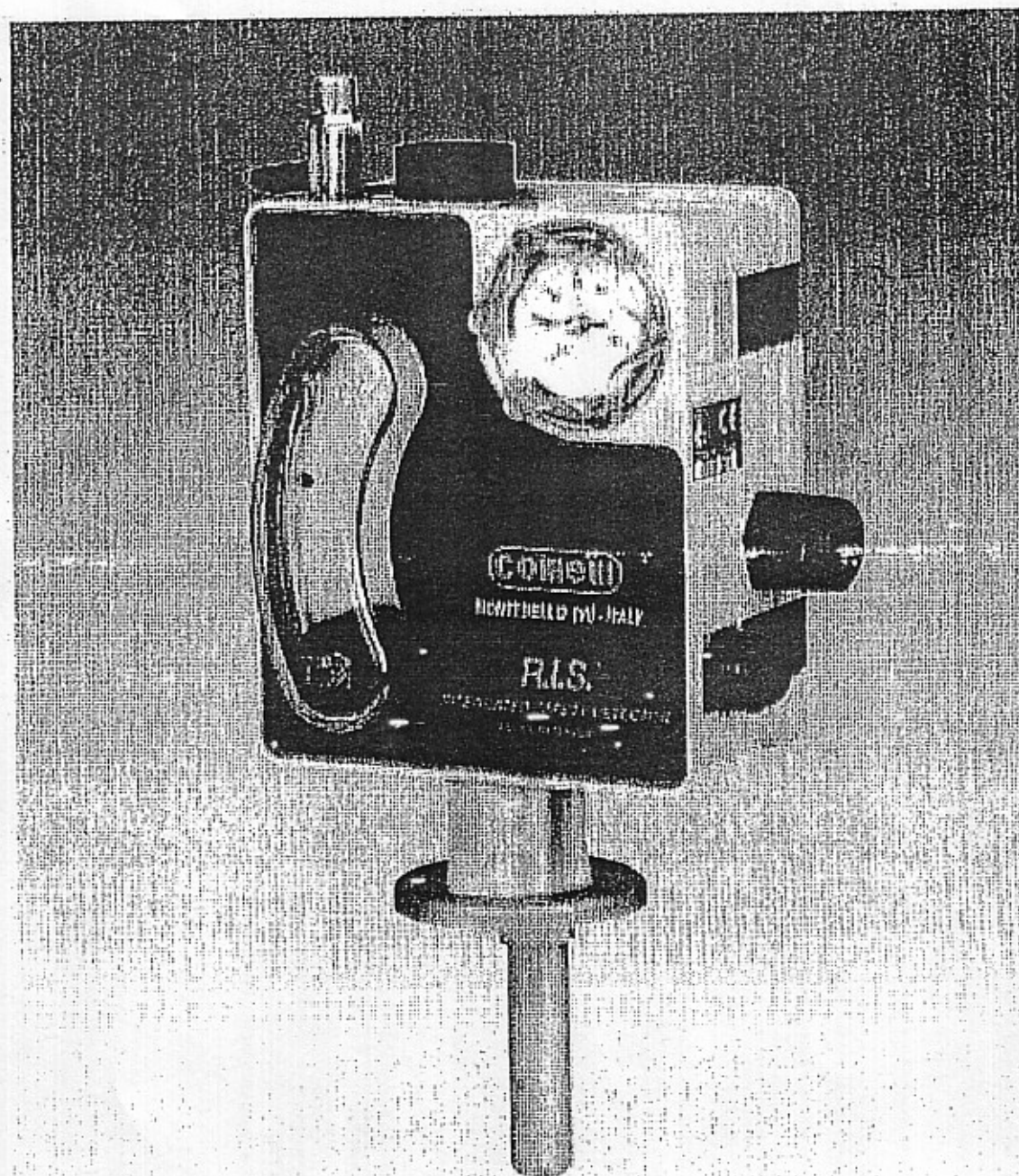


R.I.S.® INTEGRATED SAFETY DETECTOR

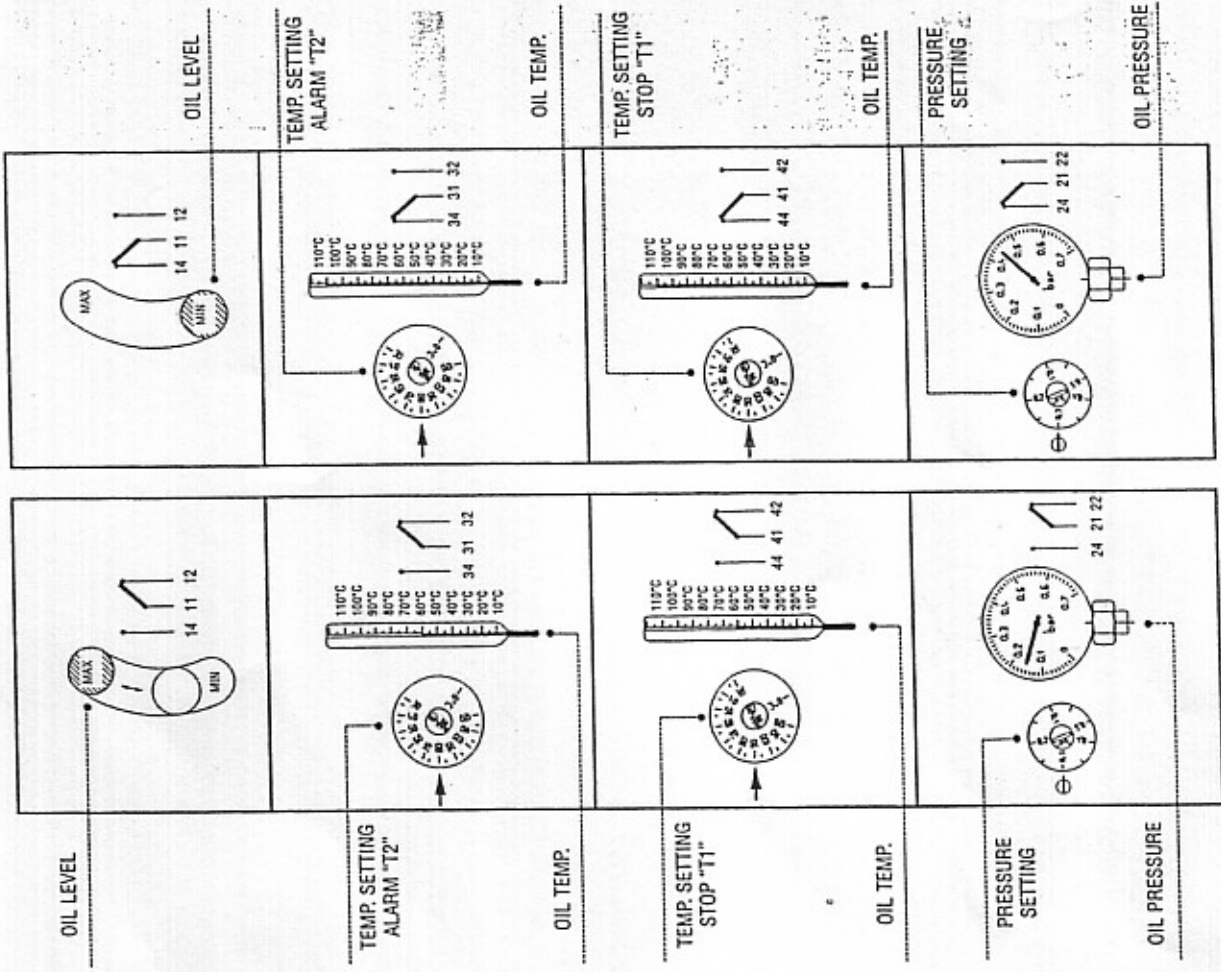
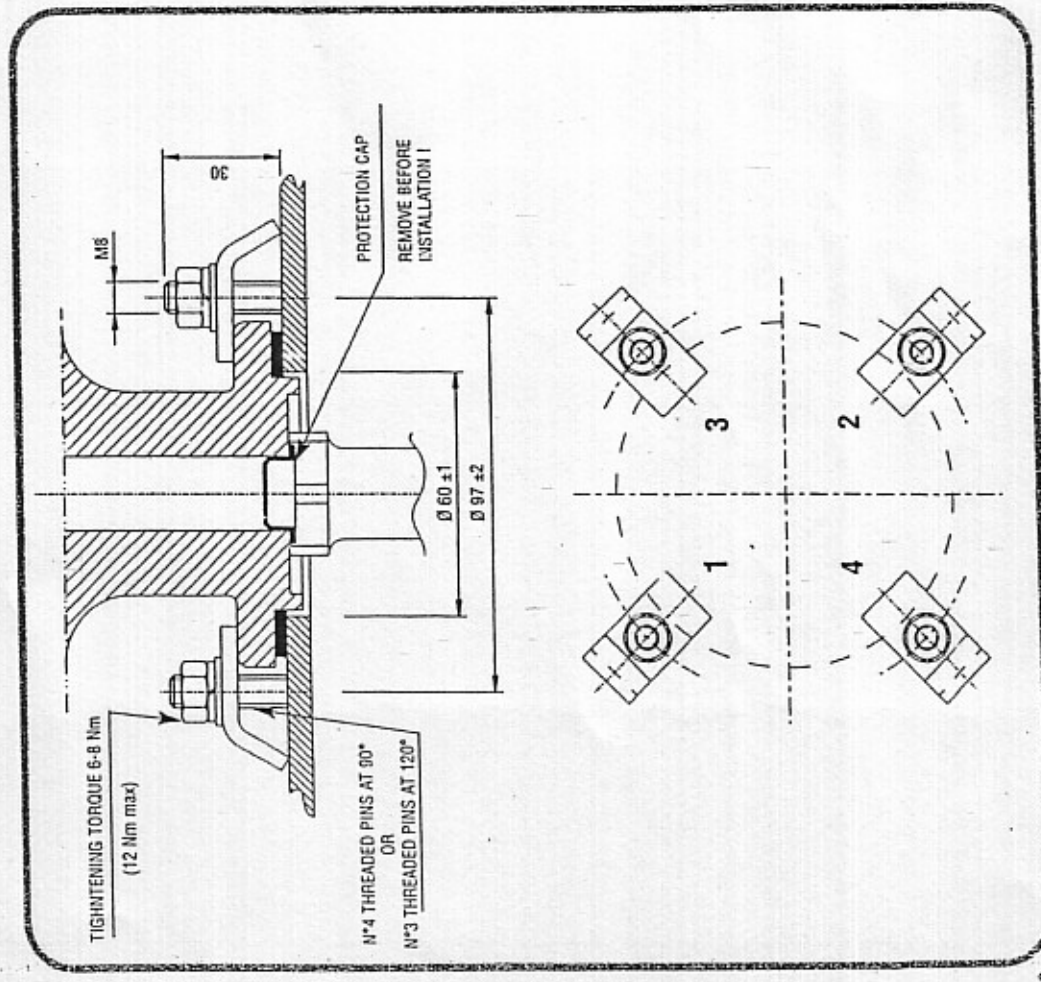


MODEL PATENDED

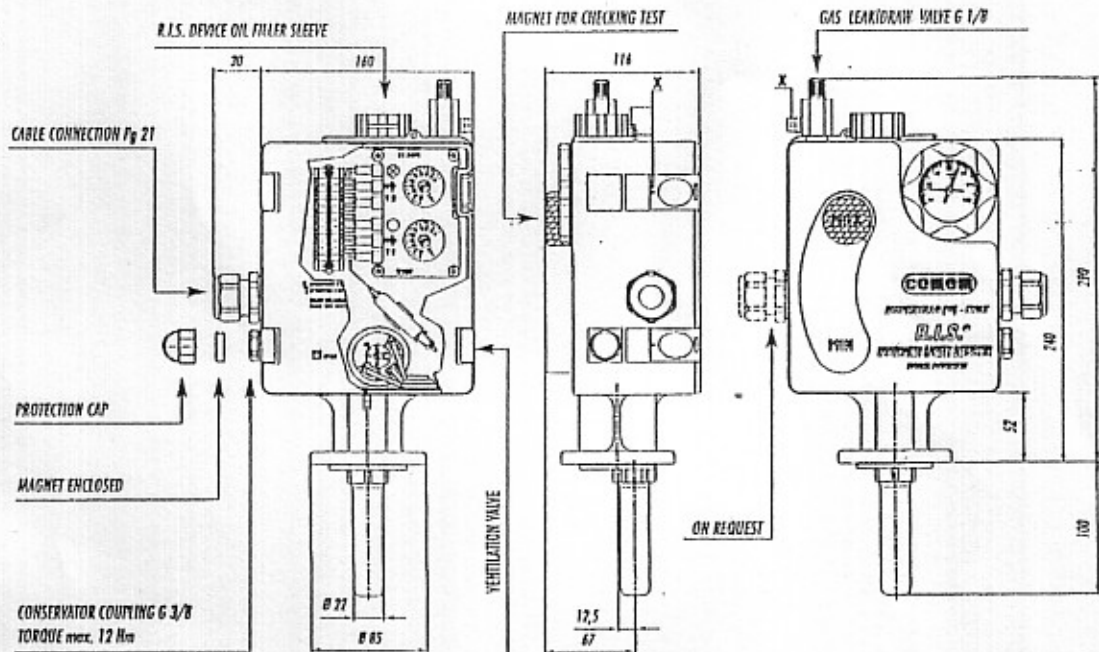
APPLICATION TO A TRANSFORMER TANK

- 60 ± 1 diam. hole on caisson
- Flat gasket (provided with the unit)
- stainless steel fixing brackets (4 pcs packed)
- stainless steel plane washers according to UNI 6592 Ø 8,4 (4 pcs packed)
- stainless steel spring washers according to UNI 1751 Ø 8,4 (4 pcs packed)
- stainless steel nuts according to UNI 5588 (4 pcs packed)

Tighten the nuts in position 1, 2, 3, 4 with torque 3-4 Nm crosswise; repeat the operation following the same sequence until the suggested value is reached.
 Due to the deformation of the cover during lifting of the transformer, an oil leak could be possible. It is suggested to use covers of suitable thickness (min. 6-8 mm).

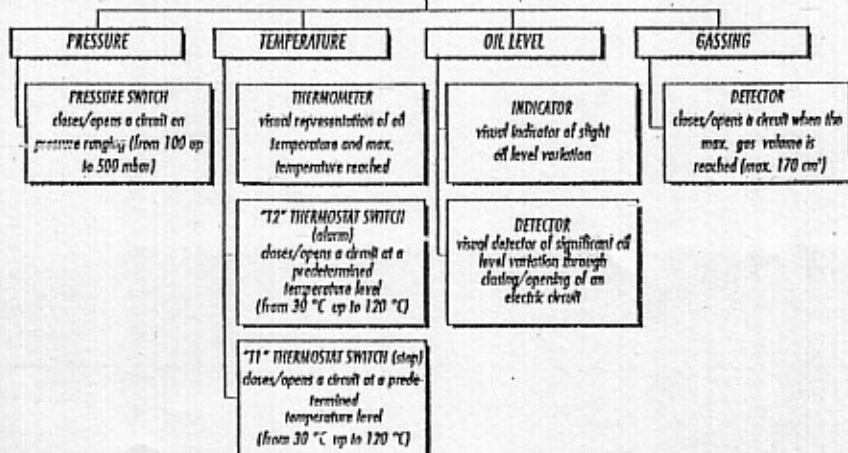


R.I.S.* (Integrated Safety Detector) was conceived from the need to integrate the functions performed by a number of transformer accessories in a single, compact and reliable instrument, which was capable of replacing their applications, as well as guaranteeing numerous advantages ranging from an economic to functional-aesthetic viewpoint.



It is composed of a robust plastic body, watertight and resistant to extreme climates, that houses a series of instruments and keeps under constant control the following operating conditions of the transformer:

R.I.S.® INTEGRATED SAFETY DETECTOR



DESCRIPTION AND FUNCTIONS	MEASURE VALUE	CHECKING TEST
<p>OIL LEVEL (float) The device indicates any gas evolution or oil level variation. Slight oil level variation or any insignificant gas evolution is denoted by the float position between "MIN" & "MAX" on the display. At major oil variation level or gas evolution the float stops at "MIN" and opens/closes the alarm circuit. Any accumulated gas can be drawn off by the cock provided.</p>	max 170 cm ³	Locate the magnet close to the float (between MAX and MIN). Drawn it downwards until it reaches "MIN". To reset the float to its correct position draw the magnet upwards and detach.
<p>PRESSURE (Pressure switch) This feature measures the internal pressure of transformer. The normal level is set according to the transformer manufacturer's instructions. When pressure exceeds a pre set level the alarm circuit is triggered via a N/O or N/C switch.</p>	100 ± 500 mbar	With the internal pressure at least 100 mbar set the adjusting knob of the pressure switch to minimum.
<p>TEMPERATURE:</p> <p>"T2" THERMOSTAT SWITCH (ALARM) The feature measures the internal oil temperature of the transformers. The normal operating value is set according to the transformer manufacturer's instructions. At a pre set temperature on alarm circuit is triggered via a N/O or N/C switch (T2).</p> <p>"T1" THERMOSTAT SWITCH (STOP) The feature measures the internal oil temperature of the transformers. The normal operating value is set according to the transformer manufacturer's instructions. At a pre set temperature on stop circuit is triggered via a N/O or N/C switch (T1).</p> <p>THERMOMETER The device measures the internal temperature of the transformer, which shall be visualized outside the device through the protection window. The thermometer is equipped with a zero re-setting pointer.</p>	<p>30 ± 120 °C</p> <p>30 ± 120 °C</p> <p>30 ± 160 °C</p>	<p>Upon the rear cover using both hands, do not lever at one side only. The adjustment knob of the alarm switch "T2" should be set to zero.</p> <p>The adjustment knob of the stop switch "T1" should be set to zero.</p> <p>The protection window is to be unscrewed so that the pointer shall be set to zero.</p>

GENERAL FEATURES

DEGREE OF PROTECTION (EN 60529)
DEGREE OF SHOCK TIGHTNESS (EN 60068)
SALT-FOG TIGHT
X-RAY RESISTANCE (UNI-ISO 4692 / UNI-ISO 4582)
TEMPERATURE RESISTANCE
CABLE CONNECTION (WIRE Ø 13 mm UNTILL Ø 16 mm)
CABLE BOX (EN 50005 / EN 60947-7-1 / IEC 947-7-1)
WIRE SECTION TO BE USED ON CLAMP BOX
MAX. RATED PRESSURE
ELECTRICAL CHARACTERISTICS

IP 66
IK 07
1000 h
500 h
-40 °C + +120 °C
Pg 21
ACCORDING TO STANDARD
UNTILL 2,5 mm²
500 mbar
INSULATED ENCLOSURE

CURRENT Circuit Type	A.C.						D.C.					
	OHMIC			INDUCTIVE (cos φ 0,5)			OHMIC			INDUCTIVE (L/R 40 ms)		
	20	22	24	21	22	24	20	22	24	20	22	24
Contacts interruption power OIL LEVEL / GAS BLEED	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A
Contacts interruption power PRESSURE SWITCH	6A	6A	6A	1,5A	1,5A	1,5A	0,6A	0,6A	0,6A	0,6A	0,6A	0,6A
Contacts interruption power THERMOSTAT	16A	16A	16A	4A	4A	4A	0,6A	0,6A	0,6A	0,6A	0,6A	0,6A

WIRING DIAGRAM BY EN 50005 STANDARD

