

MESSKO® MTRAB® 2.5

PROVEN TECHNOLOGY AND WORLDWIDE PRACTICAL EXPERIENCE.

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GROUND-BREAKING TECHNOLOGY WITH RELIABLE FUNCTION AND DIGITAL DATA INTERFACE.

The maintenance-free breathers of the MESSKO® MTRAB® 2.5 product family eliminate moisture ingress into the insulating fluid of transformers, on-load tap-changers and other electrical equipment filled with insulating fluid. And they are now available with a new app function which enables easy readout of data.

Active prevention of moisture ingress into operating fluids

Ever longer operating times and ever higher current densities lead to constantly increasing demands on the equipment. The maintenance-free MTRAB® dehydrating breathers continuously dehumidify and monitor the breathing cycle of power transformers – in all climate zones. And they regenerate themselves, which ensures maximum operating time and security and massively reduces costs. The MTRAB® units have been proven 90,000 times worldwide. An intelligent algorithm ensures continuous compliance with the IEC 60076-22-7 standard (new standard for transformer accessories – self-regenerating breathers).



Simply effective operating principle

In normal operation, the air flowing to the oil expansion vessel is dried by passing it over a desiccant (silica gel) and the moisture content of the air in the pipe to the expansion tank is constantly monitored. When the moisture content (% rH) reaches the defined limit value, regeneration of the desiccant is activated, depending on the behavior of the operating equipment.

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

Application	Tap changer	Arc suppression coil (Petersen coil)	Air-filled cable boxes	Vehicle transformers	Network transformers ≤ 40 MVA	Network and step-up transformers > 40 MVA ≤ 200 MVA	Network shell transformers > 200 MVA	Phase shifters ≤ 40 MVA	Phase shifters > 40 MVA ≤ 200 MVA	Phase shifters > 200 MVA	Reactors ≤ 40 Mvar	Reactors > 40 Mvar ≤ 200 Mvar
Туре	DB100	DB100	DB100	DB100	DB100T	DB200T	DB200D-T	DB100T	DB200T	DB200D-T	DB100T	DB200T
Silica gel	1.1 kg	1.1 kg	1.1 kg	1.1 kg	1.1 kg	2.2 kg	4.4 kg	1.1 kg	2.2 kg	4.4 kg	1.1 kg	2.2 kg







MESSKO® MTRAB® 2.5 DB200



MESSKO® MTRAB® 2.5 DB200D

Your advantages at a glance

- Reduced operating costs and increases operating reliability
- Active protection of the insulation medium against moisture
- Condition-dependent and self-learning algorithm
- Significantly higher efficiency than market competitors
- Easy to integrate into ETOS® (Embedded Transformer Operating System)
- Easy retrofitting to existing operating equipment
- Worldwide successful and fit for the future in accordance with IEC 60076-22-7
- Easy data readout using the MESSKO® MTRAB® app

Customization possible

- Offshore design
- Filter heating
- Extended overvoltage protection
- Modbus RTU via RS48

Features of the MESSKO® MTRAB® 2.5

- Data logger incl. software (software optional)
- Extended overvoltage protection in accordance with EN 60664-1 category III
- Protection class IP 66/IP67
- Corrosion protection to C4H or CX according to IEC12944
- Test button for manual testing of function at the device output and alarm chains (included as standard)
- Direct connection to monitoring and SCADA systems
- Prepared for integration in ETOS® (optional)

Reactors > 200 Mvar	High voltage DC transmission (HVDCT) transformers	Furnace transformers	Underground hall transformers	GSU machine transformers	
DB200D-T	DB200D-T	DB200G	DB200G	DB200G	
4.4 kg	4.4 kg	2.2 kg	2.2 kg	2.2 kg	



MESSKO[®] MTRAB[®] 2.5 – HIGHLIGHTS AT A GLANCE.



Reliable and highly effective

- Maintenance-free operation in 24/7 mode
- Proven over many years in all climates: Heat, cold, dry or humid



Reduces maintenance and service costs

- No inspection and maintenance costs unlike conventional dehumidifiers
- Massive cost savings as desiccant does not need to be replaced



Proven quality with the latest technology

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



Communication and integration in ETOS®

- Easy integration into MR's ETOS® Embedded Transformer Operating System
- SCADA connection via analog and digital interfaces



Ensures the health of your transformer

- Ensures transformer function
- Guarantees long equipment service life
- Protects investments and assets

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THE POWER BEHIND POWER.

