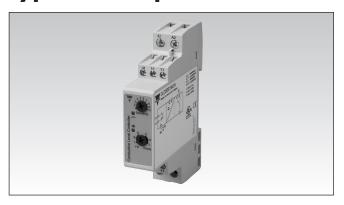
# Conductive Sensors 2-point level controller Type CL with potentiometer





- Conductive level controller
- Sensitivity adjustment from 250  $\Omega$  to 500 K $\Omega$
- · For filling or emptying applications
- Low-voltage AC electrodes
- · Easy installation on DIN rails
- Rated operational voltage: 24 to 240 VAC/DC
- Output 1 x 8 A / 250 VAC SPDT relay
- LED indication for: Output ON and Power ON



# **Product Description**

μ-Processor based level controller for liquids with a wide sensitivity range (like sewage water, chemicals, salt water etc.).

Max./min. control of charging/ discharging. The sensitivity is adjustable by means of the potentiometer. 1 x 8 A SPDT relay output. **Ordering Key** 

CLD2EB1BU24

Conductive level	
DIN rail ————	
No of inputs —	
Charge/discharge ———	
Basic with potentiometer -	
1 relay output —	
Relay SPDT —	
Power supply	

### **Type Selection**

Mounting	Relay	Ordering no. Supply: 24-240 VAC/DO
DIN-rail	SPDT	CLD2EB1BU24

# **Specifications**

Rated operational voltag Pin 2 & 10 Rated insulation voltage Rated impulse withstand voltage	. ,	20 to 265 VAC/DC, 45 to 65 Hz <2.0 kVAC (rms) 4 kV (1.2/50 µs) (line/neutral)
Rated operational power		
230 VAC/DC supply		2 W
24 VAC/DC supply		1 W
Delay on operate (t <sub>v</sub> )		< 2 s
Outputs		
Rated insulation voltage		250 VAC (rms) (cont./elec.)
Relay Rating (AgCdO)		μ (micro gap)
Resistive loads	AC1	8 A / 250 VAC (2500 VA)
	DC1	1 A / 250 VDC (250 W)
		or 10 A / 25 VDC (250 W)
Small induc. Loads	AC15	0,4 A / 250 VAC
	DC13	0,4 A / 30 VDC
Mechanical life (typical)		≥ 30 x 10 <sup>6</sup> operations
		@ 18'000 imp/h
Electrical life (typical)	AC1	> 250'000 operations
Level probe supply		Max. 5 VAC
Level probe current		Max. 2 mA
Sensitivity		250Ω to 500KΩ
		Factory settings standard
		range "S" 100KΩ
Ranges L (Low sensitivity)		250 Ω to 5 KΩ, $C_F^* = 4.7 \text{ nF}$
Ranges S (Standard sensitivity)		5 K $\Omega$ to 100 K $\Omega$ , $C_F^*$ = 2.2 nF
Ranges H (High sensitivit	Ranges H (High sensitivity)	

Dielectric voltage	>2.0 KVAC (rms) (contacts / electronics)
Rated impulse withstand volt.	4 kV (1.2/50 μS) (contacts / electronics) (IEC 664)
Operating frequency (f)	
Relay output	1 Hz
Response time	
OFF-ON (t <sub>on</sub> )	1 s
ON-OFF (t <sub>off</sub> )	1 s
Environment	
Overvoltage category	III (IEC 60664)
Degree of protection	IP 20 (IEC 60529, 60947-1)
Pollution degree	2 (IEC 60664/60664A,
-	60947-1)
Temperature	
Operating	-20° to +50°C (-4° to + 122°F)
Storage	-40° to +85°C (-40° to +185°F)
Housing material	PA66, light grey
Weight	
AC/DC supply	125 g
UL Approvals cULus	UL508
CE marking	Yes

<sup>\*</sup>C<sub>F</sub> = maximum Cable Capacitance



## **Mode of Operation**

#### **Connection cable**

2, 3, or 4 conductor PVC cable, normally screened. Cable length: max. 100 m. The resistance between the cores and the ground must be at least 500k. Normally, it is recommended to use a screened cable between probe and controller, e.g. where the cable is placed in parallel to the load cables (mains). The screen has to be connected to the reference port (Ref) must be connected to Protective Earth (PE).

#### Example 1

The diagram shows the level control connected as max. and min. control. The relays react to the low alternating current created when the

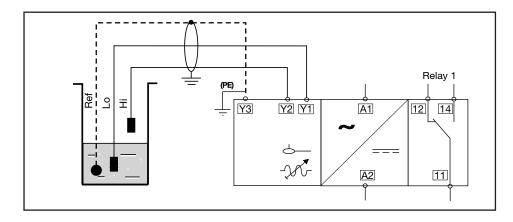
electrodes are in contact with the liquid.

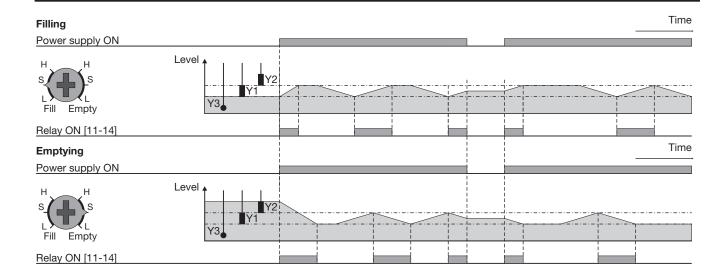
The reference (Ref) must be connected to the container or if the container consists

of a non-conductive material, to an additional electrode. (To be connected to pin Y3). (In the diagram this electrode is shown by the dotted line).

#### NB!

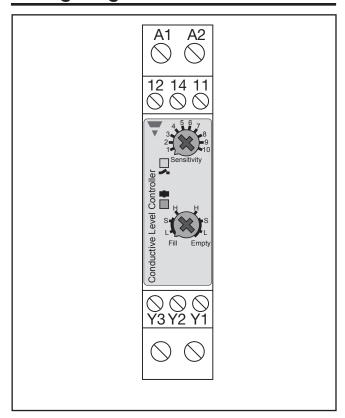
If only one level detection is required - interconnect the two inputs Y1 and Y2.



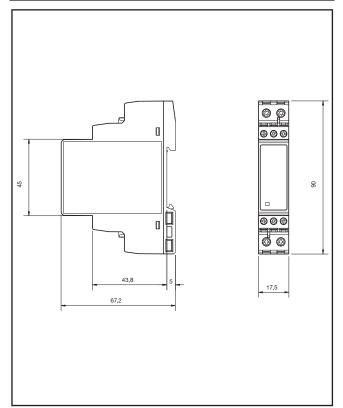




# **Wiring Diagram**



# **Dimension Drawings**



# **Delivery Contents**

- Amplifier
- Packaging: Carton box
- Manual

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Controllers category:

Click to view products by Carlo Gavazzi manufacturer:

Other Similar products are found below:

61FGPN8DAC120 CV500SLK21 70177-1011 F03-03 HAS C F03-31 81550401 FT1A-C12RA-W FT1A-C14SA-B 88981106 H2CAC24A H2CRSAC110B R88A-CRGB003CR-E R88ARR080100S R88A-TK01K DCN1-1 DRT2ID08C DTB4896VRE DTB9696CVE DTB9696LVE E53-AZ01 E53E01 E53E8C E5C4Q40J999FAC120 E5CWLQ1TCAC100240 E5GNQ03PFLKACDC24 B300LKL21 NSCXDC1V3 NSH5-232CW-3M NT20SST122BV1 NV-CN001 OAS-160-N C40PEDRA K31S6 K33-L1B K3MA-F 100-240VAC K3TX-AD31A 89750101 L595020 SRM1-C02 SRS2-1 FT1A-C14SA-S G32X-V2K 26546803 26546805 H7HP-C8D PWRA440A CPM1AETL03CH CV500SLK11 3G2A5B1081 3G2A5IA122