

# Product data sheet

Specifications



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

RM17TG20



### Main

Range of product	Harmony Control Relays
Product or component type	3-phase control relay
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	208...440 V voltage AC
Contacts type and composition	2 C/O
[Uc] control circuit voltage	208...440 V

### Complementary

Maximum switching voltage	250 V AC 250 V DC
Minimum switching current	10 mA at 5 V DC
Supply voltage limits	183...484 V AC
Control circuit voltage limits	- 12 % + 10 % Un
Power consumption in VA	0...22 VA at 400 V AC 50 Hz
Voltage detection threshold	< 100 V AC
Control circuit frequency	50...60 Hz +/- 10 %
Output contacts	2 C/O
Nominal output current	5 A
Measurement voltage limits	183...484 V AC
Delay at power up	650 ms
Voltage range	183...484 V
Response time	<= 130 ms (in the event of a fault)
Marking	CE
Overvoltage category	III conforming to IEC 60664-1

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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 0.5...1 x 4 mm <sup>2</sup> (AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm <sup>2</sup> (AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> (AWG 24...AWG 16) flexible with cable end
Tightening torque	0.6...1 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	LED (yellow) for 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	-40...70 °C
Ambient air temperature for operation	-20...50 °C
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
Vibration resistance	0.35 mm (f= 5...57.6 Hz) conforming to IEC 60068-2-6 1 gn (f= 57.6...150 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	98.0 g
Package 1 Height	2.7 cm
Package 1 width	7.8 cm
Package 1 Length	9.7 cm
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Weight	5.15 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

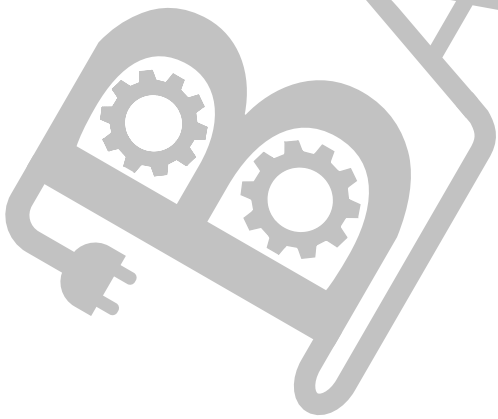
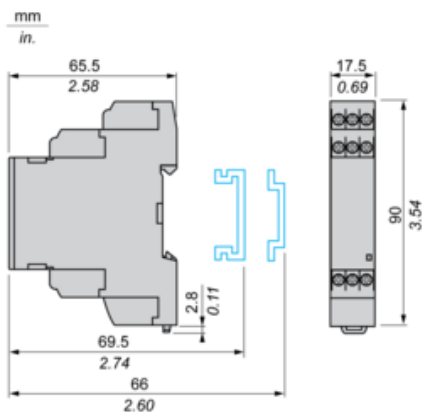
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
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 <a href="#">www.P65Warnings.ca.gov</a>

Contractual warranty

Warranty	18 months
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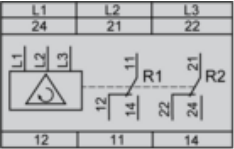
3-Phase Supply Control Relays

Dimensions and Mounting



3-Phase Supply Control Relays

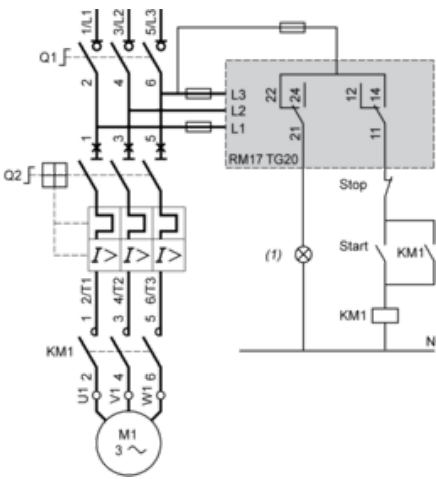
Wiring Diagram



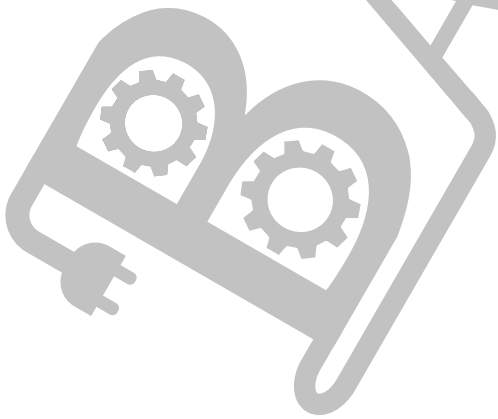
BABA EDISON

Application Scheme

Example

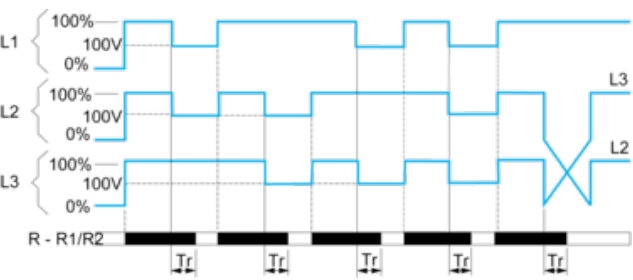


(1) Fault



Function Diagram

Phase Sequence Control and Total Loss of Phase Detection



Legend

- $T_r$  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.

