

Three-Phase Transformer Demagnetizer DEM60C

- Fully automatic demagnetization
- Demagnetization currents 5 mA – 60 A DC
- Demagnetization progress graph
- Automatic discharging circuit
- Lightweight – 13,1 kg



High DC Current Source for Automatic Transformers and CT Demagnetization

Description

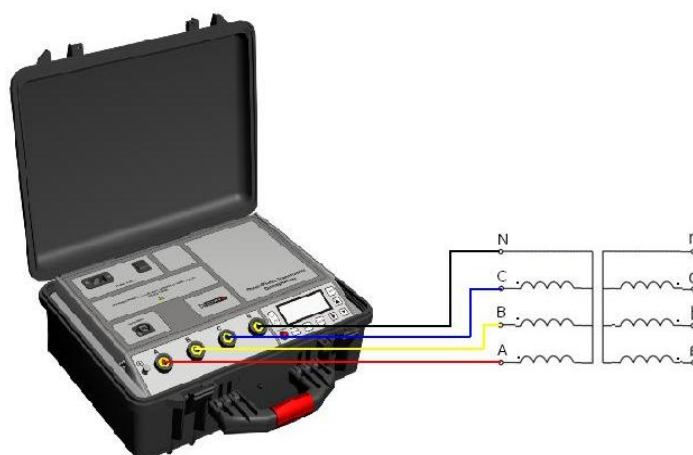
After a DC current test, such as a winding resistance measurement, the magnetic core of a power or instrument transformer may be magnetized (remanent magnetism). Also, when disconnecting a transformer from service, some amount of magnetic flux trapped in the core could be present.

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 DEM60C to perform fully automatic demagnetization.

Demagnetizing magnetic core of a transformer requires alternating current applied with decreasing magnitude down to zero. The DEM60C 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.

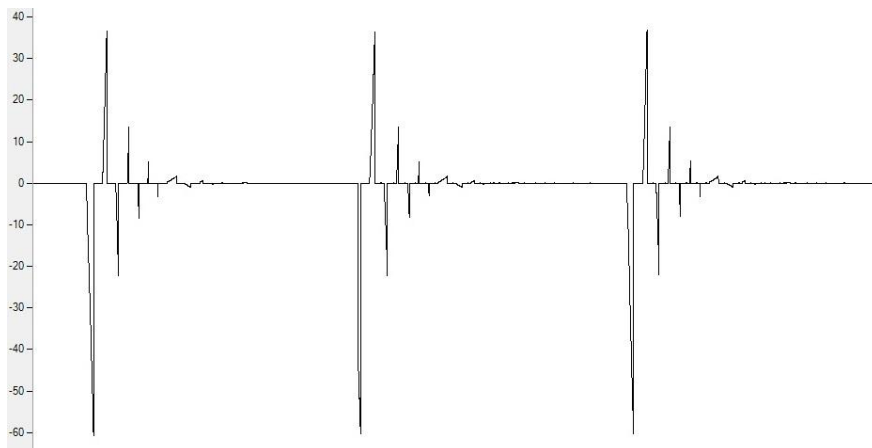


DV-Win

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

During the demagnetization process, the progress of the demagnetization will be shown on the device display.

Supported with the DV-Win software, DEM60C enables current waveforms and values to be displayed during the demagnetization progress on the DV-Win generated graph. The graphical display of demagnetizing current in real time enables monitoring the transformer core demagnetization process.



The generated graphs can be saved on computer. This option provides the after-testing analysis of the demagnetization process, in terms of current waveforms and values in each step, along with the duration of the process.

Discharging Circuit

Injection of current and discharging energy from the inductance are both automatically regulated. During and after the operation, an intrinsically safe discharge circuit with an indicator rapidly dissipates the stored magnetic energy. The discharging circuit is independent of power supply.

Accessories

Included

- ✓ DV-Win PC software, USB cable
- ✓ Mains power cable
- ✓ Ground (PE) cable

Recommended

- ✓ Current cables 4 x 10 m 10 mm² with TTA clamps
- ✓ Cable plastic case

Optional

- ✓ Current cables 4 x 15 m 10 mm² with TTA clamp
- ✓ Current cables 4 x 20 m 16 mm² with TTA clamp
- ✓ Cable bag



Current cables

Technical data

1 – Mains Power Supply

- Connection	according to IEC/EN60320-1; C320
- Voltage	90 V – 264 V AC, 50 / 60 Hz, single-phase
- Power consumption	2250 VA
- Fuse	15 A / 250 V, type F

2 – Output data

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

3 – Environmental conditions

- Operating temperature	-10 °C - +55 °C / 14 F - +131 F
- Storage and transportation	-25 °C - +70 °C / -13 F - +158 F
- Humidity	5 % - 95 % relative humidity, non condensing

4 – Dimensions and Weight

- Dimensions	480 x 190 x 385 mm (W x H x D) 18,90 x 7,48 x 15,16 in
- Weight	13,1 kg / 28,8 lb

5 – Warranty	three years
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6 – Applicable Standards

- Installation/overvoltage:	category II
- Pollution:	degree 2
- Safety	LVD 2006/95/EC, (CE Conform) Standard EN 61010-1
- EMC	Directive 2004/108/EC (CE Conform) Standard EN 61326:2006

*Specifications are subject to change without notice.