PEF GENERATOR · Si IGBT TECHNOLOGY · INDUSTRIAL APPLICATIONS

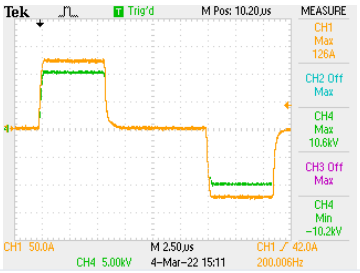
EPULSUS® / INDUSTRIAL PEF SERIES / INDUSTRIAL PRODUCTION

# EPULSUS® -BM3B-24

| 24 kV | 500 A | 9 kW | CE / SIL 3 |
|---|---|---|---|
| Max Voltage | Max Current | Max Power | Certified |

EPULSUS®-BM3B-24 is a Pulsed Electric Field (PEF) system for industrial applications.
Includes a bipolar solid-state Marx Modulator, safety enclosure, and batch/continuous treatment chamber.
Local programming via HMI; remote control via Ethernet. CE marked, SIL 3 functional safety, IP54 enclosure.

## WAVEFORM — TYPICAL U / I PULSE SHAPE




## HARDWARE

- Cabinet: 1600 x 800 x 600 mm
- Weight: 180 kg
- Forced air cooling | IP54
- Input: 400 VAC, 3PH+N, 50/60 Hz, 32 A
- CE marked | SIL 3 (IEC 62061)
- HMI | Ethernet | SD card record

## SPECIFICATIONS

| PARAMETER | VALUE / DESCRIPTION |
|---|---|
| **INPUT** | |
| Voltage | 400 VAC, 3PH+N, 50/60 Hz |
| Current | 32 A @ 400 VAC |
| Power Factor | > 0.98 |
| Power | 10,500 W, three phase + N |
| **OUTPUT** | |
| Maximum Voltage | **Up to 24 kV** |
| Maximum Current | **500 A** |
| Output Power | **9,000 W** |
| Pulse Polarity | Bipolar |
| Maximum Stored Energy | Max 1,590 J |
| **PULSE FLEXIBILITY & MODE** | |
| Pulse Frequency | 1 to 200 Hz |
| Pulse Width | 2 us to 200 us |
| Multi-pulse Mode | 1 to 250 pulses |
| Continuous Mode | n pulses \| Burst Mode: 1 to 5 pulses |
| **PROTECTIONS & REGULATIONS** | |
| Overtemperature | 70 degC |
| Overcurrent (slow) | 500 A (software-based) |
| Safety Functions | SIL 3 according to IEC 62061 |
| Compliance | CE marked |
| **CONNECTIONS & CONTROL** | |
| Remote Control | Ethernet output plug |
| Local Control | HMI -- pulse V / I / ton / frequency |
| BNC Outputs | Pulse V / I waveform monitoring |
| Treatment Chamber | Batch or continuous; specified per application |
| **ENVIRONMENT** | |
| Operating Temperature | 10 degC to 40 degC |
| Storage Temperature | -20 degC to 60 degC |
| Humidity (max) | 90 %, non-condensing |

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