002.000 (50x50, glossy)    | UN990036                   | 1108 71 09                |              |
|  | S. 1           | white (RAL 1013) glossy         | JZ-002.110 (55x55, glossy)    | UN990061                   | not required              |              |
|  | Arsys          | white (RAL 1013) glossy         | JZ-002.010 (50x50, glossy)    | UN990046                   | 1108 01 02                |              |
| FTR 101.063#00   | S. 1/B. 3/B. 7 | polar white (RAL 9010) glossy   | JZ-012.100 (55x55 glossy)     | UN990123                   | not required              |              |
| <br>(Switch H/ OFF / C)     | S. 1/B. 3/B. 7 | polar white (RAL 9010) matt     | JZ-012.101 (55x55 matt)       | UN990136                   | not required              |              |
|  | Arsys          | polar white (RAL 9010) glossy   | JZ-012.000 (50x50 glossy)     | UN990107                   | 1108 01 69                |              |
|  | Q. 1/Q. 3      | polar white (RAL 9010) velvet   | JZ-012.001 (50x50 matt)       | UN990132                   | 1109 60 79                |              |
|  | K. 1           | polar white (RAL 9010) glossy   | JZ-012.000 (50x50 glossy)     | UN990107                   | 1108 71 09                |              |
|  | S. 1           | white (RAL 1013) glossy         | JZ-012.110 (55x55 glossy)     | UN990137                   | not required              |              |
|  | Arsys          | white (RAL 1013) glossy         | JZ-012.010 (50x50 glossy)     | UN990133                   | 1108 01 02                |              |
|  | FTR 101.065#00 | S. 1/B. 3/B. 7                  | polar white (RAL 9010) glossy | JZ-004.100 (55x55, glossy) | UN990052                  | not required |
| FTR 101.265#00   | S. 1/B. 3/B. 7 | polar white (RAL 9010) matt     | JZ-004.101 (55x55, matt)      | UN990057                   | not required              |              |
| <br>(H/C switch)            | Arsys          | polar white (RAL 9010) glossy   | JZ-004.000 (50x50, glossy)    | UN990037                   | 1108 01 69                |              |
|  | Q. 1/Q. 3      | polar white (RAL 9010) velvet   | JZ-004.001 (50x50, matt)      | UN990042                   | 1109 60 79                |              |
|  | K. 1           | polar white (RAL 9010) glossy   | JZ-004.000 (50x50, glossy)    | UN990037                   | 1108 71 09                |              |
|  | S. 1           | white (RAL 1013) glossy         | JZ-004.110 (55x55, glossy)    | UN990062                   | not required              |              |
|  | Arsys          | white (RAL 1013) glossy         | JZ-004.010 (50x50, glossy)    | UN990047                   | 1108 01 02                |              |
| FTR 101.075#00   | S. 1/B. 3/B. 7 | polar white (RAL 9010) glossy   | JZ-003.100 (55x55, glossy)    | UN990053                   | not required              |              |
| <br>(3-way switch, LED)     | S. 1/B. 3/B. 7 | polar white (RAL 9010) matt     | JZ-003.101 (55x55, matt)      | UN990058                   | not required              |              |
|  | Arsys          | polar white (RAL 9010) glossy   | JZ-003.000 (50x50, glossy)    | UN990038                   | 1108 01 69                |              |
|  | Q. 1/Q. 3      | polar white (RAL 9010) velvet   | JZ-003.001 (50x50, matt)      | UN990043                   | 1109 60 79                |              |
|  | K. 1           | polar white (RAL 9010) glossy   | JZ-003.000 (50x50, glossy)    | UN990038                   | 1108 71 09                |              |
|  | S. 1           | white (RAL 1013) glossy         | JZ-003.110 (55x55, glossy)    | UN990063                   | not required              |              |
|  | Arsys          | white (RAL 1013) glossy         | JZ-003.010 (50x50, glossy)    | UN990048                   | 1108 01 02                |              |

\*) must be ordered from switch manufacturer or electronics wholesaler



## PRODUCT FINDER ALRE COVER SETS

### FOR SWITCH RANGES FROM BUSCH-JAEGER

#### INTEGRATION EXAMPLES



FTR – in Reflex SI



FTR – in Busch-balance SI



FTR – in future linear



FTR – in solo



FTR – in alpha nea

| TYPE ALRE  | BERKER RANGE                                 | COLOUR (RAL) / SURFACE FINISH  | ALRE COVER SET             | COVER SET ART. NO. | INSERT FRAME 50X50* | EURO / PG |
|--|--|--------------------------------|----------------------------|--------------------|---------------------|-----------|
| FTR 101.000#00<br>FTR 101.002#00<br>FTR 101.010#00<br>FTR 101.086#00<br>FTR 101.202#00<br>FTR 101.210#00 | <b>Reflex SI / SI Linear</b>                 | alpine white (RAL 9010) glossy | JZ-001.200 / BJ            | G9990490           | not required        |           |
|  | <b>Busch-balance SI</b>                      | alpine white (RAL 9010) glossy | JZ-001.100 (55x55, glossy) | UN990050           | not required        |           |
|  | <b>impuls</b>                                | alpine white (RAL 9010) glossy | JZ-001.000 (50x50, glossy) | UN990035           | 1746 / 10-74        |           |
|  | <b>future linear / solo / axcent / carat</b> | studio white (RAL 9016) glossy | JZ-001.320 / BJ            | G9990493           | not required        |           |
|  | <b>future linear</b>                         | studio white (RAL 9016) matt   | JZ-001.021 (50x50, matt)   | UN990100           | 1746 / 10-884       |           |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) glossy | JZ-001.020 (50x50, glossy) | UN990071           | 1746 / 10-24G       |           |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) matt   | JZ-001.021 (50x50, matt)   | UN990100           | 1746 / 10-24        |           |
|  | <b>Duro 2000 SI / SI Linear</b>              | white (RAL 1013) glossy        | JZ-001.210 / BJ            | G9990491           | not required        |           |
|  | <b>future linear / solo / carat</b>          | ivory white (RAL 1013) glossy  | JZ-001.010 (50x50, glossy) | UN990045           | 1746 / 10-82        |           |
|  | <b>alpha nea</b>                             | ivory white (RAL 1013) glossy  | JZ-001.010 (50x50, glossy) | UN990045           | 1746 / 10-22G       |           |
|  | <b>impuls</b>                                | ivory white (RAL 1013) glossy  | JZ-001.010 (50x50, glossy) | UN990045           | 1746 / 10-72        |           |
|  | <b>future linear</b>                         | aluminium silver/glossy        | JZ-001.030 / BJ            | UN990108           | 1746 / 10-83        |           |
|  | <b>future linear</b>                         | anthracite / glossy            | JZ-001.040 / BJ            | UN990109           | 1746 / 10-81        |           |
| FTR 101.062#00<br>FTR 101.262#00   | <b>Reflex SI / SI Linear</b>                 | alpine white (RAL 9010) glossy | JZ-002.200 / BJ            | G990492            | not required        |           |
|  | <b>Busch-balance SI</b>                      | alpine white (RAL 9010) glossy | JZ-002.100 (55x55, glossy) | UN990051           | not required        |           |
|  | <b>impuls</b>                                | alpine white (RAL 9010) glossy | JZ-002.000 (50x50, glossy) | UN990036           | 1746 / 10-74        |           |
|  | <b>future linear / solo / axcent / carat</b> | studio white (RAL 9016) glossy | JZ-002.020 (50x50, glossy) | UN990072           | 1746 / 10-84        |           |
|  | <b>future linear</b>                         | studio white (RAL 9016) matt   | JZ-002.021 (50x50, matt)   | UN990101           | 1746 / 10-884       |           |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) glossy | JZ-002.020 (50x50, glossy) | UN990072           | 1746 / 10-24G       |           |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) matt   | JZ-002.021 (50x50, matt)   | UN990101           | 1746 / 10-24        |           |
|  | <b>Duro 2000 SI / SI Linear</b>              | white (RAL 1013) glossy        | JZ-002.010 (50x50, glossy) | UN990046           | 1746-212-101        |           |
|  | <b>future linear / solo / carat</b>          | ivory white (RAL 1013) glossy  | JZ-002.010 (50x50, glossy) | UN990046           | 1746 / 10-82        |           |
|  | <b>alpha nea</b>                             | ivory white (RAL 1013) glossy  | JZ-002.010 (50x50, glossy) | UN990046           | 1746 / 10-22G       |           |
|  | <b>impuls</b>                                | ivory white (RAL 1013) glossy  | JZ-002.010 (50x50, glossy) | UN990046           | 1746 / 10-72        |           |
| FTR 101.063#00   | <b>Reflex SI / SI Linear</b>                 | alpine white (RAL 9010) glossy | JZ-012.000 (50x50 glossy)  | UN990107           | 1746-214-101        |           |
|  | <b>Busch-balance SI</b>                      | alpine white (RAL 9010) glossy | JZ-012.100 (55x55 glossy)  | UN990123           | not required        |           |
|  | <b>impuls</b>                                | alpine white (RAL 9010) glossy | JZ-012.000 (50x50 glossy)  | UN990107           | 1746 / 10-74        |           |
|  | <b>future linear / solo / axcent / carat</b> | studio white (RAL 9016) glossy | JZ-012.020 (50x50 glossy)  | UN990134           | 1746 / 10-84        |           |
|  | <b>future linear</b>                         | studio white (RAL 9016) matt   | JZ-012.021 (50x50 matt)    | UN990135           | 1746 / 10-884       |           |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) glossy | JZ-012.020 (50x50 glossy)  | UN990134           | 1746 / 10-24G       |           |
|  | <b>alpha nea</b>                             | studio white (RAL 9016) matt   | JZ-012.021 (50x50 matt)    | UN990135           | 1746 / 10-24        |           |
|  | <b>Duro 2000 SI / SI Linear</b>              | white (RAL 1013) glossy        | JZ-012.010 (50x50 glossy)  | UN990133           | 1746-212-101        |           |
|  | <b>future linear / solo / carat</b>          | ivory white (RAL 1013) glossy  | JZ-012.010 (50x50 glossy)  | UN990133           | 1746 / 10-82        |           |
|  | <b>alpha nea</b>                             | ivory white (RAL 1013) glossy  | JZ-012.010 (50x50 glossy)  | UN990133           | 1746 / 10-22G       |           |
|  | <b>impuls</b>                                | ivory white (RAL 1013) glossy  | JZ-012.010 (50x50 glossy)  | UN990133           | 1746 / 10-72        |           |



Standard (without switch)



(ON / OFF switch, LED)



(Switch H / OFF / C)



# PRODUCT FINDER ALRE COVER SETS

## FOR SWITCH RANGES FROM BUSCH-JAEGER

### INTEGRATION EXAMPLES



FTR – in Reflex SI



FTR – in Busch-balance SI





FTR – in future linear



FTR – in solo



FTR – in alpha nea

| TYPE ALRE   | BUSCH-JAEGER RANGE  | COLOUR (RAL) / SURFACE FINISH  | ALRE COVER SET                 | COVER SET ART. NO.         | INSERT FRAME 50X50* | EURO / PG    |  |
|---|---|--------------------------------|--------------------------------|----------------------------|---------------------|--------------|--|
| <b>FTR 101.065#00</b><br><b>FTR 101.265#00</b><br><br>(H / C switch) | <b>Reflex SI / SI Linear</b>  | alpine white (RAL 9010) glossy | JZ-004.000 (50x50, glossy)     | UN990037                   | 1746-214-101        |              |  |
|   | <b>Busch-balance SI</b>   | alpine white (RAL 9010) glossy | JZ-004.100 (55x55, glossy)     | UN990052                   | not required        |              |  |
|   | <b>impuls</b>   | alpine white (RAL 9010) glossy | JZ-004.000 (50x50, glossy)     | UN990037                   | 1746 / 10-74        |              |  |
|   | <b>future linear / solo / axcent / carat</b>  | studio white (RAL 9016) glossy | JZ-004.020 (50x50, glossy)     | UN990073                   | 1746 / 10-84        |              |  |
|   | <b>future linear</b>  | studio white (RAL 9016) matt   | JZ-004.021 (50x50, matt)       | UN990103                   | 1746 / 10-884       |              |  |
|   | <b>alpha nea</b>  | studio white (RAL 9016) glossy | JZ-004.020 (50x50, glossy)     | UN990073                   | 1746 / 10-24G       |              |  |
|   | <b>alpha nea</b>  | studio white (RAL 9016) matt   | JZ-004.021 (50x50, matt)       | UN990103                   | 1746 / 10-24        |              |  |
|   | <b>Duro 2000 SI / SI Linear</b>   | white (RAL 1013) glossy        | JZ-004.010 (50x50, glossy)     | UN990047                   | 1746-212-101        |              |  |
|   | <b>future linear / solo / carat</b>   | ivory white (RAL 1013) glossy  | JZ-004.010 (50x50, glossy)     | UN990047                   | 1746 / 10-82        |              |  |
|   | <b>alpha nea</b>  | ivory white (RAL 1013) glossy  | JZ-004.010 (50x50, glossy)     | UN990047                   | 1746 / 10-22G       |              |  |
|   | <b>impuls</b>   | ivory white (RAL 1013) glossy  | JZ-004.010 (50x50, glossy)     | UN990047                   | 1746 / 10-72        |              |  |
|   | <b>FTR 101.075#00</b><br><br>(3-way switch, LED) | <b>Reflex SI / SI Linear</b>   | alpine white (RAL 9010) glossy | JZ-003.000 (50x50, glossy) | UN990038            | 1746-214-101 |  |
|   |   | <b>Busch-balance SI</b>        | alpine white (RAL 9010) glossy | JZ-003.100 (55x55, glossy) | UN990053            | not required |  |
| <b>impuls</b>   |   | alpine white (RAL 9010) glossy | JZ-003.000 (50x50, glossy)     | UN990038                   | 1746 / 10-74        |              |  |
| <b>future linear / solo / axcent / carat</b>  |   | studio white (RAL 9016) glossy | JZ-003.020 (50x50, glossy)     | UN990074                   | 1746 / 10-84        |              |  |
| <b>future linear</b>  |   | studio white (RAL 9016) matt   | JZ-003.021 (50x50, matt)       | UN990102                   | 1746 / 10-884       |              |  |
| <b>alpha nea</b>  |   | studio white (RAL 9016) glossy | JZ-003.020 (50x50, glossy)     | UN990074                   | 1746 / 10-24G       |              |  |
| <b>alpha nea</b>  |   | studio white (RAL 9016) matt   | JZ-003.021 (50x50, matt)       | UN990102                   | 1746 / 10-24        |              |  |
| <b>Duro 2000 SI / SI Linear</b>   |   | white (RAL 1013) glossy        | JZ-003.010 (50x50, glossy)     | UN990048                   | 1746-212-101        |              |  |
| <b>future linear / solo / carat</b>   |   | ivory white (RAL 1013) glossy  | JZ-003.010 (50x50, glossy)     | UN990048                   | 1746 / 10-82        |              |  |
| <b>alpha nea</b>  |   | ivory white (RAL 1013) glossy  | JZ-003.010 (50x50, glossy)     | UN990048                   | 1746 / 10-22G       |              |  |
| <b>impuls</b>   |   | ivory white (RAL 1013) glossy  | JZ-003.010 (50x50, glossy)     | UN990048                   | 1746 / 10-72        |              |  |

\*) must be ordered from switch manufacturer or electronics wholesaler

For BJ future / solo there are also 55x55 insert frames (for use with alre 55x55 cover set) – BJ item no. 1747-84 (studio white) and 1784-82 (ivory white)

Note: Busch-Jaeger central disc cannot be used with alre FTR.

**PRODUCT FINDER ALRE COVER SETS**

FOR SWITCH RANGES FROM ELSO

**INTEGRATION  
EXAMPLES**

FTR – in Joy








FTR – in Fashion



FTR – in Riva



FTR – in Scala

| TYPE ALRE   | ELSO RANGE                    | COLOUR (RAL)/<br>SURFACE FINISH | ALRE COVER SET             | COVER<br>SET ART.<br>NO. | INSERT<br>FRAME<br>50X50* | EURO/<br>PG |
|---|-------------------------------|---------------------------------|----------------------------|--------------------------|---------------------------|-------------|
| FTR 101.000#00  | <b>Joy</b>                    | pure white (RAL 9010) glossy    | JZ-001.100 (55x55, glossy) | UN990050                 | not required              |             |
| FTR 101.002#00  | <b>Joy</b>                    | pearl white (RAL 1013) glossy   | JZ-001.110 (55x55, glossy) | UN990060                 | not required              |             |
| FTR 101.010#00  | <b>Joy</b>                    | pearl white (RAL 1013) glossy   | JZ-001.110 (55x55, glossy) | UN990060                 | not required              |             |
| FTR 101.086#00  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy    | JZ-001.000 (50x50, glossy) | UN990035                 | 203084                    |             |
| FTR 101.202#00  | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy   | JZ-001.010 (50x50, glossy) | UN990045                 | 203080                    |             |
| FTR 101.210#00  | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy   | JZ-001.010 (50x50, glossy) | UN990045                 | 203080                    |             |
|    | Standard (without switch)     |                                 |                            |                          |                           |             |
| FTR 101.062#00  | <b>Joy</b>                    | pure white (RAL 9010) glossy    | JZ-002.100 (55x55, glossy) | UN990051                 | not required              |             |
| FTR 101.262#00  | <b>Joy</b>                    | pearl white (RAL 1013) glossy   | JZ-002.110 (55x55, glossy) | UN990061                 | not required              |             |
|    | (ON/OFF switch, LED)          |                                 |                            |                          |                           |             |
| FTR 101.063#00  | <b>Joy</b>                    | pure white (RAL 9010) glossy    | JZ-012.100 (55x55 glossy)  | UN990123                 | not required              |             |
|   | <b>Joy</b>                    | pearl white (RAL 1013) glossy   | JZ-012.110 (55x55 glossy)  | UN990137                 | not required              |             |
|  | (Switch H/OFF/C)              |                                 |                            |                          |                           |             |
| FTR 101.063#00  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy    | JZ-012.000 (50x50 glossy)  | UN990107                 | 203084                    |             |
|   | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy   | JZ-012.010 (50x50 glossy)  | UN990133                 | 203080                    |             |
| FTR 101.065#00  | <b>Joy</b>                    | pure white (RAL 9010) glossy    | JZ-004.100 (55x55, glossy) | UN990052                 | not required              |             |
| FTR 101.265#00  | <b>Joy</b>                    | pearl white (RAL 1013) glossy   | JZ-004.110 (55x55, glossy) | UN990062                 | not required              |             |
|  | (H/C switch)                  |                                 |                            |                          |                           |             |
| FTR 101.065#00  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy    | JZ-004.000 (50x50, glossy) | UN990037                 | 203084                    |             |
|   | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy   | JZ-004.010 (50x50, glossy) | UN990047                 | 203080                    |             |
| FTR 101.075#00  | <b>Joy</b>                    | pure white (RAL 9010) glossy    | JZ-003.100 (55x55, glossy) | UN990053                 | not required              |             |
|   | <b>Joy</b>                    | pearl white (RAL 1013) glossy   | JZ-003.110 (55x55, glossy) | UN990063                 | not required              |             |
|  | (3-way switch, LED)           |                                 |                            |                          |                           |             |
| FTR 101.075#00  | <b>Fashion / Riva / Scala</b> | pure white (RAL 9010) glossy    | JZ-003.000 (50x50, glossy) | UN990038                 | 203084                    |             |
|   | <b>Fashion / Riva / Scala</b> | pearl white (RAL 1013) glossy   | JZ-003.010 (50x50, glossy) | UN990048                 | 203080                    |             |

\*) must be ordered from switch manufacturer or electronics wholesaler



## PRODUCT FINDER ALRE COVER SETS

FOR SWITCH RANGES FROM GIRA

### INTEGRATION EXAMPLES



FTR – in Standard 55



FTR – in E2





FTR – in Event



FTR – in surface switch



FTR – in E22

| TYPE ALRE   | GIRA RANGE                                     | COLOUR (RAL)/ SURFACE FINISH  | ALRE COVER SET             | COVER SET ART. NO. | INSERT FRAME 50X50* | EURO/ PG |
|---|--|-------------------------------|----------------------------|--------------------|---------------------|----------|
| FTR 101.000#00  | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) glossy  | JZ-001.100 (55x55, glossy) | UN990050           | not required        |          |
| FTR 101.002#00  | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) matt    | JZ-001.101 (55x55, matt)   | UN990055           | not required        |          |
| FTR 101.010#00  | <b>surface switch</b>                          | pure white (RAL 9010) glossy  | JZ-001.000 (50x50, glossy) | UN990035           | 0282 112            |          |
| FTR 101.086#00  | <b>Standard 55 / Event / Esprit / ClassiX</b>  | cream white (RAL 1013) glossy | JZ-001.110 (55x55, glossy) | UN990060           | not required        |          |
| FTR 101.202#00  | <b>System 55</b>                               | aluminium / matt              | JZ-001.131 / Gl            | UN990110           | not required        |          |
| FTR 101.210#00  | <b>System 55</b>                               | anthracite / matt             | JZ-001.141 / Gl            | UN990111           | not required        |          |
|    | Standard (without switch)                      |                               |                            |                    |                     |          |
| FTR 101.062#00  | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) glossy  | JZ-002.100 (55x55, glossy) | UN990051           | not required        |          |
| FTR 101.262#00  | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) matt    | JZ-002.101 (55x55, matt)   | UN990056           | not required        |          |
|    | <b>surface switch</b>                          | pure white (RAL 9010) glossy  | JZ-002.000 (50x50, glossy) | UN990036           | 0282 112            |          |
|   | <b>Standard 55 / Event / Esprit / ClassiX</b>  | cream white (RAL 1013) glossy | JZ-002.110 (55x55, glossy) | UN990061           | not required        |          |
|   | <b>System 55</b>                               | anthracite / matt             | JZ-002.141 / Gl            | UN990121           | not required        |          |
|   | (ON / OFF switch, LED)                         |                               |                            |                    |                     |          |
| FTR 101.063#00  | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) glossy  | JZ-012.100 (55x55 glossy)  | UN990123           | not required        |          |
|   | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) matt    | JZ-012.101 (55x55 matt)    | UN990136           | not required        |          |
|  | <b>surface switch</b>                          | pure white (RAL 9010) glossy  | JZ-012.000 (50x50 glossy)  | UN990107           | 0282 112            |          |
|   | <b>Standard 55 / Event / Esprit / ClassiX</b>  | cream white (RAL 1013) glossy | JZ-012.110 (55x55 glossy)  | UN990137           | not required        |          |
|   | (Switch H / OFF / C)                           |                               |                            |                    |                     |          |
| FTR 101.065#00  | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) glossy  | JZ-004.100 (55x55, glossy) | UN990052           | not required        |          |
| FTR 101.265#00  | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) matt    | JZ-004.101 (55x55, matt)   | UN990057           | not required        |          |
|  | <b>surface switch</b>                          | pure white (RAL 9010) glossy  | JZ-004.000 (50x50, glossy) | UN990037           | 0282 112            |          |
|   | <b>Standard 55 / Event / Esprit / ClassiX</b>  | cream white (RAL 1013) glossy | JZ-004.110 (55x55, glossy) | UN990062           | not required        |          |
|   | (H / C switch)                                 |                               |                            |                    |                     |          |
| FTR 101.075#00  | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) glossy  | JZ-003.100 (55x55, glossy) | UN990053           | not required        |          |
|   | <b>Standard 55 / E2 / E22 / Event / Esprit</b> | pure white (RAL 9010) matt    | JZ-003.101 (55x55, matt)   | UN990058           | not required        |          |
|  | <b>surface switch</b>                          | pure white (RAL 9010) glossy  | JZ-003.000 (50x50, glossy) | UN990038           | 0282 40             |          |
|   | <b>Standard 55 / Event / Esprit / ClassiX</b>  | cream white (RAL 1013) glossy | JZ-003.110 (55x55, glossy) | UN990063           | not required        |          |
|   | (3-way switch, LED)                            |                               |                            |                    |                     |          |

\*) must be ordered from switch manufacturer or electronics wholesaler

\*\*) for GIRA surface switches, there are also 55x55 insert frames (for the use of alre 55x55 cover set) – GIRA item no. 0289 112 (pure white) and 0289 111 (cream white)

**PRODUCT FINDER ALRE COVER SETS**

FOR SWITCH RANGES FROM JUNG

**INTEGRATION  
EXAMPLES**

FTR – in AS 500



FTR – in A 500








FTR – in A plus



FTR – in A creation



FTR – in LS-design

| TYPE ALRE  | JUNG RANGE                                  | COLOUR (RAL) / SURFACE FINISH  | ALRE COVER SET             | COVER SET ART. NO. | INSERT FRAME 50X50* | EURO/ PG |
|--|---|--------------------------------|----------------------------|--------------------|---------------------|----------|
| FTR 101.000#00<br>FTR 101.002#00<br>FTR 101.010#00<br>FTR 101.086#00<br>FTR 101.202#00<br>FTR 101.210#00<br><br><br>Standard (without switch) | AS 500/A 500/A 550/A creation/A plus/A flow | alpine white (RAL 9010) glossy | JZ-001.100 (55x55, glossy) | UN990050           | not required        |          |
|  | CD 500/CD plus                              | alpine white (RAL 9010) glossy | JZ-001.000 (50x50, glossy) | UN990035           | CD 590 Z WW         |          |
|  | LS 990/LS design/LS plus                    | alpine white (RAL 9010) glossy | JZ-001.000 (50x50, glossy) | UN990035           | LS 961 Z WW**       |          |
|  | AS 500                                      | white (RAL 1013) glossy        | JZ-001.110 (55x55, glossy) | UN990060           | not required        |          |
|  | CD 500/CD plus                              | white (RAL 1013) glossy        | JZ-001.010 (50x50, glossy) | UN990045           | 590 Z               |          |
|  | LS 990/LS design/LS plus                    | white (RAL 1013) glossy        | JZ-001.010 (50x50, glossy) | UN990045           | LS 961 Z**          |          |
|  | AS 550/A flow                               | snow white matt                | JZ-001.101 (55x55, matt)   | UN990055           | not required        |          |
| FTR 101.062#00<br>FTR 101.262#00<br><br><br>(ON/OFF switch, LED)   | AS 500/A 500/A 550/A creation/A plus/A flow | alpine white (RAL 9010) glossy | JZ-002.100 (55x55, glossy) | UN990051           | not required        |          |
|  | CD 500/CD plus                              | alpine white (RAL 9010) glossy | JZ-002.000 (50x50, glossy) | UN990036           | CD 590 Z WW         |          |
|  | LS 990/LS design/LS plus                    | alpine white (RAL 9010) glossy | JZ-002.000 (50x50, glossy) | UN990036           | LS 961 Z WW**       |          |
|  | AS 500                                      | white (RAL 1013) glossy        | JZ-002.110 (55x55, glossy) | UN990061           | not required        |          |
|  | CD 500/CD plus                              | white (RAL 1013) glossy        | JZ-002.010 (50x50, glossy) | UN990046           | 590 Z               |          |
|  | LS 990/LS design/LS plus                    | white (RAL 1013) glossy        | JZ-002.010 (50x50, glossy) | UN990046           | LS 961 Z**          |          |
|  | AS 550/A flow                               | snow white matt                | JZ-002.101 (55x55, matt)   | UN990056           | not required        |          |
| FTR 101.063#00<br><br><br>(Switch H/ OFF / C)   | AS 500/A 500/A 550/A creation/A plus/A flow | alpine white (RAL 9010) glossy | JZ-012.100 (55x55 glossy)  | UN990123           | not required        |          |
|  | CD 500/CD plus                              | alpine white (RAL 9010) glossy | JZ-012.000 (50x50 glossy)  | UN990107           | CD 590 Z WW         |          |
|  | LS 990/LS design/LS plus                    | alpine white (RAL 9010) glossy | JZ-012.000 (50x50 glossy)  | UN990107           | LS 961 Z WW**       |          |
|  | AS 500                                      | white (RAL 1013) glossy        | JZ-012.110 (55x55 glossy)  | UN990137           | not required        |          |
|  | CD 500/CD plus                              | white (RAL 1013) glossy        | JZ-012.010 (50x50 glossy)  | UN990133           | 590 Z               |          |
|  | LS 990/LS design/LS plus                    | white (RAL 1013) glossy        | JZ-012.010 (50x50 glossy)  | UN990133           | LS 961 Z**          |          |
|  | AS 550/A flow                               | snow white matt                | JZ-012.101 (55x55 matt)    | UN990136           | not required        |          |
| FTR 101.065#00<br>FTR 101.265#00<br><br><br>(H / C switch)  | AS 500/A 500/A 550/A creation/A plus/A flow | alpine white (RAL 9010) glossy | JZ-004.100 (55x55, glossy) | UN990052           | not required        |          |
|  | CD 500/CD plus                              | alpine white (RAL 9010) glossy | JZ-004.000 (50x50, glossy) | UN990037           | CD 590 Z WW         |          |
|  | LS 990/LS design/LS plus                    | alpine white (RAL 9010) glossy | JZ-004.000 (50x50, glossy) | UN990037           | LS 961 Z WW**       |          |
|  | AS 500                                      | white (RAL 1013) glossy        | JZ-004.110 (55x55, glossy) | UN990062           | not required        |          |
|  | CD 500/CD plus                              | white (RAL 1013) glossy        | JZ-004.010 (50x50, glossy) | UN990047           | 590 Z               |          |
|  | LS 990/LS design/LS plus                    | white (RAL 1013) glossy        | JZ-004.010 (50x50, glossy) | UN990047           | LS 961 Z**          |          |
|  | AS 550/A flow                               | snow white matt                | JZ-004.101 (55x55, matt)   | UN990057           | not required        |          |
| FTR 101.075#00<br><br><br>(3-way switch, LED)   | AS 500/A 500/A 550/A creation/A plus/A flow | alpine white (RAL 9010) glossy | JZ-003.100 (55x55, glossy) | UN990053           | not required        |          |
|  | CD 500/CD plus                              | alpine white (RAL 9010) glossy | JZ-003.000 (5x50, glossy)  | UN990038           | CD 590 Z WW         |          |
|  | LS 990/LS design/LS plus                    | alpine white (RAL 9010) glossy | JZ-003.000 (50x50, glossy) | UN990038           | LS 961 Z WW**       |          |
|  | AS 500                                      | white (RAL 1013) glossy        | JZ-003.110 (55x55, glossy) | UN990063           | not required        |          |
|  | CD 500/CD plus                              | white (RAL 1013) glossy        | JZ-003.010 (50x50, glossy) | UN990048           | 590 Z               |          |
|  | LS 990/LS design/LS plus                    | white (RAL 1013) glossy        | JZ-003.010 (50x50, glossy) | UN990048           | LS 961 Z**          |          |
|  | AS 550/A flow                               | snow white matt                | JZ-003.101 (55x55, matt)   | UN990058           | not required        |          |

\*) must be ordered from switch manufacturer or electronics wholesaler

\*\*) for the Jung LS series, there are also 55x55 insert frames (for the use of alre 55x55 cover set) – JUNG item no. LS 961 Z5 WW (alpine white) and LS 961 Z5 (white)

\*\*\* if necessary, the manufacturer JUNG will change the colour of alpine white from RAL 9010 to RAL 9016



## PRODUCT FINDER ALRE COVER SETS

FOR SWITCH RANGES FROM MERTEN

### INTEGRATION EXAMPLES



FTR – in 1-M



FTR – in M-Smart




FTR – in M-Plan



FTR – in Artec



FTR – in Antik

| TYPE ALRE      | MERTEN RANGE  | COLOUR (RAL) / SURFACE FINISH  | ALRE COVER SET             | COVER SET ART. NO. | INSERT FRAME 50X50* | EURO/ PG |
|----------------|---|--------------------------------|----------------------------|--------------------|---------------------|----------|
| FTR 101.000#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) glossy  | JZ-001.100 (55x55, glossy) | UN990050           | not required        |          |
| FTR 101.002#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) matt    | JZ-001.101 (55x55, matt)   | UN990055           | not required        |          |
| FTR 101.010#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | active white (RAL 9016) glossy | JZ-001.120 (55x55, glossy) | UN990086           | not required        |          |
| FTR 101.086#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | active white (RAL 9016) glossy | JZ-001.120 (55x55, glossy) | UN990086           | not required        |          |
| FTR 101.202#00 | <b>D-Life</b>   | lotus white (RAL 9016) glossy  | JZ-001.020 (50x50, glossy) | UN990071           | MEG4500-6035        |          |
| FTR 101.210#00 | <b>D-Life</b>   | lotus white (RAL 9016) glossy  | JZ-001.020 (50x50, glossy) | UN990071           | MEG4500-6035        |          |
|                | <b>System design: Artec, Antik</b>  | polar white (RAL 9010) glossy  | JZ-001.000 (50x50, glossy) | UN990035           | 5160 99             |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | white (RAL 1013) glossy        | JZ-001.110 (55x55, glossy) | UN990060           | not required        |          |
|                | <b>System design: Artec, Antik</b>  | white (RAL 1013) glossy        | JZ-001.010 (50x50, glossy) | UN990045           | 5160 94             |          |
|                | <b>System M</b>   | aluminium/matt                 | JZ-001.131 / ME            | UN990116           | not required        |          |
|                | <b>System M</b>   | anthracite/matt                | JZ-001.141 / ME            | UN990117           | not required        |          |
|                |    |                                |                            |                    |                     |          |
|                | Standard (without switch)   |                                |                            |                    |                     |          |
| FTR 101.062#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) glossy  | JZ-002.100 (55x55, glossy) | UN990051           | not required        |          |
| FTR 101.262#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) matt    | JZ-002.101 (55x55, matt)   | UN990056           | not required        |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | active white (RAL 9016) glossy | JZ-002.120 (55x55, glossy) | UN990088           | not required        |          |
|                | <b>D-Life</b>   | lotus white (RAL 9016) glossy  | JZ-002.020 (50x50, glossy) | UN990072           | MEG4500-6035        |          |
|                | <b>System design: Artec, Antik</b>  | polar white (RAL 9010) glossy  | JZ-002.000 (50x50, glossy) | UN990036           | 5160 99             |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | white (RAL 1013) glossy        | JZ-002.110 (55x55, glossy) | UN990061           | not required        |          |
|                | <b>System design: Artec, Antik</b>  | white (RAL 1013) glossy        | JZ-002.010 (50x50, glossy) | UN990046           | 5160 94             |          |
|                |   |                                |                            |                    |                     |          |
|                | (ON / OFF switch, LED)  |                                |                            |                    |                     |          |
| FTR 101.063#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) glossy  | JZ-012.100 (55x55 glossy)  | UN990123           | not required        |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) matt    | JZ-012.101 (55x55 matt)    | UN990136           | not required        |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | active white (RAL 9016) glossy | JZ-012.120 (55x55 glossy)  | UN990138           | not required        |          |
|                | <b>D-Life</b>   | lotus white (RAL 9016) glossy  | JZ-012.020 (50x50 glossy)  | UN990134           | MEG4500-6035        |          |
|                | <b>System design: Artec, Antik</b>  | polar white (RAL 9010) glossy  | JZ-012.000 (50x50 glossy)  | UN990107           | 5160 99             |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | white (RAL 1013) glossy        | JZ-012.110 (55x55 glossy)  | UN990137           | not required        |          |
|                | <b>System design: Artec, Antik</b>  | white (RAL 1013) glossy        | JZ-012.010 (50x50 glossy)  | UN990133           | 5160 94             |          |
|                |  |                                |                            |                    |                     |          |
|                | (Switch H / OFF / C)  |                                |                            |                    |                     |          |
| FTR 101.065#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) glossy  | JZ-004.100 (55x55, glossy) | UN990052           | not required        |          |
| FTR 101.265#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) matt    | JZ-004.101 (55x55, matt)   | UN990057           | not required        |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | active white (RAL 9016) glossy | JZ-004.120 (55x55, glossy) | UN990089           | not required        |          |
|                | <b>D-Life</b>   | lotus white (RAL 9016) glossy  | JZ-004.020 (50x50, glossy) | UN990073           | MEG4500-6035        |          |
|                | <b>System design: Artec, Antik</b>  | polar white (RAL 9010) glossy  | JZ-004.000 (50x50, glossy) | UN990037           | 5160 99             |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | white (RAL 1013) glossy        | JZ-004.110 (55x55, glossy) | UN990062           | not required        |          |
|                | <b>System design: Artec, Antik</b>  | white (RAL 1013) glossy        | JZ-004.010 (50x50, glossy) | UN990047           | 5160 94             |          |
|                |  |                                |                            |                    |                     |          |
|                | (H / C switch)  |                                |                            |                    |                     |          |
| FTR 101.075#00 | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) glossy  | JZ-003.100 (55x55, glossy) | UN990053           | not required        |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | polar white (RAL 9010) matt    | JZ-003.101 (55x55, matt)   | UN990058           | not required        |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | active white (RAL 9016) glossy | JZ-003.120 (55x55, glossy) | UN990090           | not required        |          |
|                | <b>D-Life</b>   | lotus white (RAL 9016) glossy  | JZ-003.020 (50x50, glossy) | UN990074           | MEG4500-6035        |          |
|                | <b>System design: Artec, Antik</b>  | polar white (RAL 9010) glossy  | JZ-003.000 (50x50, glossy) | UN990038           | 5160 99             |          |
|                | <b>1-M, Atelier-M / M-Smart, M-Pure, M-Plan, M-Creativ</b>                          | white (RAL 1013) glossy        | JZ-003.110 (55x55, glossy) | UN990063           | not required        |          |
|                | <b>System design: Artec, Antik</b>  | white (RAL 1013) glossy        | JZ-003.010 (50x50, glossy) | UN990048           | 5160 94             |          |
|                |  |                                |                            |                    |                     |          |
|                | (3-way switch, LED)   |                                |                            |                    |                     |          |

\*) must be ordered from switch manufacturer or electronics wholesaler  
 Note: Merten central plates cannot be used with alre FTR.



# ROOM TEMPERATURE OR FLOOR TEMPERATURE CONTROLLER, ELECTRONIC, WITH CLOCK HTRRUU

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

### TECHNICAL DATA

|   |  |
|---|--|
| <b>Design:</b>                                      | Berlin UP  |
| <b>Housing material:</b>                            | PC, PMMA, ABS plastic  |
| <b>Operating voltage:</b>                           | 230 V AC, 50 Hz  |
| <b>Storage temperature:</b>                         | -20 ... +70 °C   |
| <b>Permissible atmospheric humidity:</b>            | Max. 95% rel. humidity, non-condensing   |
| <b>Electrical connection:</b>                       | pluggable screw terminals  |
| <b>Mounting/attachment:</b>                         | <b>In flush-mounted socket, can be adapted to fit virtually any switch range (deep flush-mounted socket recommended) see adaptation list</b>   |
| <b>Protection rating:</b>                           | IP30   |
| <b>Protection class:</b>                            | II, if properly mounted  |
| <b>Safety and EMC:</b>                              | according to DIN EN 60730  |
| <b>Max. switching current:</b>                      | 10 (2) A   |
| <b>Max. switching voltage:</b>                      | 230 V AC, 50 Hz  |
| <b>Min. switching voltage:</b>                      | 230 V AC, 50 Hz  |
| <b>Switching power:</b>                             | 2300 W   |
| <b>Switching element:</b>                           | relay  |
| <b>Switching contact:</b>                           | NO contact   |
| <b>Output signal:</b>                               | 230 V AC, 50 Hz  |
| <b>Sensor:</b>                                      | NTC internal, optional external floor sensor see accessories, optional external room sensor see Sensors 'Sensor 2'   |
| <b>Sensor rupture and short-circuit protection:</b> | If the internal or external sensor is faulty or the external sensor is not connected to the functions room temperature controller with floor monitoring, floor temperature controller or room temperature controller with ext. sensor, emergency operation is triggered. |
| <b>Control function:</b>                            | Heating  |
| <b>Control range:</b>                               | 5 to 30 °C (room) / 10 to 42 °C (floor)  |
| <b>Setting range:</b>                               | The setting range varies, depending on the use of the controller as a room temperature controller (5 ... 30 °C) or floor temperature controller (10 ... 42 °C)   |
| <b>Hysteresis:</b>                                  | for room control < 1 K, for floor control < 2 K  |
| <b>Display type:</b>                                | illuminated graphical display  |
| <b>Display:</b>                                     | setpoint, actual temperature / date, time; setpoint, actual temperature or date, time  |
| <b>Accessories:</b>                                 | terminal strips: VOOPL compatible valve actuators: ZB00A-010.1xx   |

### APPLICATION

Flush-mounted controller for time-dependent single room or floor temperature control for electrical and hot water heating systems (normally closed actuators). The device can be used as a room temperature controller with internal sensor or (in combination with an optional remote sensor) as a room temperature controller with floor monitoring or floor temperature controller. (Remote sensor is not a part of the scope of delivery)

This clock thermostat has a weekly timer with individually adjustable programs (factory setting: 'normal' daily sequences).

**Self-learning function:** Automatic adjustment of the controller to the start of the heating period. The goal is to achieve the comfort temperature at the time that has been set. The learning function is disabled upon delivery, but it can be enabled.


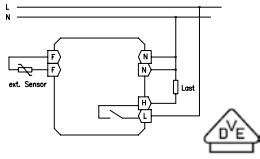


**Standby function:** This function disables the control; frost protection is still ensured.

#### General features:













ECO function, adjustable ECO value; 'ECO' display; 'on/off' display; 'heating' display; digital actual value display; backlighting; standby mode with frost protection monitoring; child-safe features; load setting; power reserve (approx. 5 days); Actual value correction/measured value correction; learning function; valve protection; holiday setting; party setting; external setting; comfortable operation using touch-sensitive buttons; VDE-tested

Special colours as well as the colours anthracite and aluminium are available for projects upon request.



| TYPE/IMAGE  | ITEM NO.                        | FEATURES  | CIRCUIT DIAGRAM   | EURO/PG |
|---|---------------------------------|---|---|---------|
|  | HTRRUu 210.021#21<br>UA060000   | Scope of delivery: controller, 50x50 mm cover, <b>pure white</b> (like RAL 9010), <b>glossy, alre frame 'Berlin'</b>  |  |         |
|  | HTRRUu 210.021#21/7<br>UN060011 | like HTRRUu 210.021#21 but scope of delivery as follows: Controller, 50x50 mm cover, <b>pure white</b> (like RAL 9010), <b>glossy, alre frame 'Berlin'</b> , <b>external floor sensor</b> (HF-8 / 4-K2) |   |         |
|  | HTRRUu 210.021#07<br>UA060001   | like HTRRUu 210.021#21 but scope of delivery as follows: Controller, 50x50 mm cover <b>pure white</b> (similar to RAL 9010), <b>glossy, without frame</b>   |   |         |





| TYPE/IMAGE   | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM | EURO/PG |
|--|----------|---|-----------------|---------|
| HTRRUu 210.021#09<br>   | UA060002 | like HTRRUu 210.021#21 but scope of delivery as follows:<br>Controller, <b>50x50 mm cover pearl white</b> (like RAL 1013),<br><b>glossy</b> , without frame   |                 |         |
| HTRRUu 210.021#27<br>   | UA060003 | like HTRRUu 210.021#21 but scope of delivery as follows:<br>Controller, <b>50x50 mm cover traffic/studio white</b> (like RAL 9016),<br><b>glossy</b> , without frame  |                 |         |
| HTRRUu 210.021#28<br>   | UA060006 | like HTRRUu 210.021#21 but scope of delivery as follows:<br>Controller, cover <b>suitable for BUSCH JAEGER Reflex SI/SI Linear pure white</b> (similar to RAL 9010),<br><b>glossy</b> , without frame   |                 |         |
| HTRRUu 210.021#55<br>   | UA060004 | like HTRRUu 210.021#21 but scope of delivery as follows:<br>Controller, <b>55x55 mm cover pure white</b> (like RAL 9010),<br><b>glossy</b> , without frame  |                 |         |
| HTRRUu 210.021#56<br>   | UA060020 | like HTRRUu 210.021#21 but scope of delivery as follows:<br>Controller, <b>55x55 mm cover pure white</b> (like RAL 9010), <b> matt</b> ,<br>without a frame   |                 |         |
| HTRRUu 210.021#57<br> | UA060005 | like HTRRUu 210.021#21 but scope of delivery as follows:<br>Controller, <b>55x55 mm cover pearl white</b> (like RAL 1013),<br><b>glossy</b> , without frame   |                 |         |
| HTRRUu 210.021#59<br> | UA060014 | like HTRRUu 210.021#21 but scope of delivery as follows:<br>Controller, <b>55x55 mm cover traffic/studio white</b> (like RAL 9016),<br><b>glossy</b> , without frame  |                 |         |
| ACCESSORIES  | ITEM NO. | FEATURES  |                 | EURO/PG |
| HF-8/4-K2<br>         | G8000370 | <b>General features:</b> optional, external floor sensor<br><b>Ambient temperature:</b> -5 to +70 °C<br><b>Protection rating:</b> IP65<br><b>Sensor:</b> NTC<br><b>Connecting cable:</b> 4 m, PVC   |                 |         |
| HF-8/6-K2<br>         | G8000368 | <b>General features:</b> optional, external floor sensor<br><b>Ambient temperature:</b> -5 to +70 °C<br><b>Protection rating:</b> IP65<br><b>Sensor:</b> NTC<br><b>Connecting cable:</b> 6 m, PVC   |                 |         |
| WP-01<br>             | G9990180 | <b>General features:</b> heat conduction paste 2 ml; R > 1 TΩ/cm, silicone-free<br><b>Ambient temperature:</b> -40 to +150 °C<br><b>Heat conductivity:</b> > 0.7 W/mK   |                 |         |
| THF<br>               | C1809515 | <b>General features:</b> protective sleeve for screed mounting<br>(for sleeve sensor HF Ø 7.7, for example, HF-8/4-K2 or HF-8/6-K2), copper   |                 |         |
| JZ-090.900<br>        | VV000025 | <b>General features:</b> alre frame 'Berlin' (neutral) for all flush-mounted controllers with cover 50x50 mm<br><b>Design:</b> Berlin<br><b>Surface finish:</b> Glossy<br><b>Colour:</b> Pure white, like RAL 9010<br><b>Material:</b> PC plastic |                 |         |



# ROOM TEMPERATURE OR FLOOR TEMPERATURE CONTROLLER, ELECTRONIC, WITH CLOCK HTRRUU

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

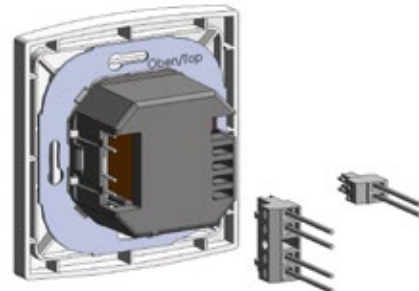
| ACCESSORIES   | ITEM NO.      | FEATURES   | EURO/PG |
|---|---------------|--|---------|
|  | JZ-090.100    | VV000048<br><b>Features:</b> like JZ-090.900 but for all flush-mounted controllers in combination with 55x55 mm cover<br><b>Surface finish:</b> glossy<br><b>Colour:</b> pure white, like RAL 9010<br><b>Material:</b> PC plastic                              |         |
|  | JZ-090.910    | VV000010<br><b>General features:</b> alre frame 'Berlin' (neutral) for all flush-mounted controllers with cover 50x50 mm<br><b>Design:</b> Berlin<br><b>Surface finish:</b> glossy<br><b>Colour:</b> pearl white, like RAL 1013<br><b>Material:</b> PC plastic |         |
|   | BTF2-C47-0000 | SA140014<br><b>Surface-mounted 'ultra-thin' room temperature sensor for temperature measurement in residential and business premises</b>   |         |
|   | FUFC 47-0000  | SN090198<br><b>Flush-mounted room temperature sensor for temperature measurement in residential and business premises</b>  |         |

### ILLUSTRATIONS

HTRRUu with alre frame 'Berlin'



Pluggable screw-type terminals



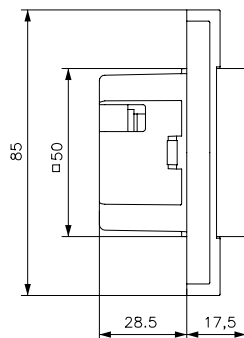
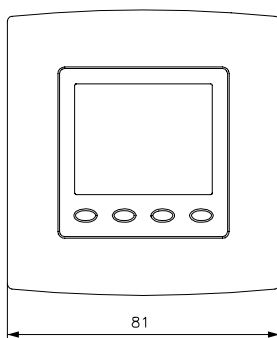
#### additional benefits:

- Pluggable screw-type terminals facilitate quick and easy assembly
- Illuminated, graphics-capable display
- Choice of 8 different external floor sensors (e.g., 2 kOhm – alre, 12 kOhm – OJ/AEG, 15 kOhm – DEVI, 33 kOhm – Eberle), meaning they are also ideal for retrofitting
- VDE mark
- Automatic adjustment to standard/daylight savings time
- Learn function
- Correction of measurement values
- Open window detection
- Configurable display content during installation, choice of various languages including German, English, French, Dutch, Polish, Spanish, Czech, Russian, Italian and Hungarian
- Limit setting for floor temperature
- Standby with frost protection
- Key lock
- Valve protection function
- Configurable control method (PI-PWM or 2-point control)
- Holiday and party function
- Power reserve
- Heating operation indication (orange LED)
- Load setting for improved control

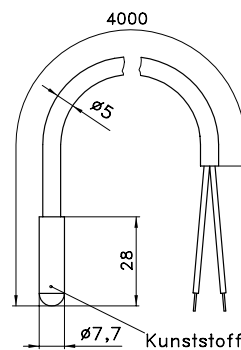
#### Factory setting:

- Holiday temperature 17 °C
- Setback temperature 17 °C
- Comfort temperature 20 °C
- Comfort times: Mon – Fri 5 am – 9 pm / 4 pm – 10 pm, Sat / Sun 6 am – 10 pm
- Key lock disabled
- Automatic adjustment to summer / winter time enabled
- Valve and pump protection disabled
- Learning function disabled
- Display lighting 10 s
- Heating load 0.1 kW
- 2-point control method
- External sensor
- 2 kOhm and max. floor temperature 42 °C (if configured as floor temperature controller)

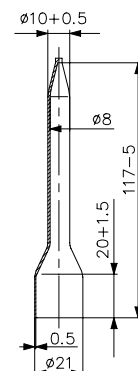
HTRRUu with alre frame 'Berlin'



HF-8/4-K2



THF







## ADAPTATION OF ALRE FLUSH-MOUNTED CONTROLLERS – HTRRUU 210.021

| MANUFACTURER               | RANGE                                 | COLOUR RAL 9010<br>(surface finish)              | ADAPTATION<br>in switch range '55x55'<br>possible using... | '50x50' adaptation possible<br>with... (insert frame from switch<br>manufacturer required) |
|----------------------------|---------------------------------------|--|--|--|
| BERKER                     | S.1                                   | polar white (matt)                               | HTRRUu 210.021#56  | not required   |
| BERKER                     | S.1                                   | polar white (glossy)                             | HTRRUu 210.021#55  | not required   |
| BERKER                     | Arsys                                 | polar white (glossy)                             |  | HTRRUu 210.021#07 + (1108 01 69)   |
| BERKER                     | B.3                                   | aluminium polar white (matt)                     | HTRRUu 210.021#56  | not required   |
| BERKER                     | B.3                                   | aluminium / polar white (glossy)                 | HTRRUu 210.021#55  | not required   |
| BERKER                     | B.7                                   | glass / polar white (matt)                       | HTRRUu 210.021#56  | not required   |
| BERKER                     | B.7                                   | glass / polar white (glossy)                     | HTRRUu 210.021#55  | not required   |
| BERKER                     | K.1                                   | polar white (glossy)                             |  | HTRRUu 210.021#07 + (1108 71 09)   |
| BUSCH-JAEGER               | Reflex SI / SI Linear                 | alpine white (glossy)                            | HTRRUu 210.021#28  | not required   |
| BUSCH-JAEGER               | Busch-balance SI                      | alpine white (glossy)                            | HTRRUu 210.021#55  | not required   |
| BUSCH-JAEGER               | impuls                                | alpine white (glossy)                            |  | HTRRUu 210.021#07 + (1746 / 10-74)   |
| BUSCH-JAEGER               | solo / future / axcent etc.           | studio white – see RAL 9016 below                |  |  |
| Elso                       | Joy                                   | pure white (glossy)                              | HTRRUu 210.021#55  | not required   |
| Elso                       | Fashion / Riva / Scala                | pure white (glossy)                              |  | HTRRUu 210.021#07 + 203084   |
| GIRA                       | surface switch                        | pure white (glossy)                              |  | HTRRUu 210.021#07 + (0282 112)   |
| GIRA (System 55)           | Standard / E2                         | pure white (semi-gloss)                          | HTRRUu 210.021#56  | not required   |
| GIRA (System 55)           | Standard / E2 / E3                    | pure white (glossy)                              | HTRRUu 210.021#55  | not required   |
| GIRA (System 55)           | E22                                   | pure white (glossy)                              | HTRRUu 210.021#55  | not required   |
| GIRA (System 55)           | Event                                 | pure white (semi-gloss) + opaque...              | HTRRUu 210.021#56  | not required   |
| GIRA (System 55)           | Event                                 | pure white (glossy) + opaque...                  | HTRRUu 210.021#55  | not required   |
| GIRA (System 55)           | Esprit                                | pure white (semi-gloss) + glass,<br>aluminium... | HTRRUu 210.021#56  | not required   |
| GIRA (System 55)           | Esprit                                | pure white (glossy) + glass,<br>aluminium...     | HTRRUu 210.021#55  | not required   |
| GIRA                       | S-Color                               | pure white (high-gloss)                          |  | HTRRUu 210.021#07 + (0282 40)  |
| JUNG                       | CD 500 / CD plus                      | alpine white (glossy) **                         |  | HTRRUu 210.021#07 + (CD 590 Z WW)  |
| JUNG                       | A 500 / AS 500 / A plus               | alpine white (glossy) **                         | HTRRUu 210.021#55  | not required   |
| JUNG                       | LS 990                                | alpine white (glossy) **                         |  | HTRRUu 210.021#07 + (LS 961 Z WW)  |
| JUNG                       | LS plus                               | alpine white (glass) **                          |  | HTRRUu 210.021#07 + (LS 961 Z WW)  |
| JUNG                       | A creation                            | alpine white (glossy)                            | HTRRUu 210.021#55  | not required   |
| JUNG                       | LS Design                             | alpine white (glossy)                            |  | HTRRUu 210.021#07 + (LS 961 Z WW)  |
| JUNG                       | AS 550 / A flow                       | snow white matt                                  | HTRRUu-210.021#56  | not required   |
| MERTEN (System M)          | M-Smart, M-Plan, M-Pure               | polar white (matt)                               | HTRRUu 210.021#56  | not required   |
| MERTEN (System M)          | M-Smart, M-Plan, M-Creativ,<br>M-Pure | polar white (glossy)                             | HTRRUu 210.021#55  | not required   |
| MERTEN (System Basis)      | 1-M / Atelier-M                       | polar white (glossy)                             | HTRRUu 210.021#55  | not required   |
| MERTEN (Surface<br>System) | Artec/Antik                           | polar white (glossy)                             |  | HTRRUu 210.021#07 + (5160 99)  |
| MERTEN                     | 1-M/M-Smart/M-Plan/<br>M-Pure/D-Life  | active white – see RAL 9016 below                |  |  |
| PEHA                       | Standard                              | pure white (glossy)                              |  | HTRRUu 210.021#07 + (80.670.02 ZV)   |
| PEHA                       | Dialog                                | pure white (glossy)                              |  | HTRRUu 210.021#07 + (95.670.02 ZV)   |
| PEHA                       | Aura                                  | pure white (matt) / glass                        |  | HTRRUu 210.021#07 + (20.670.02 ZV)   |
| PEHA                       | Badora                                | pure white (glossy)                              |  | HTRRUu 210.021#07 + (11.670.02 ZV)   |

| MANUFACTURER | RANGE                         | COLOUR RAL 9016<br>(surface finish) | ADAPTATION<br>in switch range '55x55'<br>possible using... | '50x50' adaptation possible<br>with... (insert frame from switch<br>manufacturer required) |
|--------------|-------------------------------|-------------------------------------|--|--|
| BUSCH-JAEGER | solo / future / future linear | studio white (RAL 9016, glossy)     |  | HTRRUu 210.021#27 + (1746 / 10-84)   |
| BUSCH-JAEGER | axcent                        | studio white (RAL 9016, glossy)     |  | HTRRUu 210.021#27 + (1746 / 10-84)   |
| BUSCH-JAEGER | carat (glass, bronze, gold)   | studio white (RAL 9016, glossy)     |  | HTRRUu 210.021#27 + (1746 / 10-84)   |
| BUSCH-JAEGER | alpha (nea / exclusive *)     | studio white (RAL 9016, glossy)     |  | HTRRUu 210.021#27 + (1746 / 10-24G)  |
| MERTEN       | M-Smart, M-Plan, M-Pure       | active white (RAL 9016, glossy)     | HTRRUu 210.021#59  | not required   |
| MERTEN       | 1-M / Atelier-M               | active white (RAL 9016, glossy)     | HTRRUu 210.021#59  | not required   |
| MERTEN       | D-Life                        | lotus white (RAL 9016)              |  | HTRRUu 210.021#27 + MEG4500-6035   |
| PEHA         | Standard                      | arctic                              |  | HTRRUu 210.021#27 + (D 80.670 ZV AW)   |

\*) During assembly, you need to remove 4 plastic tabs located at the rear of the frame

\*\* if necessary, the manufacturer JUNG will change the colour from RAL 9010 to RAL 9016

**NOTE:** Most light switches are designed in the colour "like RAL 9010", although different switch manufacturers use different designations for this colour. Coloured, glass and aluminium frames are also combined with white jacks or plugs so that controllers with white covers can also be integrated into these frames. Check the precise application in each individual case. The frames have different surface qualities (matt/glossy). For design reasons, the cover of the controller should have the same quality as the frame. We accept no liability for slight variations in colour and surface finish or for accuracy of fit. When installing devices into multi frames, always assemble the temperature controllers at the lowermost position.

**'50x50 controller':** The housing covers of the 50x50 controllers are 50x50 mm in size. Using a 50x50 mm insert frame, they can be integrated into nearly all light switch ranges in accordance with DIN 49075. The 50x50 mm insert frames must be ordered from the light switch manufacturer or from a wholesaler. The order number of the insert frame corresponding to the switch range in question can be found in the column 'For adaptation of size '50x50' HTRRUu'.

**'55x55 controller':** The housing covers of the 55x55 controllers are 55x55 mm in size. Many light switch ranges have inner dimensions of 55x55 mm. Therefore, the 55x55 controllers can be installed directly in the light switch frame without the use of an insert frame. See the column 'Adaptation in switch range (55x55)' to determine whether the 55x55 controller fits in the given light switch range (HTRRUu 210.021#xx).

All information regarding switch manufacturers' product lines and item numbers was last updated in 12/2022 | No liability is assumed for the information provided. | Technical specifications subject to change.



# FLOOR OR SURFACE TEMPERATURE CONTROLLER, ELECTRONIC, WITH REMOTE SENSOR (FOR FLOOR HEATING / WALL AND CEILING HEATING / TILED STOVE) HTRRB SURFACE-MOUNTED INSTALLATION – DESIGN BERLIN 2000

**TECHNICAL DATA**

|   |  |
|---|--|
| <b>Design:</b>                                      | Berlin 2000  |
| <b>Surface finish:</b>                              | matt   |
| <b>Housing colour:</b>                              | pure white, like RAL 9010  |
| <b>Housing material:</b>                            | ABS plastic  |
| <b>Operating voltage:</b>                           | 230 V AC, 50 Hz  |
| <b>Ambient temperature:</b>                         | 0 ... 30 °C  |
| <b>Storage temperature:</b>                         | -20 ... +70 °C   |
| <b>Permissible atmospheric humidity:</b>            | Max. 95% rel. humidity, non-condensing   |
| <b>Electrical connection:</b>                       | screw-type terminals   |
| <b>Mounting/attachment:</b>                         | surface-/wall-mounting (4-hole assembly on flush-mounted socket)   |
| <b>Protection rating:</b>                           | IP30   |
| <b>Protection class:</b>                            | II, if properly mounted  |
| <b>Safety and EMC:</b>                              | according to DIN EN 60730  |
| <b>Max. switching current:</b>                      | 13 (2) A   |
| <b>Max. switching voltage:</b>                      | 230 V AC, 50 Hz  |
| <b>Min. switching voltage:</b>                      | 230 V AC, 50 Hz  |
| <b>Switching power:</b>                             | 3000 W   |
| <b>Switching element:</b>                           | relay  |
| <b>Switching contact:</b>                           | NO contact   |
| <b>Output signal:</b>                               | 230 V AC, 50 Hz  |
| <b>Sensor:</b>                                      | external, NTC  |
| <b>Sensor rupture and short-circuit protection:</b> | heating is switched off  |
| <b>Control function:</b>                            | Heating  |
| <b>Hysteresis:</b>                                  | approx. 1 K  |
| <b>General features:</b>                            | 'Heating' display: mechanical range limitation; 3000 W switching power for electric direct heating systems, natural stone heating; 'on/off' switch; external setting |

**APPLICATION**

Temperature control (e.g., of electrical heating systems) for floor, fringe zone, bathroom, ceiling, tiled stove, marble and wall heating systems or tempering systems.

Note: The sensor line must be routed in a protective duct. Parallel routing together with lines that carry alternating currents is not admissible.

Floor temperature controller with clock: HTRRBu-110.021  
Floor temperature controller for distributor assembly: ITR 79 Series (plant engineering)

**TYPE/IMAGE****ITEM NO.****FEATURES****CIRCUIT DIAGRAM****EURO/PG**

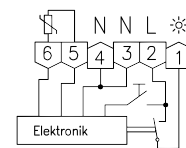
HTRRB-011.010



DA400000

**General features:** Floor temperature controller with remote sensor HF-8/4-K2 4 m, multi-digit display 1–6  
**Control range:** 10 to 60 °C

**Note:** The setting range can be adjusted to e.g. 10 to 40 °C using the mechanical range limitation as a replacement for the type **HTRRB-010.310**.

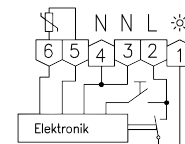


HTRRB-011.410








DA400100

**General features:** Tiled stove surface temperature controller with remote sensor HF-5/4-K3 4 m; scale: Degrees Celsius; threshold arrow  
**Control range:** 20–80 °C



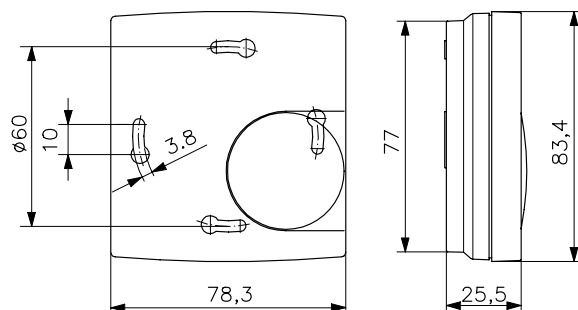


# FLOOR OR SURFACE TEMPERATURE CONTROLLER, ELECTRONIC, WITH REMOTE SENSOR (FOR FLOOR HEATING / WALL AND CEILING HEATING / TILED STOVE) HTRRB SURFACE-MOUNTED INSTALLATION – DESIGN BERLIN 2000

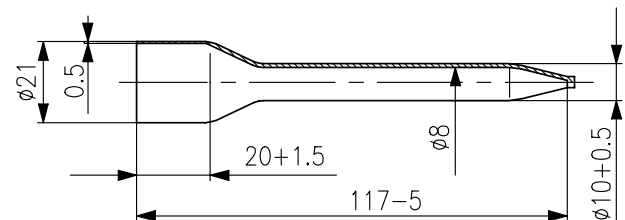
| ACCESSORIES   | ITEM NO. | FEATURES  | EURO/PG |
|---|----------|---|---------|
|  | G8000370 | <b>General features:</b> Spare sensor for HTRRB-011.010<br><b>Ambient temperature:</b> -5 to +70 °C<br><b>Protection rating:</b> IP65<br><b>Sensor:</b> NTC<br><b>Connecting cable:</b> 4 m, PVC  |         |
|  | G8000368 | <b>General features:</b> Spare sensor for HTRRB-011.010<br><b>Ambient temperature:</b> -5 to +70 °C<br><b>Protection rating:</b> IP65<br><b>Sensor:</b> NTC<br><b>Connecting cable:</b> 6 m, PVC  |         |
|  | G9031456 | <b>General features:</b> Spare sensor for HTRRB-011.410<br><b>Ambient temperature:</b> -50 to +150 °C<br><b>Protection rating:</b> IP65<br><b>Sensor:</b> NTC<br><b>Connecting cable:</b> 4 m, silicone, H05SS-F <VDE> 2x0.75 mm <sup>2</sup> |         |
|  | G9990180 | <b>General features:</b> heat conduction paste 2 ml; R > 1 TΩ/cm, silicone-free<br><b>Heat conductivity:</b> > 0.7 W/mK<br><b>Ambient temperature:</b> -40 to +150 °C   |         |
|  | C1809515 | <b>General features:</b> protective sleeve for screed mounting<br>(for sleeve sensor HF Ø 7.7, for example, HF-8/4-K2 or HF-8/6-K2), copper   |         |

## ILLUSTRATIONS

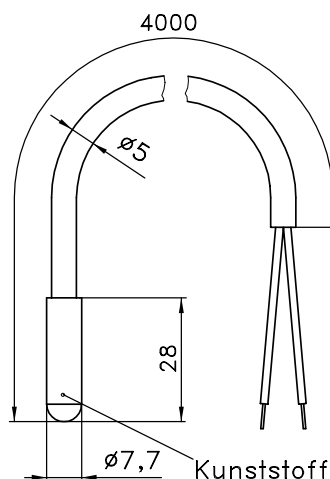
HTRRB



THF



HF-8/4-K2





# ELECTRONIC FLOOR OR SURFACE TEMPERATURE CONTROLLER WITH CLOCK AND REMOTE SENSOR (FOR FLOOR HEATING / WALL AND CEILING HEATING) HTRRBUSURFACE-MOUNTED INSTALLATION – BERLIN 3000

**TECHNICAL DATA**

|  |   |
|--|---|
| <b>Design:</b>                           | Berlin 3000   |
| <b>Surface finish:</b>                   | matt  |
| <b>Housing colour:</b>                   | pure white, like RAL 9010   |
| <b>Housing material:</b>                 | ABS plastic   |
| <b>Operating voltage:</b>                | 230 V AC, 50 Hz   |
| <b>Ambient temperature:</b>              | 0 ... 30 °C   |
| <b>Storage temperature:</b>              | -20 ... +70 °C  |
| <b>Permissible atmospheric humidity:</b> | Max. 95% rel. humidity, non-condensing  |
| <b>Electrical connection:</b>            | screw-type terminals 0.5 ... 1.5 mm <sup>2</sup>                                  |
| <b>Mounting/attachment:</b>              | surface / wall mounting or by means of an adapter plate on a flush-mounted socket |
| <b>Protection rating:</b>                | IP30  |
| <b>Protection class:</b>                 | II, if properly mounted   |
| <b>Safety and EMC:</b>                   | according to DIN EN 60730   |
| <b>Max. switching current:</b>           | heating (terminal 4) 13 (2) A, clock output (terminal 3) 100 mA                   |
| <b>Max. switching voltage:</b>           | 230 V AC, 50 Hz   |
| <b>Min. switching voltage:</b>           | 230 V AC, 50 Hz   |
| <b>Switching power:</b>                  | terminal 4: 3000 W, terminal 3: 23 W  |
| <b>Switching element:</b>                | relay   |
| <b>Switching contact:</b>                | NO contact  |
| <b>Output signal:</b>                    | switching (230 VAC, 50 Hz)  |
| <b>Sensor:</b>                           | external, NTC   |
| <b>Control function:</b>                 | Heating   |
| <b>Control range:</b>                    | 10 ... 42 °C  |
| <b>Hysteresis:</b>                       | approx. 1 K   |
| <b>Display type:</b>                     | symbol display  |
| <b>Output 'temperature reduction':</b>   | switching (230 VAC, 50 Hz), for pilot function                                    |

**APPLICATION**


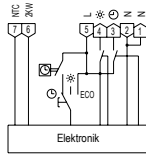
Time-dependent temperature control (for example, of electrical heating systems) for floor, fringe zone, bathroom, ceiling, tiled stove, marble and wall heating systems or tempering systems.

It can be used as a master (pilot regulator) for the temperature reduction of other controllers. Controllers of the series FETR, RTBSU and RTBSB are suitable for use as slaves (satellite controllers).

Note: The sensor line must be routed in a protective duct. Parallel routing together with lines that carry AC voltage is not permissible.

Programming procedures for every day, familiar from mechanical timers, by means of 'electronic tabs'. Shortest switching time 15 min.




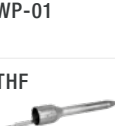

**General features:**  
Pilot function; ECO function; ECO value adjustable; display 'ECO'; display 'On / Off'; display 'heating'; child-safe features; power reserve (approx. 4 – 7 days); learning function; valve protection; holiday setting; party setting; automatic adjustment to standard / daylight savings time; mechanical range limitation; reduction / comfort / automatic button; external setting; operation using direct-dial buttons; on / off button; information button; party function button; holiday setting button

| TYPE/IMAGE  | ITEM NO. | FEATURES          | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|-------------------|---|---------|
| HTRRBu-110.021<br> | MA600400 | With backlighting |  |         |

Accessories: terminal strips: VOOPL compatible valve actuators: ZBOOA-010.1xx

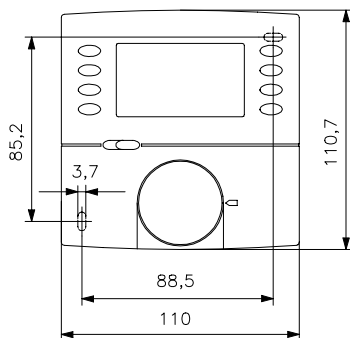


# ELECTRONIC FLOOR OR SURFACE TEMPERATURE CONTROLLER WITH CLOCK AND REMOTE SENSOR (FOR FLOOR HEATING / WALL AND CEILING HEATING) HTRRBu SURFACE-MOUNTED INSTALLATION – BERLIN 3000

| ACCESSORIES  | ITEM NO. | FEATURES  | EURO/PG |
|--|----------|---|---------|
|   | MN990001 | <b>General features:</b> Adapter plate for mounting devices on flush-mounted sockets (including fastening screws for mounting the controller on the adapter plate)<br><b>Surface finish:</b> matt<br><b>Colour:</b> pure white, like RAL 9010<br><b>Material:</b> ABS plastic |         |
|   | G8000370 | <b>General features:</b> Spare sensor for HTRRBu-110.021<br><b>Ambient temperature:</b> -5 to +70 °C<br><b>Protection rating:</b> IP65<br><b>Sensor:</b> NTC<br><b>Connecting cable:</b> 4 m, PVC   |         |
|   | G8000368 | <b>General features:</b> Spare sensor for HTRRBu-110.021<br><b>Ambient temperature:</b> -5 to +70 °C<br><b>Protection rating:</b> IP65<br><b>Sensor:</b> NTC<br><b>Connecting cable:</b> 6 m, PVC   |         |
|   | G9990180 | <b>General features:</b> Heat conduction paste 2 ml; $R > 1 \text{ T}\Omega/\text{cm}$ , silicone-free<br><b>Ambient temperature:</b> -40 to +150 °C  |         |
|  | C1809515 | <b>General features:</b> protective sleeve for screed mounting (for sleeve sensor HF $\varnothing 7.7$ , for example, HF-8/4-K2 or HF-8/6-K2), copper   |         |

## ILLUSTRATIONS

HTRRBu-110.XXX



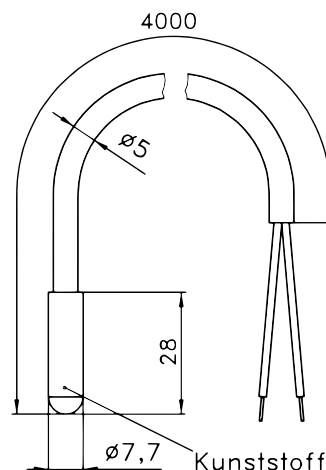
JZ-17



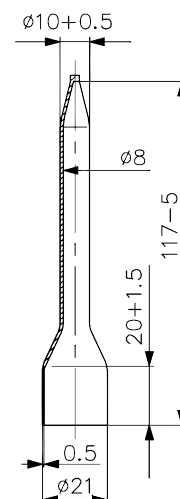
### Factory setting:

- Setback temperature 1.7
- Continuous time display
- Programme display using switching segments enabled
- Child-safe features disabled
- Automatic adjustment to summer / winter time enabled
- Valve and pump protection disabled
- Learning function disabled
- Comfort times:  
Mon – Fri 5 am – 9 am / 4 pm – 10 pm,  
Sat / Sun 6 am – 10 pm
- Sensor rupture and short-circuit safeguarding:  
In case of a sensor rupture or sensor short-circuit, the heating is activated with a power-on time of 30% to prevent cooling or frost damage in the room. Temperatures below -20 °C are also interpreted as sensor rupture, and the emergency function is triggered.

HF-8/4-K2



THF





# ELECTRONIC FLOOR TEMPERATURE CONTROLLER WITH REMOTE SENSOR (FOR FLOOR HEATING / WALL AND CEILING HEATING) FETR/RTERU

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP



### TECHNICAL DATA

|   |   |
|---|---|
| <b>Design:</b>                                      | Berlin UP   |
| <b>Housing material:</b>                            | PC plastic (FETR)<br>PA6 plastic (RTERU)  |
| <b>Operating voltage:</b>                           | 230 V AC, 50 Hz   |
| <b>Storage temperature:</b>                         | -20 ... +70 °C  |
| <b>Permissible atmospheric humidity:</b>            | Max. 95% rel. humidity, non-condensing  |
| <b>Electrical connection:</b>                       | screw-type terminals (FETR)<br>pluggable screw terminals (RTERU)  |
| <b>Mounting/attachment:</b>                         | In flush-mounted socket – with suitable cover set, can be adapted to fit virtually any switch range (deep flush-mounted socket recommended) |
| <b>Protection rating:</b>                           | IP30  |
| <b>Protection class:</b>                            | II, if properly mounted   |
| <b>Safety and EMC:</b>                              | according to DIN EN 60730   |
| <b>Max. switching voltage:</b>                      | 230 V AC, 50 Hz   |
| <b>Min. switching voltage:</b>                      | 230 V AC, 50 Hz   |
| <b>Switching element:</b>                           | relay   |
| <b>Switching contact:</b>                           | NO contact  |
| <b>Output signal:</b>                               | switching (230 VAC, 50 Hz)  |
| <b>Sensor:</b>                                      | external or internal/external (monitors)  |
| <b>Sensor type (external):</b>                      | HF-8/4-K2   |
| <b>Sensor rupture and short-circuit protection:</b> | heating is switched off   |
| <b>Sensor wire extendible up to:</b>                | 50 m with min. 0.5 mm <sup>2</sup> double-insulated   |
| <b>Control function:</b>                            | Heating   |
| <b>Hysteresis:</b>                                  | <1 K (FETR)<br>1.5 K (RTERU)  |
| <b>General features:</b>                            | ECO function; 'reduction' display (FETR);<br>'heating' display  |
| <b>Input temperature reduction:</b>                 | approx. 5 K (230 VAC, 50 Hz)  |

### APPLICATION

Temperature control (e.g., of electrical heating systems) for floor, fringe zone, bathroom, ceiling, tiled stove, marble and wall heating systems or tempering systems, direct floor heating systems.

Reduction: With these flush-mounted controllers, the temperature can be reduced by 5 K. For this purpose, potential is applied to the clock input terminal by an external pilot controller or an external timer L1.

Note: The sensor line must be routed in a protective duct. Parallel routing together with lines that carry alternating currents is not admissible.

The 55x55 mm variants visually fit perfectly without an insert frame in many switch ranges of 55x55 mm.

Using an insert frame, the 50x50 mm variants fit in almost all switch ranges.

See page for an overview of currently possible combinations and insert frames

### TYPE/IMAGE

### ITEM NO.

### FEATURES

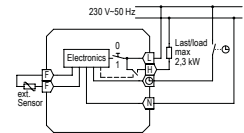
### CIRCUIT DIAGRAM

### EURO/70PG

RTERU-010.715#00

UN110100

**General features:** floor temperature controller; mechanical range limitation; on / off switch; external setting; protective cap; contact hazard protection cover plate; Multi-digit display \*–6  
**Ambient temperature:** 0 to 35 °C  
**Max. switching current:** 10 (1.5) A  
**Switching power:** 2300 W  
**Control range:** 10 to 50 °C  
**Scope of delivery:** controller, remote sensor 4 m  
 Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.  
**Suitable set no.:** JZ-035.xxx, for example:  
 cover set 50x50 mm, pure white, glossy: JZ-035.000  
 55x55 mm cover set, pure white, gloss: JZ-035.100



RTERU-010.715#21

UN110109


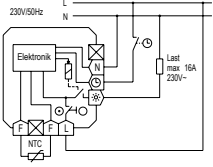

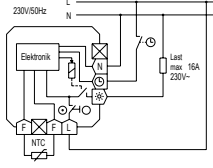






Like RTERU-010.715#00 but **scope of delivery as follows:** controller, 4 m remote sensor, alre frame 'Berlin' (neutral), 50x50 mm cover, pure white (like RAL 9010), glossy





# ELECTRONIC FLOOR TEMPERATURE CONTROLLER WITH REMOTE SENSOR (FOR FLOOR HEATING / WALL AND CEILING HEATING) FETR / RTERU


## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| TYPE/IMAGE  | ITEM NO. | FEATURES   | CIRCUIT DIAGRAM   | EURO/PG |
|---|----------|--|---|---------|
|    | UN030000 | <p><b>General features:</b> Floor temperature controllers; internal setting; multi-digit display 1–6</p> <p><b>Ambient temperature:</b> 0 to 40 °C</p> <p><b>Max. switching current:</b> 16 (2) A</p> <p><b>Switching power:</b> 3680 W</p> <p><b>Control range:</b> 10 to 60 °C</p> <p><b>Scope of delivery:</b> controller, remote sensor 4 m, cover 50x50 mm, pure white (like RAL 9010), glossy</p>  |  |         |
|    | UA030119 | <p><b>General features:</b> Floor temperature controller; mechanical range limitation; <b>on/off switch</b>; external setting; protective cap; contact hazard protection cover plate; multi-digit display 1–5</p> <p><b>Ambient temperature:</b> 0 to 40 °C</p> <p><b>Max. switching current:</b> 16 (2) A</p> <p><b>Switching power:</b> 3680 W</p> <p><b>Control range:</b> 10 to 50 °C</p> <p><b>Scope of delivery:</b> controller, remote sensor 4 m</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range (cover sets)') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-005.xxx, for example.:</b><br/>cover set 50x50 mm, pure white, glossy: JZ-005.000<br/>cover set 55x55 mm, pure white, glossy: JZ-005.100</p> |  |         |
|  | UN030109 | like FETR 101.715#00, but with scope of delivery: controller, remote sensor 4 m, alre frame 'Berlin' (neutral), cover 50x50 mm, pure white (like RAL 9010), glossy   |   |         |
|  | UA030502 | <p>like FETR 101.715#00, but with control range 10 to 42 °C (multi-digit display 1 to 4)</p> <p>Cover sets are offered in various designs (see the separate overview, 'alre flush-mounted range [cover sets]') and are not included in the delivery.</p> <p><b>Suitable set no.: JZ-009.xxx, e.g.,:</b><br/>cover set 50x50 mm, pure white, glossy: JZ-009.000<br/>cover set 55x55 mm, pure white, glossy: JZ-009.100<br/>Complete device with alre frame 'Berlin' (neutral), 50x50 mm cover (pure white, like RAL 9010, glossy) upon request.</p>   |   |         |
| ACCESSORIES   | ITEM NO. | FEATURES   |   | EURO/PG |
|  | G8000370 | <p><b>General features:</b> Spare sensor for RTERU/FETR 101.7xx</p> <p><b>Ambient temperature:</b> –5 to +70 °C</p> <p><b>Protection rating:</b> IP65</p> <p><b>Sensor:</b> NTC</p> <p><b>Connecting cable:</b> 4 m, PVC</p>   |   |         |
|  | G8000368 | <p><b>General features:</b> Spare sensor for RTERU/FETR 101.7xx</p> <p><b>Ambient temperature:</b> –5 to +70 °C</p> <p><b>Protection rating:</b> IP65</p> <p><b>Sensor:</b> NTC</p> <p><b>Connecting cable:</b> 6 m, PVC</p>   |   |         |
|  | G9990180 | <p><b>General features:</b> Heat conduction paste 2 ml; R &gt; 1 TΩ/cm, silicone-free</p> <p><b>Ambient temperature:</b> –40 to +150 °C</p>  |   |         |
|  | C1809515 | <p><b>General features:</b> Protective sleeve for screed mounting (for sleeve sensor HF Ø 7.7, for example, HF-8/4-K2 or HF-8/6-K2), copper</p>  |   |         |



# ELECTRONIC FLOOR TEMPERATURE CONTROLLER WITH REMOTE SENSOR (FOR FLOOR HEATING / WALL AND CEILING HEATING) FETR/RTERU

## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

| ACCESSORIES   | ITEM NO.   | FEATURES  | EURO/PG |
|---|------------|---|---------|
|  | JZ-090.900 | VV000025<br><b>General features:</b> alre frame 'Berlin' (neutral) for all flush-mounted controllers with cover 50x50 mm<br><b>Design:</b> Berlin<br><b>Surface finish:</b> Glossy<br><b>Colour:</b> Pure white, like RAL 9010<br><b>Material:</b> PC plastic |         |
|   | JZ-090.910 | VV000010<br>Like JZ-090.900 but with pearl white colour similar to RAL 1013   |         |
|   | JZ-090.100 | VV000048<br>like JZ-090.900, but for all flush-mounted controllers in combination with 55x55 mm cover   |         |

## ALRE FLUSH-MOUNTED RANGE (COVER SETS)

ALL BASIC TYPES AND SUITABLE COVER SETS **50 X 50 MM** / B-J REFLEX SI/SI LINEAR

| BASIC TYPE       | 50x50 mm cover set<br>PURE WHITE (RAL 9010)<br>GLOSSY (JZ-xxx.000) |          | 50x50 mm cover set<br>PURE WHITE (RAL 9010)<br>MATT (JZ-xxx.001) |          | 50x50 mm cover set<br>PEARL WHITE (RAL 1013)<br>GLOSSY (JZ-xxx.010) |          | EURO/PG |
|------------------|--|----------|--|----------|---|----------|---------|
|                  | Cover set  | Item no. | Cover set  | Item no. | Cover set   | Item no. |         |
| FETR 101.715#00  | JZ-005.000   | UN990003 | JZ-005.001   | UN990006 | JZ-005.010  | UN990009 |         |
| FETR 101.716#00  | JZ-009.000   | UN990004 | JZ-009.001   | UN990007 | JZ-009.010  | UN990010 |         |
| RTERU 010.715#00 | JZ-035.000   | UN990169 | JZ-035.001   | UN990193 | JZ-035.010  | UN990177 |         |

| BASIC TYPE       | 50x50 mm cover set<br>TRAFFIC/STUDIO WHITE<br>(RAL 9016) GLOSSY<br>(JZ-xxx.020) |          | 50x50 mm cover set<br>TRAFFIC WHITE<br>(RAL 9016) MATT<br>(JZ-xxx.021) |          | EURO/PG | BUSCH-JAEGER cover set<br>REFLEX SI/SI LINEAR<br>PURE WHITE (RAL 9010)<br>GLOSSY (JZ-xxx.200 / BJ) |          | EURO/PG |
|------------------|---|----------|--|----------|---------|--|----------|---------|
|                  | Cover set   | Item no. | Cover set  | Item no. |         | Cover set  | Item no. |         |
| FETR 101.715#00  | JZ-005.020  | UN990075 | JZ-005.021   | UN990104 |         | –  | –        |         |
| FETR 101.716#00  | JZ-009.020  | UN990076 | JZ-009.021   | UN990106 |         | –  | –        |         |
| RTERU 010.715#00 | JZ-035.020  | UN990185 | JZ-035.021   | UN990201 |         | JZ-035.200 / BJ  | G9990499 |         |

In flush-mounted socket, it can be adapted to fit virtually any switch range.

## ALL BASIC TYPES AND SUITABLE COVER SETS **55 X 55 MM**

| BASIC TYPE       | 55x55 mm cover set<br>PURE WHITE (RAL 9010)<br>GLOSSY (JZ-xxx.100) |          | 55x55 mm cover set<br>PURE WHITE (RAL 9010)<br>MATT (JZ-xxx.101) |          | 55x55 mm cover set<br>PEARL WHITE (RAL 1013)<br>GLOSSY (JZ-xxx.110) |          | EURO/PG |
|------------------|--|----------|--|----------|---|----------|---------|
|                  | Cover set  | Item no. | Cover set  | Item no. | Cover set   | Item no. |         |
| FETR 101.715#00  | JZ-005.100   | UN990012 | JZ-005.101   | UN990015 | JZ-005.110  | UN990018 |         |
| FETR 101.716#00  | JZ-009.100   | UN990013 | JZ-009.101   | UN990016 | JZ-009.110  | UN990019 |         |
| RTERU 010.715#00 | JZ-035.100   | UN990173 | JZ-035.101   | UN990197 | JZ-035.110  | UN990181 |         |

| BASIC TYPE       | 55x55 mm cover set<br>TRAFFIC/STUDIO<br>WHITE (RAL 9016) GLOSSY<br>(JZ-xxx.120) |          | EURO/PG | 55x55 mm cover set<br>ANTHRACITE,<br>MATT FOR GIRA<br>(JZ-xxx.141) |          | EURO/PG | SPECIAL COLOURS<br>AS WELL AS THE<br>COLOURS<br>ANTHRACITE AND<br>ALUMINIUM ARE<br>AVAILABLE UPON<br>REQUEST. |
|------------------|---|----------|---------|--|----------|---------|---|
|                  | Cover set   | Item no. |         | Cover set  | Item no. |         |   |
| FETR 101.715#00  | JZ-005.120  | UN990091 |         |  |          |         |   |
| FETR 101.716#00  | JZ-009.120  | UN990092 |         | JZ-009.141/GI  | UN990122 |         |   |
| RTERU 010.715#00 | JZ-035.120  | UN990189 |         | JZ-035.141/GI  | UN990205 |         |   |

## ALL BASIC TYPES AND SUITABLE COVER SETS **70 X 70 MM**

| BASIC TYPE       | 70x70 mm cover set<br>PURE WHITE (RAL 9010)<br>GLOSSY (JZ-xxx.400) |          | 70x70 mm cover set<br>PEARL WHITE (RAL 1013)<br>GLOSSY (JZ-xxx.410) |          | EURO/PG | 70x70 mm cover set<br>TRAFFIC/STUDIO WHITE<br>(RAL 9016) GLOSSY (JZ-xxx.420) |          | EURO/PG |
|------------------|--|----------|---|----------|---------|--|----------|---------|
|                  | Cover set  | Item no. | Cover set   | Item no. |         | Cover set  | Item no. |         |
| RTERU 010.715#00 | JZ-035.400   | UN990143 | JZ-035.401  | UN990147 |         | JZ-035.420   | UN990151 |         |



## ADAPTATION OF ALRE FLUSH-MOUNTED CONTROLLERS

| MANUFACTURER            | RANGE                                    | COLOUR RAL 9010<br>(surface finish)                 | ADAPTATION possible<br>with '55x55' or '70x70'<br>cover set (without insert<br>frame) | ADAPTATION<br>'50x50' possible with...<br>(insert frame from switch<br>manufacturer required) |
|-------------------------|--|---|---|---|
| BERKER                  | S.1                                      | polar white (matt)                                  | x   | 1109 19 19  |
| BERKER                  | S.1                                      | polar white (glossy)                                | x   | 1109 90 89  |
| BERKER                  | Arsys                                    | polar white (glossy)                                |   | 1108 01 69  |
| BERKER                  | B.3                                      | aluminium / polar white (matt)                      | x   | 1109 19 19  |
| BERKER                  | B.3                                      | aluminium / polar white (glossy)                    | x   | 1109 90 89  |
| BERKER                  | B.7                                      | glass / polar white (matt)                          | x   | 1109 19 19  |
| BERKER                  | B.7                                      | glass / polar white (glossy)                        | x   | 1109 90 89  |
| BERKER                  | Q.1 / Q.3                                | polar white (velvet)                                |   | 1109 60 79  |
| BERKER                  | K.1                                      | polar white (glossy)                                |   | 1108 71 09  |
| BUSCH-JAEGER            | Reflex SI / SI Linear                    | alpine white (glossy)                               |   | 1746-214-101  |
| BUSCH-JAEGER            | Busch-balance SI                         | alpine white (glossy)                               | x   | 1746-914-101  |
| BUSCH-JAEGER            | impuls                                   | alpine white (glossy)                               |   | 1746 / 10-74  |
| BUSCH-JAEGER            | solo / future / axcent etc.              | studio white – see RAL 9016 below                   |   |   |
| Elso                    | Joy                                      | pure white (glossy)                                 | x   | 363084  |
| Elso                    | Fashion / Riva / Scala                   | pure white (glossy)                                 |   | 203084  |
| GIRA                    | surface switch                           | pure white (glossy)                                 | x   | 0282 112  |
| GIRA (System 55)        | Standard / E2                            | pure white (semi-gloss)                             | x   | 0282 27   |
| GIRA (System 55)        | Standard / E2                            | pure white (glossy)                                 | x   | 0282 03   |
| GIRA (System 55)        | E22                                      | pure white (glossy)                                 | x   | 0282 03   |
| GIRA (System 55)        | Event                                    | pure white (semi-gloss) + opaque...                 | x   | 0282 27   |
| GIRA (System 55)        | Event                                    | pure white (glossy) + opaque...                     | x   | 0282 03   |
| GIRA (System 55)        | Esprit                                   | pure white (semi-gloss) + glass, aluminium...       | x   | 0282 27   |
| GIRA (System 55)        | Esprit                                   | pure white (glossy) + glass, aluminium...           | x   | 0282 03   |
| GIRA                    | S-Color                                  | pure white (high-gloss)                             |   | 0282 40   |
| JUNG                    | CD 500 / CD plus                         | alpine white (glossy)                               |   | CD 590 Z WW   |
| JUNG                    | A 500 / AS 500 / A plus                  | alpine white (glossy)                               | x   | A 590 Z WW  |
| JUNG                    | LS 990                                   | alpine white (glossy)                               | x   | LS 961 Z WW   |
| JUNG                    | LS plus                                  | alpine white (glass)                                | x   | LS 961 Z WW   |
| JUNG                    | A creation                               | alpine white (glossy)                               | x   | A 590 Z WW  |
| JUNG                    | LS Design                                | alpine white (glossy)                               | x   | LS 961 Z WW   |
| MERTEN (System M)       | M-Smart, M-Plan, M-Pure                  | polar white (matt)                                  | x   | 5181 19   |
| MERTEN (System M)       | M-Smart, M-Plan, M-Creativ, M-Pure       | polar white (glossy)                                | x   | 5185 19   |
| MERTEN (System Basis)   | 1-M / Atelier-M                          | polar white (glossy)                                | x   | 5185 19   |
| MERTEN (Surface System) | Artec / Antik                            | polar white (glossy)                                |   | 5160 99   |
| MERTEN                  | 1-M / M-Smart / M-Plan / M-Pure / D-Life | active white – see RAL 9016 below or product finder |   |   |
| PEHA                    | Standard                                 | pure white (glossy)                                 |   | 80.670.02 ZV  |
| PEHA                    | Dialog                                   | pure white (glossy)                                 |   | 95.670.02 ZV  |
| PEHA                    | Aura                                     | pure white (matt) / glass                           |   | 20.670.02 ZV  |
| PEHA                    | Badora                                   | pure white (glossy)                                 |   | 11.670.02 ZV  |

| MANUFACTURER | RANGE                         | COLOUR RAL 9016<br>(surface finish) | ADAPTATION<br>in switch programmes<br>(‘55x55’ or ‘70x70’)<br>possible with... | ‘50x50’ adaptation<br>possible with...<br>(insert frame from switch<br>manufacturer required) |
|--------------|-------------------------------|-------------------------------------|--|---|
| BUSCH-JAEGER | solo / future / future linear | studio white (RAL 9016, glossy)     |  | 1746 / 10-84  |
| BUSCH-JAEGER | future linear                 | studio white (RAL 9016 matt)        |  | 1746 / 10-884   |
| BUSCH-JAEGER | impuls                        | studio white (RAL 9016 matt)        |  | 1746 / 10-774   |
| BUSCH-JAEGER | axcent                        | studio white (RAL 9016, glossy)     |  | 1746 / 10-84  |
| BUSCH-JAEGER | carat (glass, bronze, gold)   | studio white (RAL 9016, glossy)     |  | 1746 / 10-84  |
| BUSCH-JAEGER | alpha (nea / exclusive *)     | studio white (RAL 9016, glossy)     |  | 1746 / 10-24G   |
| BUSCH-JAEGER | alpha (nea / exclusive *)     | studio white (RAL 9016 matt)        |  | 1746 / 10-24  |
| MERTEN       | M-Smart, M-Plan, M-Pure       | active white (RAL 9016, glossy)     | x  | 5185 25   |
| MERTEN       | 1-M / Atelier-M               | active white (RAL 9016, glossy)     | x  | 5185 25   |
| MERTEN       | D-Life                        | lotus white (RAL 9016)              | x  | MEG4500-6035  |
| PEHA         | Standard                      | arctic                              |  | D 80.670 ZV AW  |

\*) During assembly, you need to remove 4 plastic tabs located at the rear of the frame

**NOTE:** Most light switches are designed in the colour 'like RAL 9010', although different switch manufacturers use different designations for this colour. Coloured, glass and aluminium frames are also combined with white jacks or plugs so that controllers with white covers can also be integrated into these frames. Check the precise application in each individual case. The frames have different surface qualities (matt/glossy). For design reasons, the cover of the controller should have the same quality as the frame. We accept no liability for slight variations in colour and surface finish or for accuracy of fit. When installing devices into multi frames, always assemble the temperature controllers at the lowermost position.

**'50x50 controller':** The housing covers of the 50x50 controllers are 50x50 mm in size. Using a 50x50 mm insert frame, they can be integrated into nearly all light switch ranges in accordance with DIN 49075. The 50x50 mm insert frames must be ordered from the light switch manufacturer or from a wholesaler. The order number of the insert frame corresponding to the switch range in question can be found in the column 'Only for adaptation with '50x50' cover set'.

**'55x55 controller':** The housing covers of the 55x55 controllers are 55x55 mm in size. Many light switch ranges have inner dimensions of 55x55 mm. Therefore, the 55x55 controllers can be installed directly in the light switch frame without the use of an insert frame. See the column 'Adaptation with '55x55' cover set' to determine whether the 55x55 controller fits in the given light switch model (x).

All information regarding switch manufacturers' product lines and item numbers was last updated in 12/2022 | No liability is assumed for the information provided. | Technical specifications subject to change.



## PRODUCT FINDER ALRE COVER SETS

### FOR SWITCH RANGES FROM BERKER

#### INTEGRATION EXAMPLES



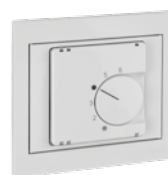
RTERU – in S. 1



RTERU – in B. 3




RTERU – in B. 7



RTERU – in K. 1



RTERU – in Arsys

| TYPE ALRE   | BERKER RANGE     | COLOUR (RAL)/ SURFACE FINISH | ALRE COVER SET                | COVER SET ART. NO.        | INSERT FRAME 50X50* | EURO/ PG     |
|---|------------------|------------------------------|-------------------------------|---------------------------|---------------------|--------------|
| <br>Standard | RTERU-010.715#00 | S. 1 / B. 3 / B. 7           | polar white (RAL 9010) glossy | JZ-035.100 (55x55 glossy) | UN990173            | not required |
|   |                  | S. 1 / B. 3 / B. 7           | polar white (RAL 9010) matt   | JZ-035.101 (55x55 matt)   | UN990197            | not required |
|   |                  | Arsys                        | polar white (RAL 9010) glossy | JZ-035.000 (50x50 glossy) | UN990169            | 1108 01 69   |
|   |                  | Q. 1/Q. 3                    | polar white (RAL 9010) velvet | JZ-035.001 (50x50 matt)   | UN990193            | 1109 60 79   |
|   |                  | K. 1                         | polar white (RAL 9010) glossy | JZ-035.000 (50x50 glossy) | UN990169            | 1108 71 09   |
|   |                  | S. 1                         | white (RAL 1013) glossy       | JZ-035.110 (55x55 glossy) | UN990181            | not required |
|   |                  | Arsys                        | white (RAL 1013) glossy       | JZ-035.010 (50x50 glossy) | UN990177            | 1108 01 02   |

## PRODUCT FINDER ALRE COVER SETS

### FOR SWITCH RANGES FROM BUSCH-JAEGER

#### INTEGRATION EXAMPLES



RTERU – in Reflex SI



RTERU – in Busch-balance SI




RTERU – in future linear



RTERU – in solo



RTERU – in alpha nea

| TYPE ALRE   | BUSCH-JAEGER RANGE | COLOUR (RAL)/ SURFACE FINISH          | ALRE COVER SET                 | COVER SET ART. NO.        | INSERT FRAME 50X50* | EURO/ PG      |
|---|--------------------|---------------------------------------|--------------------------------|---------------------------|---------------------|---------------|
| <br>Standard | RTERU-010.715#00   | Reflex SI / SI Linear                 | alpine white (RAL 9010) glossy | JZ-035.200/BJ             | UN990169            | 1746-214-101  |
|   |                    | Busch-balance SI                      | alpine white (RAL 9010) glossy | JZ-035.100 (55x55 glossy) | UN990173            | not required  |
|   |                    | impuls                                | alpine white (RAL 9010) glossy | JZ-035.000 (50x50 glossy) | UN990169            | 1746 / 10-74  |
|   |                    | future linear / solo / axcent / carat | studio white (RAL 9016) glossy | JZ-035.020 (50x50 glossy) | UN990185            | 1746 / 10-84  |
|   |                    | future linear                         | studio white (RAL 9016) matt   | JZ-035.021 (50x50 matt)   | UN990201            | 1746 / 10-884 |
|   |                    | alpha nea                             | studio white (RAL 9016) glossy | JZ-035.020 (50x50 glossy) | UN990185            | 1746 / 10-24G |
|   |                    | alpha nea                             | studio white (RAL 9016) matt   | JZ-035.021 (50x50 matt)   | UN990201            | 1746 / 10-24  |
|   |                    | Duro 2000 SI / SI Linear              | white (RAL 1013) glossy        | JZ-035.010 (50x50 glossy) | UN990177            | 1746-212-101  |
|   |                    | future linear / solo / carat          | ivory white (RAL 1013) glossy  | JZ-035.010 (50x50 glossy) | UN990177            | 1746 / 10-82  |
|   |                    | alpha nea                             | ivory white (RAL 1013) glossy  | JZ-035.010 (50x50 glossy) | UN990177            | 1746 / 10-22G |
|   |                    | impuls                                | ivory white (RAL 1013) glossy  | JZ-035.010 (50x50 glossy) | UN990177            | 1746 / 10-72  |



## PRODUCT FINDER ALRE COVER SETS

FOR SWITCH RANGES FROM ELSO

### INTEGRATION EXAMPLES



RTERU – in Joy



RTERU – in Fashion



RTERU – in Riva



RTERU – in Scala

| TYPE ALRE   | ELSO RANGE       | COLOUR (RAL)/<br>SURFACE FINISH | ALRE COVER SET                | COVER SET<br>ART. NO.     | INSERT<br>FRAME 50X50* | EURO/<br>PG  |
|---|------------------|---------------------------------|-------------------------------|---------------------------|------------------------|--------------|
|  | RTERU-010.715#00 | Joy                             | pure white (RAL 9010) glossy  | JZ-035.100 (55x55 glossy) | UN990173               | not required |
|   |                  | Joy                             | pearl white (RAL 1013) glossy | JZ-035.110 (55x55 glossy) | UN990181               | not required |
|   |                  | Fashion/Riva/Scala              | pure white (RAL 9010) glossy  | JZ-035.000 (50x50 glossy) | UN990169               | 203084       |
|   |                  | Fashion/Riva/Scala              | pearl white (RAL 1013) glossy | JZ-035.010 (50x50 glossy) | UN990177               | 203080       |

Standard

## PRODUCT FINDER ALRE COVER SETS

FOR SWITCH RANGES FROM GIRA

### INTEGRATION EXAMPLES



RTERU – in Standard  
55



RTERU – in E2



RTERU – in Event



RTERU – in surface  
switch



RTERU – in E22

| TYPE ALRE   | GIRA RANGE       | COLOUR (RAL)/<br>SURFACE FINISH     | ALRE COVER SET                | COVER SET<br>ART. NO.      | INSERT<br>FRAME 50X50* | EURO/<br>PG  |
|---|------------------|-------------------------------------|-------------------------------|----------------------------|------------------------|--------------|
|  | RTERU-010.715#00 | Standard<br>55/E2/E22/Event/Esprit  | pure white (RAL 9010) glossy  | JZ-035.100 (55x55 glossy)  | UN990173               | not required |
|   |                  | Standard<br>55/E2/E22/Event/Esprit  | pure white (RAL 9010) matt    | JZ-035.101 (55x55 matt)    | UN990197               | not required |
|   |                  | Surface switch <b>NEW</b>           | pure white (RAL 9010) glossy  | JZ-035.400 (70x70, glossy) | UN990143               | not required |
|   |                  | Standard<br>55/Event/Esprit/ClassiX | cream white (RAL 1013) glossy | JZ-035.110 (55x55 glossy)  | UN990181               | not required |
|   |                  | System 55                           | anthracite/matt               | JZ/-035.141/GI             | UN990205               | not required |

Standard



## PRODUCT FINDER ALRE COVER SETS

### FOR SWITCH RANGES FROM JUNG

#### INTEGRATION EXAMPLES



RTERU – in AS 500



RTERU – in A 500



RTERU – in A plus



RTERU – in A creation



RTERU – in LS-design

| TYPE ALRE   | JUNG RANGE   | COLOUR (RAL)/<br>SURFACE FINISH | ALRE COVER SET             | COVER SET<br>ART. NO. | INSERT<br>FRAME 50X50* | EURO/<br>PG  |
|---|--|---------------------------------|----------------------------|-----------------------|------------------------|--------------|
| RTERU-010.715#00<br> | AS 500 / A 500 / A 550 /<br>A creation / A plus / A flow | alpine white (RAL 9010) glossy  | JZ-035.100 (55x55 glossy)  | UN990173              | not required           |              |
|   | CD 500 / CD plus   | alpine white (RAL 9010) glossy  | JZ-035.000 (50x50 glossy)  | UN990169              | CD 590 Z WW            |              |
|   | LS 990 / LS design /<br>LS plus                          | alpine white (RAL 9010) glossy  | JZ-035.400 (70x70, glossy) | UN990143              |                        | not required |
| Standard)   | AS 500   | white (RAL 1013) glossy         | JZ-035.110 (55x55 glossy)  | UN990181              |                        | not required |
|   | CD 500 / CD plus   | white (RAL 1013) glossy         | JZ-035.010 (50x50 glossy)  | UN990177              | 590 Z                  |              |
|   | LS 990 / LS design /<br>LS plus                          | white (RAL 1013) glossy         | JZ-035.410 (70x70 glossy)  | UN990147              |                        | not required |

## PRODUCT FINDER ALRE COVER SETS

### FOR SWITCH RANGES FROM MERTEN

#### INTEGRATION EXAMPLES



RTERU – in 1-M



RTERU – in M-Smart



RTERU – in M-Plan



RTERU – in Artec



RTERU – in Antik

| TYPE ALRE   | MERTEN RANGE   | COLOUR (RAL)/<br>SURFACE FINISH | ALRE COVER SET              | COVER SET<br>ART. NO. | INSERT<br>FRAME 50X50* | EURO/<br>PG  |
|---|--|---------------------------------|-----------------------------|-----------------------|------------------------|--------------|
| RTERU-010.715#00<br> | 1-M, Atelier-M / M-Smart,<br>M-Pure, M-Plan, M-Creativ | polar white (RAL 9010) glossy   | JZ-035.100 (55x55 glossy)   | UN990173              | not required           |              |
|   | 1-M, Atelier-M / M-Smart,<br>M-Pure, M-Plan, M-Creativ | polar white (RAL 9010) matt     | JZ-035.101 (55x55 matt)     | UN990197              | not required           |              |
|   | 1-M, Atelier-M / M-Smart,<br>M-Pure, M-Plan, M-Creativ | active white (RAL 9016) glossy  | JZ-035.120 (55x55 glossy)   | UN990189              |                        | not required |
| Standard)   | D-Life <b>NEW</b>                                      | lotus white (RAL 9016) glossy   | JZ-035.420 (70x70, glossy)) | UN990151              |                        | not required |
|   | System design: Artec, Antik                            | polar white (RAL 9010) glossy   | JZ-035.000 (50x50 glossy)   | UN990169              | 5160 99                |              |
|   | 1-M, Atelier-M / M-Smart,<br>M-Pure, M-Plan, M-Creativ | white (RAL 1013) glossy         | JZ-035.110 (55x55 glossy)   | UN990181              |                        | not required |
|   | System design: Artec, Antik                            | white (RAL 1013) glossy         | JZ-035.010 (50x50 glossy)   | UN990177              | 5160 94                |              |

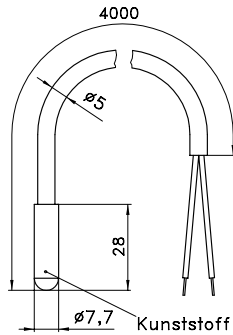


# ELECTRONIC FLOOR TEMPERATURE CONTROLLER WITH REMOTE SENSOR (FOR FLOOR HEATING / WALL AND CEILING HEATING) FETR / RTERU

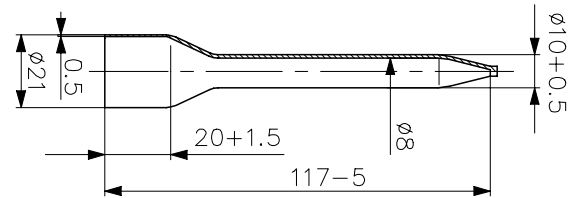
## FLUSH-MOUNTED INSTALLATION – DESIGN BERLIN UP

### ILLUSTRATIONS

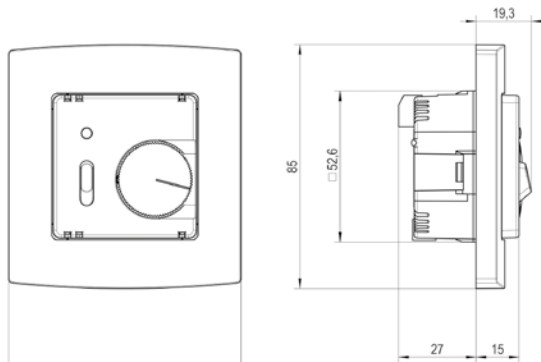
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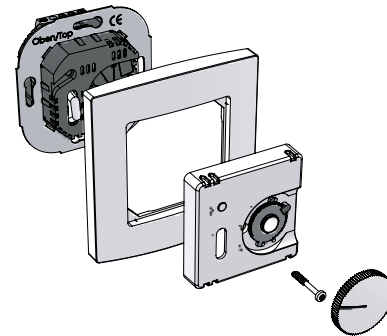
THF



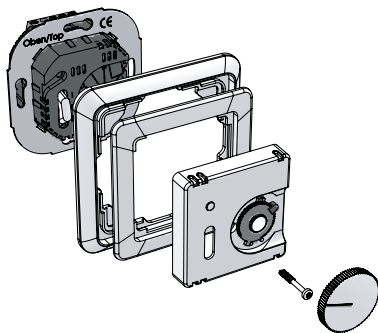
RTERU with alre frame 'Berlin' (#21 types)



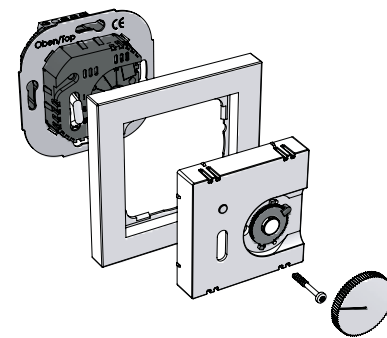
alre frame 'Berlin' (#21 types)



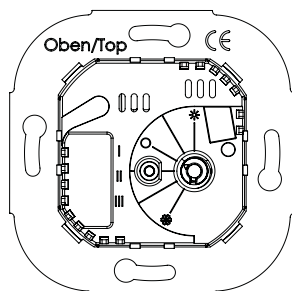
with 50x50 mm insert frame



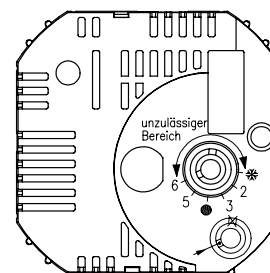
without 55x55 mm insert frame



Internal scale RTERU for temperature control without cover



Contact hazard protection cap with scale  
(for FETR 101.700 with internal setting – similar to illustration)





# ACTUATOR 'STELLA' 230 V NC

## FOR AUTOMATIC HYDRAULIC COMPARISON

**TECHNICAL DATA**


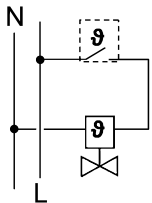


|  |  |
|--|--|
| <b>Operating voltage:</b>                | 230 V~, 50 Hz                          |
| <b>Max. power consumption:</b>           | 30 W                                   |
| <b>Max. starting current:</b>            | approx. 0.13 A                         |
| <b>Housing colour:</b>                   | grey-orange                            |
| <b>Housing material:</b>                 | PA6 plastic                            |
| <b>Ambient temperature:</b>              | 0 ... 50 °C                            |
| <b>Storage temperature:</b>              | -25 to +60 °C                          |
| <b>Permissible atmospheric humidity:</b> | Max. 95% rel. humidity, non-condensing |
| <b>Mounting/ attachment:</b>             | M 30x1.5                               |
| <b>Protection rating:</b>                | IP54                                   |
| <b>Protection class:</b>                 | II                                     |
| <b>Safety and EMC:</b>                   | according to DIN EN 60730              |
| <b>Average power consumption:</b>        | approx. 1.7 W                          |
| <b>Opening/closing time:</b>             | approx. 3 min                          |
| <b>Nominal stroke:</b>                   | 3.5 mm                                 |
| <b>Function type:</b>                    | normally closed                        |
| <b>Nominal closing force:</b>            | 110 N                                  |
| <b>Connecting cable:</b>                 | 1 m / 2x0.34 mm <sup>2</sup>           |

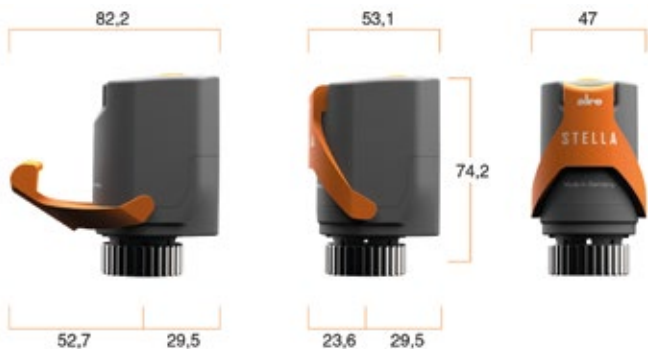
**APPLICATION**

'Stella' – the intelligent autonomous 230 VAC NC electrothermal actuator for automatic adaptive hydraulic comparison of heating manifolds' heating circuits in surface heating and surface cooling systems.

Sensors on the supply and return lines measure temperature differences and algorithm continuously calculates the necessary temperature spread and the appropriate valve position.

Normally closed and features a folding lever for easily unscrewing the thermostat valve or opening it manually when it is disconnected from the mains. With integrated inflow temperature limitation.

| TYPE/IMAGE  | ITEM NO. | FEATURES  | CIRCUIT DIAGRAM  | EURO/PG |
|---|----------|---|--|---------|
| ZB00A-010.185<br> | G8990010 | Actuator for automatic hydraulic comparison   |  |         |
| SET 31<br>       | VV000046 | Set for performing fully automatic hydraulic comparison consisting of 5 surface-mounted room thermostats, 1 terminal strip and 6 actuators. |  |         |
| SET 32<br>       | VV000047 | Set for performing fully automatic hydraulic comparison consisting of 5 flush-mounted room thermostats, 1 terminal strip and 6 actuators.   |  |         |


**ILLUSTRATIONS****BRIEF DESCRIPTION**



- Combinable with the commercial two-point room temperature controller (electromechanical, electronic, PWM)
- For heating and cooling systems
- Features a folding lever for easily unscrewing the thermostat valve or opening it manually when it is disconnected from the mains
- Temperature sensors suited for surface heating pipes made of plastic, metal or combinations thereof with an external diameter of 12 to 20 mm
- Measures a heating circuit's outflow temperature
- The range of setpoint temperatures Stella calculates is variable and dependent on user behaviour and the system's environment
- The valve can be adjusted to any desired position between OPEN and CLOSED and set to remain in that position.
- An expansion element and a path measurement system are needed to position the valve lift.



# ELECTRO-THERMAL VALVE ACTUATORS

## FOR HEATING, VENTILATION AND AIR CONDITIONING TECHNOLOGY

|   | TECHNICAL DATA                           | APPLICATION                            |  |
|---|--|--|--|
|  | <b>Housing colour:</b>                   | pure white, like RAL 9010              | Extremely compact design:<br>Can be fitted quickly and comfortably thanks to the slim shape in the area around the fastening nut.  |
|   | <b>Housing material:</b>                 | PC plastic, GF (20%)                   |  |
|   | <b>Ambient temperature:</b>              | 0 ... 50 °C                            | Can be fitted in any position:<br>Lateral drainage holes carry off any leakage water that from the valve plunger into the open, thus avoiding damage to the drive.                                       |
|   | <b>Storage temperature:</b>              | -20 ... +70 °C                         |  |
|   | <b>Permissible atmospheric humidity:</b> | Max. 95% rel. humidity, non-condensing | Additional valve monitoring:<br>Two additional viewing windows at the side allow users to visually check the respective valve position with ease; this does not work when mounted in a suspended manner. |
|   | <b>Mounting / attachment:</b>            | M 30x1.5                               |  |
|   | <b>Protection rating:</b>                | IP42                                   |  |
|   | <b>Protection class:</b>                 | II                                     |  |
|   | <b>Safety and EMC:</b>                   | according to DIN EN 60730              |  |
|   | <b>Average power consumption:</b>        | Approx. 3 W                            |  |
|   | <b>Opening/closing time:</b>             | approx. 4 min                          |  |
|   | <b>Nominal stroke:</b>                   | 3 mm                                   |  |
|   | <b>Function type:</b>                    | normally closed                        |  |
|   | <b>Nominal closing force:</b>            | 90 N                                   |  |
| <b>Connecting cable:</b>  | 0.8 m / 2x0.5 mm <sup>2</sup>            |  |  |
| <b>Valve position indicator:</b>  | 2X (at the top and the side)             |  |  |

| TYPE/IMAGE  | ITEM NO. | FEATURES   | EURO/PG |
|---|----------|--|---------|
|    | H9100010 | <b>Operating voltage:</b> 230 V~, 50 Hz<br><b>Max. power consumption:</b> 70 W<br><b>Max. starting current:</b> approx. 0.3 A    |         |
|  | H9100000 | <b>Operating voltage:</b> 24 VDC or 24 VAC<br><b>Max. power consumption:</b> 12 W<br><b>Max. starting current:</b> approx. 0.5 A |         |

Thanks to their M 30x1.5 fastening and their characteristics (normally closed), the actuators are suitable for the following valve and distributor makes: Beulco, Empur, Heimeier, Kamo, Oventrop, Purmo, SBK, SKV, Strawa, Taconova, Watts

### BRIEF DESCRIPTION:

The drive features a compact, space-saving design.

The device can be mounted easily thanks to the narrowed shape, especially in the fastening area of the nut.

The fastening cable is not located near the fastening nut. This reduces the probability of contact with equipment carrying hot water.

Since the fastening nut allows continuous screwing onto the thread, by unscrewing the nut by two or three turns, it is possible to open the valve in an electrically de-energised state – something that cannot be done with bayonet couplings and impulse couplings.

Discharged water is dissipated via a draining system. Gaskets are not required thanks to the special design.

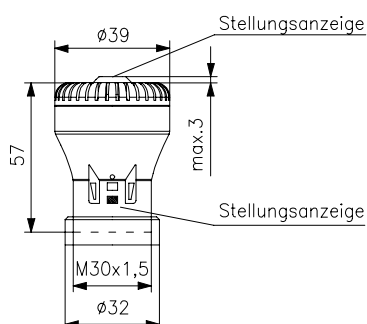
### THE DOUBLE POSITION DISPLAY HAS THE FOLLOWING ADVANTAGES:

The upper display provides the option of a visual or, in conditions of bad visibility, tactile function test of the drive.

The lower viewing windows allow an additional check to determine whether the valve to be actuated follows the lifting movement of the drive.

At the beginning of the heating period, it can happen off and on that the valve plungers get "stuck". Therefore, with the additional display, it is possible to determine whether the cause lies with the actuator or with the valve in the event the valve does not open. However, that is not possible when mounted in a suspended manner.

### ILLUSTRATIONS



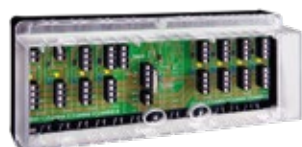
### VALVE ACTUATOR WITH EXTENDED PUSH ROD





# TERMINAL STRIP FOR HEATING MANIFOLD

## FOR 6 OR 8 ROOM THERMOSTATS





### TECHNICAL DATA

|  |  |
|--|--|
| <b>Surface finish:</b>                   | Upper part glossy, lower part matt   |
| <b>Housing colour:</b>                   | Upper part transparent, lower part anthracite grey, similar to RAL 7016  |
| <b>Housing material:</b>                 | PC plastic   |
| <b>Operating voltage:</b>                | 230 VAC/50 Hz  |
| <b>Ambient temperature:</b>              | -10 ... +50 °C   |
| <b>Storage temperature:</b>              | -20 ... +70 °C   |
| <b>Permissible atmospheric humidity:</b> | Max. 95% rel. humidity, non-condensing   |
| <b>Electrical connection:</b>            | spring terminals<br>0.75 mm <sup>2</sup> to 1.5 mm <sup>2</sup> for rigid cables<br>0.5 mm <sup>2</sup> to 1 mm <sup>2</sup> for flexible cables   |
| <b>Protection rating:</b>                | IP20   |
| <b>Mounting/attachment:</b>              | convenient and simple installation in the heating manifold via <b>hat rails (standard rail or supporting rail EN 60715)</b> or magnetic bases<br>Surface/wall mounting with 4 fastening screws included in delivery or using optional JZ-32 magnetic fastening set |
| <b>Protection class:</b>                 | II, if properly mounted  |
| <b>Control function:</b>                 | Heating or cooling   |
| <b>General features:</b>                 | Ready for operation display (mains voltage), active channels display, integrated strain relief, labelling fields   |

### APPLICATION


Terminal strip for heating controller with or without ECO function, also for heating/cooling controller with integrated heating/cooling switch. Depending on the controller used, actuators can be connected in the NC (normally closed) or NO (normally open) mode of operation.

Can be set up with master-slave control when using a clock regulator or an external timer.

| TYPE/IMAGE   | ITEM NO. | FEATURES   | EURO/PG |
|--|----------|--|---------|
| VOOPL-216.176<br> | DA480510 | <b>General features:</b> Terminal strip in housing for wiring up to 6 room thermostats and up to 12 actuators; (channel 1-2: 1 actuator/channel 3: 4 actuators/channel 4-6: 2 actuators), T3,15 A/250 V device fuse, installation dimensions Ø 5x20 mm (also secures the circuits of the connected controllers and valve gears)    |         |
| VOOPL-318.178<br> | DA480520 | <b>General features:</b> Terminal strip in housing for wiring up to 8 room thermostats and up to 16 actuators; (channel 1-2: 1 actuator/channel 3, 5-8: 2 actuators/channel 4: 4 actuators), T3,15 A/250 V device fuse, installation dimensions Ø 5x20 mm (also secures the circuits of the connected controllers and valve gears) |         |

other/similar items: VOORL terminal strip for heating and cooling in the air conditioning technology section

Accessories: suitable valve actuators ZB00A

| ACCESSORIES  | ITEM NO. | FEATURES  | EURO/PG |
|--|----------|---|---------|
| JZ-32<br> | BN990005 | <b>General features:</b> Magnetic fastening set for simple and safe fastening of the VOOPL terminal strip on a metallic substrate (for example, heating manifold) |         |

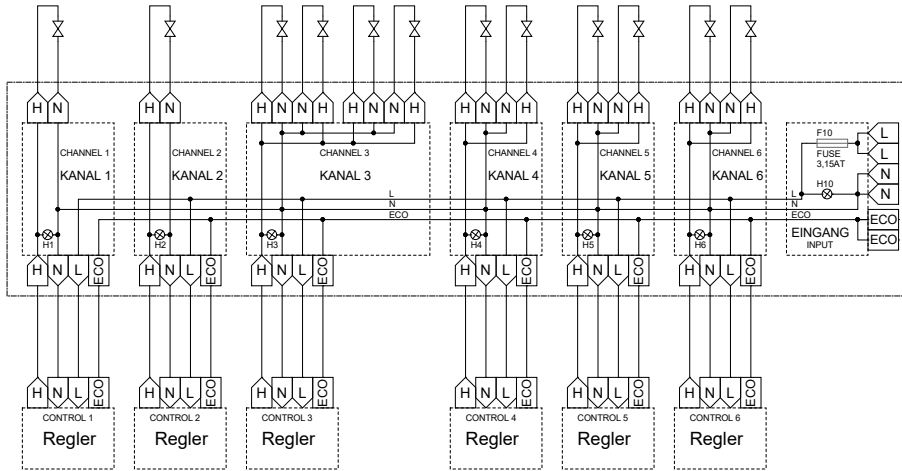


# TERMINAL STRIP FOR HEATING MANIFOLD

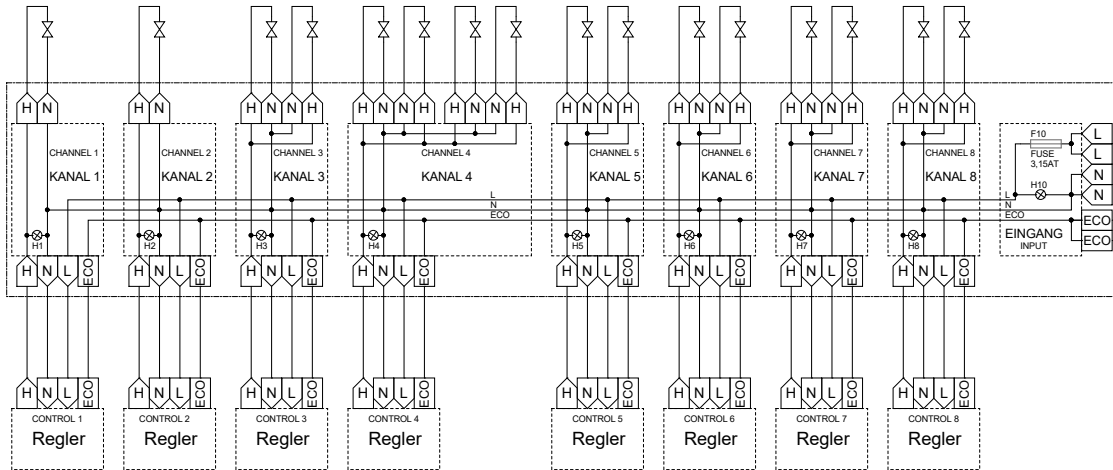
## FOR 6 OR 8 ROOM THERMOSTATS

### ILLUSTRATIONS

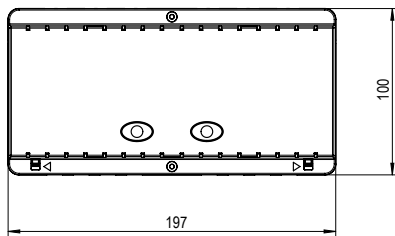
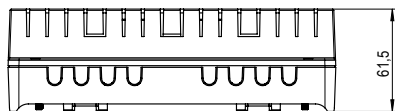
V00PL-216.176



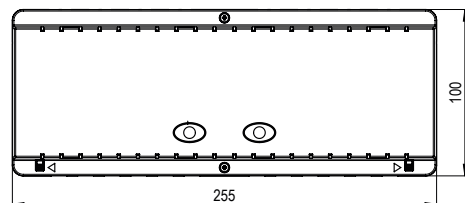
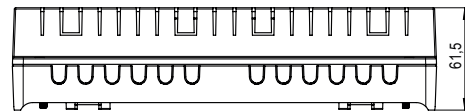
V00PL-318.178



V00PL-216.176



V00PL-318.178



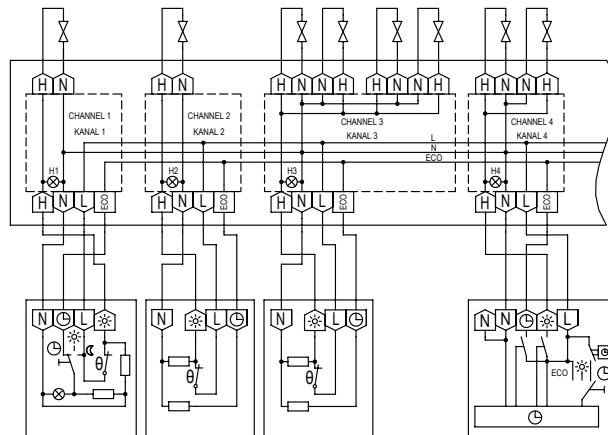


# NOTES ON AND EXAMPLES OF WIRING FOR VOOPL TERMINAL STRIPS

## 1 HEATING SYSTEM WITH MASTER-SLAVE TIME ZONE

The controllers and valve actuators are supplied with power via the terminal strip.

The illustrations shown here refer to de-energized closed valve actuators.

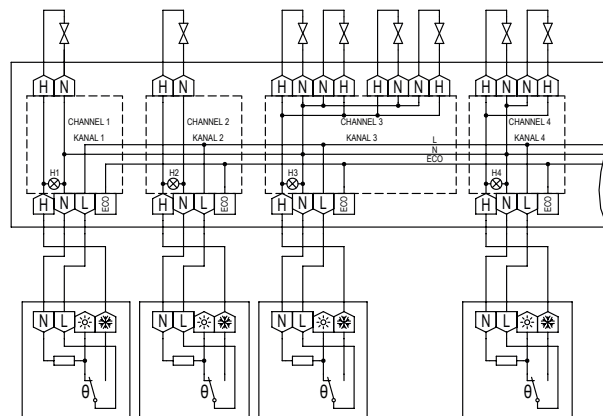


|  |  |  |  |
|--|--|--|--|
| Study<br>RTBSB-201.075 /<br>RTBSU-401.075<br>(slave) | Children's room<br>RTBSB-201.002 /<br>RTBSU-401.002<br>(slave) | Living room<br>RTBSB-201.002 /<br>RTBSU-401.002<br>(slave) | Bedroom<br>HTRRBu 110.117<br>(master time zone 2<br>slave) |
|--|--|--|--|

## 2 COOLING SYSTEM

The controllers and valve actuators are supplied with power via the terminal strip.

The illustrations shown here refer to de-energized closed valve actuators.

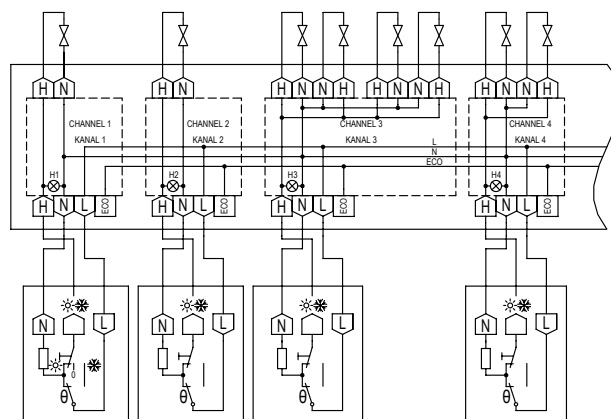


|   |   |   |   |
|---|---|---|---|
| Study<br>RTBSB-201.010 /<br>RTBSU-401.010 | Children's room<br>RTBSB-201.010 /<br>RTBSU-401.010 | Living room<br>RTBSB-201.010 /<br>RTBSU-401.010 | Bedroom<br>RTBSB-201.010 /<br>RTBSU-401.010 |
|---|---|---|---|

## 3 HEATING / COOLING SYSTEMS WITH HEATING / COOLING SWITCHES AT THE CONTROLLERS

The controllers and valve actuators are supplied with power via the terminal strip.

The printing on the heating / cooling change-over switches on the RTBSU-401.065 and RTBSU-401.063 applies to normally closed valve actuators. The medium status 'hot' or 'cold' must always correspond to the switch settings.



|                          |   |   |   |
|--------------------------|---|---|---|
| Study RTB-<br>SU-401.063 | Children's room<br>RTBSB-201.065 /<br>RTBSU-401.065 | Living room<br>RTBSB-201.065 /<br>RTBSU-401.065 | Bedroom<br>RTBSB-201.065 /<br>RTBSU-401.065 |
|--------------------------|---|---|---|





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