



2-point water level controller DLR1/DHR1

with low alarm (DLR1) or high alarm (DHR1)

Application and function

This is, together with IGEMA conductivity probes, a two-point water level controller plus low-level alarm (DLR1) or high-level alarm (DHR1), to be used in steam boilers or in tanks with conductive liquids.

The product meets EC Directive 2014/658/EU (PED). Applied rules: corresponding DIN EN standards.

Function DLR1/DHR1

The indicator lamp "UB" shows that the power supply is on.

Control function:

- a) Inlet control via 2 electrode rods of different lengths. The feed pump is switched on when both electrode rods emerge. As soon as both electrode rods are immersed, the feed pump is switched off.
- b) Inflow control via an electrode rod and a downstream time relay: The feed pump is switched on for the duration of the time preset on the time relay when the electrode rod is replaced.

Process control: special version as DLR1-A / DHR1-A process control via 2 electrode rods of different lengths. The drain valve opens when both electrode rods are immersed. If both electrode rods are exposed, the valve is closed.

Signalizer:

NW-Signalizer (DLR1) When the electrode rod is immersed, the associated relay is energized, the 'Alarm' contacts are closed and the 'NW' LED goes out.
HW-Signalizer (DHR1) When the electrode rod is immersed, the associated relay is energized, the 'Alarm' contacts are closed and the 'HW' LED goes out. If the electrode rod is immersed, the associated relay is de-energized, the 'Alarm' contacts are opened (closed-circuit principle) and the 'HW' LED lights up.





Standard technical equipment

- DLR1/DHR1 is delivered in a plastic plug-in housing for installation in control panels
- Fixation on standard rail 35 mm according to DIN EN 50022 or directly screwed to chassis plate

Technical data

Power supply	230V ± 10% / 50-60 Hz
Input	ca. 4,5 VA
Fuse	80 mA/T
Protection as per DIN EN 60529	IP40 ¹⁾
Allowable ambient temperature	0 – 60°C

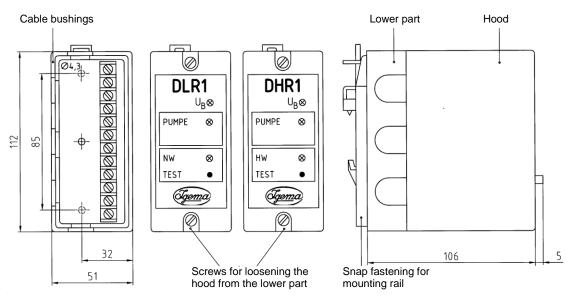
¹⁾ according to DIN EN 12952-11, 4.3.4 a protection of IP54 must be maintained in the boiler area (switching cabinet).

Max. operating data of potential free contacts	
Voltage	max. 250 VAC
Current	max. 5 A ohmsch
Electrical conductivity of the liquid	5 µs/cm ≤ æ ≤ 10.000 µS/cm
	0,5 μs/cm ≤ æ ≤ 2.000 μS/cm
Length of connection line	max. 100 m at 5 – 10.000 µS/cm
	max. 30 m at 0,5 – 2.000 μS/cm

Lower part with connection terminals

Front views

```
Side view
```



Digital Documentation

