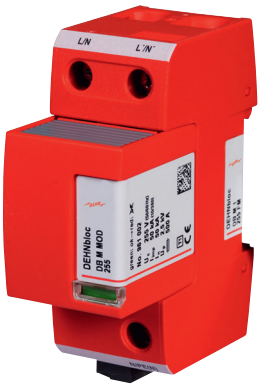
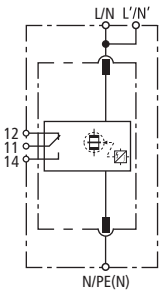
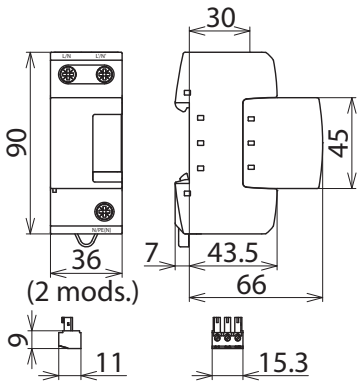
# DB M 1 255 FM (961 125)

- Coordinated spark-gap-based lightning current arrester consisting of a base part and a plug-in protection module
- Maximum system availability due to RADAX Flow follow current limitation
- Without additional cable length directly coordinated with DEHNguard surge protective device






Basic circuit diagram




Dimension drawing

Coordinated and modular single-pole lightning current arrester with high follow current limitation; with remote signalling contact for the monitoring system (floating changeover contact).

| | |
|---|---|
| **Type** | **DB M 1 255 FM** |
| **Part No.** | **961 125** |
| **Standards** | |
| Certification | UL |
| UL Standard | UL 1449 5th edition |
| UL File Number | E319777 |
| **Test values according to UL 1449** | |
| SPD classification according to UL 1449 | Component (Type 4) SPD for SPD Type 2 application |
| Rated A.C. Voltage | 230 V |
| Frequency | 60 Hz |
| Max. Continuous Operating Voltage (AC) [L-N] (MCOV) | 255 V |
| Voltage Protection Rating [L-N] (VPR) | 1500 V |
| Amperage (series connection) | 115 A |
| Nominal discharge current (8/20µs) ( $I_n$) | 20 kA |
| Operating Temperature Range | -40°C...+85°C |
| Cross-sectional area (L/N, L'/N', N/PE(N)) | AWG 8 Cu stranded |
| Torque (L/N, L'/N', N/PE(N)) | 65 □□□□□□ |
| Connection of remote signalling contact | Class 2 circuits only |
| Cross-sectional area (remote indicator) | AWG 14-22 |
| Torque (remote indicator) | 3 Lbs-in |
| **Technical data** | |
| SPD according to EN 61643-11 / IEC 61643-11 | type 1 / class I |
| Nominal voltage (a.c.) ($U_N$) | 230 V (50 / 60 Hz) |
| Max. continuous operating voltage (AC) ($U_C$) | 255 V (50 / 60 Hz) |
| Lightning impulse current (10/350 µs) ($I_{imp}$) | 50 kA |
| Specific energy (W/R) | 625.00 kJ/ohms |
| Voltage protection level ($U_P$) | ≤ 2.5 kV |
| Follow current extinguishing capability (a.c.) ($I_{fi}$) | 50 $kA_{rms}$ |
| Follow current limitation / Selectivity | no tripping of a 32 A gG fuse up to 50 $kA_{rms}$ (prosp.) |
| Response time ($t_A$) | ≤ 100 ns |
| Max. backup fuse (L) up to $I_K$ = 50 $kA_{rms}$ ($t_a$ ≤ 0.2 s) | 500 A gG |
| Max. backup fuse (L) up to $I_K$ = 50 $kA_{eff}$ ($t_a$ ≤ 5 s) | 315 A gG |
| Max. backup fuse (L-L') | 125 A gG |
| Temporary overvoltage ($U_T$) – characteristic | 440 V / 120 min. – withstand |
| Operating temperature range (parallel connection) ($T_{UP}$) | -40 °C ... +80 °C |
| Operating temperature range (through-wiring) ($T_{US}$) | -40 °C ... +60 °C |
| Operating state / fault indication | green / red |
| Number of ports | 1 |
| Cross-sectional area (L/N, L'/N', N/PE(N)) (min.) | 10 mm² solid / flexible |
| Cross-sectional area (L/N, N/PE(N)) (max.) | 50 mm² stranded / 35 mm² flexible |

© DEHN, Inc. • 500 S Main Street, Suite 115 • Mooresville, NC 28115 • United States • Tel. +1 877-927-6510 • contactDEHN@dehn.us • www.dehn.us

: Tested • NEU: New • !: Discontinued Model
: Cross connector • : Longitudinal connector • : Parallel connector • : T connector • : Clamp for parallel connector • : Clamp for T connector
: Pipe clamp for parallel connector • : Pipe clamp for T connector • : Equipotential bonding bar • : Bridging component

| Technical data | |
|---|---|
| Cross-sectional area (L'/N') (max.) | 35 mm² stranded / 25 mm² flexible |
| For mounting on | 35 mm DIN rails acc. to EN 60715 |
| Enclosure material | thermoplastic, red, UL 94 V-0 |
| Place of installation | indoor installation |
| Degree of protection | IP 20 |
| Capacity | 2 Standard DIN module, DIN 43880 |
| Approvals | VDE, KEMA, UL |
| Type of remote signalling contact | changeover contact |
| Switching capacity (a.c.) | 250 V / 0.5 A |
| Switching capacity (d.c.) | 250 V / 0.1 A; 125 V / 0.2 A; 75 V / 0.5 A |
| Cross-sectional area for remote signalling terminals | max. 1.5 mm² solid / flexible |
| **Extended technical data** | |
| Max. prospective short-circuit current | 100 $kA_{rms}$ (220 $kA_{peak}$) |
| Limitation / Extinction of mains follow currents | up to 100 $kA_{rms}$ (220 $kA_{peak}$) |
| Max. backup fuse (L) up to $I_K$ = 100 $kA_{rms}$ ($t_a \leq 0.2$ s) | 500 A gG |
| Max. backup fuse (L) up to $I_K$ = 100 $kA_{rms}$ ($t_a \leq 5$ s) | 315 A gG |
| **Supplementary data** | |
| Nominal discharge current (8/20 µs) ($I_n$) | 50 kA |

| Masterdata | |
|---|---|
| Net weight | 343.3 g/pc(s) |
| GTIN | 4013364118621 |
| PU | 1 pc(s) |
| Customs tariff number (Comb. Nomenclature EU) | 85363090 |

We reserve the right to make changes to the design and technology, dimensions, weights and materials in the interests of technical progress. The illustrations are not binding.