



### 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	Phase sequence Phase failure detection Undertemperature: -1...11°C Overtemperature: 34...46°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	600 KOhm 3-phase 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) 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 : EMC 89/336/EEC CE : 73/23/EEC
Overvoltage category	III IEC 60664-1

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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	400 V IEC 60664-1
Operating voltage tolerance	- 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 mm <sup>2</sup> AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm <sup>2</sup> AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> 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)/(low R2) 1 LED Yellow 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 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	NF EN 60255-6 IEC 60255-6
Product Certifications	GL UL C-tick CSA GOST
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	3389119405188
Returnability	No
Country of origin	ID

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.07 in (7.8 cm)
Package 1 Width	1.73 in (4.4 cm)
Package 1 Length	3.82 in (9.7 cm)
Package 1 Weight	4.69 oz (133.0 g)
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Height	11.81 in (30.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	15.65 lb(US) (7.097 kg)

## 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Contractual warranty

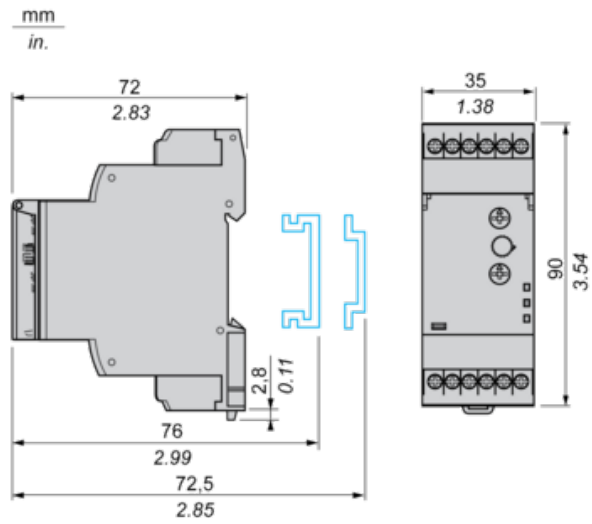
Warranty	18 months
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Temperature Control Relays for Elevator Machine Rooms and 3-Phase Supplies

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Dimensions and Mounting

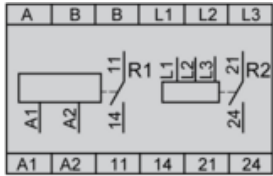


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Wiring Diagram

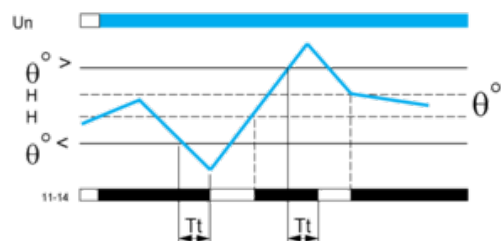


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Function Diagram

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Temperature Control by PT 100 Probe



Legend

$T_t$  Time delay after crossing of the temperature threshold

$U_n$  Supply voltage

$\theta^\circ$  Temperature monitored

$\theta^\circ >$  High temperature threshold

$\theta^\circ <$  Low temperature threshold

H Hysteresis

11-12, 11-14 R1 output relay connections

Relay status: black color = energized.