



Surge Protection

New products and updates valid as of April 1, 2019



Everything new in a nutshell

As a supplement to the current "Surge Protection" catalogue, this brochure offers you a quick overview of the latest products and most important new features.

What is the point of surge protection?

Surge protective devices (SPDs) protect electrical equipment and systems from damage caused by overvoltages and establish equipotential bonding. This optimises the availability of systems and devices and improves safety when dealing with electricity.

With **Red/Line** products you protect power technology,

With **Yellow/Line** products data, information and measuring and control technology

DEHN protects.

For more than 100 years, DEHN products have provided reliable protection against the dangers posed by lightning and surges.



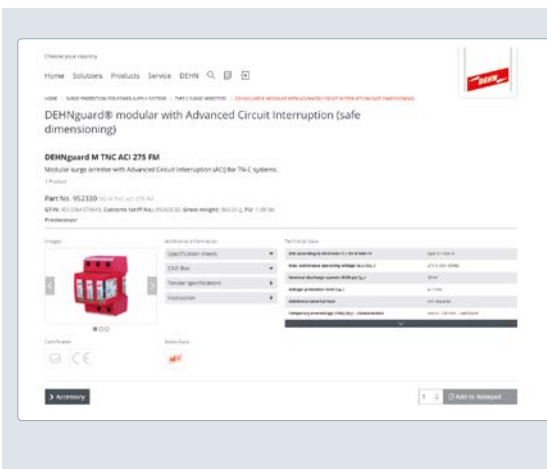
DEHNshield

- Application-optimised and prewired spark-gap-based type 1 + type 2 combined lightning current and surge arrester
- Compact design due to space-saving spark gap technology with a width of only one module / pole
- Fulfils the minimum requirements on the lightning current discharge capacity according to IEC 60364-5-53
- Allows compact lightning equipotential bonding including protection of terminal equipment
- Discharge capacity up to 50 kA (10/350 μ s)
- Operating state / fault indication by green / red indicator flag in the inspection window
- High follow current extinguishing capacity ($I_{fi} = 25 \text{ kA}_{rms}$)

Update to the product family Catalogue 2018, page 28



For protecting compact low-voltage consumer's installations against surges and even direct lightning strikes. For installation in conformity with the lightning protection zone concept at the boundaries from $0_A - 2$.



Only a click away

Our online product catalogue gives you quick and easy access to our complete product range. Particularly practical: from the product page, all relevant information sheets, CAD data, tender specifications and installation instructions are only one click away.

www.dehn-international.com

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- DEHNshield TNC 255:** Application-optimised combined lightning current and surge arrester for TN-C systems
- DEHNshield TNS 255:** Application-optimised combined lightning current and surge arrester for TN-S systems
- DEHNshield TT 255:** Application-optimised combined lightning current and surge arrester for TT and TN-S systems (3+1 configuration)
- DEHNshield TN 255:** Application-optimised combined lightning current and surge arrester for single-phase TN systems
- DEHNshield TT 2P 255:** Application-optimised combined lightning current and surge arrester for single-phase TT and TN systems (1+1 configuration)
- DEHNshield ... FM:** With remote signalling contact for monitoring device (floating changeover contact)

DEHNshield TNC (FM)

Application-optimised and prewired combined lightning current and surge arrester for TN-C systems with a nominal voltage of 230/400 V (3+0 configuration); FM version with floating remote signalling contact.

Type DSH ...	TNC 255	TNC 255 FM
Part No.	941 300	941 305
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U_c)	255 V (50 / 60 Hz)	255 V (50 / 60 Hz)
Lightning impulse current (10/350 μ s) [L1+L2+L3-PEN] (I_{total})	37.5 kA	37.5 kA
Lightning impulse current (10/350 μ s) [L-PEN] (I_{imp})	12.5 kA	12.5 kA
Voltage protection level (U_p)	$\leq 1.5 \text{ kV}$	$\leq 1.5 \text{ kV}$
Max. mains-side overcurrent protection	160 A gG	160 A gG
Approvals	KEMA, VDE, UL	KEMA, VDE
Type of remote signalling contact	—	changeover contact



DEHNshield TNC Basic FM

Application-optimised and prewired combined lightning current and surge arrester for TN-C systems; with floating remote signalling contact.

Type DSH ...	B TNC 255 FM
Part No.	941 306
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U_c)	255 V (50 / 60 Hz)
Lightning impulse current (10/350 μ s) [L1+L2+L3-PEN] (I_{total})	22.5 kA
Lightning impulse current (10/350 μ s) [L-PEN] (I_{imp})	7.5 kA
Voltage protection level (U_p)	$\leq 1.5 \text{ kV}$
Max. mains-side overcurrent protection	160 A gG
Approvals	VDE
Type of remote signalling contact	changeover contact



DEHNshield



DEHNshield TNS (FM)

Application-optimised and prewired combined lightning current and surge arrester for TN-S systems with a nominal voltage of 230/400 V (4+0 configuration); FM version with floating remote signalling contact.

Type DSH ...	TNS 255	TNS 255 FM
Part No.	941 400	941 405
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U _c)	255 (50 / 60 Hz)	255 (50 / 60 Hz)
Lightning impulse current (10/350 μs) [L1+L2+L3+N-PE] (I _{total})	50 kA	50 kA
Lightning impulse current (10/350 μs) [L, N-PE] (I _{imp})	12.5 kA	12.5 kA
Voltage protection level [L-PE]/[N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV	≤ 1.5 / ≤ 1.5 kV
Max. mains-side overcurrent protection	160 A gG	160 A gG
Approvals	KEMA, VDE, UL	KEMA, VDE
Type of remote signalling contact	—	changeover contact

DEHNshield TNS Basic FM

Application-optimised and prewired combined lightning current and surge arrester for TN-S systems; with floating remote signalling contact.



Type DSH ...	B TNS 255 FM
Part No.	941 406
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U _c)	255 (50 / 60 Hz)
Lightning impulse current (10/350 μs) [L1+L2+L3+N-PE] (I _{total})	30 kA
Lightning impulse current (10/350 μs) [L, N-PE] (I _{imp})	7.5 kA
Voltage protection level [L-PE]/[N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV
Max. mains-side overcurrent protection	160 A gG
Approvals	VDE
Type of remote signalling contact	changeover contact



DEHNshield TT (FM)

Application-optimised and prewired combined lightning current and surge arrester for TT and TN-S systems with a nominal voltage of 230/400 V (3+1 configuration); FM version with floating signalling contact.

Type DSH ...	TT 255	TT 255 FM
Part No.	941 310	941 315
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U _c)	255 V (50 / 60 Hz)	255 V (50 / 60 Hz)
Lightning impulse current (10/350 μs) [L1+L2+L3+N-PE] (I _{total})	50 kA	50 kA
Lightning impulse current (10/350 μs) [L-N]/[N-PE] (I _{imp})	12.5 / 50 kA	12.5 / 50 kA
Voltage protection level [L-N]/[N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV	≤ 1.5 / ≤ 1.5 kV
Max. mains-side overcurrent protection	160 A gG	160 A gG
Approvals	KEMA, VDE, UL	KEMA, VDE
Type of remote signalling contact	—	changeover contact
Extended technical data:		
Voltage protection level [L-PE] (U _p)	2.0 kV	2.0 kV

DEHNshield TT Basic FM

Application-optimised and prewired combined lightning current and surge arrester for TT and TN-S systems (3+1 configuration); with floating remote signalling contact.



Type DSH ...	B TT 255 FM
Part No.	941 316
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U _c)	255 V (50 / 60 Hz)
Lightning impulse current (10/350 μs) [L1+L2+L3+N-PE] (I _{total})	30 kA
Lightning impulse current (10/350 μs) [L-N]/[N-PE] (I _{imp})	7.5 / 30 kA
Voltage protection level [L-N]/[N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV
Max. mains-side overcurrent protection	160 A gG
Approvals	VDE
Type of remote signalling contact	changeover contact
Extended technical data:	
Voltage protection level [L-PE] (U _p)	2.0 kV

DEHNshield

DEHNshield TN (FM)

Application-optimised and prewired combined lightning current and surge arrester for single-phase TN systems with a nominal voltage of 230 V (2+0 configuration); FM version with floating remote signalling contact.

Type DSH ...	TN 255	TN 255 FM
Part No.	941 200	941 205
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U _c)	255 V (50 / 60 Hz)	255 V (50 / 60 Hz)
Lightning impulse current (10/350 μs) [L+N-PE] (I _{total})	25 kA	25 kA
Lightning impulse current (10/350 μs) [L, N-PE] (I _{imp})	12.5 kA	12.5 kA
Voltage protection level [L-PE]/[N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV	≤ 1.5 / ≤ 1.5 kV
Max. mains-side overcurrent protection	160 A gG	160 A gG
Approvals	KEMA, VDE, UL	KEMA, VDE
Type of remote signalling contact	—	changeover contact



DEHNshield TN Basic FM

Application-optimised and prewired combined lightning current and surge arrester for single-phase TN systems; with floating remote signalling contact.

Type DSH ...	B TN 255 FM
Part No.	941 206
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U _c)	255 V (50 / 60 Hz)
Lightning impulse current (10/350 μs) [L+N-PE] (I _{total})	15 kA
Lightning impulse current (10/350 μs) [L, N-PE] (I _{imp})	7.5 kA
Voltage protection level [L-PE]/[N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV
Max. mains-side overcurrent protection	160 A gG
Type of remote signalling contact	changeover contact



DEHNshield TT 2P FM

Application-optimised and prewired combined lightning current and surge arrester for single-phase TT and TN systems with a nominal voltage of 230 V (1+1 configuration); FM version with floating remote signalling contact.

Type DSH ...	TT 2P 255	TT 2P 255 FM
Part No.	941 110	941 115
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U _c)	255 V (50 / 60 Hz)	255 V (50 / 60 Hz)
Lightning impulse current (10/350 μs) [L+N-PE] (I _{total})	25 kA	25 kA
Lightning impulse current (10/350 μs) [L-N]/[N-PE] (I _{imp})	12.5 / 25 kA	12.5 / 25 kA
Voltage protection level [L-N]/[N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV	≤ 1.5 / ≤ 1.5 kV
Max. mains-side overcurrent protection	160 A gG	160 A gG
Approvals	KEMA, VDE, UL	KEMA, VDE
Type of remote signalling contact	—	changeover contact
Extended technical data:		
Voltage protection level [L-PE] (U _p)	2.0 kV	2.0 kV



DEHNshield TT 2P Basic FM

Application-optimised and prewired combined lightning current and surge arrester for single-phase TT and TN-S systems (1+1 configuration); with floating remote signalling contact.

Type DSH ...	B TT 2P 255 FM
Part No.	941 116
SPD according to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II
Max. continuous operating voltage (a.c.) (U _c)	255 V (50 / 60 Hz)
Lightning impulse current (10/350 μs) [L+N-PE] (I _{total})	15 kA
Lightning impulse current (10/350 μs) [L-N]/[N-PE] (I _{imp})	7.5 / 15 kA
Voltage protection level [L-N]/[N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV
Max. mains-side overcurrent protection	160 A gG
Type of remote signalling contact	changeover contact
Extended technical data:	
Voltage protection level [L-PE] (U _p)	2.0 kV



WINNER 2019
SSB INNOVATION AWARD

NEW: ACI Technology
Equipped for the future!



Surge protection with ACI technology: The highest level of safety

The new ACI technology improves the safety of your electrical systems. The integrated switch/spark gap combination reduces complexity and has a firm grip on future requirements.

Your advantages with DEHNguard ACI:



Safe dimensioning:
eliminate mistakes



Connection cross-section of just 6 mm²:
easier to install



TOV withstand:
increase availability



Future energy structure:
fulfil requirements



Zero leakage current:
increase arrester lifetime



Surge Protection
Lightning Protection
Safety Equipment
DEHN protects.

Find out more:

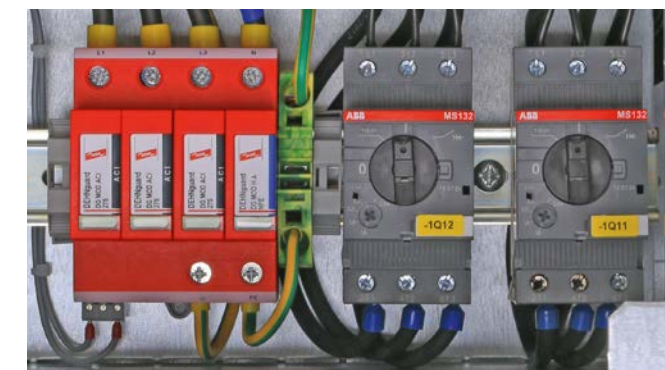
www.de.hn/acie

Surge Arresters – Type 2



DEHNguard modular with Advanced Circuit Interruption (safe dimensioning)

- New technology “Advanced Circuit Interruption” (ACI) integrated in the protection module, consists of a switch/spark gap combination
- Due to ACI technology no external backup fuse required
- Small connection cross-sections (6 mm²) absolutely sufficient
- TOV withstand also at 440 V (AC)
- High system reliability, no tripping of 32 A gG fuses
- Zero leakage current due to galvanic isolation by ACI switch unit
- Energy coordination with other arresters of the Red/Line product family



For protecting low-voltage consumer's installations against surges. For installation in conformity with the lightning protection zone concept at the boundaries from 0_B – 1 and higher.

DEHNguard M TNC ACI 275 FM: Modular surge arrester with integrated ACI technology for TN-C systems

DEHNguard M TNS ACI 275 FM: With integrated ACI technology for TN-S systems

DEHNguard M TT ACI ... FM: With integrated ACI technology for TT and TN-S systems (3+1 configuration)

DEHNguard M TN ACI 275 FM: With integrated ACI technology for 230 V TN systems

DEHNguard M TT 2P ACI ... FM: With integrated ACI technology for 230 V TT and TN systems (1+1 configuration)

DEHNguard S ACI ... FM: Single-pole, modular surge arrester with integrated ACI technology

DEHNguard M/S ... ACI ... FM: With remote signalling contact for monitoring device (floating changeover contact)

Type 2 arrester **NEW**

The new modular surge arrester of the DEHNguard ACI product family provides safety at the highest level. This is down to ACI technology (Advanced Circuit Interruption) which replaces the backup fuse with a switch / spark-gap combination connected in series with a high capacity varistor.

At the end of the service life of the ACI surge arrester, the new technology reduces any fault current to such an extent that not even the smallest fuses in the system are tripped. This means much greater availability and operational safety for the system in comparison with standard type 2 arresters with external fuses.

The new internal arrester backup fuse has further advantages:

Safe dimensioning: eliminate mistakes

The new technology prevents designing errors which might occur when dimensioning or selecting overload protection; thus eliminating the need for a backup fuse. With ACI, protection is directly integrated in the arrester and, as a result, optimally adjusted to it. DEHNguard ACI automatically eliminates the possibility of faulty installation or dimensioning errors. The arrester also leaves you more space in the switchgear cabinet as there is no need for an additional upstream backup fuse. In addition to the condition of the varistor, that of the switch/spark-gap combination is also signalled and notified via the tried and tested mechanical function/fault indicator.

Connection cross-section of only 6 mm²: Easier to install

A conductor cross-section of just 6 mm² is always enough for the active conductors and PE. You save the valuable time you would, in the past, have spent dimensioning the cross-sections. 6 mm² Cu also makes installation easier because the bending radiuses are smaller. DEHNguard ACI therefore allows shorter wiring.

TOV withstand: Increase availability

Temporary overvoltages (e.g. caused by loss of neutral) can destroy conventional surge protective devices. The new DEHNguard ACI has a much better TOV withstand and provides protection without device failure even at 440 V (AC). This increases the availability of your system and avoids wasting time and money on troubleshooting and repairing unnecessary damage.

Zero leakage current: Increase service lifetime

The construction of DEHNguard ACI means that there are no leakage currents. This prevents premature ageing of the protective device and avoids wasting time and money on replacing them ahead of schedule. DEHNguard ACI arresters also contribute towards operational safety because they prevent the accidental tripping of the insulation monitoring.

Transition in the energy sector: Fulfil future requirements

With ACI arresters you are safely equipped for the future – even if network parameters change, e.g., as a result of renewable power generation. Isolated grids and storage systems are changing the short-circuiting conditions.

DEHNguard ACI – Maximum system availability

System downtimes caused by an upstream safety device tripping or being switched back on are a thing of the past. This means much greater availability and operational safety for the system in comparison with standard type 2 arresters with external fuses.



DEHNgard modular with Advanced Circuit Interruption (safe dimensioning)

General Information:

SPD according to EN 61643-11 / IEC 61643-11 type 2 / class II

**DEHNgard M TNC ACI 275 FM**

Modular surge arrester with Advanced Circuit Interruption (ACI) for TN-C systems.

Type DG ...	M TNC ACI 275 FM
Part No.	952 330
Max. continuous operating voltage (a.c.) (U _c)	275 V (50 / 60 Hz)
Nominal discharge current (8/20 μs) (I _n)	20 kA
Voltage protection level (U _p)	≤ 1.5 kV
Additional external fuse	not required
Temporary overvoltage (TOV) (U _T) – Characteristic	440 V / 120 min. – withstand

**DEHNgard M TNS ACI 275 FM**

Modular surge arrester with Advanced Circuit Interruption (ACI) for TN-S systems.

Type DG ...	M TNS ACI 275 FM
Part No.	952 440
Max. continuous operating voltage (a.c.) [L-PE] (U _c)	275 V (50 / 60 Hz)
Nominal discharge current (8/20 μs) (I _n)	20 kA
Voltage protection level [L-PE] / [N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV
Additional external fuse	not required
Temporary overvoltage (TOV) (U _T) – Characteristic	440 V / 120 min. – withstand

**DEHNgard M TT ACI ... FM**

Modular surge arrester with Advanced Circuit Interruption (ACI) for TT and TN-S systems (3+1 configuration).

Type DG ...	M TT ACI 275 FM	M TT ACI 385 FM
Part No.	952 341	952 342
Max. continuous operating voltage (a.c.) [L-N] (U _c)	275 V (50 / 60 Hz)	385 V (50 / 60 Hz)
Nominal discharge current (8/20 μs) [L-N] (I _n)	20 kA	20 kA
Voltage protection level [L-N] / [N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV	≤ 1.5 / ≤ 1.5 kV
Additional external fuse	not required	not required
Temporary overvoltage [L-N] (U _T) – Characteristic	440 V / 120 min. – withstand	440 V / 120 min. – withstand
Temporary overvoltage [N-PE] (U _T) – Characteristic	1200 V / 200 ms – withstand	1200 V / 200 ms – withstand

**DEHNgard M TN ACI 275 FM**

Modular surge arrester with Advanced Circuit Interruption (ACI) for single-phase 230 V-TN systems.

Type DG ...	M TN ACI 275 FM
Part No.	952 220
Max. continuous operating voltage (a.c.) [L-PE] (U _c)	275 V (50 / 60 Hz)
Nominal discharge current (8/20 μs) (I _n)	20 kA
Voltage protection level [L-PE] / [N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV
Additional external fuse	not required
Temporary overvoltage (TOV) (U _T) – Characteristic	440 V / 120 min. – withstand

**DEHNgard M TT 2P ACI ... FM**

Modular surge arrester with Advanced Circuit Interruption (ACI) for single-phase 230 V-TT and TN systems (1+1 configuration).

Type DG ...	M TT 2P ACI 275 FM	M TT 2P ACI 385 FM
Part No.	952 121	952 122
Max. continuous operating voltage (a.c.) [L-N] (U _c)	275 V (50 / 60 Hz)	385 V (50 / 60 Hz)
Nominal discharge current (8/20 μs) [L-N] (I _n)	20 kA	20 kA
Voltage protection level [L-N] / [N-PE] (U _p)	≤ 1.5 / ≤ 1.5 kV	≤ 1.5 / ≤ 1.5 kV
Additional external fuse	not required	not required
Temporary overvoltage [L-N] (U _T) – Characteristic	440 V / 120 min. – withstand	440 V / 120 min. – withstand
Temporary overvoltage [N-PE] (U _T) – Characteristic	1200 V / 200 ms – withstand	1200 V / 200 ms – withstand

**DEHNgard S ACI ... FM**

Pluggable single-pole surge arrester consisting of a base part and plug-in protection module; with Advanced Circuit Interruption (ACI).

Type DG ...	S ACI 275 FM	S ACI 385 FM
Part No.	952 100	952 113
Max. continuous operating voltage (a.c.) (U _c)	275 V (50 / 60 Hz)	385 V (50 / 60 Hz)
Nominal discharge current (8/20 μs) (I _n)	20 kA	20 kA
Voltage protection level (U _p)	≤ 1.5 kV	≤ 1.5 kV
Additional external fuse	not required	not required
Temporary overvoltage (TOV) (U _T) – Characteristic	440 V / 120 min. – withstand	440 V / 120 min. – withstand



DEHNgard modular with Advanced Circuit Interruption (safe dimensioning)

Accessories for DEHNgard modular with Advanced Circuit Interruption (safe dimensioning)

Combined Switch / Spark Gap Protection Module for DEHNgard ACI

Type	DG MOD ACI 275	DG MOD ACI 385
Part No.	952 024	952 028
Max. continuous operating voltage (a.c.) (U _c)	275 V	385 V



Spark-Gap-Based Protection Module for DEHNgard M ACI

Type	DG MOD A NPE
Part No.	952 022
Max. continuous operating voltage (a.c.) (U _c)	275 V



N-PE Spark-Gap-Based Protection Module for DEHNgard M ACI

Type	DG MOD H A NPE
Part No.	952 083
Max. continuous operating voltage (a.c.) (U _c)	275 V



DEHNgard ME / SE DC ... (FM)

**DEHNgard ME DC ... FM**

Modular combined arrester for DC applications; with floating remote signalling contact.

Type DG ...	ME DC Y 950 FM
Part No.	972 146
SPD analogous to EN 61643-11 / IEC 61643-11	type 1 + type 2 / class I + class II
Max. continuous operating voltage (d.c.) (U _c)	950 V
Lightning impulse current (10/350 μs) (I _{imp})	5 kA
Nominal discharge current (8/20 μs) (I _n)	12.5 kA
Voltage protection level [(DC+ → DC-) (U _p)	≤ 4 kV
Voltage protection level [(DC+/DC-) → PE] (U _p)	≤ 3.2 kV
Max. short circuit withstand capability (I _{scCR})	500 A / 170 ms
Approvals	UL
Type of remote signalling contact	changeover contact

New to the product family
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Accessories for DEHNgard ME / SE DC ... (FM)

Varistor-Based Protection Module for DEHNgard ME DC

Type	DG MOD DC Y 500
Part No.	972 050
Max. continuous operating voltage (d.c.) (U _c)	950 V



Spark-Gap Based Protection Module for DEHNgard ME DC

Type	DGP MOD DC Y 500
Part No.	972 051
Max. continuous operating voltage (d.c.) (U _c)	950 V



General Accessories

Impulse Counter IPC P3

Type	IPC P3
Part No.	910 512
Response threshold for impulse currents (rise time ≥ 8 μs)	1 kA
LCD display	electronic counter 0-999
Power supply	3 V lithium battery (CR17335) included in delivery, replaceable, battery life of 3 years
Setting device	button on the device for setting the counter (e.g. after replacing a battery)
Resetting device	button on the device for resetting the counter to 0
Dimensions (sensor)	inner Ø14 mm
Accessories included in delivery	3 V lithium battery (CR17335); cable tie (for fixing the sensor)

Successor product for Part No. 910 502
Catalogue 2018, page 126

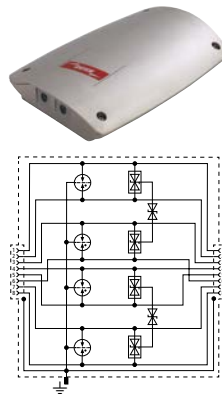
DEHNpatch outdoor CLE IP66



- Indoor / outdoor applications (IP 66)
- GBit Ethernet applications and structured cabling systems according to class E up to 250 MHz
- Power over Ethernet IEEE 802.3 (up to PoE++ / 4PPoE)
- For installation in conformity with the lightning protection zone concept at the boundaries from 0_B – 2 and higher

New to the product family Catalogue 2018, page 203

Universal surge arrester for GBit Ethernet applications, Power over Ethernet (IEEE 802.3 compliant up to PoE++ / 4PPoE) and similar applications in structured cabling systems up to class E in indoor and outdoor areas in an IP66 rated enclosure impervious to dust and water. Protection of all pairs with gas discharge tubes and one adapted filter matrix for each pair. Fully shielded surge protective solution with RJ 45 sockets. Universal mounting bracket for pole and wall mounting. External accessories: Tensioning straps for pole mounting



Type DPA ...	CLE IP66
Part No.	929 221
SPD class	TYPE 2 [2]
Max. continuous operating voltage (d.c.) pair-pair (PoE) (U _c)	60 V
Nominal current (I _n)	1 A
D1 Lightning impulse current (10/350 μs) per line (I _{imp})	0.8 kA
D1 Lightning impulse current (10/350 μs) total (I _{imp})	4 kA
C2 Nominal discharge current (8/20 μs) total (I _n)	10 kA
Cut-off frequency (f _c)	250 MHz
Degree of protection	IP 66
Connection (input / output)	RJ45 socket / RJ45 socket
Approvals	UL, CSA, EAC

Safe in rain, ice, snow, sand and dust
DEHNpatch outdoor: the installation of surge protective devices for outdoor ethernet applications has never been easier.

Surge arrester
DEHNpatch outdoor

- Functional enclosure for reliable operation in rough environments (IP 66)
- No additional EB conductor needed when mounted on a metal structure
- Easily mounted with the universal mounting bracket
- High protection capacity – lightning current discharge capacity of in total 4 kA (10/350 μs)

Surge Protection
Lightning Protection
Safety Equipment
DEHN protects.

Find out more:

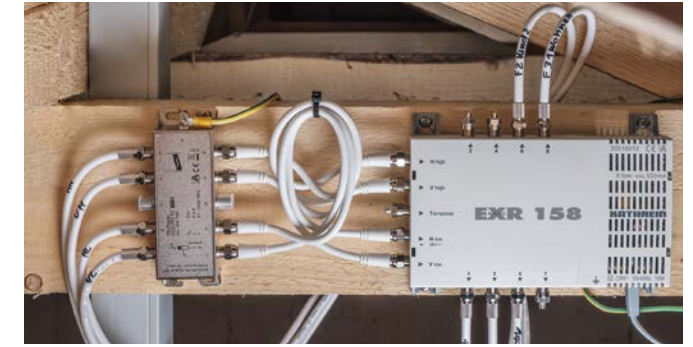
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DEHNgate FF5 TV

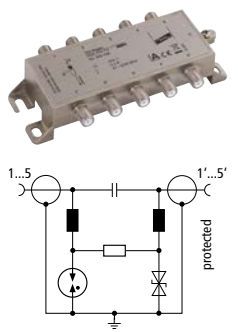
- Compact surge arrester for SAT receivers
- Five-channel protection for antenna splitter and multi-switch
- For installation in compliance with the lightning protection zones concept from 0_B – 2 and higher

New to the product family Catalogue 2018, page 220



Five-channel surge arrester for 75-ohm antenna systems. Special design for SAT antenna splitters and multi-switches. The arrester fulfills the shielding requirements of class A acc. to EN 50083-2. Delivery includes fastening material and EB conductor.

Type DGA ...	FF5 TV
Part No.	909 706
SPD class	TYPE 2 [2]
Max. continuous operating voltage (d.c.) (U _c)	20 V
Nominal current (I _n)	0.4 A
D1 Lightning impulse current (10/350 μs) (I _{imp})	0.5 kA
D1 Total lightning impulse current (10/350 μs) (I _{imp})	2.5 kA
C2 Nominal discharge current (8/20 μs) (I _n)	2.5 kA
C2 Total nominal discharge current (8/20 μs) (I _n)	10 kA
Frequency range	47-2200 MHz
Connection (input / output)	F socket / F socket



For quick answers to your questions, contact:



Partners worldwide:

International customer service:
+49 9181 906-1462
international@dehn.de

Our subsidiaries and offices in Europe, Africa, America and Asia as well as our partner network in more than 70 countries allow us to operate globally.



For technical questions:

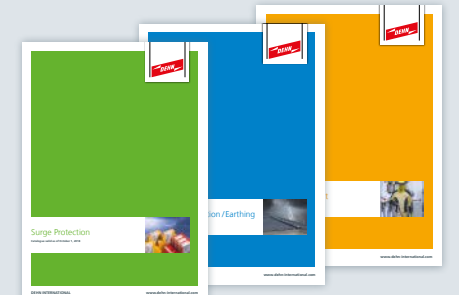
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Selecting specific products – further product catalogue

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