

INT278 LCA[®] Level monitor

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INT278 LCA

Application

The optical level monitor INT278 LCA is employed for contactless single point measurement of fluid levels, e.g. on compressors, pumps, tanks, etc. The solution consists of a screw-in part and an evaluation unit. The screw-in part for optical level monitoring is permanently built-in at the measuring point. The electronic evaluation unit can be mounted or replaced without opening the circuit of the medium to be monitored.

Functional description

Light pulses of the device are refracted in fluids and reflected in gaseous environments. This allows the INT278 LCA to detect the fluid level reliably.

After the compressor starts up and the starting transition time has elapsed, the level monitoring is active.

Time-delayed reaction prevents switching errors that can be caused by temporary fluctuations of the fluid.

If the level is too low or there is an error, the relay drops out locked; restarting only after a reset.

The potential-free, change-over contact can be looped into a safety circuit without an auxiliary relay.

An integrated own monitoring system ensures high reliability; an installation check monitors the proper assembly.

A built-in LED signals the current status (see flash code).

- Level good
- Level missing
- Internal error, voltage supply too low or faulty assembly

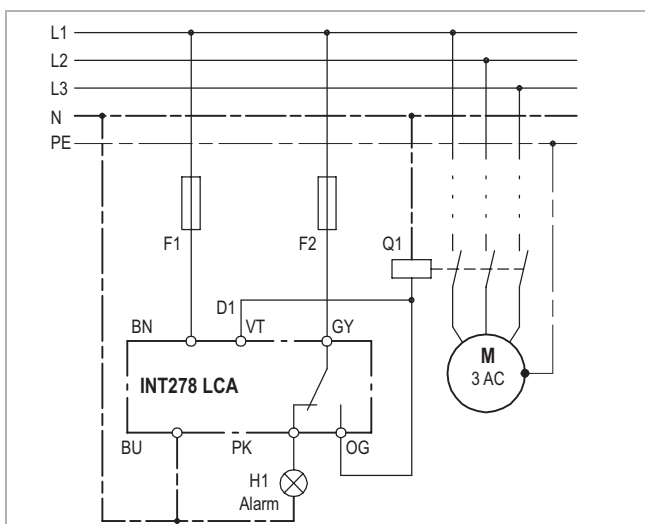
Installation instructions

1. Ensure cleanliness of thread and glass of the screw-in part.
2. Mount evaluation unit into the screw-in part. The cable outlet has to point downwards here.
3. Tighten the coupling ring hand tight.

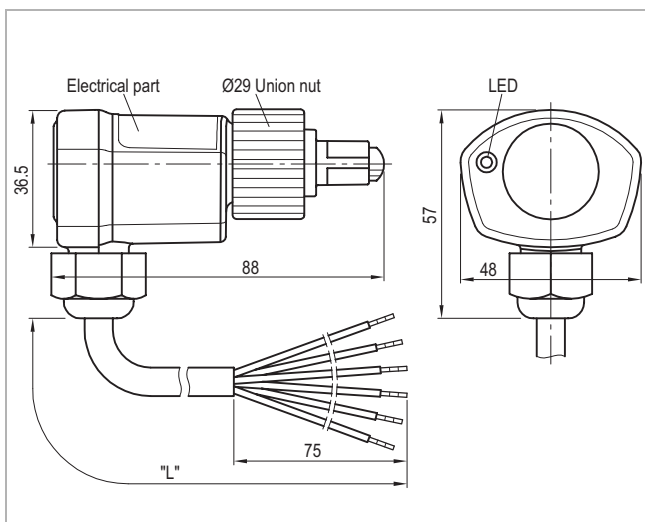


The mounting, maintenance and operation are to be carried out by an electrician. The valid European and national standards for connecting electrical equipment have to be observed.

See back side for further specifications



Wiring diagram



Dimensions in mm

Technical changes reserved



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Technical specifications

Supply voltage	
- 52 S 478 ...	AC 50/60Hz 230V ±10% 3VA
- 41 S 478 S75	AC 50/60Hz 115V ±10% 3VA
Permitted ambient temperature	-30...+60°C
Medium temperature	Max. +100°C
Permitted rel. humidity	10-95% r. h. no condensation
Input, operating recognition motor	L-potential at connection D1
Starting transition	90s ±5s
Switch delay	
- After applying the supply voltage	3s ±1s
- Level missing or fault	5s ±2s locked
Resetting the lock	Main reset >3s
Relay	
- Contact	AC 240V 2.5A C300 at least AC/DC 24V 20mA
- Mechanical service life	Approx. 1 million switching cycles
Protection class acc. to EN 60529	IP54 in mounted condition
Connection type	Cable 6 x AWG 18/7
- ... S 478 S75	L=1m
- 52 S 478 S80	L=3m
Housing material	PA glass-fibre-reinforced
Mounting	Union nut (torque max. 10Nm)
Dimensions	Refer to dimensions in mm
Weight	
- ... S 478 S75	Approx. 160g
- 52 S 478 S80	Approx. 380g
Check base	EN 61000-6-2, EN 61000-6-3 EN 61010-1 Overvoltage category II Pollution level 2
Approval	UL File No. E222056 cURus

Order data

INT278 LCA Level monitor (AC 230V)	52 S 478 S75
INT278 LCA Level monitor (AC 230V)	52 S 478 S80
INT278 LCA Level monitor (AC 115V)	41 S 478 S75
Accessories and application information	see www.kriwan.com

Product group S

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