

Pyro Safety Switches

Prevention in milliseconds to avoid short-circuits, fire ignition & battery draining.

Pyro Safety Switch PSS-1

Autoliv's industry-standard Pyro Safety Switches comply with the high-quality requirements of the vehicle industry. Our Pyro Safety Switches offer a range of technical specifications, including different voltages, short circuit resistance and maximum current.

- Maximum continuous current 300 A at 85°C
- Non-reversible device
- Suitable for voltage levels up to 400 VDC
- High peak current carrying capability up to 2 000 A



Product specifications

Switching capacity

Inductive load (5 μ H max)	200 A / 400 V
Inductive load (60 μ H)	2000 A / 150 V
Capacitive load	> 400V, contact us

Current carrying capacity

85°C, load cable 50 mm ²	300 A
105°C, load cable 50 mm ²	250 A
125°C, load cable 50 mm ²	200 A

Maximum short-time current

23°C, load cable 50 mm ²	2 000 A / 10 s
	25 000 A / 5 ms

Triggering conditions

Qualified acc. to	AK-LV 16 & USCAR
Triggering circuit resistance	$\geq 1,7 \Omega$ and $\leq 2,5 \Omega$
Triggering current	1,75 A / 0,5 ms
Or	1,20 A / 2,0 ms
No-triggering current	$\leq 0,4$ A
Or	$\leq 5,0$ A / $\leq 4 \mu$ s
Diagnostic current:	< 100 mA
Triggering pulse slope	> 8 mA / μ s

Busbar

Contact raw-material (base)	CuSn 0,15
Contact plating material (lead-free)	Sn/Ni

Busbar profile

Cross-section nominal	32 mm ²
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Operation time

Release time	< 3 ms
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Resistance & Insulation data

Busbar resistance (at RT)	
before ops.	$\leq 0,1$ m Ω
after ops	≥ 10 M Ω

Temperature

Operating temperature	-40°C... + 105°C
Environmental temperature	-40°C... + 105°C
Storage temperature	-40°C... + 65°C

Other Data

Vibration resistance acc. to	ISO 16 750 – 3
Mech. Shock resistance acc. to	ISO 16 750 – 3
Temperature cycle resistance acc. to	ISO 16 750 – 4
Chemical loads resistance acc. to	ISO 16 750 – 5

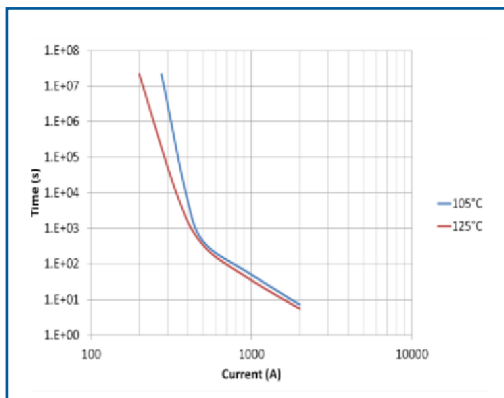
Terminal type

on bus-bar	M8 screw
on initiator	AK-1 / AK-2 ABX-3 unsealed ABX-3 sealed

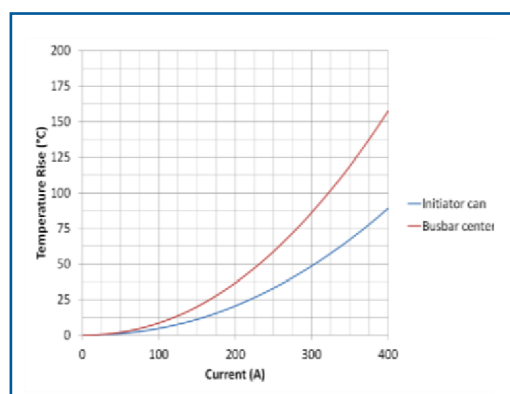
Weight	60 g
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Technical Data & Dimensions

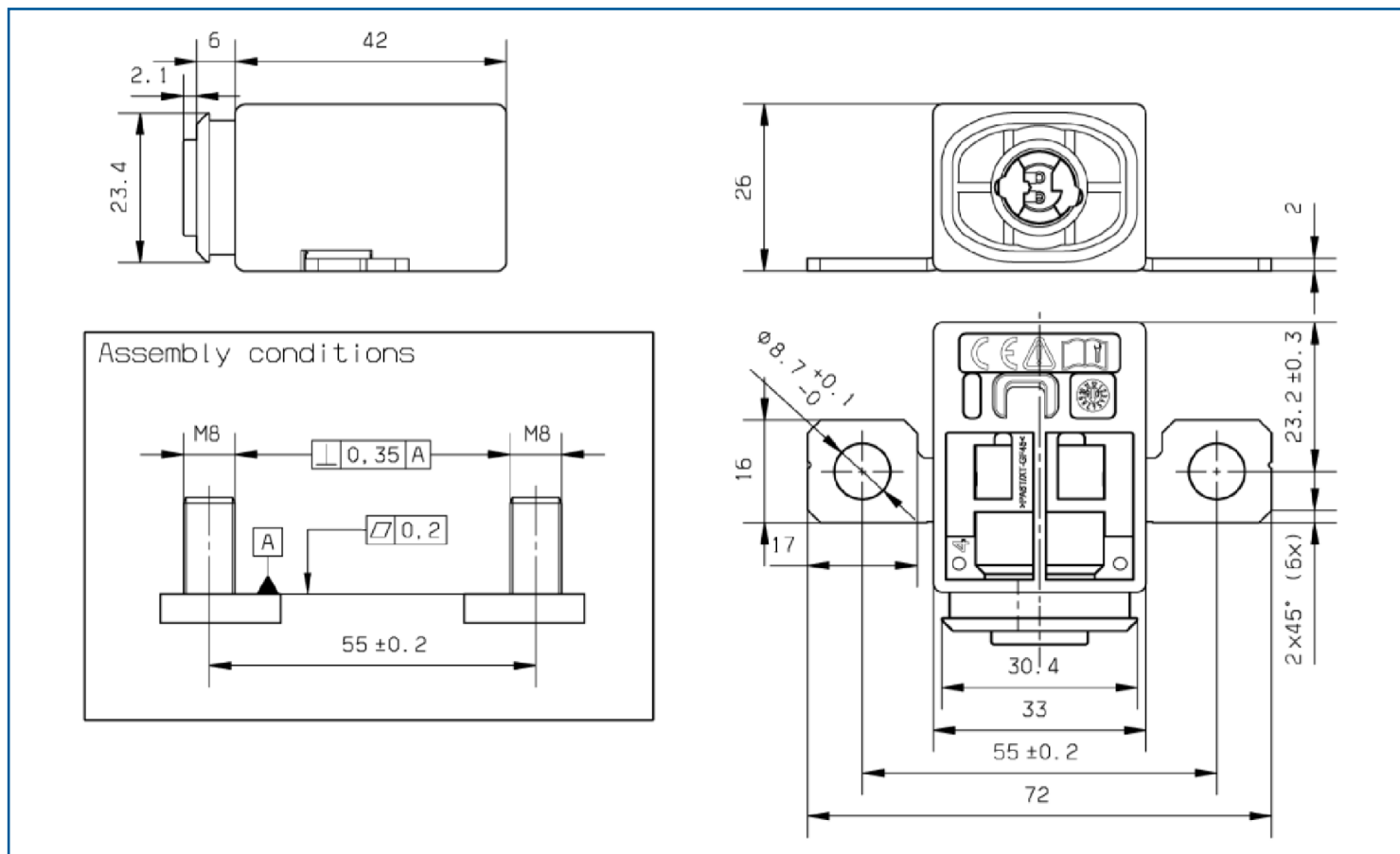
Derating curve



Temperature rise curve



Dimensions



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