

# New surge protection devices for photovoltaic applications

Type 1+2 and type 2 for 1,000 V and 1,500 V DC

**New combination arrestors for the lightning and surge protection of PV systems up to 1,500 V DC**

- Surge protection according to IEC 60364-7-712 (VDE 0100-712)
- Error-resistant Y circuit with status display
- The FS variant has a potential-free changeover contact for remote signalling

All V-PV... surge protection devices are suitable for the application in PV systems according to VDE 0100-712 (IEC 60364-7-712) and meet the current EN 50539-11 product norm.

## Type 1+2:

Lightning protection equipotential bonding according to IEC 62305 (VDE 0185-305), discharge capacity to 12.5 kA (10/350) and 40 kA (8/20)



## Type 2:

Surge protection according to IEC 60364-7-712 (VDE 0100-712), discharge capacity of 20 kA per pole and to 40 kA (8/20)



## Technical details



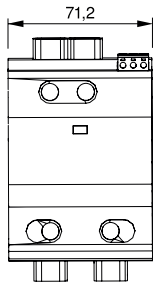
### PV complete block 1,500 V DC + PV complete block 1,000 V DC

Type 1+2 combination arrester for the lightning and surge protection of PV systems

- Lightning protection equipotential bonding according to IEC 62305 (VDE 0185-305)
- Surge protection according to IEC 60364-7-712 (VDE 0100-712)
- Discharge capacity to 12.5 kA (10/350) and 40 kA (8/20)
- Error-resistant Y circuit with status display
- The FS variant has a potential-free changeover contact for remote signalling

#### Application:

Lightning current and surge protection devices for PV systems



Type	Version	Nominal voltage	Impulse current	Item No.
V-PV-T1+2-1000	Y circuit	$U_c$ PV = 1,000 V DC	$I_{imp}$ = 12.5 kA (10/350)	5094 230
V-PV-T1+2-1000FS	Y circuit + remote	$U_c$ PV = 1,000 V DC	$I_{imp}$ = 12.5 kA (10/350)	5094 232
V-PV-T1+2-1500	Y circuit	$U_c$ PV = 1,500 V DC	$I_{imp}$ = 12.5 kA (10/350)	5094 240
V-PV-T1+2-1500FS	Y circuit + remote	$U_c$ PV = 1,500 V DC	$I_{imp}$ = 12.5 kA (10/350)	5094 242



### PV complete block 1,500 V DC

Type 2 surge protection for PV systems

- Surge protection according to IEC 60364-7-712 (VDE 0100-712)
- Discharge capacity of 20 kA per pole, up to 40 kA (8/20)
- Error-resistant Y circuit with status display
- The FS variant has a potential-free changeover contact for remote signalling

#### Application:

Surge protection devices for PV systems



Type	Version	Nominal voltage	Impulse current	Item No.
V-PV-T2-1500	Y circuit	$U_c$ PV = 1,500 V DC	$I_n$ = 20 kA (8/20)	5094 210
V-PV-T2-1500+FS	Y circuit + remote	$U_c$ PV = 1,500 V DC	$I_n$ = 20 kA (8/20)	5094 212