MESSKO® MTRAB® 2.5

PROVEN TECHNOLOGY AND WORLDWIDE PRACTICAL EXPERIENCE.

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THE MAINTENANCE-FREE DEHYDRATING BREATHERS
THE WORLD AND FIT FOR THE FUTURE IN A

The maintenance-free dehydrating breathers of the MESSKO® MTRAB® product family eliminate the ingress of moisture into the insulating fluid of transformers, tap changers and other electrical equipment filled with insulating fluids. We have improved the proven quality even further for the new 2.5 generation.

Maintain the health of your equipment through optimal dehydration!

The ever-longer operating times of power transformers, coupled with permanently increasing current densities, lead to constantly increasing demands on the equipment. Good dehydration is important for the health of your equipment, and the maintenance-free MESSKO® MTRAB® is your perfect partner for this challenge.

Operating principle: simply effective

In normal operation, the air flowing to the oil conservator is directed across the desiccant (silica gel), which dries it in the process. The degree of humidity of the air in the pipeline for the expansion tank is constantly monitored. Depending on the behavior of the equipment, the regeneration of the desiccant is activated if the moisture content (% rH) reaches the defined limit value. The intelligent algorithm ensures compliance with the standard IEC 60076-22-7.

Overview of application recommendations and product types for MESSKO® MTRAB® 2.5

<table>
<thead>
<tr>
<th>Application</th>
<th>Type</th>
<th>Tap changer</th>
<th>Arc suppression coil</th>
<th>Air-filled cable boxes</th>
<th>Vehicle transformers</th>
<th>Network transformers ≤ 40 MVA</th>
<th>Network and step-up transformers &gt; 40 MVA ≤ 200 MVA</th>
<th>Network shell transformers &gt; 200 MVA</th>
<th>Phase shifters ≤ 40 MVA</th>
<th>Phase shifters &gt; 40 MVA ≤ 200 MVA</th>
<th>Phase shifters &gt; 200 MVA</th>
<th>Reactors ≤ 40 Mvar</th>
<th>Reactors &gt; 40 Mvar ≤ 200 Mvar</th>
<th>Reactors &gt; 200 Mvar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>DB100</td>
<td>DB100</td>
<td>DB100</td>
<td>DB100</td>
<td>DB100T</td>
<td>DB200T</td>
<td>DB200D-T</td>
<td>DB100T</td>
<td>DB200T</td>
<td>DB200D-T</td>
<td>DB200G</td>
<td>DB200T</td>
<td>DB200G</td>
<td></td>
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<tr>
<td>Silica gel</td>
<td>1.1 kg</td>
<td>1.1 kg</td>
<td>1.1 kg</td>
<td>1.1 kg</td>
<td>2.2 kg</td>
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<td>4.4 kg</td>
<td>1.1 kg</td>
<td>2.2 kg</td>
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</table>
Expansion and optimization

- Data logger* included as standard
- Additional second analog output for humidity values and breathing pattern
- Standard test button for manually checking the function, moisture level and message chains
- Overvoltage protection in accordance with EN 60664-1 Category III
- Degree of protection IP 66/67
- Corrosion protection C4H or CX in accordance with IEC 12944
- Improved LED visibility, thanks to new arrangement

*) Optional software required

Highest functional service life

- High-quality, trusted materials
- Type test
- Quality process

Individual as well as customer- and application-specific adaptation

- Offshore design
- Filter heating
- Extended overvoltage protection
- Modbus RTU via RS485

Extensive accessories

- Protective grate
- Lateral mounting rods
- Insect screen
- Cable protection

If you are interested in the complete technical data of the MESSKO® MTRAB® 2.5, visit: www.reinhausen.com/messko-mtrab
MESSKO® MTRAB® 2.5 –
AN OVERVIEW OF THE HIGHLIGHTS.

Reliable and highly effective

- Maintenance-free operation in 24/7 mode
- Safe use in all climate zones, proven over many years in extreme heat, cold, dryness or humidity

Reduces maintenance and service costs

- No inspection and maintenance costs, unlike conventional dehydrating breathers
- Massive cost savings, since desiccant does not have to be replaced

Proven quality with the latest technology

- 6,500 MESSKO® MTRAB® customers in 180 countries
- More than 15 years of experience in the field
- Developed and tested in accordance with IEC 60076-22-7
  (new standard for transformer accessories – self-regenerating dehydrating breathers)

Communication and integration in ETOS®

- Easy integration of data into the ETOS® Embedded Transformer Operating System from MR
- SCADA connection via analog and digital interfaces

Protects and ensures the health of your transformer

- Guarantee of transformer function
- Guarantee of equipment service life
- Protection of investment/assets

The goal is to reduce costs in the long term

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THE POWER BEHIND POWER.