

- Maximum continuous current 300A at 85° C
- Non-reversible device
- Suitable for voltage levels up to 400 VDC
- High peak current carrying capability up to 2000 A

### Product description:

A pyrotechnical actuator separates the electric connection irreversibly. Pyrotechnical switches are installed in many road vehicles. It is triggered by the ECU, and is used to separate the "starter-generator-cable" from the electrical system (battery).



### Typical applications:

Battery disconnection to prevent fire caused by short circuits during/after an accident.

### Switching capacity

Ohmic load	1000 A / 400 V
Inductive load (60 μH)	2000 A / 150 V
Inductive load (20 μH)	600 A / 475 V
Capacitive load	> 400V, contact us

### Current carrying capacity

85° C, load cable 50 mm <sup>2</sup>	300 A
105° C, load cable 50 mm <sup>2</sup>	250 A
125° C, load cable 50 mm <sup>2</sup>	200 A
Maximum short-time current	
23° C, load cable 50 mm <sup>2</sup>	2000 A / 10 s 25000 A / 5 ms

### Busbar

Contact raw-material (base)	CuSn 0,15
Contact plating material (lead-free)	Sn/Ni
Busbar profile	
Cross-section nominal	32 mm <sup>2</sup>

### Initiator Data

Qualified acc. to	AK-LV 16 & USCAR
Initiator resistance	≥1,7 Ω and ≤ 2,5 Ω
All- Fire current	1,75 A / 0,5 ms
or	1,20 A / 2,0 ms
No-Fire current	≤ 0,4 A
or	≤ 5,0 A / ≤ 4 μs
Monitor current:	100 mA

### Operation time

Release time	< 3 ms
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### Resistance & Insulation data

Busbar resistance (at RT)	
before ops.	≤ 0,1 mΩ
after ops	≥ 10 MΩ

### Temperature

Operating temperature	-40°C... + 125° C
Environmental temperature	-40°C... + 105° C
Storage temperature	-40°C..... + 65° C
Self-ignition	≥ 210° 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	VDA-AK 1/FCI unsealed FCI sealed
Weight	60 g
Packaging unit	
Small unit (cardboard box)	140 pcs.
Large unit (container)	2520 pcs.

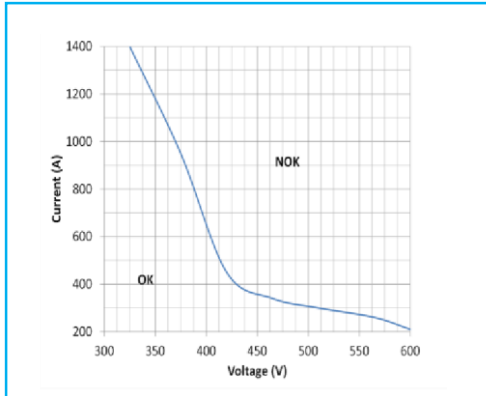
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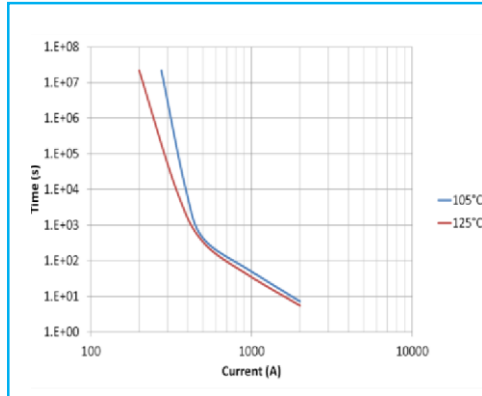
# Battery Disconnection Switch – PSS-1

## Pyroswitch – Automotive Switch – High Current Device

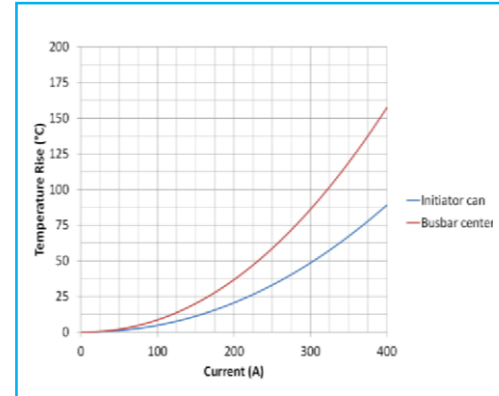
Switching capacity ind. load (60µH)



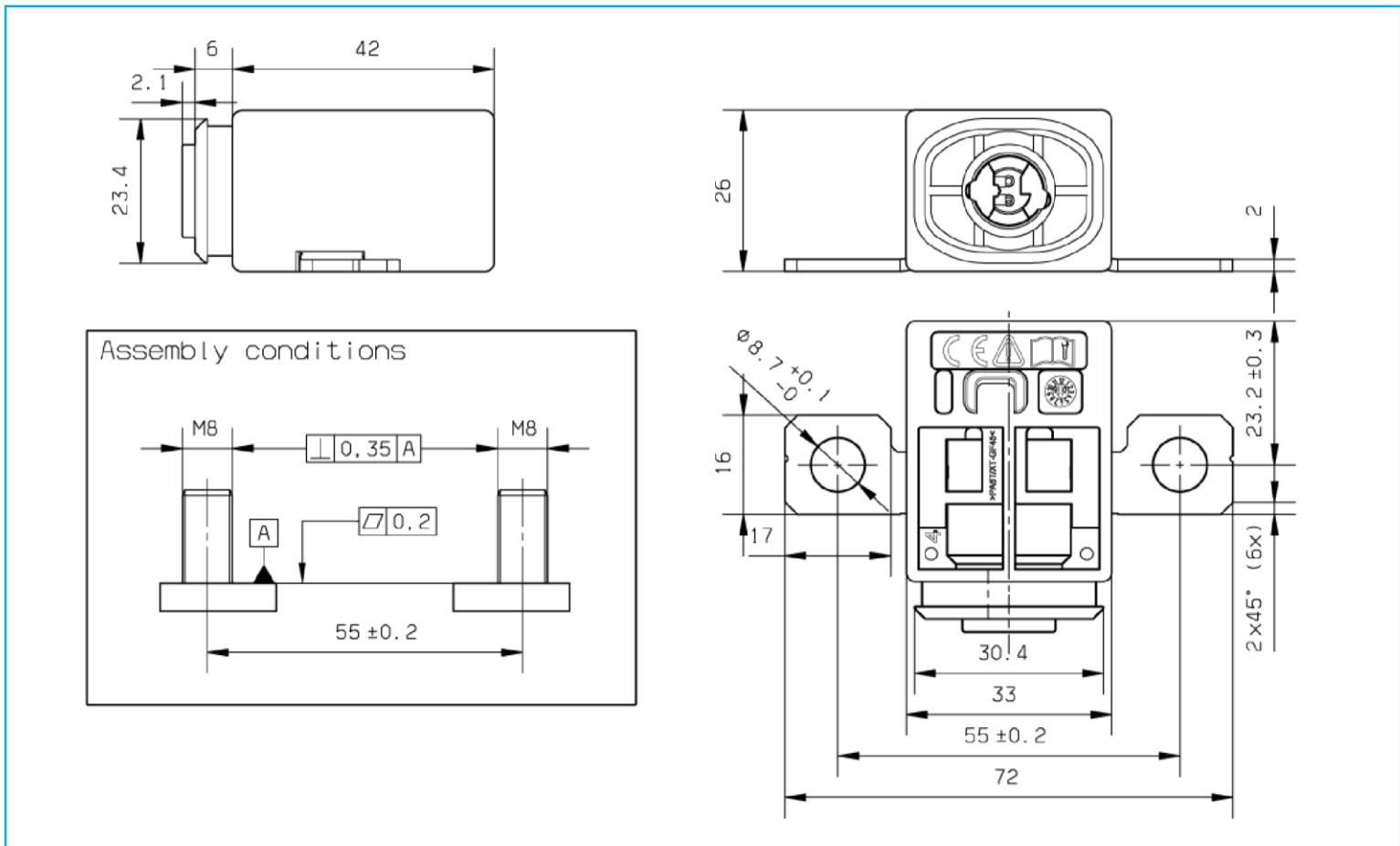
Derating curve



Temperature rise curve



### Dimensions



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