MOUNTING INSTRUCTIONS FOR PRESSURE RELIEF DEVICE
MODEL VP & VP150 QT

GENERAL INFORMATION:

When it is required to limit the pressure rise inside a tank, in order to prevent an excessive mechanical stress of the walls, it is necessary to use a safety valve set at a precise overpressure value. The tank of oil-immersed transformers is usually fitted with this kind of protecting device; as matter of fact, in case of short-circuit due to an insulation failure, the dielectric arc between alive parts vaporizes the surrounding insulating fluid which generates a quick rise of the pressure inside the tank, with the risk of permanent deformations, or, even, of the failure of the tank walls with the consequent flow-out of hot oil. Due to the rapidity of this event, it is necessary to mount on the transformer an adequate protecting device which relieves quite suddenly the excess of pressure generated inside the tank by the above mentioned failure. Our Pressure Relief Devices “VP” have this protective function.

The pressure relief valve model VP150 QT have been specially designed for use on transformers in which is not admitted any external pollution due to oil released during its operation (i.e. transformers installed on trains or ships).

The flanged oil-tight cover retains the oil released by the valve when opening and allow the oil flow out only through a draining duct. A draining screw allows to remove the oil inside the flanged cover before maintenance operations.

STORAGE AND SHELF LIFE:

Max storage period before putting the valve into service is 5 years (temperature -20 +40 °C – air humidity 75 %) as long as the valve is kept in a clean place. Before use visual check that no damages happened to any parts.

INSTALLATION:

- Unpack
- Remove the protection (VP) or oil tight cover (VP150 QT) by unscrewing the hexagonal screws with a common spanner
- Fit PRD on the mounting pad with supplied bottom o-ring and then with suitable fasteners from your end.
  
  *Note: if the valve is assembled on side wall or in a slightly inclined position make sure to orient the valve with draining screw on the higher side.*
- Connect the electric switches according to wiring diagram.
- Re-assemble the protection or cover on the valve.
- Check switches operation manually. Pull the switches operating lever (VP model). Pull out the red pin top of valve (VP150 QT).
After oil filling of transformer it is necessary to vent air trapped under the shutter as follows:

Unscrew draining screw, with a slotted screwdriver, for a few turns until you hear air escaping or oil flowing out. When oil flows out screw in again to obtain the seal.

Re-assemble the protection or cover on the valve.

Thus PRD is ready for service

**MAINTENANCE:**

No particular maintenance is required for these PRDs. It is suggested only, on a regular basis, to schedule inspections to verify conditions of valve, wirings and check operation of switch –for testing the switch see installation paragraph.

**DISPOSAL:**

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