PHOTOVOLTAIC

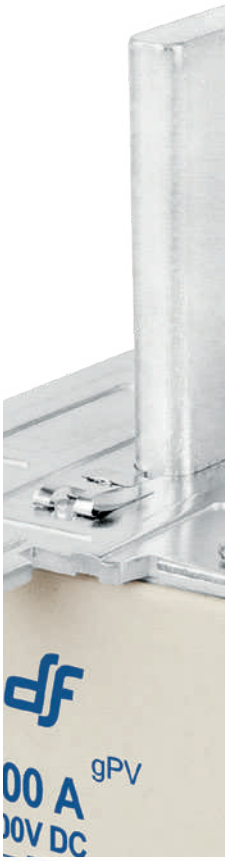
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

04

gPV
CYL
fuse links



06

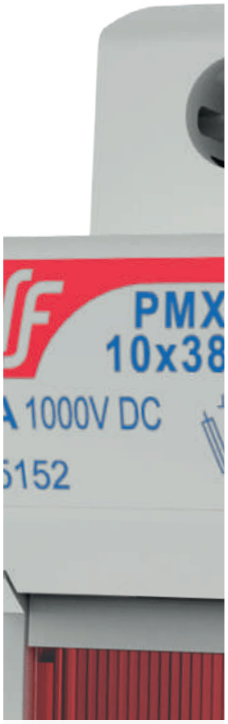
gPV
NH
1000V DC
fuse links

08

gPV
NH XL
1500V DC
fuse links

10

gG/GL & gS
NH
800V AC
fuse links

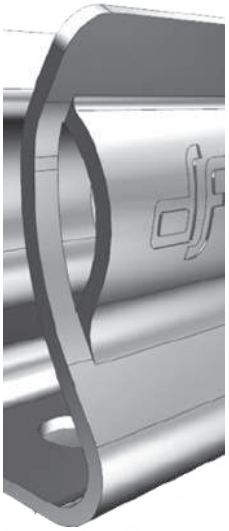


11

PMX
CYL
fuse holders

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

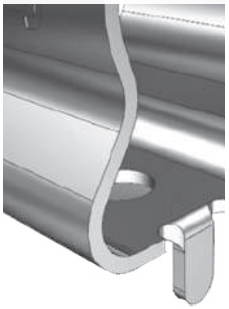


12

PML
CYL
fuse holders

13

CLIP CONTACT
CYL
Ø10 fuse links



14

ST
NH
1000V DC
fuse bases

15

ST
NH XL
1500V DC
fuse bases

16

ST
NH
690/800V AC
fuse bases

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

CYL gPV CYLINDRICAL fuse links

gPV 10x38 and 14x51 cylindrical fuse-links from DF Electric have been developed to offer a compact, safety and economic protection of photovoltaic modules (array protection) with voltages up to 1.000/1.100V DC.

They provide protection against overloads as well as short-circuit (gPV class according to the requirements of IEC60269-6 and UL248-19 Standards).

Made with ceramic tube with high withstand to internal pressure and thermal shock, that allows a high breaking capacity in a reduced physical space. Contacts are made in silver plated copper and melting elements are made in pure silver in order to avoid the aging and thus keep unalterable the electric characteristics.

For these fuse-links we recommend the utilization of PMX fuseholders.

10x38

U **1000V DC**

BREAKING CAPACITY **30kA**

STANDARDS UL

I_n (A)	REFERENCE	PACKING Uni /BOX
1	**491601**	10/100
2	**491602** UL	10/100
3	**491604** UL	10/100
4	**491605** UL	10/100
5	**491606** UL	10/100
6	**491610** UL	10/100
8	**491615** UL	10/100
10	**491620** UL	10/100
12	**491625** UL	10/100
15	**491629** UL	10/100
16	**491630** UL	10/100
20	**491635** UL	10/100
	431000	10/100

491635

14x51

U **1100V DC**

BREAKING CAPACITY **10kA**

I_n (A)	REFERENCE	PACKING Uni /BOX
15	**491647**	10/50
20	**491648**	10/50

U **1000V DC**

BREAKING CAPACITY **30kA**

I_n (A)	REFERENCE	PACKING Uni /BOX
25	**491650**	10/50
32	**491655**	10/50
	432000	10/50

491655

STANDARDS
IEC 60269-1
IEC 60269-6
UL 248-19

DIMENSIONS
PAG 18 10x38
PAG 19 14x51

t-I CHARACTERISTICS
PAG 18 10x38
PAG 19 14x51

AMBIENT TEMPERATURE DERATING FACTOR
PAG 45

COMPATIBLE **PMX FUSE HOLDERS**
PAG 11

COMPATIBLE **CLIP CONTACT Ø10 FUSE-LINKS**
PAG 13

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

CYL gPV CYLINDRICAL fuse links

gPV 10x85 & 10/14x85 cylindrical fuse-links from DF Electric have been developed to offer a compact, safety and economic protection of photovoltaic modules (array protection) with voltages up to 1.200/1.500 VDC.

They provide protection against overloads as well as short-circuit (gPV class according to the requirements of IEC60269-6 and UL248-19 Standards). Made with ceramic tube with high withstand to internal pressure and thermal shock, that allows a high breaking capacity in a reduced physical space. Contacts are made in silver plated copper and melting elements are made in pure silver in order to avoid the aging and thus keep unalterable the electric characteristics.

For these fuse-links we recommend the utilization of PML fuseholders.

10x85

U **1500V DC**

BREAKING CAPACITY **30kA**

STANDARDS UL

I_n (A)	REFERENCE	PACKING Uni /BOX
2	**492202** UL	10/50/1000
4	**492205** UL	10/50/1000
6	**492210** UL	10/50/1000
8	**492215** UL	10/50/1000
10	**492220** UL	10/50/1000
12	**492225** UL	10/50/1000
15	**492229** UL	10/50/1000
16	**492230** UL	10/50/1000
20	**492235**	10/50/1000
25	**492240**	10/50/1000

U **1200V DC**

BREAKING CAPACITY **10kA**

NEUTRAL LINK **431010** 10/50/1000

492240

10/14x85

U **1500V DC**

BREAKING CAPACITY **10kA**

I_n (A)	REFERENCE	PACKING Uni /BOX
20	**492250**	10/480
25	**492255**	10/480
30	**492260**	10/480
32	**492262**	10/480

492262

22x65

U **1500V DC**

BREAKING CAPACITY **30kA**

I_n (A)	REFERENCE	PACKING Uni /BOX
40	**492270**	10/260
50	**492275**	10/260

492275

STANDARDS	DIMENSIONS	t-I CHARACTERISTICS	AMBIENT TEMPERATURE DERATING FACTOR	COMPATIBLE PML FUSE HOLDERS	COMPATIBLE CLIP CONTACT Ø10 FUSE-LINKS
IEC 60269-1 IEC 60269-6 UL 248-19	PAG 20 PAG 21 PAG 22	PAG 20 PAG 21 PAG 22	PAG 45	PAG 12	PAG 13

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

NH gPV NH 1000V DC fuse links

NH gPV fuse-links for photovoltaic installations from DF Electric have been developed to offer a safety protection solution in sub-array, array or inverter DC input of photovoltaic installations.

They provide protection against overloads as well as short-circuits (gPV class according to IEC 60269 and UL248-19 Standards, with a minimum fusing current of 1,35·In. Made with ceramic body with high withstand to internal pressure and thermal shock. Contacts are made in silver plated copper or brass and melting elements are made in pure silver in order to avoid the aging and thus keep unalterable the electric characteristics.

For these fuse-links we recommend the utilization of 1000 VDC NH ST fuse bases.

NH1

U	1000V DC
BREAKING CAPACITY	30kA
CONTACTS	KNIFE BLADE
STANDARDS	UL

In (A)	REFERENCE	PACKING Uni /BOX
25	373210 UL	1/30
32	373215 UL	1/30
40	373225 UL	1/30
50	373230 UL	1/30
63	373235 UL	1/30
80	373240 UL	1/30
100	373245 UL	1/30
125	373250 UL	1/30
160	373255	1/30
200	373260	1/30

373250

NH2

U	1000V DC
BREAKING CAPACITY	30kA
CONTACTS	KNIFE BLADE

In (A)	REFERENCE	PACKING Uni /BOX
200	373350	1/15
250	373360	1/15

373350

NH3

U	1000V DC
BREAKING CAPACITY	30kA
CONTACTS	KNIFE BLADE
STANDARDS	UL

In (A)	REFERENCE	PACKING Uni /BOX
200	373425 UL	1/15
250	373435	1/15
315	373445	1/15
355	373450	1/15
400	373455	1/15

373435

STANDARDS
IEC 60269-1
IEC 60269-6
UL 248-19

DIMENSIONS
PAG 23

t-I CHARACTERISTICS
PAG 24

AMBIENT TEMPERATURE DERATING FACTOR
PAG 45

COMPATIBLE ST NH 1000V AC BASES
PAG 14

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

NH gPV NH 1000V DC fuse links

NH gPV fuse-links for photovoltaic installations from DF Electric have been developed to offer a safety protection solution in sub-array, array or inverter DC input of photovoltaic installations.

They provide protectionagainst overloads as well as short-circuits (gPV class according to IEC 60269 and UL248-19 Standards, with a minimum fusing current of 1,35·In. Made with ceramic body with high withstand to internal pressure and thermal shock. Contacts are made in silver plated copper or brass and melting elements are made in pure silver in order to avoid the aging and thus keep unalterable the electric characteristics.

This bolted type is specially designed for applications where can be mounted directly on busbars.

NH1

U	1000V DC
BREAKING CAPACITY	30kA
CONTACTS	BOLTED BLADE

In (A)	REFERENCE	PACKING Uni /BOX
25	**373210 B**	1/30
32	**373215 B**	1/30
40	**373225 B**	1/30
50	**373230 B**	1/30
63	**373235 B**	1/30
80	**373240 B**	1/30
100	**373245 B**	1/30
125	**373250 B**	1/30
160	**373255 B**	1/30
200	**373260 B**	1/30

373260B

NH2

U	1000V DC
BREAKING CAPACITY	30kA
CONTACTS	BOLTED BLADE

200	**373350 B**	1/15
250	**373360 B**	1/15

373350B

NH3

U	1000V DC
BREAKING CAPACITY	30kA
CONTACTS	BOLTED BLADE

200	**373425 B**	1/15
250	**373435 B**	1/15
315	**373445 B**	1/15
355	**373450 B**	1/15
400	**373455 B**	1/15

373435B

STANDARDS
IEC 60269-1
IEC 60269-6
UL 248-19

DIMENSIONS
PAG 23

t-I CHARACTERISTICS
PAG 24

AMBIENT TEMPERATURE DERATING FACTOR
PAG 45

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

NH gPV NH XL1500V DC fuse links

NH gPV 1500V DC fuse-links for photovoltaic installations have been developed to offer a safety protection solution in sub-array, array or inverter DC input of photovoltaic installations.

They provide protection against overloads as well as short-circuits (gPV class according to IEC 60269 and UL248-19 Standards), with a minimum fusing current of 1,35·In. Made with ceramic body with high withstand to internal pressure and thermal shock. Contacts are made of silver plated copper and melting elements are made of pure silver in order to avoid the aging and thus keep unalterable the electric characteristics. They have a low poer losses values to get a good efficiency.

For these fuselinks we recommend the utilization of 1500V DC NH XL fuse bases.

NH1 XL

U	1500V DC
BREAKING CAPACITY	30kA
CONTACTS	KNIFE BLADE
STANDARDS	UL

In (A)	REFERENCE	PACKING Uni /BOX
40	372225 UL	1/18
50	372230 UL	1/18
63	372235 UL	1/18
80	372240 UL	1/18
100	372245 UL	1/18
125	372250 UL	1/18
160	372255 UL	1/18
200	372260	1/18

372235

NH2 XL

U	1500V DC
BREAKING CAPACITY	30kA
CONTACTS	KNIFE BLADE
STANDARDS	UL

In (A)	REFERENCE	PACKING Uni /BOX
200	372350 UL	1/10
250	372360 UL	1/10

372360

NH3 L

U	1500V DC
BREAKING CAPACITY	30kA
CONTACTS	KNIFE BLADE

In (A)	REFERENCE	PACKING Uni /BOX
315	372445 UL	1/10
350	372448 UL	1/10
355	372450 UL	1/10
400	372455 UL	1/10

372455

STANDARDS
IEC/EN 60269-1
IEC/EN 60269-2

DIMENSIONS PAG 25

t-I CHARACTERISTICS PAG 26

AMBIENT TEMPERATURE DERATING FACTOR PAG 45

COMPATIBLE **ST NH 1500V DC BASES** PAG 15

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

NH gPV NH XL1500V DC fuse links

NH gPV 1500V DC fuse-links for photovoltaic installations have been developed to offer a safety protection solution in sub-array, array or inverter DC input of photovoltaic installations.

They provide protection against overloads as well as short-circuits (gPV class according to IEC 60269 and UL248-19 Standards), with a minimum fusing current of 1,35·In. Made with ceramic body with high withstand to internal pressure and thermal shock. Contacts are made of silver plated copper and melting elements are made of pure silver in order to avoid the aging and thus keep unalterable the electric characteristics. They have a low poer losses values to get a good efficiency.

This bolted type is specially designed for applications where can be mounted directly on busbars.

NH1 XL

U	1500V DC
BREAKING CAPACITY	30kA
CONTACTS	BOLTED BLADE

In (A)	REFERENCE	PACKING Uni /BOX
40	372225 B	1/18
50	372230 B	1/18
63	372235 B	1/18
80	372240 B	1/18
100	372245 B	1/18
125	372250 B	1/18
160	372255 B	1/18
200	372260 B	1/18

372260B

NH2 XL

U	1500V DC
BREAKING CAPACITY	30kA
CONTACTS	BOLTED BLADE

In (A)	REFERENCE	PACKING Uni /BOX
200	372350 B	1/10
250	372360 B	1/10

372360B

NH3 L

U	1500V DC
BREAKING CAPACITY	30kA
CONTACTS	BOLTED BLADE

In (A)	REFERENCE	PACKING Uni /BOX
315	372445 B	1/10
350	372448 B	1/10
355	372450 B	1/10
400	372455 B	1/10

372455B

STANDARDS
IEC 60269-1
IEC 60269-6
UL 248-19

DIMENSIONS
PAG 25

t-I CHARACTERISTICS
PAG 26

AMBIENT TEMPERATURE DERATING FACTOR
PAG 45

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

NH gG/gL & gS NH 800V AC fuse links

These knife type (NH) fuse links with high breaking capacity are intended for protection of the output side of new generation of photovoltaic inverters, with output voltage of 800V AC. They are also adequate for the protection of 690V AC capacitor banks. They are gG class and provide protection against overloads and short-circuits with rated voltages up to 800V +10%. The rated breaking capacity is 80kA. They have a low values of power dissipations. Manufactured with ceramic body with high withstand to internal pressuree and thermal shock, that allows a high breaking capacity. Knife contacts are made of silver plated copper or brass.

Can be mounted in open-type ST fuse bases or in fuse disconnectors type BS.

NH00 gS

U 800V AC

BREAKING CAPACITY 80kA

In (A)	REFERENCE	PACKING Uni /BOX
25	**369030**	3/30
35	**369035**	3/30
40	**369045**	3/30
50	**369050**	3/30
63	**369055**	3/30
80	**369060**	3/30
100	**369065**	3/30

369065

NHC1 gG

U 800V AC

BREAKING CAPACITY 80kA

In (A)	REFERENCE	PACKING Uni /BOX
25	**385210**	3/30
35	**385220**	3/30
40	**385225**	3/30
50	**385230**	3/30
63	**385235**	3/30

385235

NH1 gG

U 800V AC

BREAKING CAPACITY 80kA

In (A)	REFERENCE	PACKING Uni /BOX
80	**385240**	3/30
100	**385245**	3/30
125	**385250**	3/30
160	**385255**	3/30

385255

NH3 gG

U 800V AC

BREAKING CAPACITY 80kA

In (A)	REFERENCE	PACKING Uni /BOX
200	**385425**	3/18
250	**385435**	3/18
315	**385445**	3/18
355	**385450**	3/18
400	**385455**	3/18

385445

STANDARDS	DIMENSIONS	t-I CHARACTERISTICS	AMBIENT TEMPERATURE DERATING FACTOR	COMPATIBLE ST NH 800V AC BASES
IEC/EN 60269-1 IEC/EN 60269-2	PAG 27	PAG 28	PAG 45	PAG 16

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

PMX CYLINDRICAL fuse holders

PATENTED DESIGN

The first feature that PV Modular fuse holders offers, is the 1000V DC rated voltages. They have been developed to offer a compact, safety and economic protection solution in photovoltaic installations where due to the increase of the power and technologic evolution, no-load voltages above 800V DC can be achieved.

Modular fuse holders for 10x38 & 14x51 gPV fuses according IEC/EN 60269 standard. Compact design, with reduced distances. Manufactured with a high quality materials: Silver plated copper contacts and plastic materials with high temperature resistance and selfextinguishable.

All the materials are according to the European Directive RoHS (Restriction of the use of certain hazardous substances in electrical material).

10x38

U 1000V DC

In 32A

STANDARDS UL CSA

INDICATOR	POLES	MODULES	REFERENCE	PACKING Uni /BOX
NO	SINGLE-POLE	1	**485150**	12/192
NO	TWO-POLES	2	**485151**	6/96
YES	SINGLE-POLE	1	**485152**	12/192
YES	TWO-POLES	2	**485153**	6/96

485152

14x51

U 1100V DC

In 50A

NO	SINGLE-POLE	1	**485250**	6/90
NO	TWO-POLES	2	**485251**	3/45
YES	SINGLE-POLE	1	**485252**	6/90
YES	TWO-POLES	2	**485253**	3/45

485252

22x65

U 1500V DC

In 100A

NO	SINGLE-POLE	1	**485720**	6/48

STANDARDS

IEC/EN 60269-1 UL 4248-1
IEC/EN 60269-2 UL 4248-19
CSA 4248-19

DIMENSIONS

PAG 29 10x38
PAG 30 14x51
PAG 31 22x65

ACCESSORIES

PAG 32
PAG 33

COMPATIBLE
gPV CYL FUSE LINKS

PAG 04

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

PML CYLINDRICAL fuse holders

Fuse holder for cylindrical fuse link size 10x85 gVP and 10/14x85 gPV.

- Modern compact design.
- Ventilation zones optimized for a better heat dissipation.
- Manufactured with a high quality materials.
- Silver plated copper contacts.
- Plastic materials with high temperature resistance and self-extinguishable.
- All the materials are according to the European Directive RoHS (Restriction of the use of certain hazardous substances in electrical material) and also halogen free.

PATENTED DESIGN

10x85 | 10/14x85

U 1500V DC

In 32A

STANDARDS UL

POLES	MODULES (mm)	REFERENCE	PACKING Uni /BOX
SINGLE-POLE	24	**485701**	6/84

PML
10x85
10/14x85
1500V DC
welcome
to the future

10x85 position

10/14x85 position

STANDARDS

IEC/EN 60269-1 UL 4248-1
IEC/EN 60269-2 UL 4248-19

DIMENSIONS

PAG 34

ACCESSORIES

PAG 35

COMPATIBLE
gPV CYL FUSE LINKS

PAG 05

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

Ø10 CLIP CONTACT

CLIP CONTACT CYLINDRICAL Ø10 fuse links

Clip contact for Ø10 cylindrical fuse links.
Screw fixation and PCB versions. Manufactured in tinned bronze.
All the materials are according to the European Directive RoHS (Restriction of the use of certain hazardous substances in electrical material).

10x38 10x85

FIXATION **SCREW**

U UP TO **1500V AC/DC**

IN **25A**

P_d max (W)	REFERENCE	PACKING Uni /BOX
4	**482001**	50/200

10x38 10x85

FIXATION **PCB**

U UP TO **1500V AC/DC**

IN **25A**

P_d max (W)	REFERENCE	PACKING Uni /BOX
4	**482002**	50/200

DIMENSIONS
PAG 36

COMPATIBLE
gPV CYL FUSE LINKS
PAG 04 | 05

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

ST
NH 1000V DC bases

Fuse bases for NH fuse-links. Manufactured with a high quality materials. Silver plated copper contacts. Plastic materials with high temperature resistance and self-extinguishable. All the materials are according to the European Directive RoHS. For screw fixing. Single-phase type. Connection by screws.

Contacts with double spring in order to obtain an optimum operation. Wide range of accessories that enables IP20 protection index: contact covers, fuse link covers and partition walls. Multi-pole units can be made with connection accessories.

Manufactured according IEC, VDE and DIN standards. UL certification (File E359201).

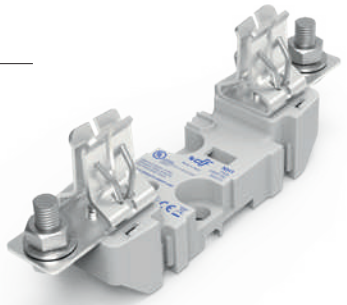
NH1

U 1000V DC

In 250A

STANDARDS UL

POLES	FIXING	CONNECTION	REFERENCE	PACKING Uni /BOX
SINGLE-POLE	DIN RAIL/SCREW	SCREW	**354172** UL	1



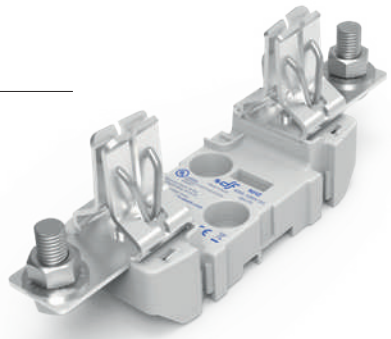
NH2

U 1000V DC

In 400A

STANDARDS UL

SINGLE-POLE	DIN RAIL/SCREW	SCREW	**354175** UL	1



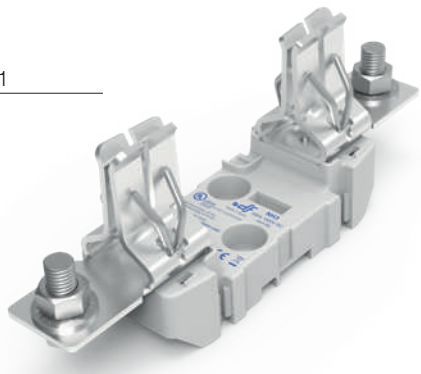
NH3

U 1000V DC

In 500A

STANDARDS UL

SINGLE-POLE	DIN RAIL/SCREW	SCREW	**354180** UL	1



STANDARDS

IEC/EN 60269-1 UL 4248-1
IEC/EN 60269-2 UL 4248-19

DIMENSIONS PAG 37

ACCESSORIES PAG 17

ACCESSORIES ASSEMBLY PAG 40

COMPATIBLE **gPV NH 1000V DC FUSE LINKS** PAG 06

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

ST
NH XL1500V DC fuse bases

Fuse bases for NH fuse-links. Manufactured with a high quality materials. Silver plated copper contacts. Plastic materials with high temperature resistance and self-extinguishable. All the materials are according to the European Directive RoHS. For screw fixing. Single-phase type. Connection by screws.

Contacts with double spring in order to obtain an optimum operation. Wide range of accessories that enables IP20 protection index: contact covers, fuse link covers and partition walls. Multi-pole units can be made with connection accessories.

Manufactured according IEC, VDE and DIN standards. UL certification (File E359201).

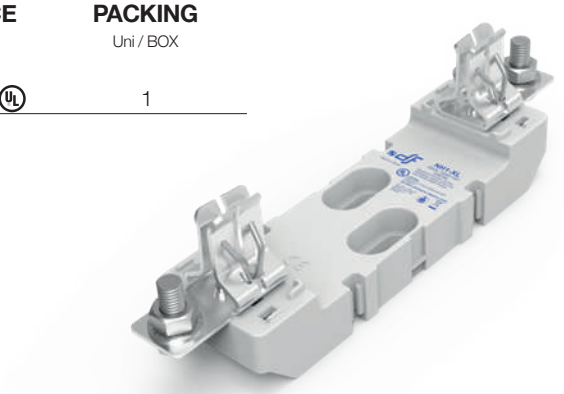
NH1 XL

U 1500V DC

In 200A

STANDARDS UL

POLES	FIXING	CONNECTION	REFERENCE	PACKING Uni / BOX
SINGLE-POLE	SCREW	SCREW	**358250** UL	1



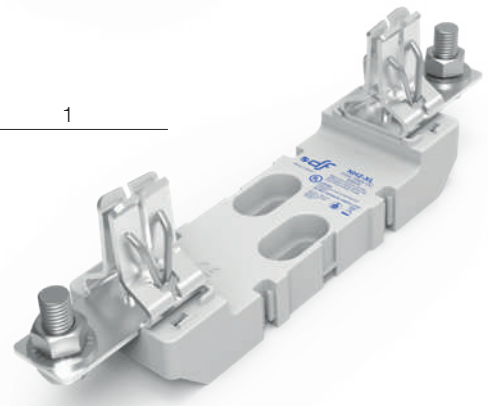
NH2 XL

U 1500V DC

In 315A

STANDARDS UL

SINGLE-POLE	SCREW	SCREW	**358400** UL	1



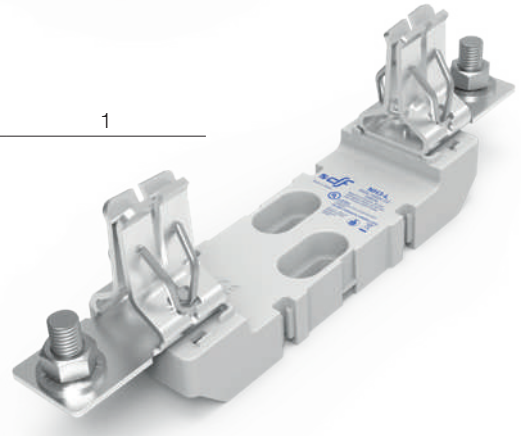
NH3 L

U 1500V DC

In 500A

STANDARDS UL

SINGLE-POLE	SCREW	SCREW	**358630** UL	1



STANDARDS

IEC/EN 60269-1 UL 4248-1
IEC/EN 60269-2 UL 4248-19

DIMENSIONS

PAG 38

ACCESSORIES

PAG 17

ACCESSORIES ASSEMBLY

PAG 41

COMPATIBLE
gPV XL NH 1500V DC FUSE LINKS

PAG 08

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

ST
NH
690V/800V AC
fuse bases

Fuse bases for NH fuse-links. Manufactured with a high quality materials. Silver plated copper contacts. Plastic materials with high temperature resistance and self-extinguishable. All the materials are according to the European Directive RoHS. For mounting on DIN/EN rail or with screw fixing. Single-phase or three-pole type. Connection by screws.

Contacts with double spring in order to obtain an optimum operation. Wide range of accessories that enables IP20 protection index: contact covers, fuse link covers and partition walls. Multi-pole units can be made with connection accessories.

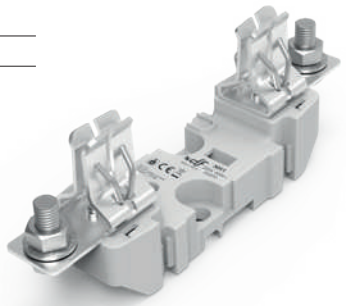
Manufactured according IEC, EN and DIN standards.

NH1

U 690V/800V AC

In 250A

POLES	FIXING	CONNECTION	REFERENCE	PACKING Uni / BOX
SINGLE-POLE	DIN RAIL / SCREW	SCREW	**352300**	3
THREE-POLE	DIN RAIL / SCREW	SCREW	**353300**	1

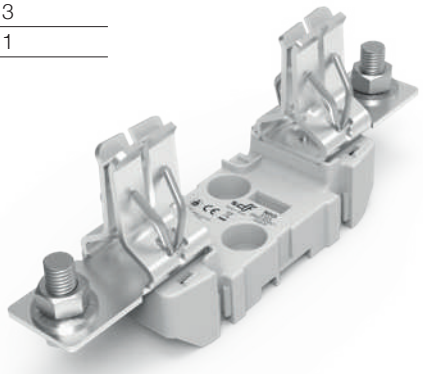


NH3

U 690V/800V AC

In 630A

SINGLE-POLE	DIN RAIL / SCREW	SCREW	**352630**	3
THREE-POLE	DIN RAIL / SCREW	SCREW	**353630**	1



STANDARDS	DIMENSIONS	ACCESSORIES	ACCESSORIES ASSEMBLY	COMPATIBLE gG/GL NH 800V AC FUSE LINKS
IEC/EN 60269-1 IEC/EN 60269-2 DIN 43620	PAG 39	PAG 17	PAG 42	PAG 10

PHOTOVOLTAIC

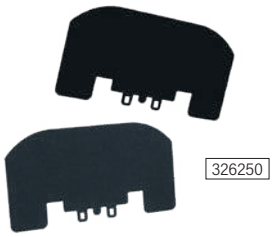
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

ST | NH ACCESSORIES fuse bases

ST

PARTITION WALLS
SNAP FIXATION

SIZE	REFERENCE	PACKING Uni /BOX
NH1 (OVER SEPARATOR)	**326200**	2
NH1 (DIRECTLY TO BODY)	**326201**	2
NH2	**326250**	2
NH3	**326630**	2
NH1XL	**326255**	2
NH2XL	**326405**	2
NH3L	**326635**	2


326250

SEPARATORS
FOR MULTIPOLE UNITS

NH1	**325250**	2
NH1XL - NH2 / NH2XL	**325400**	2
NH3 - NH3L	**325630**	2

325400

TERMINAL COVERS

NH1	**325005**	6
NH1XL	**325002**	6
NH2 / NH2XL	**325003**	6
NH3 / NH3L	**325007**	6

325005

FUSE LINKS COVERS

NH1	**325018**	3
NH2	**325020**	3
NH3	**325025**	3

325020

MICROSWITCHES

NH000...NH3 NH1XL - NH2XL - NH3L	**357010**	1/12

FUSE PULLERS

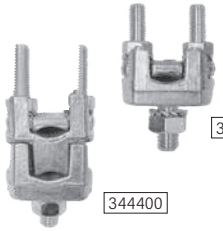
DIMENSIONS	INSTRUCTIONS
PAG 41	PAG 42

NH00...NH4	**340001**	1
NH1XL - NH2XL - NH3L	**340005**	1

340001 340005

TERMINALS

SIZE	CROSS SECTION (mm²)	CABLE	REFERENCE	PACKING Uni / BOX
1	150/16	1 CABLE	**343400**	3
2/3	240/50	1 CABLE	**343630**	3
1	150/25-16	2 CABLES	**344400**	3
2/3	240/95-50	2 CABLES	**344630**	3


343400
344400

PHOTOVOLTAIC

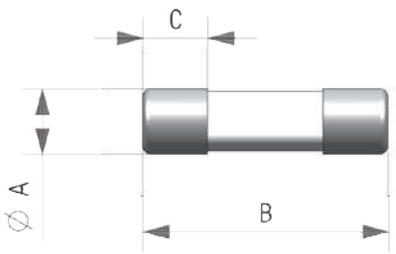
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

CYL 10x38

gPV CYLINDRICAL fuse links

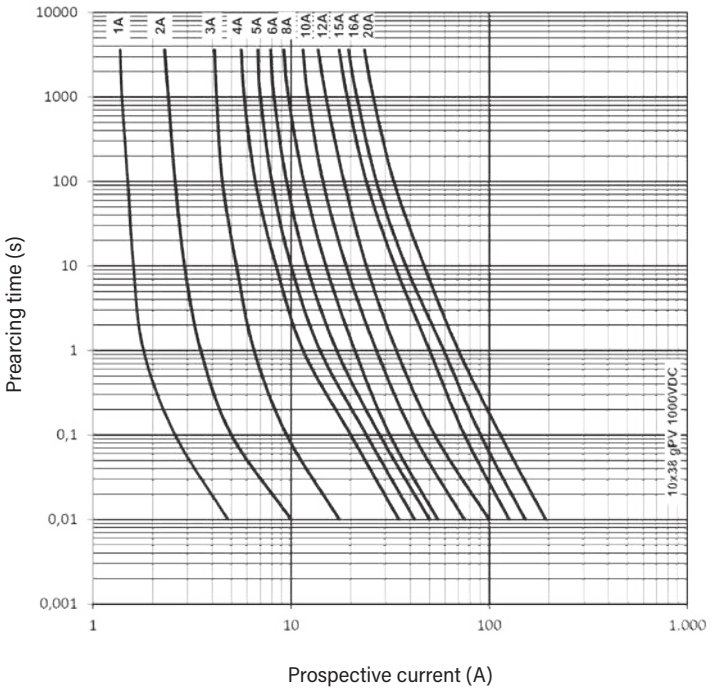
RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
1000V DC	1A...20A	30kA

DIMENSIONS



A	B	C
10,3	38	10

t-I CHARACTERISTICS



POWER DISSIPATION

RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W @ 0,7 In)	POWER DISSIPATION (W @ In)	PREARCING I^2t (A^2s)	OPERATING I^2t (A^2s)
1	**491601**	0,31	0,76	0,35	1,30
2	**491602**	0,78	1,45	0,62	1,00
3	**491604**	0,66	1,66	1,90	3,10
4	**491605**	0,64	1,57	6,90	11
5	**491606**	0,60	1,65	14	22
6	**491610**	0,77	1,84	24	38
8	**491615**	0,82	2,00	7	17
10	**491620**	0,94	2,20	15	38
12	**491625**	0,98	2,40	27	68
15	**491629**	1,05	2,65	62	115
16	**491630**	1,10	2,70	89	165
20	**491635**	1,33	3,20	158	294

PHOTOVOLTAIC

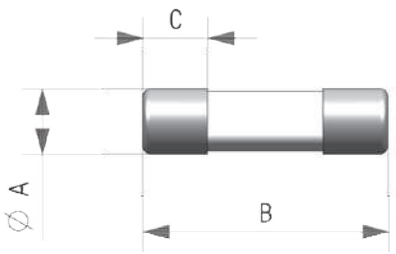
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

CYL 14x51

gPV CYLINDRICAL fuse links

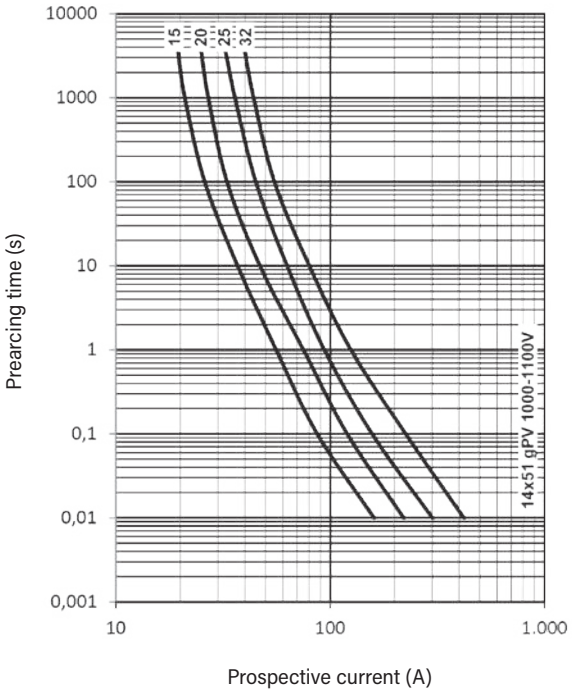
RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
1100V DC	15A	20A	10kA
1000V DC	25A	32A	30kA

DIMENSIONS



A	B	C
14,3	51	13

t-I CHARACTERISTICS



POWER DISSIPATION

	RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W @ 0,7 In)	POWER DISSIPATION (W @ In)	PREARCING I^2t (A^2s)	OPERATING I^2t (A^2s)
U 1100V DC	15	**491647**	1,34	3,14	48	112
	20	**491648**	1,55	3,68	99	367
U 1000V DC	25	**491650**	1,60	3,80	275	650
	32	**491655**	2,00	4,70	550	1300

PHOTOVOLTAIC

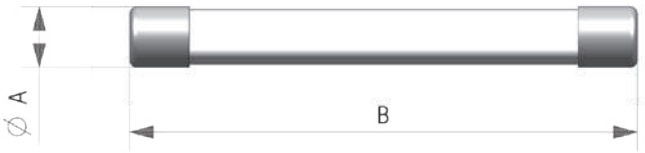
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

CYL 10x85

gPV CYLINDRICAL fuse links

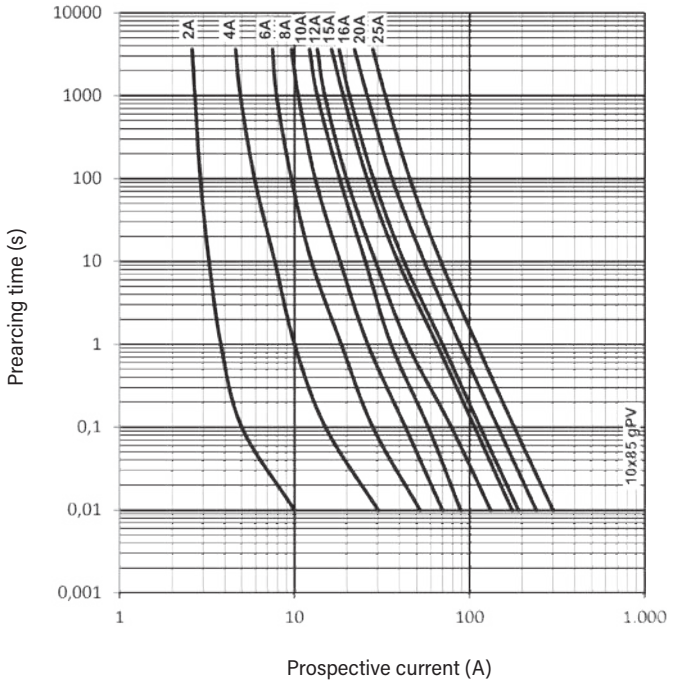
RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
1500V DC	2A...16A	30kA
1200V DC	20A I 25A	10kA

DIMENSIONS



A	B
10,3	85

t-I CHARACTERISTICS



POWER DISSIPATION

	RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W @ 0,7 In)	POWER DISSIPATION (W @ In)	PREARCING I^2t (A^2s)	OPERATING I^2t (A^2s)
U 1500V DC	2	**492202**	1,28	3,2	0,8	1,1
	4	**492205**	1,16	2,9	13	17
	6	**492210**	1,04	2,6	65	84
	8	**492215**	1,13	2,8	175	225
	10	**492220**	1,36	3,4	44	72
	12	**492225**	1,56	3,9	78	129
	15	**492229**	1,79	4,5	121	201
	16	**492230**	1,92	4,8	175	290
U 1200V DC	20	**492235**	2,04	5,1	242	478
	25	**492240**	2,20	5,5	545	1075

PHOTOVOLTAIC

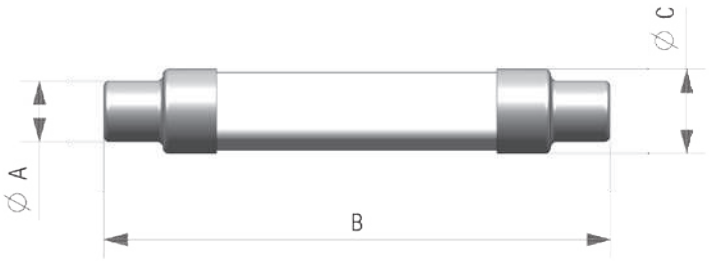
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

CYL 10/14x85

gPV CYLINDRICAL fuse links

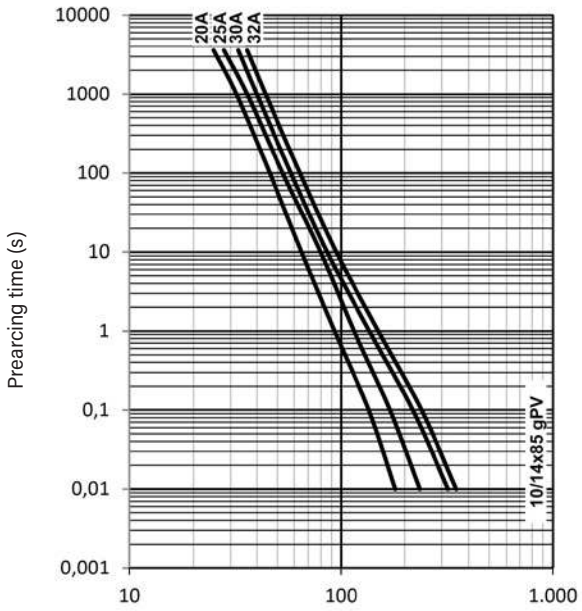
RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
1500V DC	20A...32A	10kA

DIMENSIONS



A	B	C
10,3	85	14,3

t-I CHARACTERISTICS



POWER DISSIPATION

RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W @ 0,7 In)	POWER DISSIPATION (W @ In)	PREARCING I^2t (A^2s)	OPERATING I^2t (A^2s)
20	**492250**	2,17	5,44	67	221
25	**492255**	2,46	6,22	136	452
30	**492260**	2,66	6,70	220	730
32	**492262**	3,00	8,00	267	885

PHOTOVOLTAIC

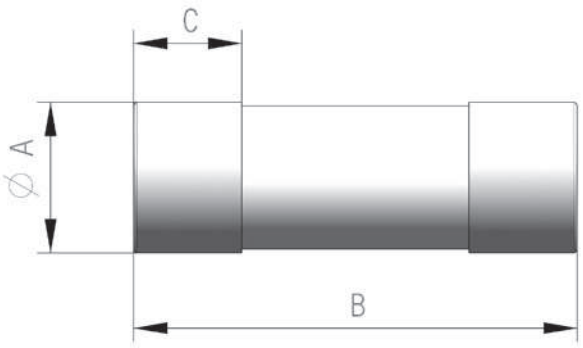
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

CYL 22x65

gPV CYLINDRICAL fuse links

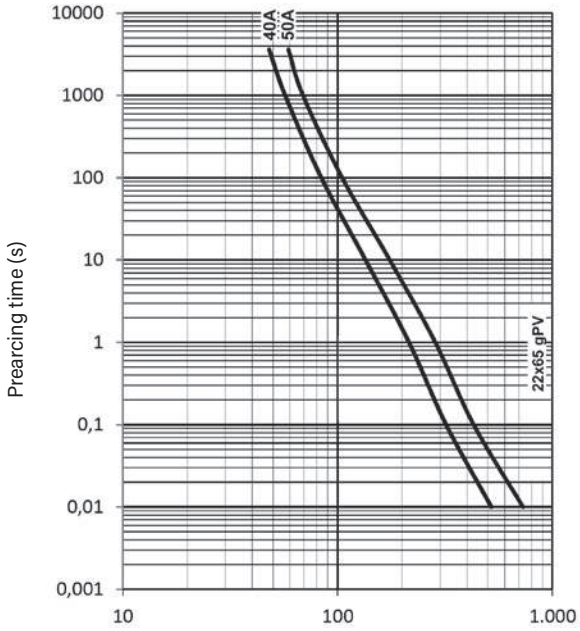
RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
1500V DC	40A	50A	30kA

DIMENSIONS



A	B	C
22,3	65	15,5

t-I CHARACTERISTICS



POWER DISSIPATION

RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W @ 0,7 In)	POWER DISSIPATION (W @ In)	PREARCING I^2t (A^2s)	OPERATING I^2t (A^2s)
40	**492270**	3,80	9,5	590	1.355
50	**492275**	4,00	10,0	1.330	3.050

PHOTOVOLTAIC

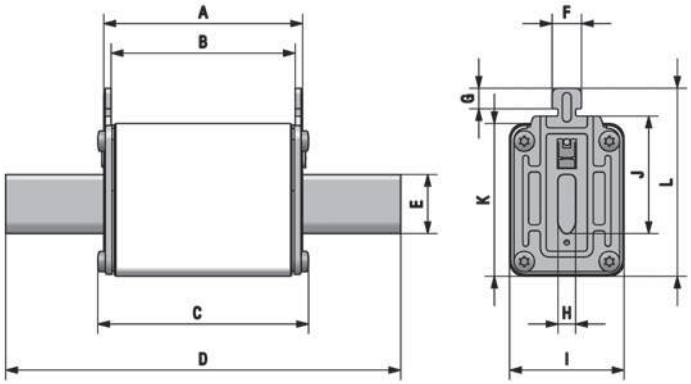
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

NH NH1 NH2 NH3

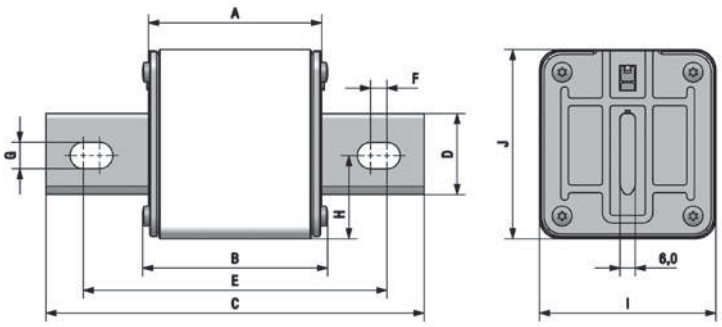
gPV
NH 1000V DC
fuse links

RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
1000V DC	25A...400A	30kA

DIMENSIONS

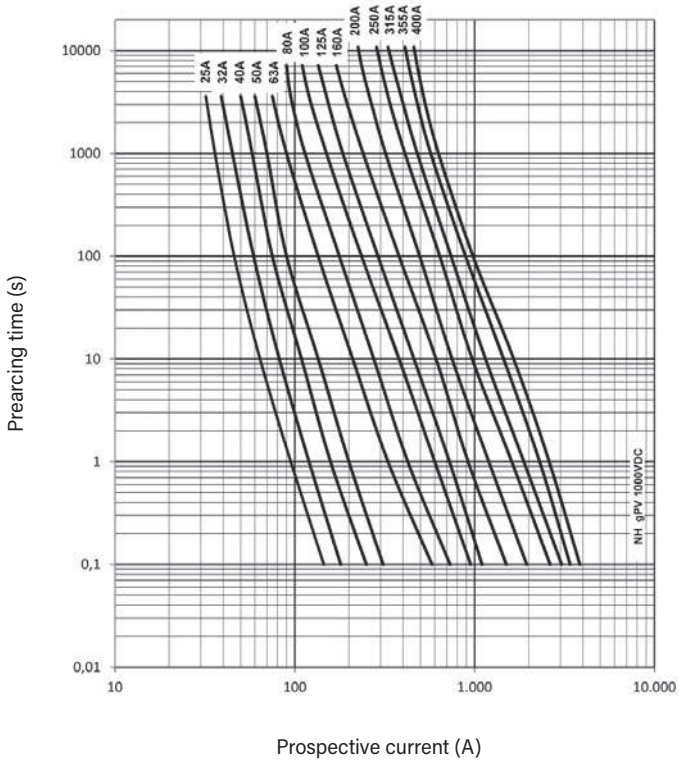


	A	B	C	D	E	F	G	H	I	J	K	L
NH1	68	62	71,5	135	20	10	9,5	6	39	40	52	64
NH2	68	62	71,5	150	25	10	9,5	6	53	48	60	72
NH3	68	62	73	150	32	10	9,5	6	70	60	75	87



	A	B	C	D	E	F	G	H	I	J
NH1	68	71,5	135	20	113	9	8,5	25,6	39	52,5
NH2	68	71,5	150	25	118	9	10,5	27	53	60,5
NH3	68	73	150	32	120	6,5	10,5	33	70	75

t-I CHARACTERISTICS



POWER DISSIPATION

	RATED CURRENT (A)	REFERENCE		POWER DISSIPATION (W @ 0,7 In)	POWER DISSIPATION (W @ In)	PREARCING I^2t (A^2s)	OPERATING I^2t (A^2s)
NH1 NH1 B	25	**373210**	**373210 B**	5,2	12,5	62	94
	32	**373215**	**373215 B**	6,3	15,5	122	184
	40	**373225**	**373225 B**	6,7	16,6	302	454
	50	**373230**	**373230 B**	7,5	18	562	844
	63	**373235**	**373235 B**	8,2	20	1.210	1.815
	80	**373240**	**373240 B**	10	27	2.250	3.375
	100	**373245**	**373245 B**	11	28	4.000	6.000
	125	**373250**	**373250 B**	12,5	32	6.500	9.700
	160	**373255**	**373255 B**	13,5	34,0	9.200	16.600
	200	**373260**	**373260 B**	12,5	30,0	19.900	38.300
NH2 NH2 B	200	**373350**	**373350 B**	11,4	28,0	18.700	36.400
	250	**373360**	**373360 B**	13,0	33,3	36.800	71.500
NH3 NH3 B	200	**373425**	**373425 B**	19,5	48,0	21.700	31.700
	250	**373435**	**373435 B**	20,5	51,5	41.000	60.000
	315	**373445**	**373445 B**	26,2	66,0	76.000	111.500
	355	**373450**	**373450 B**	18,0	46,5	74.700	130.700
	400	**373455**	**373455 B**	20,0	51,0	104.400	182.600

PHOTOVOLTAIC

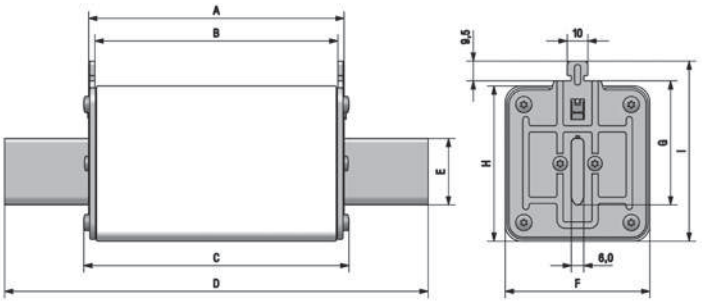
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

NH NH1 XL NH2 XL NH3 L

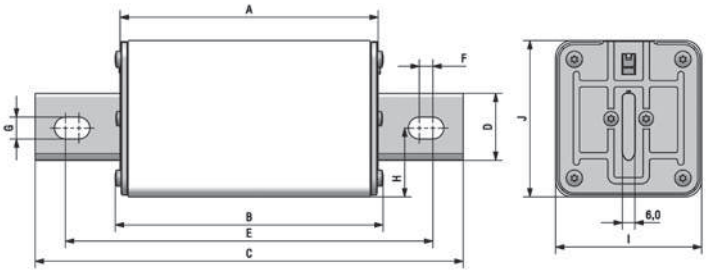
gPV
NH XL 1500V DC
fuse links

RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
1500V DC	40A...400A	30kA

DIMENSIONS



	A	B	C	D	E	F	G	H	I
NH1XL	126	120	129	191	20	39	40	52,5	64,5
NH2XL	122,6	117,6	126,7	205	25	53	48	60,5	72
NH3L	123,6	117,6	128,3	205	32	70	60	75	87

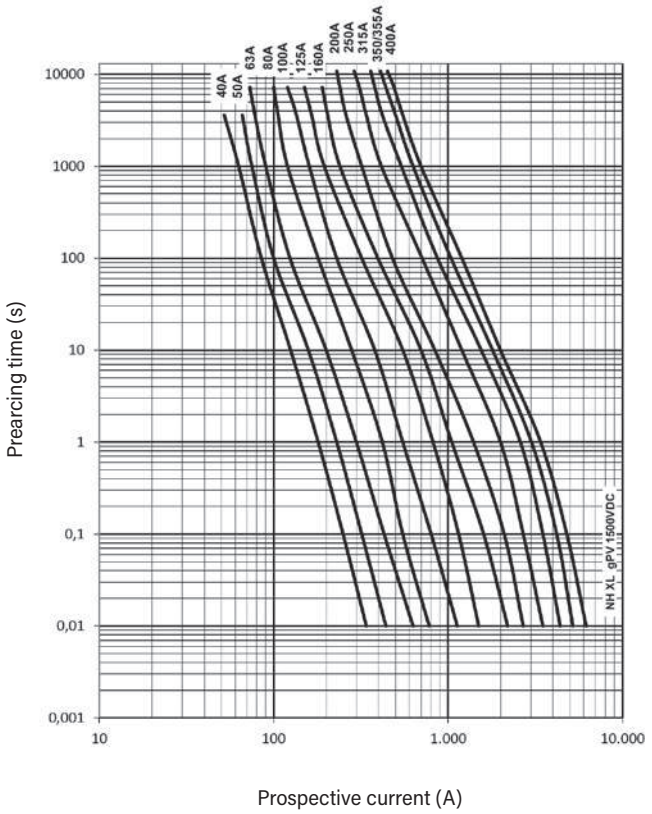


	A	B	C	D	E	F	G	H	I	J
NH1XL B	126	129	191	20	170,5	9	8,5	25,6	39	52,5
NH2XL B	122,6	126,7	205	25	173	9	10,5	27	53	60,5
NH3L B	123,6	128,3	205	32	176	6,5	10,5	33	70	75

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

t-I CHARACTERISTICS



POWER DISSIPATION

	RATED CURRENT (A)	REFERENCE		POWER DISSIPATION (W @ 0,7 In)	POWER DISSIPATION (W @ In)	PREARCING I^2t (A^2s)	OPERATING I^2t (A^2s)
NH1 XL / NH1 XL B	40	**372225**	**372225 B**	6,3	15	260	490
	50	**372230**	**372230 B**	7,2	18	560	1.170
	63	**372235**	**372235 B**	7,6	19	1.160	2.460
	80	**372240**	**372240 B**	10	25	1.760	3.720
	100	**372245**	**372245 B**	10,4	26	3.970	8.380
	125	**372250**	**372250 B**	12	30	7.070	14.900
	160	**372255**	**372255 B**	15	38	13.360	28.180
	200	**372260**	**372260 B**	19	47	24.850	52.400
NH2 XL / NH2 XL B	200	**372350**	**372350 B**	18	45	24.850	52.360
	250	**372360**	**372260 B**	21	52	42.000	88.500
NH3 L / NH3 L B	315	**372445**	**372445 B**	25	61	114.000	172.080
	350	**372448**	**372448 B**	26	66	159.230	240.350
	355	**372450**	**372450 B**	27	68	159.230	240.350
	400	**372455**	**372455 B**	30	75	212.000	320.000

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

NH NHC1 NH1 NH3

gG / gL
NH 800V AC
fuse links

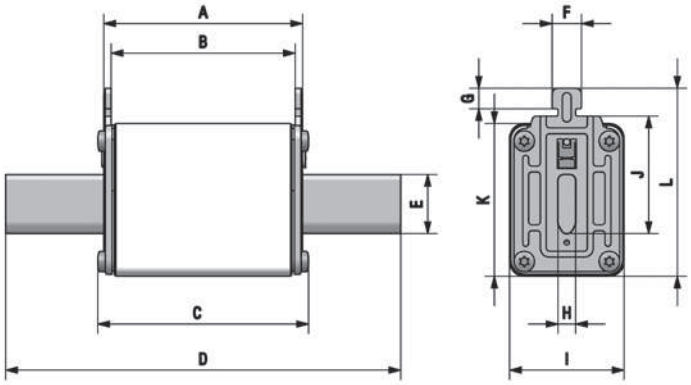
RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
800V AC	25A...400A	80kA

NH00

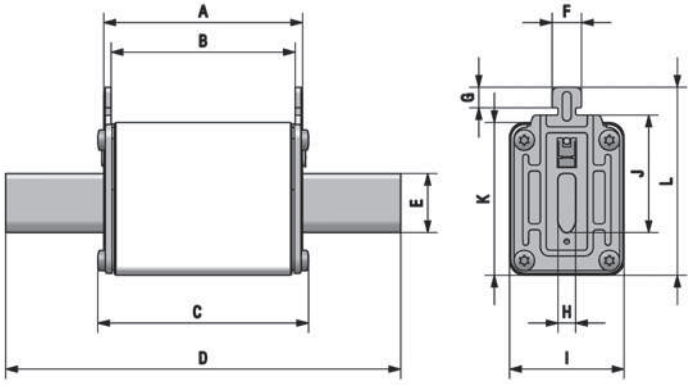
gS
NH 800V AC
fuse links

RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
800V AC	25A...100A	80kA

DIMENSIONS



	A	B	C	D	E	F	G	H	I	J	K	L
NHC1	68	62	70,5	135	15	10	9,5	6	29	40	47	64
NH1	68	62	71,5	135	20	10	9,5	6	39	40	52	64
NH3	68	62	73	150	32	10	9,5	6	70	60	75	87

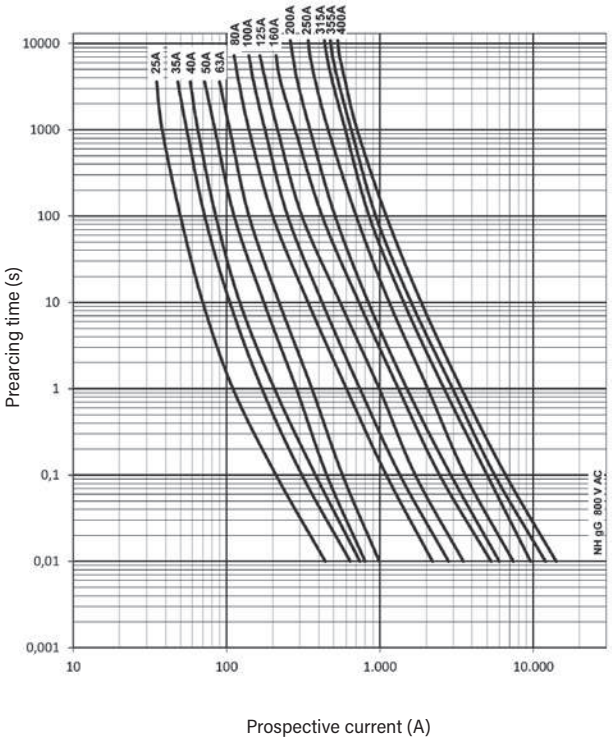


	A	B	C	D	E	F	G	H	I	J	K	L
NH00	49	44	52	78,5	15	10	9,5	6	29	35	47	59

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

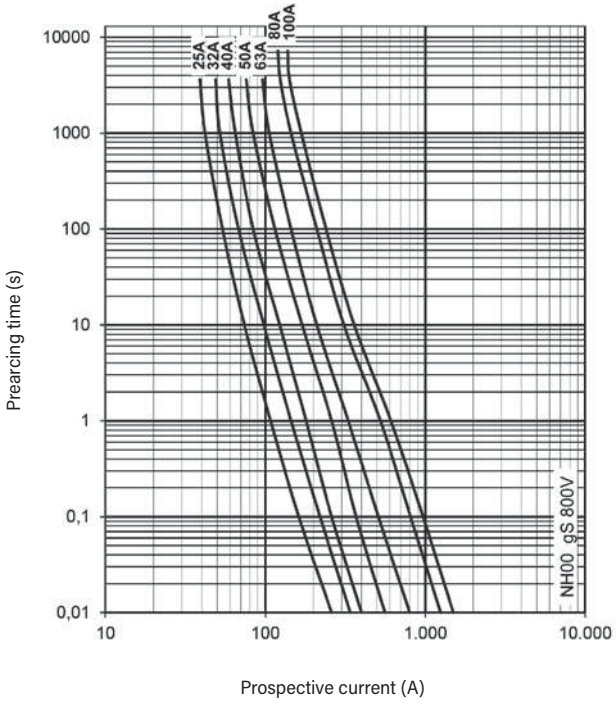
t-I CHARACTERISTICS



Prospective current (A)

POWER DISSIPATION

	RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W)	PREARCING I^2t (A^2s)	OPERATING I^2t (A^2s 800V ~)
NHC1	25	**385210**	4,1	1.150	2.770
	35	**385220**	4,8	2.780	6.700
	40	**385225**	5,0	4.600	11.080
	50	**385230**	5,3	4.680	11.300
	63	**385235**	6,1	9.400	22.670
NH1	80	**385240**	10,0	16.550	33.855
	100	**385245**	12,0	32.430	66.355
	125	**385250**	14,0	59.730	122.215
	160	**385255**	18,0	95.300	195.000
NH3	200	**385425**	21,0	140.150	245.000
	250	**385435**	25,0	241.500	422.000
	315	**385445**	34,5	395.000	698.000
	355	**385450**	37,0	539.000	1.230.000
	400	**385455**	43,0	760.000	1.734.000



Prospective current (A)

	RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W) 0,8 In	POWER DISSIPATION (W) In	PREARCING I^2t (A^2s)	OPERATING I^2t (A^2s 800V ~)
NH00	25	**369030**	2,4	4,1	100	385
	32	**369035**	2,6	4,6	260	990
	40	**369045**	3,3	5,6	400	1.540
	50	**369050**	3,7	6,1	790	3.025
	63	**369055**	4,2	6,8	1.620	6.170
	80	**369060**	4,8	8,3	3.170	12.100
	100	**369065**	6,8	10,9	5.200	19.900

PHOTOVOLTAIC

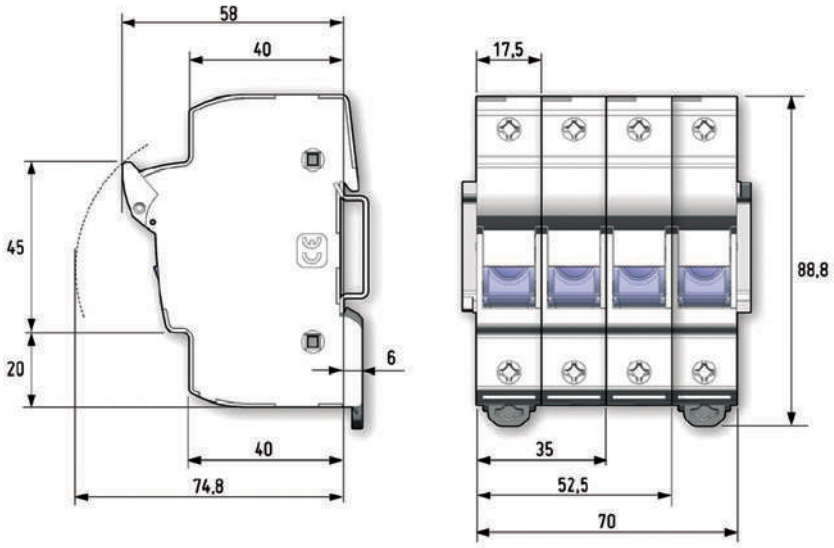
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

PMX 10x38

PMX
CYLINDRICAL
fuse holders

RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
1000V DC 690V AC	32A	IP20

DIMENSIONS



ACCESSORIES

REFERENCE	DESCRIPTION	PACKING Uni /BOX
480005	PINS FOR MULTIPOLE ASSEMBLY	12
485050	HANDLE TIES FOR MULTIPOLE ASSEMBLY	12
485051	LOCK SUPPORT	5
485052	SPECIAL IP20 PROTECTION ACCESSORY	24
485053	PHASE SEPARATOR ACCESSORY	12
485656	SCREWS PROTECTION ACCESSORY	20

PHOTOVOLTAIC

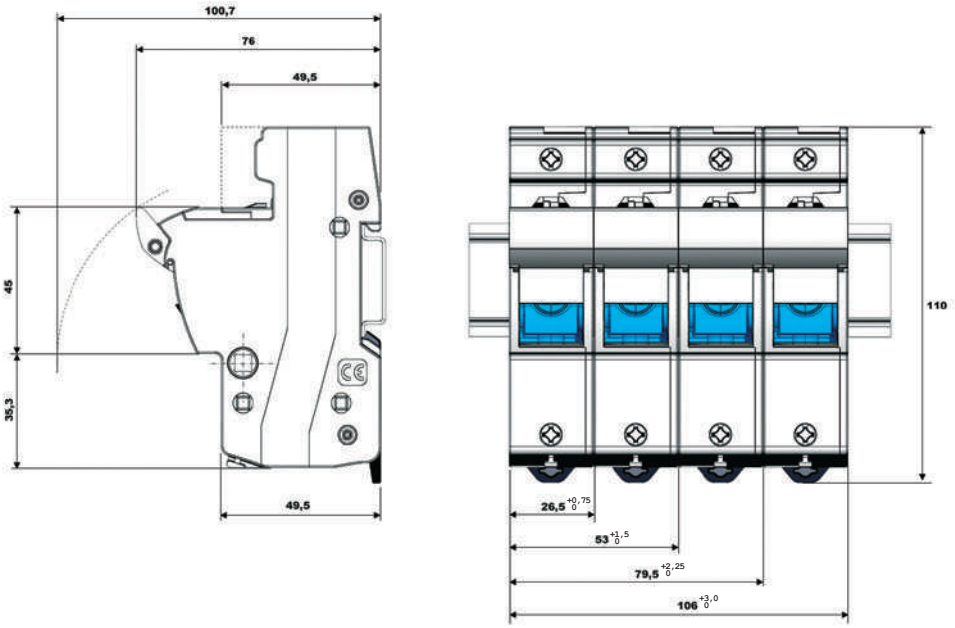
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

PMX 14x51

PMX
CYLINDRICAL
fuse holders

RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
1000V DC 690V AC	50A	IP20

DIMENSIONS



ACCESSORIES

REFERENCE	DESCRIPTION	PACKING Uni /BOX
480005	PINS FOR MULTIPOLE ASSEMBLY	12
485356	HANDLE TIES FOR MULTIPOLE ASSEMBLY	12
485258	LOCK SUPPORT	5
485266	SPECIAL IP20 PROTECTION ACCESSORY	12
485656	SCREWS PROTECTION ACCESSORY	12
485271	SPECIAL ACCESSORY SCREW CONNECTION	12

PHOTOVOLTAIC

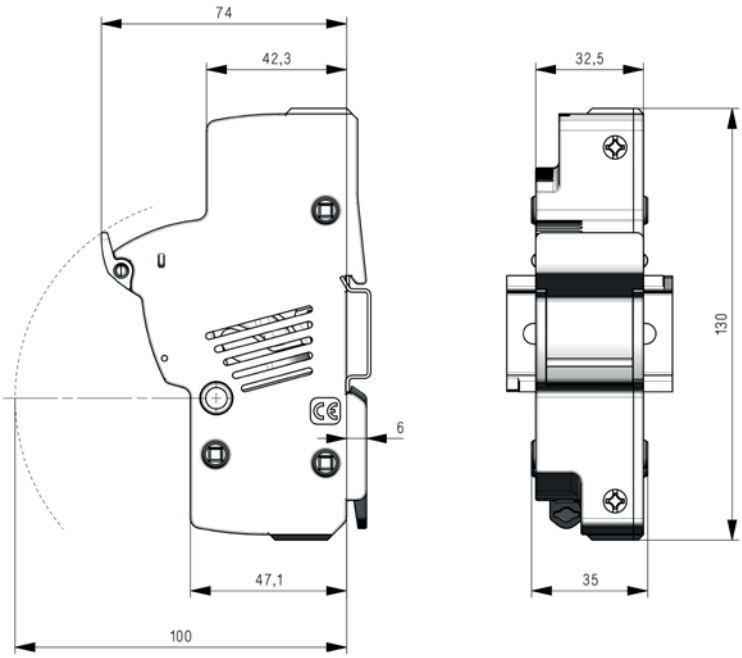
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

PMX 22x65

PMX CYLINDRICAL fuse holders

RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
1500V DC 1000V AC	100A	IP20

DIMENSIONS



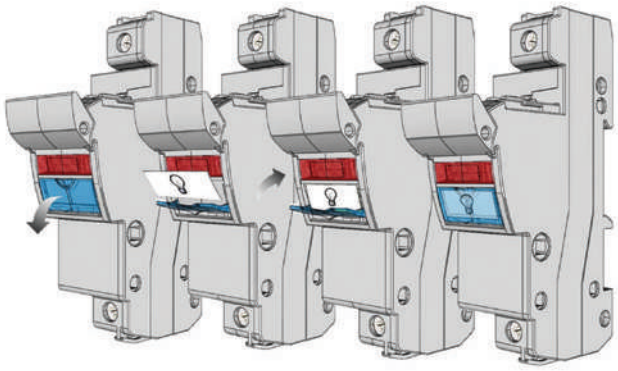
ACCESSORIES

REFERENCE	DESCRIPTION	PACKING Uni /BOX
480005	PINS FOR MULTIPOLE ASSEMBLY	12
485356	HANDLE TIES FOR MULTIPOLE ASSEMBLY	12
485266	SPECIAL IP20 PROTECTION ACCESSORY	12
485371	SPECIAL ACCESSORY SCREW CONNECTION	12

PMX 10x38 14x51 **PMX** CYLINDRICAL fuse holders

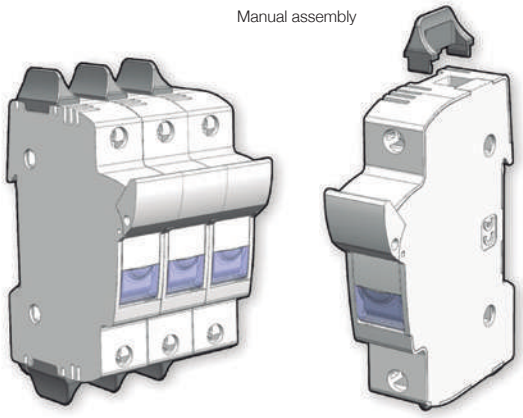
ACCESSORIES

IDENTIFICATION BY LABEL



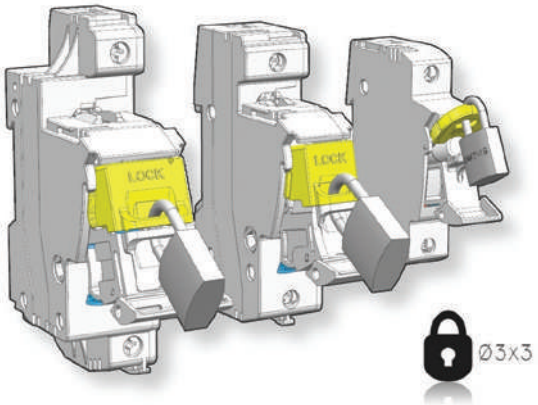
Open the label-holder part when the fuse holder is totally closed or totally open, put on the label and close.

PHASE SEPARATOR

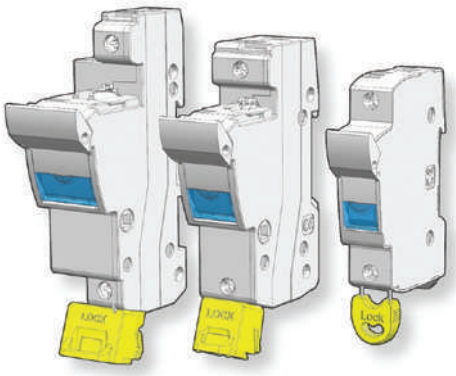


The accessory increases the distance between phases in multipolar asemblies.

LOCKING MEANS A PADLOCK



To avoid the operation and connection when the fuse holder is open, put on the accessory “Padlock support” sliding it for the guides, and covering the fuse link zone.

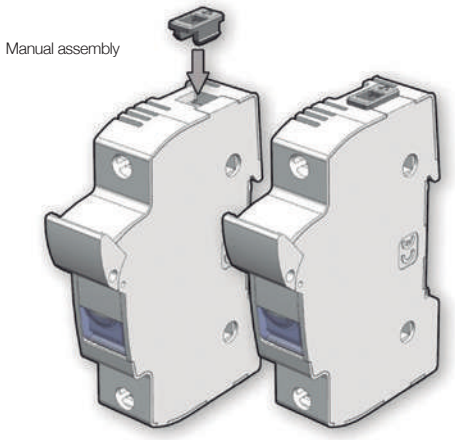


Introduce the padlock trough the symmetrical holes and close it.
(Is possible the use with or without fuse link)

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

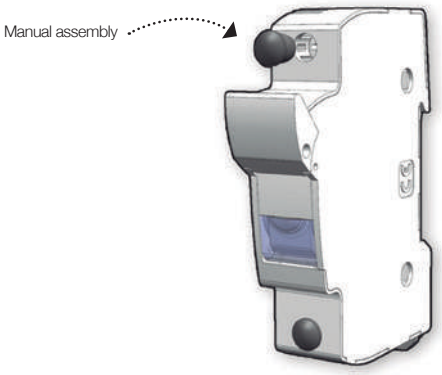
SPECIAL IP20 PROTECTION



The accessory mut be positioned in the wire entries, if it's neccesary to achieve the IP20 degree of protection with thin wires.

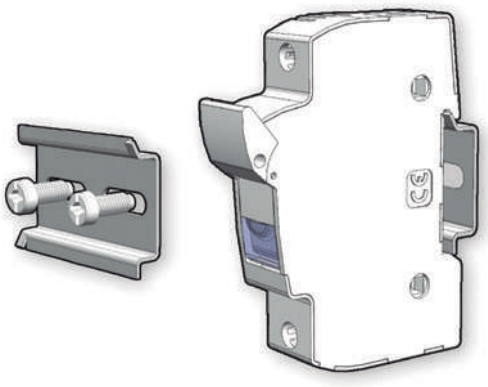
	SECTION FLEXIBLE WIRE (mm²)	SECTION SOLID WIRE (mm²)	LENGTH (mm)
8x32	≤6	≤10	10
10x38	≤6	≤10	10
14x51	≤10	≤16	14
22x58	≤16	≤25	18

SCREW PROTECTION



Protection accesory to avoid the screws manipulation and improve the protection degree.

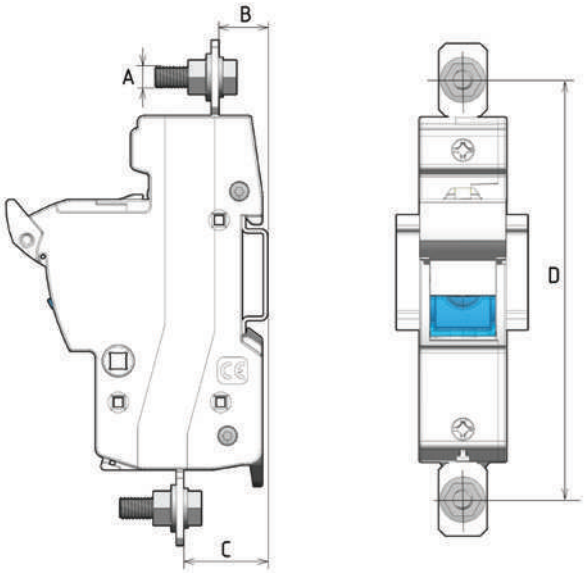
SCREW FIXATION



First mount the accessory with screws, then mount the fuseholder.
(there are available differents accessories depending the number of the fuseholder)

REFERENCE	SIZE (mm)
485650	25
485651	50
485652	75
485653	100
485654	125
485655	175

ACCESSORY SCREW CONNECTION



14x51

REFERENCE	A (mm)	B (mm)	C (mm)	D (mm)
485271	M6	14,5	25	128,5

PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

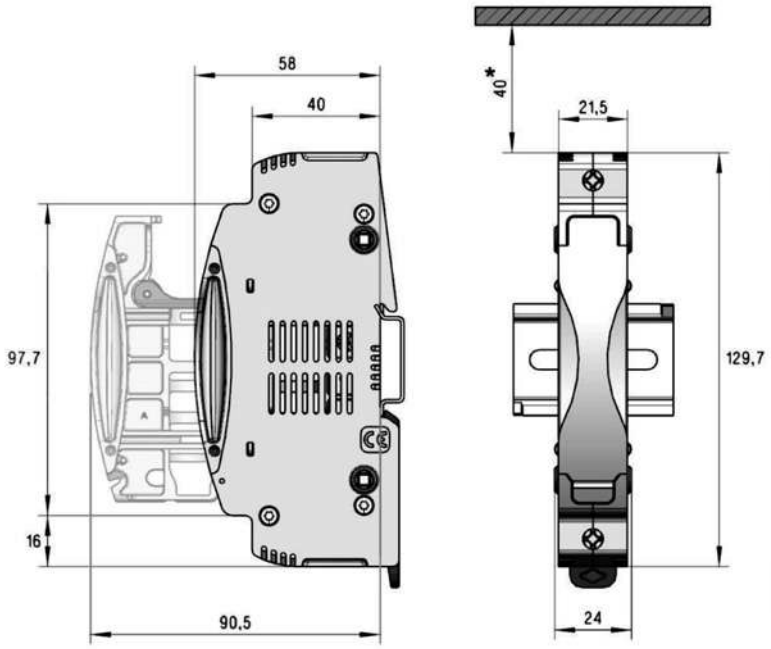
PML 10x85 10/14x85

PML CYLINDRICAL fuse holders

RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
1000V DC 1500V DC	32A	IP20

PATENTED DESIGN

DIMENSIONS



* Recommended minimum mounting free space

10x85 position

10/14x85 position

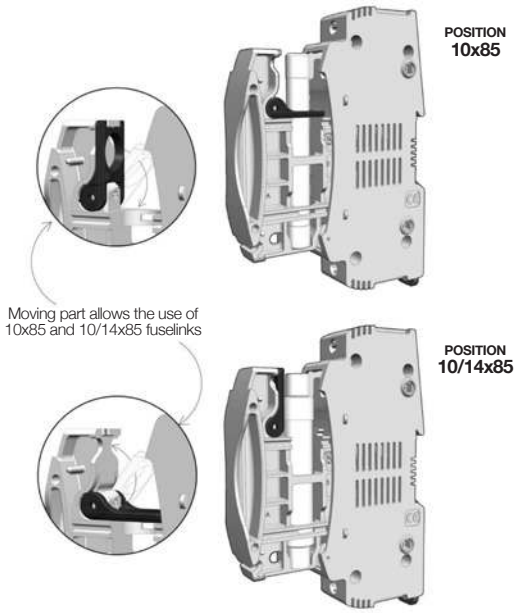
ACCESSORIES

REFERENCE	DESCRIPTION	PACKING Uni./BOX
480005	PINS FOR MULTIPOLE ASSEMBLY	12
485050	HANDLE TIES FOR MULTIPOLE ASSEMBLY	12
485051	LOCK ACCESORY	5
485052	SPECIAL IP20 PROTECTION ACCESSORY	24
485053	PHASE SEPARATOR ACCESORY	12
485656	SCREWS PROTECTION ACCESSORY	20

PHOTOVOLTAIC

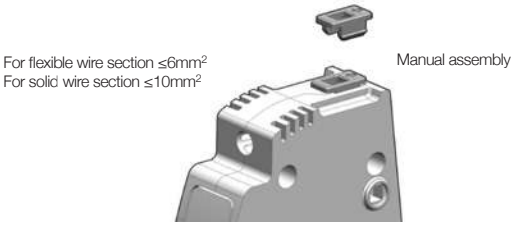
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

FUSE-LINK SIZE SELECTOR

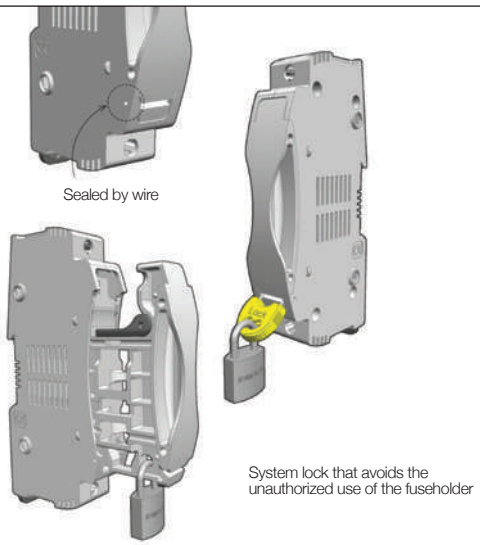


FREE SPACE FOR LABELING

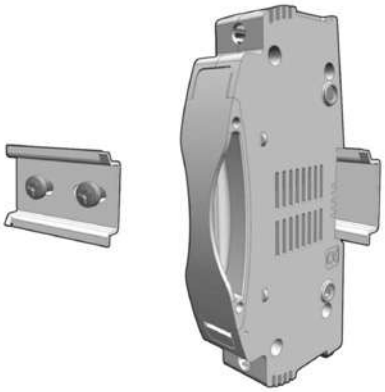
SPECIAL IP20 PROTECTION



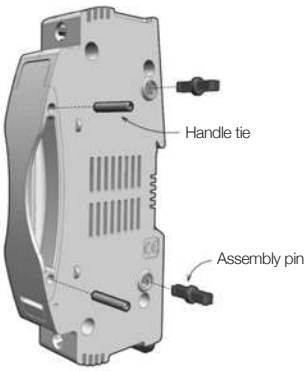
LOCK SYSTEM



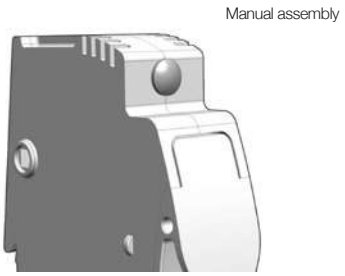
SCREW FIXATION ACCESSORY



MULTIPOLAR ASSEMBLY



SCREW PROTECTION ACCESSORY



PHOTOVOLTAIC

FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

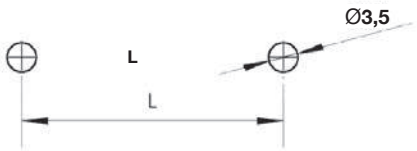
Ø10 CLIP CONTACT | 10x38 | 10x85

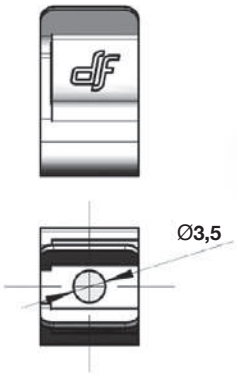
CLIP CONTACT
CYLINDRICAL
Ø10 fuse links

	RATED VOLTAGE	RATED CURRENT	RATED POWER DISSIPATION
UP TO	1000V DC 1500V DC	25A	4W

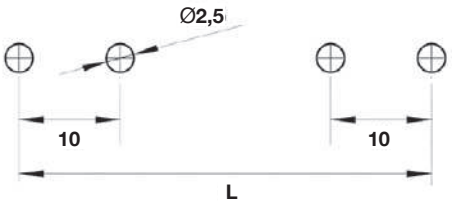
DIMENSIONS

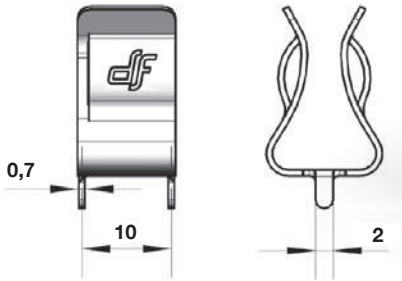
	L (mm)
10x38	32
10x85	79,6





	L (mm)
10x38	42
10x85	89,6





PHOTOVOLTAIC

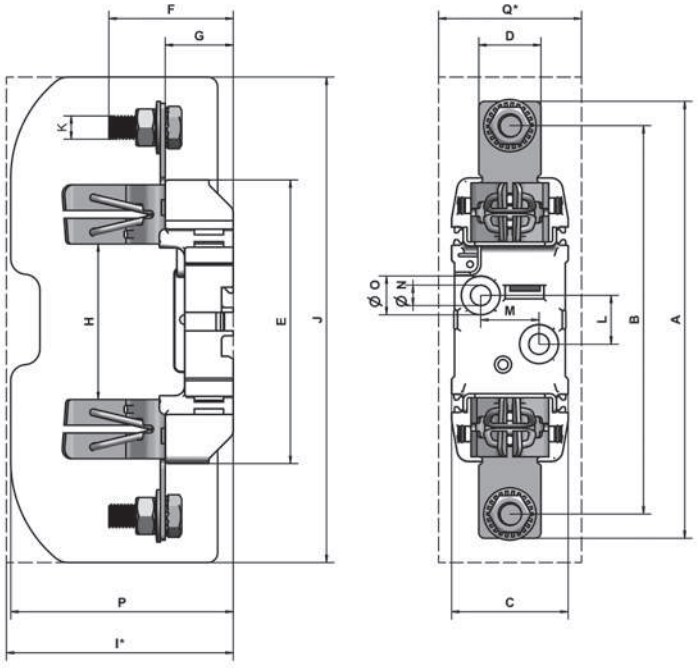
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

ST NH1 NH2 NH3

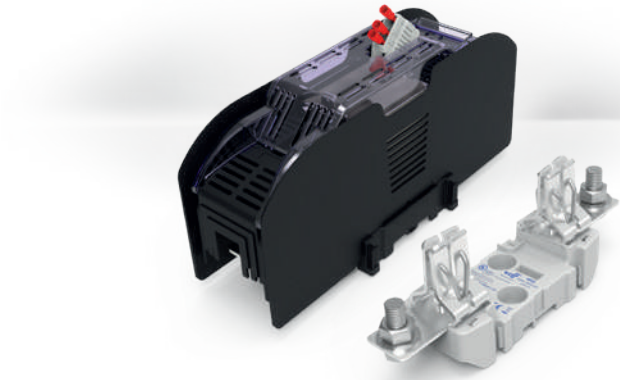
ST
NH 1000V DC
fuse bases

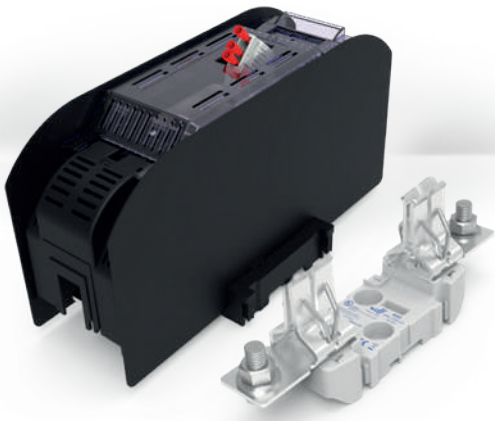
RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
1000V DC	250A NH1	IP00 | IP20
	400A NH2	
	500A NH3	

DIMENSIONS



* with IP20 protection





	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
NH1	200	175	48	28	146	77,5	35	80	107	230	M10	25	30	10,5	20	107	54
NH2	225	200	60	32	146	88	35	80	123	250	M12	25	30	10,5	20	114,5	83
NH3	240	210	60	38	146	97	35	80	143	270	M12	25	30	10,5	20	143	116

PHOTOVOLTAIC

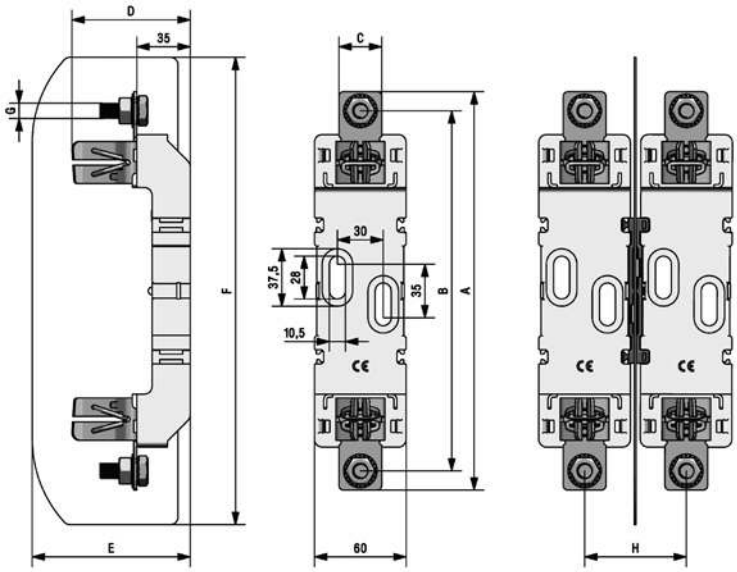
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

ST NH1 XL NH2 XL NH3 L

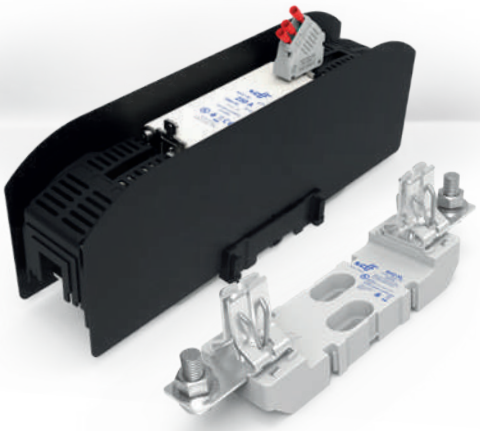
ST
NH XL1500V DC
fuse bases

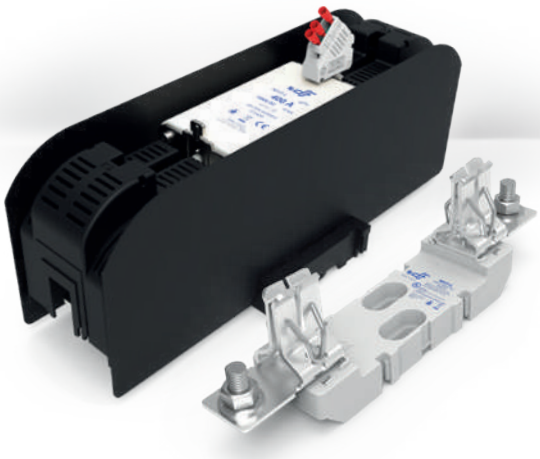
RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
1500V DC	200A (NH1 XL)	IP00 | IP20
	315A (NH2 XL)	
	500A (NH3 L)	

DIMENSIONS



	A	B	C	D	E	F	G	H
NH1XL	260	235	28	77,5	103,5	305	M10	66
NH2XL	285	260	32	88	113,8	305	M12	66
NH3L	300	270	38	97	127,5	326	M12	82





PHOTOVOLTAIC

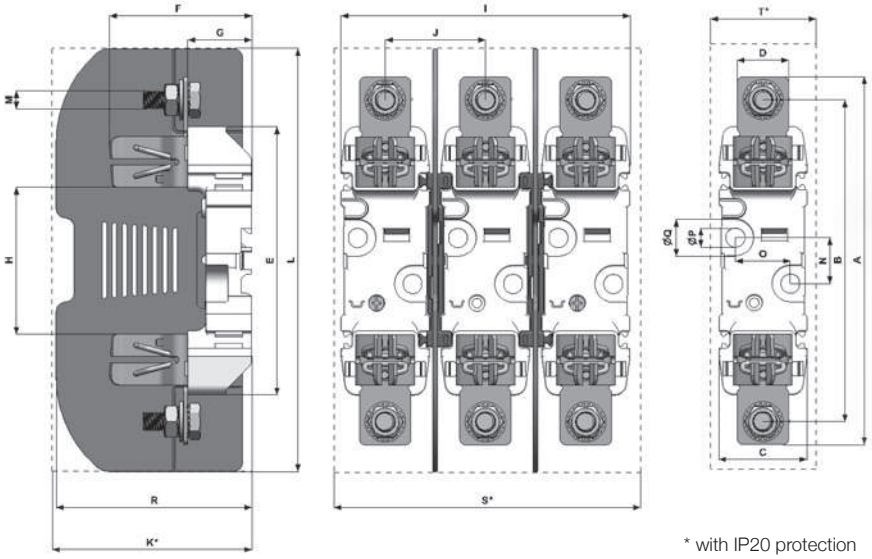
FUSE-LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

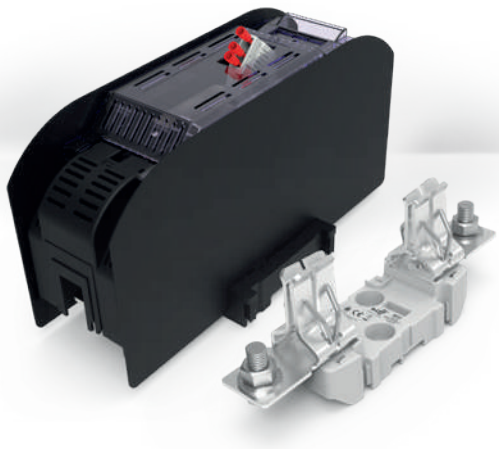
ST NH1 NH3

ST
NH 690V/800V AC
fuse bases

RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
690V/800V AC	250A (NH1) 630A (NH3)	IP00 | IP20

DIMENSIONS





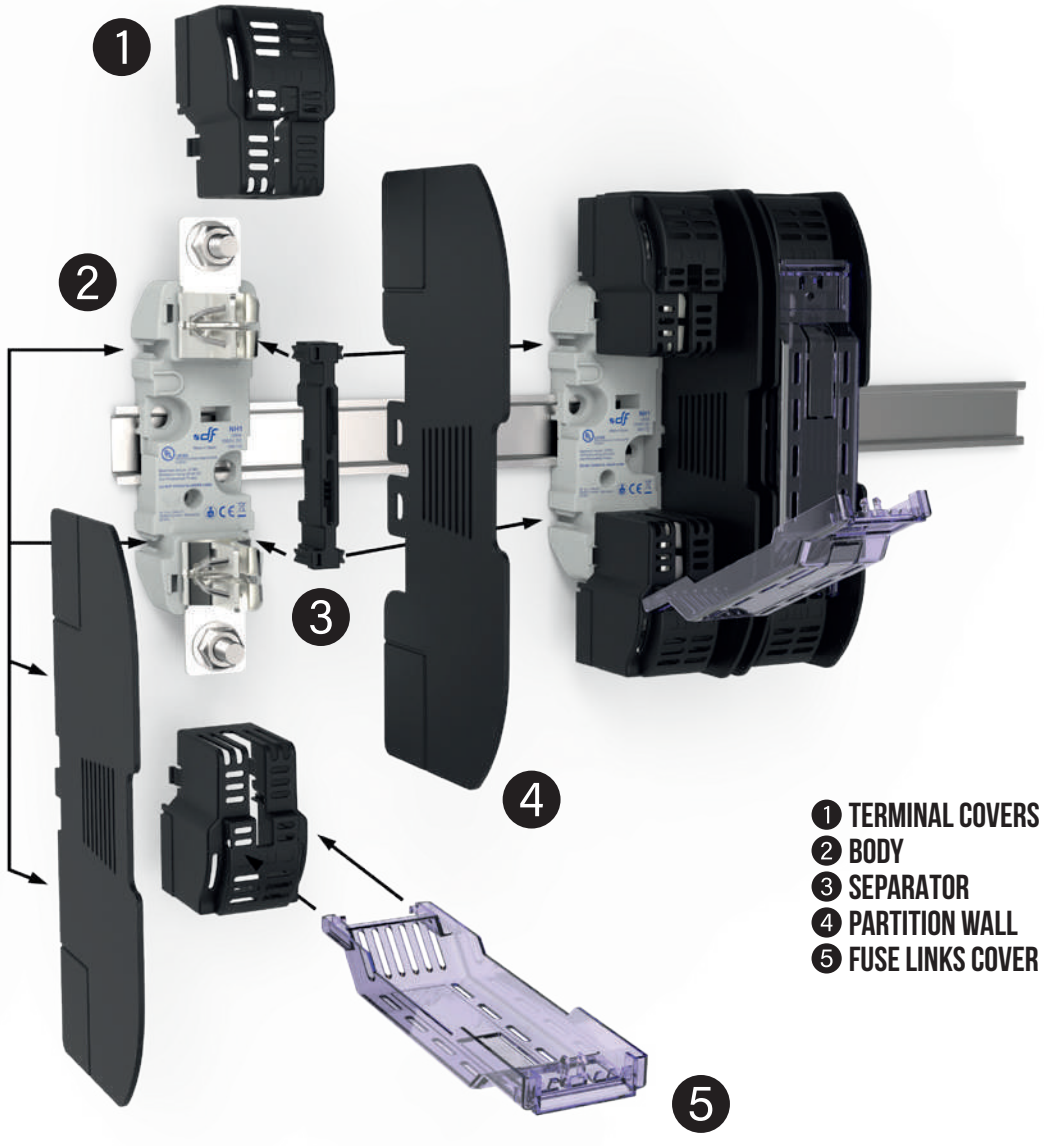
* with IP20 protection

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
NH1	200	175	48	28	146	77,5	35	80	169,5	60,8	107	230	M10	25	30	10,5	20	107	175	54
NH3	240	210	60	38	146	97	35	80	224	82	143	270	M12	25	30	10,5	20	143	281	116

ST NH1 NH2 NH3

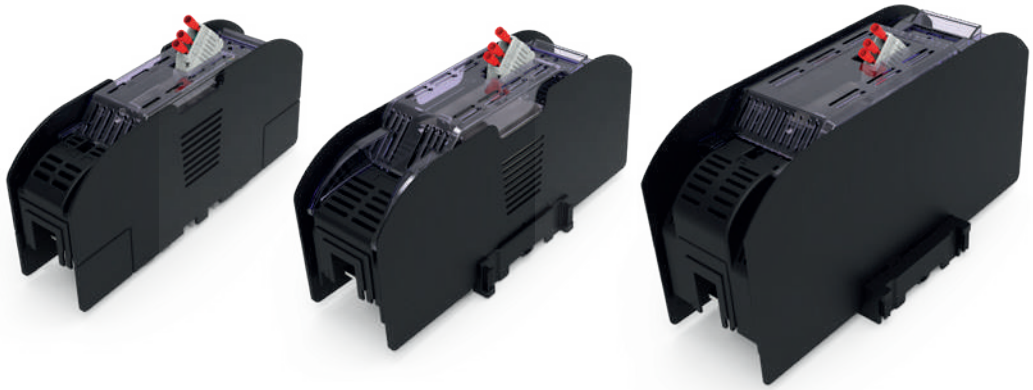
ST
NH 1000V DC
fuse bases

ACCESSORIES ASSEMBLY



1. TERMINAL COVERS
2. BODY
3. SEPARATOR
4. PARTITION WALL
5. FUSE LINKS COVER

The fuseholder allows using simultaneously a microswitch for NH fuse links and IP20 protection accessories.

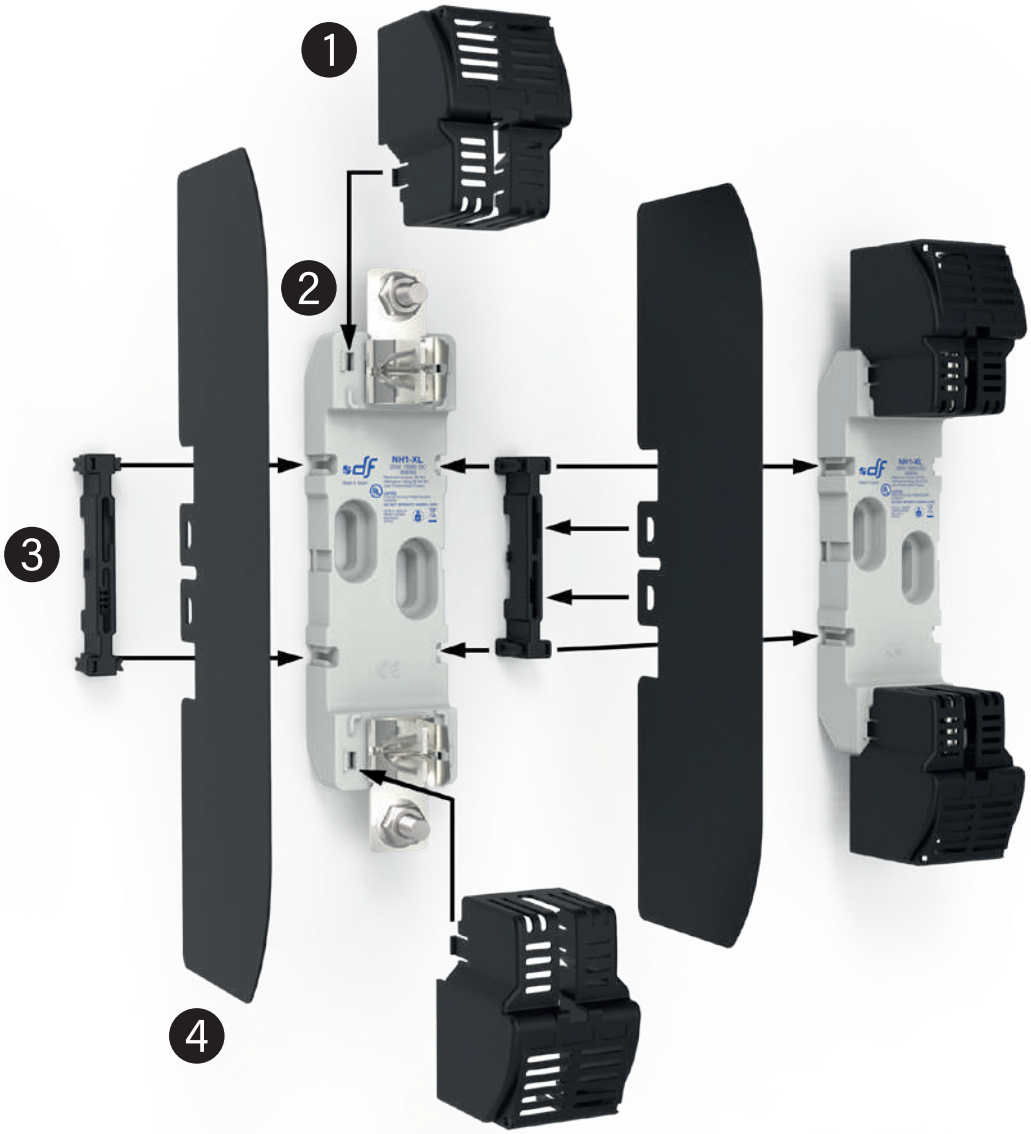


ACCESSORIES
PAG 17

ST NH1 XL NH2 XL NH3 L

ST
NH XL1500V DC
fuse bases

ACCESSORIES ASSEMBLY



1. TERMINAL COVERS
2. BODY
3. SEPARATOR
4. PARTITION WALL

The fuseholder allows using simultaneously a microswitch for NH fuse links and IP20 protection accessories.

ACCESSORIES
PAG 17

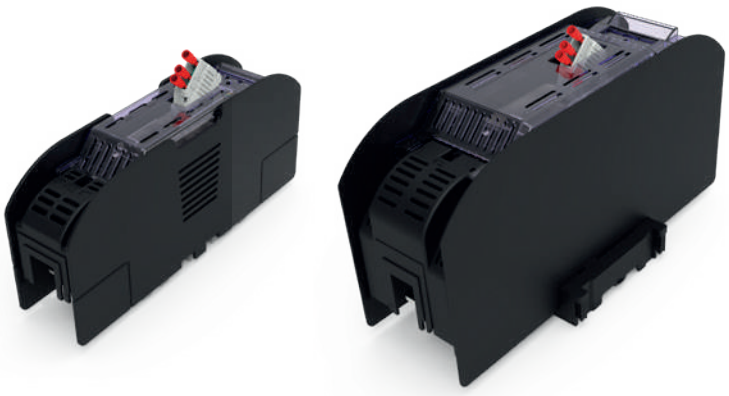
ST NH1 NH3

ST
NH 690V/800V AC
fuse bases

ACCESSORIES ASSEMBLY

1. TERMINAL COVERS
2. BODY
3. SEPARATOR
4. PARTITION WALL
5. FUSE LINKS COVER

The fuseholder allows using simultaneously a microswitch for NH fuse links and IP20 protection accessories.



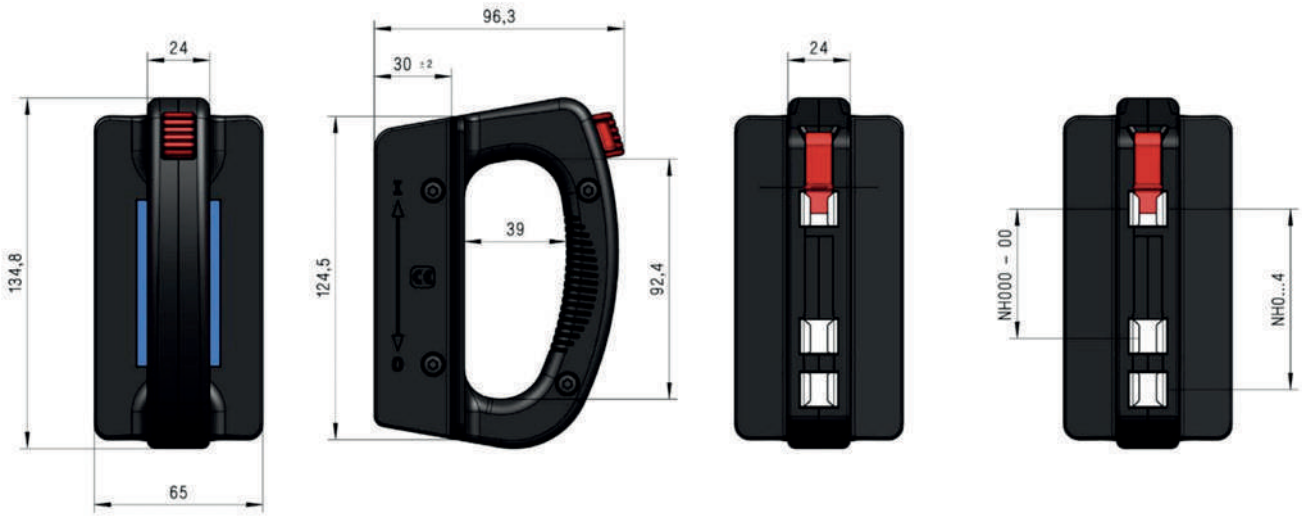
ACCESSORIES
PAG 17

NH NH1 NH2 NH3 NH1 XL NH2 XL NH3 L

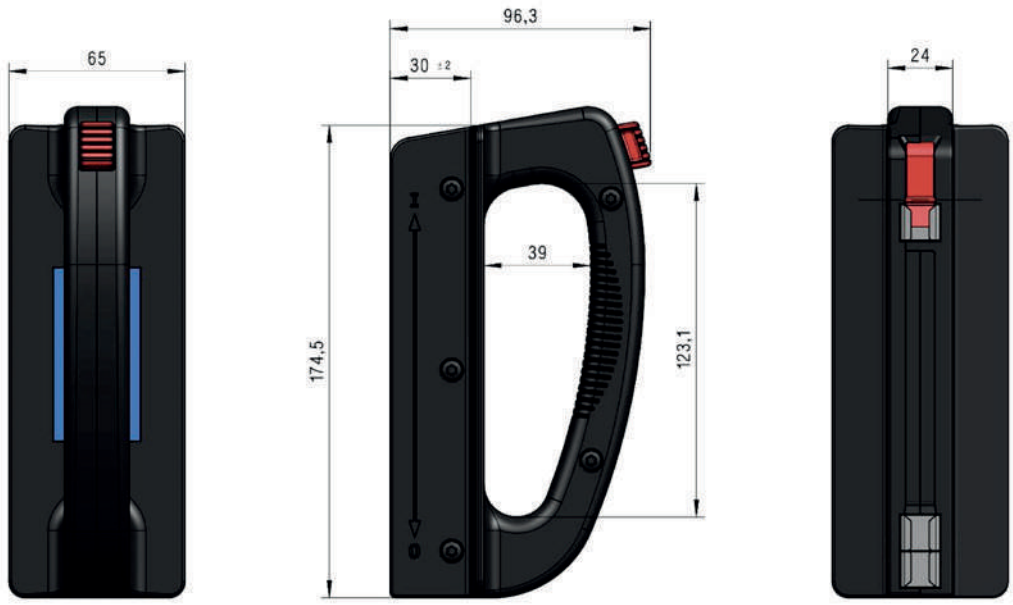
FUSE PULLERS
NH 1000V DC
NH XL 1500V DC
accessories

DIMENSIONS

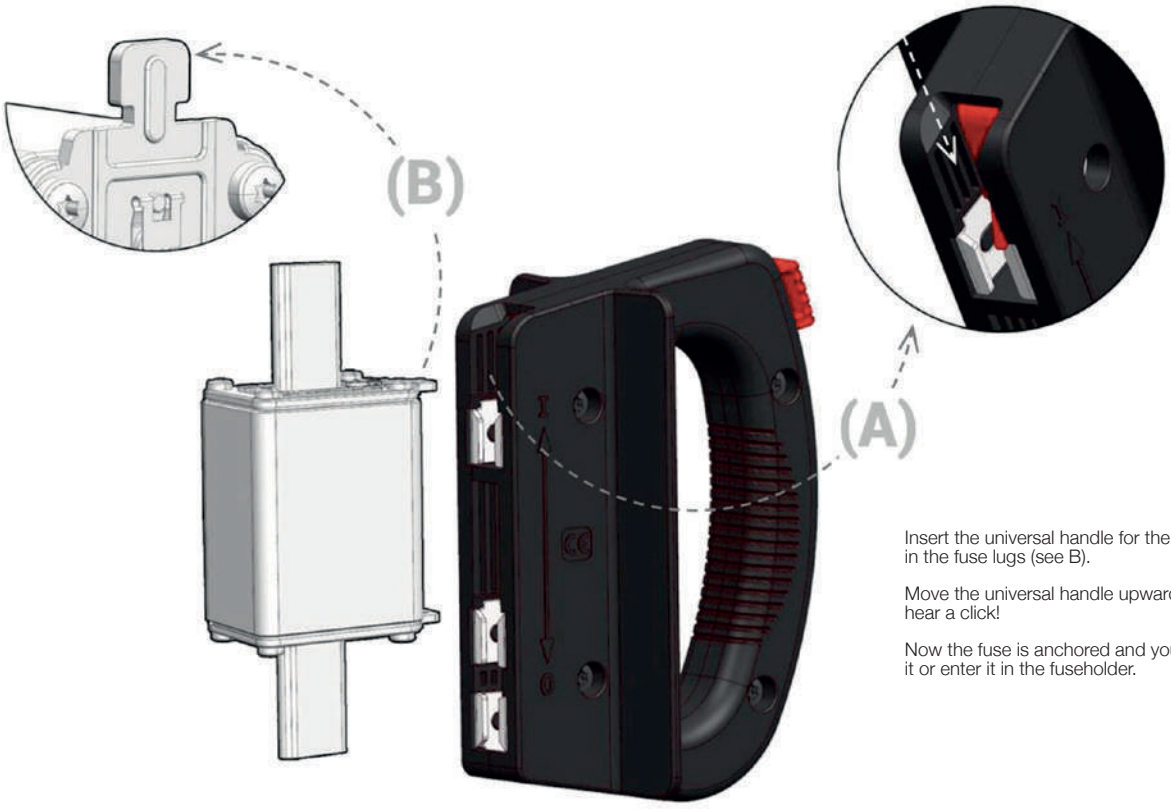
NH1
NH2
NH3



NH1 XL
NH2 XL
NH3 L



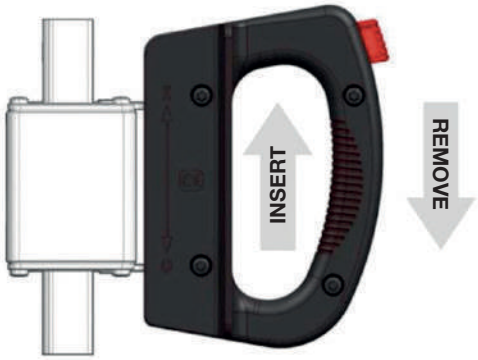
INSTRUCTIONS



Insert the universal handle for the top (see A) in the fuse lugs (see B).

Move the universal handle upward until you hear a click!

Now the fuse is anchored and you can remove it or enter it in the fuseholder.

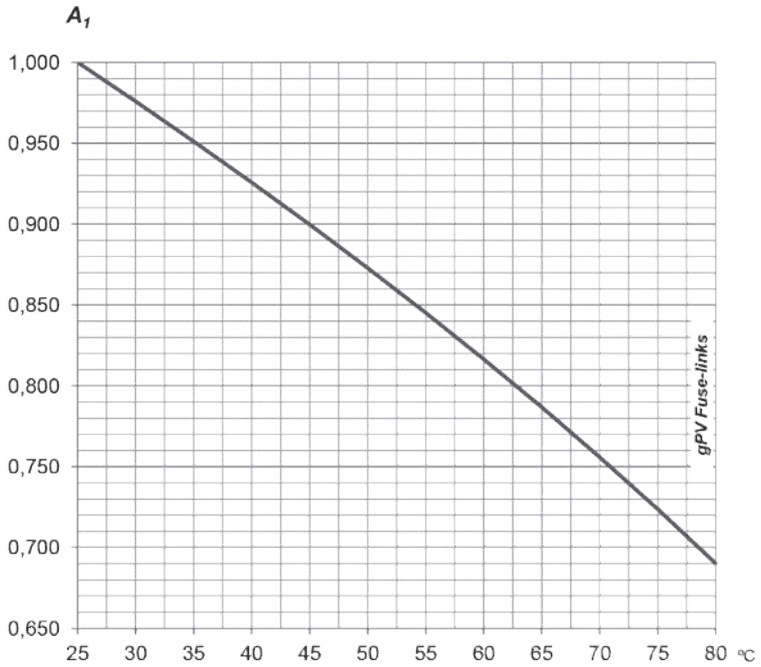


To remove the universal handle from the fuse, press the red button and move the handle downward.

CYL | gPV CYLINDRICAL fuse links

NH | gPV NH fuse links

AMBIENT TEMPERATURE DERATING FACTOR



ta (°C)	A1
25	1,00
30	0,98
35	0,95
40	0,93
45	0,90
50	0,87
55	0,84
60	0,82
65	0,79
70	0,76
75	0,72
80	0,69

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