



## CT48A CT48A Part number 89420087



- Input by J-K thermo-couple or by thermo-resistance Pt 100 (2-wire)
- 2 regulation modes : ON/OFF or proportional derivative selected by wiring
- Relay output

### Part numbers

|            | Type  | Description   | Temperatures | Scale divisions |
|------------|-------|---------------|--------------|-----------------|
| 89 420 087 | CT48A | Termocouple K | 0 + 1200     | 20 °C           |

### Specifications

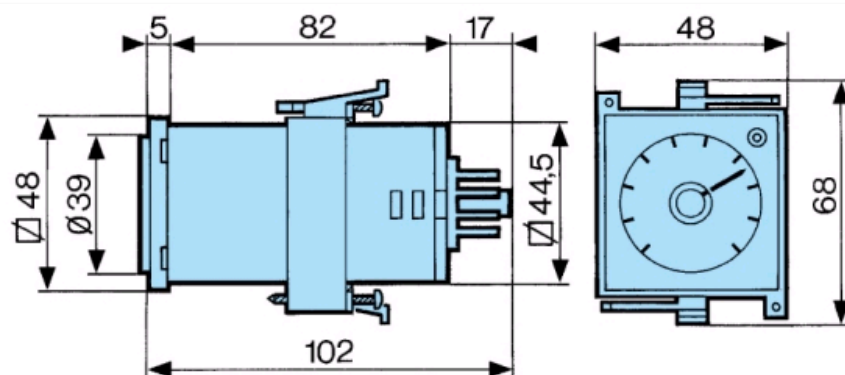
|                                                     |                                  |
|-----------------------------------------------------|----------------------------------|
| Supply voltage Un                                   | 230 to 240 VAC<br>50/60 Hz       |
| Operating range                                     | 0,85 to 1,15 x Un                |
| Maximum power consumption                           | 2 VA                             |
| Thermocouple according to IEC 584                   | J - K                            |
| Automatic cold-junction compensation                | For J - K : semi-conductor       |
| Max. line resistance                                | 150 Ω                            |
| Resist. temp. detector Pt 100 according to IEC 751  | 2-wire                           |
| Derating following line resistance                  | 1 °C / 0,4 Ω                     |
| Derating with regard to the setpoint                | J - K : ≤ 1 °C                   |
| Per 10 °C variation in ambient temperature          | Pt 100 : ≤ 0,1 °C                |
| Derating with regard to the setpoint                | J - K : ≤ 1 °C                   |
| Per 10 Ω of line resistance variation               |                                  |
| Derating with regard to the setpoint                | ≤ 0,1 %                          |
| Per 10% variation in supply voltage                 |                                  |
| ON/OFF output action                                |                                  |
| Fixed hysteresis                                    | 0,4 %                            |
| Derived proportional output action                  |                                  |
| Fixed proportional band (% of full scale)           | 3 %                              |
| Derived proportiona output action                   |                                  |
| Period proportional band                            | 22 s                             |
| Changeover relay                                    | 5 A / 250 V AC max.              |
| Mechanical life (operations)                        | 3x10 <sup>5</sup>                |
| Behaviour in the event of sensor failure            | Relay in rest position           |
| Scale evolution                                     | 80 mm                            |
| Display accuracy J-K (full scale)                   | ± 2 %                            |
| Display accuracy Pt 100 (of the full scale)         | ± 1,5 %                          |
| Operating temperature range (°C)                    | 0 °→+55                          |
| Storage temperature range (°C)                      | -20 →+70                         |
| Insulation according to standard VDE 0110           | Group C for 250                  |
| Protection class according to DIN 40050 Casing      | IP20                             |
| Protection class according to DIN 40050 Front panel | IP41                             |
| Mounting                                            | Clip                             |
| Connection                                          | Solder terminals socket, 8 poles |
| Weight (g)                                          | 350                              |

### Accessories

| Accessories                  | Code       |
|------------------------------|------------|
| Solder tag connector 8-pin   | 25 622 301 |
| *** TRADUCTION MANQUANTE *** | 25 622 303 |
| Protective cover IP 54       | 79 237 709 |

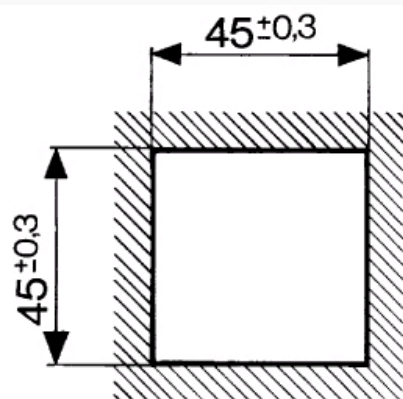
### Dimensions (mm)

#### Dimensions - mounting



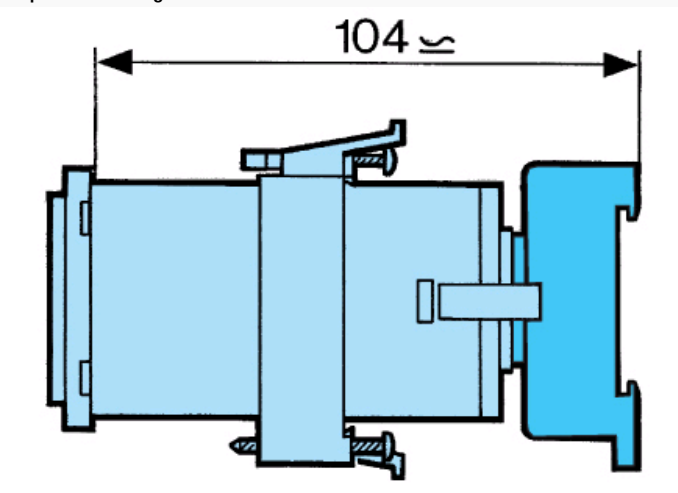
#### Dimensions (mm)

Panel cut-out



#### Dimensions (mm)

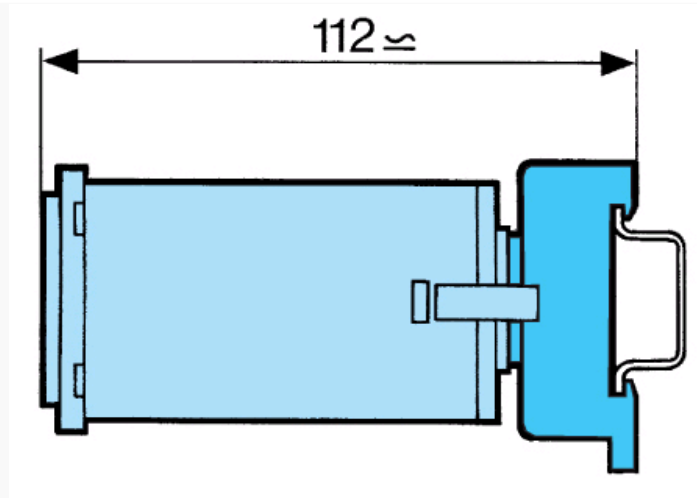
Screw terminal or connector socket - 8-pin base : ref. 25 622 303  
for panel mounting



Screw terminal or connector socket - 8-pin base : ref. 25 622 303 - for panel mounting

#### Dimensions (mm)

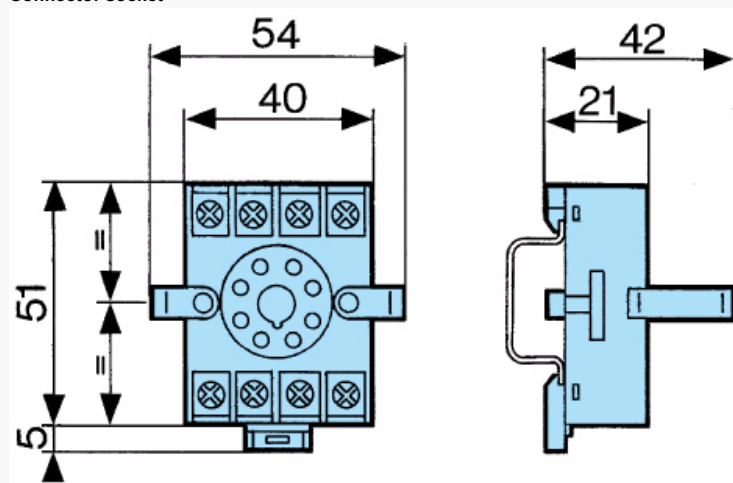
Screw terminal or connector socket - 8-pin base : ref. 25 622 303  
for mounting on DIN rail 35 mm EN 50022



Screw terminal or connector socket - 8-pin base : ref. 25 622 303 - for mounting on DIN rail 35 mm EN 50022

#### Dimensions (mm)

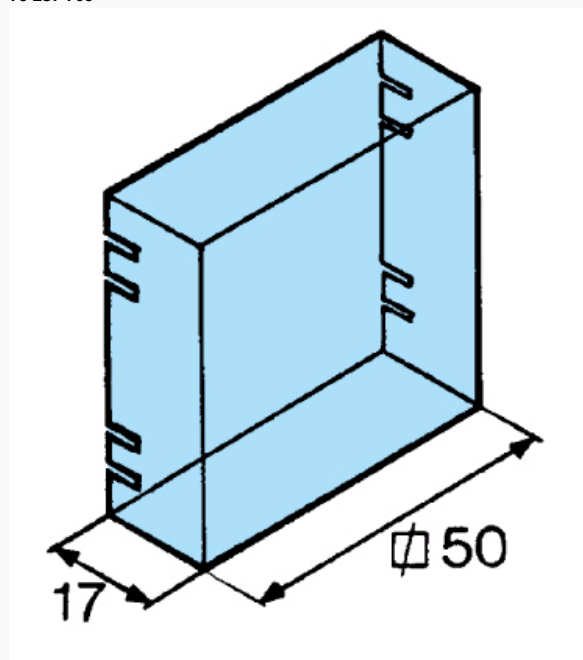
##### Connector socket



Screw terminal or connector socket - 8-pin base : ref. 25 622 303 - for mounting on DIN rail 35 mm EN 50022

#### Dimensions (mm)

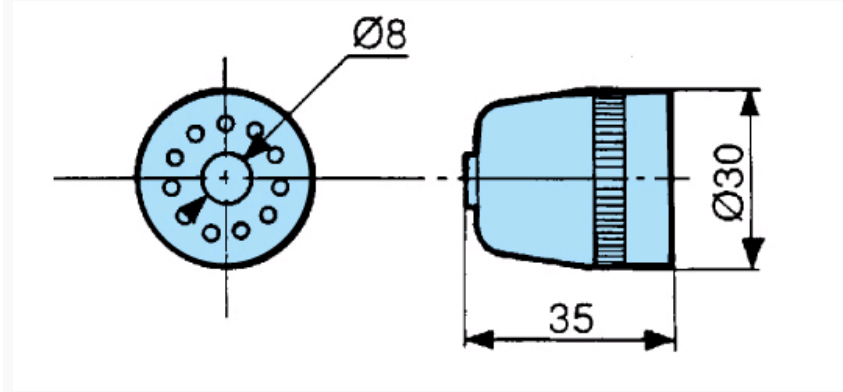
##### Protective cover - IP 54 79 237 709



Protective cover IP 54 Ref. 79 237 709

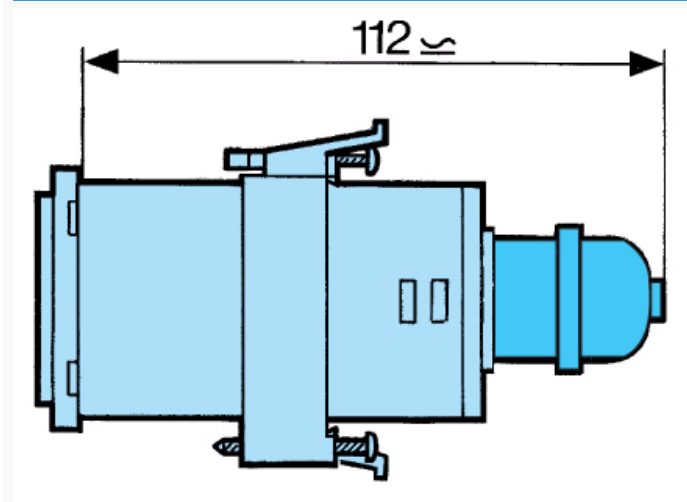
Dimensions (mm)

Solder tag connector  
8-pin : ref. 25 622 301



Solder tag connector 8-pin : Ref. 25 622 301

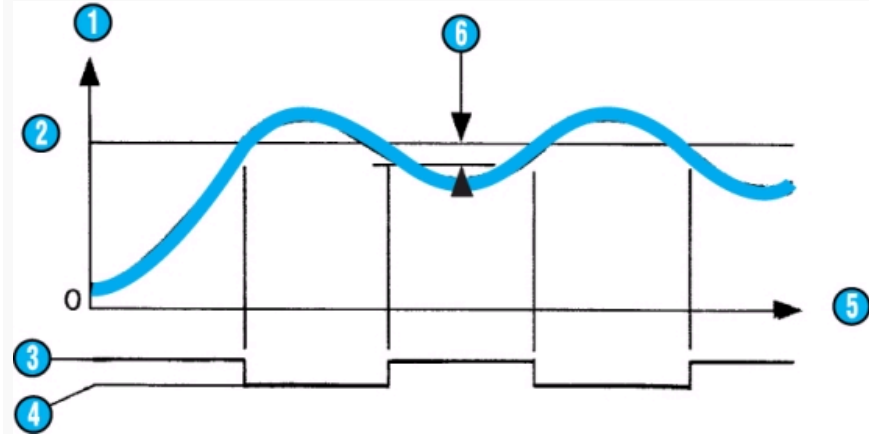
Dimensions (mm)



Solder tag connector 8-pin : Ref. 25 622 301

Curves

ON/OFF output action - CT48A

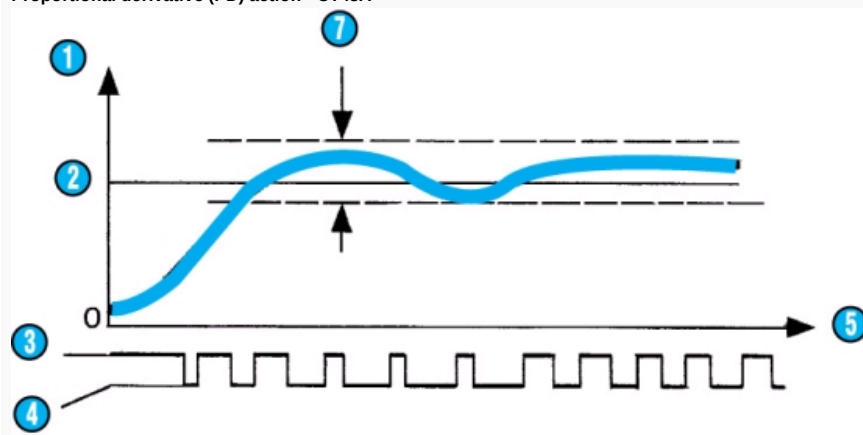


| N° | Legend      |
|----|-------------|
| 1  | Temperature |
| 2  | Setpoint    |

|   |                    |
|---|--------------------|
| ③ | Output ON          |
| ④ | Output OFF         |
| ⑤ | Time               |
| ⑥ | Hysteresis (0,4 %) |

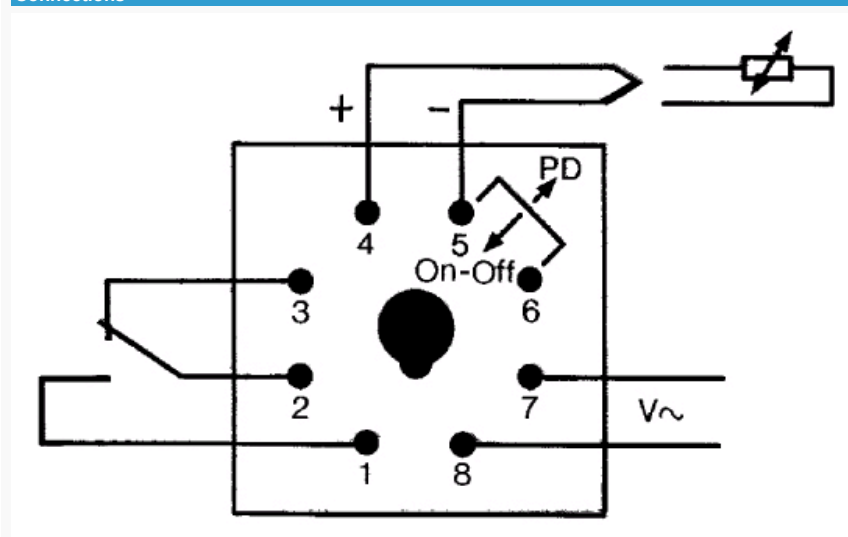
### Curves

#### Proportional derivative (PD) action - CT48A



| N° | Legend                 |
|----|------------------------|
| ①  | Temperature            |
| ②  | Setpoint               |
| ③  | Output ON              |
| ④  | Output OFF             |
| ⑤  | Time                   |
| ⑦  | Proportional band (PB) |

### Connections



### Other information

Other possible output type : solid state 0 Other possible supply voltages : 24 V AC and 110 V AC.  
Please consult us.