



PRODUCT-DETAILS

CM-ENS.31S

CM-ENS.31S Liquid level monitoring relay
2c/o, sensitivity 0.1-1000kOhm



General Information	
Extended Product Type	CM-ENS.31S
Product ID	1SVR730850R0300
EAN	4013614502910
Catalog Description	CM-ENS.31S Liquid level monitoring relay 2c/o, sensitivity 0.1-1000kOhm
Long Description	The CM-ENS.31S belongs to the CM liquid level monitoring relay range. It operates with a rated control supply voltage of 24 - 240 V AC/DC and has a 2 c/o (SPDT) output with contacts rated at 250 V / 4 A. It monitors liquid levels of conductive fluids and protects pumps against dry running or tanks against overflow. The working principle as well as the sensitivity can be selected via front-face potentiometers. Furthermore, an ON-delay or an OFF-delay can be adjusted within a range of 0.1 to 10 s. Several electrodes and a sealable transparent cover for protection against unauthorized changes are available as accessory. The device offers screw connection technology with double-chamber cage connection terminals.

Ordering	
EAN	4013614502910
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads	
Data Sheet, Technical Information	2CDC112230D0201
Instructions and Manuals	1SVC730680M1001 1SVC730680M0001
CAD Dimensional Drawing	2CDC001079B0201

Dimensions	
Product Net Width	22.5 mm
Product Net Height	85.6 mm
Product Net Depth / Length	103.7 mm
Product Net Weight	0.143 kg

Technical	
Function	Filling or draining monitoring
Number of Electrodes	3
Measuring Range	0 1 ... 1000 kΩ
Time Range	0 s or 0.1 ... 30 s tripping delay (ON or OFF)
Rated Control Supply Voltage (U _s)	24 ... 240 V AC/DC
Rated Frequency (f)	Supply Circuit 50/60 Hz
Output	2 c/o (SPDT) contacts
Terminal Type	Screw Terminals
Rated Operational Current AC-12 (I _e)	(230 V) 4 A
Rated Operational Current AC-15 (I _e)	(230 V) 3 A
Rated Operational Current DC-12 (I _e)	(24 V) 4 A
Rated Operational Current DC-13 (I _e)	(24 V) 2 A
Minimum Switching Capacity	12 V 10 mA
Rated Impulse Withstand Voltage (U _{imp})	Measuring Circuit / Output Circuit 4 kV Output Circuit 1 / Output Circuit 2 4 kV Supply Circuit / Measuring Circuit 4 kV Supply Circuit / Output Circuit 4 kV
Rated Insulation Voltage (U _i)	Measuring Circuit / Output Circuit 300 V Output Circuit 1 / Output Circuit 2 300 V Supply Circuit / Measuring Circuit 300 V Supply Circuit / Output Circuit 300 V
Degree of Protection	Housing IP50 Terminals IP20
Overvoltage Category	III
Pollution Degree	3
Short-Circuit Protective Devices	Output Circuit NC - F Type Fuses 6 A Output Circuit NO - F Type Fuses 10 A
Electrical Durability	AC-12 100000 cycle
Mechanical Durability	1000000 cycle
Connecting Capacity	Flexible with Ferrule 1x 0.5 ... 2.5 mm ² Flexible with Ferrule 2x 0.5 ... 1.5 mm ² Flexible with Insulated Ferrule 1x 0.5 ... 2.5 mm ²

	Flexible with Insulated Ferrule 2x 0.5 ... 1.5 mm ² Flexible 1x 0.5 ... 2.5 mm ² Flexible 2x 0.5 ... 1.5 mm ² Rigid 1x 0.5 ... 4 mm ² Rigid 2x 0.5 ... 2.5 mm ²
Tightening Torque	0.6 ... 0.8 N·m Control Circuit 0.9 N·m Main Circuit 1 N·m
Wire Stripping Length	8 mm Main Circuit 10 mm
Recommended Screw Driver	0.8 x 4 4.5 Pozidriv 1
Mounting Position	1 ... 5 1 ... 6
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715
Standards	CAN/CSA C22.2 No.14 IEC/EN 63000 IEC/EN 60255-27 IEC/EN 61000-6-2 IEC/EN 61000-6-3 UL 508

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Output Circuit 300 V AC
Contact Rating UL/CSA	B300
Connecting Capacity UL/CSA	Flexible 1x 18-14 AWG Flexible 2x 18-16 AWG Rigid 1x 20-12 AWG Rigid 2x 20-14 AWG
Tightening Torque UL/CSA	7.08 in·lb
Pilot Duty UL/CSA	B300

Environmental

Ambient Air Temperature	Operation -25 ... +60 °C Storage -40 ... +85 °C
Maximum Operating Altitude Permissible	Without Derating 2000 m

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	1SVD981001-4501
RoHS Information	1SVD981001-4401
RoHS Status	Following EU Directive 2011/65/EU
Toxic Substances Control Act - TSCA	2CMT2023-006536

Circular Value

End of Life Instructions	1SAC200290H0001
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Certificates and Declarations	
CQC Certificate	CQC2015010303819793
cULus Certificate	cULus508_20150627-E140448
Declaration of Conformity - CCC	2020980303000198
Declaration of Conformity - CE	1SVD981005-00
Declaration of Conformity - UKCA	1SVD981005-10
DNV GL Certificate	DNV_GL_TAA00000RW

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	97 mm
Package Level 1 Depth / Length	30 mm
Package Level 1 Height	109 mm
Package Level 1 Gross Weight	0.168 kg
Package Level 1 EAN	4013614502910

Classifications	
Object Classification Code	B
ETIM 7	EC001447 - (Fill) level monitoring relay
ETIM 8	EC001447 - (Fill) level monitoring relay
ETIM 9	EC001447 - (Fill) level monitoring relay
eClass	V11.0 : 27371813
UNSPSC	39122331
E-Number (Finland)	2712568

Categories
Low Voltage Products and Systems → Control Products → Electronic Relays and Controls → Liquid Level Monitors and Controls → CM-Enx

