

# GAS COLLECTING DEVICE



FOR TRANSFORMER







**GAS COLLECTING DEVICE  
(STANDARD MODEL)**  
Code : 700-101



**GAS COLLECTING DEVICE  
(WITH COCK VALVE)**  
Code : 700-102

## GENERAL

Gasses generated in transformer due to electrical fault or insulation breakdown, collect in the Buchholz Relay. On Collection of a particular volume of gas the Buchholz Relay is operated for alarm and further for trip. To attend a gas collection the transformer has to be shut down and someone has to climb up on the transformer to inspect the gas.

In order to avoid shut down, to some extent, Gas Collecting Device is used on a transformer. The Gas Collected in the Buchholz is brought down into the gas collecting device and inspected for its colour. The Colour itself is the identification for the type of fault. The remedial actions depending upon the Colour of gas may further be initiated.

Also normally, the gases collecting can be visually Inspected at intervals and can be taken along with the device for dissolved gas analysis to reveal the healthiness of transformer.

## CONSTRUCTION

The gas chamber is a clear transparent glass tube. 3 Nos. needle valves serve as the different ports of entry and exit. These valves with male 8" BSP Threads can accept standard nipple Mounting. The unit is weatherproof, pressure tested and suitably protective painted. The device can be mounted on place using 2 Nos. M8 hardware.

### TECHNICAL DETAILS

**Wt. of Device** : 1.5 Kgs.

**Paint Shade** : Grey Shade 631 of IS-5

**Test Pressure** : 0.70 Kg/Cm2 with Air / Oil

**Needle Valve** : Brass with 1/8" BSP Threads

**Hardwares** : Brass, Chromium Plated

**Body** : Aluminium LM6 IS-627

**Chamber** : Transparent Glass Tube

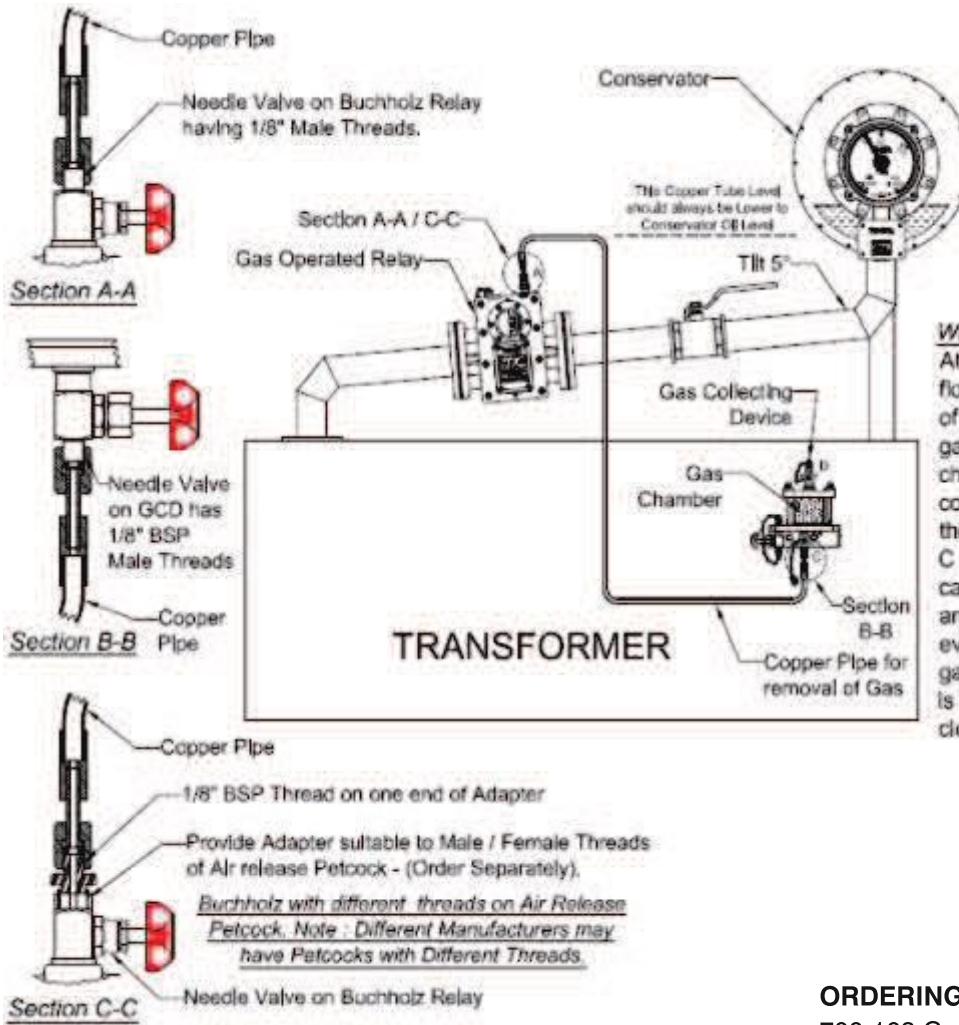
**Piping** : 9.5 mm Copper  
(Supplied only on ordering)

### BILL OF MATERIAL

S. No.	Description	Material	Qty.
01	Bottom Body	Aluminium Pr. Die Cast	01
02	Top Cover	Aluminium Pr. Die Cast	01
03	Glass Container	Scientific Glass	01
04	Needle Valve	Brass	03
05	Tie Rod M6	Stainless Steel	02
06	Gasket	Nitrile	02
07	Data Plate	Aluminium	01
08	Plug	Brass	03
09	Drain Plug	Brass	01
10	Dome Nut M6	Stainless Steel	02
11	Adapter 1/8" BSP	Brass	01
12	Container Protection Cover	Stainless Steel	01
13	Ball Valve & Adapter	Brass	02



## FITMENT OF GAS COLLECTING DEVICE ON BUCHHOLZ RELAY



**Procedure (How to Make Functional)**  
Copper Connection Tubing has 1/8" BSP Female Mtg. Threads, Connect Air Release of Buchholz Relay and Gas Receiving Petcock 'C' of G.C.D., Open the Valves 'A', 'C' & 'D'. Let oil flow until any available air is released in atmosphere and Gas Chamber is full of oil, Now close Valve 'D'. Let Valves 'A' & 'C' be Open and full of oil.

When Air Accumulates in Buchholz relay  
At the gas sampling valve C, the air will flow until the pressure exerted by the oil of the conservator has evacuated the gases from the relay housing to gas chamber of the device. The gases will collect at the top of the chamber. When the gas collection is complete, the Valve C to be closed. The gas samples now can be taken by opening Valve-D, for analysis. When all the gases have been evacuated, oil will again start filling the gas chamber completely and the device is again ready for gas collection, after closing the Valve-D.

## ORDERING FOR PIPE

- 700-103 Copper Tubing Length 1 Metre  
700-104 Copper Tubing Length 2 Metre  
700-105 Copper Tubing Length 3 Metre  
700-106 Copper Tubing Length 4 Metre  
700-107 Copper Tubing Length 5 Metre  
700-108 Copper Tubing Length 6 Metre  
700-109 Copper Tubing Length 7 Metre  
700-110 Copper Tubing Length 8 Metre  
700-111 Copper Tubing Length 9 Metre  
700-112 Copper Tubing Length 10 Metre  
700-113 Copper Tubing Length 11 Metre  
700-114 Copper Tubing Length 12 Metre  
700-115 Copper Tubing Length 13 Metre

**NOTE :**

- Copper Tubing Assembly are supplied with lead washers.
- Adopter to suit different take off of Buchholz.
- Copper tubing with Needle valves or any other arrangement and tailor made to customer specification and can be supplied on ordering.

## OUR OTHER PRODUCTS :

- PRISMATIC AND KENYA TYPE OIL LEVEL INDICATOR
- GAS AND OIL OPERATED BUCHHOLZ RELAY
- GAS COLLECTING DEVICE
- SILICAGEL BREATHER
- PRESSURE RELIEF VALVE
- OIL SURGE RELAY



**YOGYA**  
ENTERPRISES  
(AN ISO 9001 : 2000 CERTIFIED COMPANY)

**YOGYA ENTERPRISES**

284 003, In Front of A Cabin, AC Loco Shed Road, Mahaveeranpura,  
Uttar Pradesh, Jhansi, India. Ph. : +919415030985. e-mail : info@yogyaenterprises.in