

Impulse magnetizer K-Series

• Outstanding features

- 2000 Volt max. voltage
- 10000 Ws Energy
- 25.000 A max. current
- Siemens PLC
- Digital operator panel
- Digital voltage setting 1 V accuracy
- Analog voltage monitor
- Fixture temperature monitor
- Built-in current monitor
- Compact design
- Single shift 1 year warranty



• Description

The K-Series offers proven quality in compact design. Operation of magnetization equipment in a 24 hour / seven day a week industrial environment requires only the best design and components. Our goal is to be invisible! No problems or concerns with this machine.

We use a 2000 Volt magnetization technique. The combination of 2000 V with medium capacitors allows for moderate magnetization impulses. This allows the magnetization field to better penetrate the surrounding steel components of an assembly. This gives more magnetization field in the magnets with lower losses in the steel.

Its maximum energy of 10000 Ws meets a wide range of magnetization tasks

- Medium sized Rotors with rare earth magnets
- Production of high magnetic fields in axial coils
- Motor magnetization with 2 or more internal poles
- Production of low-frequent magnetic fields for demagnetization
- Deep-drawn steel parts with injection molded ferrites

The K-Series stands between the bench-top U-Series and the heavy production X-Series. .
The focus on the core functions allows a very attractive price !

• **Technical Data**

| | IM-K-...-A-... | IM-K-...-D-... | IM-K-...AD-... |
|--|--|-------------------------|---|
| Type of discharge: | aperiodically damped | damped oscillation | aperiodically damped + damped oscillation |
| Maximum energy: | 5000 Ws / 10000 Ws | 4000 WS / 8000 Ws | 4000 Ws / 8000 Ws |
| Maximum voltage: | 2000 V | 2000 V | 2000 V |
| Voltage setting accuracy: | 1,0 V | 1,0 V | 1,0 V |
| Maximum current: | 25000 A | 25000 A | 25000 A |
| Cycle time at max. energy, approx: | 7 s / 12 s | 6 s / 10 s | 6 s / 10 s |
| High current output: | 1 | 1 | 1 |
| Control: | Simatic® SPS S7, Software updates via Micro Memory Card | | |
| Operation: | Display with keyboard remote via 24 V interface Interfaces RS 232, Profibus (optional) | | |
| Current measurement: | Measurement of impulse current | | |
| Option: | Synchronous operation | | |
| Supply: | 1-phase: 230 V AC ± 10 %, 50/60 Hz, 16 A | | |
| Weight: | ca. 140 kg / ca. 170 kg | ca. 140 kg / ca. 170 kg | ca. 140 kg / ca. 170 kg |
| Dimensions (with casters and lift rings) | | | |
| - Width: | 480 mm | | |
| - Height: | 840 mm | | |
| - Depth: | 900 mm | | |

• **Safety functions**

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

The Siemens Programmable Logic Controller (PLC) controls all basic functions continuously. The PLC can safely shut down the magnetizer should any out of control conditions occur. In case of a fault or interruption the capacitors are discharged automatically and disconnect the mains.

For safety reasons, we do not allow direct control of our PLC. Alteration of internal programs is not allowed. Your inputs are checked against our software at all times. Only permitted functions are allowed per the programming of our PLC.

Your production line can communicate with our machines via several interfaces. Normal communications are via 24-volt signals. This allows for status monitoring and activation of the machine. We also offer Profibus and RS232 communications protocols as an option.

Maintenance is minimized. Most parts in our machine are standard and can be replaced around the world. The few specialized items are in stock and available for express shipment within 24 hours.