

# FSProtect

## Integrated lightning protection system for Schletter open area plants

- System components for a price-efficient realization of the complete exterior lightning protection
- Planning for the complete verification of the exterior lightning protection

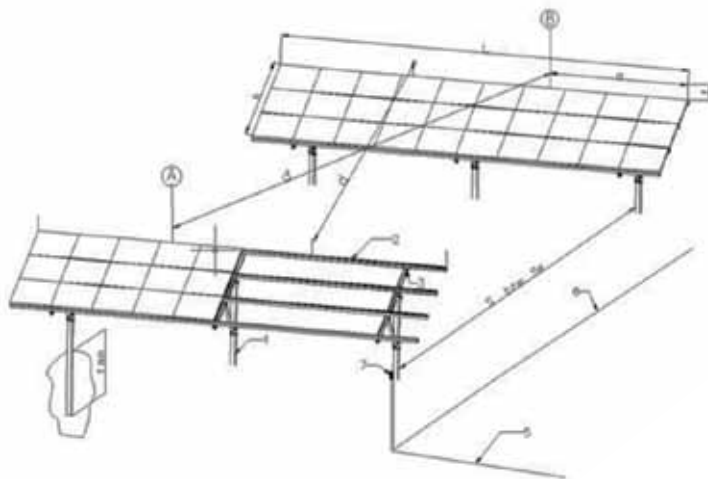


With the FSProtect system, the Schletter company provides a completely integrated lightning protection system.

The design of the open area mounting system FS with pile-driven foundations and aluminum module cross beams with big cross-sections widely fulfills the task of a complete lightning protection/grounding device "for free", so to speak. Thus, it is possible to realize an exterior lightning protection system according to the standards with only a few additional components: By means of a suitable mesh network, all pile-driven foundations are used as earth electrodes. Moreover, the module racks are equipped with lightning spikes, due to the relatively big cross-sections, the module rack itself fulfills the task of electric connection in an almost optimum manner and without time effort. The required components for the refitting can be delivered as system accessories at a little extra cost together with the mounting system.

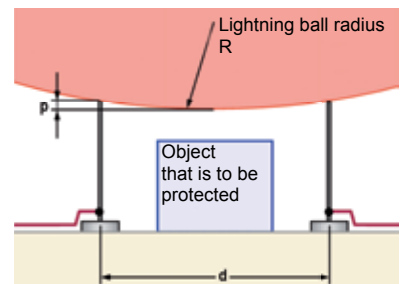


Foundation clamp

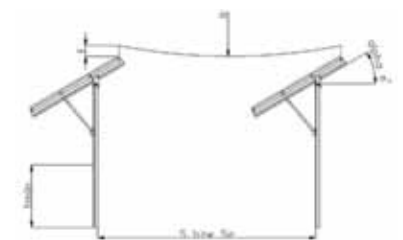


### Spatial geometry of the row arrangement with lightning spikes (from the planning program)

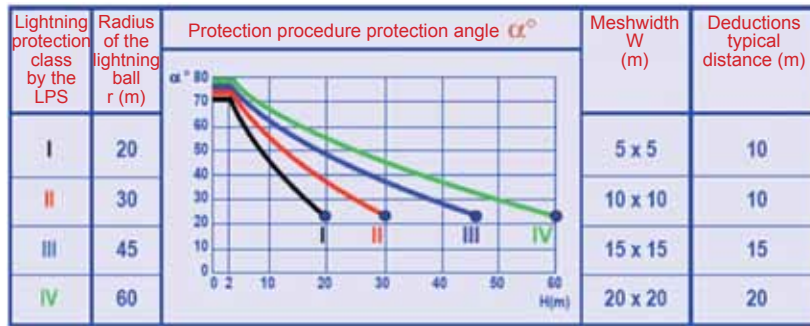
- 1 Foundation earth electrode
- 2 Cross connection in the table through load bearing purlin
- 3 Deduction at the rack by load bearing girder
- 4 Lightning spike
- 5 Connection from rack to rack with earthing strap
- 6 Interconnection of the rows with earthing strap
- 7 Foundation clamp for connection



Verification of the protection condition acc. to the lightning ball method, schematic illustration



Verification of the protection condition on the basis of the plant geometry in case of uniform row arrangement



### Technical data and standards

<b>Relevant standards</b>	Lightning protection concept acc. to DIN VDE 0185-305-3 Bbl2 Class 3
<b>Lightning protection class</b>	Usually class 3 according to standard risk assesment
<b>Exterior lightning protection system</b>	Verification of the protection of the plant according to the lightning ball procedure acc. to DIN EN 62305-3 (VDE 0185-3) section 5.2.2
<b>Earthing plant</b>	Earthing system acc. to DIN EN 62305-3 (VDE 0185-305-3)
<b>Internal lightning protection</b>	Recommendation according to dimensioning program

We would like to thank the company Dehn&Söhne for their support in the creation of the FSProtect lightning protection system

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