

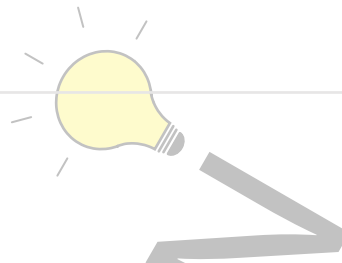
# Product data sheet

Specifications



## Harmony, Modular temperature control relay, 5 A , 1 CO, 24..240 V AC/DC

RM35ATL0MW



### 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	Undertemperature: -1...11°C Overtemperature: 34...46°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
Maximum 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
Maximum power consumption in W	0.6 W DC
Resistance across terminals	1.33 kOhm at temperature
Width	35 mm
Output contacts	1 C/O
Contacts material	Cadmium free
Nominal output current	5 A

<b>Delay at power up</b>	0.2 s
<b>Measurement accuracy</b>	+/- 2 °C
<b>Response time</b>	<= 3.5 s + Tt (in case of temperature fault) <= 3.5 s (on disappearance of fault)
<b>Temperature probe type</b>	Pt 100 - 3-wire
<b>Installed device</b>	Pt 100 probe cable length <= 10 m
<b>Marking</b>	CE : EMC 89/336/EEC CE : 73/23/EEC
<b>Overvoltage category</b>	III conforming to IEC 60664-1
<b>Insulation resistance</b>	> 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
<b>[Ui] rated insulation voltage</b>	250 V conforming to IEC 60664-1
<b>Operating voltage tolerance</b>	- 10 % + 10 % Un DC - 15 % + 10 % Un AC
<b>Supply frequency</b>	50/60 Hz +/- 10 %
<b>Insulation</b>	Galvanic insulation between supply and measurement
<b>Operating position</b>	Any position without derating
<b>Connections - terminals</b>	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
<b>Tightening torque</b>	0.6...1 N.m conforming to IEC 60947-1
<b>Housing material</b>	Self-extinguishing plastic
<b>Local signalling</b>	1 LED green for power ON 1 LED yellow for correct temperature (high R1) 1 LED yellow for correct temperature (low R2)
<b>Mounting support</b>	35 mm symmetrical DIN rail conforming to EN/IEC 60715
<b>Electrical durability</b>	100000 cycles
<b>Mechanical durability</b>	30000000 cycles
<b>Operating rate</b>	<= 360 operations/hour full load
<b>Environment</b>	
<b>Immunity to microbreaks</b>	10 ms
<b>Electromagnetic compatibility</b>	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
<b>Standards</b>	IEC 60255-6 NF EN 60255-6
<b>Product certifications</b>	GOST GL C-Tick UL CSA
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Ambient air temperature for operation</b>	-20...50 °C
<b>Vibration resistance</b>	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
<b>Shock resistance</b>	15 gn for 11 ms conforming to IEC 60255-21-1
<b>IP degree of protection</b>	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529

<b>Pollution degree</b>	3 conforming to IEC 60664-1
<b>Dielectric test voltage</b>	2 kV, 1 min AC 50 Hz
<b>Non-dissipating shock wave</b>	4 kV

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	127.0 g
<b>Package 1 Height</b>	8 cm
<b>Package 1 width</b>	4.6 cm
<b>Package 1 Length</b>	9.7 cm
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	48
<b>Package 2 Weight</b>	6.732 kg
<b>Package 2 Height</b>	30 cm
<b>Package 2 width</b>	30 cm
<b>Package 2 Length</b>	40 cm

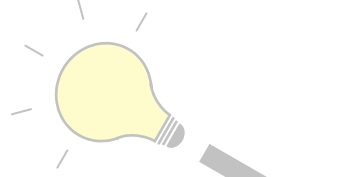
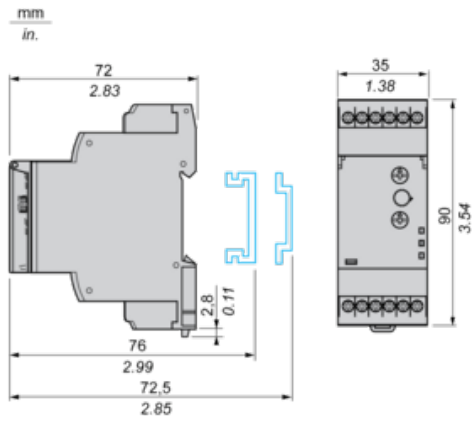
## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	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>

## Contractual warranty

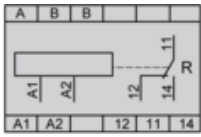
<b>Warranty</b>	18 months
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**Dimensions and Mounting**



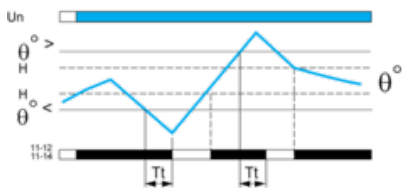
BABA EDISON

**Wiring Diagram**



Function Diagram

Temperature Control by PT 100 Probe



Legend

Tt Time delay after crossing of the temperature threshold

Un Supply voltage

$\theta^\circ$  Temperature monitored

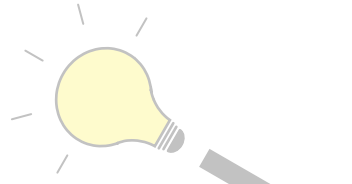
$\theta^\circ >$  High temperature threshold

$\theta^\circ <$  Low temperature threshold

H Hysteresis

11-12, 11-14 Output relay connections

Relay status: black color = energized.



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