RM35TF30

multifunction phase control relay RM35-T - range 194..528 V AC



Main

Range of product	Zelio Control
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	Asymmetry Phase failure detection Phase sequence Undervoltage and overvoltage in window mode
Time delay	Adjustable 0.110 s, 10 %
Switching capacity in VA	1250 VA
Measurement range	194528 V AC

Complementary

Complementary	4500 (400) /	
Reset time	<= 1500 ms for at 480 V	
Maximum switching voltage	250 V AC 250 V DC	
Minimum switching current	10 mA at 5 V DC	
Maximum switching current	5 A AC 5 A DC	
[Us] rated supply voltage	220480 V AC	
Supply voltage limits	194528 V AC 3 phases	
Control circuit voltage limits	- 12 %, + 10 % Un	
Power consumption in VA	<= 22 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 %	
Run-up delay at power-up	<= 650 ms	
Measuring cycle	<= 140 ms measurement cycle as true rms value	
Threshold adjustment voltage	+2+10 % in the range 480 V AC +2+20 % in the range 220440 V AC -122 % in the range 220 V AC 220 % of Un selected -202 % in the range 380480 V AC	
Voltage range	220 V phase to phase 380 V phase to phase 400 V phase to phase 415 V phase to phase 440 V phase to phase 480 V phase to phase	
Adjustment of asymmetry threshold	515 % of Un selected	
Measurement accuracy	+/- 10 % of the full scale value	
Repeat accuracy	0.3 % for time delay 0.5 % for 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 : 73/23/EEC CE : EMC 89/336/EEC	
Overvoltage category	III conforming to IEC 60664-1	

Insulation resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1
[Ui] rated insulation voltage	400 V conforming to IEC 60664-1
Supply frequency	50/60 Hz +/- 10 %
Operating position	Any position without
Connections - terminals	Screw terminals 1 x 0.51 x 4 mm² - AWG 20AWG 11, solid cable without cable end Screw terminals 2 x 0.52 x 2.5 mm² - AWG 20AWG 14, solid cable without cable end Screw terminals 1 x 0.21 x 2.5 mm² - AWG 24AWG 12, flexible cable with cable end Screw terminals 2 x 0.22 x 1.5 mm² - AWG 24AWG 16, flexible cable with cable end
Tightening torque	0.61 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Status LED	1 LED green for power ON 1 LED yellow for fault 1 LED yellow for relay ON
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 under full load
Utilisation category	AC-12 conforming to IEC 60947-5-1 AC-13 conforming to IEC 60947-5-1 AC-14 conforming to IEC 60947-5-1 AC-15 conforming to IEC 60947-5-1 DC-12 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1
Width	35 mm
Product weight	0.13 kg

Environment

Electromagnetic compatibility	Emission standard for industrial environments conforming to EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3 Immunity for industrial environments conforming to EN/IEC 61000-6-2
Standards	EN/IEC 60255-1
Product certifications	CSA C-Tick GL GOST UL
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-2050 °C
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
Vibration resistance	0.35 mm (f = 557.6 Hz) conforming to IEC 60068-2-6/IEC 60255-21-1 1 gn (f = 57.6150 Hz) conforming to IEC 60068-2-6/IEC 60255-21-1
Shock resistance	15 gn for 11 ms conforming to IEC 60255-21-1
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Dielectric test voltage	2 kV 1 min AC 50 Hz
Non-dissipating shock wave	4 kV

Contractual warranty

Period	18 months

