

## Class III adapter plug

### PU D ZS pluggable surge protection

Class III surge protection

The PU D ZS pluggable surge protection device provides protection against transient overvoltages for equipment plugged into earthed power sockets. The pluggable surge protection with its earthed power socket is designed for 230 V/16 A, fulfils the requirements of class III to IEC 61643-1 and is used in conjunction with class II, the PU C protection.

The PU D ZS is fitted with components to monitor varistor temperature. In the event of an excessive temperature rise due to pulses from the mains supply, these disconnect the unit.

The integral red warning lamp indicates that protection is no longer provided. The PU D ZS must then be replaced.

### PU D ZS analogue surge protection device

Besides standard telephones, an analogue installation can also be used to transmit data services such as fault signalling systems and Internet. Because, in addition to telephones, other devices such as fax machines and modems are connected to the analogue line, the risk of damage due to transient interference phenomena such as voltage surges is greater.

To provide protection against these overvoltages, a combined

surge protection device for analogue lines and mains voltages is incorporated. The basic version of this power socket adapter is protected by a two-stage surge protection device using a gas discharge tube and fast-acting suppression diodes.

The gas discharge tube diverts a large amount of electrical energy; the suppression diodes ensure a low residual voltage.

### PU D ZS digital surge protection device

This power socket adapter is available for Uko and So interfaces.

To provide protection against these voltage surges, a combined surge protection device for digital lines and mains voltage is incorporated. The basic version of this power socket adapter is protected by a two-stage surge protection device using a gas discharge tube and fast-acting suppression diodes.

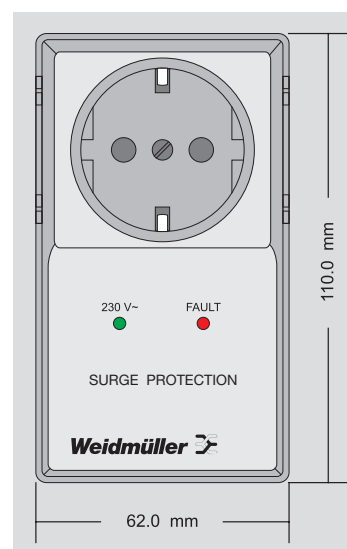
The gas discharge tube diverts a large amount of electrical energy; the suppression diodes ensure a low residual voltage. In the case of the PU D ZS with RJ45 sockets, a connecting cable with RJ45 plugs at both ends is included with the product.

The PU D ZS TV is for protection of radios or TVs, for example. The device protects both the power supplies and the antenna connection.

The PU D ZS Cat.6 can protect Ethernet connections of both category 5 and category 6.



### Dimensions PU D ZS





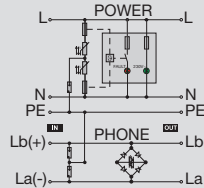
## Surge protection for low-voltage supplies

## Class III adapter plug

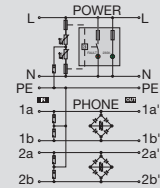
Class III surge protection

- with visual function indicator
- suitable for earthed power sockets
- PU D ZS AS with additional audible alarm

## PU D ZS

PU D ZS UK<sub>0</sub> 230 V 16 A

## PU D ZS

PU D ZS S<sub>0</sub> 230 V 16 A

## Technical data

Rated voltage (AC)  
max. continuous voltage, U<sub>c</sub> (AC)  
Operating current, I<sub>max</sub>  
to DIN VDE 0675-6  
Requirements class to IEC 61643-1  
Combined pulse U<sub>oc</sub>

Discharge current, max. (8/20 μs)  
Fuse, max.  
Response time  
Protection level on output side sym., input 8/20 μs, typ.  
Protection level on output side unsym., input 8/20 μs, typ.  
Leakage current at Un  
Optical function indicator  
Pollution severity

Surge category  
Ambient temperature (operational)  
Storage temperature

## General data

Input voltage, max.  
Rated current I<sub>n</sub>, max.  
Standard signal  
Rated discharge current (8/20 μs)  
Total current  
Response time, typical  
Resistance per path  
Cut-off frequency f<sub>g</sub>, 600 Ω system  
Transistor output, positive-switching  
Residual voltage at output for input pulse of 1 kV/μs  
Residual voltage at output for 8/20 μs and input pulse of 5kA

## Dimensions

Clamping range (rating- / min. / max.) mm<sup>2</sup>  
Length x width x height mm

## Note

## Ordering data

Version without telecomm. contact

## Note

## Accessories

## Note

230 V  
275 V  
16 A  
Requirements class D  
Class III  
4 kV

5 kA  
16 A  
≤ 150 ns  
600 V  
1500 V  
1 μA  
green LED = OK; red LED = fault  
2

III  
0 ... 60°C  
-25 ... 85°C

190 V DC  
0.45 A  
ISDN telephone signal RJ45/RJ11/12  
4 kA  
10 A  
< 5 ns  
1.1 Ω  
80 MHz

a/b ≤ 270V a-b/PE ≤ 270V  
a/b ≤ 100V a-b/PE ≤ 100V

## Schuko

110 x 62 x 48

Including Cable, RJ 11/12 both ends

230 V  
275 V  
16 A  
Requirements class D  
Class III  
4 kV

5 kA  
16 A  
≤ 150 ns  
600 V  
1500 V  
1 μA  
green LED = OK; red LED = fault  
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III  
0 ... 60°C  
-25 ... 85°C

190 V  
0.45 A  
ISDN telephone signal RJ45/RJ11/12  
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80 MHz

a/b ≤ 270V a-b/PE ≤ 270V  
a/b ≤ 100V a-b/PE ≤ 100V

## Schuko

110 x 62 x 48

Including Cable, RJ 11/12 both ends

Type	Qty.	Order No.
PU D ZS Uko 230V 16A	1	8697570000

Type	Qty.	Order No.
PU D ZS 230V~ 16A / ISDN So	1	8697560000

Conductor, RJ 45 at both ends, order No. 8697590000

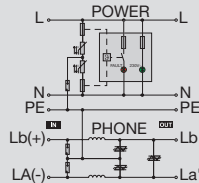
Conductor, RJ 45 at both ends, order No. 8697590000

**Class III adapter plug**

- Class III surge protection
- with visual function indicator
- suitable for earthed power sockets

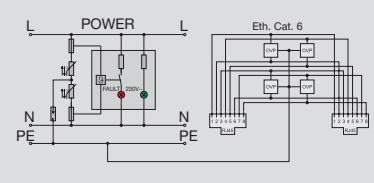
**PU D ZS**

**PU D ZS analog 230 V 16 A**



**PU D ZS**

**PU D ZS Cat.6**



**Technical data**

Rated voltage (AC)	230 V
max. continuous voltage, U <sub>c</sub> (AC)	275 V
Operating current, I <sub>max</sub> to DIN VDE 0675-6	16 A
Requirements class to IEC 61643-1	Requirements class D
Combined pulse U <sub>oc</sub>	Class III
	4 kV
Discharge current, max. (8/20 μs)	5 kA
Fuse, max.	16 A
Response time	≤ 150 ns
Protection level on output side sym., input 8/20 μs, typ.	600 V
Protection level on output side unsym., input 8/20 μs, typ.	1500 V
Leakage current at U <sub>n</sub>	1 μA
Optical function indicator	green LED = OK; red LED = fault
Pollution severity	2
Surge category	III
Ambient temperature (operational)	0 ... 60°C
Storage temperature	-25 ... 85°C
<b>General data</b>	
Input voltage, max.	190 V DC
Rated current I <sub>n</sub> , max.	0.45 A
Standard signal	Analogue telephone signal RJ45/RJ11/12
Rated discharge current (8/20 μs)	4 kA
Total current	10 A
Response time, typical	< 5 ns
Resistance per path	1.1 Ω
Cut-off frequency f <sub>g</sub> , 600 Ω system	2 MHz
Transistor output, positive-switching	
Residual voltage at output for input pulse of 1 kV/μs	a/b ≤ 270V a-b/PE ≤ 270V
Residual voltage at output for 8/20μs and input pulse of 5kA	a/b ≤ 100V a-b/PE ≤ 100V

<b>Dimensions</b>	
Clamping range (rating- / min. / max.)	mm <sup>2</sup>
Length x width x height	mm

**Note**

**Ordering data**

Version	without telecomm. contact
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**Note**

**Accessories**

**Note**

Rated voltage (AC)	230 V
max. continuous voltage, U <sub>c</sub> (AC)	275 V
Operating current, I <sub>max</sub> to DIN VDE 0675-6	16 A
Requirements class to IEC 61643-1	Requirements class D
Combined pulse U <sub>oc</sub>	Class III
	4 kV
Discharge current, max. (8/20 μs)	5 kA
Fuse, max.	16 A
Response time	≤ 150 ns
Protection level on output side sym., input 8/20 μs, typ.	600 V
Protection level on output side unsym., input 8/20 μs, typ.	1500 V
Leakage current at U <sub>n</sub>	1 μA
Optical function indicator	green LED = OK; red LED = fault
Pollution severity	2
Surge category	III
Ambient temperature (operational)	0 ... 60°C
Storage temperature	-25 ... 85°C
<b>General data</b>	
Input voltage, max.	190 V DC
Rated current I <sub>n</sub> , max.	0.45 A
Standard signal	Analogue telephone signal RJ45/RJ11/12
Rated discharge current (8/20 μs)	4 kA
Total current	10 A
Response time, typical	< 5 ns
Resistance per path	1.1 Ω
Cut-off frequency f <sub>g</sub> , 600 Ω system	2 MHz
Transistor output, positive-switching	
Residual voltage at output for input pulse of 1 kV/μs	a/b ≤ 270V a-b/PE ≤ 270V
Residual voltage at output for 8/20μs and input pulse of 5kA	a/b ≤ 100V a-b/PE ≤ 100V

<b>Dimensions</b>	
Clamping range (rating- / min. / max.)	mm <sup>2</sup>
Length x width x height	mm

**Note**

Type	Qty.	Order No.
PU D ZS 230V~ 16A / analog a/b	1	8697600000

**Note**

Conductor, RJ45 on both sides, order No. 8697590000

Rated voltage (AC)	230 V
max. continuous voltage, U <sub>c</sub> (AC)	275 V
Operating current, I <sub>max</sub> to DIN VDE 0675-6	16 A
Requirements class to IEC 61643-1	Requirements class D
Combined pulse U <sub>oc</sub>	Class III
	4 kV
Discharge current, max. (8/20 μs)	5 kA
Fuse, max.	16 A
Response time	≤ 150 ns
Protection level on output side sym., input 8/20 μs, typ.	600 V
Protection level on output side unsym., input 8/20 μs, typ.	1500 V
Leakage current at U <sub>n</sub>	1 μA
Optical function indicator	green LED = OK; red LED = fault
Pollution severity	2
Surge category	III
Ambient temperature (operational)	0 ... 60°C
Storage temperature	-25 ... 85°C
<b>General data</b>	
Input voltage, max.	30 V
Rated current I <sub>n</sub> , max.	0.2 A
Standard signal	Ethernet Cat.5 + Cat.6
Rated discharge current (8/20 μs)	2500 A
Total current	10 kA (8/20μs)
Response time, typical	< 5 ns
Resistance per path	
Cut-off frequency f <sub>g</sub> , 600 Ω system	
Transistor output, positive-switching	
Residual voltage at output for input pulse of 1 kV/μs	Cable / Cable ≤ 80 V; Cable / PE ≤ 300 V
Residual voltage at output for 8/20μs and input pulse of 5kA	Cable / Cable ≤ 130 V; Cable / PE ≤ 600 V

<b>Dimensions</b>	
Clamping range (rating- / min. / max.)	mm <sup>2</sup>
Length x width x height	mm

**Note**

Type	Qty.	Order No.
PU D ZS CAT.6	1	8805530000

**Note**

Conductor, RJ45 on both sides, order No. 8697590000

## Surge protection for low-voltage supplies

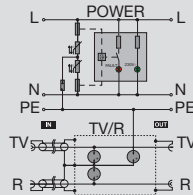
## Class III adapter plug

Class III surge protection  
for signals up to 1 GHz (radio/TV)

- with visual function indicator
- protection for Ethernet Cat.6
- suitable for earthed power sockets

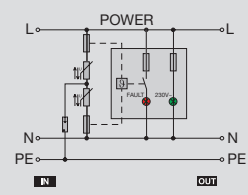
## PU D ZS

PU D ZS TV / R 230 V 16 A



## PU D ZS

For French applications



## Technical data

Rated voltage (AC)  
max. continuous voltage,  $U_c$  (AC)  
Operating current,  $I_{max}$   
to DIN VDE 0675-6  
Requirements class to IEC 61643-1  
Combined pulse  $U_{oc}$

Discharge current, max. (8/20  $\mu$ s)  
Fuse, max.  
Response time  
Protection level on output side sym., input 8/20  $\mu$ s, typ.  
Protection level on output side unsym., input 8/20  $\mu$ s, typ.  
Leakage current at Un  
Optical function indicator  
Pollution severity

Surge category  
Ambient temperature (operational)  
Storage temperature

## General data

Input voltage, max.  
Rated current  $I_n$ , max.  
Standard signal  
Rated discharge current (8/20  $\mu$ s)  
Total current  
Response time, typical  
Resistance per path  
Cut-off frequency  $f_g$ , 600  $\Omega$  system  
Transistor output, positive-switching  
Residual voltage at output for input pulse of 1 kV/ $\mu$ s  
Residual voltage at output for 8/20 $\mu$ s and input pulse of 5kA

## Dimensions

Clamping range (rating- / min. / max.) mm<sup>2</sup>  
Length x width x height mm

## Note

230 V  
275 V  
16 A  
Requirements class D  
Class III  
4 kV

5 kA  
16 A  
 $\leq 150$  ns  
600 V  
1500 V  
1  $\mu$ A  
green LED = OK; red LED = fault  
2

III  
0 ... 60°C  
-25 ... 85°C

70 V  
1.5 A  
TV/R terrestrial and cable  
5 kA

< 100 ns  
1.1  $\Omega$   
1 GHz / 75  $\Omega$

600 V  
800 V

## Schuko

110 x 62 x 48  
Length of coaxial cable: approx. 35 cm

230 V  
275 V  
16 A

Class III  
4 kV

5 kA  
16 A  
 $\leq 150$  ns

600 V  
1500 V  
1  $\mu$ A  
green LED = OK; red LED = fault  
2

III  
0 ... 60°C  
-25 ... 85°C

110 x 63 x 48

## Ordering data

Version without telecomm. contact

## Note

Type	Qty.	Order No.
PU D ZS TV/R	1	8779230000

## Note

Type	Qty.	Order No.
PU D ZS F	1	8750650000

## Note

## Accessories

## Note