

HelioProtection® HP10NH

Photovoltaic fuse-links gPV 1000VDC

Photovoltaic NH fuses

Mersen HP10NH photovoltaic (PV) fuse series was engineered and designed specifically for the protection of photovoltaic systems. Helio-Protection® HP10NH fuse links are designed for the protection of cables in a PV group of chains when a short circuit occurs in a panel (main fuse category). This HelioProtection® main fuse range enlarges our PV fuse links offering on a size having a worldwide acceptance. They are of the gPV type and comply with both IEC 60269-6 and UL 2579 PV standards.

Features Benefits

- Global acceptance
- Low fault current interrupting capability
- Temperature cycle withstand capability
- Durable construction for enhanced system longevity
- High efficiency with low power losses
- Small footprint

Applications

- All photovoltaic applications
- Inverter DC input protection
- Re-combiner applications (sub combiner, array combiner, master combiner)

Technical data overview

Volt (VDC)	1000 VDC
Ampere Range (A)	50 ... 250 A
Size per Standard	NH1 and NH2
Speed/Characteristic	gPV
I.R. DC	50 kA (L/R = 1ms)



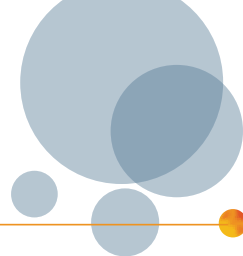
Standards

IEC 60269-6

UL 2579

RoHS compliance





Product range



HP10NH1GPV125

NH fuse links HP10NH 1000VDC size 1

Catalog number	Reference number	Rated current I_n	Power dissipation at $0.7 \times I_n$	Power dissipation at I_n	Width	Weight	Package
HP10NH1GPV50	Z1028283	50 A	4.6 W	11 W	39.5 mm	0.4 kg	3
HP10NH1GPV63	A1028284	63 A	5.4 W	13 W	39.5 mm	0.4 kg	3
HP10NH1GPV80	B1028285	80 A	6.1 W	15 W	39.5 mm	0.4 kg	3
HP10NH1GPV100	C1028286	100 A	7.2 W	17 W	39.5 mm	0.4 kg	3
HP10NH1GPV125	D1028287	125 A	7.4 W	18 W	39.5 mm	0.4 kg	3
HP10NH1GPV160	E1028288	160 A	9.6 W	23 W	39.5 mm	0.4 kg	3



HP10NH2GPV250

NH fuse-links HP10NH 1000VDC size 2

Catalog number	Reference number	Rated current I_n	Power dissipation at $0.7 \times I_n$	Power dissipation at I_n	Width	Weight	Package
HP10NH2GPV200	X1037619	200 A	11.3 W	27 W	51 mm	0.63 kg	3
HP10NH2GPV250	Y1037620	250 A	12.9 W	31 W	51 mm	0.63 kg	3



HPBB11PPR



HPBB11PPRFS

NH fuse-bases for NH fuse-links gPV 1000VDC, size 1, 250A, single pole

Catalog number	Reference number	Power acceptance	Rated impulse withstand voltage U_{imp}	Cable termination	Design	Weight	Package
HPBB11PPR	A1030607	32 W	8 kV	M10 terminal screw M = 27-32Nm	open design, for DIN-rail or screw mounting (M8/M10, M = 14/17 Nm), for NH fuse links size 1	0.5 kg	3
HPBB11PPRFS	K1032916	32 W	8 kV	M10 terminal screw M = 27-32Nm	with touch protection, for DIN-rail or screw mounting (M8/M10, M = 14/17 Nm), for NH fuse links size 1	0.624 kg	3



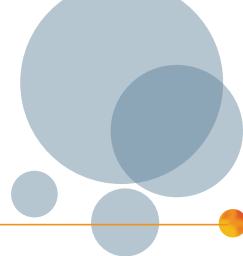
HPBB21PPR



HPBB21PPRFS

NH fuse-bases for NH fuse-links gPV 1000VDC, size 2, 315A, single pole

Catalog number	Reference number	Power acceptance	Rated impulse withstand voltage U_{imp}	Cable termination	Design	Weight	Package
HPBB21PPR	C1037509	45 W	8 kV	M10 terminal screw M = 27-32Nm	open design, for DIN-rail or screw mounting (M8/M10, M = 14/17 Nm), for NH fuse links size 1 and 2	0.407 kg	3
HPBB21PPRFS	D1037510	45 W	8 kV	M10 terminal screw M = 27-32Nm	with touch protection, for DIN-rail or screw mounting (M8/M10, M = 14/17 Nm), for NH fuse links size 2	0.722 kg	3

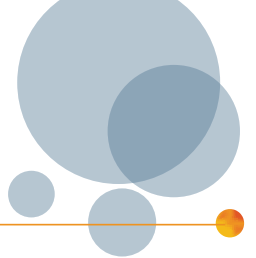


Product range



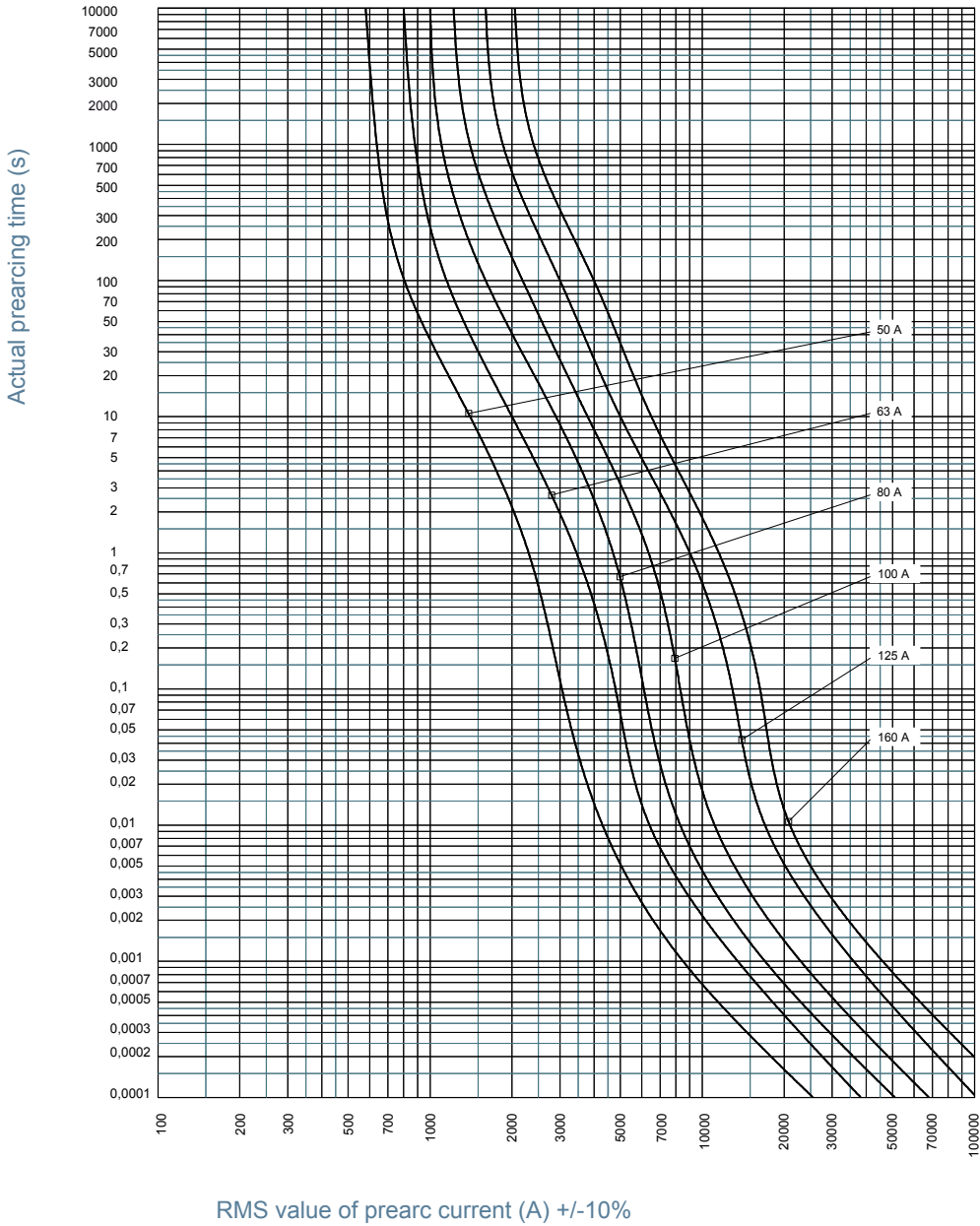
NH Fuse handle for NH fuse links size 00-4

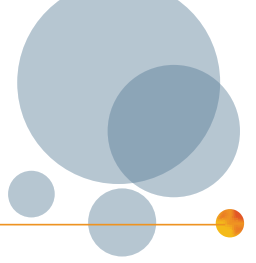
Catalog number	Reference number	Size	Design	Weight	Package
NHHANDLE	P215592	00 to 4	without arm protection to DIN VDE 0636-2, DIN VDE 608-4	279 g	5
08024.000000	X216105	00 to 4	with fire proof arm protection to DIN VDE 0636-2, DIN VDE 608-4	627 g	1



Time current characteristic curves

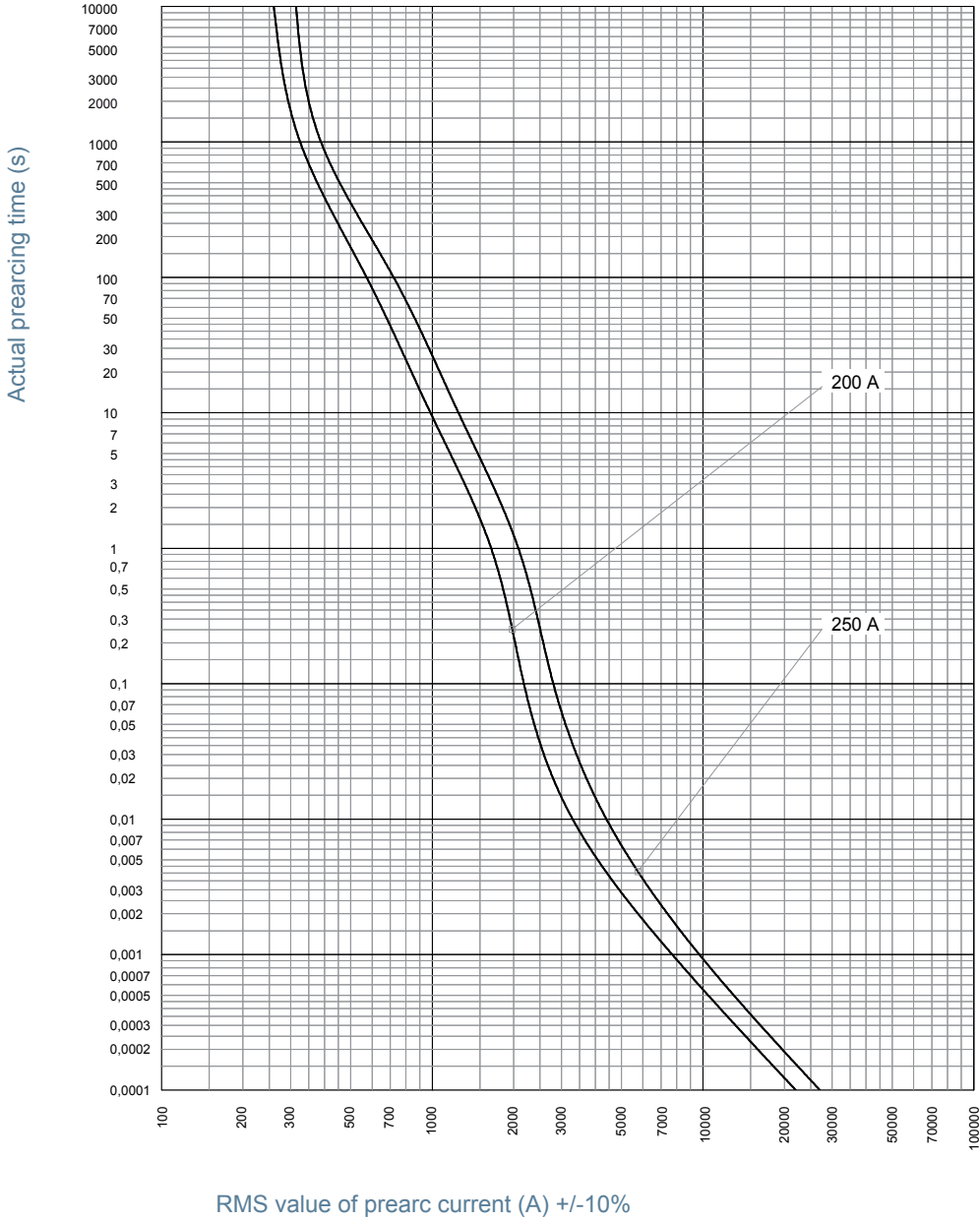
Special purpose gPV fuse link size NH1 CC 1000V 50-160A (2049900A-211)

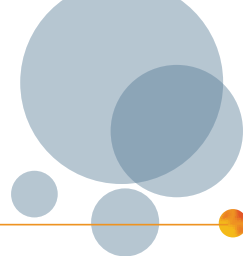




Time current characteristic curves

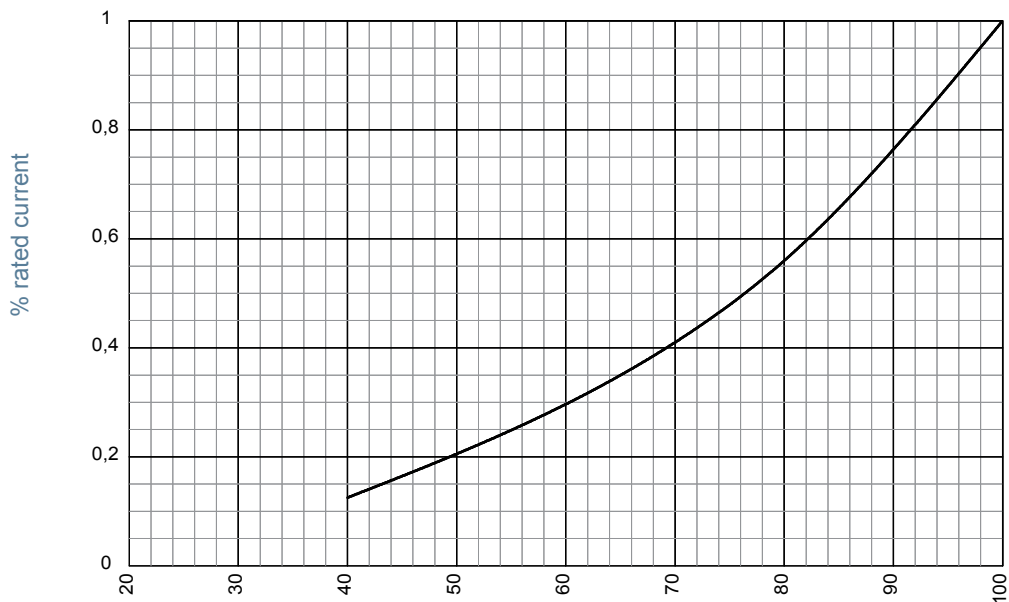
Special purpose gPV fuse link size NH2 CC 1000V 200-250A (2078900A-211)



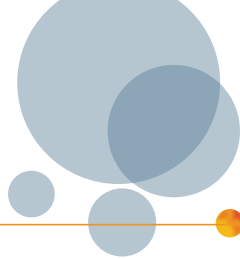


Correction factor

Rated power dissipation at rated current fuse-link gPV NH1 CC 100V 125-160A (2049900A-262)

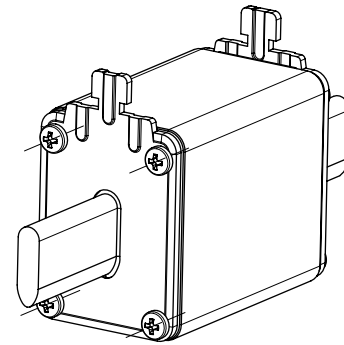
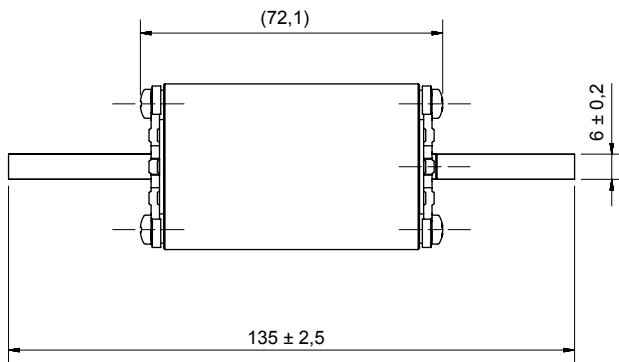
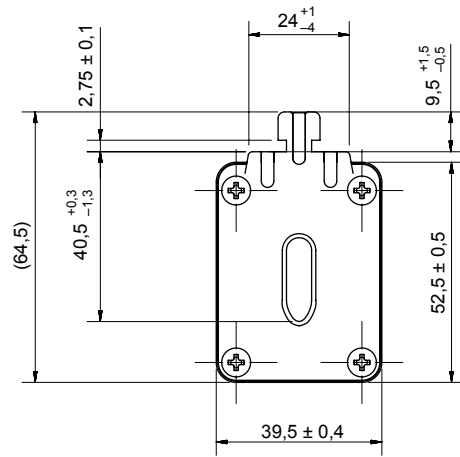
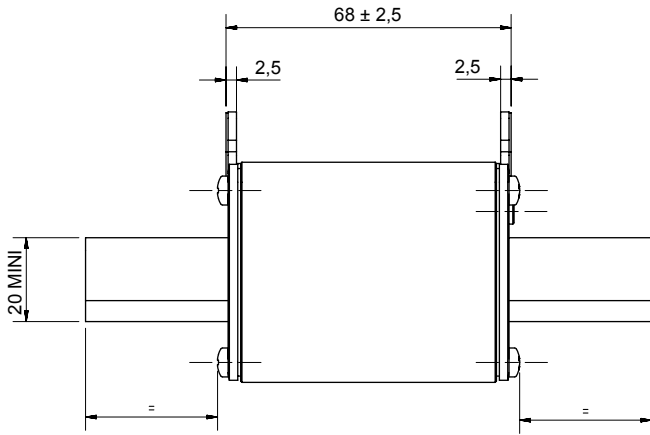


Correction factor for power dissipation



Dimensions

Special purpose gPV fuse link size NH1 without trip indicator (1026397)



A	B
100 ^{+2,0} _{-1,5}	100±1,0

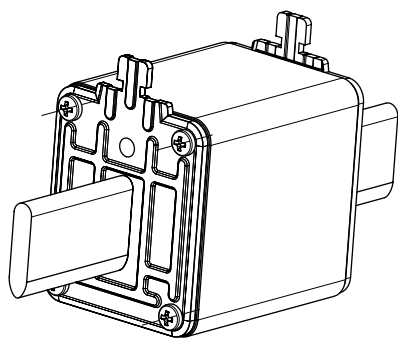
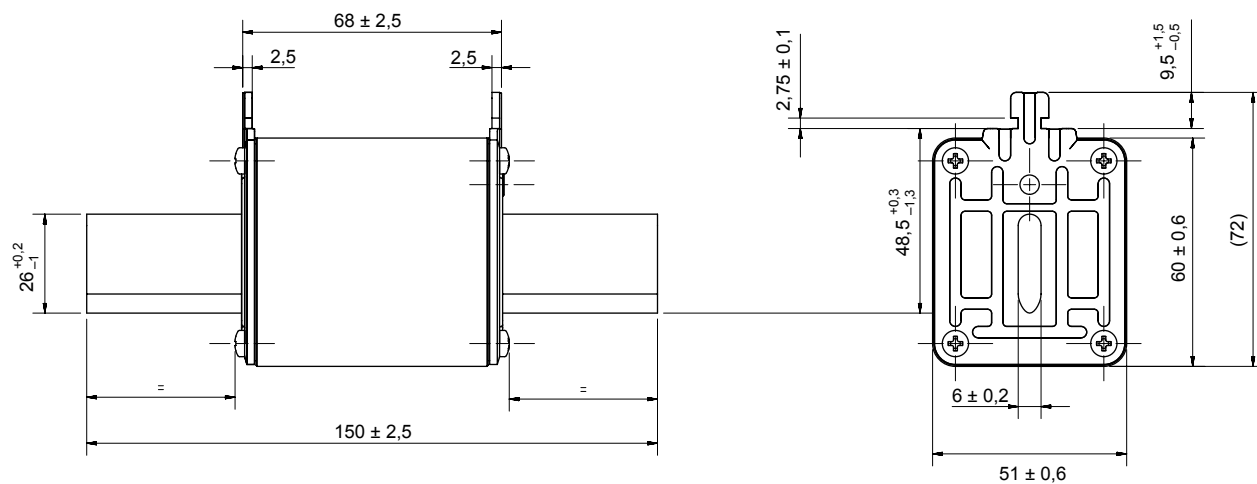
Dimensions in mm

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Dimensions

Special purpose gPV fuse link size NH2 without trip indicator (1029641)



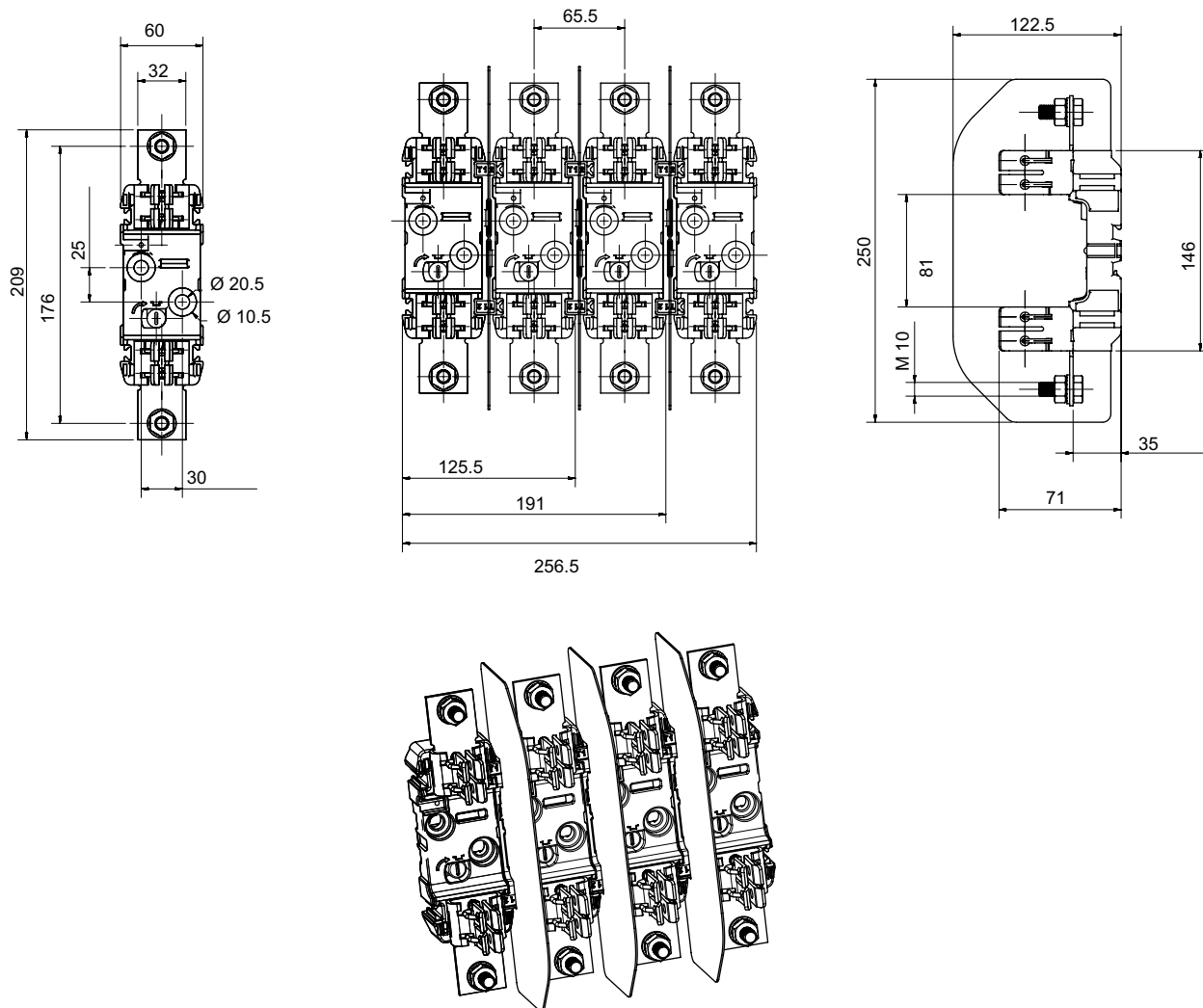
Dimensions in mm

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Photovoltaic fuse-links gPV 1000VDC

Dimensions

NH fuse-base for NH fuse-links gPV, size 1, type PP, open design (1023573-NH1)

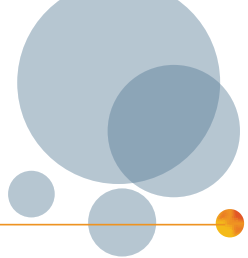


For multi-pole applications:

In case of installation of multi-pole units without phase barriers,

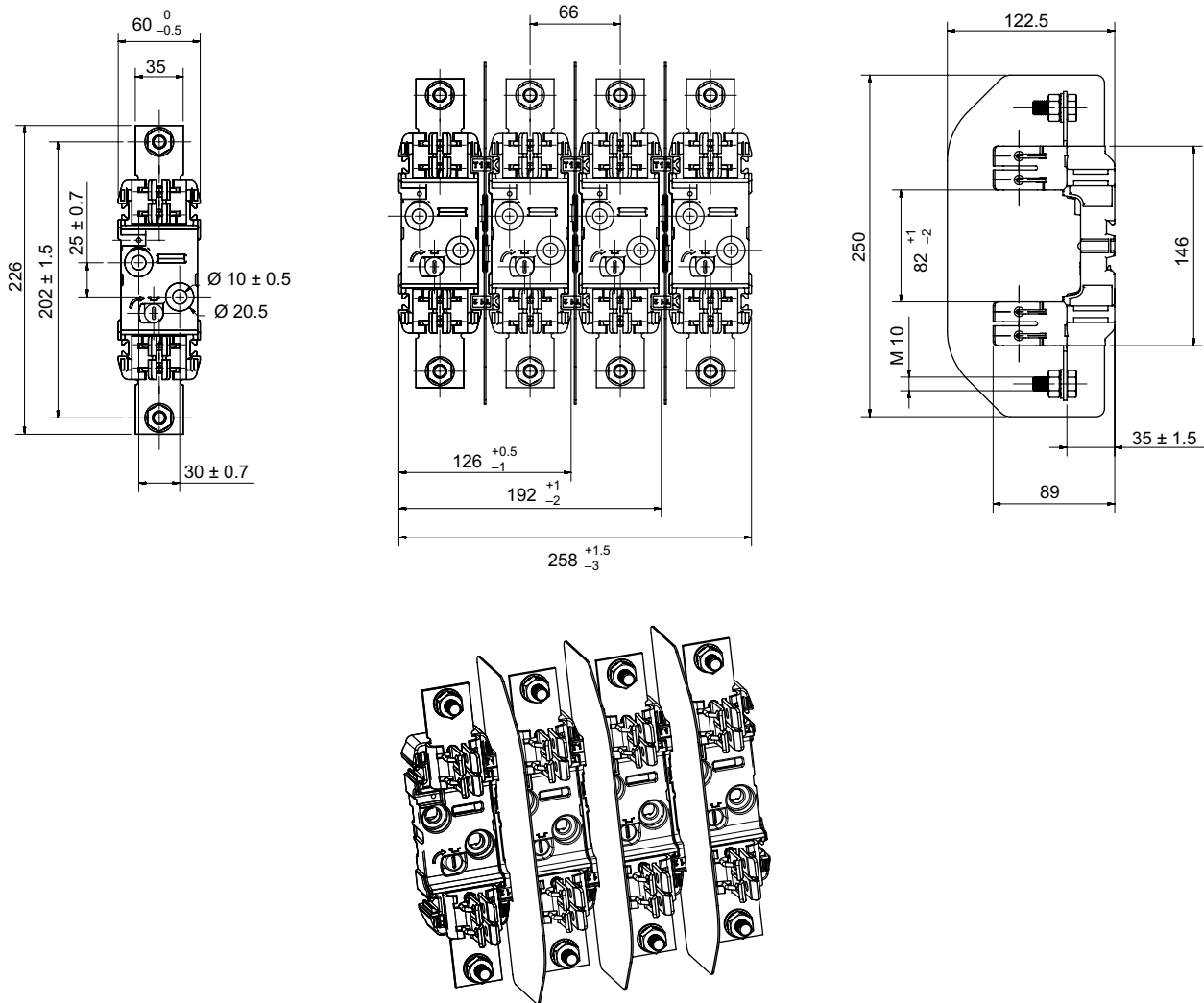
a distance of 8 mm must be considered between the live (current carrying) parts of the fuses (single units).

Dimensions in mm



Dimensions

NH fuse-base for NH fuse-links gPV, size 2, type PP, open design (1023573)

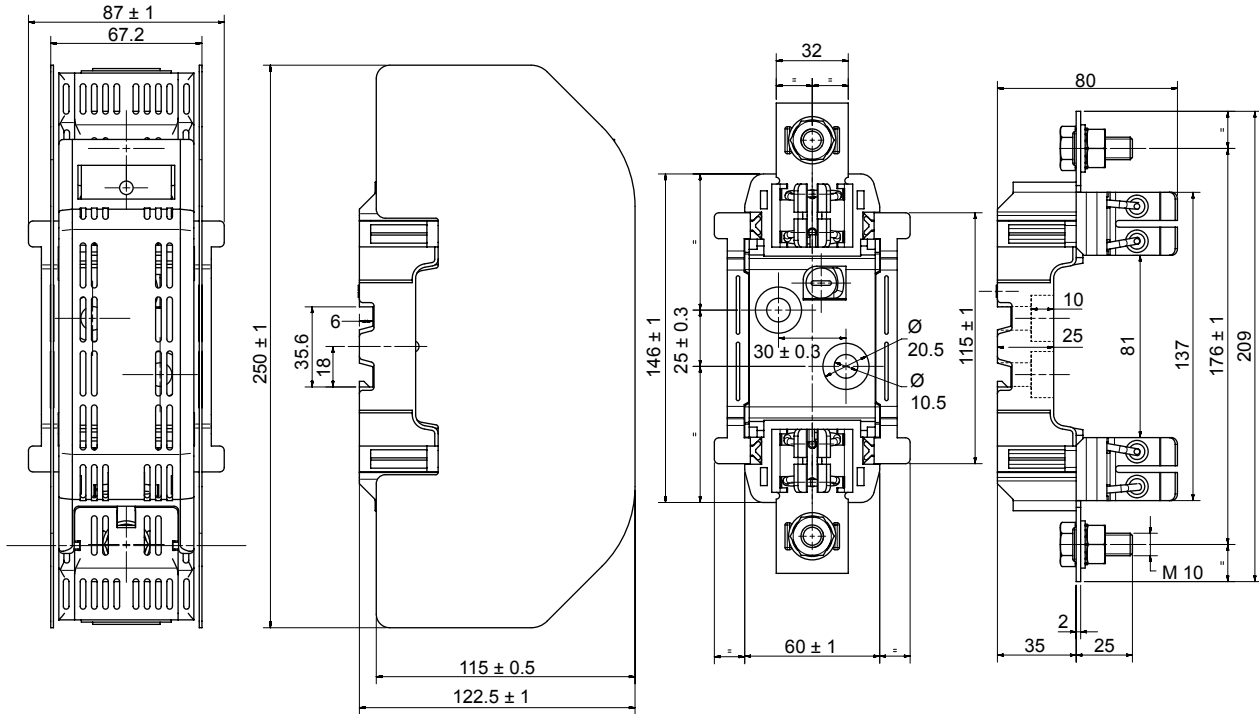


For multi-pole applications:
 In case of installation of multi-pole units without phase barriers,
 a distance of 8 mm must be considered between the live (current carrying) parts of the fuses (single units).

Dimensions in mm

Dimensions

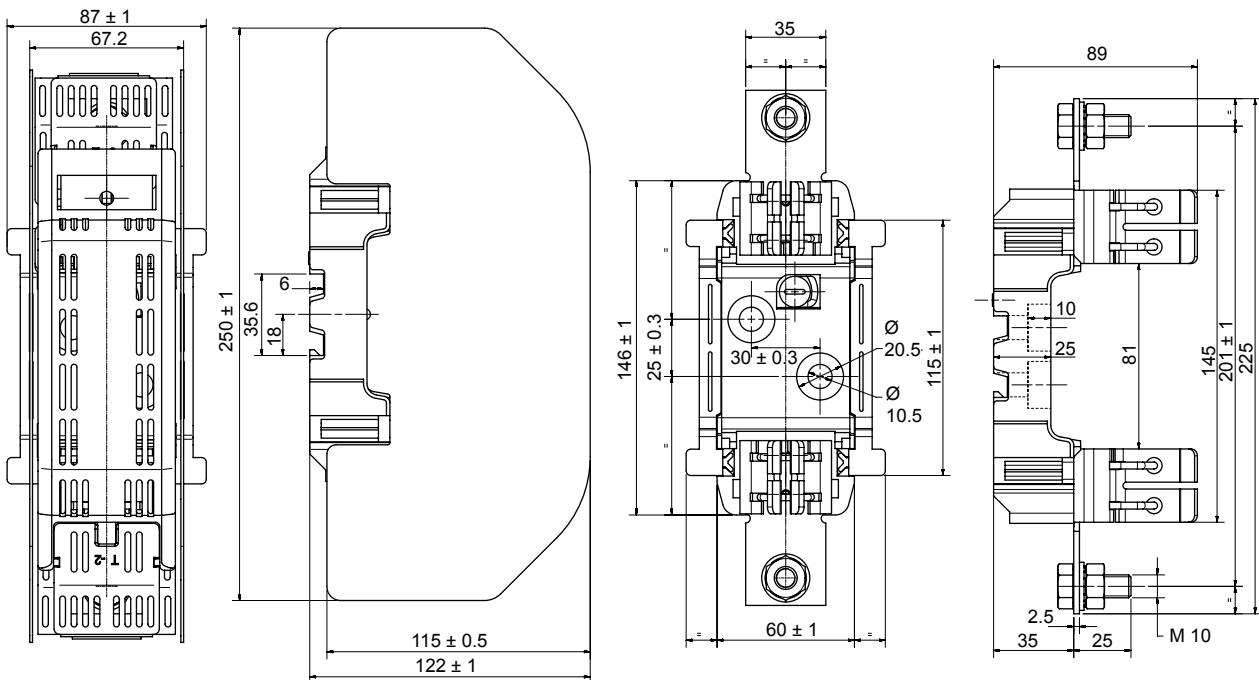
NH fuse-base for NH fuse-links gPV, size 1, type PP, with touch protection (1035224)



Dimensions in mm

Dimensions

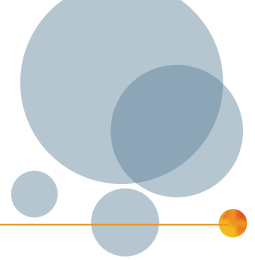
NH fuse-base for NH fuse-links gPV, size 2, type PP, with touch protection (1039109)



Dimensions in mm

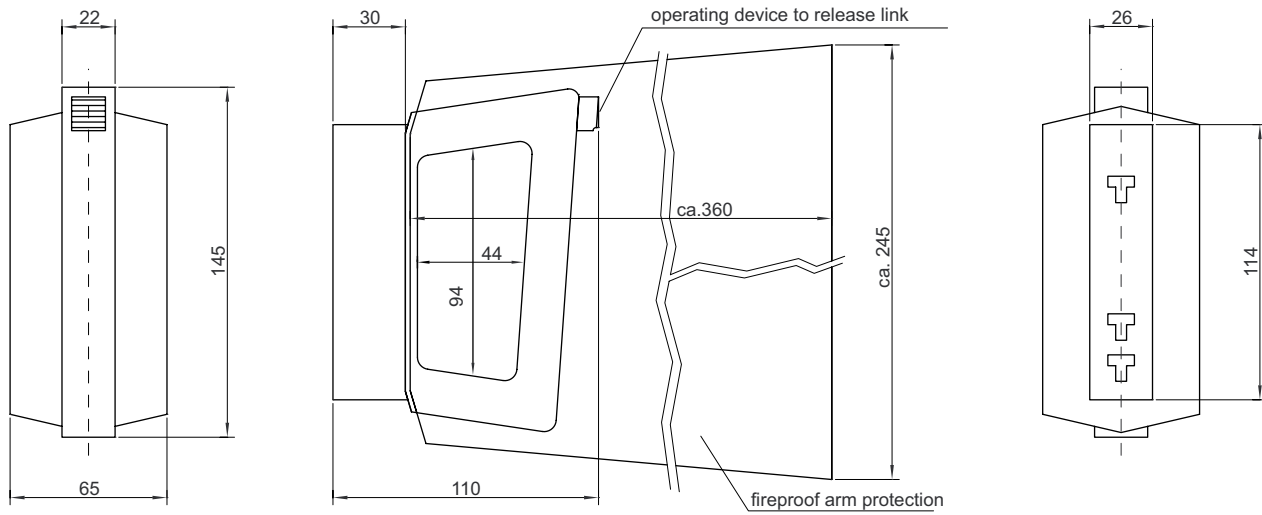
HelioProtection® HP10NH

Photovoltaic fuse-links gPV 1000VDC



Dimensions

NH fuse-handle for NH fuse-links size 00 to 4 (0127456)



Dimensions in mm