### Product data sheet Characteristics

## **RM17TG20**

Modular 3-phase supply control relay, 5 A, 2 CO, 208...440 V AC





#### Main

Range of product	Zelio Control	
Product or component type	Modular measurement and control relays	
Relay type	Control relay	
Product specific application	For 3-phase supply	
Relay name	RM17TG	
Relay monitored parameters	Phase sequence Phase failure detection (2 or more phase cut)	
Time delay	Without	
Switching capacity in VA	1250 VA	
Measurement range	208480 V voltage AC	

#### Complementary

Main		
Range of product	Zelio Control	
Product or component type	Modular measurement and control relays	
Relay type	Control relay	
Product specific application	For 3-phase supply	
Relay name	RM17TG	
Relay monitored parameters	Phase sequence Phase failure detection (2 or more phase cut)	
Time delay	Without	
Switching capacity in VA	1250 VA	
Measurement range	208480 V voltage AC	
Complementary  Maximum switching voltage	250 V AC	
Maximum switching voltage	250 V DC	
Maximum switching voltage  Minimum switching current	250 V DC 10 mA at 5 V DC	
Maximum switching voltage  Minimum switching current  Supply voltage limits	250 V DC 10 mA at 5 V DC 183484 V AC	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits	250 V DC 10 mA at 5 V DC 183484 V AC - 12 % + 10 % Un	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits  Power consumption in VA	250 V DC  10 mA at 5 V DC  183484 V AC  - 12 % + 10 % Un  022 VA at 400 V AC 50 Hz	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits  Power consumption in VA  Voltage detection threshold	250 V DC  10 mA at 5 V DC  183484 V AC  - 12 % + 10 % Un  022 VA at 400 V AC 50 Hz  < 100 V AC	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits  Power consumption in VA  Voltage detection threshold  Control circuit frequency	250 V DC  10 mA at 5 V DC  183484 V AC  - 12 % + 10 % Un  022 VA at 400 V AC 50 Hz	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits  Power consumption in VA  Voltage detection threshold  Control circuit frequency	250 V DC  10 mA at 5 V DC  183484 V AC  - 12 % + 10 % Un  022 VA at 400 V AC 50 Hz  < 100 V AC	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits  Power consumption in VA  Voltage detection threshold  Control circuit frequency  Output contacts	250 V DC  10 mA at 5 V DC  183484 V AC  - 12 % + 10 % Un  022 VA at 400 V AC 50 Hz  < 100 V AC  5060 Hz +/- 10 %	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits  Power consumption in VA  Voltage detection threshold  Control circuit frequency  Output contacts  Nominal output current	250 V DC  10 mA at 5 V DC  183484 V AC  - 12 % + 10 % Un  022 VA at 400 V AC 50 Hz  < 100 V AC  5060 Hz +/- 10 %  2 C/O	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits  Power consumption in VA  Voltage detection threshold  Control circuit frequency  Output contacts  Nominal output current  Measurement voltage limits	250 V DC  10 mA at 5 V DC  183484 V AC  - 12 % + 10 % Un  022 VA at 400 V AC 50 Hz  < 100 V AC  5060 Hz +/- 10 %  2 C/O  5 A	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits	250 V DC  10 mA at 5 V DC  183484 V AC  - 12 % + 10 % Un  022 VA at 400 V AC 50 Hz  < 100 V AC  5060 Hz +/- 10 %  2 C/O  5 A  183528 V AC	
Maximum switching voltage  Minimum switching current  Supply voltage limits  Control circuit voltage limits  Power consumption in VA  Voltage detection threshold  Control circuit frequency  Output contacts  Nominal output current  Measurement voltage limits  Delay at power up	250 V DC  10 mA at 5 V DC  183484 V AC  - 12 % + 10 % Un  022 VA at 400 V AC 50 Hz  < 100 V AC  5060 Hz +/- 10 %  2 C/O  5 A  183528 V AC  650 ms	

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 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 mm² (AWG 24AWG 12) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) flexible with cable end		
Tightening torque	0.61 N.m conforming to IEC 60947-1		
Housing material	Self-extinguishing plastic		
Local signalling	LED (yellow)relay ON:		
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715		
Electrical durability	10000 cycles		
Mechanical durability	30000000 cycles		
Operating rate	<= 360 operations/hour 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		
Safety reliability data	B10d = 850000 MTTFd = 924.6 years		
Width	17.5 mm		
Net 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	GOST	
	C-Tick	
	UL	
	CSA	
	GL	
Directives	73/23/EEC - low voltage directive	
	89/336/EEC - electromagnetic compatibility	
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	
	1 gn (f= 57.6150 Hz) conforming to 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	

### Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	93 g	
Package 1 Height	2.7 cm	

Package 1 width	7.8 cm
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Package 1 Length	9.7 cm
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Weight	4.909 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	P06
Number of Units in Package 3	768
Package 3 Weight	87.204 kg
Package 3 Height	77 cm
Package 3 width	80 cm
Package 3 Length	60 cm

### Offer Sustainability

Sustainable offer status	Green Premium product	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

#### Contractual warranty

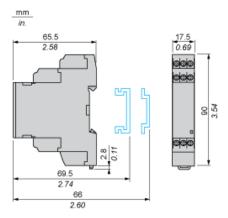
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Warranty	18 months	

# Product data sheet Dimensions Drawings

# **RM17TG20**

### 3-Phase Supply Control Relays

### **Dimensions and Mounting**

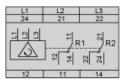


### Product data sheet Connections and Schema

# **RM17TG20**

### 3-Phase Supply Control Relays

### Wiring Diagram

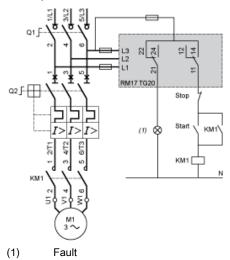


### Product data sheet Connections and Schema

# RM17TG20

### Application Scheme

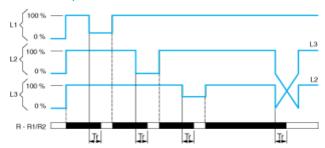
### Example



### **Technical Description**

### Function Diagram

### Phase Sequence Control and Total Loss of Phase Detection



#### Legend

Tr Response time on appearance of a fault

L1, L2, L3 Phases of the supply voltage monitored

R - R1/R2 Output relay(s),

Relay status: black color = energized.