उत्पाद मानक परिणामित्र शाप/अभि. निर्देश

# PRODUCT STANDARD TRANSFORMER SHOP/ENGG INSTRUCITONS

TR 20166B

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### TITLE: SPECIFICATION FOR MAINTENANCE FREE BREATHER

#### 1. GENERAL

Each silica gel Breather of the Maintenance-Free regenerative type (Duly filled with Non carcinogenic cobalt free silica gel) shall be equipped with a humidity sensor, a condition based microprocessor control unit and LED status indication. The function shall be tested via a test button. A stainless steel filter at the bottom shall protect the silica gel chamber against external environment influences. This condition controlled application should be environmental friendly.

Item No.	Weight of oil in Transformer(in T)	Style No.
1	<40T	BP9066058994
2	40T-80T	BP9066059001

#### 2. TEHNNICAL REQUIREMENT

- a. Suitable for- Outdoor use & resistive to transformer oil, ultraviolet rays, pollution & salt water
- b. Working ambient temperature-0 to 80°C
- c. Degree of Protection- IP:55/IP67
- d. Rated supply Voltages-230 V, 1-phase, 50Hz AC
- e. Rated insulation level-Analog output against ground - 500 V AC, 50 Hz, 1 min w/s Relay contact against ground - 2.5 kV AC, 50 Hz, 1 min w/s
- f. The control unit shall be provided on the breather equipped with suitable heater to prevent moisture condensation.
- g. Status LEDs for local display shall be provided on breather along with suitable contacts to take the signal to remote control room.
- h. The moisture and temperature measurement system (sensor) installed should be of modular type, making it easy to replace the same if at all the same is necessary during the service of breather. A self-diagnostic system shall be provided with LED indication and remote signal through a relay shall be provided.
- Micro fuse and an additional built in line filter shall be provided to protect against over voltages & to avoid failures caused by high frequency interference.
- j. The control unit in the breather shall provide analogue output signal of 4-20mA and also shall be equipped with a RS485 port for data logging.
- k. Suitable Data Logger shall also be provided in the control unit.

PA	K. Suitable Data Logger shall also be provided in the control unit.					
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COPYRIGHT AND CONFIDENTIAL The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be	used directly or indirectly in any way detrimental to the interest of the Company.	<ul> <li>3. DIMENSIONS DETAILS:    Dimension of the Breather may vary supplier to supplier</li> <li>4. INSTALLATION, COMMISIONING &amp; TRAINING    Installation &amp; commissioning of the system shall be in scope by BHEL.</li> <li>5. INSPECTION &amp; DISPATCH    a. Three sets of inspection, routine, acceptance and calibration test reports, operation and maintenance manual, descriptive catalogue/</li> </ul>							
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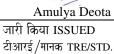
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SI. No.	Requirement	Yes/No	Deviation, If any
1.	GENERAL		
2.	ITEM REQUIRED		
3.	TECHNICAL REQUIREMENTS		
4.	INSTALLATION, COMMISIONING & TRAINING		
5.	INSPECTION & DISPATCH		

6. CPMPLIANCE CHECKLIST Table-I COMP. drg REF COPYRIGHT AND CONFIDENTIAL

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