What is it?

A Relay (Level/Leakage) is used to sense leakage and to monitor liquid level.

What does it do?

The Relay can be used in different applications. It may be applied in conjunction with a leakage probe as well as a level sensor. NR 430-type Relays have a hysteresis behavior which allows you to control two switch points (e.g. tank full-empty) in connection with a 3-rod electrode.

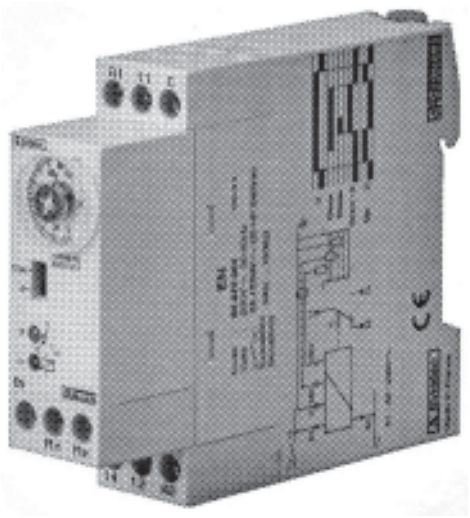
With 2-rod electrodes, one filling level can be monitored. For this purpose, the Relay applies a physically separated AC voltage to two outputs (e.g. 20 VAC).

How does it work?

If the Relay is controlled by rod electrodes, the conductivity of the liquid must be at least 10 *u*S. For well-conducting liquids, the Relay should be less sensitive; otherwise malfunctions may occur if the atmosphere around the rod electrodes is humid. Maximum sensitivity is to be chosen for poorly conducting liquids.

Why do you need it?

There is a minimum-maximum level control with 3-rod electrodes. The output Relay pulls up if a nominal voltage is applied to terminals A1 or A2 and if the electrode is not wetted. If the liquid level reaches the upper electrode (connection "O"), the Relay drops, if the liquid level falls below the lower electrode (connection "U"), the Relay pulls up again.



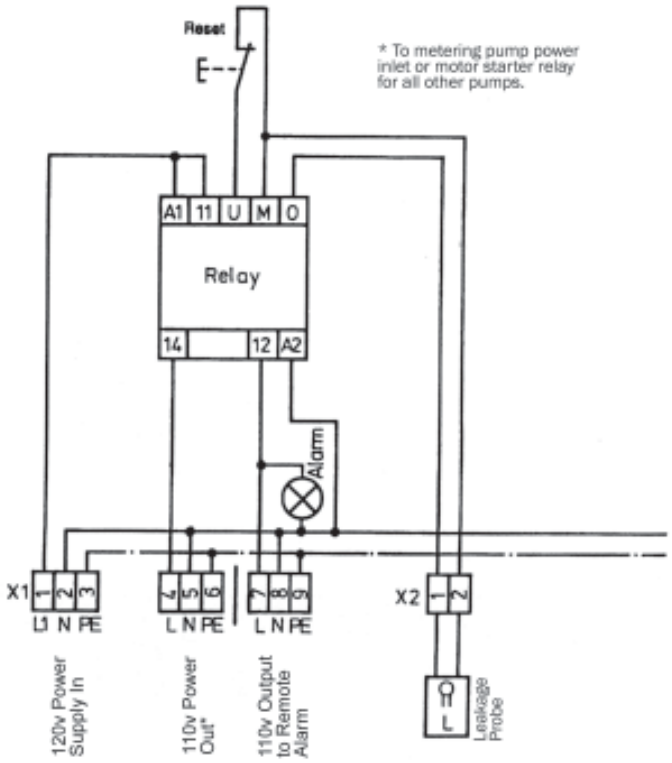
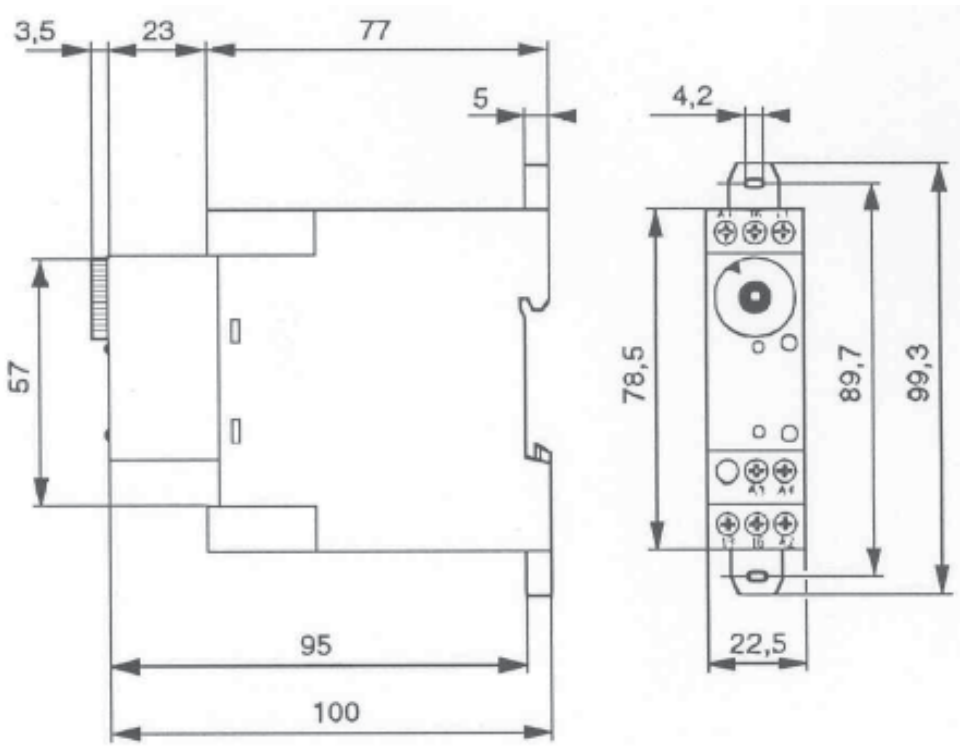


Figure 4: Typical Leak Detector Wiring Diagram

Wiring Diagram

U - lower electrode
O - upper electrode
M - reference electrode (ground)



Depth with adapter plate +1.5mm

Technical Data

Dimensions
78.5 x 22.5 x 100 mm
Quick fastening for 35 mm standard bearing rails acc. to DIN EN 50022
Connection marking acc. to DIN EN 50005
Dimensioning of the striking and creeping distance according to VDE 0110 Gr. C.

Output Relay	
Unblocking potential	120 VAC, 60 Hz
Contact rating	1.1 KVA
Thermal nominal current	10 A
Switching frequency	maximum 7200/hour
Mechanical life	20x106 switches
Short-circuit strength	10 A fuse, cl. gl

General	
Internal consumption	4 VA
Connecting voltage	120 VAC, 50/60 Hz
Sensitivity of response	settable <5 to <100 kOhm
Operating range	14° to 131°F/-10 to +55°C
Part number	44300072