Product data sheet
Characteristics

RM22TA31
3-phase control relay, Harmony Control Relays, 8A, 2CO, 200...240V AC



Main

Range of product	Harmony Control Relays
Relay type	Control relay
Product or component type	3-phase control relay
Relay name	RM22TA
Relay monitored parameters	Asymmetry Phase failure detection Phase sequence
Control type	With test button
Contacts type and composition	2 C/O

Complementary

[Us] rated supply voltage	, self-powered
Supply voltage limits	160…288 V AC
Supply frequency	50...60 Hz +/- 10 %
Power consumption in VA	10 VA at 240 V AC 60 Hz
Measurement range	200...240 V voltage AC
Voltage detection threshold	< 100 V AC
Maximum measuring cycle	150 Ms measurement cycle as true rms value
Adjustment of asymmetry threshold	5...15 % of Un selected
Setting accuracy of the switching threshold	+/- 10 % of the full scale
Repeat accuracy	+/- 0.5 % for input and measurement circuit +/- 3 % for time delay
Measurement error	< 1 % over the whole range with voltage variation < 0.05 %/°C with temperature variation
Time delay type	Adjustable 0.1...30 s, +/- 10 % of the full scale value Tt- time delay upon fault
Setting accuracy of time delay	10 %
Reset time	1500 Ms at maximum voltage
Response time	<= 300 ms
Output contacts	2 C/O
Nominal output current	8 A
Maximum switching voltage	250 V AC
Switching capacity in VA	2000 VA
Minimum switching current	10 MA at 5 V DC
Maximum switching current	8 A AC
Electrical durability	100000 Cycles
Mechanical durability	10000000 Cycles
Contacts material	Cadmium free

Environment

Electromagnetic compatibility	Immunity for residential, commercial and light-industrial environments conforming to IEC 61000-6- Immunity for industrial environments conforming to IEC 61000-6-2 Emission standard for residential, commercial and light-industrial environments conforming to IEC Emission standard for industrial environments conforming to IEC 61000-6-4 Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2
Standards	IEC 60255-1
Product certifications	GL[RETURN]EAC[RETURN]UL[RETURN]CSA[RETURN]RCM[RETURN]CCC[RETURN]CE
Ambient air temperature for storage	-40…70 °C -40…70 °C
Ambient air temperature for operation	-20…50 °C at 60 Hz -20…60 °C at 50 Hz AC/DC
Relative humidity	93…97 % at 25…55 °C conforming to IEC 60068-2-30
Vibration resistance	0.075 mm (f= 10…58.1 Hz) not in operation conforming to IEC 60068-2-6 1 gn (f= 10…58.1 Hz) not in operation conforming to IEC 60068-2-6 0.035 mm (f= 58.1…150 Hz) in operation conforming to IEC 60068-2-6 0.5 gn (f= 58.1…150 Hz) in operation conforming to IEC 60068-2-6
Shock resistance	15 gn (duration = 11 ms) for not in operation conforming to IEC 60068-2-27 5 gn (duration = 11 ms) for in operation conforming to IEC 60068-2-27
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front panel) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1 3 conforming to UL 508
Overvoltage category	III conforming to IEC 60664-1 III conforming to UL 508
Dielectric test voltage	2.5 KV, 1 min AC 50 Hz conforming to IEC 60255-27
Insulation resistance	> 100 MOhm at 500 V DC conforming to IEC 60255-27
Connections - terminals	Screw terminals, 2 x 0.5...2 x 2.5 mm² (20 AWG...14 AWG) solid without cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² (24 AWG...16 AWG) flexible with cable end Screw terminals, 1 x 0.5...1 x 3.3 mm² (20 AWG...12 AWG) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm² (24 AWG...14 AWG) flexible with cable end
Tightening torque	0.6…1 N.M conforming to IEC 60947-1
Housing material	Polycarbonate
Status LED	LED (yellow) relay ON LED (green) power ON
Mounting support	35 mm DIN rail conforming to IEC 60715
Safety reliability data	MTTFd = 388.1 years B10d = 350000
Height	90 Mm 88.9 Mm
Width	22.5 Mm 22.9 Mm
Depth	73 Mm 73.7 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	2.6 Cm
Package 1 Width	8.2 Cm
Package 1 Length	9.5 Cm
Package 1 Weight	101.0 G
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	15 Cm
Package 2 Width	30 Cm
Package 2 Length	40 Cm
Package 2 Weight	4.469 Kg

Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	50.0 Cm
Package 3 Width	80.0 Cm
Package 3 Length	60.0 Cm
Package 3 Weight	86.18 Kg

Offer Sustainability

Recyclability potential, in %	17
Total lifecycle Carbon footprint	71 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	2.0760090909
Carbon footprint of the manufacturing phase [A1 to A3]	2 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.0130308364
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0005039074
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	68.6709333333
Carbon footprint of the use phase [B2, B3, B4, B6]	69 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.0586883455
Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.
Total lifecycle Carbon footprint	71
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	3c095d35-159c-493c-8604-58788d456aa9
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
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised