## Product data sheet Characteristics

### **RM17TA00**

# multifunction control relay RM17-TA - range 183..528 V AC



#### Main Range of product Zelio Control Product or component Modular measurement and control relays type Relay type Multifunction control relay Product specific For 3-phase supply application Relay name RM17TA Relay monitored Asymmetry parameters Phase failure detection Phase sequence Time delay Adjustable 0.1...10 s, 10 % Switching capacity in 1250 VA Measurement range 183...528 V AC

#### Complementary

Complementary	
Reset time	1500 ms for time delay
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	208480 V AC 3 phases
Supply voltage limits	183528 V AC
Control circuit voltage limits	- 12 %, + 10 % Un
Power consumption	<= 1.8 VA AC
Control circuit frequency	5060 Hz +/- 10 %
Output contacts	1 C/O
Nominal output current	5 A
Hysteresis	2 %
Run up delay at power up	0.5 s time delay
Measuring cycle	<= 150 ms measurement cycle as true rms value
Threshold adjustment voltage	+2+17 % in the range 480 V AC -212 % in the range 208 V AC -217 % in the range 220 V AC 220 % of Un selected
Voltage range	208 V phase to phase 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	0.5 % 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
Phase failure sensitivity	0.7 Un
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
Electrical connection	1 conductor cable 0.22.5 mm² AWG24AWG12 flexible with cable end conforming to IEC 60947-1 1 conductor cable 0.54 mm² AWG20AWG11 solid without cable end conforming to IEC 60947-1 2 conductors cable 0.21.5 mm² AWG24AWG16 flexible with cable end conforming to IEC 60947-1 2 conductors cable 0.52.5 mm² AWG20AWG14 solid without cable end conforming to IEC 60947-1
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 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	17.5 mm
Product weight	0.13 kg

#### Environment

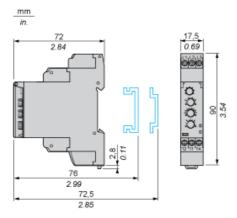
Immunity to microbreaks	10 ms
Electromagnetic compatibility	Emission standard for industrial environments conforming to EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3 Immunity for industrial environments conforming to EN/IEC 61000-6-2
Standards	EN/IEC 60255-6
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 conforming to IEC 60255-5 2 kV 1 min AC 50 Hz conforming to IEC 60664-1
Non-dissipating shock wave	4 kV conforming to IEC 60255-5 4 kV conforming to IEC 60664-1 4 kV conforming to IEC 61000-4-5
RoHS EUR status	Compliant
RoHS EUR conformity date	0701



## **RM17TA00**

#### Multifunction 3-Phase Supply Control Relays

#### **Dimensions and Mounting**

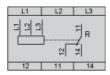


### Product data sheet Connections and Schema

## **RM17TA00**

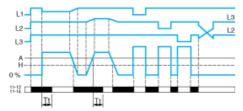
#### Multifunction 3-Phase Supply Control Relays

#### Wiring Diagram



#### **Function Diagram**

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



- Tt Time delay after crossing of threshold (adjustable on front panel)
- L1, Phases of the supply voltage monitored
- L2,
- L3
- A Asymmetry threshold (adjustable from 5...15% of the nominal supply voltage)
- H Hysteresis
- 11-12Output relay connections (refer to Connections and Schema)
- 11-14

Relay status: black color = energized.