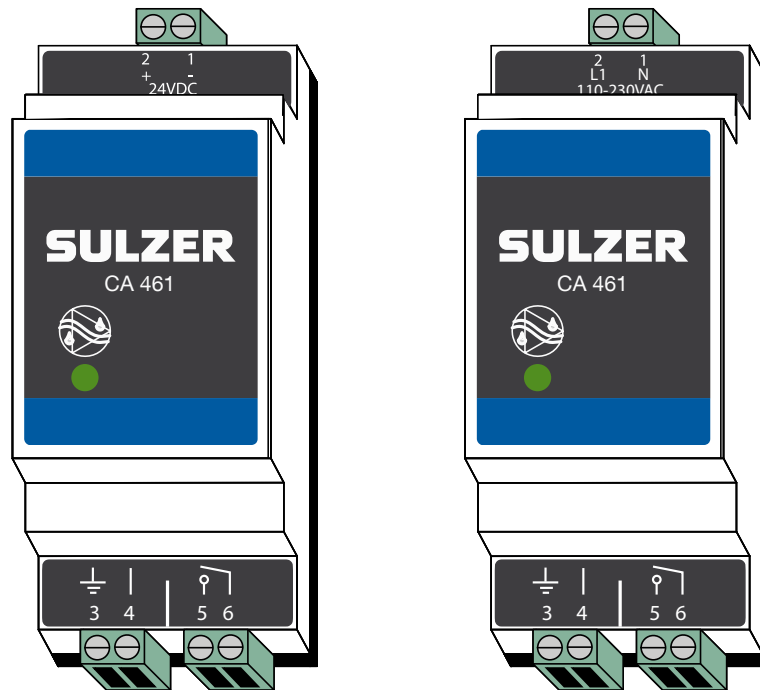

Leakage Control Type ABS CA 461





Leakage control type CA 461

Installation Guide

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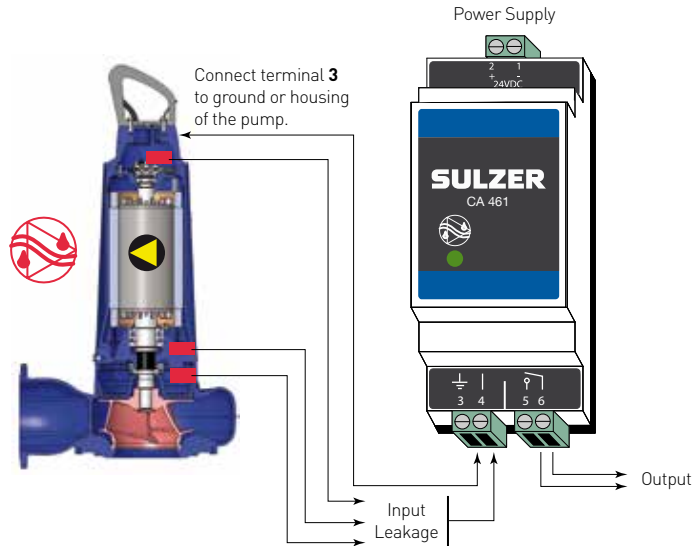
Sulzer reserves the right to alter specifications due to technical developments.

1 FUNCTION AND USAGE

CA 461 is a standalone leakage detection monitor for DIN rail mount.

1.1 Function

In case of water leakage, the resistance between the sensor electrode and housing will decrease. If the resistance becomes lower than 100k ohms ($\pm 10\%$), the output goes active and contact on terminal 5 and 6 are closed. The signal has to be stable for 10 seconds before the output is activated.



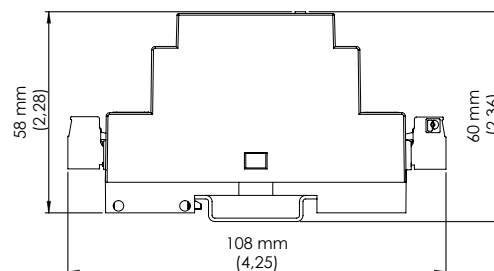
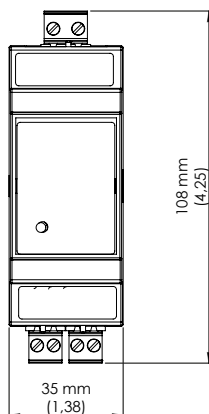
Leakage: sensors must be in parallel

It is very important to have in mind that this practice avoids alarms to be distinguished. Sulzer highly recommends to use one module per signal to allow not only distinguishing but also acting in a different way according to the alarm category/severity.

If pump is operated from a motor drive or frequency converter, special precautions are required.


The high electric noise level can distort electrical readings and in extension jeopardize functionality. To avoid conducted electrical noise, follow best practices and manufacturer EMC compliance recommendations when installing frequency converters. Use shielded cables and 50 cm separation between power and signal cables. Ensure that the cables are also separated from each other in cabinets.

Terminal	Description
1	Power supply (0 V or N)
2	Power supply (+24 VDC or L1)
3	Ground / Pump chassis
4	Input(s) from pump probe(s)/anode(s)
5	Output contact
6	Output contact (NO)



2 TECHNICAL DATA

2.1 Technical data CA 461

Leakage sensor voltage		12 VDC
Max sensor current		< 15 μ A
Leakage detection threshold		< 100 kohm
Alarm on delay		10 seconds
Ambient operating temperature		-20 to +50 °C (-4 to +122 °F)
Ambient storage temperature		-30 to +80 °C (-22 to +176 °F)
Degree of protection		IP 20, NEMA: Type 1
Housing material		PPO and PC
Mounting		DIN Rail 35 mm
Installation category		CAT II
Pollution degree		2
Flame rate		V0 (E45329)
Humidity		0-95% RH non-condensing
Dimensions		H x W x D: 108 x 35 x 58 mm (4.25 x 1.38 x 2.28 in.)
Power supply	16907010	110-230 VAC, 50 Hz/60 Hz
	16907011	18 - 36 VDC, SELV or Class 2
Fuse		Max 10 A
Terminal wire size		Use copper (Cu) wire only. 0.2 - 2.5 mm ² flexible core, stripped length 8 mm.
Terminal tightening torque		0.56 - 0.79 Nm (5 - 7 lbs-in)
Power consumption		< 2 W
Max load output		250 VAC 3 Ampere
Altitude		Max 2000 MASL or 6562 ft. AMSL
Compliance		

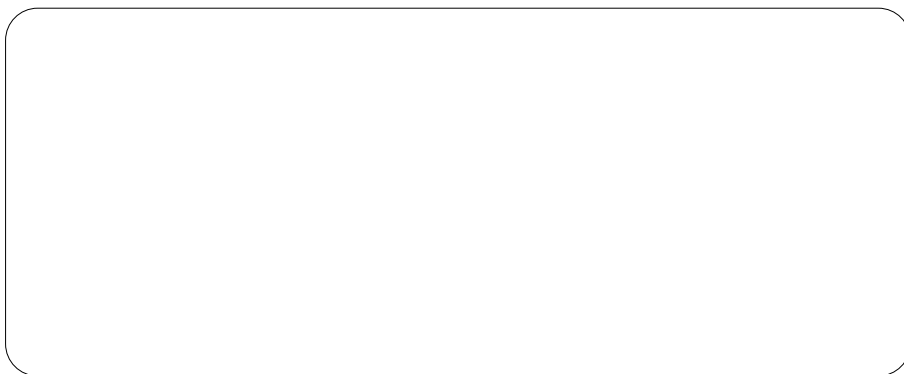
Attention If the unit is used in a manner not described in this document the protection provided by the equipment may be impaired.

2.2 Cleaning

How to clean the unit

Powers off the unit and only outside/front shall be cleaned by using a dry, soft cloth. A good choice would be the microfiber type of cloth. Gently wipe the CA 461 unit front in order not to scratch the overlay. If the dry cloth did not completely remove the dirt, do not press harder in an attempt to scrub it off.

If necessary, moisten the cloth by adding a small amount of water with thin solution of mild detergent and try again. Never use detergent with polish or solvent which can have an impact of the plastic surface.



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