

- › FNLS
- › Monitoring Relays
- › Level Monitoring Relays
- › DIN Rail Mount 45 mm

- › Automatic control and regulation of liquid levels.
- › 2 sensitivity ranges.
- › Filling or emptying function selected via dip switch.
- › High or low alarm selected via dip switch.
- › Memory can be selected.
- › LEDs indicate state of power supply, output relay and alarm relay.



Specifications	
Voltages	Code
230 VAC	84870803

Power supply characteristics	
Supply voltage Un	230, 120, 48 and 24 V AC 50/60 Hz galvanic isolation via transformer
Operating range	0.85 to 1.15 Un except 120 V AC : 0.85 to 1.1 Un
Nominal power	3 VA at Un
Maximal power	4 VA at Un + 15%
Immunity from micro power cuts	10 ms
Delay on pick-up	T1 = approx. 2 s
Response time on power up	T4 = 500 ms
Insulation coordination	Category III, degree of pollution 2 conforming to IEC/EN 60664-1 : 4 kV/2

Control technical characteristics	
Sensitivity range FN	5 kOhm(s) →100 kOhm(s)
Sensitivity range FHLS	250 Ohm(s) →5 kOhm(s)
Display precision	± 30 % with maximum sensitivity
Electrode voltage	15 V AC (50/60 Hz)
Electrode current	1 mA
Response time on immersion	T2 = 400 ms
Response time on emersion	T3 = 700 ms

Output characteristics	
Output	2 AgCdO changeover
Breaking capacity	FN LS : 2000 VA FN : 80 W
Maximum breaking current	FN LS : 8 AAC FN : 8 ADC
Minimum breaking current	FN LS : 100 mA AC FN : 100 mA DC

Output characteristics	
Max. breaking voltage	FN LS : 250 V AC FN : 250 V DC
Mechanical life (operations)	2×10^6
Electrical life AC 12	2000 VA - 10^5 operations
Electrical life AC 15	$\cos \varphi = 0,3$ - 6000 operations
Electrical life AC 13	L/R = 300 ms - 6000 operations

General characteristics	
Housing material	Self-extinguishing
Terminal capacity	2 x 1,5 mm ² with ferrule 2 x 2,5 mm ² without ferrule
Temperature limit operation (IEC 68.1.14) (°C)	-20 → +60
Temperature limits stored (IEC 68.1.1/2) (°C)	-30 → +70
Relative humidity (no condensation)	93 % (+2% ; -3%)
Weight (g)	280

Dimensions	
FN / FN LS	

Curves	

Connections	
Regulating with "up" filling control	