



Three-Phase Transformer Demagnetizer DEM60

- Fully automatic demagnetization
- Demagnetization currents 5 mA – 60 A DC
- Automatic discharging circuit
- Lightweight – 10,5 kg



High DC Current Source for Automatic Demagnetization Transformers and CTs

Description

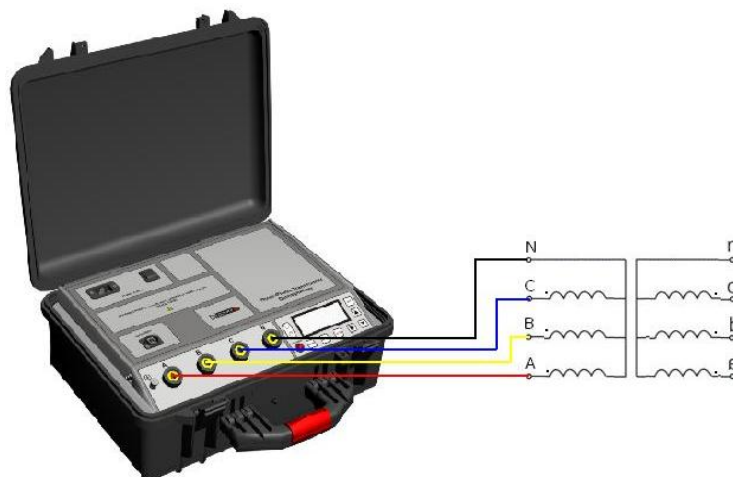
After a DC current test, such as a winding resistance measurement, the magnetic core of a power or instrument transformer may be magnetized (remanent magnetism). Also, when disconnecting a transformer from service, some amount of magnetic flux trapped in the core could be present.

The remanent magnetism can cause various problems such as erroneous diagnostic electrical measurements on a transformer, or an inrush current at start-up of power transformer, or incorrect operation of protective relays due to magnetized CT cores.

To eliminate this source of potential problems, demagnetization should be performed.

When suspecting remanent magnetism, or when various test results, like FRA or magnetization/excitation current, show possible remanency use the DEM60 to perform fully automatic demagnetization.

Demagnetizing magnetic core of a transformer requires alternating current applied with decreasing magnitude down to zero. The DEM60 provides this alternating current by internally changing the polarity of a controlled DC current. During the demagnetization process the instrument supplies current at decreasing magnitude for each step, following a proprietary developed program.



DV-Win

Using DV-Win software, instrument can be operated and controlled from a PC. The standard interface is USB and optional RS232.

Discharging Circuit

Both, injection of current and discharging energy from the inductance is automatically regulated. An intrinsically safe discharge circuit with indicator, dissipates the stored magnetic energy rapidly during and after the operation. The discharging circuit is independent of power supply.

Standard accessories

- ✓ Current cables 4 x 10 m 10 mm² with battery clamps
- ✓ DV-Win PC software, USB cable
- ✓ Mains power cable
- ✓ Ground (PE) cable
- ✓ Cable plastic case

Optional accessories

- ✓ Current cables 4 x 15 m 10 mm² with battery clamps
- ✓ Cable bag



Current cables

Technical data

1 – Mains Power Supply

- | | |
|------------------------|---|
| - Connection | according to IEC/EN60320-1; UL498, CSA 22.2 |
| - Voltage single phase | 110 – 240 V AC, + 10 % - -15 % |
| - Frequency | 50 / 60 Hz |

2 – Output data

- | | |
|----------------|-------------------|
| - Test current | 5 mA DC – 60 A DC |
| - Test voltage | 60 V DC |

3 – Environmental conditions

- | | |
|------------------------------|--|
| - Operating temperature | -10 °C - +50 °C / 14 °F - +122 °F |
| - Storage and transportation | -25 °C - +70 °C / -13 °F - +158 °F |
| - Humidity | 5 % - 95 % relative humidity, non condensing |

4 – Dimensions and Weight

- | | |
|--------------|--|
| - Dimensions | 450 x 175 x 320 mm (W x H x D)
17,72 x 6,89 x 12,6 in |
| - Weight | 10,5 kg / 23,1 lb |

- | | |
|---------------------|-------------|
| 5 - Warranty | three years |
|---------------------|-------------|

6 - Safety Standards

- European standards EN 61010-1
 LVD 2006/95/EC
- International standards IEC 61010-1
 UL 61010-1
 CAN/CSA-C22.2 No. 61010-1

7 - Electromagnetic Compatibility (EMC)

- CE conformity EMC standard 2004/108/EC

All specifications herein are valid at ambient temperature of + 25 °C and recommended accessories.
Specifications are subject to change without notice.

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