

# MAGNUS

## Step-up transformer

技术咨询和询价：010-68940148

# Megger<sup>®</sup>



- Quick and easy preparation of excitation curves for instrument transformers
- Demagnetize current transformer cores
- Conduct turn-ratio tests on voltage transformers
- Two-hand control enhances personal safety

### MAGNUS DESCRIPTION

When power systems are put into operation or when faults occur, it becomes necessary to check the instrument transformers to make sure that they are providing test instruments and protective relay equipment with the correct outputs.

MAGNUS™ permits you to prepare excitation curves for instrument transformers quickly and easily.

MAGNUS is also used to demagnetize current transformer cores and to conduct turn-ratio tests on voltage transformers. It weighs only 16 kg (35 lbs) and provides 1 A at 2.2 kV. Two-hand control enhances personal safety.

As standard, MAGNUS is delivered with special high-voltage cables and a robust transport case.

### MAGNUS APPLICATION EXAMPLE

#### IMPORTANT

Read the User's manual before using the instrument.

#### Prepare an excitation curve

1. Connect MAGNUS to the secondary side of the current transformer being tested and also to an ammeter and voltmeter.
2. Increase the voltage with the dial.
3. Jot down the values of U (voltage) and I (current).
4. Repeat steps 2 and 3 until the current (I) rises sharply without any significant rise in voltage (U).
5. Conclude the test by reducing U (voltage) slowly to zero, thereby providing demagnetization.

## SPECIFICATIONS

Specifications are valid at nominal input voltage and an ambient temperature of +25°C, (77°F). Specifications are subject to change without notice.

### Environment

**Application field** The instrument is intended for use in high-voltage substations and industrial environments.

### Temperature

**Operating** 0°C to +50°C (32°F to +122°F)  
**Storage & transport** -40°C to +70°C (-40°F to +158°F)

### Humidity

5% – 95% RH, non-condensing

### CE-marking

**LVD** 2014/35/EU

**EMC** 2014/30/EU

**RoHS** 2011/65/EU

### General

**Mains voltage** 115/230 V AC, 50/60 Hz

**Power consumption** 2300 VA (max)

**Protection** Fuses: F1, F2, F3 6 A  
Thermal cut-outs

### Dimensions

**Instrument** 356 x 203 x 241 mm  
(14" x 8" x 9.5")

**Transport case** 610 x 290 x 360 mm  
(24" x 11,4" x 14,2")

### Weight

16.3 kg (35,9 lbs)  
26.7 kg (58.9 lbs) with accessories and transport case

**High voltage cables** 2 x 10 m (33 ft) / 1,5 mm<sup>2</sup>, 5 kV

### Measuring outputs

**Voltage** 100/1, (max load of 1 MΩ)

Inaccuracy ±1,5%

**Current** 10/1

Inaccuracy ±1,5% at 2 A output current  
±3% at 0,5 A output current

### Outputs

#### Voltage outputs, AC

##### 230 V mains voltage

HIGH VOLTAGE OUTPUT <sup>1)</sup> 0 – 2200 V AC

MAINS OUTPUT <sup>1)</sup> 0 – 250 V AC (Variable transformer, not isolated from mains)

##### Maximum values

Voltage	Current	Max. load time	Rest time
2200 V AC	1 A	30 s <sup>2)</sup>	10 minutes <sup>2)</sup>
250 V AC	6 A <sup>3)</sup>	Continuous	–

#### Voltage outputs, AC

##### 115 V mains voltage

HIGH VOLTAGE OUTPUT <sup>1)</sup> 0 – 2000 V AC

MAINS OUTPUT <sup>1)</sup> 0 – 110 V AC (Variable transformer, not isolated from mains)

### Maximum values

Voltage	Current	Max. load time	Rest time
2000 V AC	1 A	30 s <sup>2)</sup>	10 minutes <sup>2)</sup>
110 V AC	10 A	Continuous	–

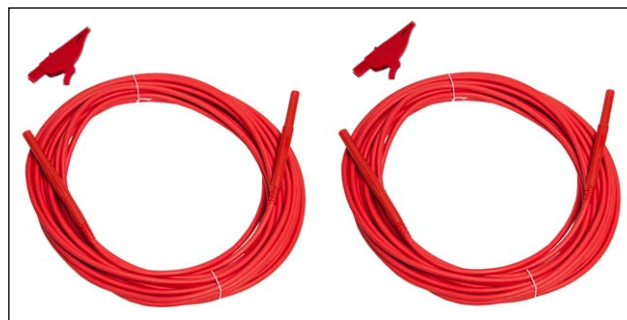
- 1) The HIGH VOLTAGE OUTPUT and the MAINS OUTPUT must not be loaded at the same time.
- 2) The load time and rest time for the high voltage output is calculated at the maximum output voltage and current. During an excitation test the voltage and current is only at their maximum level at the end of the test.
- 3) Output protected with a 6 A fuse.



Ground cable 5 m GA-00200



Transport case GD-00182



Test cables 2 x 10m GA-00090

## ORDERING INFORMATION

Item	Art. No.
<b>MAGNUS</b> Complete with: Test cables GA-00090 2 x 10m Ground cable GA-00200 Transport case GD-00182	
<b>115 V mains voltage</b>	BT-11190
<b>230 V mains voltage</b>	BT-12390