Relay Module

Relay with potential-free change-over contact for mounting in the LIQUIPHANT FTL and SOLIPHANT FTM when using an AC power supply.

Technical Information

Application

The LIQUIPHANT FTL and SOLIPHANT FTM are 2-wire electronic switches connected in series with an external load, usually in the form of a relay or contactor.

While the switch is in the "off" mode, a quiescent current still flows in the series circuit in order to supply the electronics. In the "on" mode, the switch will draw a current which is greater than the minimum quiescent current which energises the relay.

The addition of the relay module to the standard insert EL 11 or EM 11 converts the switch to give a potential-free change-over relay output.

The relay module can be used with the LIQUIPHANT FTL ... in connection with the electronic insert EL 11 or used with the SOLIPHANT FTM 930 or FTM 931 in connection with the electronic insert EM 11.

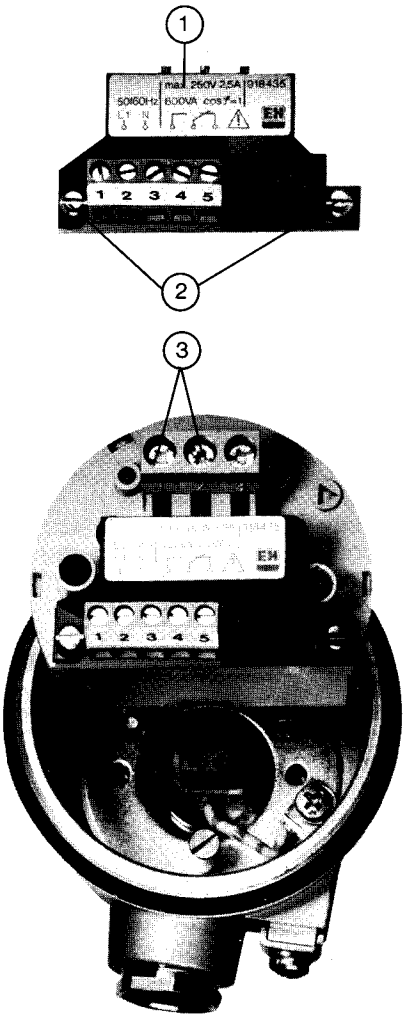


Fig. 1 ▷
The small relay module is mounted on the EL 11 or EM 11 electronic insert and both are installed in the housing.
① sticker on relay module indicating power supply
② self-tapping screws
③ electronic insert Terminals 1 and 2

Installation

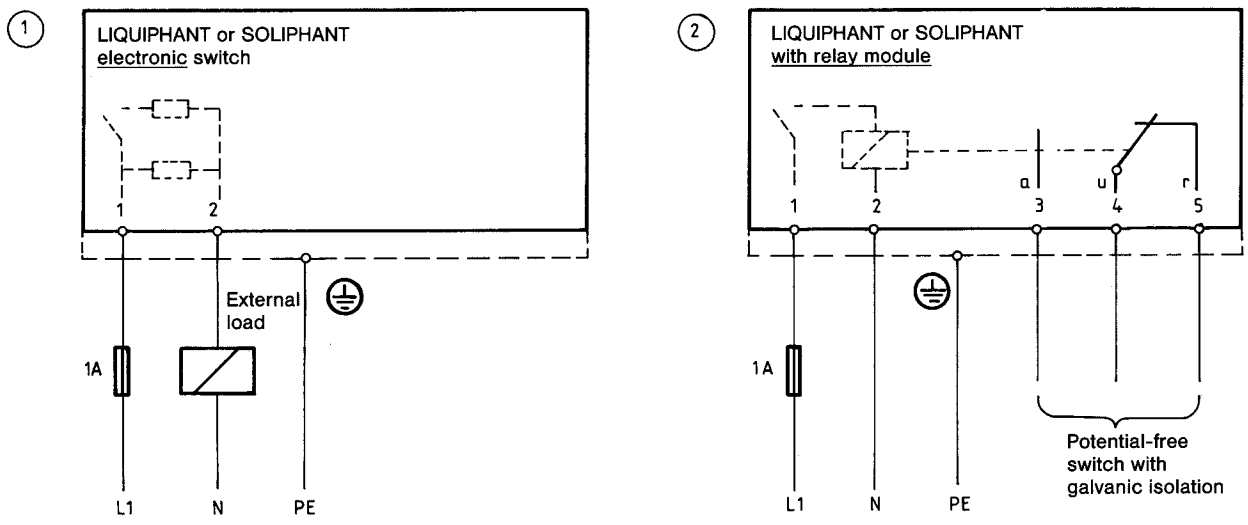
The relay module is mounted onto the EL 11 or EM 11 electronic insert in the following way:

1. Loosen the terminal screws 1 and 2 on the electronic insert.
2. Plug in the relay module and secure tightly with the two self-tapping screws.
3. Tighten terminal screws 1 and 2 on the electronic insert.

Electrical Connection

See Fig. 2.
The power supply and the level switch are connected to the terminal strip of the relay module. The ground is connected to the ground terminal situated in the aluminium housing of the level limit switch.

Fig. 2 ▽
① The LIQUIPHANT or SOLIPHANT used without the relay module are electronic switches connected in series to a load.
② The integrated relay module has a potential-free change-over contact.



Technical Data

Housing: synthetic, potted electronics

Protection conforming to DIN 40050:
IP 00; installed IP 55

Weight: 0.03 kg

Terminal connections: max. 1.5 mm^2

Power supply: AC
220 V, +15%, –10%, 50/60 Hz

Variations: 110 V, +15%, –10%,
50/60 Hz 100 V, +15%, –10%,
50/60 Hz

Contact load: U~max. 250 V,
I~max. 2.5 A, P~max. 600 VA,
cos φ = 1
U=max. 100V, I=max. 2.5 A,
P=max. 90 W

Permissible ambient temperatures:
see Fig. 3.

Subject to modification

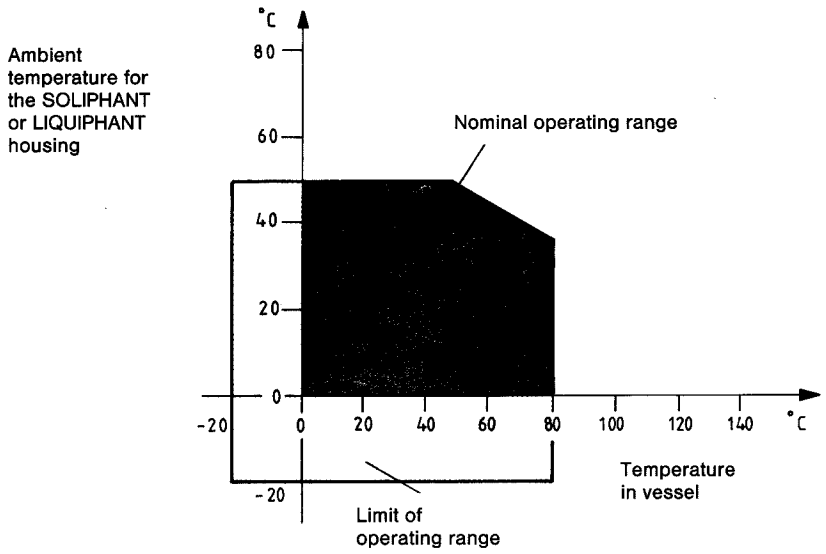


Fig. 3 △
Permissible operating temperatures for the SOLIPHANT or LIQUIPHANT level limit switch with integrated relay module.

Notes

Labelling
Information about the power supply and contact load capacity for the relay module is found on the sticker on the relay module in the housing (not on the nameplate of the FTL or FTM on the outside of the housing).

Power supply
Check that the power supply available and the information on the sticker of the relay module are identical.

Connection
To avoid the danger of live wires touching, the cores of the connecting cable must only be bared to max. 7 mm. Cable sleeves for the strands must only be max. 7 mm in length.