

HIGH CURRENT IMPULSE MAGNETIZER IM-U-1420-A-HC



• Description

(The impulse magnetizer IM-U-1420-A-HC operates according to the principle of capacitor discharge. The inner construction of the magnetizer has been optimized so that impulses of 60000 Amperes, with only 1400 Joules of energy, can be produced.

The magnetization of small rare-earth magnets requires especially high currents in thin wires. If these magnetization fixtures are operated with traditional standard magnetizers they run the risk of overheating.

This impulse magnetizer is especially suitable for the operation of this type of sensitive magnetization fixtures because very high currents are produced at very short impulses. The use of this impulse magnetizer offers the following advantages:

- Better magnetizing results
- Higher current in the magnetization fixture
- Less heating of magnetization fixture
- Longer lifetime of magnetization fixture
- Shorter duty cycles in production

● Technical data

Type of discharge:	Aperiodically damped
Maximum energy:	1400 Ws
Maximum voltage:	2000 V
Voltage setting:	1 V resolution
Maximum current:	approx. 60000 A (depending on magnetization fixture connected)
Cycle time:	10 s (at maximum energy)
High current outputs:	1
Operation:	Display with keyboard, „Start“-key remote via 24 V interface
Current monitoring:	Measurement and control of impulse current
Supply:	1-phase: 230 V AC \pm 10 %, 50/60 Hz, 16 A other supplies possible
Weight	approx. 90 kg

Dimensions

- Width:	510 mm
- Height:	390 mm
- Depth:	650 mm

● Safety functions:

Safety is a key area for Magnet-Physik. Operation without interruption and protection of the operator is a primary concern.

All basic functions are controlled continuously by the PLC. The voltage at the capacitor banks are monitored by the PLC and additionally by a separate circuit. In case of a fault or interruption from mains the capacitors are discharged automatically. The magnetizers are equipped with two of these circuits. The PLC also monitors the charging unit and in case of a failure it separates it from the mains and controls the automatic capacitor discharge.

Magnet-Physik fixtures are equipped with thermocouples that allow monitoring of the fixture heat. A second internal switch also will open should excessive heat build up.

For further information contact our sales.