# **RM35BA10**

# pump control relay RM35-BA - range 1..10 A



### Main

Range of product	Zelio Control
Product or component type	Modular measurement and control relays
Relay type	Pump control relays
Product specific application	For 3-phase and single-phase pump
Relay name	RM35BA
Relay monitored parameters	Overcurrent and undercurrent control Phase failure on 3-phase supply Phase sequence on 3-phase supply
Time delay	Reset on terminal Y2 fixed 0.3 s Ti on energisation adjustable 160 s, +/- 10 % Tt on crossing the threshold adjustable 0.110 s, +/- 10 %
Switching capacity in VA	1250 VA
Minimum switching current	10 mA at 5 V DC
Maximum switching current	5 A AC/DC
Power consumption in VA	<= 5 VA AC
Measurement range	110 A AC
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

#### Complementary

Complementary	
Reset time	2000 ms
Maximum switching voltage	250 V AC/DC
[Us] rated supply voltage	208480 V AC 3 phases 230 V AC single phase
Supply voltage limits	183528 V AC
Control circuit voltage limits	- 15 % + 10 % Un
Resistance across terminals	0.01 Ohm E1-L2 terminals
Width	35 mm
Output contacts	1 C/O
Nominal output current	5 A
Measuring cycle	<= 140 ms as true rms value
Run-up delay at power-up	0.5 s
Hysteresis	5 % of threshold
Measurement accuracy	+/- 10 % of the full scale value
Repeat accuracy	+/- 1 % for input and measurement circuit +/- 1 % for time delay
Measurement error	+/- 0.05 %/°C 1 % by volt over the whole range
Response time	< 300 ms in the event of a fault
Input current	11 A permanent at 25 °C E1-L2 terminals 50 A non repetitive < 1 s at 25 °C E1-L2 terminals
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 60255-5 > 500 MOhm at 500 V DC conforming to 60664-1
[Ui] rated insulation voltage	400 V conforming to IEC 60664-1
Supply frequency	50/60 Hz +/- 10 %

Operating position	Any position
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

## **Environment**

Immunity to microbreaks	500 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 NF 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 strength	2 kV AC 50 Hz (shock wave 4 kV)

## Contractual warranty

B : 1	10 11
Period	18 months

