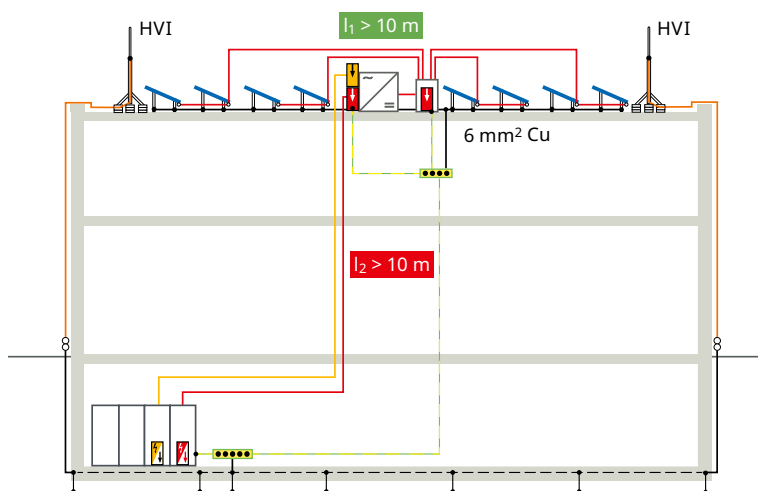


Separation distance maintained



The PV modules must be arranged in the protected volume of the isolated air-termination system while maintaining the separation distance (s). A lightning protection system, such as HVI lightning protection, should be favoured that in consideration of the required separation distances does not have a direct connection to the PV system.¹⁾

Type 2 surge arresters are used on the DC side for special protection of the inverter.¹⁾

The AC infeed is protected with a combined arrester; the AC output of the inverter with a Type 2 surge arrester. The arresters should be installed as close as possible to the inverter.

Note: If the cable length between the arrester and the device to be protected is more than 10 m, additional Type 1 surge arresters must be used.¹⁾

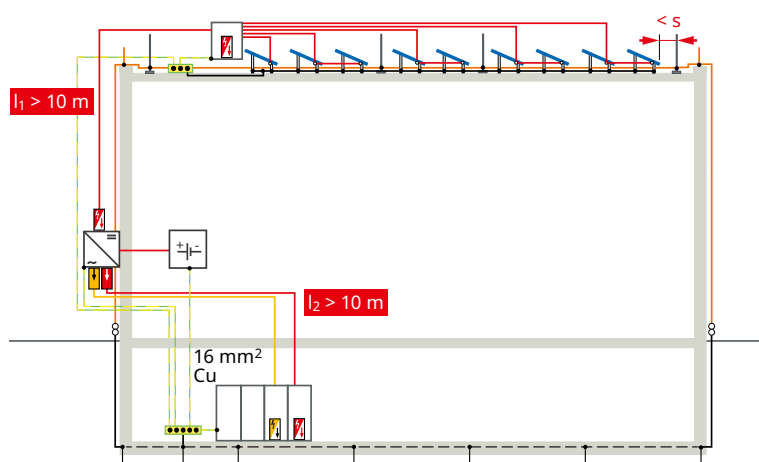
Surge protection

		Part no.
	DEHNcube 2 YPV generator junction boxes Prewired system solution with integrated Type 2 arrester for protecting the DC side of PV systems. Product versions available for up to 3 MPP applications and with cable entry or MC4 plug connection. Customisable on request.	900 924
	DEHNguard M TNS 275 FM To protect the AC side of the inverter: Surge arrester (Type 2) for TN-S systems with 230 / 400 V with floating remote signalling contact.	952 405
	DEHNventil M2 TNS 255 FM To protect the AC side of the inverter: Spark-gap-based, modular, Type 1 + 2 + 3 combined arrester and with Rapid Arc Control (RAC) for maximum system availability.	956 405
	BLITZDUCTORconnect ML2 BD HF 5 To protect the data and communication interface: Combined arrester (Type 1 + 2 + 3) with a width of 6 mm and push-in connection terminal for the protection of 1 pair; e.g. RS-485 bus systems.	927 271
	DEHNpatch Class EA For the protection of applications in structured cabling systems according to class EA up to 500 MHz: Combined arrester (Type 1 + 2 + 3) with a width of 19 mm and RJ45 connection technology with status indication and optional module adapter for remote signalling.	929 161 929 309
	DEHNrecord IRCM Monitoring unit for the condition monitoring of up to 50 BLITZDUCTORconnects. With LED status indicator and floating remote signalling contact.	910 710

External lightning protection system / equipotential bonding

		Part no.
	HVI light plus Conductor inside the supporting tube with air-termination tip SET Air-termination system for maintaining the separation distance. Components: Supporting tube (GRP/Al) Ø40 mm, length = 2,400 mm, air-termination tip (StSt) length = 500 mm, HVI light plus pre-assembled for installation inside the tube.	819 674
	Tripod hinged Tripod (hinged design) for supporting tubes of Ø50 mm with side outlet. With double clamp for the connection of 2x Rd 8-10 mm. Adapter set for reducing the diameter from Ø50 mm to Ø40 mm.	107 390 107 339
	Concrete base For air-termination rods, for protecting small roof-mounted structures on flat roofs and for installing spacers, e.g. for isolated ring conductors or for self-supporting air-termination rods in the tripod.	102 340
	UNI earthing clamp, stainless steel For integrating the PV mounting systems in the functional equipotential bonding / the functional earthing and the lightning equipotential bonding.	540 250
	UNI seam clamp, stainless steel / Al For integrating the PV mounting systems on the seam plate in the functional equipotential bonding / the functional earthing and the lightning equipotential bonding.	365 250

Separation distance not maintained



If the separation distance(s) calculated in line with DIN EN 62305-3 cannot be maintained, lightning equipotential bonding must be installed.²⁾

The metal components must be connected to the lightning protection system so they are capable of carrying lightning current. The relevant supply lines must be included in the lightning equipotential bonding. This is achieved by means of a Type 1 combined arrester on the AC, DC and data side. In this case, the cables should preferably be laid outside the building (see diagram).

Note: If the cable length between the arrester and the device to be protected is more than 10 m, additional Type 1 surge arresters must be used.¹⁾

Surge protection

		Part no.
	DEHNCube 2 YPV generator junction boxes Prewired system solution with integrated Type 1 + 2 arrester for protecting the DC side of PV system. Product versions available for up to 3 MPP applications and with cable entry or MC4 plug connection. Customisable on request.	900 976
	DEHNCombo YPV 1200 To protect the DC side of the inverter: Multipole, Type 1 + 2 combined arrester for PV generator circuits.	900 075
	DEHNventil M2 TNS 255 FM To protect the AC side of the inverter: Spark-gap-based, modular, Type 1 + 2 + 3 combined arrester and with Rapid Arc Control (RAC) for maximum system availability.	956 405
	DEHNguard M TNS 275 FM To protect the AC side of the inverter: Surge arrester (Type 2) for TN-S systems with 230 / 400 V with floating remote signalling contact.	952 405
	BLITZDUCTORconnect ML2 BD HF 5 To protect the data and communication interface: Combined arrester (Type 1 + 2 + 3) with a width of 6 mm and push-in connection terminal for the protection of 1 pair; e.g. RS-485 bus systems.	927 271
	DEHNpatch Class Ea For the protection of applications in structured cabling systems according to class Ea up to 500 MHz: Combined arrester (Type 1 + 2 + 3) with a width of 19 mm and RJ45 connection technology with status indication and optional module adapter for remote signalling.	929 161 929 309
	DEHNrecord IRCM Monitoring unit for the condition monitoring of up to 50 BLITZDUCTORconnects. With LED status indicator and floating remote signalling contact.	910 710

External lightning protection system / equipotential bonding

		Part no.
	DEHNalu round wire According to EN 62561-2, for use in lightning protection systems.	840 018
	Air-termination rod Self-supporting air-termination rods with tripod for protecting roof-mounted structures, adjustable to a roof pitch up to max. 10°. Concrete base (part no. 102 075 or 102 010) and the plastic base plate (part no. 102 060 or 102 050) have to be ordered separately.	105 525
	UNI earthing clamp, stainless steel For integrating the PV mounting systems in the functional equipotential bonding / the functional earthing and the lightning equipotential bonding.	540 250
	UNI seam clamp, stainless steel / Al For integrating the PV mounting systems on the seam plate in the functional equipotential bonding / the functional earthing and the lightning equipotential bonding.	365 250

¹⁾ IEC TR 63227:2020

²⁾ IEC 62305

