

# Product data sheet

## Characteristics

# RM10TE00N

Harmony 3 phase voltage monitoring relay,  
Range 208 to 480 VAC, phase sequence, phase  
failure, Phase imbalance, 1 CO



### Main

Range of product	Harmony Control Relays
Relay type	Control relay
Product or component type	3-phase control relay
Relay name	RM10TE
Relay monitored parameters	Phase sequence Phase failure detection Asymmetry Overvoltage and undervoltage detection
Measurement range	208...480 V AC
Time delay type	Adjustable 0...100 s, +/- 10 % of the full scale value
Output contacts	1 C/O
Nominal output current	5 A
Product specific application	For 3-phase supply

### Complementary

Supply voltage limits	183...528 V AC, 3 phases
[Ie] rated operational current	5 A 250 V AC-1 conforming to IEC 60947-5-1 5 A 28 V DC-1 conforming to IEC 60947-5-1 1.5 A 240 V AC-15 conforming to IEC 60947-5-1 2 A 24 V DC-13 conforming to IEC 60947-5-1
Reset time	1.5 S time delay
Power consumption in VA	0...4.5 VA
Voltage detection threshold	< 175 V AC
Hysteresis	2 %
Run-up delay at power-up	5 S
Maximum measuring cycle	150 Ms measurement cycle as true rms value
Voltage range	208...480 V
Repeat accuracy	0.5 % for input and measurement circuit 3 % for time delay
Measurement error	< 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation
Response time	< 550 ms (in the event of a fault)
Insulation resistance	> 100 MOhm at 500 V DC
[Ui] rated insulation voltage	400 V
Supply frequency	47...63 Hz

Connections - terminals	Screw terminals, 2 x 0.5...2 x 1.5 mm <sup>2</sup> (AWG 20...AWG 16) solid with or without cable end
Tightening torque	0.5...0.7 N.M
Housing material	Polycarbonate
Local signalling	LED (green) for ST (status) LED (red) for overvoltage LED (red) for undervoltage LED (red) for alarm asymmetry failure triggered
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Electrical durability	100000 Cycles
Mechanical durability	10000000 Cycles
Safety reliability data	MTTFd = 158 years
Height	58.5 Mm
Width	18 Mm
Depth	90 Mm
Net weight	75 G

## Environment

Electromagnetic compatibility	Conforming to IEC 61000-6-4 Conforming to IEC 61000-6-3 conforming to IEC 61000-6-2
Standards	IEC 60255-1
Product certifications	cULus[RETURN]CE[RETURN]UKCA[RETURN]CCC
Marking	CULus CE UKCA CCC
Ambient air temperature for storage	-20...80 °C
Ambient air temperature for operation	-15...60 °C
Relative humidity	10...95 %
Shock resistance	30 gn for 6 ms
IP degree of protection	IP20 (terminals) IP40 (casing)
Pollution degree	2
Overvoltage category	II
Dielectric test voltage	1.89 KV, 1 min AC 50 Hz
Non-dissipating shock wave	4 KV

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.500 Cm
Package 1 Width	7.000 Cm
Package 1 Length	11.000 Cm
Package 1 Weight	85.000 G
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Height	15.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	4.727 Kg

## Offer Sustainability

REACH Regulation	<input checked="" type="checkbox"/> <a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions <input checked="" type="checkbox"/> <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<input checked="" type="checkbox"/> Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and recycling rules.
Global warming ; Total life cycle	81 kg CO2 eq.
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	81