

# HelioProtection® HP12NHXL

Photovoltaic fuse-links gPV 1250VDC

## SPECIAL PURPOSE FUSES

## PHOTOVOLTAIC FUSES



Mersen HP12NH photovoltaic (PV) fuse series was engineered and designed specifically for the protection of photovoltaic systems. Helio-Protection® HP12NH 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 also available with bolted type blades for direct mounting.

## TECHNICAL DATA OVERVIEW

Voltage DC	1250 VDC
Ampere Range (A)	125 ... 400 A
Speed/Characteristic	gPV
I.R. DC (UL)	50 kA (L/R = 1ms)
Product Size	NH1XL, NH2XL, NH3L

## 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
- RoHS compliance



MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

## PRODUCT RANGE



HP12NH1XLGPV160

### NH fuse links gPV 1250VDC Plain Blade size 1XL

Catalog number	Item number	Rated current $I_n$	Power dissipation at $I_n$	Power dissipation at $0.7 \times I_n$	Package	Weight
HP12NH1XLGPV125	G1039744	125 A	29 W	11.5 W	1	0.44 kg
HP12NH1XLGPV160	H1039745	160 A	36 W	14.5 W	1	0.70 kg

### NH fuse links gPV 1250VDC Direct Mounting size 1XL

Catalog number	Item number	Rated current $I_n$	Power dissipation at $I_n$	Power dissipation at $0.7 \times I_n$	Package
HP12NH1LGPV125B	K1048671	125 A	29 W	11.5 W	1
HP12NH1LGPV160B	L1048672	160 A	36 W	14.5 W	1



HP12NH2XLGPV200

### NH fuse links gPV 1250VDC Plain Blade size 2XL

Catalog number	Item number	Rated current $I_n$	Power dissipation at $I_n$	Power dissipation at $0.7 \times I_n$	Package	Weight
HP12NH2XLGPV200	J1039746	200 A	40 W	16 W	1	1.05 kg
HP12NH2XLGPV250	K1039747	250 A	44 W	18 W	1	1.05 kg

### NH fuse links gPV 1250VDC Direct Mounting size 2XL

Catalog number	Item number	Rated current $I_n$	Power dissipation at $I_n$	Power dissipation at $0.7 \times I_n$	Package
HP12NH2LGPV200B	M1048673	200 A	40 W	16 W	1
HP12NH2LGPV250B	N1048674	250 A	44 W	18 W	1



HP12NH3LGPV315

### NH fuse-links gPV 1250VDC Plain Blades size 3L

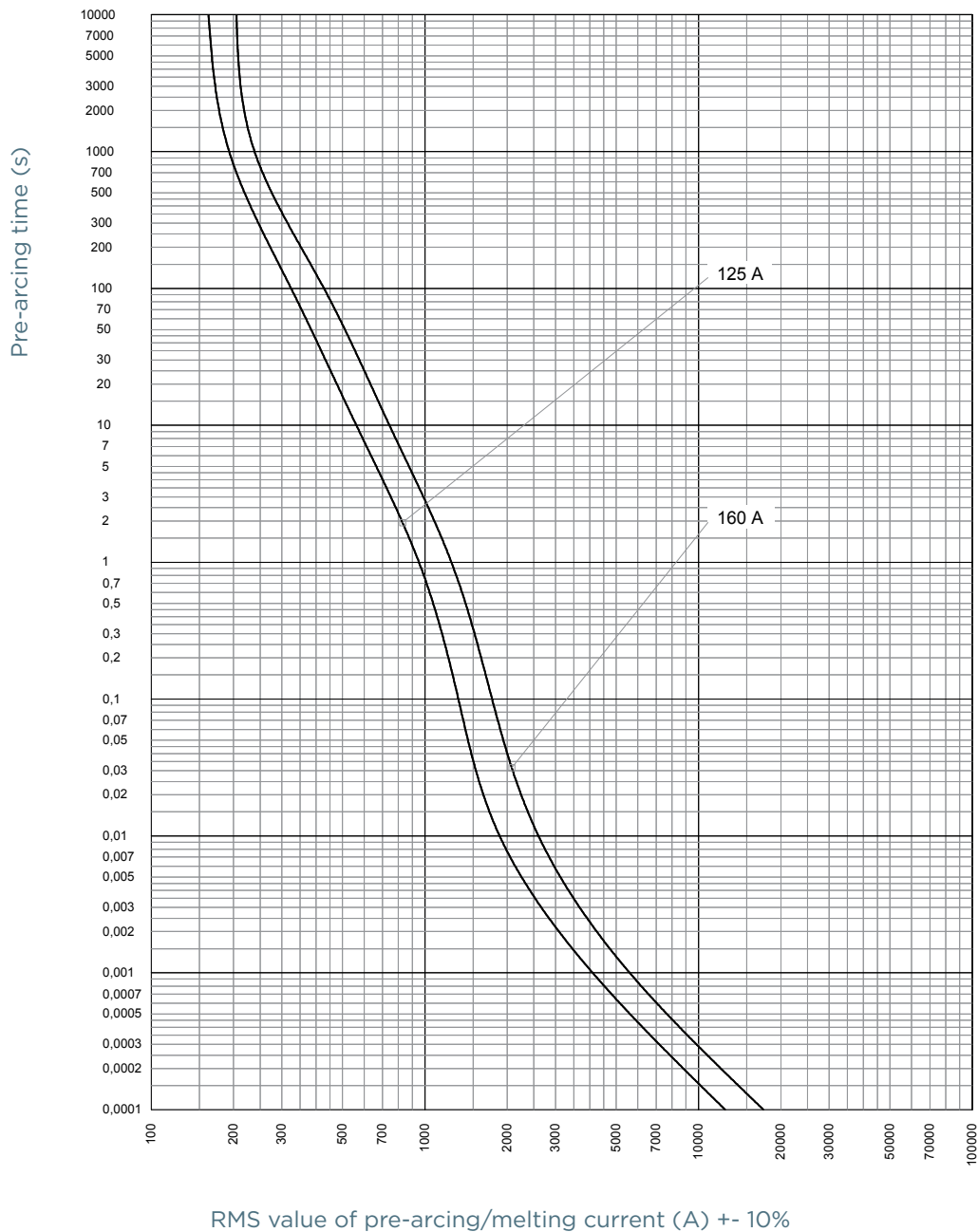
Catalog number	Item number	Rated current $I_n$	Power dissipation at $I_n$	Power dissipation at $0.7 \times I_n$	Package	Weight
HP12NH3LGPV250	Z1033389	250 A	53 W	18 W	1	1.66 kg
HP12NH3LGPV315	A1033390	315 A	55 W	22 W	1	1.66 kg
HP12NH3LGPV350	B1033391	350 A	53 W	23 W	1	1.66 kg
HP12NH3LGPV400	C1033392	400 A	55 W	29 W	1	1.66 kg

### NH fuse-links gPV 1250VDC Direct Mounting size 3L

Catalog number	Item number	Rated current $I_n$	Power dissipation at $I_n$	Power dissipation at $0.7 \times I_n$	Package	Weight
HP12NH3LGPV250B	P1048675	250 A	55 W	18 W	1	1.66 kg
HP12NH3LGPV315B	Q1048676	315 A	73 W	22 W	1	1.66 kg
HP12NH3LGPV350B	R1048677	350 A	55 W	23 W	1	1.66 kg
HP12NH3LGPV400B	S1048678	400 A	73 W	29 W	1	1.66 kg

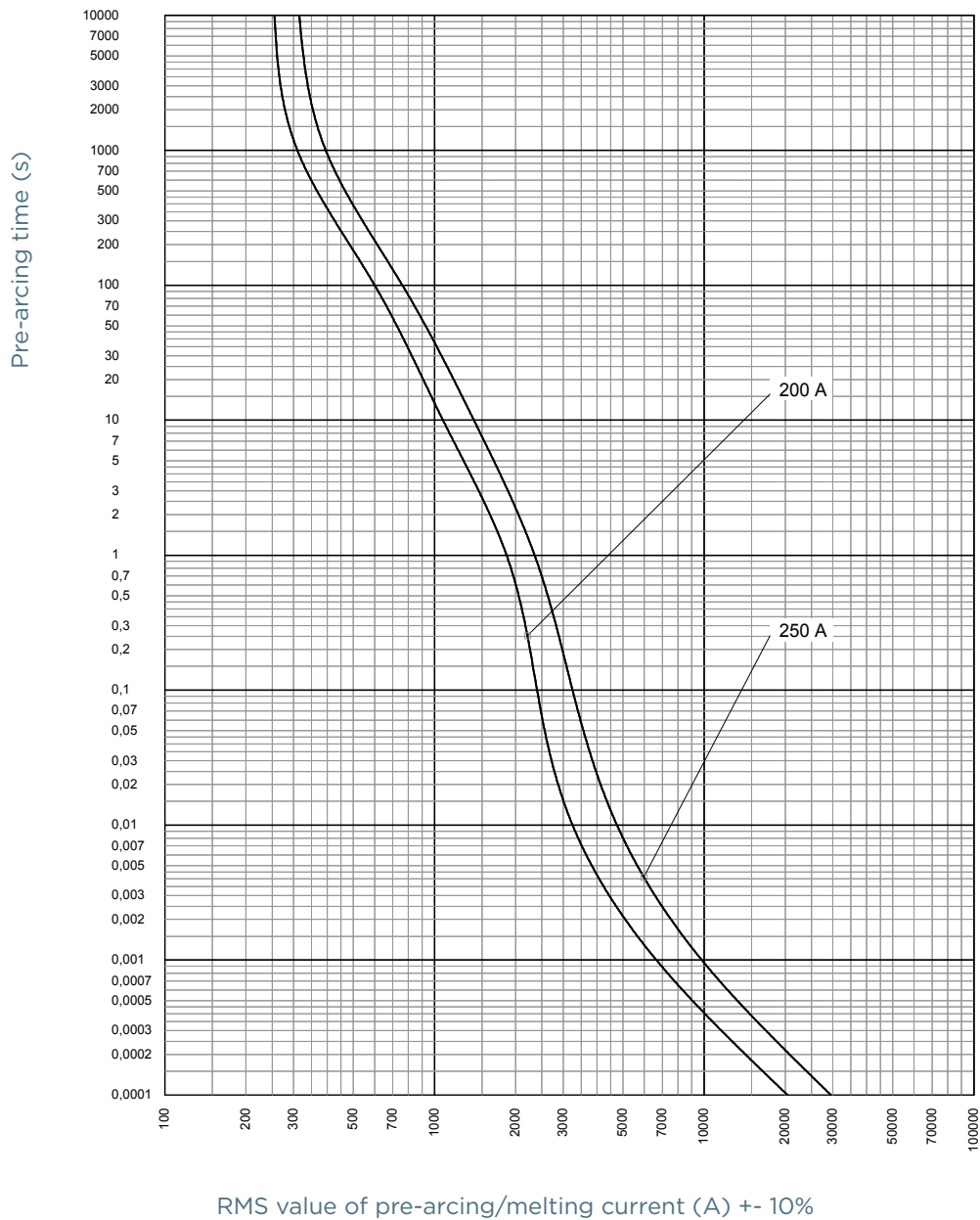
## TIME CURRENT CHARACTERISTIC CURVES

### Special purpose gPV fuse link size 1XL 1250V 125-160A



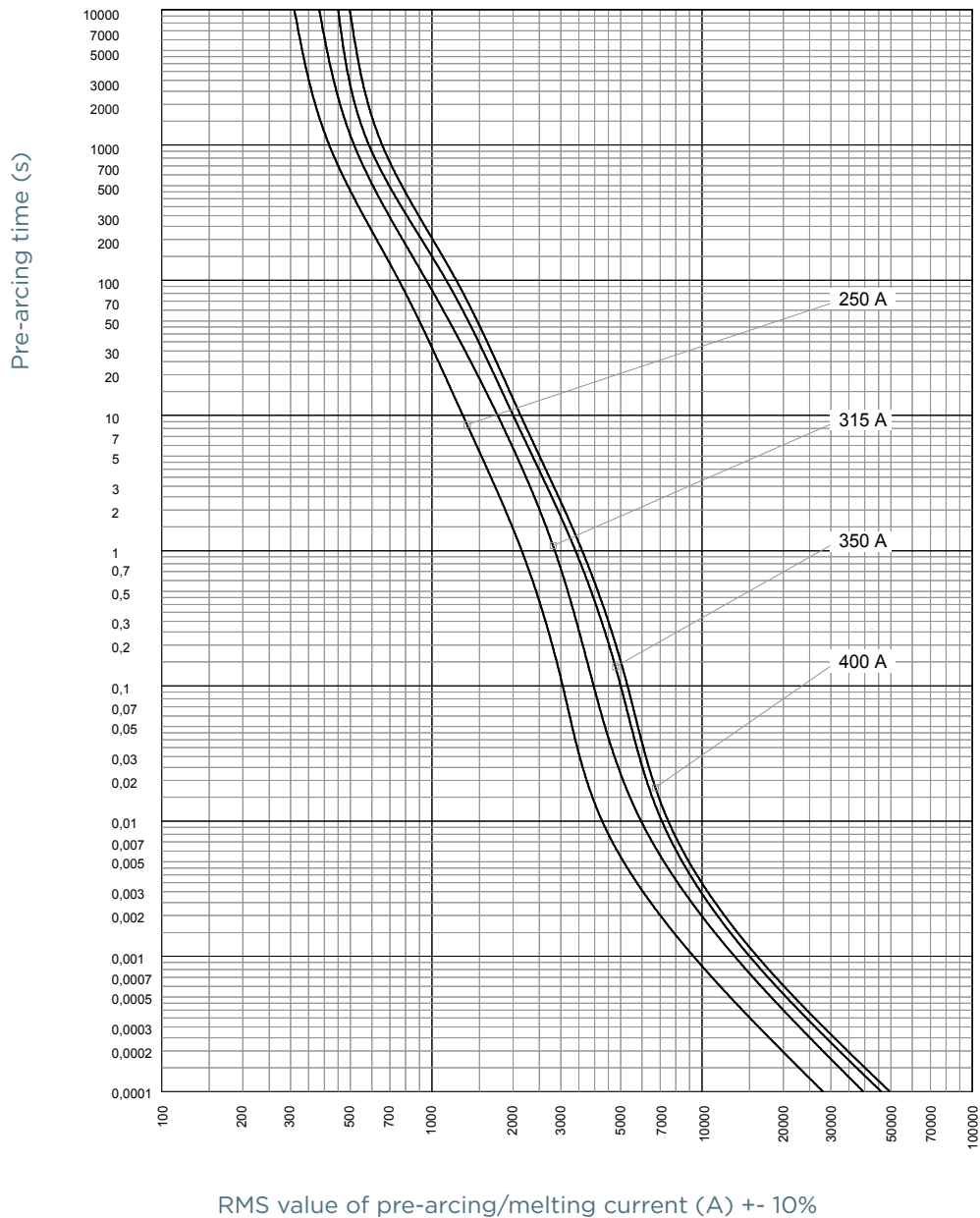
## TIME CURRENT CHARACTERISTIC CURVES

### Special purpose gPV fuse link size 2XL 1250V 200-250A



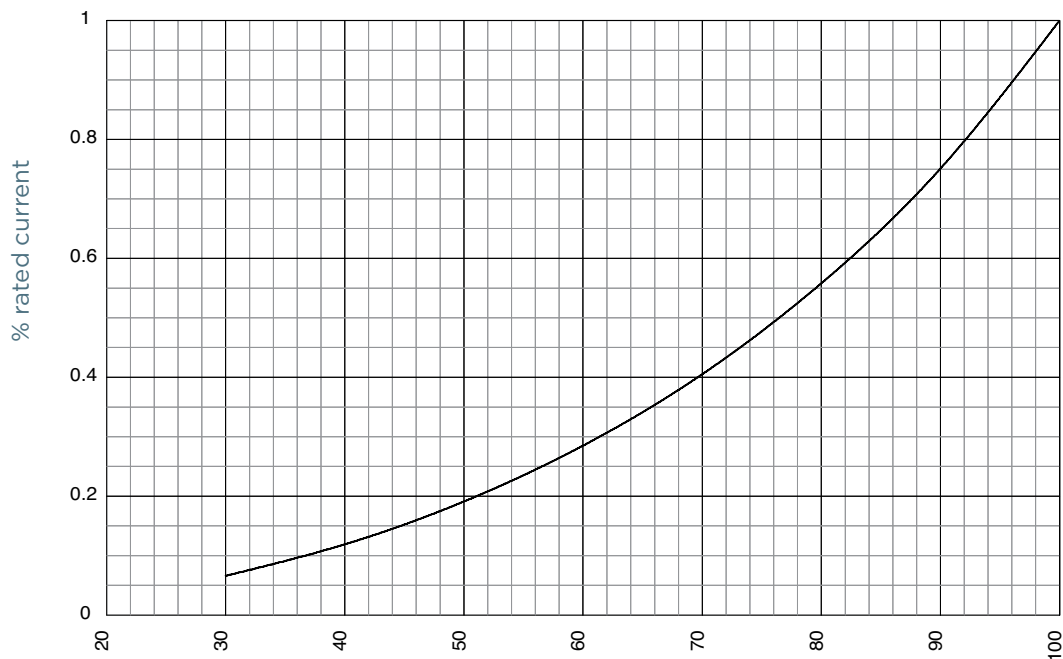
## TIME CURRENT CHARACTERISTIC CURVES

Special purpose gPV fuse link size 3L 1250V 250-400A



## CORRECTION FACTOR

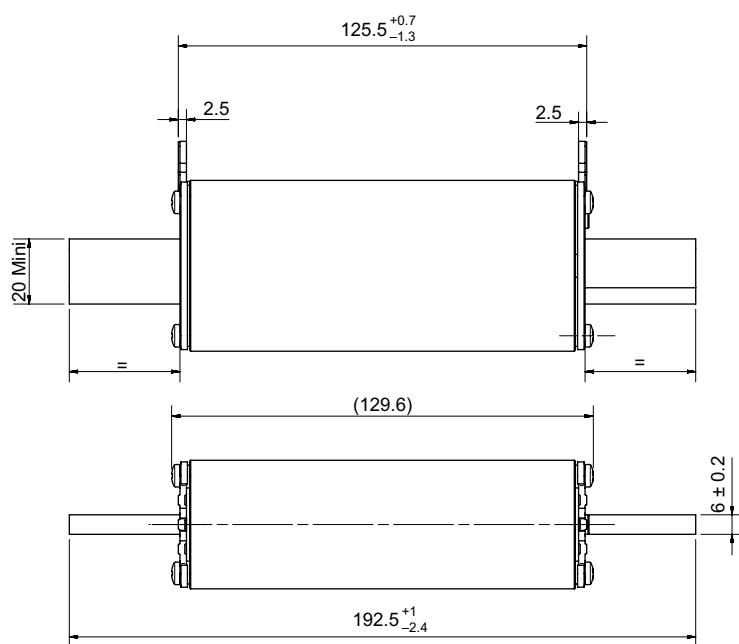
Rated power dissipation at rated current fuse-link gPV 1XL 1250V 125-160A



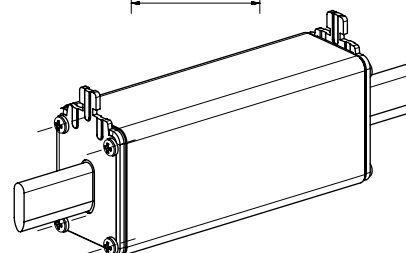
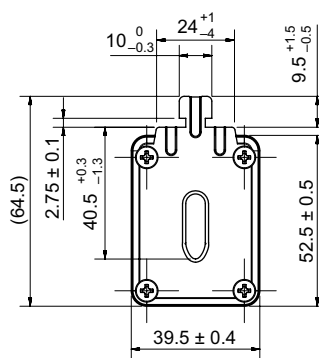
Correction factor for power dissipation

## DIMENSIONS

Special purpose gPV fuse-link Plain Blade size 1XL

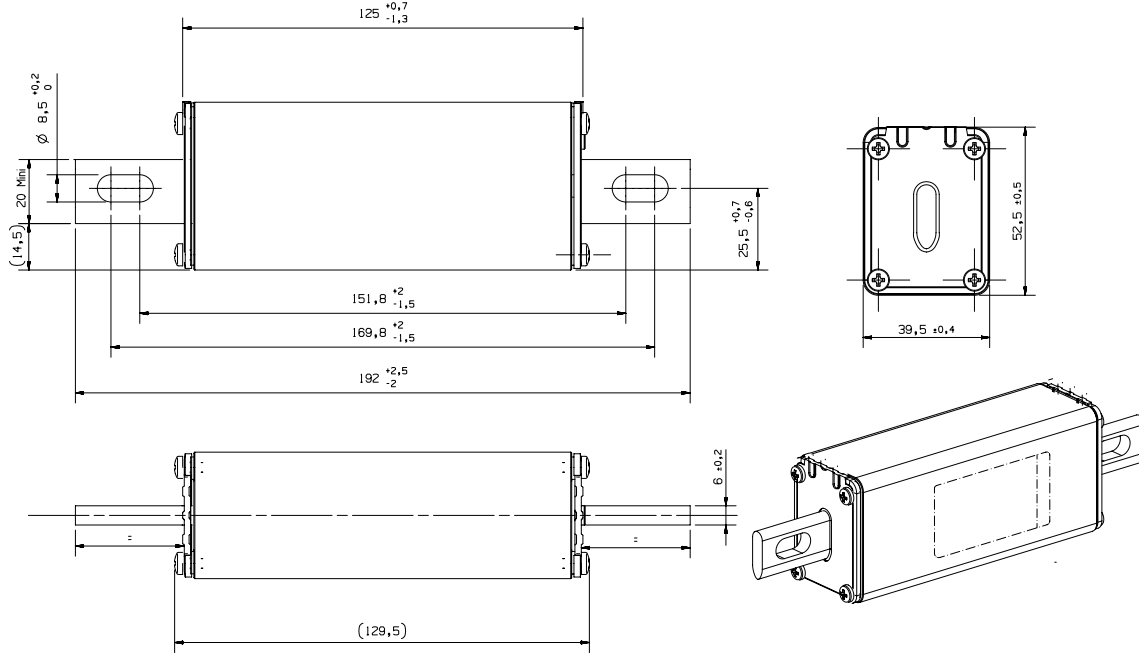


Dimensions in mm



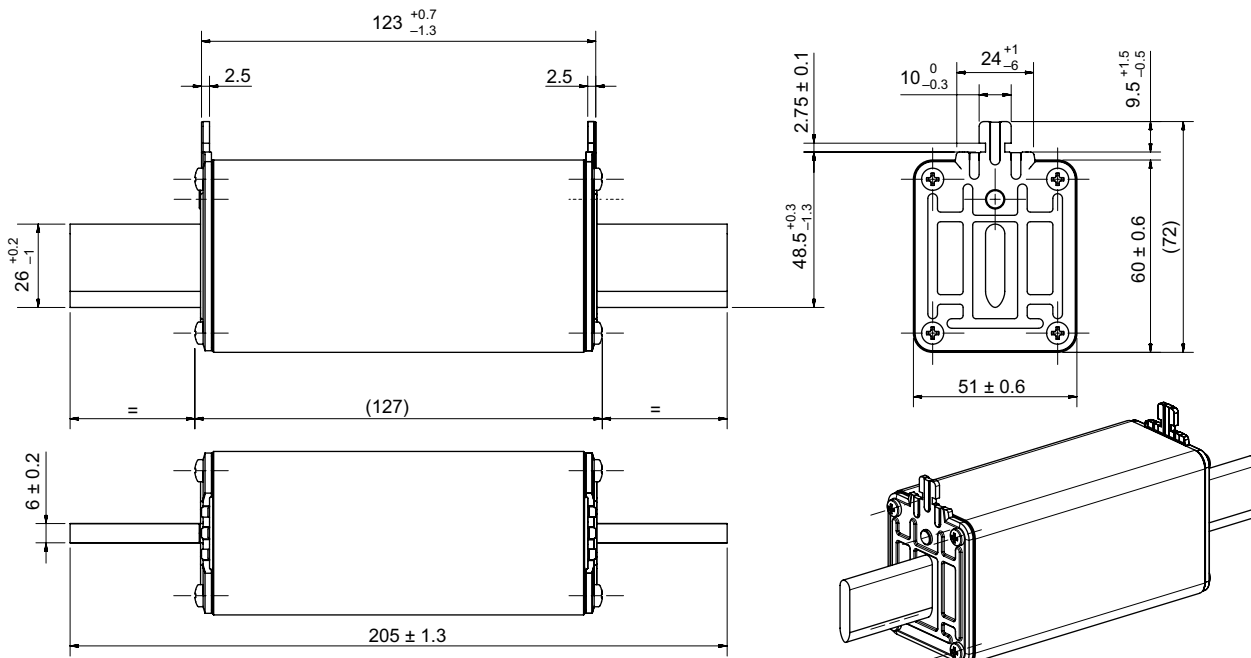
## DIMENSIONS

### Special purpose gPV fuse-link size 1XL Direct Mounting without trip indicator and without lugs



Dimensions in mm

### Special purpose gPV fuse-link Plain Blade size 2XL



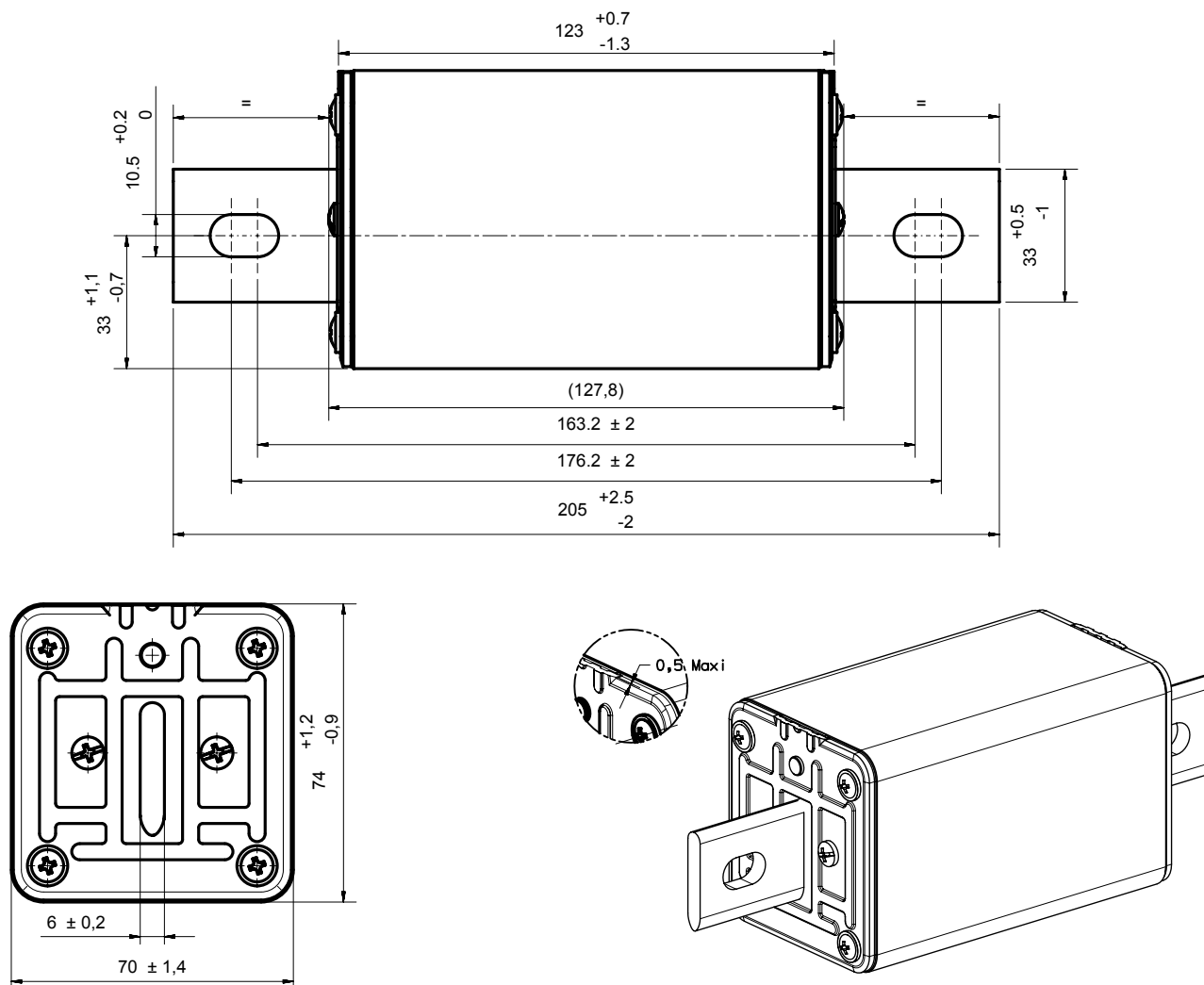
Dimensions in mm





## DIMENSIONS

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



Dimensions in mm