Technical Data

Circuit Protection - Surge Protection Devices

Brief product description:

Surge Protection Device (SPD) protect against lightning surges and man made surges such as motors, HVAC and lifts etc, and also when power re-established after fuses breaking, contactors switching or an outage, e.g. cables dug up.

New 17th Edition Wiring Regulations amendment 1 Jan 2012, now includes:

-Section 443 – risk assessment, to determine if SPD required to be fitted.

-Section 543 – product selection and how to install SPD.

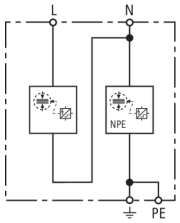
Features:

- Type 1 and 2
- Suitable for TT,TN and TNCS systems
- SPDs supplied with device flag, to indicate if device needs replacement.
- SPDs can be fitted to existing consumer units or remote enclosures
- Cable stacker kit (CUSPDA01) available to provide additional terminal capacity.

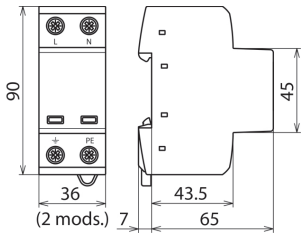
Technical Specifications

SPD according to EN 61643-11 / IEC 61643-1	Type 1 / Class I
Energy coordination with terminal equipment	Type 1 + Type 2
Energy coordination with terminal equipment (≤ 5 m)	Type 1 + Type 2 + Type 3
Nominal a.c. voltage (U_N)	230 V
Max. continuous operating a.c. voltage (U_c)	255 V
Lightning impulse current (10/350 µs) [L+N-PE] (I_{total})	25 kA
Specific energy [L+N-PE] (W/R)	156.25 kJ/Ohms
Lightning impulse current (10/350 µs) [L-N]/[N-PE] (I_{imp})	12.5 / 25 kA
Specific energy [L-N]/[N-PE] (W/R)	39.06 / 156.25 kJ/Ohms
Nominal discharge current (8/20 µs) [L-N]/[N-PE] (I_n)	12.5 / 25 kA
Voltage protection level [L-N]/[N-PE] (U_p)	≤ 1.5 / ≤ 1.5 kV
Follow current extinguishing capability [L-N]/[N-PE] (I_{fi})	10 kA_{rms} / 100 A_{rms}
Response time (t_A)	≤ 100 nS
Max. mains-side overcurrent protection	160 A gL/gG
Temporary overvoltage (TOV) [L-N] (U_T)	440 V / 5 sec.
Temporary overvoltage (TOV) [N-PE] (U_T)	1200 V / 200 mS
TOV characteristic	withstand
Operating temperature range (T_U)	-40 °C...+80 °C
Operating state/fault indication	green / red
Number of ports	1
Cross-sectional area (L, N, PE, ⏚) (min.)	1.5 mm^2 solid/flexible
Cross-sectional area (L, N, PE, ⏚) (max.)	35 mm^2 stranded/25 mm^2 flexible
For mounting on	35 mm DIN rails acc. to EN 60715
Enclosure material	Flame retardant thermoplastic, red, UL 94 V-0
Place of installation	indoor
Degree of protection	IP 20
Capacity	2 module(s), DIN 43880

Line Diagrams



Basic circuit diagram



Dimension drawing

Packaging Information

Cat No.	Description	Packaging Type			Pack Quantity			Barcode		
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Individual	Inner Box	Outer Box
CUSPD1110	SPD Type 1 and 2, 2 Module ,TT, TN and TNCS	N/A	Carton	N/A	1	1	N/A	50507650 38157		

Weights & Dimensions

Cat No.	Description	Dimension (W x L x H) cm			Weight (g)			CMB (m^3)
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Outer Box
CUSPD1110	SPD Type 1 and 2, 2 Module ,TT, TN and TNCS	9 x 7.3 x 3.6	10 x 7.5 x 3.8	N/A	1	256	N/A	0.000285

Installation Information

Safety Warning

Before use please read and carefully use in accordance with these safety wiring instructions.

To ensure a satisfactory operation these products should be installed by a competent person. If in doubt seek advice from a qualified engineer.

These products should not be installed into the same enclosure containing mains exceeding 50V. Avoid running the telecom cable within 50mm of mains electrical cable.

Technical Helpline: 0845 194 7584
If in doubt consult a competent electrician.

Technical Data

Circuit Protection - Surge Protection Devices

Brief product description:

Surge Protection Device (SPD) protect against lightning surges and man made surges such as motors, HVAC and lifts etc, and also when power re-established after fuses breaking, contactors switching or an outage, e.g. cables dug up.

New 17th Edition Wiring Regulations amendment 1 Jan 2012, now includes:

-Section 443 – risk assessment, to determine if SPD required to be fitted.

-Section 543 – product selection and how to install SPD.

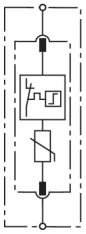
Features:

- Suitable for TNCS systems
- SPDs supplied with device flag, to indicate if device needs replacement.
- SPDs can be fitted to existing consumer units or remote enclosures
- Cable stacker kit (CUSPDA01) available to provide additional terminal capacity.

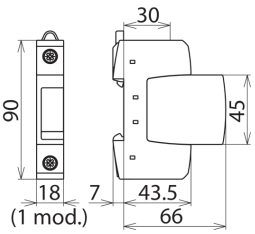
Technical Specifications

SPD according to EN 61643-11 / IEC 61643-1	Type 2 / Class II
Max. continuous operating a.c. voltage (U_c)	275 V
Max. continuous operating d.c. voltage (U_c)	350 V
Nominal discharge current (8/20 µs) (I_n)	20 kA
Max. discharge current (8/20 µs) (I_{max})	40 kA
Voltage protection level (U_p)	≤ 1.25 kV
Voltage protection level at 5 kA (U_p)	≤ 1 kV
Response time (t_A)	≤ 25 nS
Max. mains-side overcurrent protection	125 A gL/gG
Short-circuit withstand capability for max. mains-side overcurrent protection	50 kA_{rms}
Temporary overvoltage (TOV) (U_T)	335 V / 5 sec.
TOV characteristic	withstand
Operating temperature range (T_U)	-40°C...+80°C
Operating state/fault indication	green / red
Number of ports	1
Cross-sectional area (min.)	1.5 mm^2 solid/flexible
Cross-sectional area (max.)	35 mm^2 stranded/25 mm^2 flexible
For mounting on	35 mm DIN rails acc. to EN 60715
Enclosure material	Flame retardant thermoplastic, red, UL 94 V-0
Place of installation	indoor
Degree of protection	IP 20
Capacity	1 module(s), DIN 43880
Approvals	KEMA, VDE, UL, VdS, CSA

Line Diagrams



Basic circuit diagram



Dimension drawing

Packaging Information

Cat No.	Description	Packaging Type			Pack Quantity			Barcode		
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Individual	Inner Box	Outer Box
CUSPD2070	SPD Type 2, 1 Module TNCS	N/A	Carton	N/A	1	1	N/A	50507650 38164	N/A	N/A

Weights & Dimensions

Cat No.	Description	Dimension (W x L x H) cm			Weight (g)			CMB (m^3)
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Outer Box
CUSPD2070	SPD Type 2, 1 Module TNCS	9 x 7.3 x 1.8	10.5 x 7.5 x 2	N/A	1	126	N/A	0.001575

Installation Information

Safety Warning

Before use please read and carefully use in accordance with these safety wiring instructions.

To ensure a satisfactory operation these products should be installed by a competent person. If in doubt seek advice from a qualified engineer.

These products should not be installed into the same enclosure containing mains exceeding 50V. Avoid running the telecom cable within 50mm of mains electrical cable.

Technical Helpline: 0845 194 7584
If in doubt consult a competent electrician.

Technical Data

Circuit Protection - Surge Protection Devices

Brief product description:

Surge Protection Device (SPD) protect against lightning surges and man made surges such as motors, HVAC and lifts etc, and also when power re-established after fuses breaking, contactors switching or an outage, e.g. cables dug up.

New 17th Edition Wiring Regulations amendment 1 Jan 2012, now includes:

-Section 443 – risk assessment, to determine if SPD required to be fitted.

-Section 543 – product selection and how to install SPD.

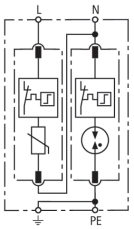
Features:

- Suitable for TT,TN and TNCS systems
- SPDs supplied with device flag, to indicate if device needs replacement.
- SPDs can be fitted to existing consumer units or remote enclosures
- Cable stacker kit (CUSPDA01) available to provide additional terminal capacity.

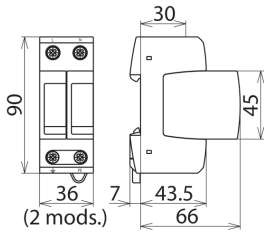
Technical Specifications

SPD according to EN 61643-11 / IEC 61643-1	Type 2 / Class II
Nominal a.c. voltage (U_N)	230 V
Max. continuous operating a.c. voltage [L-N] (U_c)	275 V
Max. continuous operating d.c. voltage [N-PE] (U_c)	255 V
Nominal discharge current (8/20 µs) (I_n)	20 kA
Max. discharge current (8/20 µs) (I_{max})	40 kA
Lightning impulse current (10/350 µs) [N-PE] (I_{imp})	12 kA
Voltage protection level [L-N] (U_p)	≤ 1.25 kV
Voltage protection level [L-N] at 5 kA (U_p)	≤ 1 kV
Voltage protection level [N-PE] (U_p)	≤ 1.5 kV
Follow current extinguishing capability [N-PE] (I_{fi})	100 A_{rms}
Response time [L-N] (t_A)	≤ 25 nS
Response time [[N-PE] (t_A)	≤ 100 nS
Max. mains-side overcurrent protection	125 A gL/gG
Short-circuit withstand capability for max. mains-side overcurrent protection	50 kA_{rms}
Temporary overvoltage (TOV) [L-N] (U_T)	335 V / 5 sec.
Temporary overvoltage (TOV) [N-PE] (U_T)	1200 V / 200 mS
TOV characteristic	withstand
Operating temperature range (T_U)	-40°C...+80°C
Operating state/fault indication	green / red
Number of ports	1
Cross-sectional area (min.)	1.5 mm^2 solid/flexible
Cross-sectional area (max.)	35 mm^2 stranded/25 mm^2 flexible
For mounting on	35 mm DIN rails acc. to EN 60715
Enclosure material	Flame retardant thermoplastic, red, UL 94 V-0
Place of installation	indoor
Degree of protection	IP 20
Capacity	2 module(s), DIN 43880
Approvals	KEMA, VDE, UL, VdS

Line Diagrams



Basic circuit diagram



Dimension drawing

Packaging Information

Cat No.	Description	Packaging Type			Pack Quantity			Barcode		
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Individual	Inner Box	Outer Box
CUSPD2110	SPD Type 2, 2 Module ,TT, TN and TNCS	N/A	Carton	N/A	1	1	N/A	50507650 38171		

Weights & Dimensions

Cat No.	Description	Dimension (W x L x H) cm			Weight (g)			CMB (m^3)
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Outer Box
CUSPD2110	SPD Type 2, 2 Module ,TT, TN and TNCS	9 x 7.3 x 3.6	10 x 7.5 x 3.8	N/A	1	220	N/A	0.000285

Installation Information

Safety Warning

Before use please read and carefully use in accordance with these safety wiring instructions.

To ensure a satisfactory operation these products should be installed by a competent person. If in doubt seek advice from a qualified engineer.

These products should not be installed into the same enclosure containing mains exceeding 50V. Avoid running the telecom cable within 50mm of mains electrical cable.

Technical Helpline: 0845 194 7584
If in doubt consult a competent electrician.

Technical Data

Circuit Protection - Surge Protection Devices

Brief product description:

Surge Protection Device (SPD) protect against lightning surges and man made surges such as motors, HVAC and lifts etc, and also when power re-established after fuses breaking, contactors switching or an outage, e.g. cables dug up.

New 17th Edition Wiring Regulations amendment 1 Jan 2012, now includes:

-Section 443 – risk assessment, to determine if SPD required to be fitted.

-Section 543 – product selection and how to install SPD.

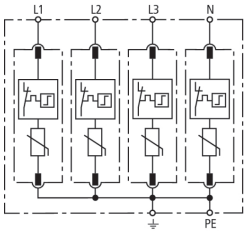
Features:

- Suitable for TNS systems
- With floating remote signalling contact
- SPDs supplied with device flag, to indicate if device needs replacement.
- SPDs can be fitted to existing consumer units or remote enclosures
- Cable stacker kit (CUSPDA01) available to provide additional terminal capacity.

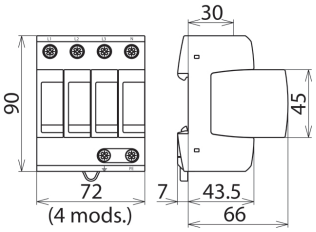
Technical Specifications

SPD according to EN 61643-11 / IEC 61643-1	Type 2 / Class II
Nominal a.c. voltage (U_N)	230/400 V
Max. continuous operating d.c. voltage (U_c)	275 V
Nominal discharge current (8/20 µs) (I_n)	20 kA
Max. discharge current (8/20 µs) (I_{max})	40 kA
Voltage protection level (U_p)	≤ 1.25 kV
Voltage protection level at 5 kA (U_p)	≤ 1 kV
Response time (t_A)	≤ 25 nS
Max. mains-side overcurrent protection	125 A gL/gG
Short-circuit withstand capability for max. mains-side overcurrent protection	50 kA_{rms}
Temporary overvoltage (TOV) (U_T)	335 V / 5 sec.
TOV characteristic	withstand
Operating temperature range (T_U)	-40°C...+80°C
Operating state/fault indication	green / red
Number of ports	1
Cross-sectional area (min.)	1.5 mm^2 solid/flexible
Cross-sectional area (max.)	35 mm^2 stranded/25 mm^2 flexible
For mounting on	35 mm DIN rails acc. to EN 60715
Enclosure material	Flame retardant thermoplastic, red, UL 94 V-0
Place of installation	indoor
Degree of protection	IP 20
Capacity	4 module(s), DIN 43880
Approvals	KEMA, VDE, UL, VdS

Line Diagrams



Basic circuit diagram



Dimension drawing

Packaging Information

Cat No.	Description	Packaging Type			Pack Quantity			Barcode		
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Individual	Inner Box	Outer Box
CUSPD2400	SPD Type 2, 4 Module TN-S	N/A	Carton	N/A	1	1	N/A			

Weights & Dimensions

Cat No.	Description	Dimension (W x L x H) cm			Weight (g)			CMB (m^3)
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Outer Box
CUSPD2400	SPD Type 2, 4 Module TN-S	9 x 7.3 x 7.2	10 x 7.5 x 7.6	N/A	1	440	N/A	0.00057

Installation Information

Safety Warning

Before use please read and carefully use in accordance with these safety wiring instructions.

To ensure a satisfactory operation these products should be installed by a competent person. If in doubt seek advice from a qualified engineer.

These products should not be installed into the same enclosure containing mains exceeding 50V. Avoid running the telecom cable within 50mm of mains electrical cable.

Technical Helpline: 0845 194 7584
If in doubt consult a competent electrician.

Technical Data

Circuit Protection - Surge Protection Devices

Brief product description:

Surge Protection Device (SPD) protect against lightning surges and man made surges such as motors, HVAC and lifts etc, and also when power re-established after fuses breaking, contactors switching or an outage, e.g. cables dug up.

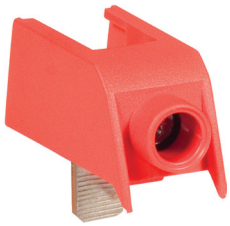
New 17th Edition Wiring Regulations amendment 1 Jan 2012, now includes:

-Section 443 – risk assessment, to determine if SPD required to be fitted.

-Section 543 – product selection and how to install SPD.

Features:

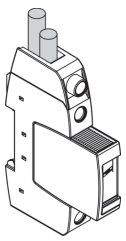
- Cable stacker kit available to provide additional terminal capacity.



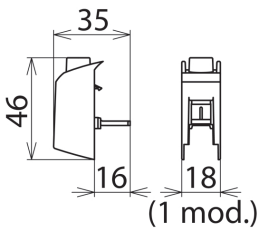
Technical Specifications

Nominal a.c./d.c. voltage (U_N)	600 V
Nominal load current a.c. (I_L)	100 A
Lightning impulse current (10/350 µs)	25 kA
Rated insulation voltage (U_i)	630 V
Rated impulse withstand voltage (U_{imp})	6 kV
Operating temperature range (T_U)	-40°C...+80°C
Cross-sectional area (min.)	1.5 mm2 solid/flexible
Cross-sectional area (max.)	25 mm2 stranded/16mm2 flexible
Type of connection front	front
Suitable for	CUSPD1110, CUSPD2070, CUSPD2110

Line Diagrams



Use of CUSPDA01



Dimension drawing

Packaging Information

Cat No.	Description	Packaging Type			Pack Quantity			Barcode		
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Individual	Inner Box	Outer Box
CUSPDA01	SPD Cable Stacker Kit	N/A	Bag	N/A	N/A	4	N/A	505076 5038188		

Weights & Dimensions

Cat No.	Description	Dimension (W x L x H) cm			Weight (g)			CMB (m^3)
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Outer Box
CUSPDA01	SPD Cable Stacker Kit	4.6 x 3.5 x 1.8	12 x 9 x 2	N/A	N/A	72	N/A	0.000216

Installation Information

Safety Warning

Before use please read and carefully use in accordance with these safety wiring instructions.

To ensure a satisfactory operation these products should be installed by a competent person. If in doubt seek advice from a qualified engineer.

These products should not be installed into the same enclosure containing mains exceeding 50V. Avoid running the telecom cable within 50mm of mains electrical cable.

Technical Helpline: 0845 194 7584
If in doubt consult a competent electrician.