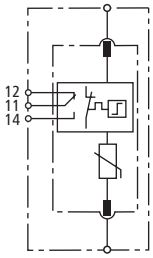
# DEHNguard S

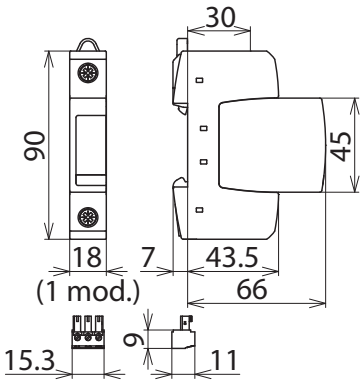
## DG S 320 FM (952093)

- Multi-purpose surge arrester consisting of a base element and a plug-in protection module
- High discharge capacity due to heavy-duty zinc oxide varistor
- High reliability due to „“Thermo Dynamic Control““ SPD monitoring device






Basic circuit diagram




Dimension drawing

Pluggable single-pole surge arrester consisting of a base part and a plug-in protection module; with floating remote signalling contact.

| **Type** | **DG S 320 FM** |
|---|---|
| **Part No.** | **952093** |
| **Standards** | |
| Certification | UL |
| UL Standard | UL 1449 5th edition |
| UL File Number | E319777 |
| **Test values according to UL 1449** | |
| Rated Voltage (AC, 50/60 Hz) | 320 V |
| MCOV (AC, 50/60 Hz) | 320 V |
| Voltage protection rating (VPR) | ≤ 1500 V |
| Nominal discharge current (8/20µs) ( $I_n$) | 20 kA |
| Maximum ambient temperature | 85 °C |
| UL 1449 edition | 5th edition |
| Type (SPD classification) | Type 4 component assembly |
| **Technical data** | |
| SPD as per IEC 61643-11 / EN IEC 61643-11 | Type 2 + type 3 |
| Energy coordination with terminal equipment (≤ 10 m) | type 2 + type 3 |
| Nominal voltage (a.c.) ($U_N$) | 230 V (50 / 60 Hz) |
| Max. continuous operating voltage (AC) ($U_C$) | 320 |
| Nominal discharge current (8/20 µs) ($I_n$) | 20 kA |
| Max. discharge current (8/20 µs) ($I_{max}$) | 40 kA |
| Combination wave ($U_{OC}$) | 20 kV |
| Voltage protection level ($U_P$) | ≤ 1.5 kV |
| Voltage protection level at 5 kA ($U_P$) | ≤ 1.2 kV |
| Protective conductor current ($I_{PE}$) | ≤ 0.5 mA |
| continuous current ($I_C$) | ≤ 0.5 mA |
| Response time ($t_A$) | ≤ 25 ns |
| Max. mains-side overcurrent protection | 125 A gG |
| Short-circuit withstand capability for max. mains-side overcurrent protection ($I_{SCCR}$) | 25 $kA_{rms}$ |
| Temporary overvoltage (TOV) ($U_T$) | 335 V / 5 sec. |
| Temporary overvoltage ($U_T$) – characteristic | 335 V / 5 sec. – Festigkeit<br>440 V / 120 min. – sicherer Ausfall |
| Condition at the end of life time of the SPD A | Open Circuit Mode (OCM) |
| Overvoltage category (OVC) main circuit | III |
| Insulation between main and remote circuit | Double insulation |
| Operating temperature range ($T_U$) | -40 °C ... +80 °C |

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: 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 | |
|---|---|
| Operating state / fault indication | green / red |
| Number of ports | 1 |
| Cross-sectional area (min.) | 1.5 mm² solid / flexible |
| Cross-sectional area (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 (integrated) |
| Capacity | 1 Standard DIN module, DIN 43880 |
| Approvals | DEKRA, VDE, UL, VdS, CSA |
| 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 |
| Overvoltage category (OVC) auxiliary circuit | II |

| Masterdata | |
|---|---|
| Net weight | 1 pc(s)/st |
| Customs tariff number (Comb. Nomenclature EU) | 85363030 |
| GTIN | 4013364109889 |
| PU | 1 st |

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.

2-14 Cu solid/stranded