

Lightning and surge protection for closed-circuit television systems (CCTV)



The PND combination protection devices as protection of power, data and control cables in one device



- 3-pin connection for the power interface
- Simple mounting with adapter plugs
- Two-port protection circuit

A single device for everything

To provide complete protection against surge voltages for cameras, the lightning protection concept requires that both the power and data cables must be protected.

The arresters are classified according to type 2+3 and can be used in the lightning protection zones 1→3. Both devices have an LED on the top housing side for error signalling.

The printed QR code can be scanned with a smartphone or tablet PC, meaning that the mounting instructions are available at any time.



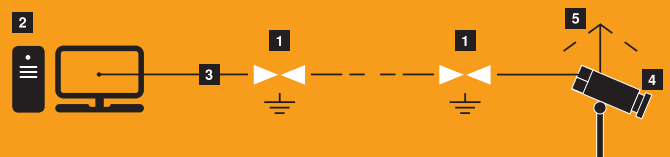
PND-2in1-C-OS

Protects the 230 V power cable and the RJ45 data cable



PND-3in1-C-OS

Protects the 230 V power cable, the RS485 data cable and the video BNC connection



1 PND-2in1-C-OS, PND-3in1-C-OS 4 Camera

2 PC as command centre 5 External lightning protection with protection angle

3 Power supply and data/video cable

Combination protection, 2in1 and 3in1, for closed-circuit television systems (CCTV)



Combination protection devices

Additional benefits

- RJ45 connection for the data interface or screw terminals and BNC connection for the data and video interface
- With error signalling (OS) via the LED operating display
- In aluminium housing
- Incl. DIN rail fastening set

Application:

To protect CCTV, video signals; (IP) cameras and TV systems

Type	PND-2in1-C-OS	PND-3in1-C-OS
	5081070	5081072
Mounting type	Mounting plate, DIN rail	Mounting plate, DIN rail
Power		
Connection	3-pin (L, N, PE)	
Maximum continuous voltage U_C	255 V AC	
Nominal voltage U_N	230 V AC	
Protection level $U_{P(LPE) / (N-PE) / (L-N)}$	≤ 1.3 kV	
Open circuit voltage of the combination wave generator U_{OC}	10 kV	
Rated load current I_L AC	16 A	
Nominal discharge current $I_{n(8/20)}$	5 kA	
Max. discharge current $I_{max(8/20)}$	10 kA	
	RJ45	DATA/RS485
Frequency range	0–100 MHz	0–100 MHz
Maximum continuous operating voltage $U_{C,DC}$	8 V	8 V
Protection level $U_{P \text{ line-line}}$	< 40 V	< 65 V
Protection level $U_{p \text{ line-earth}}$	< 450 V	< 450 V
Rated current I_L DC	1 A	0.4 A
Nominal discharge current $I_{n(8/20) \text{ line-line}}$	C1: 0.3 kV/0.15 kA	---
Nominal discharge current $I_{n(8/20) \text{ line-earth}}$	C2: 3 kV/1.5 kA	C2: 10 kV/5 kA
Impulse discharge current $I_{imp(10/350)}$	D1: 0.5 kA	D1: 1 kA
		Video/BNC
Maximum continuous operating voltage $U_{C,DC}$	---	8 V
Protection level $U_{P \text{ line-line}}$	---	< 90 V
Protection level $U_{p \text{ line-earth}}$	---	< 150 V
Rated current I_L DC	---	0.4 A
Nominal discharge current $I_{n(8/20) \text{ line-earth}}$	---	C2: 10 kV/5 kA
Impulse discharge current $I_{imp(10/350)}$	---	D1: 1 kA