# Product data sheet Characteristics

# **RM17TA00**

Harmony, Modular multifunction 3-phase supply control relay, 5 A, 1 CO, 208...480 V AC





Range of Product	Harmony Control Relays
Product or Component Type	3-phase control relay
Relay Type	Multifunction control relay
Product Specific Application	For 3-phase supply
Relay name	RM17TA
Relay monitored parameters	Asymmetry Phase sequence Phase failure detection
Time delay	Adjustable 0.110 s, +/- 10 % of the full scale value
Switching capacity in VA	1250 VA
Measurement range	208480 V voltage AC
Contacts type and composition	1 C/O
[Uc] control circuit voltage	208480 V

#### Complementary

Complementary		
Reset time	1500 ms time delay	
Maximum switching voltage	250 V AC 250 V DC	
Minimum switching current	10 mA 5 V DC	
Maximum switching current	5 A AC 5 A DC	
Supply voltage limits	183528 V AC	
Control circuit voltage limits	- 12 % + 10 % Un	
Power consumption in VA	022 VA 400 V AC 50 Hz	
Control circuit frequency	5060 Hz +/- 10 %	
Output contacts	1 C/O	
Nominal output current	5 A	
Measurement voltage limits	183528 V AC	
Hysteresis	2 %	
Delay at power up	650 ms	
Maximum measuring cycle	150 ms measurement cycle as true rms value	
Threshold adjustment voltage	+2+17 % in the range 480 V AC 220 % of Un selected -217 % in the range 220 V AC -212 % in the range 208 V AC	
Voltage range	208480 V phase to phase	
Adjustment of asymmetry threshold	515 % of Un selected	
Repeat accuracy	0.5 % input and measurement circuit 3 % time delay	
Measurement error	< 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation	
Phase failure sensitivity	0.7 Un	
Response time	< 200 ms (in the event of a fault)	
Marking	CE	
Overvoltage category	III IEC 60664-1	



Insulation resistance	> 500 MOhm 500 V DC IEC 60255-5 > 500 MOhm 500 V DC IEC 60664-1
[Ui] rated insulation voltage	400 V IEC 60664-1
Supply frequency	50/60 Hz +/- 10 %
Operating position	Any position without derating
Connections - terminals	Screw terminals, 1 x 0.51 x 4 mm <sup>2</sup> AWG 20AWG 11) solid without cable end Screw terminals, 2 x 0.52 x 2.5 mm <sup>2</sup> AWG 20AWG 14) solid without cable end Screw terminals, 1 x 0.21 x 2.5 mm <sup>2</sup> AWG 24AWG 12) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm <sup>2</sup> AWG 24AWG 16) flexible with cable end
Tightening torque	5.318.85 lbf.in (0.61 N.m) IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	For power ON LED (green) For relay ON LED (yellow)
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715
Electrical durability	100000 cycles
Mechanical durability	3000000 cycles
Operating rate	<= 360 operations/hour full load
Utilisation category	AC-12 IEC 60947-5-1 AC-13 IEC 60947-5-1 AC-14 IEC 60947-5-1 AC-15 IEC 60947-5-1 DC-12 IEC 60947-5-1 DC-13 IEC 60947-5-1
Safety reliability data	MTTFd = 502.2 years B10d = 470000
Width	0.69 in (17.5 mm)
Net Weight	0.29 lb(US) (0.13 kg)

#### Environment

Electromagnetic compatibility	Emission standard for industrial environments EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments EN/IEC 61000-6-3
	Immunity for industrial environments EN/IEC 61000-6-2
Standards	EN/IEC 60255-1
Product Certifications	GOST
	CSA
	GL
	C-tick
	UL
Directives	89/336/EEC - electromagnetic compatibility
	73/23/EEC - low voltage directive
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)
Ambient air temperature for operation	-4122 °F (-2050 °C)
Relative humidity	95 % 131 °F (55 °C) IEC 60068-2-30
Vibration resistance	0.35 mm 557.6 Hz)IEC 60068-2-6
	1 gn 57.6150 Hz)IÉC 60255-21-1
Shock resistance	15 gn 11 ms IEC 60255-21-1
IP degree of protection	IP20 IEC 60529 terminals)
	IP30 IEC 60529 casing)
Pollution degree	3 IEC 60664-1
Dielectric test voltage	2 KV AC 50 Hz, 1 min IEC 60255-5
C C	2 kV AC 50 Hz, 1 min IEC 60664-1
Non-dissipating shock wave	4 KV IEC 60255-5
	4 KV IEC 60664-1
	4 kV IEC 61000-4-5

# Ordering and shipping detailsCategory22380 - RELAYS-MEASUREMENT (RM17-RM35)Discount ScheduleCP2GTIN3389119405041Nbr. of units in pkg.1Package weight(Lbs)3.14 oz (89 g)

Returnability	Yes
Country of origin	ID

#### Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.10 in (2.8 cm)
Package 1 width	3.07 in (7.8 cm)
Package 1 Length	3.78 in (9.6 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Weight	10.33 lb(US) (4.685 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	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 www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <b>EU RoHS</b> Declaration
Mercury free	Yes
RoHS exemption information	₽
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

#### Contractual warranty

Warranty

18 months

### Multifunction 3-Phase Supply Control Relays

#### **Dimensions and Mounting**



#### Multifunction 3-Phase Supply Control Relays

## Wiring Diagram



# RM17TA00

#### **Function Diagram**

Phase Sequence Control, Phase Failure Detection (U measured < 0.7 x nominal supply voltage), and Asymmetry Detection



#### Legend

Tt Time delay after crossing of threshold

L1, L2, L3 Phases of the supply voltage monitored

A Asymmetry threshold

H Hysteresis

11-12, 11-14 Output relay connections

Relay status: black color = energized.