### Product data sheet Characteristics

### RM35LM33MW

Harmony, Modular liquid level control relay, 5 A, 2 CO, 24...240 V AC/DC

Product availability: Stock - Normally stocked in distribution facility





Main		*
Range of product	Harmony Control Relays	7
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	. <del>.</del>
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

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	F

<sup>\*</sup> Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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	
Maximum cable distance between devices	328.08 ft (100 m)	
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	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 EN/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 EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments EN/IEC 61000-6-3 Immunity for industrial environments NF EN/IEC 61000-6-2	
Standards	EN/IEC 60255-6	
Product certifications	CSA GL UL C-tick 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	

Vibration resistance	0.35 mm 557.6 Hz)IEC 60068-2-6 1 gn 57.6150 Hz)IEC 60255-21-1
Shock resistance	15 gn 11 ms IEC 60255-21-1
IP degree of protection	IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
Pollution degree	3 conforming to 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	00785901565796	
Nbr. of units in pkg.	1	
Package weight(Lbs)	0.3 lb(US) (0.14 kg)	
Returnability	Yes	
Country of origin	ID	

### Packing Units

r doking office	
Unit Type of Package 1	PCE
Package 1 Height	1.85 in (4.7 cm)
Package 1 width	3.07 in (7.8 cm)
Package 1 Length	3.82 in (9.7 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Weight	15.75 lb(US) (7.146 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Weight	144.76 lb(US) (65.66 kg)
Package 3 Height	29.53 in (75 cm)
Package 3 width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)

### 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) 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	

### Contractual warranty

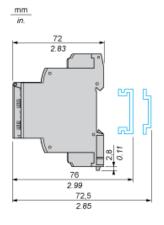
Warranty	18 months	

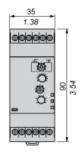
# Product data sheet Dimensions Drawings

## RM35LM33MW

### Level Control Relays

### **Dimensions and Mounting**



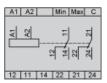


### Product data sheet Connections and Schema

### RM35LM33MW

### Level Control Relays

### Wiring Diagram



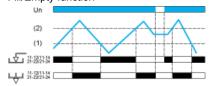
## Product data sheet Technical Description

### RM35LM33MW

### **Function Diagrams**

### Control of Two Levels

### Fill/Empty function



### Legend

Un Supply voltage

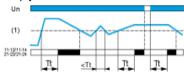
- (1) Min. level
- (2) Max. level

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

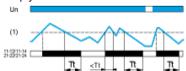
Relay status: black color = energized.

### Control of One Level

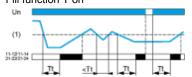
#### Empty function T on



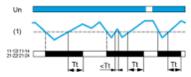
### Empty function T off



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.