INSTALLATION, OPERATION AND MAINTENANCE GUIDE

AIR BREATHERS VE SERIES

STORAGE AND SHELF LIFE
Handle with care. Max storage period before putting the instrument into service is 5 years (temperature -20 +40 °C – air humidity 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 breather from its box, pull out from the plastic bag and remove the plastic plug that close the flange hole (pos A). Make a correct disposal of packaging according local regulation.

MOUNTING POSITION
The breather is mounted on the end of the connecting pipe coming from top of conservator.
For models VE 50 to 150 assemble 1 ½” flange adaptor between breather flange and pipe as per mounting sketch. For models with thread connection then sealing taper (Teflon taper) has to be mounted on end of pipe and the breather can be screwed on pipe.

SETTING TO WORK
Once the breather is mounted on pipe following operation have to be executed:

a) Fill the breather with a charge of silicagel
   To do this operate following steps
   - Unscrew the wing nuts (C) that connect upper flange to breather
   - Pour in the charge of silicagel
   - Reassemble the breather by means the wing nut (C)

b) Activate the oil guard
   To do so operate following steps
   - Unscrew the knurled ferrule (D) that hold protection of oil guard on bottom flange, and remove together with oil cup
   - Remove the plastic plug (B) that closes the fishing out cylinder
   - Fill with mineral oil the oil cup till half inspection window (10)
   - Reassemble the oil cup protection.

The breather is now ready to work.

MAINTENANCE
During transformer maintenance is a good practice to check condition of breather.
First of all clean outside surfaces and perform following visual tests:

- Integrity of breather
  Breather should not have visible external damages, if not check integrity of gel container (3) usually oil guard has no damages because is heavily protected.

- Saturation of silicagel
  Check colour of silicagel through inspection windows: if colour is changed from orange to white (or from deep blue to pink) you have change the silicagel, to do so read following paragraph

- Level of oil inside oil guard
  Check level of oil inside oil guard through inspection window.
  Level should reach approx half of inspection window if not refill it (see paragraph below)

CHANGE CHARGE OF SILICAGEL
If charge of silicagel have to be changed operate in this way:

- Remove the oil guard protection together with oil cup by unscrewing the knurled ferrule (D) that hold protection of oil guard on bottom flange
- Unscrew the wing nuts (C) that connect upper flange to breather
- Remove the exhaust silicagel by overturn the silicagel
- Pour in the fresh charge of silicagel
- Reassemble the breather by means the wing nut (C)
- Reassemble the oil guard protection (before check presence of mineral oil inside the oil cup).

Exhausted silicagel can be regenerated or disposed; in this case operate according local rules.

REFILL OF OIL INSIDE OIL GUARD
If there is not enough oil inside oil cup operate in this way:

- Remove the oil guard protection together with oil cup by unscrewing the knurled ferrule (D) that hold protection of oil guard on bottom flange
- Fill with mineral oil the oil cup till half inspection window (10)
- Reassemble the oil cup protection on breather.
Tap connection

Threaded tube

1½ Flange Adaptor

To Conservator

Flange connection

To Conservator

Drawing shows Breather VE100 model

Livello olio Oil level

Coperchio Top cap
Protezione acciaio Inox Stainless steel Housing
Contenitore trasparente di sali Gel container (transparent)
Pescante Fishing out cylinder
Coppa olio (trasparente) Oil cup (transparent)
Coperchio inferiore Bottom cap
Targettta d'Identificazione Data plate
Spia olio Oil window
Pressa d'aria Air intake
Flangia compressa Flange (VE100/150)

Titolo Breather mounting sketch

Data 14/12/10
Scala 1:5
Dis. Nr 3339
Visto 1