

Conductive Level Sensor

DR52

NR

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- Detection of a Single Level
- Regulation between Two points
- Detecting an interface between two liquids of different conductivities
- Detection threshold variable from 4.7 to 470 kΩ typical
- 1 potential-free changeover contact
- Double insulated device



Functions

See our **NR Manual**: Conductive Level Switches..

A Conductive Detector is associated with a Probe: See Manuals **A11** and **SR01**.

Introduction

A Detector comprises two elements:

- A plastic, plug-in **Electronic Housing** whose front has a Green voltage indicator LED and a Red alarm LED.
- A **DIN base** for mounting on a DIN rail with 11 terminals.

Technical specifications

Power Supply	Standard: 230V AC, +10/-15%, 50/60 Hz Optional: 24, 48 and 110V AC
Consumption	1.5 VA
Working temperature	-20 to +60°C
Electrode voltage	18V rms
Fixed hysteresis	1% of the nominal value
Detection threshold	Variable from 4.7 kΩ to 470 kΩ; typical
Output	One inverter, potential-free, 3A/230Vrms, 500VA, 100W
Terminals	Maxi clamping capacity: 1 x 2.5
Protection class	IP 40
Weights	approx. 160 g

Ordering Information

Item code	Power Supply	N.B.
DR0252CIBE	230V AC	Comes with a DIN socket 214242
DR0252CIBE-110A	110V AC	Comes with a DIN socket 214242
DR0252CIBE-48A	48V AC	Comes with a DIN socket 214242
DR0252CIBE-24A	24V AC	Comes with a DIN socket 214242
214 242	DIN connection base	

Subject to change without notice.

Conductive Level Sensor

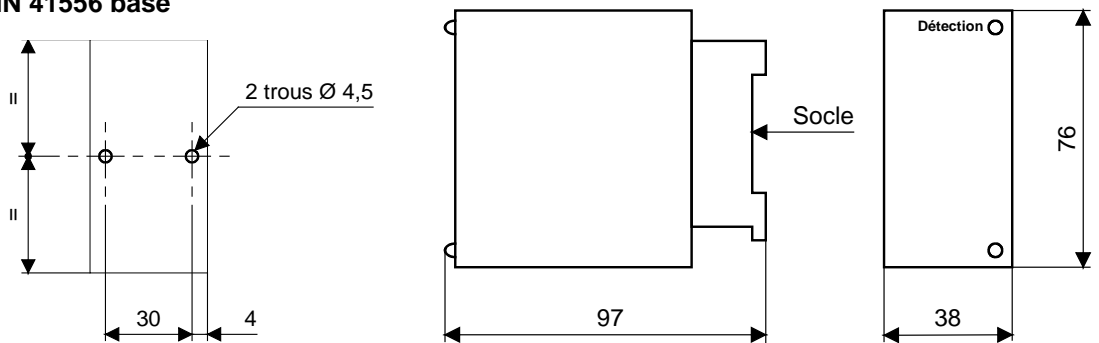
Installation & Dimensions

The Detector Housing plugs into its DIN 41556 base.

This base can be mounted in two ways : wall mounting by 2 M4 screws or DIN 46277 rail mounting.

Wall mounting the DIN 41556 base

The fixing holes are positioned relative to the size of the front face of the housing.



Commissioning & Operation

1. Connect your probe following "Diagram 1.A" or "Diagram 1B", depending on your application,
2. Connect the "Output Contact" following "Diagram 2",
3. Connect the power supply according to "Diagram 2", checking the voltage specific to your device. Once turned on, the "Green LED" must be lit.
4. Test your detection chain as shown in "Diagram 3".
5. If the "RED LED" does not change state, immerse the electrode(s), then rotate the "**Potentiometer sensitivity**" to the right, until the RED LED lights and return to Point 4.

Electrical connection on DIN 41556 base

DIN 41556 BASE	Diagram 1.A	Diagram 1.B	Diagram 2
	Single Level Detection	Regulation between 2	Power Supply & Relays
<p>NOTES: Connect terminal 7, preferably to a reference electrode (ground electrode) or to the wall of the vessel, if it is not insulated. As the device is double insulated, grounding is not required.</p>			

"Sensitivity" potentiometer

Chemical value corresponding to the conductivity of the product relative to the position of the potentiometer with a tolerance of $\pm 20\%$.

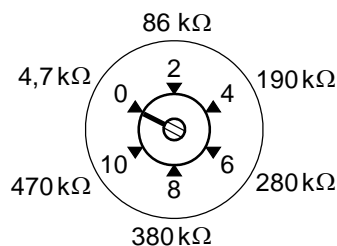


Diagram 3.	DETECTION		REGULATION			
	Low	High	Low	High	Low	High
Red LED status	●	☀	●	●	☀	☀
Status Relay	Energized	De-energized	Energized	Energized	De-energized	De-energized
Contact status						

Remarks
 The device has a system to prevent a hazard when switching on.
 Output voltage corresponding to the conductivity of the product between terminals 8 and 11
 Output voltage between terminals 9 and 11 corresponding to the set value.
 These measurements can be controlled very precisely with a single turn potentiometer.

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