



Main

Range of Product	Harmony Control Relays
Product or Component Type	Temperature control relay
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 Undertemperature: -1...11°C
Time delay range	0.1...10 s adjustable 0...10 % of the full scale value)
Switching capacity in VA	1250 VA
Minimum switching current	10 mA 5 V DC
Maximum power consumption in VA	3.5 VA AC
Utilisation category	AC-12 IEC 60947-5-1 AC-13 IEC 60947-5-1 AC-14 IEC 60947-5-1 AC-15 IEC 60947-5-1 DC-12 IEC 60947-5-1 DC-13 IEC 60947-5-1 DC-14 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
Maximum power consumption in W	0.6 W DC
Resistance across terminals	1.33 kOhm temperature
Width	1.38 in (35 mm)
Output contacts	2 NO
Contacts material	Cadmium free
Nominal output current	5 A
Delay at power up	0.2 s
Measurement accuracy	+/- 2 °C
Response time	<= 3.5 s + Tt (in case of temperature fault) <= 3.5 s (on disappearance of fault)
Temperature probe type	Pt 100 - 3-wire
Installed device	Pt 100 probe cable length <= 10 m
Marking	CE : EMC 89/336/EEC CE : 73/23/EEC
Overvoltage category	III IEC 60664-1
Insulation resistance	> 500 MOhm 500 V DC between supply and relay output IEC 60255-5 > 500 MOhm 500 V DC between measurement and relay output IEC 60664-1 > 1 MOhm 500 V DC between supply and measurement IEC 60255-5 > 500 MOhm 500 V DC between supply and relay output IEC 60664-1 > 500 MOhm 500 V DC between measurement and relay output IEC 60255-5 > 1 MOhm 500 V DC between supply and measurement IEC 60664-1
[Ui] rated insulation voltage	250 V IEC 60664-1

Operating voltage tolerance	- 10 % + 10 % Un DC - 15 % + 10 % Un AC
Supply frequency	50/60 Hz +/- 10 %
Insulation	Galvanic insulation between supply and measurement
Operating position	Any position without derating
Connections - terminals	Screw terminals, 1 x 0.5...1 x 4 mm ² AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm ² AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm ² AWG 24...AWG 16) flexible with cable end
Tightening torque	5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	1 LED Green power ON 1 LED Yellow correct temperature (high R1) 1 LED Yellow correct temperature (low R2)
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 full load

Environment

Immunity to microbreaks	10 ms
Electromagnetic compatibility	Emission standard for industrial environments EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments EN/IEC 61000-6-3 Immunity for industrial environments NF EN/IEC 61000-6-2
Standards	IEC 60255-6 NF EN 60255-6
Product Certifications	GL GOST C-tick CSA UL
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Ambient Air Temperature for Operation	-4...122 °F (-20...50 °C)
Vibration resistance	0.35 mm 5...57.6 Hz)IEC 60068-2-6/IEC 60255-21-1 1 gn 57.6...150 Hz)IEC 60068-2-6/IEC 60255-21-1
Shock resistance	15 gn 11 ms IEC 60255-21-1
IP degree of protection	IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
Pollution degree	3 IEC 60664-1
Dielectric test voltage	2 kV AC 50 Hz, 1 min
Non-dissipating shock wave	4 kV

Ordering and shipping details

Category	22380-RELAYS-MEASUREMENT (RM17-RM35)
Discount Schedule	CP2
GTIN	3389119405171
Nbr. of units in pkg.	1
Package weight(Lbs)	4.62 oz (131.0 g)
Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.96 in (7.52 cm)
Package 1 width	1.73 in (4.4 cm)
Package 1 Length	3.82 in (9.7 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	48

Package 2 Weight	15.43 lb(US) (7.001 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

Offer Sustainability

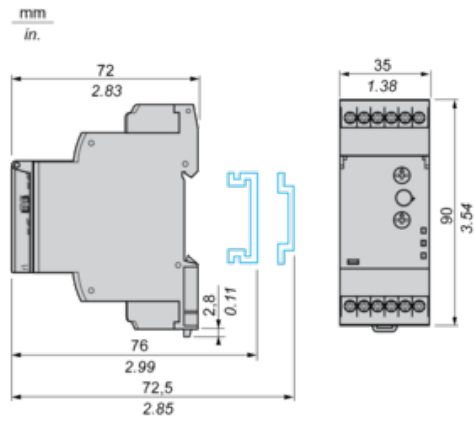
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

Warranty	18 months
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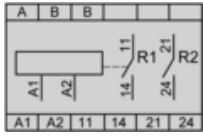
Temperature Control Relays for Elevator Machine Rooms and 3-Phase Supplies

Dimensions and Mounting



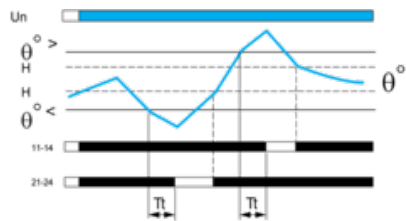
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Wiring Diagram



Function Diagram

Temperature Control by PT 100 Probe



Legend

T_t Time delay after crossing of the temperature threshold

U_n Supply voltage

θ° Temperature monitored

$\theta^\circ >$ High temperature threshold

$\theta^\circ <$ Low temperature threshold

H Hysteresis

11-12, 11-14 R1 output relay connections

21-22, 21-24 R2 output relay connections

Relay status: black color = energized.