Product data sheet
Characteristics

RM35TF30
Harmony, 3 phase supply control relay, range 220 to 480 VAC, sequence, phase failure, phase imbalance, voltage



Main

Range of product	Harmony Control Relays
Relay type	Multifunction control relay
Product or component type	3-phase control relay
Relay name	RM35TF
Relay monitored parameters	Undervoltage and overvoltage in window mode Phase sequence Phase failure detection Asymmetry
Control type	Without test button
Contacts type and composition	2 C/O
[Uc] control circuit voltage	220...480 V
Product specific application	For 3-phase supply

Complementary

[Us] rated supply voltage	, self-powered
Supply voltage limits	194…528 V AC, 3 phases
Supply frequency	50/60 Hz +/- 10 %
Power consumption in VA	0…22 VA at 400 V AC 50 Hz
Measurement range	220...480 V AC
Measurement voltage limits	176…528 V AC
Voltage detection threshold	< 194 V
Maximum measuring cycle	140 Ms measurement cycle as true rms value
Threshold adjustment voltage	2...20 % of Un selected -12...-2 % in the range 220 V AC +2...+10 % in the range 480 V AC
Hysteresis	2 %
Adjustment of asymmetry threshold	5...15 % of Un selected
Measurement error	< 1 % over the whole range with voltage variation 0.05 %/°C with temperature variation
Time delay type	Adjustable 0.1...10 s, +/- 10 % of the full scale value Tt- time delay upon fault
Setting accuracy of time delay	10 %
Reset time	1500 Ms at 480 V
Response time	< 200 ms (in the event of a fault)
Output contacts	2 C/O
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 voltage limits	- 12 % + 10 % Un
Control circuit frequency	50...60 Hz +/- 10 %

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 60255-1
Product certifications	GL[RETURN]UL[RETURN]CSA[RETURN]GOST[RETURN]C-Tick
Marking	CE
Directives	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
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 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 relay ON LED (yellow) for fault
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Safety reliability data	MTTFd = 399.5 years B10d = 360000
Height	90 Mm 88.9 Mm
Width	35 Mm 35.6 Mm
Depth	72 Mm 71.1 Mm
Net weight	0.12 Kg 0.12 Kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.800 Cm
Package 1 Width	7.800 Cm
Package 1 Length	9.700 Cm
Package 1 Weight	131.000 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	7.070 Kg
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Height	75.000 Cm
Package 3 Width	60.000 Cm
Package 3 Length	80.000 Cm
Package 3 Weight	64.124 Kg

Offer Sustainability

Recyclability potential, in %	8
Total lifecycle Carbon footprint	95 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	2.6720909091
Carbon footprint of the manufacturing phase [A1 to A3]	3 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.0167723636
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0006485936
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	92.70576
Carbon footprint of the use phase [B2, B3, B4, B6]	93 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.0755394545
Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	95
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