

HelioProtection® HP15NH3L

Photovoltaic fuse-links gPV 1500VDC

Photovoltaic NH fuses

Mersen HP15NH3L photovoltaic (PV) fuse series was engineered and designed specifically for the protection of photovoltaic systems. Helio-Protection® HP15NH3L 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

Applications

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

Technical data overview

Voltage DC	1500 VDC
Ampere Range (A)	250 ... 400 A
Speed/Characteristic	gPV
I.R. DC	50 kA (L/R = 1ms)
Product Size	NH3L



Standards

IEC 60269-6
UL 2579 (pending)
RoHS compliance



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Product range



HP15NH3LGPV250

HP15NH3L 1500VDC

Catalog number	Rated current I_n	Power dissipation at $0.7 \times I_n$	Power dissipation at I_n	Weight	Package
HP15NH3LGPV160	160 A	15 W	36 W	1.66 kg	1
HP15NH3LGPV200	200 A	18 W	44 W	1.66 kg	1
HP15NH3LGPV250	250 A	20 W	50 W	1.66 kg	1
HP15NH3LGPV315	315 A	23 W	57 W	1.66 kg	1
HP15NH3LGPV350	350 A	25 W	63 W	1.66 kg	1
HP15BH3LGPV400	400 A	28 W	71 W	1.66 kg	1



SP36122-123

Open fuse-bases for NH fuse-links gPV HP15NHXL, single pole, 1500VDC, SCCR 50kA

Catalog number	Reference number	Rated current I_n	Power acceptance	Rated impulse withstand voltage U_{imp}	Design	Weight	Package
SP36122-123	P1025054	630 A	95 W	8 kV	open design, screw mounting, for NH fuse-links NH2XL and NH3L and gPV fuse-link size 122-123 with blade contacts	1.1 kg	1



HPBB2XL3L1PPFS

Fuse-bases with touch protection for NH fuse-links gPV HP15NHXL, single pole, 1500VDC, SCCR 15kA

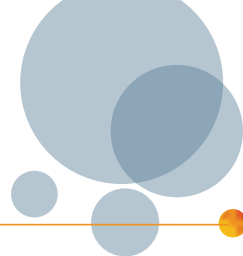
Catalog number	Reference number	Rated current I_n	Power acceptance	Rated impulse withstand voltage U_{imp}	Cable termination	Design	Weight	Package
HPBB2XL3L1PPFS	Z1039599	500 A	70 W	8 kV	M12 terminal screws M = 30Nm for cable lugs 300mm ²	with touch protection, screw mounting (M10, M = 8-10Nm), for NH fuse-links NH2XL and NH3L	1.03 kg	3
HPBB2XL3L1PBFS	A1039600	500 A	70 W	8 kV	M12 terminal screws M = 30Nm for cable lugs 300mm ²	with touch protection screw mounting (M10, M = 8-10Nm), and busbar output (1x40x10 or 2x40x10) for NH fuse-links NH2XL and NH3L (can accept NH3L fuse-links up to 630 A with derating)	1 kg	3



HPBB2XL3L1PBFS

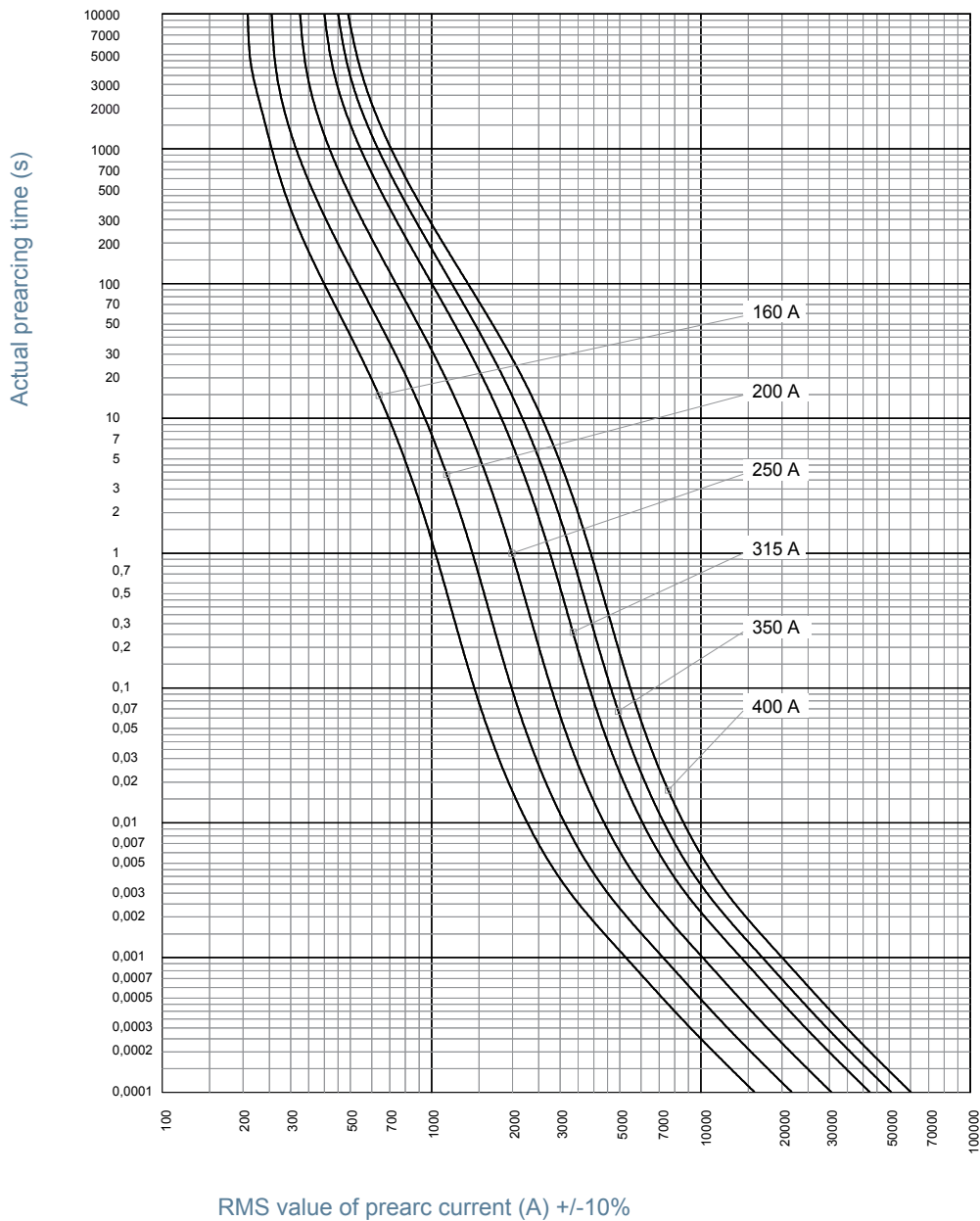
NH Fuse handle for NH fuse links HP15NHXL

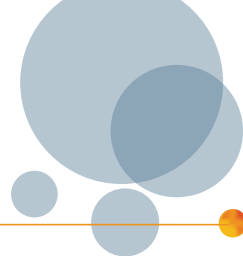
Catalog number	Reference number	Design	Weight	Package
POIGNEPM12	Y210402	without arm protection	0.435 kg	1



Time current characteristic curves

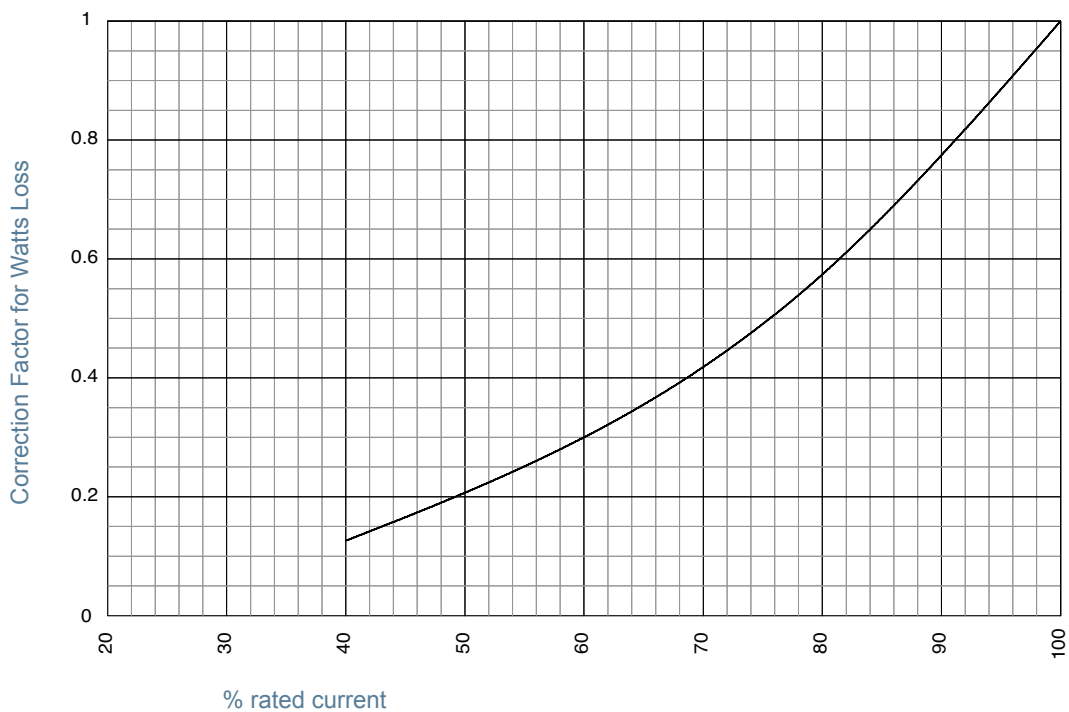
Special purpose gPV fuse link size NH3L CC 1500V 160-400A (2067100A-211)





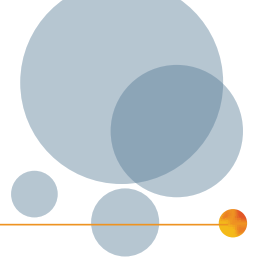
Correction factor

Watts loss vs % rated current (2067100A-211)



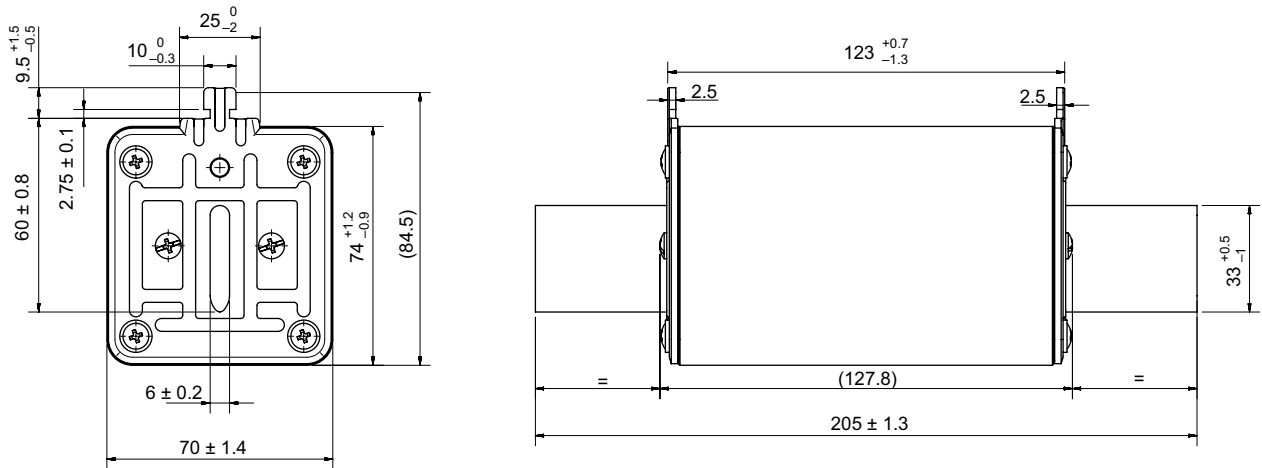
HelioProtection® HP15NH3L

Photovoltaic fuse-links gPV 1500VDC



Dimensions

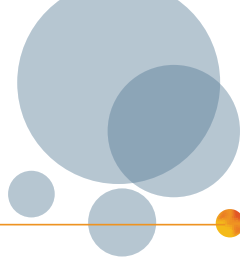
Special purpose gPV fuse link size NH3L without trip indicator (1026471A)



Dimensions in mm

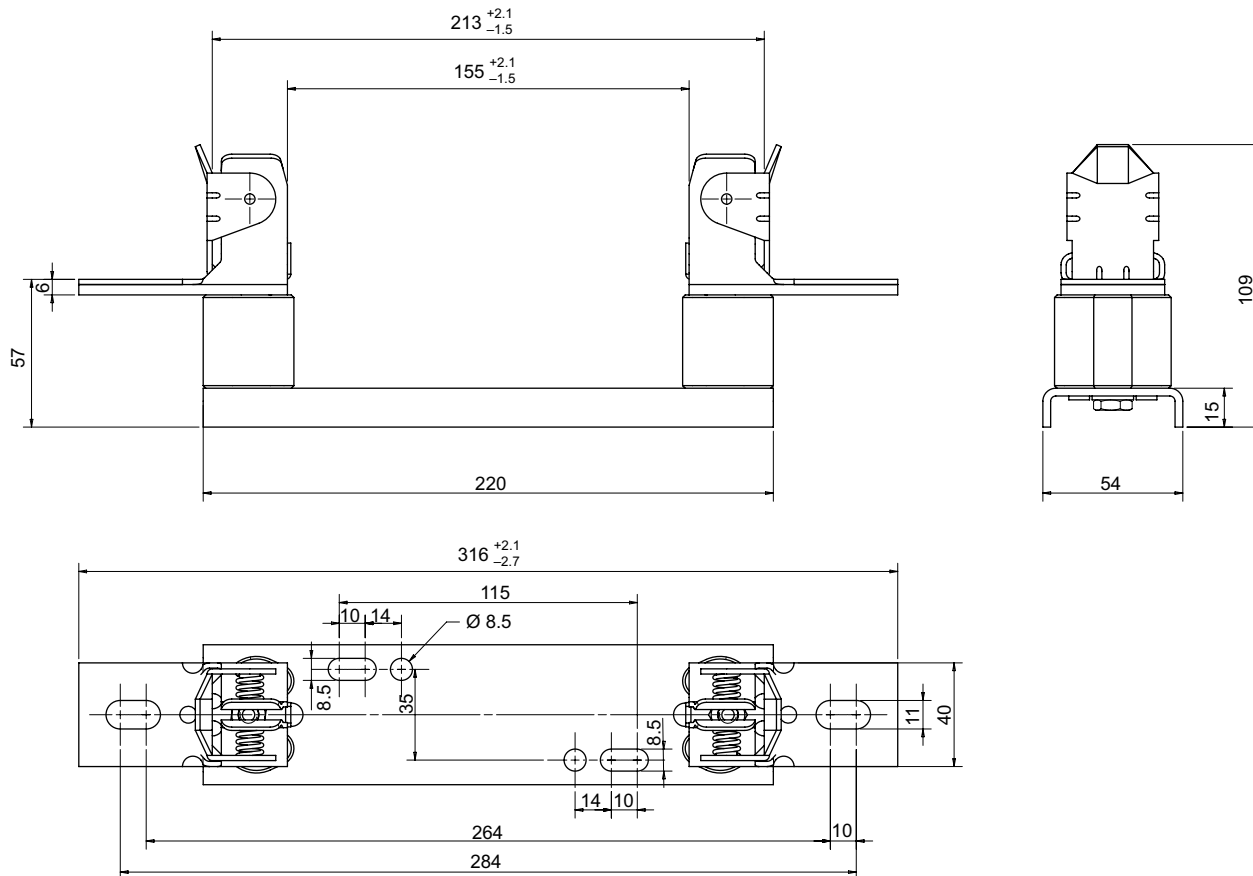
HelioProtection® HP15NH3L

Photovoltaic fuse-links gPV 1500VDC



Dimensions

NH fuse-base for NH fuse-links gPV, HP12NH2XL and HP12NH3L, open design (1025313)



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).

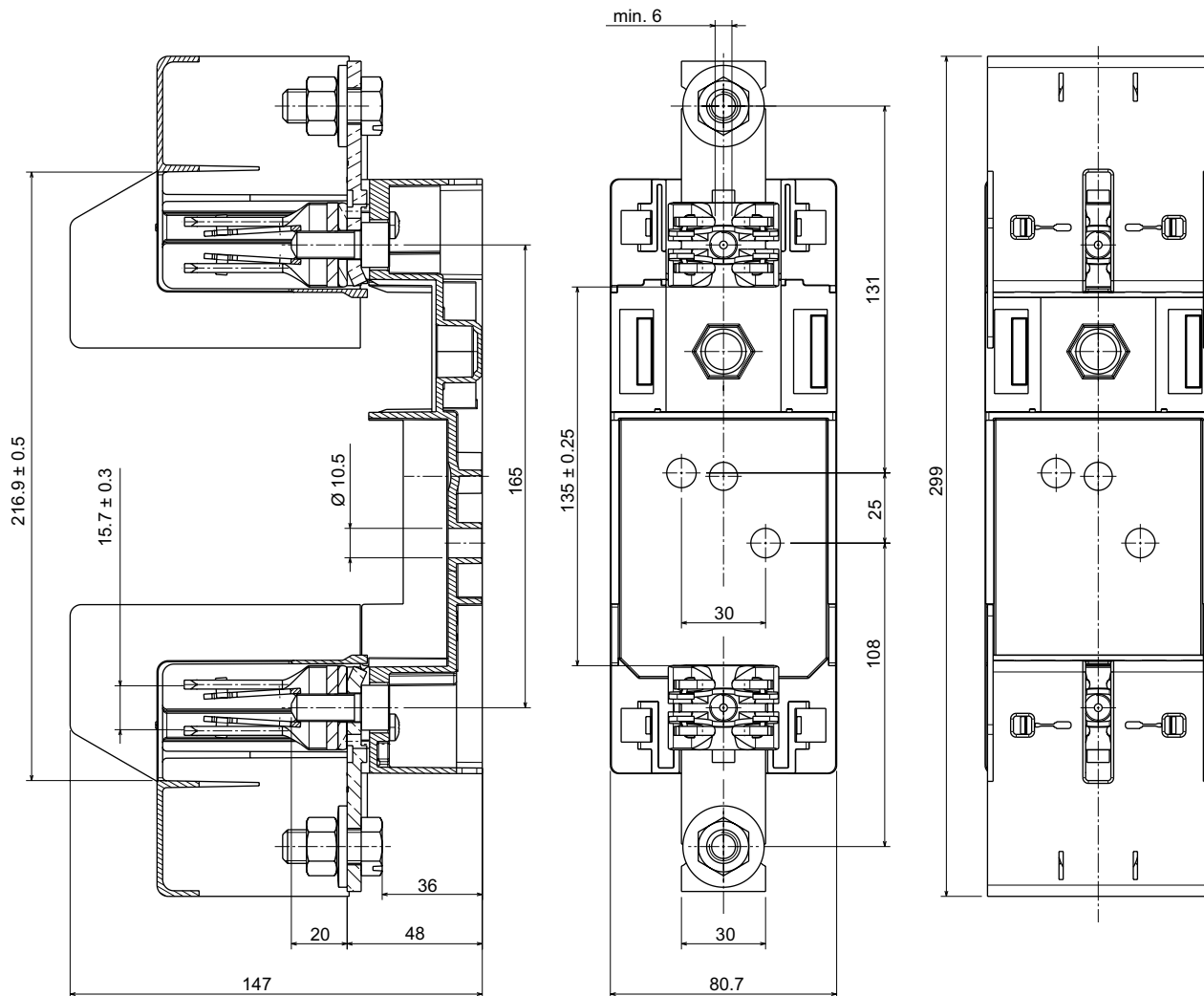
Dimensions in mm

HelioProtection® HP15NH3L

Photovoltaic fuse-links gPV 1500VDC

Dimensions

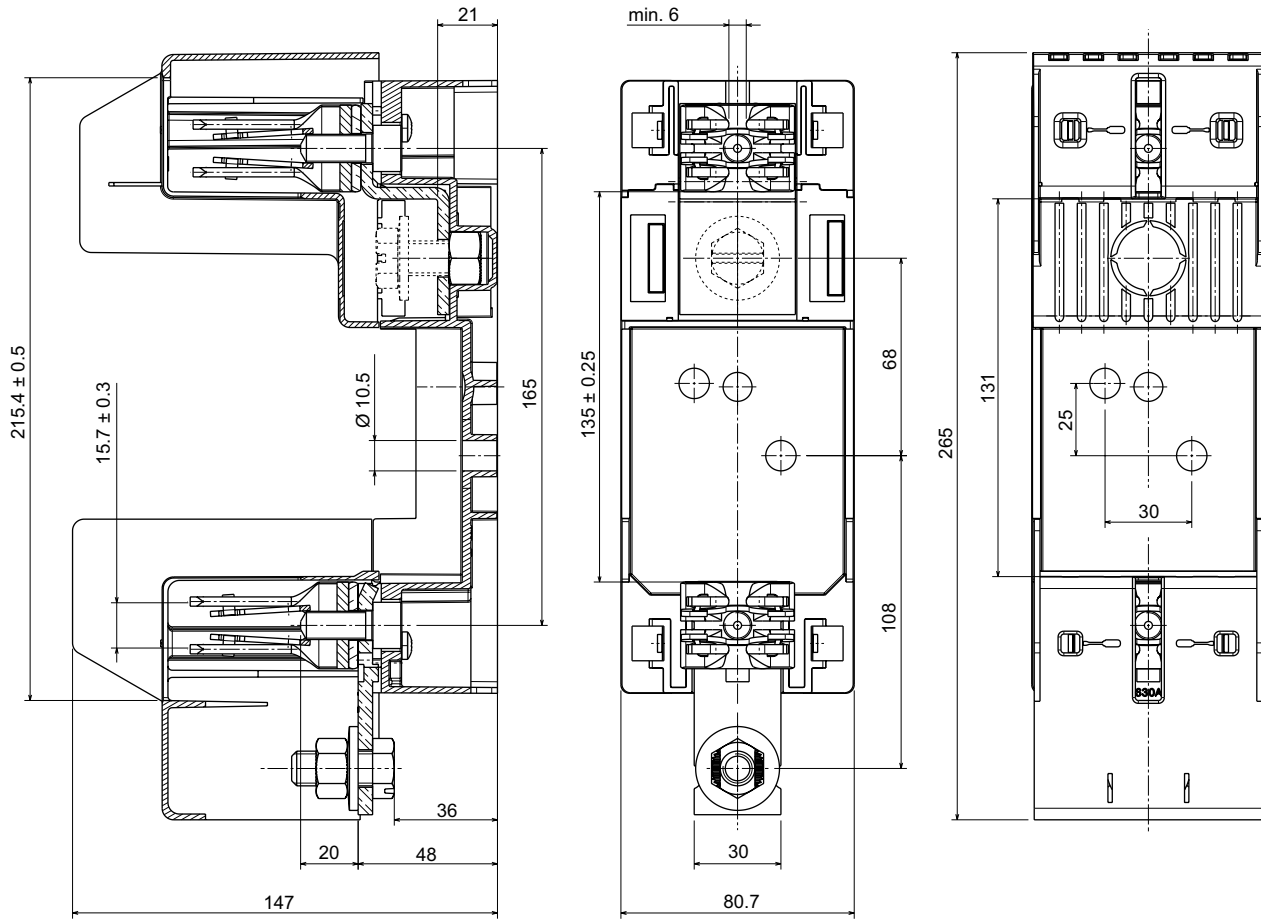
NH fuse-base for NH fuse-links gPV, HP12NH2XL and HP12NH3L, with touch protection (HPBB2XL3LPPFS)



Dimensions in mm

Dimensions

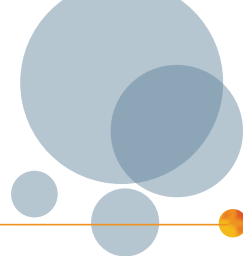
NH fuse base for HP12NH2XL and HP12NH3L with touch protection and busbar output (HPBB2XL3LPBFS)



Dimensions in mm

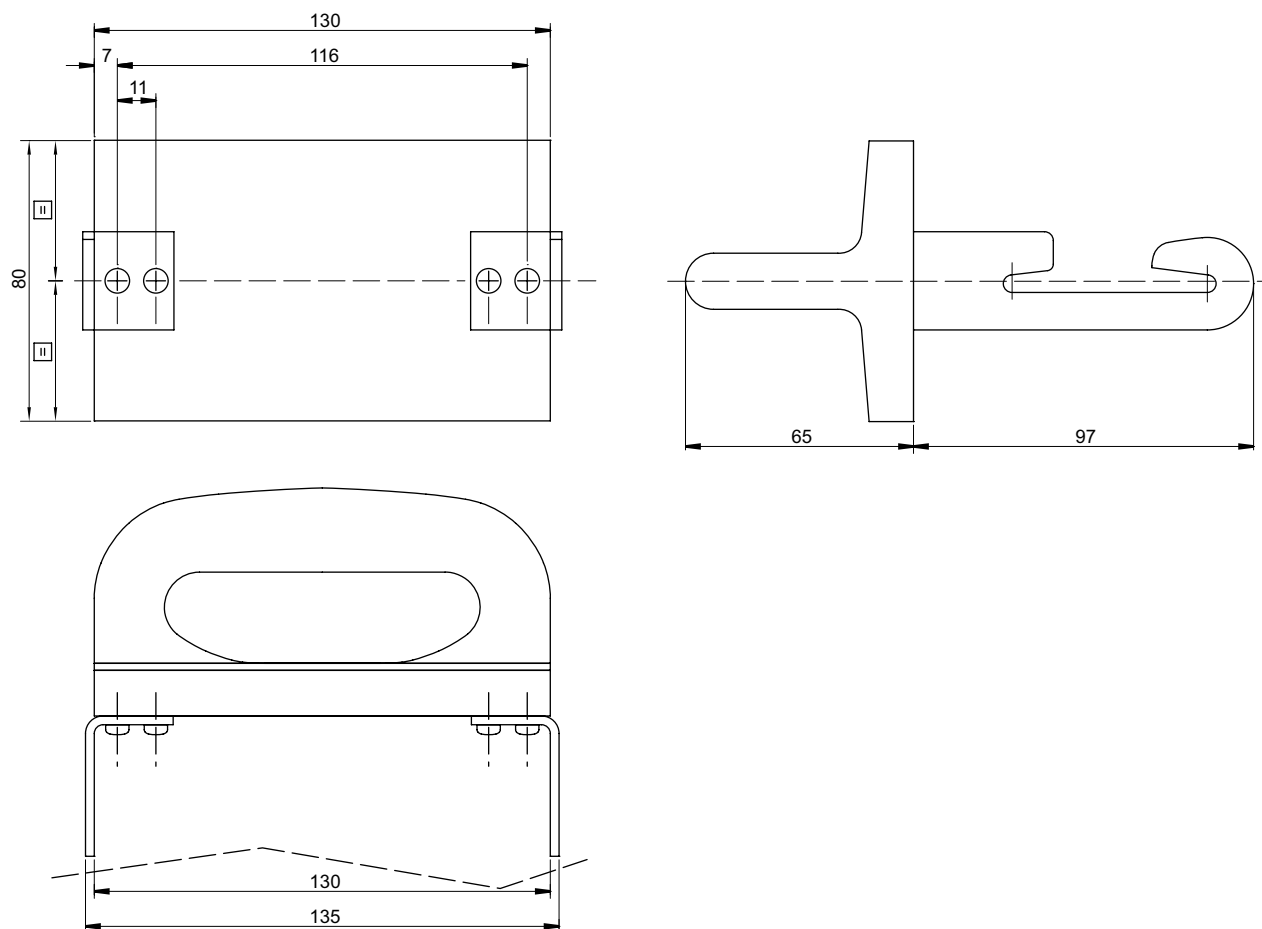
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Dimensions

NH fuse-handle for NH fus-links size 1XL 2XL and 3L (B114853)



Dimensions in mm