

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

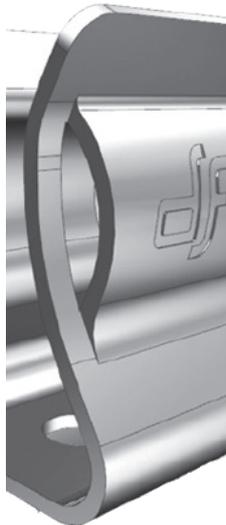
**gG/GL
NH**
800V AC
fuse links



11

**PMX
CYL**
fuse holders





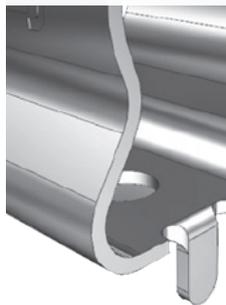
12

**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**
800V AC
fuse bases



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.



10x85 10/14x85

U **1500V DC**

In **32A**

STANDARDS

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

PAGE 32

ACCESSORIES

PAGE 33

COMPATIBLE gPV CYL FUSE LINKS

PAGE 05



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).



FIXATION **SCREW**

In **25A**

Pd max
(W)

REFERENCE

PACKING
Uni /BOX

4

482001

50/200



FIXATION **PCB**

In **25A**

4

482002

50/200





ST NH 1000V 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 DIN rail mounting or with 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**

I_N **250A**

STANDARDS

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



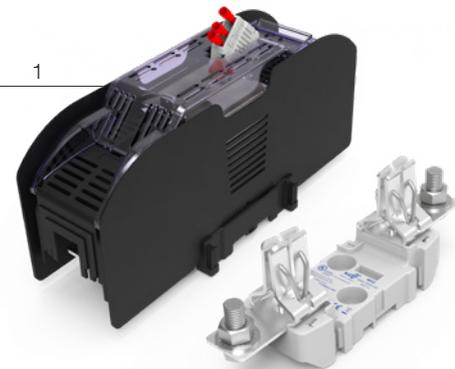
NH2

U **1000V DC**

I_N **400A**

STANDARDS

SINGLE-POLE	DIN RAIL/SCREW	SCREW	354175	1
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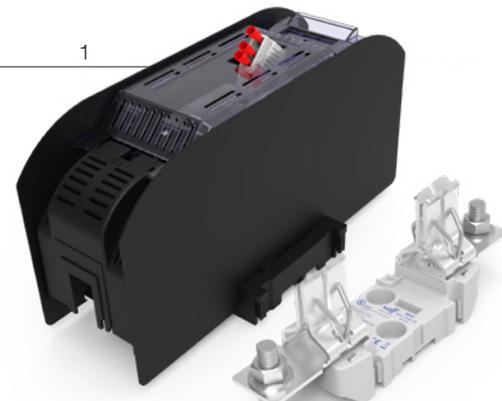
NH3

U **1000V DC**

I_N **500A**

STANDARDS

SINGLE-POLE	DIN RAIL/SCREW	SCREW	354180	1
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STANDARDS

IEC/EN 60269-1 UL 4248-1
 IEC/EN 60269-2 UL 4248-19
 IEC/EN 60269-6

DIMENSIONS
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ACCESSORIES
 PAGE 17

ACCESSORIES ASSEMBLY
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COMPATIBLE gPV NH FUSE LINKS
 PAGE 06

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.



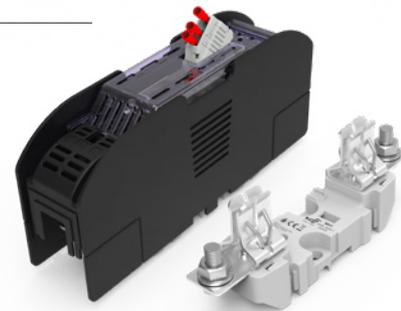
ST NH 800V AC fuse bases



U **800V AC**

In **200A**

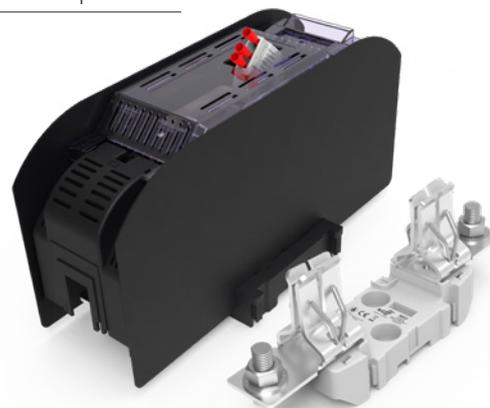
POLES	FIXING	CONNECTION	REFERENCE	PACKING Uni / BOX
SINGLE-POLE	DIN RAIL / SCREW	SCREW	352200	3
THREE-POLE	DIN RAIL / SCREW	SCREW	353200	1



U **800V AC**

In **630A**

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



STANDARDS

IEC/EN 60269-1
IEC/EN 60269-2
DIN 43620

DIMENSIONS

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ACCESSORIES

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ACCESSORIES ASSEMBLY

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COMPATIBLE gPV NH FUSE LINKS

PAGE 10

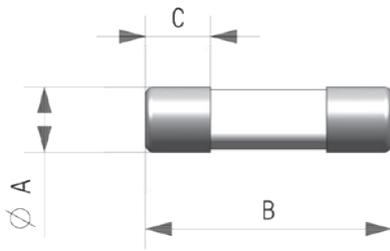


gPV
CYLINDRICAL
fuse links

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

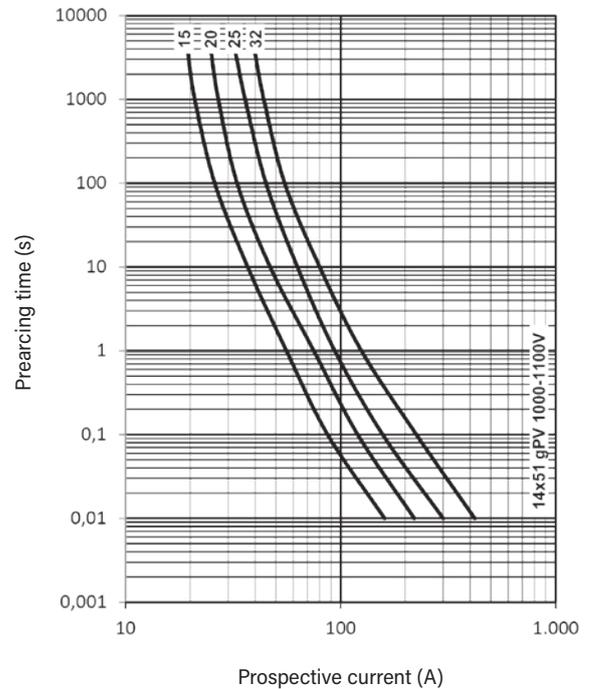


DIMENSIONS



A	B	C
14,3	51	13

t-I CHARACTERISTICS



POWER DISSIPATION

	RATED VOLTAGE	RATED CURRENT	REFERENCE	POWER DISSIPATION	POWER DISSIPATION	PREARcing I ² t	OPERATING I ² t
		(A)		(W @ 0,7 I _n)	(W @ I _n)	(A ² s)	(A ² s)
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

CYL

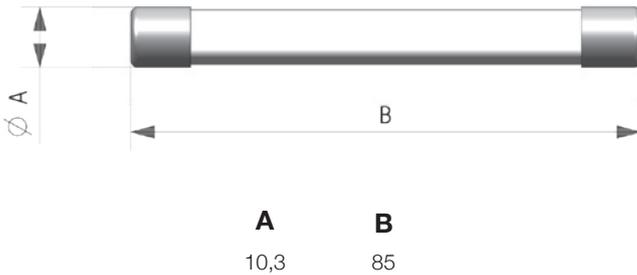
10x85

gPV
CYLINDRICAL
fuse links

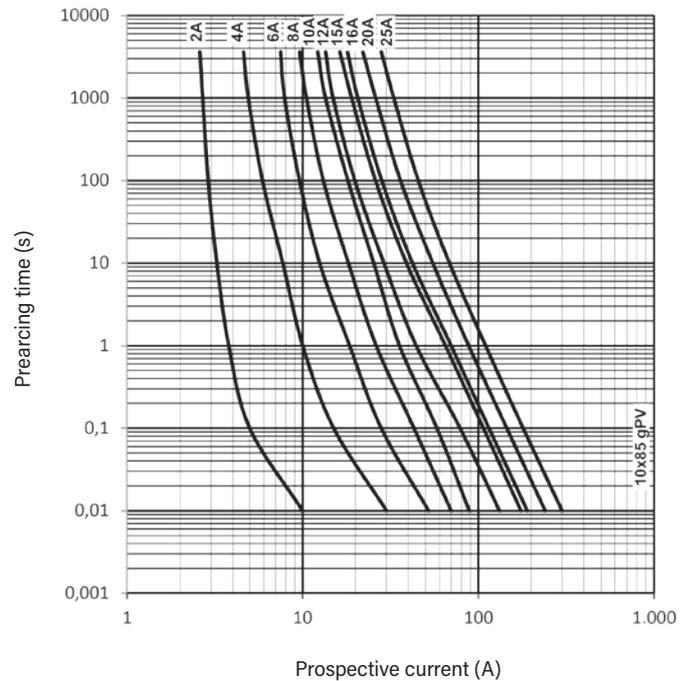
RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
1500V DC	2A...16A	30kA
1200V DC	20A 25A	10kA



DIMENSIONS



t-I CHARACTERISTICS



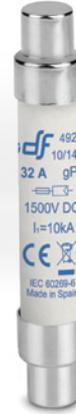
POWER DISSIPATION

	RATED VOLTAGE (U)	RATED CURRENT	REFERENCE	POWER DISSIPATION	POWER DISSIPATION	PREARcing I²t	OPERATING I²t
		(A)		(W @ 0,7 I _n)	(W @ I _n)	(A²s)	(A²s)
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

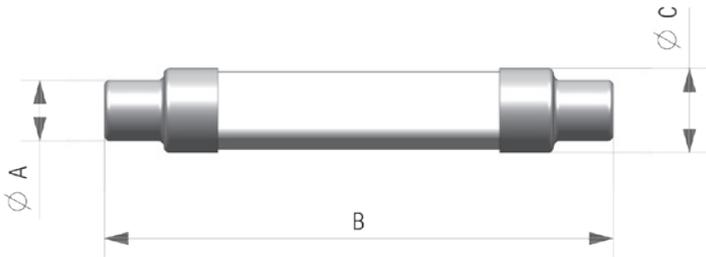


gPV
CYLINDRICAL
fuse links

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

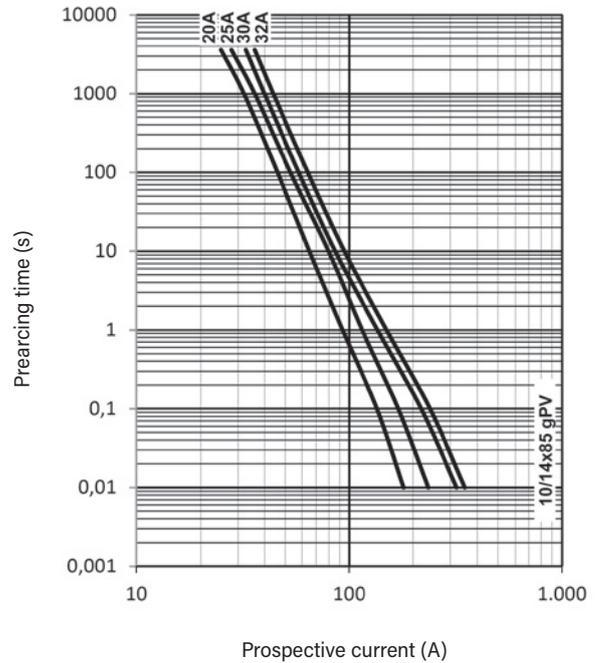


DIMENSIONS



A	B	C
10,3	85	14,3

t-I CHARACTERISTICS



POWER DISSIPATION

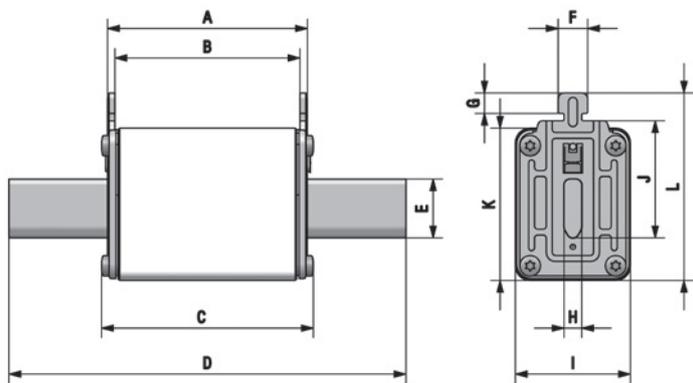
RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W @ 0,7 In)	POWER DISSIPATION (W @ In)	PREARCIING I ² t (A ² s)	OPERATING I ² t (A ² s)
20	492250	2,17	5,44	67	221
25	492255	2,46	6,22	136	452
30	492260	2,66	6,70	220	730
32	492262	3,00	8,00	267	885



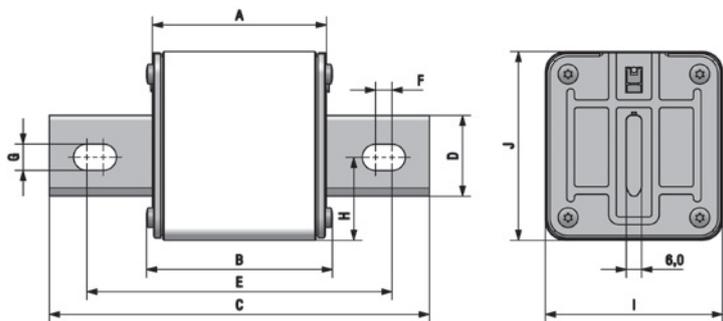
gPV
NH 1000V DC
fuse links

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

DIMENSIONS



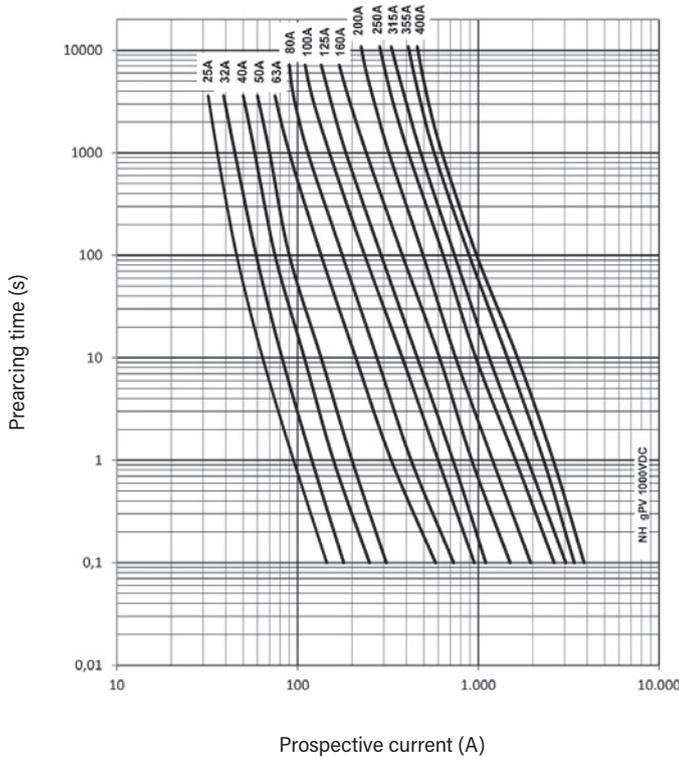
	A	B	C	D	E	F	G	H	I	J	K	L
NH1	68	62	71,5	135	20	10	9,5	6	39	40	52	64
NH2	68	62	71,5	150	25	10	9,5	6	53	48	60	72
NH3	68	62	73	150	32	10	9,5	6	70	60	75	87



	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

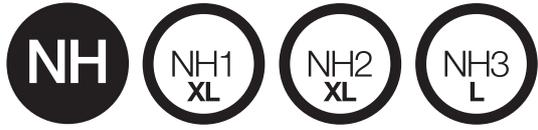


t-I CHARACTERISTICS



POWER DISSIPATION

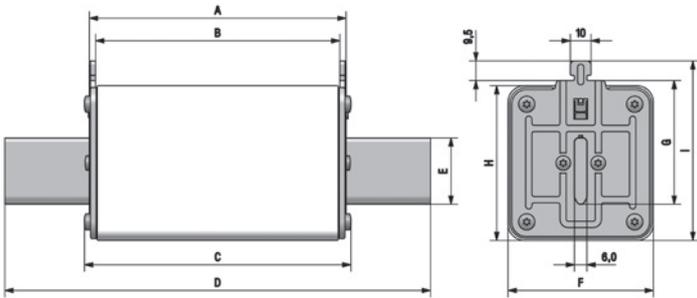
RATED CURRENT (A)	REFERENCE		POWER DISSIPATION	POWER DISSIPATION	PREARcing I^2t	OPERATING I^2t	
			(W @ 0,7 In)	(W @ In)	(A ² s)	(A ² s)	
	25	373210	373210 B	5,2	12,5	62	94
	32	373215	373215 B	6,3	15,5	122	184
	40	373225	373225 B	6,7	16,6	302	454
	50	373230	373230 B	7,5	18	562	844
	63	373235	373235 B	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	
	200	373350	373350 B	11,4	28,0	18.700	36.400
	250	373360	373360 B	13,0	33,3	36.800	71.500
	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



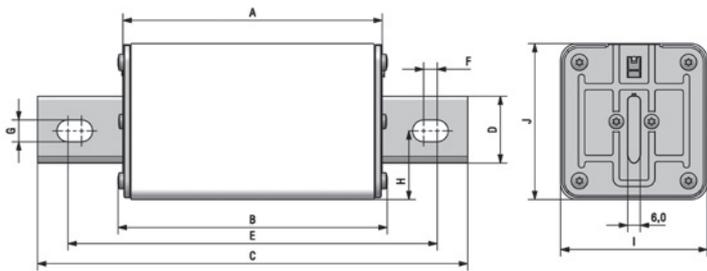
gPV NH XL 1500V DC fuse links

RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
1500V DC	50A...250A	30kA
	315...400A	10kA

DIMENSIONS



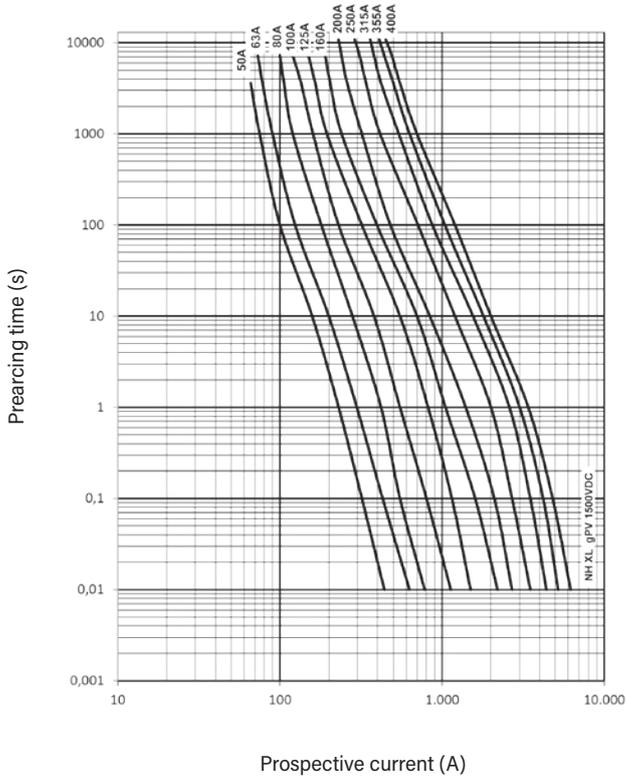
	A	B	C	D	E	F	G	H	I
NH1XL	126	120	129	191	20	39	40	52,5	64,5
NH2XL	122,6	117,6	126,7	205	25	53	48	60,5	72
NH3L	123,6	117,6	128,3	205	32	70	60	75	87



	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



t-I CHARACTERISTICS



POWER DISSIPATION

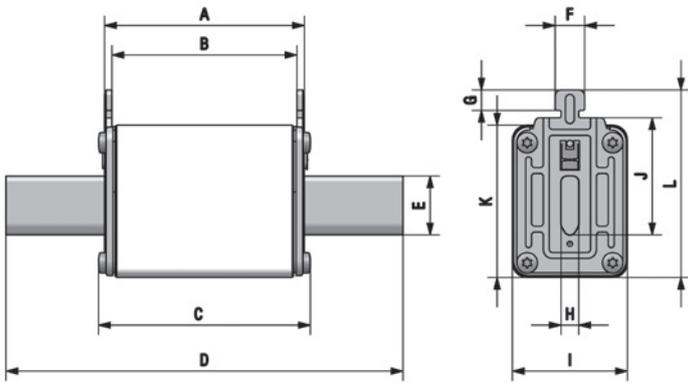
	RATED CURRENT	REFERENCE		POWER DISSIPATION	POWER DISSIPATION	PREARcing I ² t	OPERATING I ² t
	(A)			(W @ 0,7 In)	(W @ In)	(A ² s)	(A ² s)
	40	372225	372225 B	6,3	15	260	490
	50	372230	372230 B	7,2	18	560	1.170
	63	372235	372235 B	7,6	19	1.160	2.460
	80	372240	372240 B	10	25	1.760	3.720
	100	372245	372245 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
	200	372350	372350 B	18	45	24.850	52.360
	250	372360	372260 B	21	52	42.000	88.500
	315	372445	372445 B	23	58	69.020	145.550
	355	372450	372450 B	26	65	99.390	209.600
	400	372455	372455 B	28	71	155.300	327.500



gG / gL
NH 800V AC
fuse links

RATED VOLTAGE	RATED CURRENT	BREAKING CAPACITY
800V AC	25A...315A	80kA

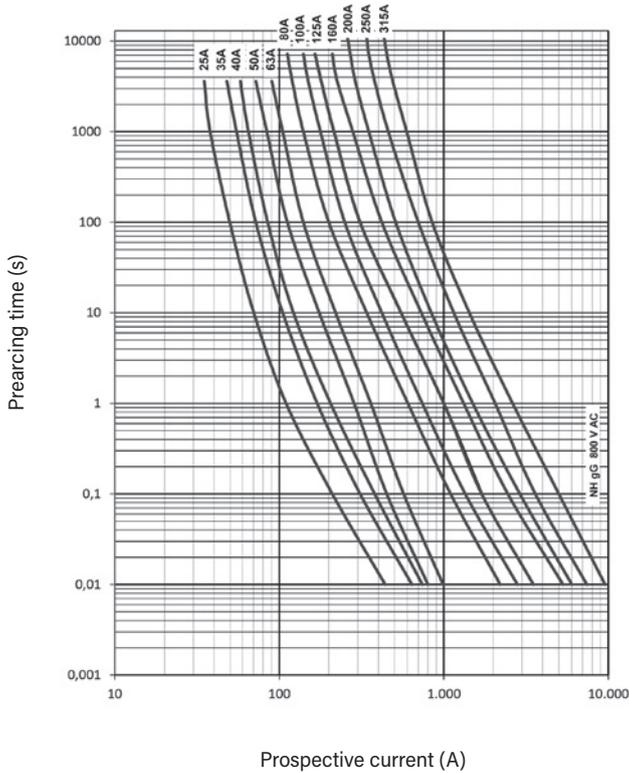
DIMENSIONS



	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



t-I CHARACTERISTICS



POWER DISSIPATION

	RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W)	PREARcing I^2t (A ² s)	OPERATING I^2t (A ² s 800V ~)
	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
	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
	200	385425	21,0	140.150	245.000
	250	385435	25,0	241.500	422.000
	315	385445	34,5	395.000	698.000



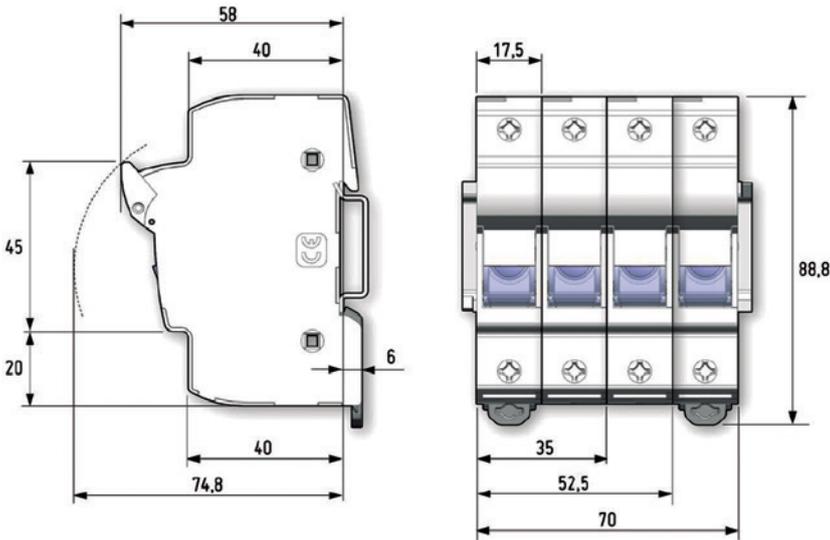
PMX CYLINDRICAL fuse holders

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



**PATENTED
DESIGN**

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

PMX

14x51

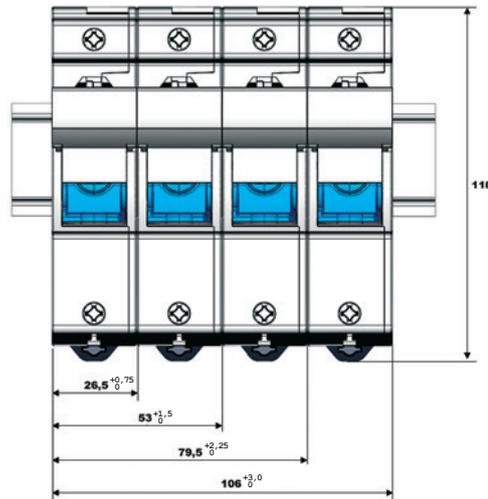
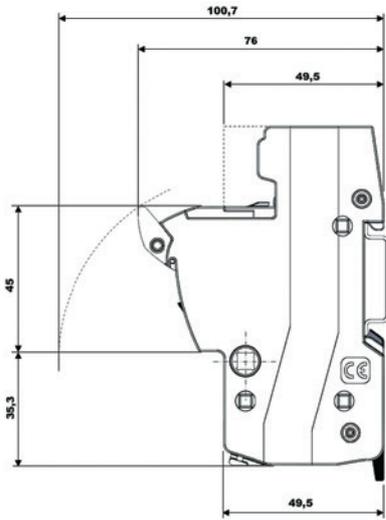
PMX
CYLINDRICAL
fuse holders

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



**PATENTED
DESIGN**

DIMENSIONS



ACCESSORIES

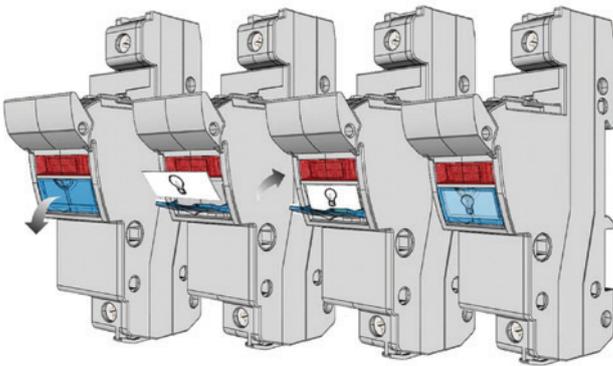
REFERENCE	DESCRIPTION	PACKING
		Uni /BOX
480005	PINS FOR MULTIPOLE ASSEMBLY	12
485356	HANDLE TIES FOR MULTIPOLE ASSEMBLY	12
485258	LOCK SUPPORT	5
485266	SPECIAL IP20 PROTECTION ACCESSORY	12
485656	SCREWS PROTECTION ACCESSORY	12
485271	SPECIAL ACCESSORY SCREW CONNECTION	12



PMX
CYLINDRICAL
fuse holders

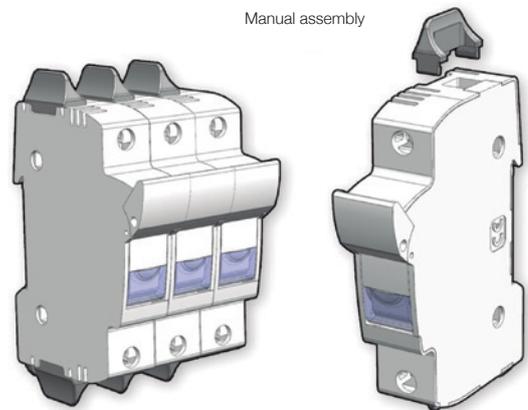
ACCESSORIES

IDENTIFICATION BY LABEL



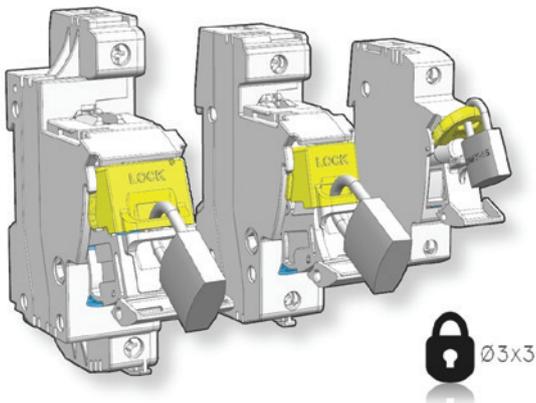
Open the label-holder part when the fuse holder is totally closed or totally open, put on the label and close.

PHASE SEPARATOR

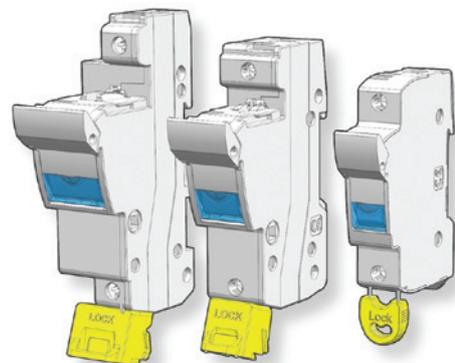


The accessory increases the distance between phases in multipolar assemblies.

LOCKING MEANS A PADLOCK

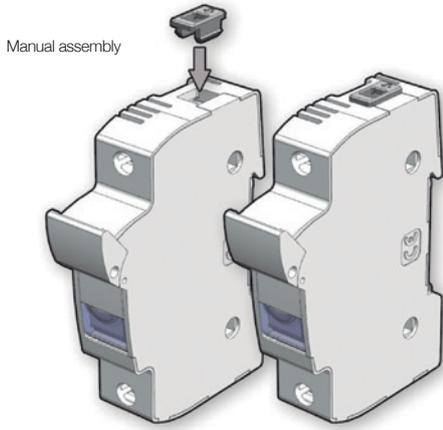


To avoid the operation and connection when the fuse holder is open, put on the accessory "Padlock support" sliding it for the guides, and covering the fuse link zone.



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

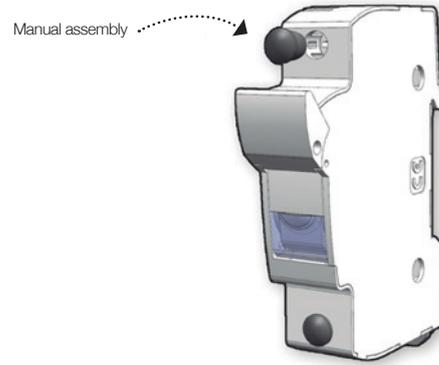
SPECIAL IP20 PROTECTION



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

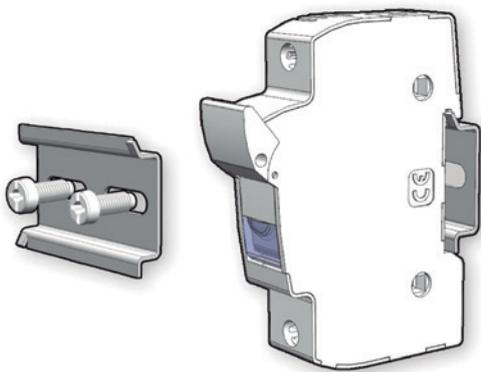
	SECTION FLEXIBLE WIRE (mm ²)	SECTION SOLID WIRE (mm ²)	LENGTH (mm)
8x32	≤6	≤10	10
10x38	≤6	≤10	10
14x51	≤10	≤16	14
22x58	≤16	≤25	18

SCREW PROTECTION



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

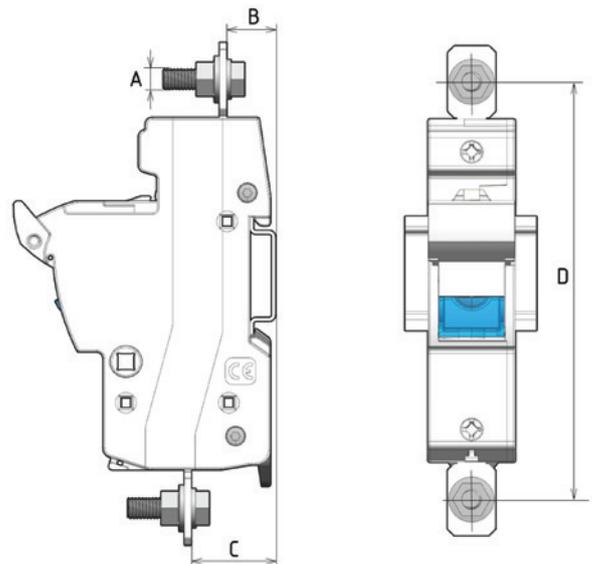
SCREW FIXATION



First mount the accessory with screws, then mount the fuseholder. (there are available different 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



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

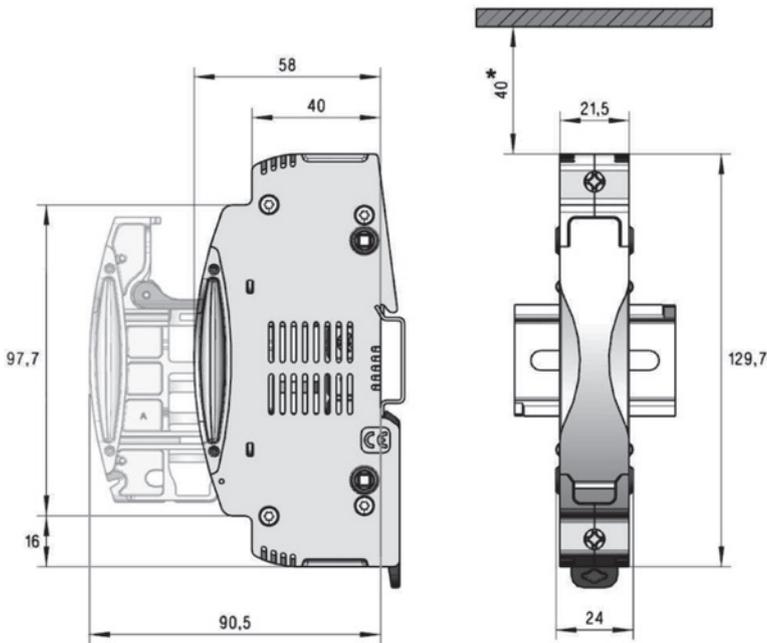


PML CYLINDRICAL fuse holders

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



DIMENSIONS



10x85 position



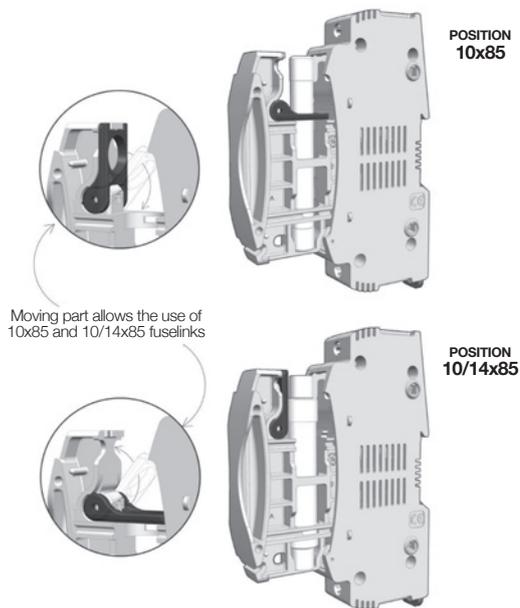
10/14x85 position

* Recommended minimum mounting free space

ACCESSORIES

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

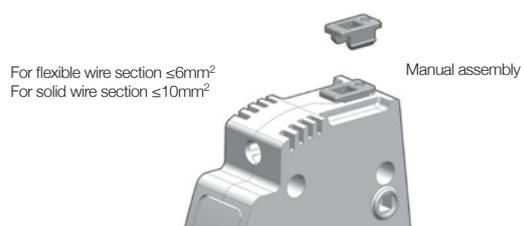
FUSE-LINK SIZE SELECTOR



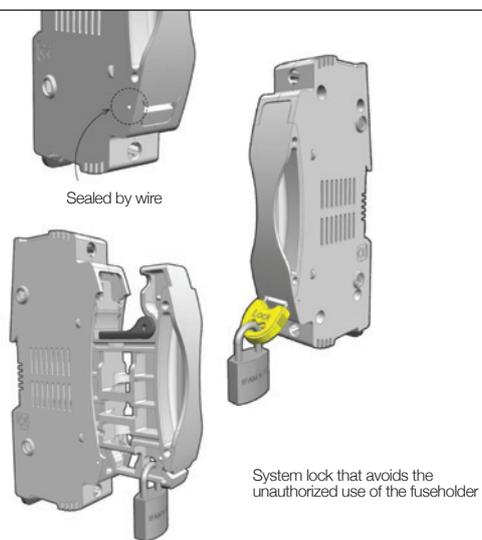
FREE SPACE FOR LABELING



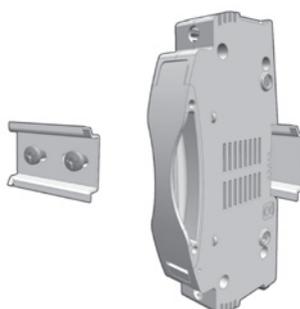
SPECIAL IP20 PROTECTION



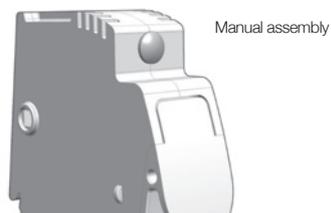
LOCK SYSTEM



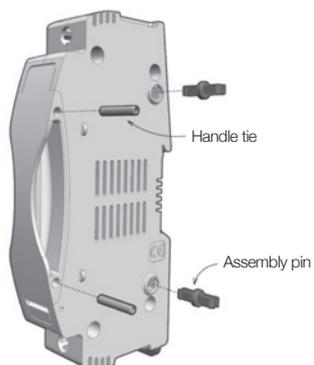
SCREW FIXATION ACCESSORY



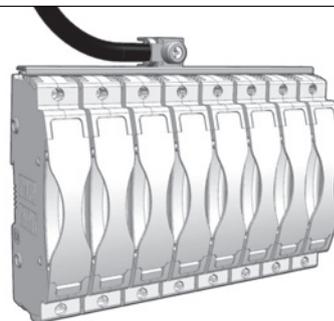
SCREW PROTECTION ACCESSORY



MULTIPOLAR ASSEMBLY



BUSBAR



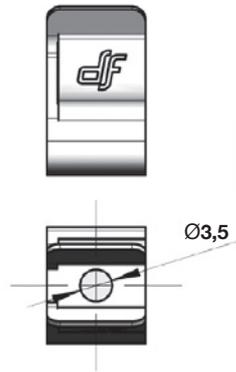
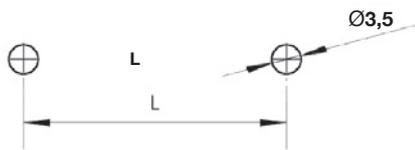


CLIP CONTACT CYLINDRICAL Ø10 fuse links

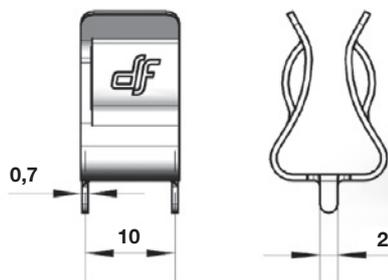
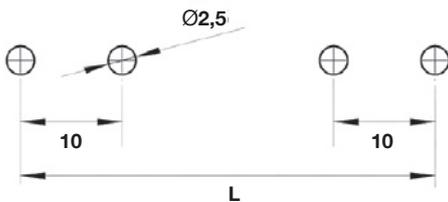
	RATED VOLTAGE	RATED CURRENT	RATED POWER DISSIPATION
UP TO	1000V DC	25A	4W
	1500V DC		

DIMENSIONS

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



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

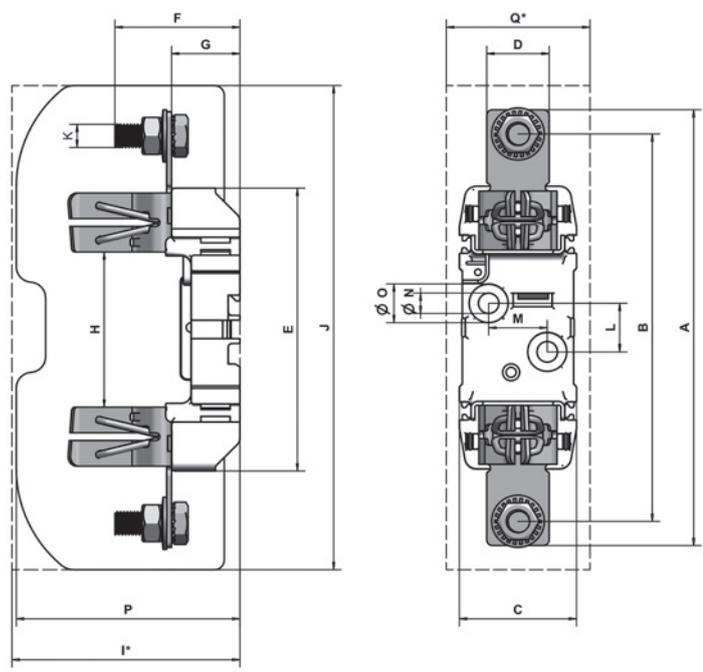
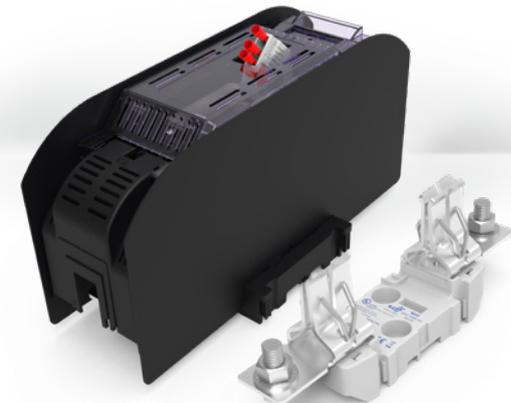
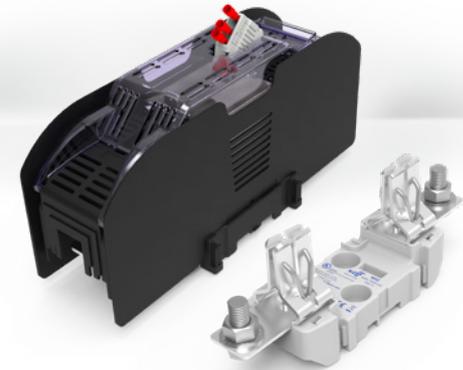




ST NH 1000V DC fuse bases

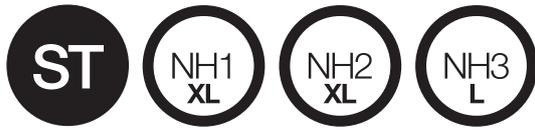
RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
1000V DC	250A ^{NH1}	IP00 IP20
	400A ^{NH2}	
	500A ^{NH3}	

DIMENSIONS



* with IP20 protection

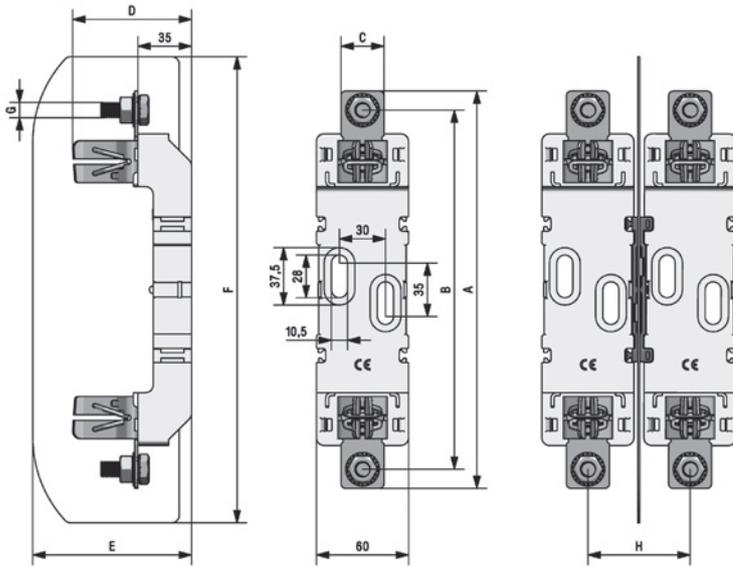
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
NH1	200	175	48	28	146	77,5	35	80	107	230	M10	25	30	10,5	20,5	107	53,5
NH2	225	200	60	32	146	88	35	80	123	250	M12	25	30	10,5	20,5	114,5	83
NH3	240	210	60	38	146	97	35	80	143	270	M12	25	30	10,5	20,5	143	116



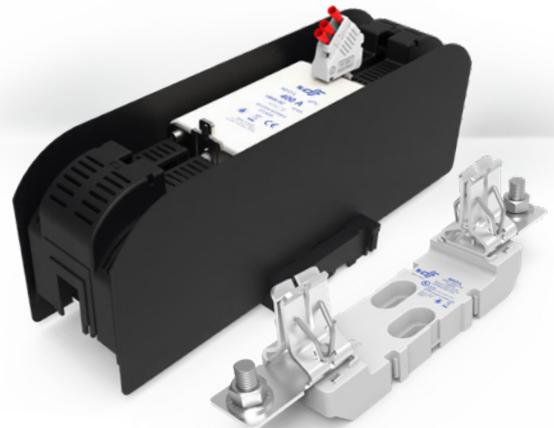
ST NH XL1500V DC fuse bases

RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
1500V DC	200A	IP00 IP20
	315A	
	500A	

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



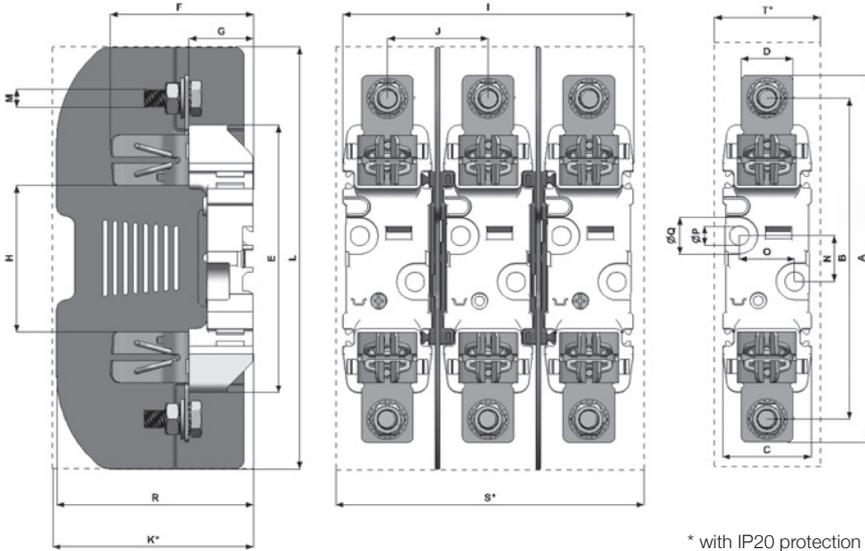


ST NH 800V AC fuse bases

RATED VOLTAGE	RATED CURRENT	PROTECTION INDEX
800V AC	200A 630A	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	148	77,5	35	80	156,5	54,3	107	230	M10	25	30	10,5	20,5	107	162	54
NH3	240	210	60	38	148	97	35	80	224	82	143	270	M12	25	30	10,5	20,5	143	281	116

ST

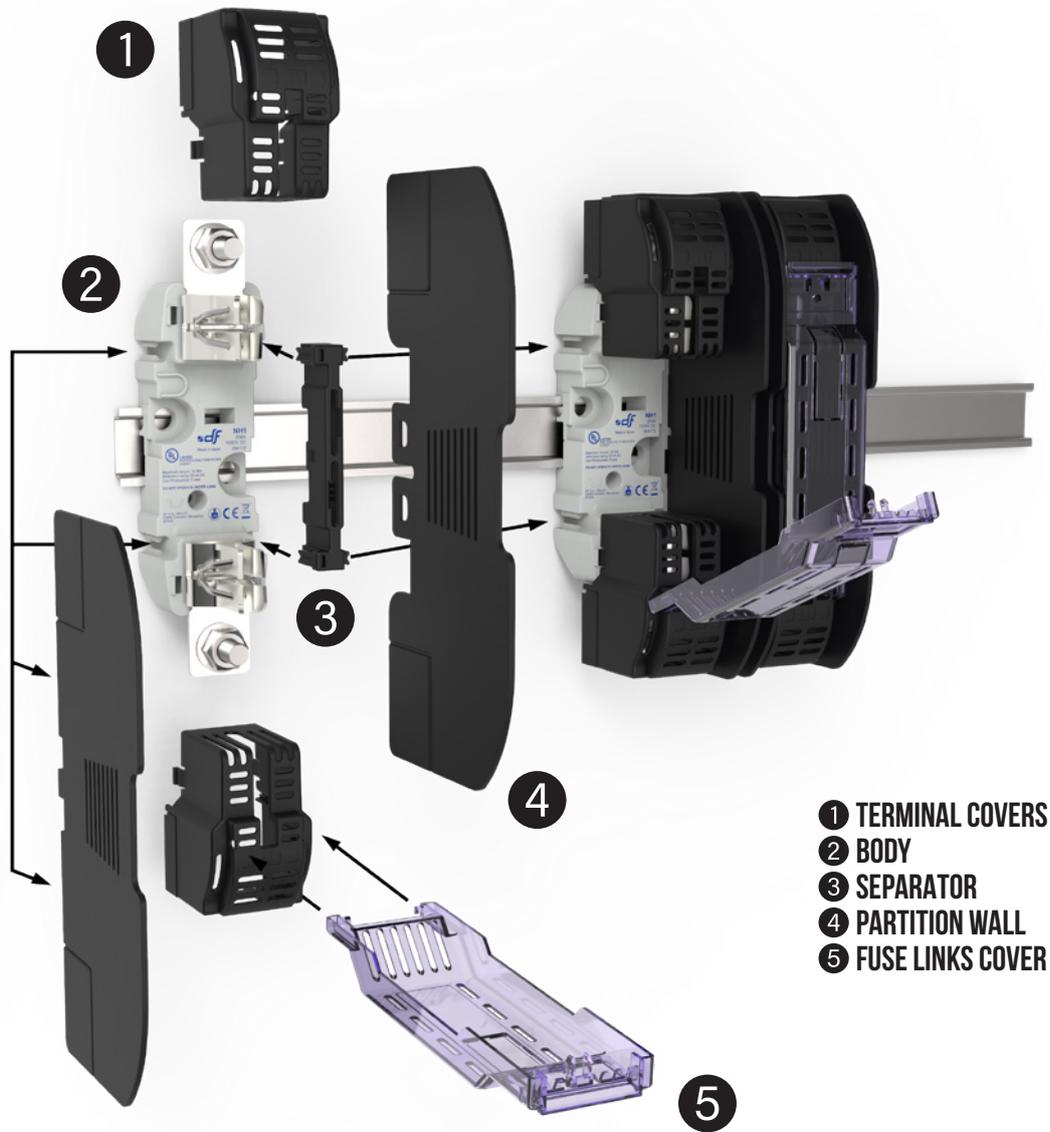
NH1

NH2

NH3

ST
NH 1000V DC
fuse bases

ACCESSORIES ASSEMBLY



ST

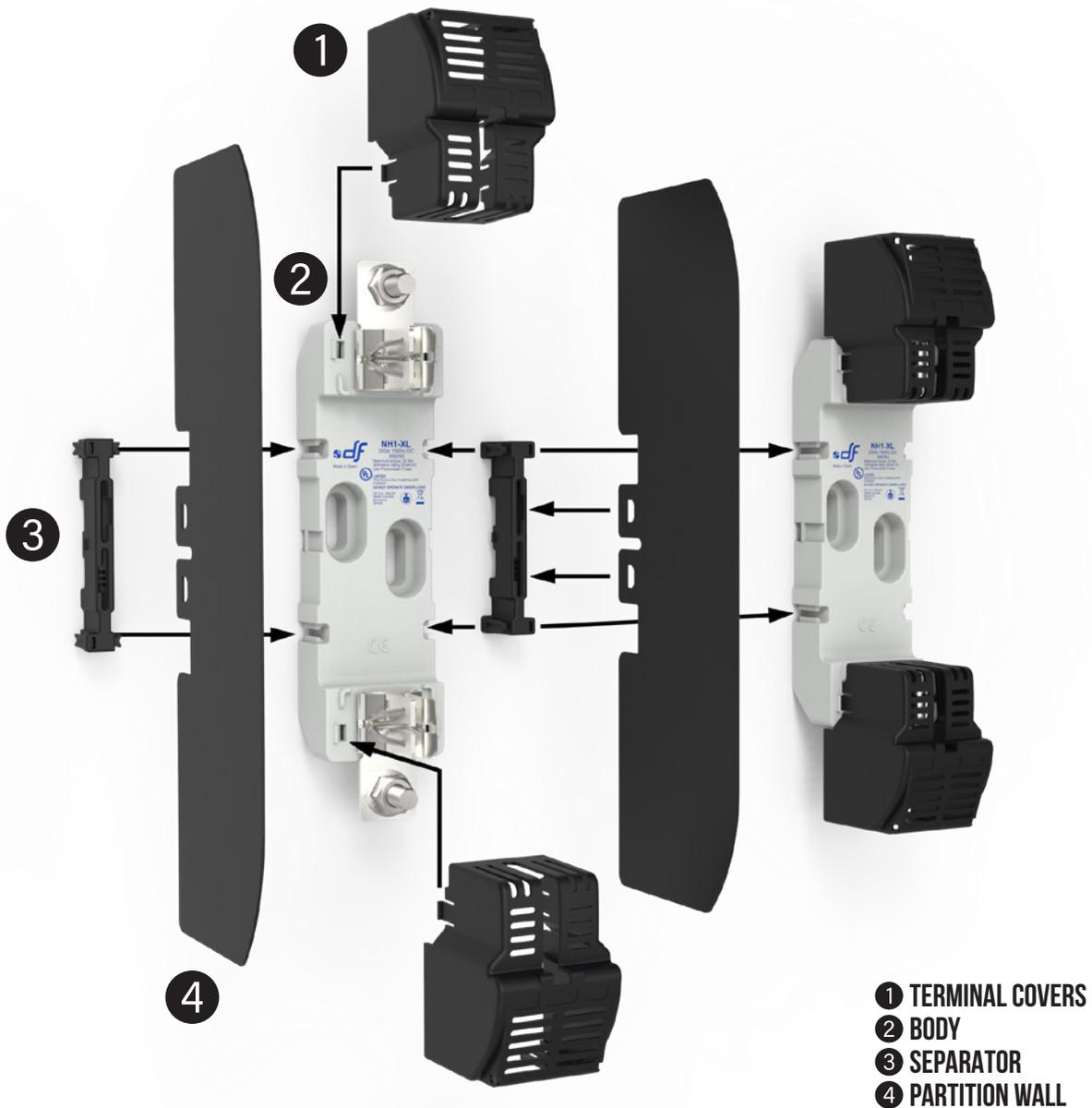
NH1
XL

NH2
XL

NH3
L

ST
NH XL1500V DC
fuse bases

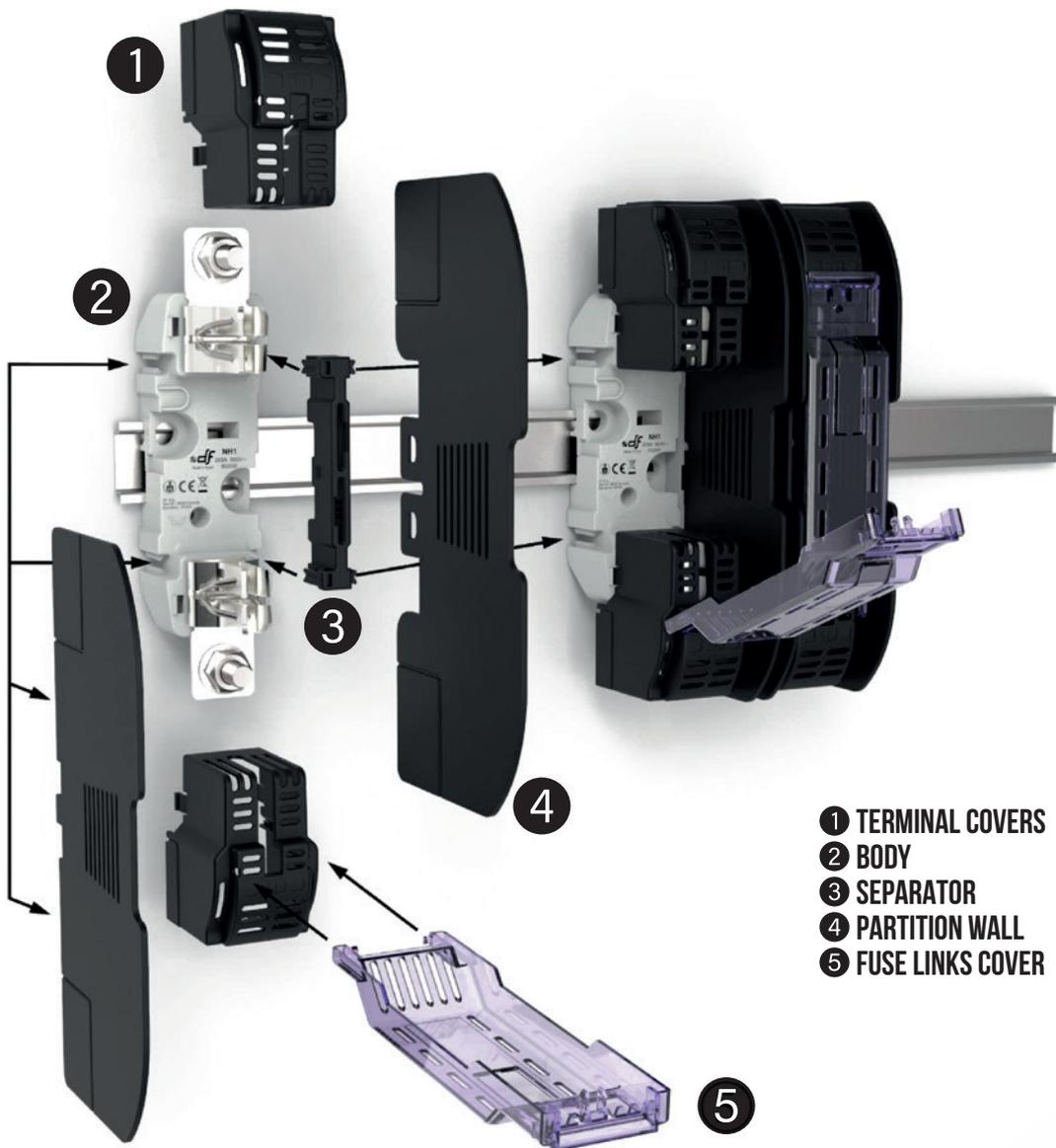
ACCESSORIES ASSEMBLY





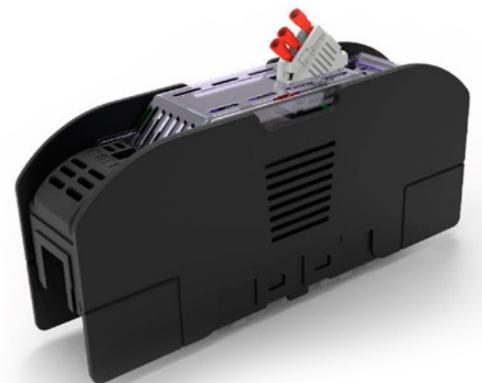
ST
NH 800V AC
fuse bases

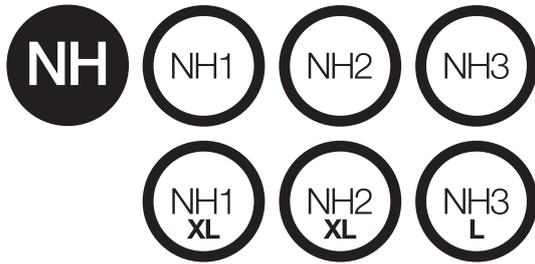
ACCESSORIES ASSEMBLY



- 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.





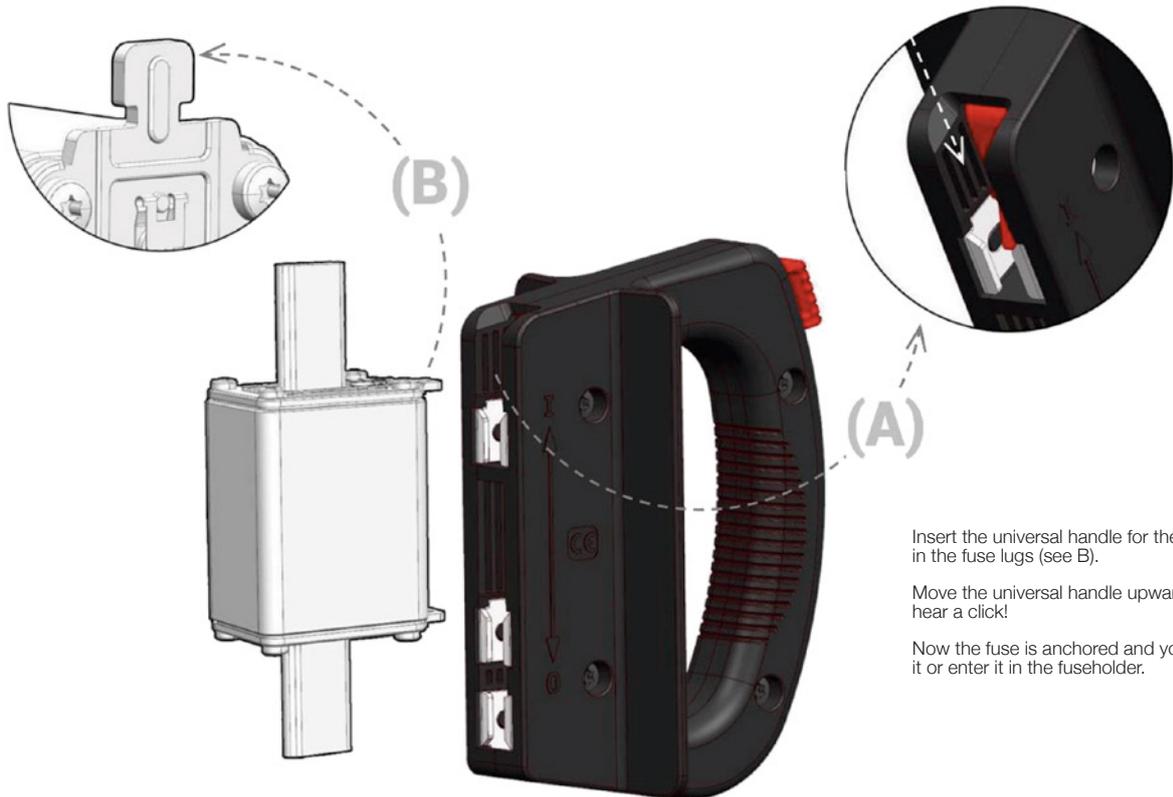
FUSE PULLERS

NH 1000V DC
NH XL 1500V DC
accessories

DIMENSIONS



INSTRUCTIONS

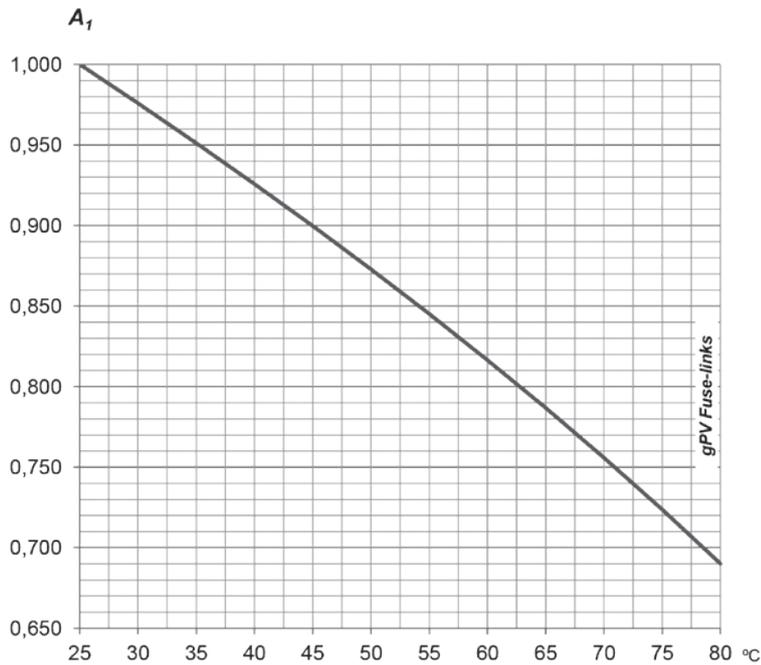


To remove the universal handle from the fuse, press the red button and move the handle downward.

CYL | **gPV**
CYLINDRICAL
fuse links

NH | **gPV**
NH 1000V DC
fuse links

AMBIENT TEMPERATURE DERATING FACTOR



t_a (°C)	A_1
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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