Product data sheet Characteristics

RM35LM33MW

level control relay, Harmony Control Relays, 5A, 2CO, 24…240V AC DC





Main

Dange of Draduet	Harmany Cantral Dalays
Range of Product	Harmony Control Relays
Product or Component Type	Level control relay
Relay Type	Level control relay
Relay name	RM35L
Relay monitored parameters	Detection by resistive probes
Time delay	Adjustable 0.15 s, +/- 10 %
Switching capacity in VA	1250 VA
Minimum switching current	10 mA 5 V DC
Maximum switching current	5 A AC/DC
Power consumption	5 VA AC
Measurement range	250 Ohm1 MOhm
Utilisation category	AC-12 IEC 60947-5-1 AC-13 IEC 60947-5-1 AC-14 IEC 60947-5-1 AC-15 IEC 60947-5-1 DC-12 IEC 60947-5-1 DC-13 IEC 60947-5-1
Contacts type and composition	2 C/O

Complementary

Complementary	
Reset time	1750 ms
Maximum switching voltage	250 V AC/DC
[Un] rated nominal voltage	24240 V AC/DC 50/60 Hz +/- 10 %
Supply voltage limits	20.4264 V AC/DC
Operating voltage tolerance	- 15 % + 10 % Un
Power consumption	1.5 W DC
Output contacts	2 C/O
Nominal output current	5 A
Delay at power up	0.6 s
Measurement accuracy	+/- 10 % of the full scale value +/- 20 % for the HS range
Repeat accuracy	+/- 2 % time delay
Measurement error	0.5 %/°C with temperature variation
Sensitivity scale	0.255 kOhm LS (Low Sensitivity) 5100 kOhm St (Standard Sensitivity) 501000 kOhm HS (High Sensitivity)
Sensitivity adjustment	5100 %
Maximum supply current for sensors	1 mA
Cable capacitance	1 NF HS (High Sensitivity) probe cable 2.2 NF St (Standard Sensitivity) probe cable 4.7 nF LS (Low Sensitivity)
Marking	CE : 73/23/EEC CE : EMC 89/336/EEC
Overvoltage category	III IEC 60664-1

Insulation resistance	 > 500 MOhm 500 V DC between supply and relay output IEC 60255-5 > 500 MOhm 500 V DC between measurement and relay output IEC 60664-1 > 1 MOhm 500 V DC between supply and measurement IEC 60255-5 > 500 MOhm 500 V DC between supply and relay output IEC 60664-1 > 500 MOhm 500 V DC between measurement and relay output IEC 60255-5 > 1 MOhm 500 V DC between supply and measurement IEC 60664-1 	
[Ui] rated insulation voltage	250 V IEC 60664-1	
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, 2 x 0.22 x 1.5 mm² AWG 24AWG 16) flexible with cable end Screw terminals, 1 x 0.21 x 2.5 mm² AWG 24AWG 12) flexible with cable end	
Tightening torque	5.318.85 lbf.in (0.61 N.m) IEC 60947-1	
Housing material	Self-extinguishing plastic	
Local signalling	For relay ON LED (yellow) For power ON LED (green) For timer ON LED (yellow)	
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715	
Electrical durability	100000 cycles	
Mechanical durability	30000000 cycles	
Operating rate	<= 360 operations/hour full load	
Safety reliability data	B10d = 170000 MTTFd = 182.6 years	
Width	1.38 in (35 mm)	

Environment

Immunity to microbreaks	100 Ms DC 90 ms AC
Electromagnetic compatibility	Emission standard for industrial environments conforming to IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to IEC 61000-6-3 Immunity for industrial environments conforming to NF EN/IEC 61000-6-2
Standards	IEC 60255-6
Product Certifications	CSA[RETURN]GL[RETURN]UL[RETURN]C-tick[RETURN]GOST
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)
Ambient air temperature for operation	-4122 °F (-2050 °C)
Relative humidity	95 % 131 °F (55 °C) IEC 60068-2-30
IP degree of protection	IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
Pollution degree	3 IEC 60664-1
Dielectric test voltage	2 KV AC 50 Hz, 1 min IEC 60255-5 2 kV AC 50 Hz, 1 min IEC 60664-1

Ordering and shipping details

Category	22380-RELAYS-MEASUREMENT (RM17-RM35)
Discount Schedule	CP2
GTIN	3389119405232
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	1.85 in (4.700 cm)	
Package 1 Width	3.07 in (7.800 cm)	
Package 1 Length	3.82 in (9.700 cm)	
Package 1 Weight	4.97 oz (141.000 g)	
Unit Type of Package 2	S03	
Number of Units in Package 2	48	

Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	16.42 lb(US) (7.448 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	23.62 in (60.000 cm)
Package 3 Length	31.50 in (80.000 cm)
Package 3 Weight	144.76 lb(US) (65.660 kg)

Offer Sustainability

Sustainable offer status	Green Premium product	
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 www.P65Warnings.ca.gov	
REACh Regulation	☑REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
Mercury free	Yes	
China RoHS Regulation	China RoHS Declaration	
RoHS exemption information	₫Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	☑ End Of Life Information	

Contractual warranty

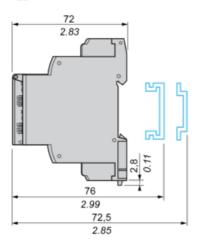
Contractual warranty		
Warranty	18 months	

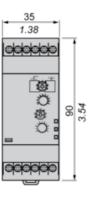
RM35LM33MW

Level Control Relays

Dimensions and Mounting





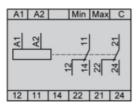


Product data sheet Connections and Schema

RM35LM33MW

Level Control Relays

Wiring Diagram



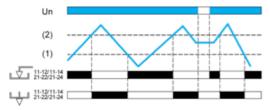
Product data sheet Technical Description

RM35LM33MW

Function Diagrams

Control of Two Levels

Fill/Empty function



Legend

Un Supply voltage

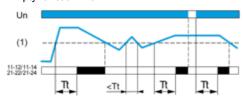
- (1) Min. level
- (2) Max. level

11-12/11-14, 21-22/21-24 Output relay connections

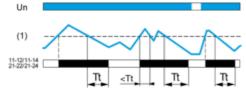
Relay status: black color = energized.

Control of One Level

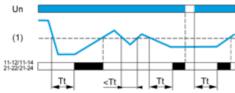
Empty function T on



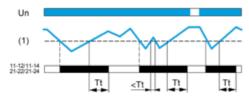
Empty function T off



Fill function T on



Fill function T off



Legend

Tt Time delay after crossing of threshold

Un Supply voltage

- (1) Level threshold
- 11-12/11-14, 21-22/21-24 Output relay connections

Relay status: black color = energized.