



fig. -21.5



fig. -01x00

## Room controller RRTZ

1 continuous output with preset Z-characteristic

Internal or external sensor

Direction da with Z-shaped special characteristic

Housing: 75 x 75 x 27 mm, IP30

### Technical data

|                 |   |  |
|-----------------|---|--|
| Electrical data | Power supply<br>Power consumption<br>Output signal<br>Attention: Please note!   | 24 Vac (21,6...26,4 V)<br>< 1 VA<br>Z-shaped 1,5...5,5...9,5 Vdc (0...10 Vdc), max. 2 mA<br>The characteristic curve is determined by the factory settings of trimmers 2, 4, 5 and 6. These should not be set or only by trained personnel (see function diagram S2) |
| Functions       | Adjustment range<br>Output terminal 3<br>Setpoint correction SK<br>P-band heating and cooling<br>Dead band<br>Temperature probe | see order information<br>cooling (da) increases tR - increases Y<br>±5 K, adjustable internally<br>factory setting (FS) fixed 2 K<br>-3 K...+6 K (FS 1 K)<br>internal or external sensor Djadun series F..11   |
| Safety          | Protection type / class<br>EMC<br>CE conformity<br>Ambient temperature<br>Ambient conditions<br>Permitted relative humidity     | IP30 / III (SELV)<br>EN 55011:2011-04, 55011-103:2013-02<br>according to 2014/30/EU<br>operation 0...50 °C; storage -10...+70 °C<br>normally polluted air<br>max. 95% RH, no condensation  |
| Mechanical      | Connection technology<br>Housing<br>Cover color<br>Weight   | screw terminals 2,5 mm <sup>2</sup><br>ABS 75 x 75 x 27 mm, socket PC (black)<br>pure white like RAL9010 or pearl white like RAL1013<br>about 75 g   |

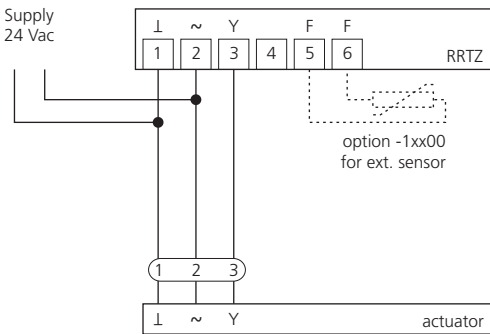
### Product features

|                  |  |
|------------------|--|
| Application      | The RRTZ is used explicitly when an fan coil is rebuild into continuous electric linear actators with pneumatic linear drives. |
| Control function | 1 continuous output with proportional function   |
| Control signal   | 0...10 Vdc with Z-characteristic   |
| Power supply     | 24 Vac   |

### Order information

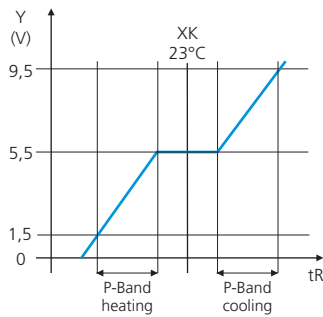
| Item number     | signal              | range      | Variant  |
|-----------------|---------------------|------------|--|
| RRTZ/23.5-00100 | 1,5...5,5...9,5 Vdc | 18...28 °C | internal sensor, pure white                        |
| RRTZ/23.5-01100 | 1,5...5,5...9,5 Vdc | 18...28 °C | internal sensor, internal setting, pure white      |
| RRTZ/23.5-10100 | 1,5...5,5...9,5 Vdc | 18...28 °C | for external sensor, outside setting, pure white   |
| RRTZ/23.5-11100 | 1,5...5,5...9,5 Vdc | 18...28 °C | for external sensor, internal setting, pure white  |
| RRTZ/23.5-00000 | 1,5...5,5...9,5 Vdc | 18...28 °C | internal sensor, pearl white                       |
| RRTZ/23.5-01000 | 1,5...5,5...9,5 Vdc | 18...28 °C | internal sensor, internal setting, pearl white     |
| RRTZ/23.5-10000 | 1,5...5,5...9,5 Vdc | 18...28 °C | for external sensor, outside setting, pearl white  |
| RRTZ/23.5-11000 | 1,5...5,5...9,5 Vdc | 18...28 °C | for external sensor, internal setting, pearl white |

## Connection diagram



Parallel connection of other actuators possible. Note power data!

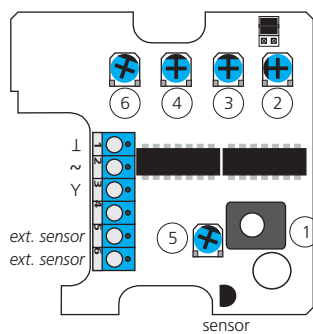
## Function diagramm RRTZ (clamp 3)



### Attention:

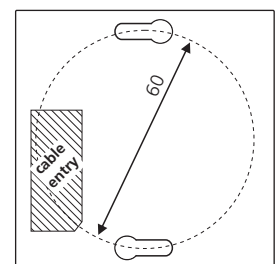
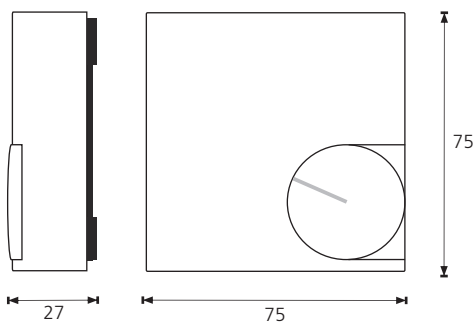
The characteristic curve is determined by the factory settings of trimmers 2, 4, 5 and 6. These should not be set or only by trained personnel

## Circuit Board



- ① Setpoint adjustment XK
- ② P-Band XP cooling
- ③ setpoint or sensor correction
- ④ P-Band XP2 heating
- ⑤ 5,5 V plateau
- ⑥ Dead band XE

## Dimensions and drilling plan



- Remove adjustment knob
- Set stops to temperature range
- Replace adjustment knob
- Check stops