INSTALLATION, OPERATION AND MAINTENANCE GUIDE

PROTECTIVE RELAY CPR3 FOR RUBBER BAG CONSERVATOR

STORAGE AND SHELF LIFE

Handle with care. Max storage period before putting the instrument into operation is 5 years (temperature -20 +50 °C – air humidity 50-75 %) as long as the instrument is kept in its envelope and in a clean place. Before use, visual check that no damages happened to any parts.

UNPACKING

Unpack the CPR3 from its carton box, pull it out from the plastic bag and remove the plastic plug under bottom flange. Before use visual check that no damages happened to any parts. Make a correct disposal of packaging according local regulations.

MOUNTING POSITION

According to your arrangements the protective relay CPR3 can be mounted top of conservator top of conservator (see alternative 1 in mounting sketch in dwg.3678) or top of a piping coming off conservator from front wall (see alternative 2 mounting sketch in dwg.3678) using 4 screws, washers and nuts M10. Sealing is obtained using a flat gasket made in NBR (standard material).

SETTING TO WORK

Before setting to work fill up the relay with insulation oil making sure that air inside the body has been released through gas release cock pos.2. To do this operation cover the top cock with a cloth (to avoid oil spraying) open the cock pos.2 acting the side handle and wait until oil leaks off. After the oil spurges off the cock close the handle. Make wiring according to provided wiring diagram and take out the wires through cable entry according your arrangements. Electrical circuit can now be manually tested by pressing down the push button pos.3.

TESTING OF CONTACT

The relay is provided with a self resetting push-button for checking the continuity of the electrical circuits. The procedure for testing is very simple: unscrew the knurled cap pos.3 (see drawing) which protect the push-button and press it slowly in order to activate the alarm contact and after the trip contact. When the push-button end his stroke, release it slowly, in order to switch off the alarm contact. During testing it is possible to observe the movement of the float through the inspection window.

Test of alarm contact at ground level

When at site, without needing to climb up top of conservator, you can test the contact function inflating gas through a piping connected to gas release cock pos.2. Arrange for a copper tube coming down from gas cock to ground level where a cock / ball-valve shall be fitted as shown in the sketches in the following page.
Arrangements to take the tube to ground level
Testing steps (view also the manual of testing kit for correctly setting up the device):

1. Connect the testing device to cock / ball-valve located at ground level
2. Open the cock / ball-valve
3. Open clock-wise the grey handle to release the gas into the tubing and await until the alarm contact operates
4. Close the cock / ball-valve and remove the testing device
5. **IMPORTANT:** At the end of the test release the gas inside the CPR3 to reset the contact. To do this operation cover the cock / ball-valve at ground with a cloth (to avoid oil spraying) open it acting the side handle awaiting until oil leaks off. After the oil spurges off the cock / ball-valve close the handle.

**MAINTENANCE**

The protective relay CPR3 does not need periodic maintenance; however it is suggested to check on a regular basis the contact operation and the free movement of float; this test can be easily made by pushing down the test button pos.3.

**DISPOSAL**

Disposal of all parts shall be made according to local environmental and waste management regulations.

." attachment drawing no.3678
RELAY OPERATES WITH GAS DISPLACEMENT 400±50 cc

ACCESSORIES UPON CUSTOMER REQUEST

WIRING DIAGRAM

MOUNTING SKETCH

- 10 Earthing screw
- 9 Cover
- 8 Mounting flange
- 7 Plug M25x1.5
- 6 Trip terminals
- 5 Cable entry M25-M20
- 4 Terminal box
- 3 Push button for checking electric circuits
- 2 Gas release cock
- 1 Inspection window
- 0 Body

Pos. Description

Alternative 1

TO BREATHER

Inclined Face Gauge type IFG-FK2
(See catalogue of oil gauge)

Alternative 2

TO BUCHHOLZ RELAY

Data 08/08/12
Scala 1:1
Dis. Nr 3678
Dis. 1 2

Protective relay CPR3 for rubber bag conservator