

HELIOPROTECTION®





PHOTOVOLTAIC FUSES 214 - 221

HelioProtection HP6M..... 214

HelioProtection® Fuse-links gPV..... 214

HelioProtection® Modulostar® 216

HelioProtection® USGM1HEL 216

HelioProtection® Fuse-links gPV..... 216

HelioProtection® US15M1HEL..... 218

HelioProtection® HP15FHM32 Series 218

HelioProtection® Fuse-links 218

Photovoltaic Fuse bases 219

HelioProtection® Fuse-links gPV..... 220

Microswitch 221

Photovoltaic Fuse bases 221



SURGE PROTECTION FOR PV APPLICATION 222 - 226

SURGE-TRAP® DC Type 1+2 YPV photovoltaic SPD 222

SURGE-TRAP® DC Type 2 YPV photovoltaic SPD..... 222

SURGE-TRAP® DC T2 & T1+2 MPPT photovoltaic SPD..... 223

SURGE-TRAP® plug-in surge sockets for PCB 223

SURGE-TRAP® AC Type 2 photovoltaic SPD..... 224

SURGE-TRAP® AC Type 2 reinforced peak withstand photovoltaic SPD 225

SURGE-TRAP® Signal Line photovoltaic SPD 226



DISCONNECT SWITCHES FOR PV APPLICATION 227 - 229

PV-Rated Disconnect Switches 227

HELIOPROTECTION®

HelioProtection HP6M
Photovoltaic fuse-links gPV 600VDC

PRODUCT RANGE



DC10HEL12C8

Minimum Breaking Capacity = 1.35In
Maximum Breaking Capacity = 10kA

| Catalog Number | Item Number | Rated Voltage DC (IEC) | Rated Current I _n | 70% AMP Rating (W) | 80% AMP Rating (W) | 100% AMP Rating (W) | Package |
|----------------|-------------|------------------------|------------------------------|--------------------|--------------------|---------------------|---------|
| HP6M1 | L1018565 | 600 | 1 A | 0.14 | 0.19 | 0.31 | 10 |
| HP6M2 | M1018566 | 600 | 2 A | 0.19 | 0.26 | 0.43 | |
| HP6M3 | N1018567 | 600 | 3 A | 0.64 | 0.85 | 1.4 | |
| HP6M4 | Q1018569 | 600 | 4 A | 0.58 | 0.77 | 1.3 | |
| HP6M5 | R1018570 | 600 | 5 A | 0.65 | 0.87 | 1.4 | |
| HP6M6 | S1018571 | 600 | 6 A | 0.69 | 0.92 | 1.5 | |
| HP6M7 | T1018572 | 600 | 7 A | - | - | - | |
| HP6M8 | V1018573 | 600 | 8 A | 0.92 | 1.23 | 2.0 | |
| HP6M10 | X1018575 | 600 | 10 A | 0.96 | 1.28 | 2.1 | |
| HP6M12 | Y1018576 | 600 | 12 A | 1.12 | 1.49 | 2.5 | |
| HP6M15 | Z1018577 | 600 | 15 A | 0.99 | 1.32 | 2.2 | |
| HP6M20 | A1018578 | 600 | 20 A | 1.25 | 1.67 | 2.8 | |
| HP6M25 | K1018610 | 600 | 25 A | 1.38 | 1.84 | 3.1 | |
| HP6M30 | L1018611 | 600 | 30 A | 1.5 | 2.0 | 3.3 | |

Fuse holders

| Catalog Number | Item Number | Nb of poles | Nb of modules (17.5mm) | Indicator | Package |
|----------------|-------------|-------------|------------------------|-----------|---------|
| US101HEL | D1009979 | 1 | 1 | No | 12 |
| US101IHEL | Q1009461 | 1 | 1 | Yes | 12 |
| USGM1HEL | P1022294 | 1 | 1 | No | 12 |
| USGM1IHEL | N1022293 | 1 | 1 | Yes | 12 |

HelioProtection® Fuse-links gPV
HP10M - 1 000 VDC



HP10M15

Minimum Breaking Capacity = 1.35In
Maximum Breaking Capacity = 10kA

| Catalog Number | Item Number | Rated Voltage DC (IEC) | Rated Current I _n | 70% AMP Rating (W) | 80% AMP Rating (W) | 100% AMP Rating (W) | Package |
|----------------|-------------|------------------------|------------------------------|--------------------|--------------------|---------------------|---------|
| HP10M1 | B1018579 | 1000 | 1 A | 0.125 | 0.175 | 0.250 | 10 |
| HP10M2 | C1018580 | 1000 | 2 A | 0.160 | 0.250 | 0.320 | |
| HP10M3 | D1018581 | 1000 | 3 A | 0.66 | 0.87 | 1.36 | |
| HP10M4 | E1018582 | 1000 | 4 A | 0.69 | 0.8 | 1.25 | |
| HP10M5 | F1018583 | 1000 | 5 A | 0.59 | 0.73 | 1.12 | |
| HP10M6 | G1018584 | 1000 | 6 A | 0.42 | 0.67 | 1.05 | |
| HP10M7 | H1018585 | 1000 | 7 A | 0.40 | 0.64 | 1.0 | |
| HP10M8 | J1018586 | 1000 | 8 A | 0.77 | 0.88 | 1.48 | |
| HP10M10 | L1018588 | 1000 | 10 A | 0.67 | 0.90 | 1.5 | |
| HP10M12 | M1018589 | 1000 | 12 A | 0.72 | 1.0 | 1.8 | |
| HP10M15 | N1018590 | 1000 | 15 A | 0.9 | 1.3 | 2.2 | |
| HP10M20 | P1018591 | 1000 | 20 A | 1.1 | 1.5 | 2.8 | |
| HP10M25 | D1023825 | 1000 | 25 A | 1.3 | 1.8 | 3.0 | |
| HP10M30 | E1023826 | 1000 | 30 A | 1.5 | 1.9 | 3.7 | |
| HP10M32 | H1062170 | 1000 | 32 A | 1.7 | 2.3 | 4.2 | |

Fuse holders

| Catalog Number | Item Number | Nb of poles | Nb of modules (17.5mm) | Indicator | Package |
|----------------|-------------|-------------|------------------------|-----------|---------|
| US101HEL | D1009979 | 1 | 1 | No | 12 |
| US101IHEL | Q1009461 | 1 | 1 | Yes | 12 |
| USGM1HEL | P1022294 | 1 | 1 | No | 12 |
| USGM1IHEL | N1022293 | 1 | 1 | Yes | 12 |

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

HelioProtection® Fuse-links gPV
Dual HP10M - 1 000VDC ferrule

PRODUCT RANGE



| Catalog Number | Item Number | Rated Current I _n | 70% AMP Rating (W) | 80% AMP Rating (W) | 100% AMP Rating (W) | Package |
|----------------|-------------|------------------------------|--------------------|--------------------|---------------------|---------|
| HP10M36 | - | 36 A | | | | |
| HP10M45 | - | 45 A | | | | |
| HP10M60 | - | 60 A | | | | |

Minimum breaking capacity: 1.35xI_n
Maximum breaking capacity: 50kA

HelioProtection® Fuse-links gPV
Dual HP10M - 1 000VDC with Crimp Cap



| Catalog Number | Item Number | Rated Current I _n | 70% AMP Rating (W) | 80% AMP Rating (W) | 100% AMP Rating (W) | Package |
|----------------|-------------|------------------------------|--------------------|--------------------|---------------------|---------|
| HP10M36CC | - | 36 A | | | | |
| HP10M45CC | - | 45 A | | | | |
| HP10M60CC | - | 60 A | | | | |

Minimum breaking capacity: 1.35xI_n
Maximum breaking capacity: 50kA

HelioProtection® Fuse-links gPV
HP10M - 1 000VDC with Crimp Cap



HP10M30CC

| Catalog Number | Item Number | Rated Voltage DC (IEC) | Rated Current I _n | 70% AMP Rating (W) | 80% AMP Rating (W) | 100% AMP Rating (W) | Interrupting Rating (kA) | Size (mm) |
|----------------|-------------|------------------------|------------------------------|--------------------|--------------------|---------------------|--------------------------|-----------|
| HP10M1CC | F1061616 | 1000 | 1 A | 0.14 | 0.19 | 0.27 | 50 | 10 x 65 |
| HP10M2CC | G1061617 | | 2 A | 0.17 | 0.27 | 0.35 | | |
| HP10M3CC | H1061618 | | 3 A | 0.72 | 0.95 | 1.49 | | |
| HP10M3-1/2CC | J1061619 | | 3.5 A | 0.74 | 0.92 | 1.43 | | |
| HP10M4CC | K1061620 | | 4 A | 0.76 | 0.88 | 1.38 | | |
| HP10M5CC | L1061621 | | 5 A | 0.65 | 0.80 | 1.23 | | |
| HP10M6CC | J1061527 | | 6 A | 0.46 | 0.74 | 1.15 | | |
| HP10M7CC | K1061528 | | 7 A | 0.44 | 0.70 | 1.1 | | |
| HP10M8CC | L1061529 | | 8 A | 0.85 | 0.97 | 1.63 | | |
| HP10M10CC | M1061530 | | 10 A | 0.74 | 0.99 | 1.65 | | |
| HP10M12CC | N1061531 | | 12 A | 0.79 | 1.1 | 1.98 | | |
| HP10M15CC | P1061532 | | 15 A | 0.99 | 1.43 | 2.42 | | |
| HP10M20CC | Q1061533 | | 20 A | 1.21 | 1.65 | 3.08 | | |
| HP10M25CC | R1061534 | | 25 A | 1.43 | 1.98 | 3.3 | | |
| HP10M30CC | S1061535 | | 30 A | 1.65 | 2.09 | 4.07 | | |
| HP10M32CC | T1061536 | | 32 A | 1.70 | 2.30 | 4.20 | | |

HELIOPROTECTION®

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

HelioProtection® Modulostar®

PRODUCT RANGE

Modular Fuseholders for gPV fuses-links HP6M and HP10M



CUS101HEL

Fuse-holders US10HEL for cylindrical fuse-links gPV 600VDC and 1000VDC

| Catalog Number | Item Number | Nb of poles | Voltage rating | Ampere rating | Nb of modules (17.5mm) | Indicator | Package |
|----------------|-------------|-------------|----------------|---------------|------------------------|--------------|---------|
| CUS101HEL | K1062724 | 1 | 1000VDC | 32A | 1 | Without Ind. | 12 |
| CUS101HEL | X1062758 | 1 | 1000VDC | 32A | 1 | With Ind. | 12 |

Fuse-clips for cylindrical fuse-links gPV 600VDC and 1000VDC

| Catalog Number | Item Number | Designation | Weight (g) | Package |
|----------------|-------------|--------------------|------------|---------|
| MR10CIRESSORT | Y098507 | MR 10 CI + RESSORT | 4.5 | 200 |

HelioProtection® USGM1HEL

UltraSafe™ Fuseholders



USGM1HEL

Fuse-holders USGM1HEL for cylindrical fuse-links gPV 600VDC and 1000VDC

| Fuse Type | Catalog Number | Item Number | No. of Poles | Voltage Rating | Ampere Rating | Visual Indication | Package |
|--------------|----------------|-------------|--------------|----------------|---------------|-------------------|---------|
| Photovoltaic | USGM1HEL | P1022294 | 1 | 1000VDC | 30 | No | 12 |
| | USGM1HEL | N1022293 | | | | Yes | 12 |

HelioProtection® Fuse-links gPV

DC10HEL - 1200VDC Midget (10x85mm)



DC10HEL12C8

HelioProtection® DC10HEL Photovoltaic fuse-links gPV 1200VDC

| Catalog number | Item Number | Size (mm) | Maximum operating voltage for L/R ≤ 0,5ms | Rated Current | Operation | Breaking Capacity @ Un | Power losses End contacts 0.7In (Watts) | Power losses End contacts 0.8In (Watts) | Package |
|----------------|-------------|-----------|---|---------------|-----------|------------------------|---|---|---------|
| DC10HEL12C8 | D1014188 | D10xL85 | 1200V | 8 A | gPV type | 10 kA | 1,3 | 1,7 | 45 |
| DC10HEL12C10 | T1012017 | | | 10 A | | | 1,3 | 1,7 | 45 |
| DC10HEL12C12,5 | X1008754 | | | 12,5 A | | | 1,3 | 1,9 | 45 |
| DC10HEL12C16 | Y1008755 | | | 16 A | | | 1,5 | 2,1 | 45 |
| DC10HEL12C20 | Z1008756 | | | 20 A | | | 1,8 | 2,5 | 45 |
| DC10HEL9C25 | A1008757 | | 900V | 2,2 | | | 3 | 45 | |

HelioProtection® Fuse-links gPV

HP15M - 1500VDC Midget (10x85mm)



HP15M30

HelioProtection® HP15M Photovoltaic fuse-links gPV 1500VDC

| Catalog number | Item Number | Rated Current I _n | Power Dissipation at 0.7xI _n (Watts) | Power Dissipation at 0.8xI _n (Watts) | Power Dissipation at 1.0xI _n (Watts) | Package |
|----------------|-------------|------------------------------|---|---|---|---------|
| HP15M4 | F1059569 | 4 A | 0.79 | 1.09 | 1.85 | 5 |
| HP15M5 | X1055053 | 5 A | 0.84 | 1.16 | 1.97 | 5 |
| HP15M6 | Q1053667 | 6 A | 0.97 | 1.37 | 2.42 | 5 |
| HP15M7 | R1053668 | 7 A | 0.97 | 1.37 | 2.43 | 5 |
| HP15M8 | S1053669 | 8 A | 1.04 | 1.50 | 2.60 | 5 |
| HP15M10 | T1053670 | 10 A | 1.23 | 1.77 | 3.09 | 5 |
| HP15M12 | V1053671 | 12 A | 1.15 | 1.70 | 2.89 | 5 |
| HP15M15 | W1053672 | 15 A | 1.39 | 1.91 | 3.48 | 5 |
| HP15M20 | X1053673 | 20 A | 1.71 | 2.47 | 4.28 | 5 |
| HP15M25 | Y1053674 | 25 A | 2.13 | 3.08 | 5.35 | 5 |
| HP15M30 | Z1053675 | 30 A | 2.56 | 3.61 | 6.40 | 5 |
| HP15M32 | G1059570 | 32 A | 2.73 | 3.85 | 6.82 | 5 |

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

HelioProtection® Fuse-links gPV
HP15M with crimp clamp - 1500VDC Midget (10x85mm)

PRODUCT RANGE



HP15M5CC

| Catalog number | Item Number | Rated Current I _n | Power Dissipation at 0.7xI _n (Watts) | Power Dissipation at 0.8xI _n (Watts) | Power Dissipation at 1.0xI _n (Watts) | Package |
|----------------|-------------|------------------------------|---|---|---|---------|
| HP15M4CC | A1061542 | 4 A | 0.80 | 1.04 | 1.69 | 5 |
| HP15M5CC | B1061543 | 5 A | 0.92 | 1.27 | 2.16 | 5 |
| HP15M6CC | D1061545 | 6 A | 1.06 | 1.50 | 2.66 | 5 |
| HP15M7CC | E1061546 | 7 A | 1.06 | 1.50 | 2.67 | 5 |
| HP15M8CC | F1061547 | 8 A | 1.14 | 1.65 | 2.86 | 5 |
| HP15M10CC | G1061548 | 10 A | 1.35 | 1.94 | 3.34 | 5 |
| HP15M12CC | H1061549 | 12 A | 1.26 | 1.87 | 3.18 | 5 |
| HP15M15CC | J1061550 | 15 A | 1.53 | 2.10 | 3.83 | 5 |
| HP15M20CC | K1061551 | 20 A | 1.88 | 2.71 | 4.71 | 5 |
| HP15M25CC | L1061552 | 25 A | 2.34 | 3.39 | 5.88 | 5 |
| HP15M30CC | M1061553 | 30 A | 2.81 | 3.97 | 7.04 | 5 |
| HP15M32CC | N1061554 | 32 A | 3.00 | 4.23 | 7.51 | 5 |

HelioProtection® Fuse-links gPV
Dual HP15M - 1 500VDC ferrule



| Catalog Number | Item Number | Rated Current I _n | 70% AMP Rating (W) | 80% AMP Rating (W) | 100% AMP Rating (W) | Package |
|----------------|-------------|------------------------------|--------------------|--------------------|---------------------|---------|
| HP15M36 | - | 36 A | 3.19 | 4.41 | 5.59 | 25 |
| HP15M45 | - | 45 A | 3.62 | 5.21 | 9.23 | 25 |
| HP15M60 | - | 60 A | | | | |

Minimum breaking capacity: 1.35xI_n
Maximum breaking capacity: 50kA

HelioProtection® Fuse-links gPV
Dual HP15M - 1 500VDC with Crimp Cap



| Catalog Number | Item Number | Rated Current I _n | 70% AMP Rating (W) | 80% AMP Rating (W) | 100% AMP Rating (W) | Package |
|----------------|-------------|------------------------------|--------------------|--------------------|---------------------|---------|
| HP15M36CC | - | 36 A | 3.19 | 4.41 | 5.59 | 25 |
| HP15M45CC | - | 45 A | 3.62 | 5.21 | 9.23 | 25 |
| HP15M60CC | - | 60 A | | | | |

Minimum breaking capacity: 1.35xI_n
Maximum breaking capacity: 50kA

HelioProtection® US15M1HEL
UltraSafe™ Fuseholders for gPV fuse-links HP15M

PRODUCT RANGE



US15M1HEL

| Catalog Number | Fuse Type | No. of Poles | Voltage Rating | Ampere Rating | Packaging |
|----------------|--------------|--------------|----------------|---------------|-----------|
| US15M1HEL | Photovoltaic | 1 | 1500VDC | 30 | 12 |

Helioprotection® HP15FHM32 Series
Fuseholders for gPV fuse-links HP15M



HP15FHM32A

| Catalog Number | Fuse Type | No. of Poles | Voltage Rating | Ampere Rating | Packaging |
|----------------|--------------|--------------|----------------|---------------|-----------|
| HP15FHM32A | Photovoltaic | 1 | 1500VDC | 32 | 12 |
| HP15FHM32B | | | | | |

HelioProtection® Fuse-links
HP10NH 1000VDC

Plain blade



HP10NH1GPV125

| Size | Rated Voltage (V) | Nominal Current (A) | Class | Catalog number | Item Number | weight (kg) | Power dissipation at In | Power dissipation at 0,7xIn | Package |
|------|-------------------|---------------------|---------------|----------------|-------------|-------------|-------------------------|-----------------------------|---------|
| NH1 | 1000 VDC | 50 | gPV | HP10NH1GPV50 | Z1028283 | 0.4 | 11 | 4.6 | 3 |
| | | 63 | | HP10NH1GPV63 | A1028284 | 0.4 | 13 | 5.4 | 3 |
| | | 80 | | HP10NH1GPV80 | B1028285 | 0.4 | 15 | 6.1 | 3 |
| | | 100 | | HP10NH1GPV100 | C1028286 | 0.4 | 17 | 7.2 | 3 |
| | | 125 | | HP10NH1GPV125 | D1028287 | 0.4 | 18 | 7.4 | 3 |
| | | 160 | | HP10NH1GPV160 | E1028288 | 0.4 | 23 | 9.6 | 3 |
| NH2 | 1000 VDC | 200 | HP10NH2GPV200 | X1037619 | 0.63 | 29 | 12 | 3 | |
| | | 250 | HP10NH2GPV250 | Y1037620 | 0.63 | 34 | 14 | 3 | |

Direct mounting



HP10NH1GPV160B

| Size | Rated Voltage (V) | Nominal Current (A) | Class | Catalog number | Item Number | weight (kg) | Power dissipation at In | Power dissipation at 0,7xIn | Package |
|------|-------------------|---------------------|----------------|----------------|-------------|-------------|-------------------------|-----------------------------|---------|
| NH1 | 1000 VDC | 50 | gPV | HP10NH1GPV50B | B1048663 | 0.4 | 11 | 4.6 | 3 |
| | | 63 | | HP10NH1GPV63B | C1048664 | 0.4 | 13 | 5.4 | 3 |
| | | 80 | | HP10NH1GPV80B | D1048665 | 0.4 | 15 | 6.1 | 3 |
| | | 100 | | HP10NH1GPV100B | E1048666 | 0.4 | 17 | 7.2 | 3 |
| | | 125 | | HP10NH1GPV125B | F1048667 | 0.4 | 18 | 7.4 | 3 |
| | | 160 | | HP10NH1GPV160B | G1048668 | 0.4 | 23 | 9.6 | 3 |
| NH2 | 1000 VDC | 200 | HP10NH2GPV200B | H1048669 | 0.63 | 29 | 12 | 3 | |
| | | 250 | HP10NH2GPV250B | J1048670 | 0.63 | 34 | 14 | 3 | |

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

HelioProtection® Fuse-links
HP12NH - 1250VDC

PRODUCT RANGE



HP12NH2XLGVPV200

Plain blade

| Size | Rated Voltage (V) | Nominal Current (A) | Class | PLAIN BLADE | | | Power dissipation at 0,7xIn | Power dissipation at In | Package |
|-------|-------------------|---------------------|-------|------------------|-------------|-------------|-----------------------------|-------------------------|---------|
| | | | | Catalog number | Item Number | weight (kg) | | | |
| NH1XL | 1250 VDC | 125 | gPV | HP12NH1XLGVPV125 | G1039744 | 0.435 | 12 | 29 | 1 |
| | | 160 | | HP12NH1XLGVPV160 | H1039745 | 0.698 | 14 | 34 | 1 |
| NH2XL | | 200 | | HP12NH2XLGVPV200 | J1039746 | 1.054 | 16 | 42 | 1 |
| | | 250 | | HP12NH2XLGVPV250 | K1039747 | 1.054 | 17 | 45 | 1 |
| NH3L | | 250 | | HP12NH3LGPV250 | Z1033389 | 1.66 | 18 | 46 | 1 |
| | | 315 | | HP12NH3LGPV315 | A1033390 | 1.66 | 22 | 53 | 1 |
| | | 350 | | HP12NH3LGPV350 | B1033391 | 1.66 | 23 | 55 | 1 |
| | | 400 | | HP12NH3LGPV400 | C1033392 | 1.66 | 29 | 73 | 1 |



Direct mounting

| Size | Rated Voltage (V) | Nominal Current (A) | Class | DIRECT MOUNTING | | Power dissipation at 0,7xIn | Power dissipation at In | Package |
|-------|-------------------|---------------------|-------|-----------------|-------------|-----------------------------|-------------------------|---------|
| | | | | Catalog number | Item Number | | | |
| NH1XL | 1250 VDC | 125 | gPV | HP12NH1LGPV125B | K1048671 | 12 | 29 | 1 |
| | | 160 | | HP12NH1LGPV160B | L1048672 | 14 | 34 | 1 |
| NH2XL | | 200 | | HP12NH2LGPV200B | M1048673 | 16 | 42 | 1 |
| | | 250 | | HP12NH2LGPV250B | N1048674 | 17 | 45 | 1 |
| NH3L | | 250 | | HP12NH3LGPV250B | P1048675 | 18 | 46 | 1 |
| | | 315 | | HP12NH3LGPV315B | Q1048676 | 22 | 53 | 1 |
| | | 350 | | HP12NH3LGPV350B | R1048677 | 23 | 55 | 1 |
| | | 400 | | HP12NH3LGPV400B | S1048678 | 29 | 73 | 1 |

Photovoltaic Fuse bases
1000VDC



| Catalog Number | Item Number | Power acceptance | Rated impulse withstand voltage Uimp | Design | Package |
|----------------|-------------|------------------|--------------------------------------|---|---------|
| HPBB11PPR | A1030607 | 32 W | 8 kV | open design, for DIN-rail or screw mounting, for NH fuse links size 1 | 3 |
| HPBB11PPRFS | K1032916 | 32 W | 8 kV | with touch protection, for DIN-rail or screw mounting, for NH fuse links size 1 | 3 |



HPBB21PPR

| Catalog Number | Item Number | Power acceptance | Rated impulse withstand voltage Uimp | Design | Package |
|----------------|-------------|------------------|--------------------------------------|---|---------|
| HPBB21PPR | C1037509 | 45 W | 8 kV | open design, for DIN-rail or screw mounting, for NH fuse links size 1 and 2 | 3 |
| HPBB21PPRFS | D1037510 | 45 W | 8 kV | with touch protection, for DIN-rail or screw mounting, for NH fuse links size 1 and 2 | 3 |

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

HelioProtection® Fuse-links gPV
HP15NH - 1500VDC

PRODUCT RANGE



HP15NH3LGPV400

NH-fuse-links gPV 1500VDC Plain Blade

| Catalog number | Item number | Size | Rated current I_n | Power dissipation at I_n | Power dissipation at $0.7 \times I_n$ | Package | Weight |
|-----------------|-------------|------|---------------------|----------------------------|---------------------------------------|---------|---------|
| HP15NH1XLGPV50 | A1061266 | 1XL | 50 A | 21 W | 8.6 W | | 0.7 kg |
| HP15NH1XLGPV63 | Z1064508 | 1XL | 63 A | 25 W | 10.2 W | | 0.7 kg |
| HP15NH1XLGPV80 | A1064509 | 1XL | 80 A | 25.5 W | 10.3 W | | 0.7 kg |
| HP15NH1XLGPV100 | B1064510 | 1XL | 100 A | 26 W | 10.5 W | | 0.7 kg |
| HP15NH1XLGPV125 | C1064511 | 1XL | 125 A | 30 W | 12.2 W | | 0.7 kg |
| HP15NH2XLGPV125 | H1064309 | 2XL | 125 A | 33.7 W | 13.6 W | | 1.05 kg |
| HP15NH2XLGPV160 | J1064310 | 2XL | 160 A | 38 W | 15.4 W | | 1.05 kg |
| HP15NH2XLGPV200 | K1064311 | 2XL | 200 A | 48 W | 19.4 W | | 1.05 kg |
| HP15NH2XLGPV250 | L1064312 | 2XL | 250 A | 51.7 W | 20.9 W | | 1.05 kg |
| HP15NH3LGPV160 | H1037859 | 3L | 160 A | 36 W | 15 W | | 1.69 kg |
| HP15NH3LGPV200 | J1037860 | 3L | 200 A | 44 W | 18 W | | 1.69 kg |
| HP15NH3LGPV250 | K1037861 | 3L | 250 A | 50 W | 20 W | | 1.69 kg |
| HP15NH3LGPV315 | L1037862 | 3L | 315 A | 57 W | 23 W | | 1.69 kg |
| HP15NH3LGPV350 | M1037863 | 3L | 350 A | 63 W | 25 W | | 1.69 kg |
| HP15NH3LGPV400 | N1037864 | 3L | 400 A | 71 W | 28 W | | 1.69 kg |



HP15NH3LGPV400B

NH-fuse-links gPV 1500VDC Direct Mounting

| Catalog number | Item number | Size | Rated current I_n | Power dissipation at I_n | Power dissipation at $0.7 \times I_n$ | Package | Weight |
|-----------------|-------------|------|---------------------|----------------------------|---------------------------------------|---------|---------|
| HP15NH1LGPV50B | D1065431 | 1XL | 50 A | 21 W | 8.6 W | 1 | 0.69 kg |
| HP15NH1LGPV63B | D1065432 | 1XL | 63 A | 25 W | 10.2 W | 1 | 0.69 kg |
| HP15NH1LGPV80B | E1065433 | 1XL | 80 A | 25.5 W | 10.3 W | 1 | 0.69 kg |
| HP15NH1LGPV100B | F1065434 | 1XL | 100 A | 26 W | 10.5 W | 1 | 0.69 kg |
| HP15NH1LGPV125B | G1065435 | 1XL | 125 A | 30 W | 12.2 W | 1 | 0.69 kg |
| HP15NH2LGPV125B | M1064313 | 2XL | 125 A | 33.7 W | 13.6 W | 1 | 1.02 kg |
| HP15NH2LGPV160B | N1064314 | 2XL | 160 A | 38 W | 15.4 W | 1 | 1.02 kg |
| HP15NH2LGPV200B | P1064315 | 2XL | 200 A | 48 W | 19.4 W | 1 | 1.02 kg |
| HP15NH2LGPV250B | Q1064316 | 2XL | 250 A | 51.7 W | 20.9 W | 1 | 1.02 kg |
| HP15NH3LGPV160B | T1048679 | 3L | 160 A | 36 W | 15 W | 1 | 1.66 kg |
| HP15NH3LGPV200B | V1048680 | 3L | 200 A | 44 W | 18 W | 1 | 1.66 kg |
| HP15NH3LGPV250B | W1048681 | 3L | 250 A | 50 W | 20 W | 1 | 1.66 kg |
| HP15NH3LGPV315B | X1048682 | 3L | 315 A | 57 W | 23 W | 1 | 1.66 kg |
| HP15NH3LGPV350B | Y1048683 | 3L | 350 A | 63 W | 25 W | 1 | 1.66 kg |
| HP15NH3LGPV400B | Z1048684 | 3L | 400 A | 71 W | 28 W | 1 | 1.66 kg |



HP15NH3LPV350BI

NH-fuse-links gPV 1500VDC Direct Mounting size 3L with striker

| Catalog number | Item number | Rated current I_n | Power dissipation at I_n | Power dissipation at $0.7 \times I_n$ | Power dissipation at $0.8 I_n$ | Package | Weight |
|-----------------|-------------|---------------------|----------------------------|---------------------------------------|--------------------------------|---------|---------|
| HP15NH3LPV160BI | A1057218 | 160 A | 36 W | 15 W | 20 W | 1 | 1.66 kg |
| HP15NH3LPV200BI | B1057219 | 200 A | 44 W | 18 W | 25 W | 1 | 1.66 kg |
| HP15NH3LPV250BI | C1057220 | 250 A | 50 W | 20 W | 28 W | 1 | 1.66 kg |
| HP15NH3LPV315BI | D1057221 | 315 A | 57 W | 23 W | 32 W | 1 | 1.66 kg |
| HP15NH3LPV350BI | E1057222 | 350 A | 63 W | 25 W | 35 W | 1 | 1.66 kg |
| HP15NH3LPV400BI | F1057223 | 400 A | 71 W | 28 W | 40 W | 1 | 1.66 kg |

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Microswitch
1000VDC

PRODUCT RANGE



MC3E1-5N

Microswitch for NH-fuse-link gPV 1500VDC size 3L (with striker)

| Catalog number | Item number | Rated current I _n | Rated impulse withstand voltage U _{imp} | Indication System | Package | Weight |
|----------------|-------------|------------------------------|--|-------------------|---------|--------|
| MC3E1-5N | D310020 | 5 A | 20 kV | standard | 3 | 32 g |

Photovoltaic Fuse bases
1500VDC - Protected version

PRODUCT RANGE



HP15FHH1XLB



COVERFHH3L



COVERFHH1XL

Fuse-bases for NH gPV fuse-links, single pole, 1500VDC, 50 kA, SCCR 15kA

| Catalog number | Size | Rated current I _n | Power acceptance | Rated impulse withstand voltage U _{imp} | Cable termination | Design | Package |
|----------------|--------|------------------------------|------------------|--|--|---|---------|
| HP15FHH1XLA | 1XL | 250 A | 50 W | 6 kV | M10 terminal screws M = 32Nm for cable lugs 25-240 mm ² | open design, screw mounting, for NH1XL fuse-links with blade contacts | - |
| HP15FHH1XLB | 1XL | 250 A | 50 W | 6 kV | M10 terminal screws M = 32Nm for cable lugs 25-240 mm ² | with touch-safe protection, screw mounting, for NH1XL fuse-links with blade contacts | - |
| HP15FHH3LA | 2XL-3L | 600 A | 100 W | 6 kV | M12 terminal screws M = 32Nm for cable lugs 25-300 mm ² | open design, screw mounting, for NH2XL and NH3L fuse-links with blade contacts | - |
| HP15FHH3LB | 2XL-3L | 600 A | 100 W | 6 kV | M12 terminal screws M = 32Nm for cable lugs 25-300 mm ² | with touch-safe protection, screw mounting, for NH2XL and NH3L fuse-links with blade contacts | - |

Cover for fuse-base with touch protection

| Catalog number | Design | Package |
|----------------|---|---------|
| COVERFHH1XL | pack of 4 gripping lug covers for NH1XL fuse-base with touch protection | 1 |
| COVERFHH3L | pack of 2 gripping lug covers for NH3L fuse-base with touch protection | 1 |

HP6J - 600V DC Class J Photovoltaic Fuses



| Catalog Number | | | | | |
|----------------|--------------|---------|--------------|---------|--------------|
| Frame Size 1 | Frame Size 2 | | Frame Size 3 | | Frame Size 4 |
| HP6J70 | HP6J110 | HP6J175 | HP6J225 | HP6J350 | HP6J450 |
| HP6J80 | HP6J125 | HP6J200 | HP6J250 | HP6J400 | HP6J500 |
| - | HP6J150 | - | HP6J300 | - | HP6J600 |

Volts: 600VDC
Amps: 70 to 600A
IR: 10kA I.R. DC
MBC: 1.35 x I_n
Photovoltaic Fuse

HP10J - 1000V DC Class J Photovoltaic Fuses



| Catalog Number | | | | |
|----------------|----------|--------------|----------|--------------|
| Frame Size 1 | | Frame Size 2 | | Frame Size 3 |
| HP10J70 | HP10J125 | HP10J250 | HP10J400 | HP10J450 |
| HP10J80 | HP10J160 | HP10J300 | - | HP10J500 |
| HP10J100 | HP10J200 | HP10J350 | - | HP10J600 |

Volts: 1000VDC (70A to 600A), 600VAC (70A to 400A)
Amps: 70A to 600A
IR: 65kA @ 1000VDC, 200kA @ 600VAC
MBC: 1.35 x I_n
Photovoltaic Fuse

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

HELIOPROTECTION®

SURGE-TRAP® DC Type 1+2 YPV photovoltaic SPD
STP T12 5 YPV

PRODUCT RANGE



STPT12-5K1000V-YPVM

Catalog numbers / Reference numbers

| Catalog number | Item number | System type | Ucpv [Vdc] | Iscpv [A] | IIMP (10/350) [kA] | I _{max} (8/20) [kA] | I _n (8/20) [kA] | U _{p@I_n} (8/20) [kV] | Remote indication (M) | Cartridge Id. L |
|---------------------|-------------|-------------|------------|-----------|--------------------|------------------------------|----------------------------|--|-----------------------|-----------------|
| STPT12-5K1000V-YPV | 83120167 | "Y" PV | 1060 | 10 000 | 5 | 40 | 20 | ≤ 4 | | C43 |
| STPT12-5K1000V-YPVM | 83120168 | "Y" PV | 1060 | 10 000 | 5 | 40 | 20 | ≤ 4 | √ | C43 |

Replacement cartridges

| Catalog number | Item number | Network | Ucpv [Vdc] | IIMP (10/350) [kA] | I _{max} (8/20) [kA] | I _n (8/20) @U _p [kA] | U _{p@I_n} (8/20) [kV] | Cartridge Id. |
|-----------------|-------------|---------|------------|--------------------|------------------------------|--|--|---------------|
| SP12-5K1000V-PV | 83120011 | PV | 530 | 5 | 40 | 20 | ≤ 2 | C43 |

SURGE-TRAP® DC Type 2 YPV photovoltaic SPD
STP T2 40 YPV



STPT2-40K1500V-YPVM

Catalog numbers / Reference numbers

| Catalog number | Item number | System type | Ucpv [Vdc] | Iscpv [A] | I _{max} (8/20) [kA] | I _n (8/20) [kA] | U _{p@I_n} (8/20) [kV] | Remote indication (M) | Cartridge Id. L |
|---|-------------|-----------------|------------|-----------|------------------------------|----------------------------|--|-----------------------|-----------------|
| Y PV. LARGE-SCALE AND ROOFTOP PV | | | | | | | | | |
| STPT2-40K600V-YPV | 83020138 | "Y" PV | 660 | 10 000 | 40 | 20 | ≤2.6 | | C40 |
| STPT2-40K600V-YPVM | 83020139 | "Y" PV | 660 | 10 000 | 40 | 20 | ≤2.6 | √ | C40 |
| STPT2-40K1000V-YPV | 83020140 | "Y" PV | 1060 | 10 000 | 40 | 20 | ≤4 | | C41 |
| STPT2-40K1000V-YPVM | 83020141 | "Y" PV | 1060 | 10 000 | 40 | 20 | ≤4 | √ | C41 |
| STPT2-40K1500V-YPV | 83020158 | "Y" PV | 1500 | 10 000 | 40 | 15 | ≤5 | | C42 |
| STPT2-40K1500V-YPVM | 83020159 | "Y" PV | 1500 | 10 000 | 40 | 15 | ≤5 | √ | C42 |
| U PV. SELF-CONSUMPTION | | | | | | | | | |
| STPT2-40K60V-2P | 83020128 | TNS (1Ph+N); PV | 65 | 1000 | 40 | 20 | ≤0.7 | | Consult |
| STPT2-40K60V-2PM | 83020129 | TNS (1Ph+N); PV | 65 | 1000 | 40 | 20 | ≤0.7 | √ | Consult |
| STPT2-40K75V-2P | 83020130 | TNS (1Ph+N); PV | 80 | 1000 | 40 | 20 | ≤0.8 | | Consult |
| STPT2-40K75V-2PM | 83020131 | TNS (1Ph+N); PV | 80 | 1000 | 40 | 20 | ≤0.8 | √ | Consult |

Replacement cartridges

| Item number | Catalog number | Network | Ucpv [Vdc] | I _{max} (8/20) [kA] | I _n (8/20) @U _p [kA] | U _{p@I_n} (8/20) [kV] | Cartridge Id. |
|-------------|-----------------|---------|------------|------------------------------|--|--|---------------|
| 83020005 | SP2-40K600V-PV | PV | 330 | 40 | 20 | ≤1.3 | C40 |
| 83020006 | SP2-40K1000V-PV | PV | 530 | 40 | 20 | ≤2 | C41 |
| 83020010 | SP2-40K1500V-PV | PV | 750 | 40 | 10 | ≤2,5 | C42 |

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

SURGE-TRAP® DC T2 & T1+2 MPPT photovoltaic SPD
STP MPPT PV

PRODUCT RANGE



STPT2-40K1000V-8YPVM

Catalog numbers / Reference numbers

| Catalog number | Item number | System type | Ucpv [Vdc] | Iscpv [A] | IIMP (10/350) [kA] | Imax (8/20) [kA] | In (8/20) [kA] | Up@In (8/20) [kV] | Remote indication (M) | Cartridge Id. L |
|----------------------|-------------|---------------|------------|-----------|--------------------|------------------|----------------|-------------------|-----------------------|-----------------|
| TYPE 1+2 | | | | | | | | | | |
| STPT12-5K1000V-5YPVM | 83120192 | 3+ , 1- , 1PE | 1060 | 10000 | 5 | 40 | 20 | 4 | √ | C43 |
| STPT12-5K1000V-8YPVM | 83120190 | 6+ , 1- , 1PE | 1060 | 10000 | 5 | 40 | 20 | 4 | √ | C43 |
| TYPE 2 | | | | | | | | | | |
| STPT2-40K1000V-5YPVM | 83020188 | 3+ , 1- , 1PE | 1060 | 10000 | - | 40 | 20 | 4 | √ | C02 |
| STPT2-40K1000V-8YPVM | 83020204 | 6+ , 1- , 1PE | 1060 | 10000 | - | 40 | 20 | 4 | √ | C02 |

Replacement cartridges

| Catalog number | Item number | Network | Ucpv [Vdc] | IIMP (10/350) [kA] | Imax (8/20) [kA] | In (8/20) [kA] | Up@In (8/20) [kV] | Cartridge Id. |
|-----------------|-------------|---------|------------|--------------------|------------------|----------------|-------------------|---------------|
| SP2-40K1000V-PV | 83020006 | PV | 530 | - | 40 | 20 | ≤2 | C02 |
| SP12-5K1000V-PV | 83020011 | PV | 530 | 5 | 40 | 20 | ≤2 | C43 |

SURGE-TRAP® plug-in surge sockets for PCB
SB-PCB



SB-PCB-1000PV-M

Catalog numbers / Reference numbers

| Catalog number | Item number | Ucpv [Vdc] | Remote indication (M) | Cartridge Id. Item number | Cartridge Id. Catalog number |
|-----------------|-------------|------------|-----------------------|---------------------------|------------------------------|
| DC SIDE | | | | | |
| SB-PCB-1000PV-M | 83050133 | 1000 | √ | 83020006 | SP2-40K1000V-PV |
| SB-PCB-1500PV-M | 83050135 | 1500 | √ | 83020010 | SP2-40K1500V-PV |
| AC SIDE | | | | | |
| SB-PCB-275V-M | 83050119 | 275 | √ | 83020002 | SP2-40K275V |
| SB-PCB-440V-M | 83050123 | 320 | √ | 83020004 | SP2-40K440V |
| SB-PCB-750V-M | 83050127 | 440 | √ | 83020007 | SP2-30K750V |
| SB-PCB-N-M | 83050129 | 750 | √ | 83020000 | SP2-40K-N |

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

SURGE-TRAP® AC Type 2 photovoltaic SPD
STP T2 40 3P

PRODUCT RANGE



STPT2-40K275V-3PM

Catalog numbers / Reference numbers

| Catalog number | Item number | System type | Un [VAC] | Uc [V] | I _{max} (8/20) [kA] | In (8/20) [kA] | Up@In (8/20) [kV] | Remote indication (M) | Cartridge Id. L |
|-------------------|-------------|-------------|---------------|--------|------------------------------|----------------|-------------------|-----------------------|-----------------|
| STPT2-40K275V-3P | 83020134 | TNC (3Ph) | -/400 | 275 | 40 | 20 | ≤1.3 | | C06 |
| STPT2-40K275V-3PM | 83020135 | TNC (3Ph) | -/400 | 275 | 40 | 20 | ≤1.3 | √ | C06 |
| STPT2-40K320V-3P | 83020136 | TNC (3Ph) | -/480 | 320 | 40 | 20 | ≤1.4 | | C07 |
| STPT2-40K320V-3PM | 83020137 | TNC (3Ph) | -/480 | 320 | 40 | 20 | ≤1.4 | √ | C07 |
| STPT2-30K750V-3P | 83020102 | TNC (3Ph) | -/690; -/1000 | 750 | 30 | 15 | ≤3 | | C08 |
| STPT2-30K750V-3PM | 83020103 | TNC (3Ph) | -/690; -/1000 | 750 | 30 | 15 | ≤3 | √ | C08 |
| STPT2-30K750V-1P | 83020100 | L-N (1Ph) | 690 | 750 | 30 | 15 | ≤3 | | C08 |
| STPT2-30K750V-1PM | 83020101 | L-N (1Ph) | 690 | 750 | 30 | 15 | ≤3 | √ | C08 |

Replacement cartridges

| Catalog number | Item number | Network | Un [VAC] | Uc [V] | I _{max} (8/20) [kA] | In (8/20) [kA] | Up@In (8/20) [kV] | Cartridge Id. |
|----------------|-------------|-----------|----------|--------|------------------------------|----------------|-------------------|---------------|
| SP2-40K275V | 83020002 | L-N (1Ph) | 230 | 275 | 40 | 20 | ≤1.3 | C06 |
| SP2-40K320V | 83020003 | L-N (1Ph) | 277 | 320 | 40 | 20 | ≤1.4 | C07 |
| SP2-30K750V | 83020007 | L-N (1Ph) | 690 | 750 | 30 | 15 | ≤3 | C08 |

SURGE-TRAP® AC Type 2 reinforced peak withstand photovoltaic SPD
STP T2 30 3P-R

PRODUCT RANGE



STPT2-30K850V-3P-R

Catalog numbers / Reference numbers

| Catalog number | Item number | System type | UN [VAC] | UC [V] | I _{max} (8/20) [kA] | I _n (8/20) [kA] | Up@In (8/20) [kV] | Remote indication (M) | U _{peak} (I-pe) [kV] | L | PE |
|---------------------|-------------|-------------|----------|--------|------------------------------|----------------------------|-------------------|-----------------------|-------------------------------|-----|-----|
| STPT2-30K440V-3P-R | 83020177 | IT | - / 400 | 440 | 30 | 20 | 5 | | 1,6 | C25 | C08 |
| STPT2-30K440V-3P-RM | 83020178 | IT | - / 400 | 440 | 30 | 20 | 5 | √ | 1,6 | C25 | C08 |
| STPT2-30K750V-3P-R | 83020213 | IT | - / 690 | 750 | 30 | 15 | 6 | | 2,1 | C08 | C08 |
| STPT2-30K750V-3P-RM | 83020214 | IT | - / 690 | 750 | 30 | 15 | 6 | √ | 2,1 | C08 | C08 |
| STPT2-30K850V-3P-R | 83020201 | IT | - / 690 | 850 | 30 | 15 | 6 | | 2,2 | C28 | C28 |
| STPT2-30K850V-3P-RM | 83020202 | IT | - / 690 | 850 | 30 | 15 | 6 | √ | 2,2 | C28 | C28 |
| STPT2-30K850V-1P | 83020234 | L-N (1Ph) | 690 | 850 | 30 | 15 | 3 | | - | C28 | - |
| STPT2-30K850V-1PM | 83020235 | L-N (1Ph) | 690 | 850 | 30 | 15 | 3 | √ | - | C28 | - |

Replacement cartridges

| Catalog number | Item number | Network | Un [VAC] | Uc [V] | I _{max} (8/20) [kA] | I _n (8/20) [kA] | Up@In (8/20) [kV] | Cartridge Id. |
|----------------|-------------|-----------|----------|--------|------------------------------|----------------------------|-------------------|---------------|
| SP2-40K440V | 83020004 | L-N (1Ph) | 400 | 440 | 40 | 20 | ≤2 | C25 |
| SP2-30K750V | 83020007 | L-N (1Ph) | 690 | 750 | 30 | 15 | 3 | C08 |
| SP2-30K850V | 83020022 | L-N (1Ph) | 690 | 850 | 30 | 15 | 3 | C28 |

SURGE-TRAP® Signal Line photovoltaic SPD
STS 485

PRODUCT RANGE



STPT2-40K275V-3PM



STS485-5K-15V-3WI



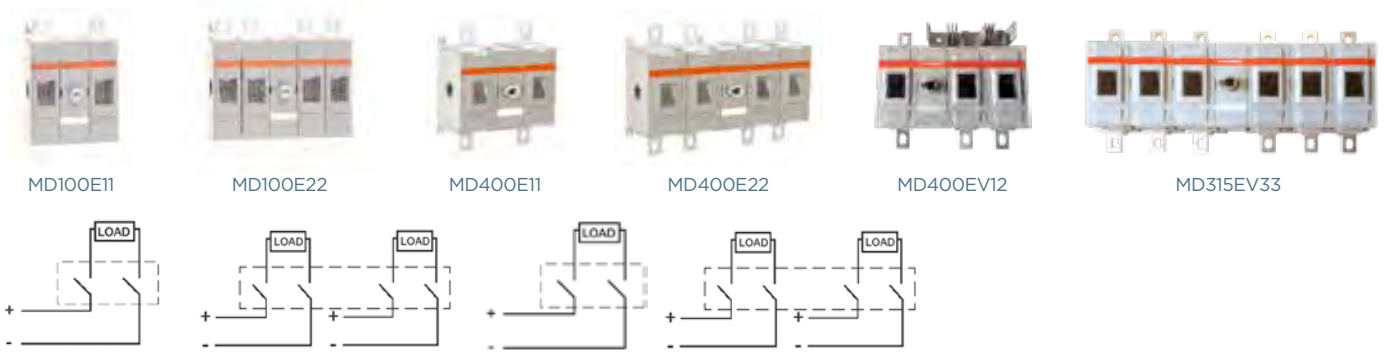
STS485-5K-15V-3WI

Catalog numbers / Reference numbers

| Catalog number | Item number | Un [V] | D1 (10/350) [kA] | I _{max} (8/20) | C2 (8/20) | Up@In (8/20) [V] | f _g [MHz] | Protected wires | EOL Indication |
|----------------|-------------|--------|------------------|-------------------------|-----------|------------------|----------------------|-----------------|----------------|
| STS485-7V-2W | 83040111 | 6 | 2,5 | 10 | 5 | 10 | 1 | 2 | |
| STS485-16V-2W | 83040112 | 12 | 2,5 | 10 | 5 | 20 | 1,2 | 2 | |
| STS485-27V-2W | 83040113 | 24 | 2,5 | 10 | 5 | 40 | 4 | 2 | |
| STS485-56V-2W | 83040114 | 48 | 2,5 | 10 | 5 | 70 | 5 | 2 | |
| STS485-15V-3WI | 83040110 | 12 | 2,5 | 10 | 5 | 45 | 10 | 2+GND | √ |
| STS485-5V-4WG | 83040120 | 5 | 2,5 | 10 | 10 | 30 | 60 | 4+GND | |

PV-Rated Disconnect Switches
IEC-Rated DC Switches

PRODUCT RANGE



Switch Body

| Ampere Rating | 100 | 160 | 200 | 250 | 315 | 400 | 500 |
|-----------------------------------|----------|----------|----------|----------|-----------|-----------|-----------|
| 1000VDC 2-pole Configuration | MD100E11 | MD160E11 | MD200E11 | MD250E11 | MD315E11 | MD400E11 | MD500E11 |
| 1000VDC 2x2-pole Configuration | MD100E22 | MD160E22 | MD200E22 | MD250E22 | MD315E22 | MD400E22 | MD500E22 |
| 1500VDC 3-pole Configuration | | | | | MD315EV12 | MD400EV12 | MD500EV12 |
| 1500VDC 2x3-pole Configuration | | | | | MD315EV33 | MD400EV33 | MD500EV33 |

Handles and Shafts



HDD250



HB65

| Direct Front Operation | | | | | | | |
|------------------------|--------|--------|--------|--------|--------|--------|--------|
| | HDD250 | HDD250 | HDD250 | HDD250 | HDD400 | HDD400 | HDD400 |

| External Pistol Style | | | |
|-----------------------|--------------|--|----------------|
| NEMA Type 1, 3R, 12 | HB65, HB80 | | HB125, HB145 |
| NEMA Type 4, 4X | HB65X, HB80X | | HB125X, HB125X |

B=Black. Substitute 'R' for 'B' if a red handle is desired. Ex. HR65

| Shafts | | | |
|--------------------------------------|--|--|--|
| Shaft—SPAxxx (xxx = length in mm) | SPA130, SPA210, SPA290, SPA360, SPA430 | | SFB185, SFB280, SFB325, SFB395, SFB535 |

Accessories



OA1G01

OA1G10

OEA28

| Auxiliary Contacts* | | | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|
| NO Right side mounting | OA1G10 | OA1G10 | OA1G10 | OA1G10 | OA1G10 | OA1G10 | OA1G10 |
| NC left side mounting | OA3G01 | OA3G01 | OA3G01 | OA3G01 | OA3G01 | OA3G01 | OA3G01 |
| Module for SF aux. contacts | OEA28 | OEA28 | OEA28 | OEA28 | OEA28 | OEA28 | OEA28 |

*Rated 2A max continous @690VAC



JUMP250

JC250

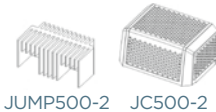


JUMP500

JC500

| Short Circuit Link | | | | | | | |
|---------------------------|---------|---------|---------|---------|-----------|-----------|-----------|
| For MDxxxE22 and EV33 | | | | | JUMP500-2 | JUMP500-2 | JUMP500-2 |
| For MDxxxE11, E22, EV12** | JUMP250 | JUMP250 | JUMP250 | JUMP250 | JUMP500 | JUMP500 | JUMP500 |

**Shipped with one link per circuit



JUMP500-2

JC500-2

| Terminal Shroud for Short Circuit Link | | | | | | | |
|--|-------|-------|-------|-------|---------|---------|---------|
| For JUMP500-2 | | | | | JC500-2 | JC500-2 | JC500-2 |
| For JUMP250, JUMP500 | JC250 | JC250 | JC250 | JC250 | JC500 | JC500 | JC500 |

| Terminal Shrouds for Lugs | | | | | | | |
|---------------------------|----------|----------|----------|----------|--------|--------|--------|
| Kit of 4 Terminal Shrouds | TS250-14 | TS250-14 | TS250-14 | TS250-14 | | | |
| 1 Terminal Shroud | | | | | TDS400 | TDS400 | TDS400 |

A shorter version is available for DC Switches up to 250A. 1 piece per package: TS250S-14

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

PV-Rated Disconnect Switches
UL 98B Listed DC Switches

PRODUCT RANGE



MD100U11



MD100U22



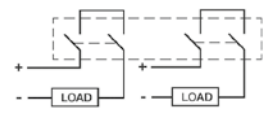
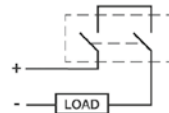
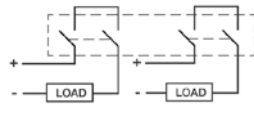
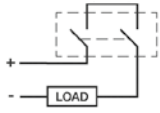
MD250UV12



MD400U11



MD400U22



Switch Body

| Ampere Rating | 100 | 200 | 250 | 320 | 400 |
|-----------------------------------|----------|----------|-----------|-----------|-----------|
| 1000VDC 2-pole Configuration | MD100U11 | MD200U11 | MD250U11 | MD320U11 | MD400U11 |
| 1000VDC 2x2-pole Configuration | MD180U22 | MD180U22 | MD180U22 | MD320U22 | MD400U22 |
| 1500VDC 2-pole Configuration | | | MD250UV12 | MD320UV12 | MD400UV12 |

Handles and Shafts



HDD400



HB125

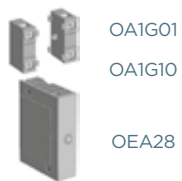
| Direct Front Operation | | | | | |
|------------------------|--------|--------|--------|--------|--------|
| 1000VDC | HDD250 | HDD250 | HDD250 | HDD400 | HDD400 |
| 1500VDC | | | HDD400 | HDD400 | HDD400 |

| External Pistol Style | | |
|-----------------------|--------------|----------------|
| NEMA Type 1, 3R, 12 | HB65, HB80 | HB125, HB145 |
| NEMA Type 4, 4X | HB65X, HB80X | HB125X, HB145X |

B=Black. Substitute 'R' for 'B' if a red handle is desired. Ex. HR65

| Shafts | | |
|--|---|--|
| Shaft—SPAxxx (xxx = length in mm), SFBxxx (xxx = length in mm) | SPA130, SPA210, SPA290, SPA360, SPA430 | SFB185, SFB280, SFB325, SFB395, SFB535 |

Accessories



OA1G01

OA1G10



OEA28

| Auxiliary Contacts* | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|
| NO Right side mounting | OA1G10 | OA1G10 | OA1G10 | OA1G10 | OA1G10 |
| NC left side mounting | OA3G01 | OA3G01 | OA3G01 | OA3G01 | OA3G01 |
| Module for SF aux. contacts | OEA28 | OEA28 | OEA28 | OEA28 | OEA28 |

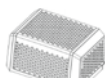
*Rated 2A max continous @690VAC



JC250



JC500



JC500-2

| Terminal Shroud for Short Circuit Link | | | | | |
|--|---------|---------|---------|---------|---------|
| For MDxxxU11, UV12 | JC250 | JC250 | JC500 | JC500 | JC500 |
| For MDxxxU22 | JC500-2 | JC500-2 | JC500-2 | JC500-2 | JC500-2 |

| Terminal Shroud for Lugs | | | | | |
|---------------------------|--------|--------|--------|--------|--------|
| Kit of 4 Terminal Shrouds | | | | | |
| 1 Terminal Shroud | TDS400 | TDS400 | TDS400 | TDS400 | TDS400 |

A shorter version is available for DC switches up to 250A. 1 piece per package: TDS250S.

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

PV-Rated Disconnect Switches

PRODUCT RANGE

UL 98B DC-rated Non-Fused switches

| Part # | Description | Ref # |
|-----------|----------------------------|----------|
| MD100U11 | DC Switch 100A UL 2p | X1043231 |
| MD180U22 | DC Switch 180A UL 4p | Y1043232 |
| MD200U11 | DC Switch 200A UL 2p | Z1043233 |
| MD250U11 | DC Switch 250A UL 2p | A1043234 |
| MD250U22 | DC Switch 250A UL 4p | B1043235 |
| MD320U11 | DC Switch 320A UL 2p | C1043236 |
| MD320U22 | DC Switch 320A UL 4p | D1043237 |
| MD400U11 | DC Switch 400A UL 2p | E1043238 |
| MD400U22 | DC Switch 400A UL 4p | F1043239 |
| MD250UV12 | DC Switch 250A UL 1500V 3p | L1050926 |
| MD320UV12 | DC Switch 320A UL 1500V 3p | M1050927 |
| MD400UV12 | DC Switch 400A UL 1500V 3p | N1050928 |

IEC DC-rated Non-Fused switches

| Part # | Description | Ref # |
|-----------|-------------------------------|----------|
| MD100E11 | DC Switch 100A IEC 1000V 2p | G1043217 |
| MD160E11 | DC Switch 160A IEC 1000V 2p | H1043218 |
| MD200E11 | DC Switch 200A IEC 1000V 2p | J1043219 |
| MD250E11 | DC Switch 250A IEC 1000V 2p | K1043220 |
| MD100E22 | DC Switch 100A IEC 2x1000V 4p | L1043221 |
| MD160E22 | DC Switch 160A IEC 2x1000V 4p | M1043222 |
| MD200E22 | DC Switch 200A IEC 2x1000V 4p | N1043223 |
| MD250E22 | DC Switch 250A IEC 2x1000V 4p | P1043224 |
| MD315E11 | DC Switch 315A IEC 1000V 2p | Q1043225 |
| MD400E11 | DC Switch 400A IEC 1000V 2p | R1043226 |
| MD500E11 | DC Switch 500A IEC 1000V 2p | S1043227 |
| MD315E22 | DC Switch 315A IEC 2x1000V 4p | T1043228 |
| MD400E22 | DC Switch 400A IEC 2x1000V 4p | V1043229 |
| MD500E22 | DC Switch 500A IEC 2x1000V 4p | W1043230 |
| MD315EV12 | DC Switch 315A IEC 1500V 3p | C1050918 |
| MD400EV12 | DC Switch 400A IEC 1500V 3p | D1050919 |
| MD500EV12 | DC Switch 500A IEC 1500V 3p | E1050920 |
| MD315EV33 | DC Switch 315A IEC 2x1500V 6p | F1050921 |
| MD400EV33 | DC Switch 400A IEC 2x1500V 6p | G1050922 |
| MD500EV33 | DC Switch 500A IEC 2x1500V 6p | J1050924 |

Handles

| Part # | Description | Ref # |
|--------|---------------------------------|----------|
| HB65 | Handle black 65mm IP65 NEMA 3R | W1043368 |
| HB65X | Handle black 65mm IP65 NEMA 4X | X1043369 |
| HB95 | Handle black 95mm IP65 NEMA 3R | N1043913 |
| HB95X | Handle black 95mm IP65 NEMA 4X | P1043914 |
| HB125 | Handle black 125mm IP65 NEMA 3R | A1043372 |
| HB125X | Handle black 125mm IP65 NEMA 4X | B1043373 |
| HR65 | Handle red 65mm IP65 NEMA 3R | G1043378 |
| HR65X | Handle red 65mm IP65 NEMA 4X | H1043379 |
| HR95 | Handle red 95mm IP65 NEMA 3R | S1043917 |
| HR95X | Handle red 95mm IP65 NEMA 4X | T1043918 |
| HR125 | Handle red 125mm IP65 NEMA 3R | K1043381 |
| HR125X | Handle red 125mm IP65 NEMA 4X | L1043382 |
| HDD250 | Handle direct MD100-250 | G1047794 |
| HDD400 | Handle direct MD315-500 | H1047795 |

Shafts

| Part # | Description | Ref # |
|--------|-------------------------------|----------|
| SFB280 | Shaft SwitchFuse 12x12x280mm | F1043423 |
| SFB325 | Shaft SwitchFuse 12x12x325mm | G1043424 |
| SFB395 | Shaft SwitchFuse 12x12x395mm | H1043425 |
| SPA130 | Shaft pistol handle 6x6x130mm | V1043919 |
| SPA210 | Shaft pistol handle 6x6x210mm | P1043431 |
| SPA290 | Shaft pistol handle 6x6x290mm | Q1043432 |
| SPA360 | Shaft pistol handle 6x6x360mm | W1043920 |
| SPA430 | Shaft pistol handle 6x6x430mm | X1043921 |

Terminal Shrouds

| Part # | Description | Ref # |
|----------|------------------------------|----------|
| TS250-14 | Term.shrd 250A switch 1p L/4 | A1043464 |
| TDS400 | Term.shrd MD250-500 1p L/1 | A1045534 |
| TDS250S | Term.shrd MD100-250 1p S /1 | Z1045533 |

Jumpers

| Part # | Description | Ref # |
|-----------|-------------------------------|----------|
| JUMP250 | Jumper bar for 250A DC switch | F1043469 |
| JUMP500 | Jumper bar for 500A DC switch | G1043470 |
| JUMP500-2 | Jumper bar for 1500V E33 | S1051300 |
| JC250 | Jumper cover for JUMP250 | H1043471 |
| JC500 | Jumper cover for JUMP500 | J1043472 |
| JC500-2 | Jumper cover for JUMP500-2 | V1051302 |

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.