

Monitoring relays series *clip CT3X*

2.2

- installation profile according to VDE 43880
- up to 6 PTC can be connected
- motor temperature monitoring
- broken wire monitoring
- electronic lock to prevent re-start
- internal or external reset facility



Technical Data:

Supply voltages:

Single voltage:
24 VAC
110 VAC
230 VAC

Nominal consumption:

4 VA

Permissible voltage range

24VAC/110 V AC 0,85 to 1,1U_N
230VAC 0,8 to 1,15U_N

Frequency range 45-65 Hz
Duty cycle 100% IEC class 1c

Environmental conditions:

Permissible ambient temperature -25°C to +55°C
Class of application HVF to DIN 40040

Mechanical data/specifications:

Enclosure in self-extinguishing plastic. Type of protection IP 40

Type of connections:

Contact-protected terminals

Dimensions and standards:

78,5 x 35 x 66 mm (h x b x d)

Mounting on DIN rails to DIN 46277/3 (European standard EN 50 0222)

Connection via terminals up to 4 mm² with protection against accidental contact.

Type of protection IP20

Contact protection to VDE 0106 and VBG 4

Terminal arrangement and connection markings to DIN 46 199

Output stage:

2 changeover

Max. switching voltage: max. 250VAC

Continuous current: max. 5A

Switching capacity: 250VAC cosφ = 1 1250VA

Max. switching rate
without load 72000/h
with nominal load 3000/h

Mechanical life >30 . 10⁶ switching operations.

Types:

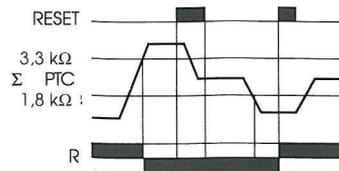
CT3X 24 V AC/DC
CT3X 110 V AC
CT3X 230 V AC

Accessories:

Mounting plate MP

PTC-triggered unit for motor temperature monitoring

Function diagram:



Description of function:

The CT PTC-triggered unit can monitor the temperature of motors with built-in PTC resistors.

Up to a maximum of 6 PTC-resistors can be connected to the unit. If the sum of the cold resistances is smaller than or equal to 1,8 kΩ (normal motor temperature) the output relay will respond when the supply voltage is applied. Only when the nominal switch-off temperature (TNF) of a sensor is reached ($\Sigma PTC > 3,3 \text{ k}\Omega$) will the output relay be released and the LED extinguished.

The output relay will not come into operation again until the sum of cold resistances is $\leq 1,8 \text{ k}\Omega$ and a reset button is pressed or the supply voltage is interrupted.

If instead of a switch a jumper wire is connected across terminals R1 and R2, the output relay will automatically switch back on when the motor has cooled down.

Sensing range:

Type A PTC triggering behaviour conforms to DIN VDE 0660

for PTC sensors conforming to DIN 44 081

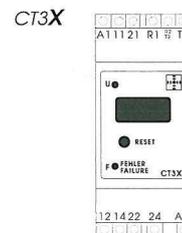
Range of adjustment:

Input	Input threshold fixed	Output threshold fixed	max. measuring voltage at: R=4kΩ/R=∞
1T1 - 1T2	$\leq 1,8 \text{ k}\Omega$	$\geq 3,3 \text{ k}\Omega$	$\leq 2 \text{ V DC} / 12 \text{ V DC}$

Time delays:

Release delay : none
Start-surge delay: none

Front view



Connection:

CT3X

