### Product data sheet Characteristics

# RM35TF30SP01

# multifunction phase control relay





#### Main

Range of Product	Harmony Relay
Product or Component Type	Modular measurement and control relays
Relay Type	Multifunction control relay
Product Specific Application	For 3-phase supply
Relay name	RM35TF
Relay monitored parameters	Phase sequence Asymmetry Undervoltage and overvoltage in window mode Phase failure detection
Time delay	Adjustable 0.110 s, +/- 10 % of the full scale value
Switching capacity in VA	1250 VA
Measurement range	194528 V AC

#### Complementary

Reset time	1500 ms at 480 V
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	194528 V AC, 3 phase
Control circuit voltage limits	- 12 % + 10 % Un
Power consumption in VA	022 VA 400 V AC 50 Hz
Voltage detection threshold	< 194 V
Control circuit frequency	5060 Hz +/- 10 %
Output contacts	2 C/O
Nominal output current	5 A
Hysteresis	2 %
Delay at power up	650 ms
Maximum measuring cycle	140 ms measurement cycle as true rms value
Threshold adjustment voltage	220 % of Un selected -122 % in the range 220 V AC +2+10 % in the range 480 V AC -202 % in the range 380480 V AC +2+20 % in the range 220440 V AC
Voltage range	220480 V phase to phase
Adjustment of asymmetry threshold	515 % of Un selected
Repeat accuracy	0.3 % time delay 0.5 % input and measurement circuit
Measurement error	< 1 % over the whole range with voltage variation 0.05 %/°C with temperature variation
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 mm² AWG 20AWG 11) solid without cable end Screw terminals, 2 x 0.52 x 2.5 mm² AWG 20AWG 14) solid without cable end
	Screw terminals, 1 x 0.21 x 2.5 mm $^2$ AWG 24AWG 12) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm $^2$ 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) For fault LED (yellow)
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715
Electrical durability	100000 cycles
Mechanical durability	30000000 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	B10d = 360000 MTTFd = 399.5 years
Width	1.38 in (35 mm)
Net Weight	0.29 lb(US) (0.13 kg)

#### **Environment**

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
EN/IEC 60255-1
CSA C-tick GL GOST UL
89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
-40158 °F (-4070 °C)
-4122 °F (-2050 °C)
95 % 131 °F (55 °C) IEC 60068-2-30
0.35 mm 557.6 Hz)IEC 60068-2-6 1 gn 57.6150 Hz)IEC 60255-21-1
15 gn 11 ms IEC 60255-21-1
IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
3 IEC 60664-1
2 kV AC 50 Hz, 1 min
4 kV

### Ordering and shipping details

Category	22380-RELAYS-MEASUREMENT (RM17-RM35)
Discount Schedule	CP2
GTIN	3389119215442
Returnability	No

## Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	3.07 in (7.800 cm)	
Package 1 Width	3.78 in (9.600 cm)	
Package 1 Length	1.77 in (4.500 cm)	

Package 1 Weight	4.59 oz (130 g)
Unit Type of Package 2	S01
Number of Units in Package 2	12
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	5.91 in (15.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	3.94 lb(US) (1.785 kg)

### 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) EU RoHS  Declaration
Mercury free	Yes
China RoHS Regulation	☑ China RoHS Declaration
RoHS exemption information	₫Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	☑ End Of Life Information

#### Contractual warranty

Contraction warranty	
Warranty	18 months