

## Three-Phase Transformer Demagnetize DEM60C

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



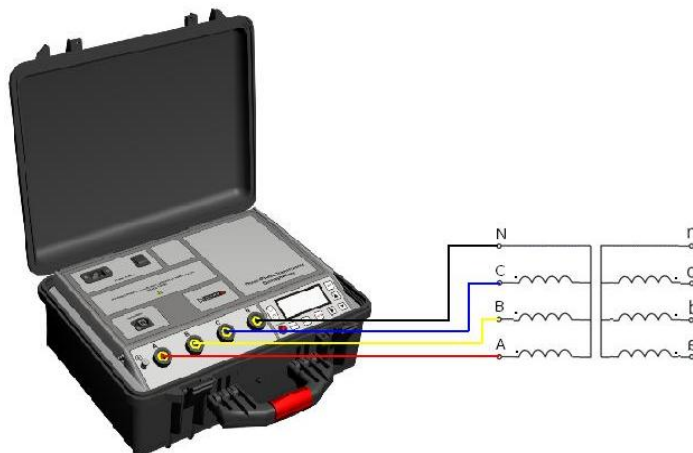
### High DC Current Source for Automatic Transformers and CT Demagnetization

#### 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, inaccurate measurements on a transformer, or an inrush current at a start-up of power transformer, or an 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, a DEM60C can be used to perform fully automatic demagnetization.

Transformer magnetic core demagnetization requires alternating current applied with magnitude decreasing 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 a current at decreasing magnitude for an each step, following a proprietary software solution.

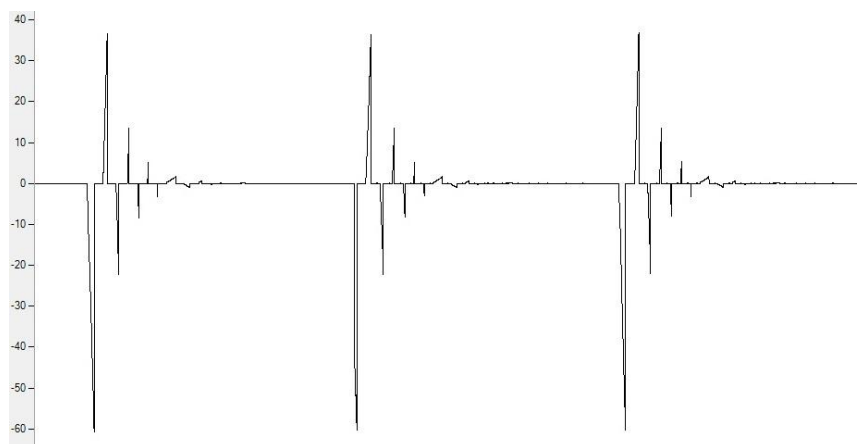


## DV-Win

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

During the demagnetization process, the progress of the demagnetization will be shown either on the device display or on a PC.

Supported by 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 graph can be saved on a computer. This option provides easy after-the-test analysis of the demagnetization process, in terms of current waveforms and values for each step, along with the duration of the complete 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 mm<sup>2</sup> with TTA clamps
- Cable bag

### Optional

- Current cables 4 x 15 m 10 mm<sup>2</sup> with TTA clamp
- Current cables 4 x 20 m 16 mm<sup>2</sup> with TTA clamp
- Cable plastic case – medium size
- Cable plastic case with wheels – medium size
- Transport case
- Bluetooth communication module



Current cables

## Technical data

### 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

### Output data

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

### Display

- LCD screen 20 characters by 4 lines; LCD display with backlight, visible in bright sunlight

### Interface

- DEM60C is equipped with an USB port to connect to an external computer

### 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

### 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 lbs

**Warranty** three years

### Applicable Standards

- Installation/overvoltage: category II
- Pollution: degree 2
- Safety LVD 2006/95/EC, (CE Conform)  
Standard EN 61010-1:2001
- EMC Directive 2004/108/EC (CE Conform)  
Standard EN 61326:2006

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