

HelioProtection® HP15NH3L

Photovoltaic fuse-links gPV 1500VDC

SPECIAL PURPOSE FUSES

PHOTOVOLTAIC 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.

They are available with bolted type blades for direct mounting and with striker.

TECHNICAL DATA OVERVIEW

Voltage DC	1500 VDC
Ampere Range (A)	160 ... 400 A
Speed/Characteristic	gPV
I.R. DC (UL)	50 kA (L/R = 1ms)
Product Size	NH3L
Operating temperature	-40°C - +70°C

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
- Available in 3 versions: plain blade, direct mounted, direct mounted with striker

APPLICATIONS

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

STANDARDS

- IEC 60269-6
- UL 2579
(E358319, Volume 1, Section 1)
- RoHS compliance



PRODUCT RANGE



HP15NH3LGPV250

NH-fuse-links gPV 1500VDC Plain Blade size 3L

Catalog number	Item number	Rated current I_n	Power dissipation at $0.7 \times I_n$	Power dissipation at I_n	Weight	Package
HP15NH3LGPV160	H1037859	160 A	15 W	36 W	1.69 kg	1
HP15NH3LGPV200	J1037860	200 A	18 W	44 W	1.69 kg	1
HP15NH3LGPV250	K1037861	250 A	20 W	50 W	1.69 kg	1
HP15NH3LGPV315	L1037862	315 A	23 W	57 W	1.69 kg	1
HP15NH3LGPV350	M1037863	350 A	25 W	63 W	1.69 kg	1
HP15NH3LGPV400	N1037864	400 A	28 W	71 W	1.69 kg	1



HP15NH3LGPV400B

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

Catalog number	Item number	Rated current I_n	Power dissipation at $0.7 \times I_n$	Power dissipation at I_n	Weight	Package
HP15NH3LGPV160B	T1048679	160 A	15 W	36 W	1.66 kg	1
HP15NH3LGPV200B	V1048680	200 A	18 W	44 W	1.66 kg	1
HP15NH3LGPV250B	W1048681	250 A	20 W	50 W	1.66 kg	1
HP15NH3LGPV315B	X1048682	315 A	23 W	57 W	1.66 kg	1
HP15NH3LGPV350B	Y1048683	350 A	25 W	63 W	1.66 kg	1
HP15NH3LGPV400B	Z1048684	400 A	28 W	71 W	1.66 kg	1



HP15NH3LPV400BI

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

Catalog number	Item number	Rated current I_n	Power dissipation at $0.7 \times I_n$	Power dissipation at $0.8 I_n$	Power dissipation at I_n	Weight	Package
HP15NH3LPV160BI	A1057218	160 A	15 W	20 W	36 W	1.66 kg	1
HP15NH3LPV200BI	B1057219	200 A	18 W	25 W	44 W	1.66 kg	1
HP15NH3LPV250BI	C1057220	250 A	20 W	28 W	50 W	1.66 kg	1
HP15NH3LPV315BI	D1057221	315 A	23 W	32 W	57 W	1.66 kg	1
HP15NH3LPV350BI	E1057222	350 A	25 W	35 W	63 W	1.66 kg	1
HP15NH3LPV400BI	F1057223	400 A	28 W	40 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	Item 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	1.39 kg	1

PRODUCT RANGE



HPBB2XL3L1PPFS



HPBB2XL3L1PBFS

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

Catalog number	Item 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	1.1033 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)	1.1333 kg	3

NH Fuse handle for NH fuse links HP15NHXL

Catalog number	Item number	Design	Weight	Package
POIGNEEPM12	Y210402	without arm protection	0.435 kg	1



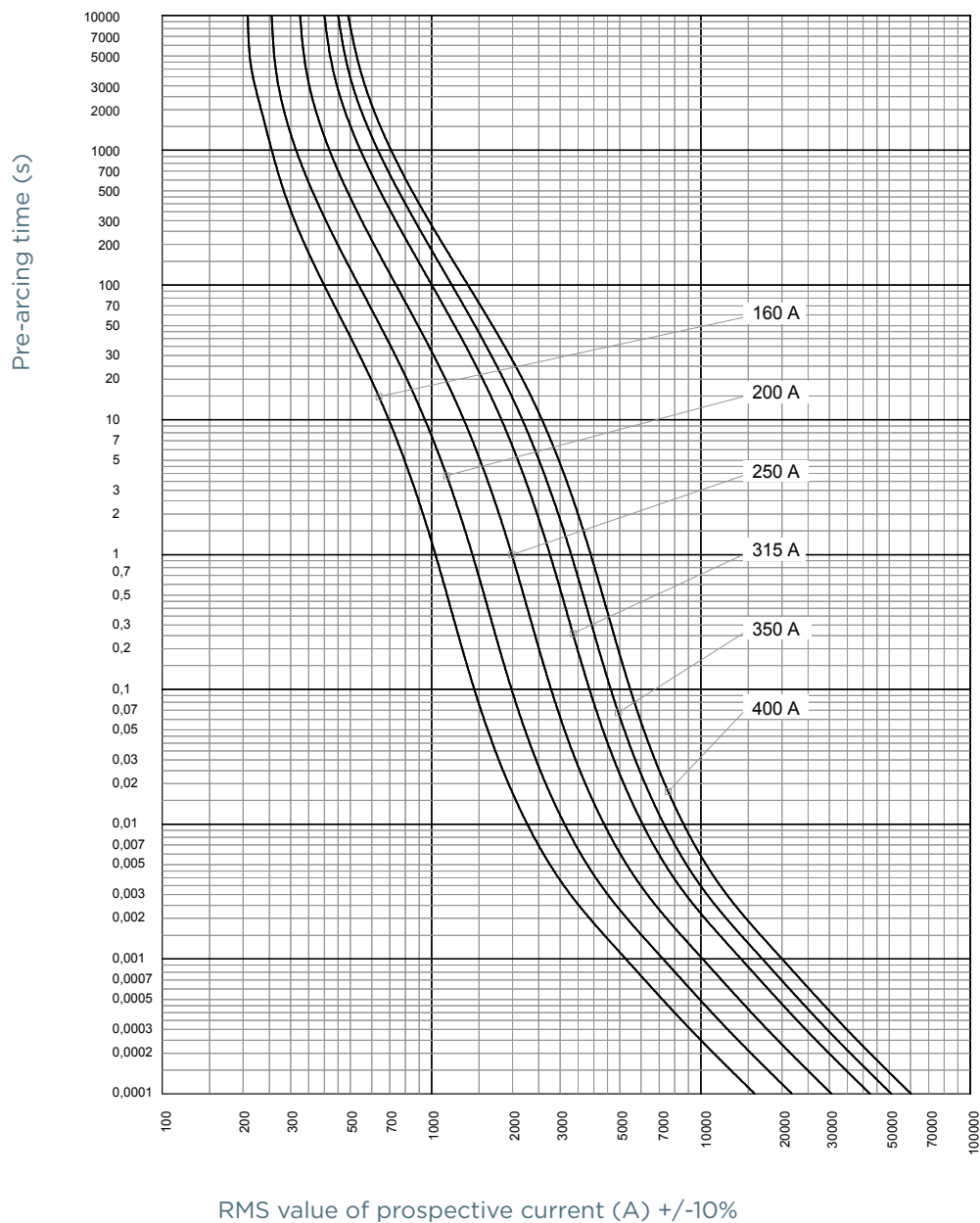
MC3E1-5N

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

Catalog number	Item number	Rated current I_n	Rated impulse withstand voltage U_{imp}	Indication System	Weight	Package
MC3E1-5N	D310020	5 A	20 kV	Standard	32 g	3

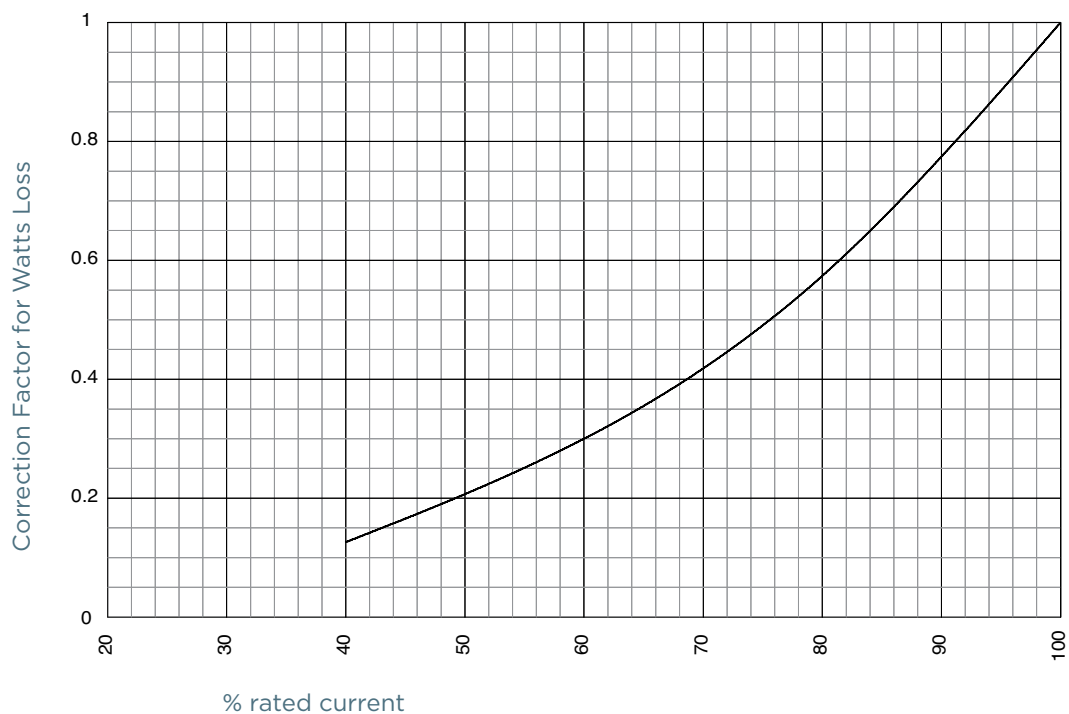
TIME CURRENT CHARACTERISTIC CURVES

Special purpose gPV fuse link size 3L 1500V 160-400A

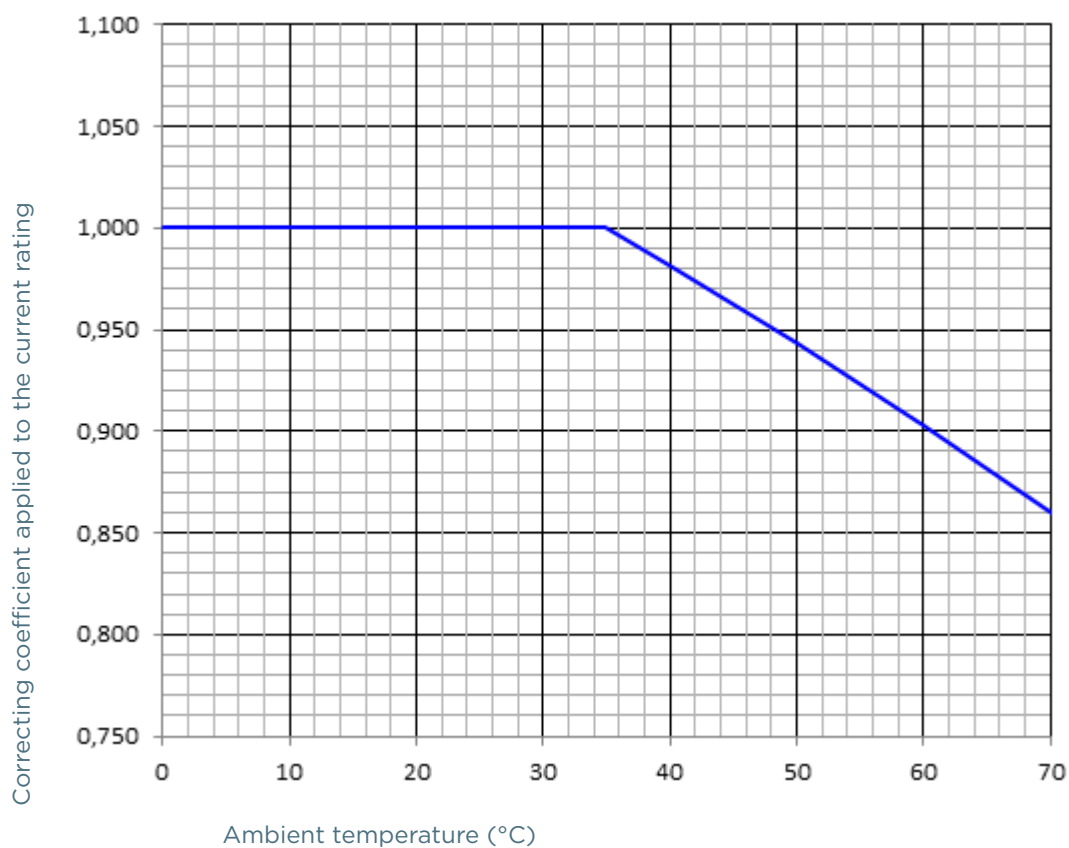


CORRECTION FACTOR

Watts loss vs % rated current

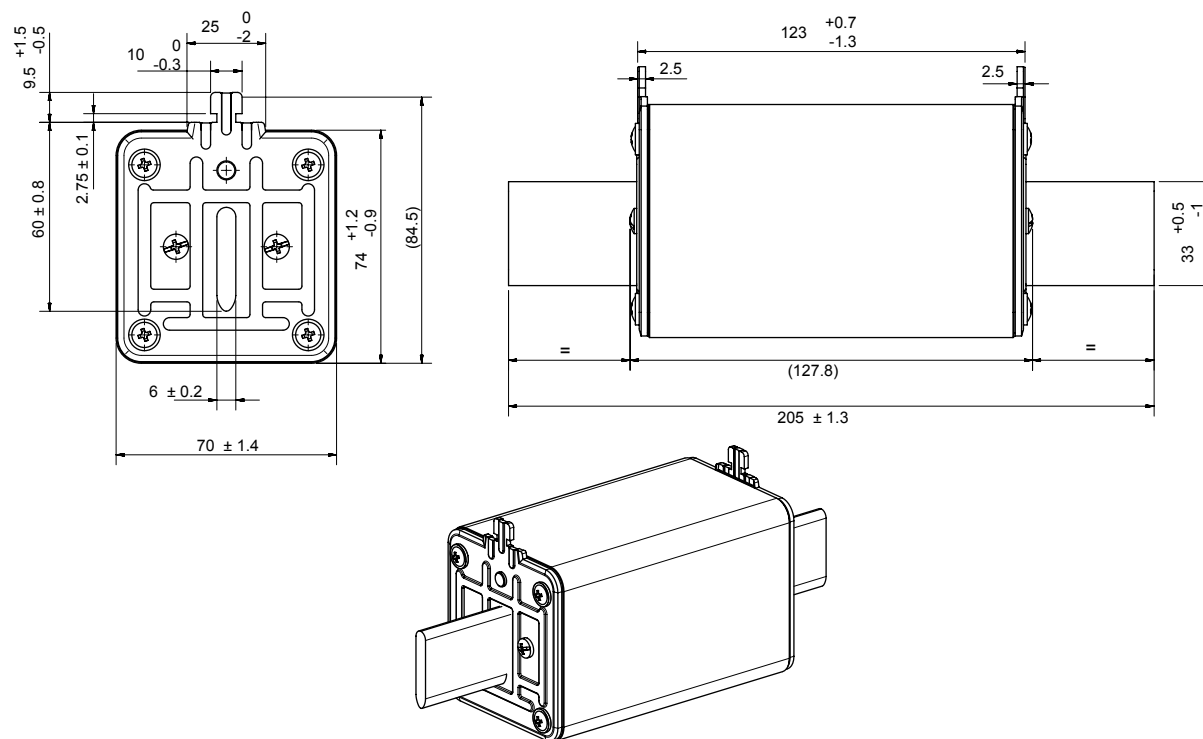


TEMPERATURE DERATING



DIMENSIONS

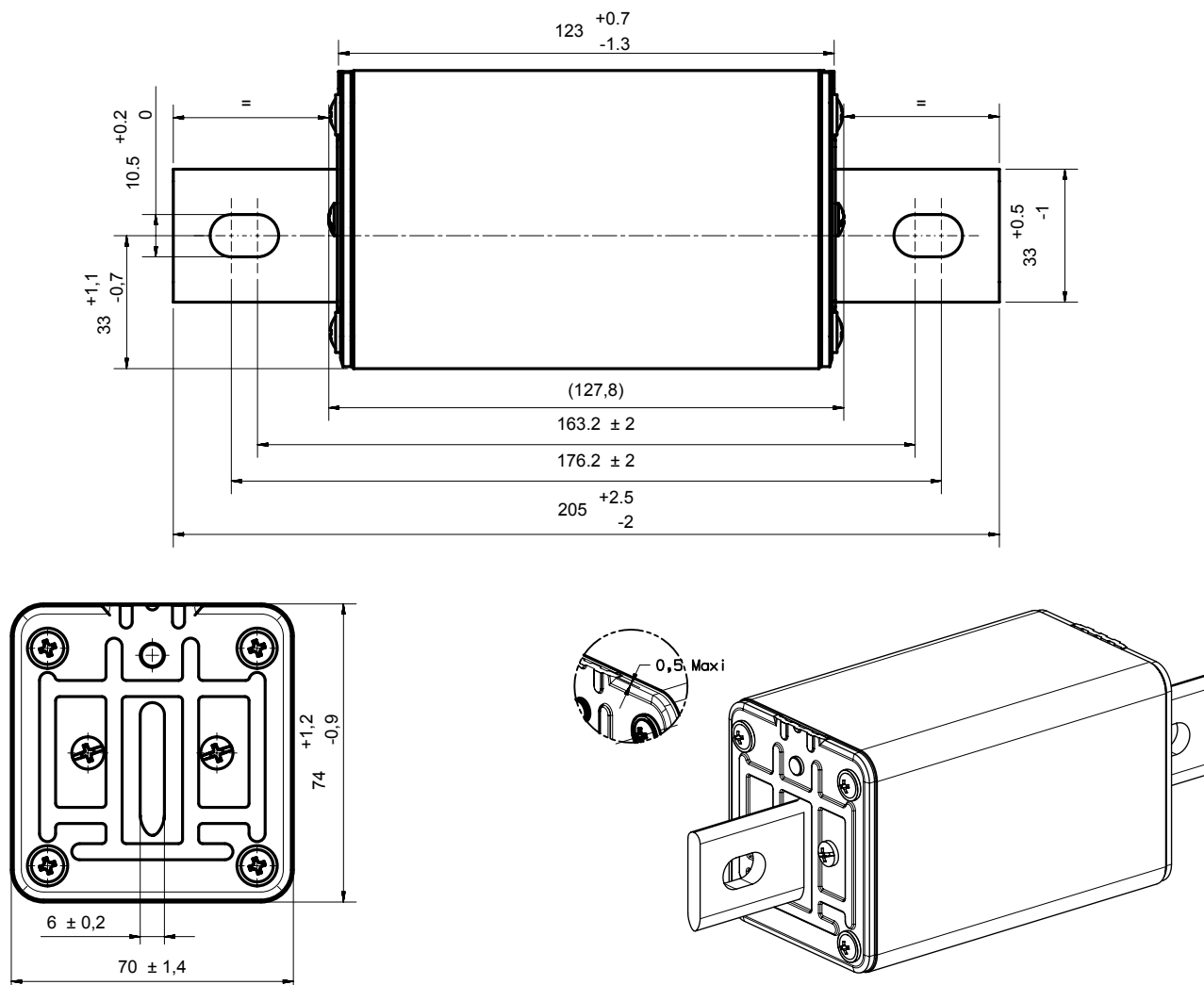
Special purpose gPV fuse link size 3L Plain Blade without trip indicator



Dimensions in mm

DIMENSIONS

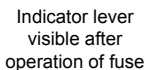
Special purpose gPV fuse link size 3L Direct Mounting without trip indicator and without lugs



Dimensions in mm

DIMENSIONS

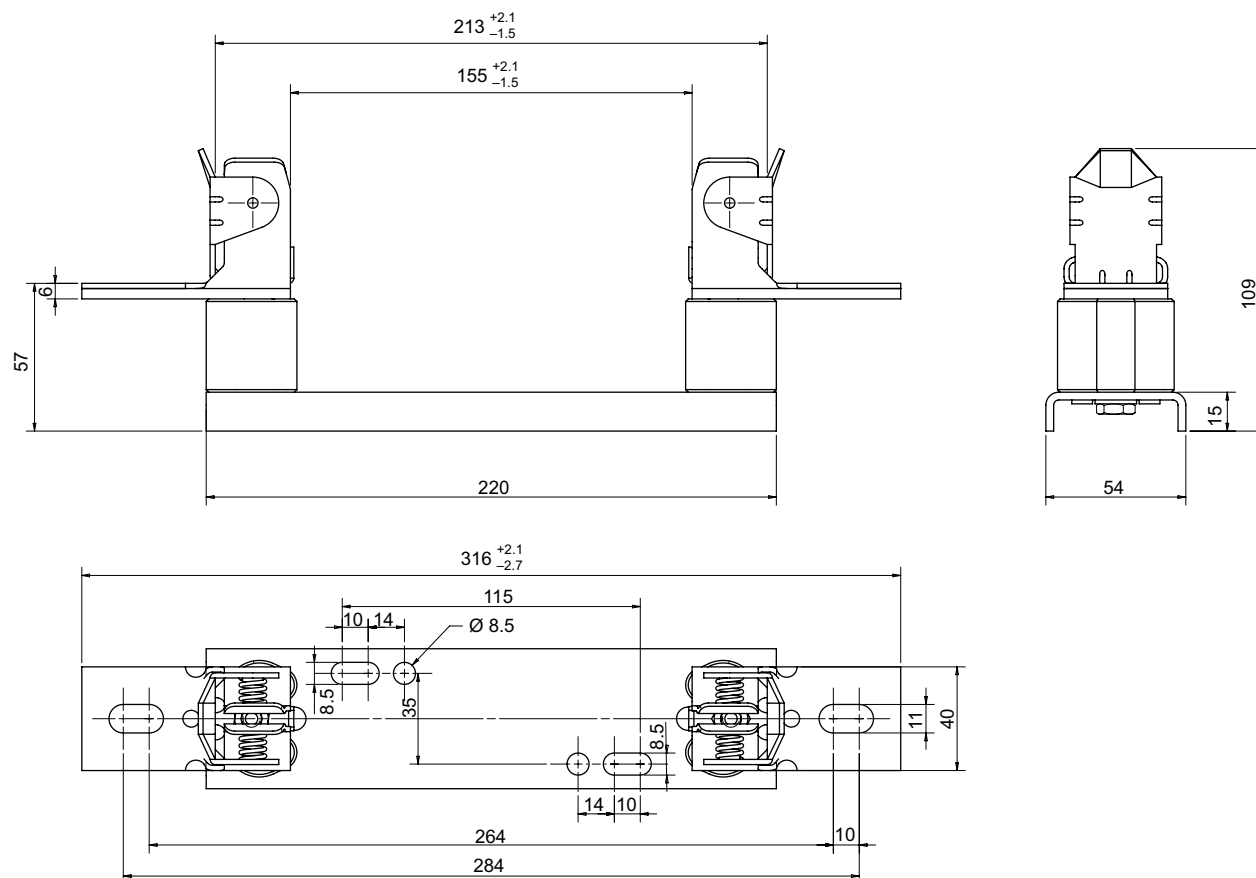
Special purpose gPV fuse link size 3L Direct Mounting with striker and without lugs



Dimensions in mm

DIMENSIONS

NH fuse-base for NH fuse-links gPV sizes 2XL and 3L, open design



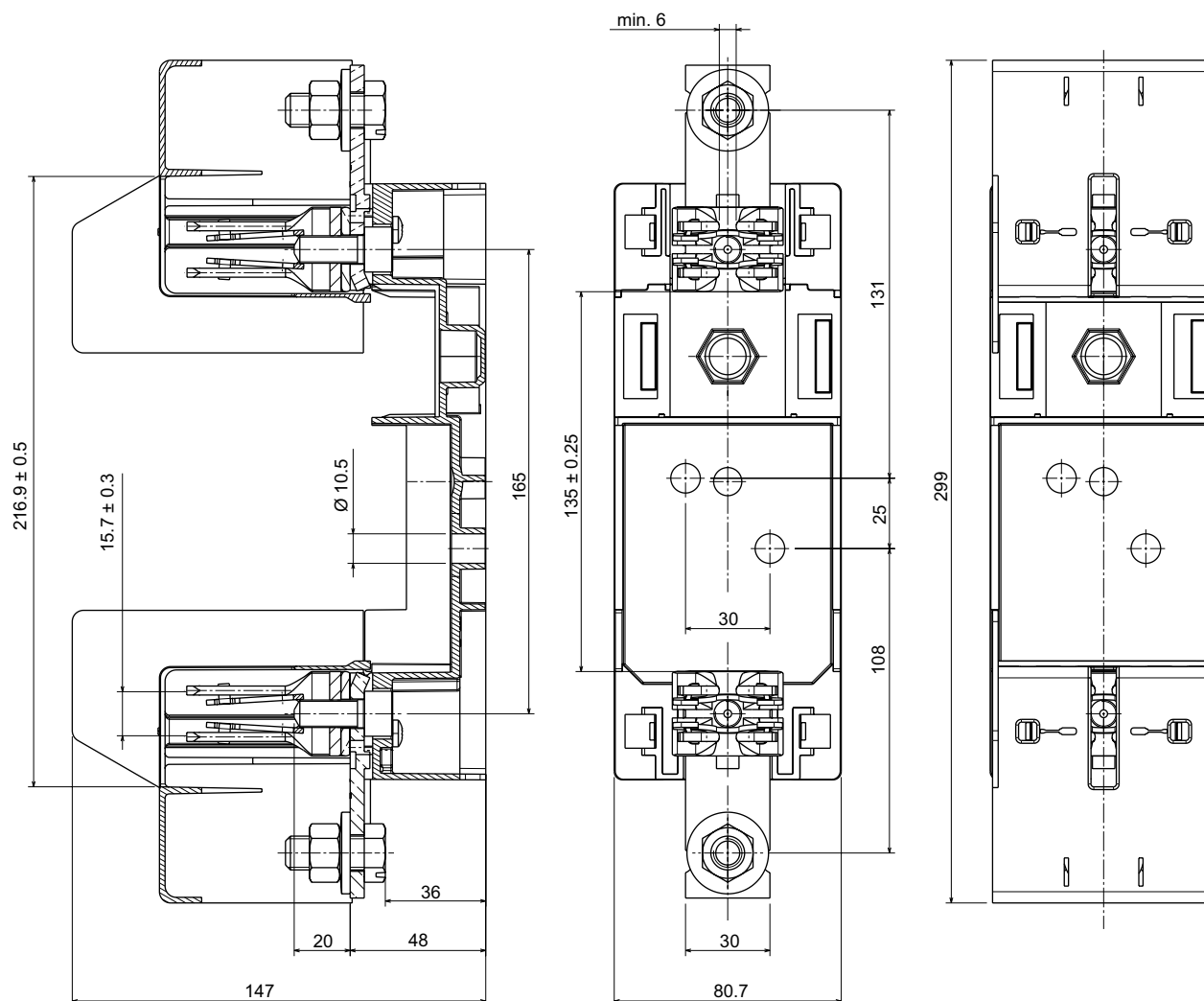
Para montajes multipolares:

En caso de una instalacion multipolar sin placas de separación, se debera dejar una distancia de 8mm entre las partes vivas de los fusibles.

Dimensions in mm

DIMENSIONS

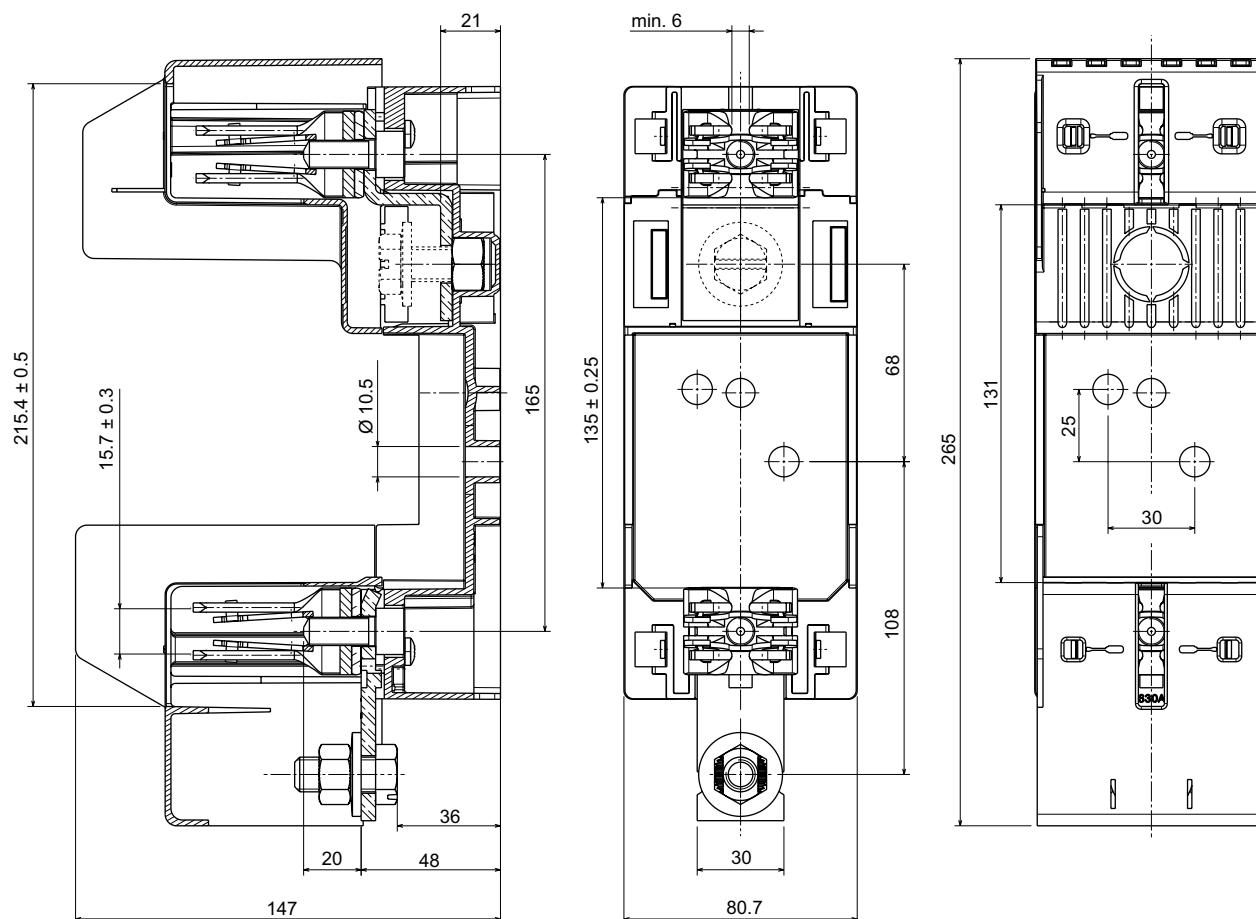
NH fuse-base for NH fuse-links gPV sizes 2XL and 3L, with touch protection



Dimensions in mm

DIMENSIONS

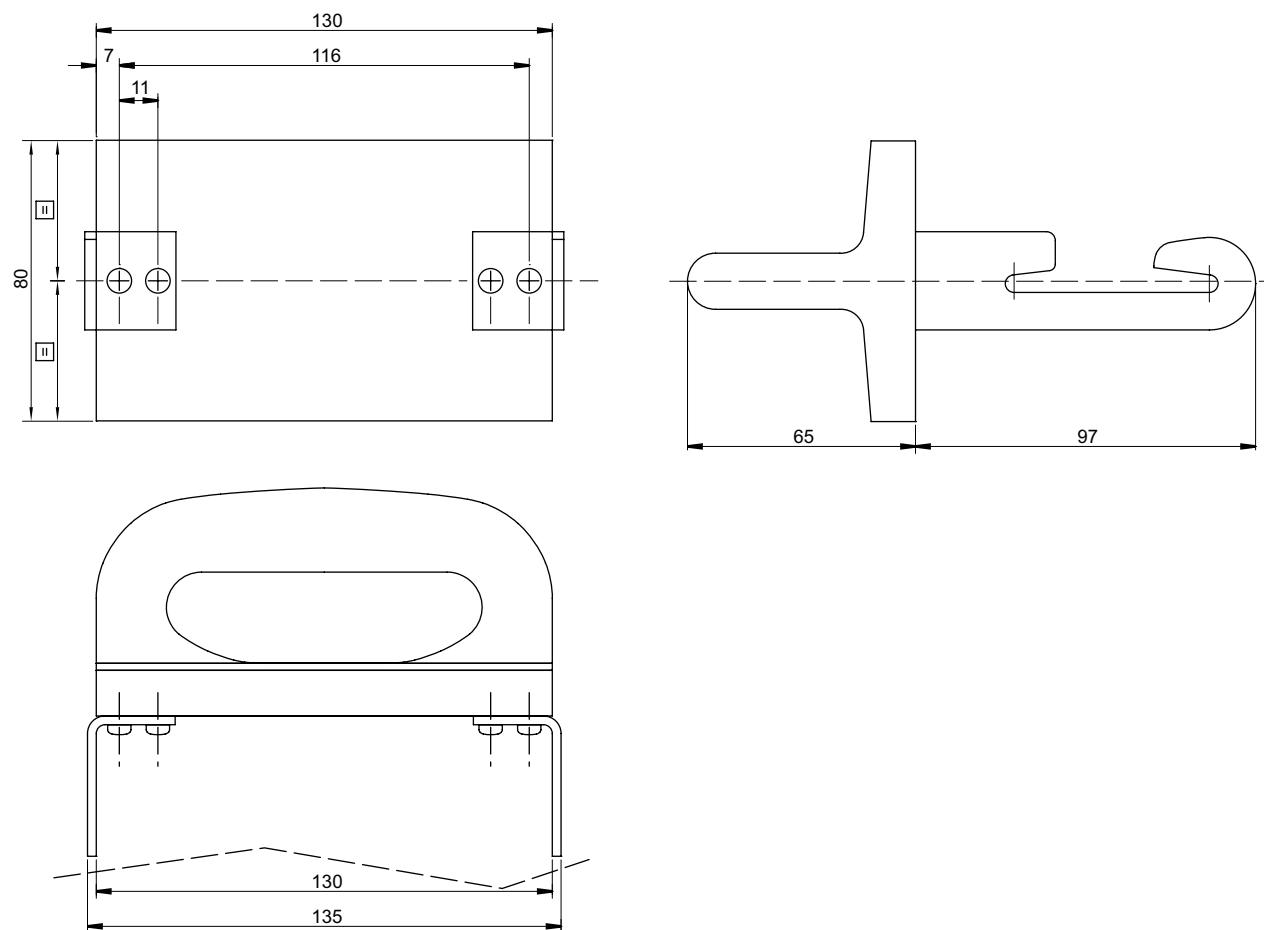
NH fuse base for sizes 2XL and 3L with touch protection and busbar output



Dimensions in mm

DIMENSIONS

NH fuse-handle for NH fus-links sizes 1XL 2XL and 3L



Dimensions in mm