

# CONSERVATOR PROTECTION RELAY / GAS RELAY

## For Hermetically Sealed Transformers



## FEATURES

- Sizes 75mm standard PCD according to IEC 60076-22-1:2019 standards.
- Aluminium alloy housing with unique internal design of housing prevents false air traps on top of the relay.
- Well-designed internal layout gives clear view of colour of gas inside the relay through glass window for fault analysis.
- Solid float type design with inherent ability to withstand vacuum treatment of transformers.
- Built-in test facility for checking continuity of contacts.
- Magnetic switch design gives high stability against mechanical shocks and vibrations.
- Switching option of up to 2 switches, normally open (SPST) or change over (SPDT) type.
- One of the largest manufacturers of Buchholz Relays in the world with more than 50 years of experience.
- Optional C5M & extreme weather and environment options.
- Variable gas volume options.
- Ball valve on top for gas collection & analysis. Compatible with Viat Gas Collection device.
- CE marked.

# VIAT

## INSTRUMENTS

VI-C08B(R1)

A House of  
Transformer  
Accessories

## 1. DESCRIPTION

A Gas Relay known by a few names including Aircell Leakage Detector or Conservator Protection relay can be used in both distribution and power transformers. This device provides an accurate signal to the accumulation of gas in the tank. It also has a provision to collect this gas for analysis. This helps identify faults accurately. It also helps ensure the Conservator bag is leak proof.

## 2. WORKING PRINCIPLE

**Gas Relay :** During normal operation of a transformer the relay is filled with oil. Due to buoyancy, the floats are in their highest position. In the event of some fault in the interior of the transformer tank, gas bubbles are produced which automatically accumulate in the relay mounted on top of the tank cover. In consequence, the oil level in the relay enclosure drops which in turn lowers the float. This causes a magnetic switch to operate.

**Conservator Protection Relay :** CPRs are mounted on top of the conservator with air bags. Any leakage of air from the pressurised air bag thus gets collected in the relay, which in turn actuates the switch at predetermined level.

## 3. CONSTRUCTION FEATURE, FINISH & ACCESSORIES:

**3.1 Construction features :** The Body and Cover of the relay are made of Aluminium. The casting is air tight and has weather proof protection. The body houses the floats and switches assembly. There are inspection window on either side for viewing.

**3.2 Accessories :** On the top cover of the relay are provided petcocks for the release of the gas, a push button for testing the electrical circuits. A cable gland can be provided with the top mounted cable box.

**3.3 Finish :** In standard execution, all cast parts are protected powder coating, and all hardware is made of stainless steel.

Technical Specifications	
<b>Material:</b> Body Indicator Glass	Aluminium alloy. Toughened Glass.
<b>Mounting:</b>	75mm PCD flange type with 4 bolts.
<b>Enclosure Protection:</b>	IP 65
<b>Operating Temperature:</b>	-40° to 100°C (-40° to 257°F) standard. Optional extreme weather model also available.
<b>Electrical Rating:</b>	250V AC 5A 1250VA   250V DC 3A 750W
<b>Contacts:</b>	Upto 2 SPST or SPDT
<b>Vibration Resistance:</b>	4M4 according to IEC 60721-3-4.
<b>Dielectric Insulation:</b>	2.5kV between circuit and earth   1kV between contacts
<b>Gas Volume:</b>	200cc, 450cc or 350cc and 450cc

Please contact us for ordering form/drawings and any further details

Due to our policy of continuous product improvement, dimensions and designs are subject to change.



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