Product data sheet Characteristics

RM35LM33MW

liquid level control relay RM35-L - 24..240 V AC/ DC





Main

La series	1	
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Main		
Range of product	Zelio Control	
Product or component type	Modular measurement and control relays	
Relay type	Level control relay	
Relay name	RM35L	
Relay monitored parameters	Detection by resistive probes	
Time delay type	Adjustable 0.15 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	250 Ohm1 MOhm	
Utilisation category	AC-12 conforming to IEC 60947-5-1	
ounsation category	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		
Reset time	1750 ms	
Maximum switching voltage	250 V AC/DC	
[Us] rated supply voltage	24240 V AC/DC 50/60 Hz +/- 10 %	
Supply voltage limits	20.4264 V AC/DC	
Control circuit voltage limits	- 15 % + 10 % Un	
Power consumption in W	<= 1.5 W DC	
Output contacts	2 C/O	
Nominal output current	5 A	
Run-up delay at power-up	0.6 s	
Measurement accuracy	+/- 20 % for the HS range	
Mar 10, 0017		

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	+/- 10 % of the full scale value	
Repeat accuracy	+/- 2 % for 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 %	
Supply current for sensors	<= 1 mA	
Cable length	100 m between probe and delay	
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 : EMC 89/336/EEC CE : 73/23/EEC	
Overvoltage category	III conforming to IEC 60664-1	
Insulation resistance	 > 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60255-5 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60664-1 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60255-5 > 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60664-1 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60255-5 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60255-5 > 1 MOhm at 500 V DC between supply and measurement and relay output conforming to IEC 60255-5 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60664-1 	
[Ui] rated insulation voltage	250 V conforming to IEC 60664-1	
Operating position	Any position without derating	
Connections - terminals	Screw terminals 1 x 0.51 x 4 mm ² - AWG 20AWG 11, solid cable without cable end Screw terminals 2 x 0.52 x 2.5 mm ² - AWG 20AWG 14, solid cable without cable end Screw terminals 1 x 0.21 x 2.5 mm ² - AWG 24AWG 12, flexible cable with cable end Screw terminals 2 x 0.22 x 1.5 mm ² - AWG 24AWG 16, flexible cable with cable end	
Tightening torque	0.61 N.m conforming to IEC 60947-1	
Housing material	Self-extinguishing plastic	
Local signalling	LED green for power ON LED yellow for relay ON LED yellow for timer ON	
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715	
Electrical durability	100000 cycles	
Mechanical durability	3000000 cycles	
Operating rate	<= 360 operations/hour under full load	
Safety reliability data	B10d = 170000 MTTFd = 182.6 years	
Width	35 mm	

Environment

Immunity to microbreaks	100 ms DC 90 ms AC	
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 UL GOST	
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 AC 50 Hz, 1 min conforming to IEC 60255-5 2 kV AC 50 Hz, 1 min conforming to IEC 60664-1

Offer Sustainability

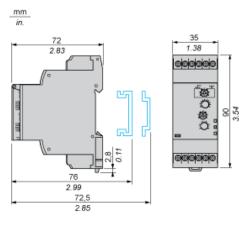
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0701 - Schneider Electric declaration of conformity
	Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
	Reference not containing SVHC above the threshold
Product environmental profile	Available
	Product environmental
Product end of life instructions	Available
	Product environmental

Contractual warranty	
Warranty period	18 months

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Level Control Relays

Dimensions and Mounting

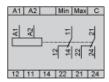


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Connections and Schema

Level Control Relays

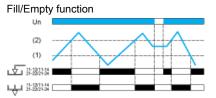
Wiring Diagram



RM35LM33MW

Function Diagrams

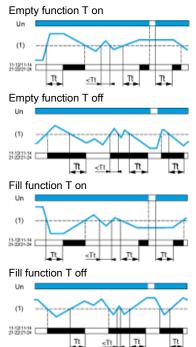




Legend

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



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.