Product datasheet
Characteristics

RM35ATW5MW
temperature control relay RM35-A - 24..240 V AC/DC - 2 NO

Main

Range of product	Zelio Control
Product or component type	Modular measurement and control relays
Relay type	Temperature control relays
Product specific application	For elevator machine rooms and 3-phase supplies
Relay name	RM35AT
Relay monitored parameters	Overtemperature: 34...46°C Phase failure detection Phase sequence Undertemperature: -1...11°C
Time delay range	0.1...10 s adjustable delay (tolerance: 0...10 % of the full scale value)
Switching capacity in VA	1250 VA
Minimum switching current	10 mA at 5 V DC
Power consumption in VA	<= 3.5 VA AC
Utilisation category	AC-12 conforming to IEC 60947-5-1 AC-13 conforming to IEC 60947-5-1 AC-14 conforming to IEC 60947-5-1 AC-15 conforming to IEC 60947-5-1 DC-12 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1 DC-14 conforming to IEC 60947-5-1

Complementary

Reset time	8 s
Maximum switching voltage	250 V AC/DC
[Us] rated supply voltage	24...240 V AC/DC
[Us] rated supply voltage	24...240 V AC/DC
Supply voltage limits	20.4...264 V AC 21.6...264 V DC
Power consumption in W	<= 0.6 W DC
Resistance across terminals	600 kOhm 3-phase 1.33 kOhm temperature
Width	35 mm
Output contacts	2 NO
Contacts material	Cadmium free
Nominal output current	5 A
Run-up delay at power-up	0.2 s
Measurement accuracy	+/- 2 °C
Response time	<= 3.5 ms + Tt in case of temperature fault 500 ms in case of 3-phase fault 500 ms on disappearance of fault
Temperature probe type	Pt 100 - 3-wire
Installed device	Pt 100 probe cable length <= 10 m
Marking	CE : 73/23/EEC CE : EMC 89/336/EEC
Overvoltage category	III conforming to IEC 60664-1
Insulation resistance	> 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60255-5 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60664-1

	> 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60255-5 > 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60664-1 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60255-5 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60664-1
[Ui] rated insulation voltage	400 V conforming to IEC 60664-1
Control circuit voltage limits	- 10 % + 10 % Un DC - 15 % + 10 % Un AC
Supply frequency	50/60 Hz +/- 10 %
Operating position	Any position without derating
Connections - terminals	Screw terminals 1 x 0.5...1 x 4 mm² - AWG 20...AWG 11, solid cable without cable end Screw terminals 2 x 0.5...2 x 2.5 mm² - AWG 20...AWG 14, solid cable without cable end Screw terminals 1 x 0.2...1 x 2.5 mm² - AWG 24...AWG 12, flexible cable with cable end Screw terminals 2 x 0.2...2 x 1.5 mm² - AWG 24...AWG 16, flexible cable with cable end
Tightening torque	0.6...1 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Status LED	1 LED green for power ON 1 LED yellow for correct temperature (high R1)/(low R2) 1 LED yellow for phases of relay
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715
Electrical durability	100000 cycles
Mechanical durability	30000000 cycles
Operating rate	<= 360 operations/hour under full load

Environment

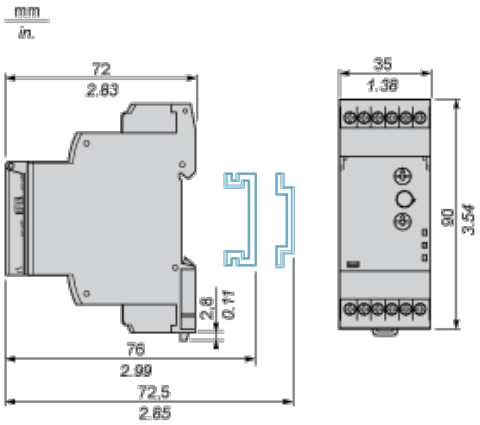
immunity to microbreaks	10 ms
electromagnetic compatibility	Emission standard for industrial environments conforming to EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3 Immunity for industrial environments conforming to NF EN/IEC 61000-6-2
standards	IEC 60255-6 NF EN 60255-6
product certifications	CSA C-Tick GL GOST UL
ambient air temperature for storage	-40...70 °C
ambient air temperature for operation	-20...50 °C
vibration resistance	0.35 mm (f = 5...57.6 Hz) conforming to IEC 60068-2-6/IEC 60255-21-1 1 gn (f = 57.6...150 Hz) conforming to IEC 60068-2-6/IEC 60255-21-1
shock resistance	15 gn for 11 ms conforming to IEC 60255-21-1
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
pollution degree	3 conforming to IEC 60664-1
dielectric test voltage	2 kV AC 50 Hz, 1 min
non-dissipating shock wave	4 kV

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0701 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

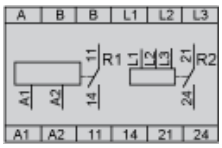
Temperature Control Relays for Elevator Machine Rooms and 3-Phase Supplies

Dimensions and Mounting



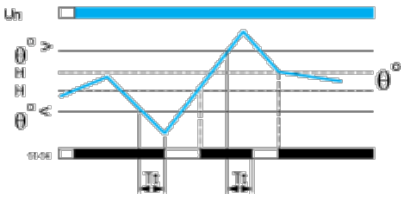
Temperature Control Relays for Elevator Machine Rooms and 3-Phase Supplies

Wiring Diagram



Function Diagram

Temperature Control by PT 100 Probe



Legend

Tt Time delay after crossing of the temperature threshold

Un Supply voltage

θ° Temperature monitored

θ° > High temperature threshold

θ° < Low temperature threshold

H Hysteresis

11-12, 11-14 R1 output relay connections

Relay status: black color = energized.