Selection matrix – Industrial buildings lightning current and surge protective devices for power supply systems Red / Line

Low-voltage main distribution board [1]

Upstream backup fuse > 250 A

Upstream backup fuse > 125 A

Sub-distribution board existent?

No further protective devices required

> 10 m

Type 1+2+3 combined arrester [2] – DEHNvenCI ... FM [3]

System configuration		
TN-S	TT	TN-C
4x **961 205** 1x **900 417**	3x **961 205** 1x **961 185** 1x **900 849**	3x **961 205** 1x **900 411**

Type 1+2+3 combined arrester – DEHNventil ... FM

System configuration		
TN-S	TT	TN-C
956 405	**956 315** [4] alternative **951 310**	**956 305**

Type 2 surge arrester – DEHNguard ACI ... FM [3]
Cross-sectional area of 6 mm² (Cu)

System configuration		
TN-S	TT	TN-C
952 440	**952 341**	**952 330**

Type 2 surge arrester – DEHNguard ... FM

System configuration		
TN-S	TT	TN-C
952 405	**952 385**	**952 305**

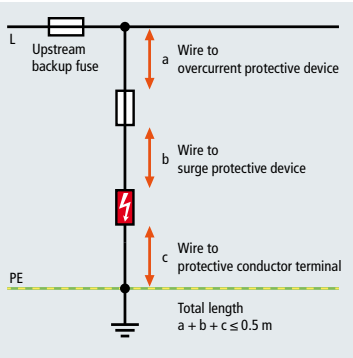
Type 3 surge arrester

DEHNrail M ... FM [3]		DEHNflex	DEHNsafe	SFL PRO 6x 19"
Three phase current up to 25 A	Alternating current up to 25 A	Alternating current up to 16 A	Alternating current up to 16 A	Alternating current up to 16 A installation in 19" systems
953 405	**953 205**	**924 396**	**924 370**	**909 251**

Installation notes

Comply with maximum cable length

According to IEC 60364-5-53, it is important to ensure that the total length of all lines between the connection points of the SPD combination does not exceed a value of 0.5 m. This specification applies to the cable length including the backup fuse.
Tip: Cable length a need not be taken into account when using DEHNvenCI and DEHNguard ACI, both products without an additional backup fuse.



Detailed selection is quick and easy with our online configurators:

More information at:
de.hn/8xpVg

Yes
No
Cable length to the equipment > 10 m

[1] Same product selection regardless of the lightning protection system
[2] Protective effect
[3] without additional backup fuse (earth-fault and short-circuit-proof installation necessary)
[4] available from Q2/2024

DS390/EN-EURAF/0823
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Selection matrix – Industrial buildings lightning current and surge protective devices for telecommunications Yellow / Line

Building automation / measuring and control systems

KNX

BLITZDUCTORconnect ML2 B 180

927 210	U_C = 180 V DC I_L = 1.2 A

TYPE 1 P1

DEHNbox TC B 180

922 220	U_C = 180 V DC I_L = 1 A

TYPE 1 P2

BLITZDUCTOR XT ML2 B 180 [1)]

920 211	U_C = 180 V DC I_L = 1.2 A

TYPE 1 P1

BUStector 24

925 001	U_C = 45 V DC I_L = 6 A

TYPE 2 KNX

Two-wire bus systems
Profibus, Modbus RTU, RS 485, CAN Bus

BLITZDUCTORconnect ML2 BD HF 5

927 271	U_C = 8.5 V DC I_L = 750 mA

TYPE 1 P1

BLITZDUCTOR XT ML4 BD HF 5 [1)]

920 371	U_C = 6.0 V DC I_L = 1.0 A

TYPE 1 P1

Ethernet interfaces
BACnet, Profinet, Modbus TCP

DEHNpatch CL8 EA 4PPOE

929 161	U_C = 3.3 V DC, $U_{C,PoE}$ = 58 V DC I_L = 1.5 A, f_G = 500 MHz

TYPE 1 P2

HLK

Analogue signal with/without auxiliary power
(up to max. 33 V DC / 23.3 V AC)

BLITZDUCTORconnect ML2 BE 24

927 224	U_C = 33 V DC / 23.3 V AC I_L = 0.75 A

TYPE 1 P1

BLITZDUCTOR XT ML4 BE 24 [1)]

920 324	U_C = 33 V DC / 23.3 V AC I_L = 0.75 A

TYPE 1 P1

Damper and valve actuators
(up to max. 45 V DC / 31 V AC)

BLITZDUCTOR XT ML4 BE 36 [1)]

920 336	U_C = 45 V DC / 31 V AC I_L = 1.8 A

TYPE 1 P1

Temperature measurement
(PT 100, PT 1000, Ni 1000, NTC, PTC)

BLITZDUCTOR XT ML4 BC 24 [1)]

920 354	U_C = 33 V DC / 23.3 V AC I_L = 0.75 A

TYPE 1 P1

Safety and security technology

Video security systems / IP cameras

DEHNpatch CL8 EA 4PPOE

929 161	U_C = 3.3 V DC, $U_{C,PoE}$ = 58 V DC I_L = 1.5 A, f_G = 500 MHz

TYPE 1 P2

DEHNpatch outdoor CLE IP66

929 221	U_C = 60 V DC, I_L = 1 A f_G = 250 MHz

TYPE 2 P1

Burglar alarm systems
(e.g. 12 V DC operating voltage)

BLITZDUCTORconnect ML2 BD 12 [2)]

927 242	U_C = 15 V DC / 10.6 V AC I_L = 0.75 A

TYPE 1 P1

BLITZDUCTOR XT ML2 BD S 12 [1), 2)]

920 242	U_C = 15 V DC / 10.6 V AC [1)] I_L = 1.0 A

TYPE 1 P1

Fire alarm systems
(e.g. ring, loop and stub line)

BLITZDUCTOR XT ML2 BD S 48 [1), 2)]

920 245	U_C = 54 V DC / 38.1 V AC I_L = 1.0 A

TYPE 1 P1

BLITZDUCTOR XT ML2 BE S 24 [1), 2)]

920 224	U_C = 33 V DC / 23.3 V AC I_L = 0.75 A

TYPE 1 P1

Fire brigade peripherals
(e.g. FBKD, release element, FIOS)

BLITZDUCTOR XT ML2 BD S 24 [1)]

920 344	U_C = 45 V DC / 31 V AC I_L = 1.8 A

TYPE 1 P1

Voice alarm systems (VAS)

DEHNVARIO 2 BY S 150 FM

928 430	U_C = 150 V DC, I_L = 10 A

TYPE 1 P2

Telecommunications / network

VDSL, VVDSL, G.Fast

BLITZDUCTORconnect ML2 B 180

927 210	U_C = 180 V DC I_L = 1.2 A

TYPE 1 P1

DEHNrapid LSA 10 B 180 FSD

907 401	U_C = 180 V DC I_L = 0.4 A

TYPE 1 C

BLITZDUCTOR XT ML2 B 180 [1)]

920 211	U_C = 180 V DC I_L = 1.2 A

TYPE 1 P1

DEHNbox TC B 180

922 220	U_C = 180 V DC I_L = 1 A

TYPE 1 P2

Network

DEHNpatch CL8 EA 4PPOE

929 161	U_C = 3.3 V DC, $U_{C,PoE}$ = 58 V DC I_L = 1.5 A, f_G = 500 MHz

TYPE 1 P2

DEHNpatch outdoor CLE IP66

929 221	U_C = 60 V DC, I_L = 1 A f_G = 250 MHz

TYPE 2 P1

Separable		Visual indication	
DIN rail mounting		Wall mounting	
		Pole mounting	
Push-in connection		Arrester on LSA disconnection block	
Screw connection		IP66 (outdoor use)	
RJ45		1) In combination with base part BXT BAS, 920 300	
RFID Life Check		2) Manufacturer-specific deviations possible	

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