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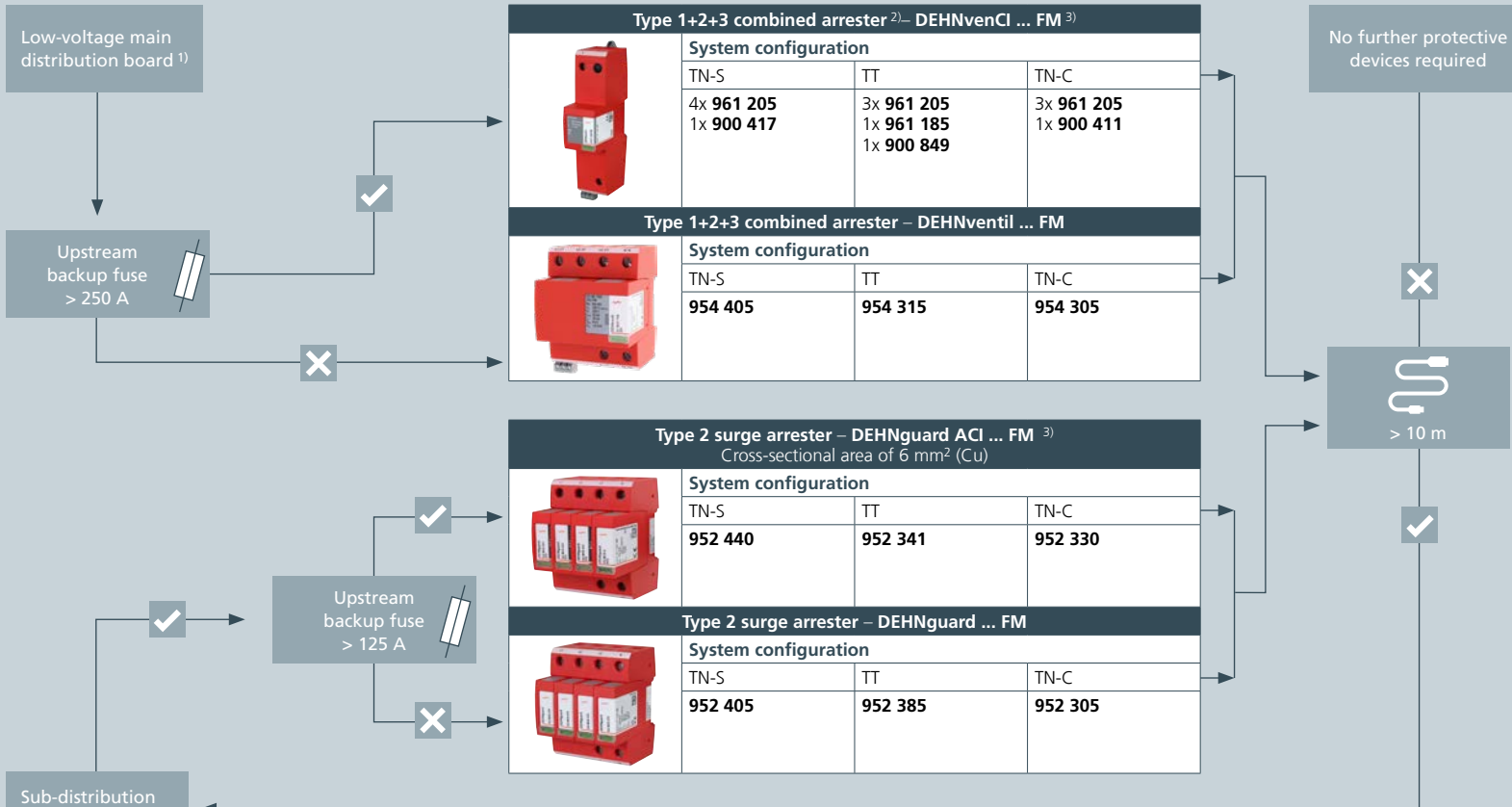 Selection matrix – Industrial buildings lightning current and surge protective devices for power supply systems Red/Line

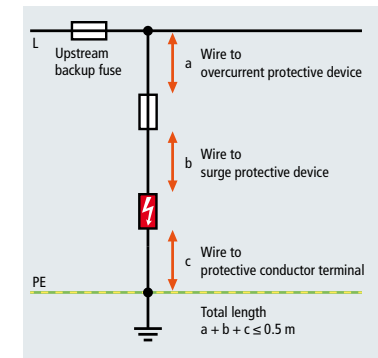**DEHN**

**Low-voltage main distribution board [1]**

**Upstream backup fuse > 250 A**

## 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 |
| **954 405** | **954 315** | **954 305** |

**No further protective devices required**

**> 10 m**

## 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** |

**Upstream backup fuse > 125 A**

**Sub-distribution board existent?**

## 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 DIN VDE 0100-534, 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.

L — Upstream backup fuse
a — Wire to overcurrent protective device
b — Wire to surge protective device
c — Wire to protective conductor terminal
PE
Total length a + b + c ≤ 0.5 m

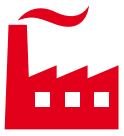Detailed selection is quick and easy with our online configurators:

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)

# 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

**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

**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 IP66

### 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

**BLITZDUCTOR XT ML2 B 180** [1]
**920 211** | $U_C = 180\,V\,DC$, $I_L = 1.2\,A$
TYPE 1 P1

**DEHNrapid LSA 10 B 180 FSD**
**907 401** | $U_C = 180\,V\,DC$, $I_L = 0.4\,A$
TYPE 1 C

**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 IP66

### Legend

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