Product data sheet
Characteristics

RM35TM50MW
3-phase control relay, Harmony Control Relays, 5A , 2NO, phase failure detection, 24..240V AC DC



Main

Range of product	Harmony Control Relays
Relay type	Motor temperature control relay
Product or component type	Motor temperature control relay
Relay name	RM35TM
Relay monitored parameters	Phase sequence Motor temperature via PTC probe Phase failure detection
Control type	Without test button
Contacts type and composition	2 NO
[Uc] control circuit voltage	24...240 V
Product specific application	For 3-phase supply

Complementary

[Us] rated supply voltage	24...240 V AC/DC 50/60 Hz, non self-powered
Supply voltage limits	20.4…264 V AC 20.4…264 V DC
Supply frequency	50/60 Hz +/- 10 %
Power consumption in VA	0…4 VA at 24...240 V AC
Measurement range	208...480 V AC 15...3100 Ohm
Measurement voltage limits	176…528 V AC
Time delay type	Without
Reset time	10000 Ms output
Response time	> 50 ms (input Y1 (contact Y1-T1) and push-button)
Output contacts	2 NO
Nominal output current	5 A
Maximum switching voltage	250 V AC
Switching capacity in VA	1250 VA
Minimum switching current	10 MA at 5 V DC
Maximum switching current	5 A AC 5 A DC
Electrical durability	100000 Cycles
Mechanical durability	30000000 Cycles
Control circuit frequency	50...60 Hz +/- 10 %
Resistance across terminals	602 KOhm
[Uc] control circuit voltage	<= 3.6 V of temperature control circuit (T1-T2 terminals open)
Short-circuit current	0.007 A temperature sensing circuit (T1-T2 terminals short circuited)

Maximum resistance	1500 Ohm for temperature sensor at 20 °C
Tripping threshold	3100 Ohm +/- 10 % for temperature control circuit
Reset threshold	1650 Ohm +/- 10 % for temperature control circuit
Maximum power consumption in W	0.5 W DC

Environment

Electromagnetic compatibility	Emission standard for industrial environments conforming to IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to IEC Immunity for industrial environments conforming to IEC 61000-6-2
Standards	IEC 60255-6 IEC 60034-11-2
Product certifications	GL[RETURN]UL[RETURN]GOST[RETURN]C-Tick[RETURN]CSA
Marking	CE
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
Ambient air temperature for storage	-40…70 °C -40…70 °C
Ambient air temperature for operation	-20…50 °C
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Dielectric test voltage	2 KV, 1 min AC 50 Hz
Insulation resistance	> 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60255-5
[Ui] rated insulation voltage	400 V conforming to IEC 60664-1
Operating position	Any position without derating
Connections - terminals	Screw terminals, 1 x 0.5...1 x 4 mm² (20 AWG...11 AWG) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm² (20 AWG...14 AWG) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm² (24 AWG...12 AWG) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² (24 AWG...16 AWG) flexible with cable end
Tightening torque	0.6…1 N.M conforming to IEC 60947-1
Housing material	Polycarbonate
Local signalling	LED (green) for power ON LED (yellow) for phase of relay (R2) LED (yellow) for temperature of relay (R1)
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Height	90 Mm 88.9 Mm
Width	35 Mm 35.6 Mm
Depth	72 Mm 71.1 Mm
Net weight	0.095 Kg 0.10 Kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.300 Cm
Package 1 Width	7.800 Cm
Package 1 Length	9.500 Cm
Package 1 Weight	127.000 G
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Height	30.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	6.900 Kg

Offer Sustainability

Recyclability potential, in %	8
Total lifecycle Carbon footprint	29 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	8.821162012798137
Carbon footprint of the manufacturing phase [A1 to A3]	9 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.01713040285049447
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.042505461023851075
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	20.104799999999997
Carbon footprint of the use phase [B2, B3, B4, B6]	20 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.245929828388598
Carbon footprint of the end-of-life phase [C1 to C4]	0.2 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	29
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
End of life manual availability	End Of Life Information
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised