BUSSMANN SERIES

EBPS Series Pyro Switch









EATON
Powering Business Worldwide

EBPS Series Pyro Switch
CA136005EN

EBPS Series Pyro Switch



EBPSXXF40



EBPSXXF40A

Description

Bussmann's Pyro switch is an advanced safety component crafted for the energy transition application, distinguished by its swift response, smart functionality, and steadfast reliability. This pyrotechnic switch is meticulously engineered to establish an immediate and secure protection upon the event of a triggering force, such as over-current, collision etc.

For Bussmann's dual-triggering Pyro switch, the incorporation of intelligent design principles into the Pyro switch, will enable it to trigger itself upon the event of over-current. This will offer extra reinforced protection and improve the reliability further.

The reliability of Bussmann's Pyro switch is a testament to its robust construction, which is built to withstand the harshest conditions within an electrical system. Extensive testing ensures that each switch meets stringent durability and reliability standards, guaranteeing that it remains a dependable element of the safety features under all circumstances.

In summary, Bussmann's Pyro switch exemplifies the brand's dedication to safety and innovation. Its quick, intelligent, and reliable performance is essential for the safety infrastructure of multiple applications like electrical vehicles & charging stations, battery storage systems and PV systems.

EBPS Series Pyro include 2 types products:

- Single Triggering Pyro: can be triggered by external signal only
- Dual Triggering Pyro: Can be triggered either by external or by internal signal

Technical data

- Rated voltage & continuous loading current

Catalogue numbers	Triggering Type	V d.c.	Continuous Amp. @85°C
EBPS65F40	Single Triggering	0-500	0-400 A
EBPS100F40		0-1000	
EBPS50F40A	Dual Triggering	0-500 External 100-500 Internal	
EBPS100F40A		0-1000 External 100-1000 Internal	

- Breaking capacity

Item	EBPS65F40	EBPS100F40	EBPS50F40A	EBPS100F40A
Breaking capacity	12kA @500Vdc &20uH	16kA @1000Vdc &15uH	15kA @500Vdc &15uH	15kA @1000Vdc &15uH
Operating time	<2ms	<2ms	<2ms or <2ms + C-T curve	<2ms or <2ms +C-T curve
Busbar Resistance	<50 µΩ	<50 µΩ	<70 µΩ	<70 µΩ
Isolation (busbar Vs triggering connector)	100MΩ			
Busbar resistance after operation	≥2MΩ			
Recommended wiring	150 mm^2 (For smaller cross section, please contact us)			
Operating and storage temperature range	-40°C to 85°C (-40°F to 185°F) (contact us for extended temperature range)			

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Technical data

- External triggering connector type AK-2 code I
- Initiator resistance 2±0.3Ω
- Triggering pulse current ≥ 1.75A &0.5ms or ≥1.2A &2.0ms
- Current increase I_{tr} ≥ 1 A/μs
- No-triggering current < 0.4A &10s
- Recommended diagnostic current: ≤10 mA

Agency information

Initiator

- Qualified acc. To AK-LV 16 & USCAR 28

Transport hazard classification

- Qualified as Class 9 acc. To
  - ST/SG/AC.10/11/Rev.7
  - ST/SG/AC.10/1/Rev.22

Features and benefits

- 500Vdc & 1000Vdc voltage rating
- Support quick-charging current profile
- Safe and fast interruption of high short-circuit current
- ECU/BMS signal trigging or/and fuse protection integrated design
- IP65 protection level
- UL94-V0 for plastic parts

Typical application

- EV and charging station
- Energy storage system
- PV system

Product weight and packing

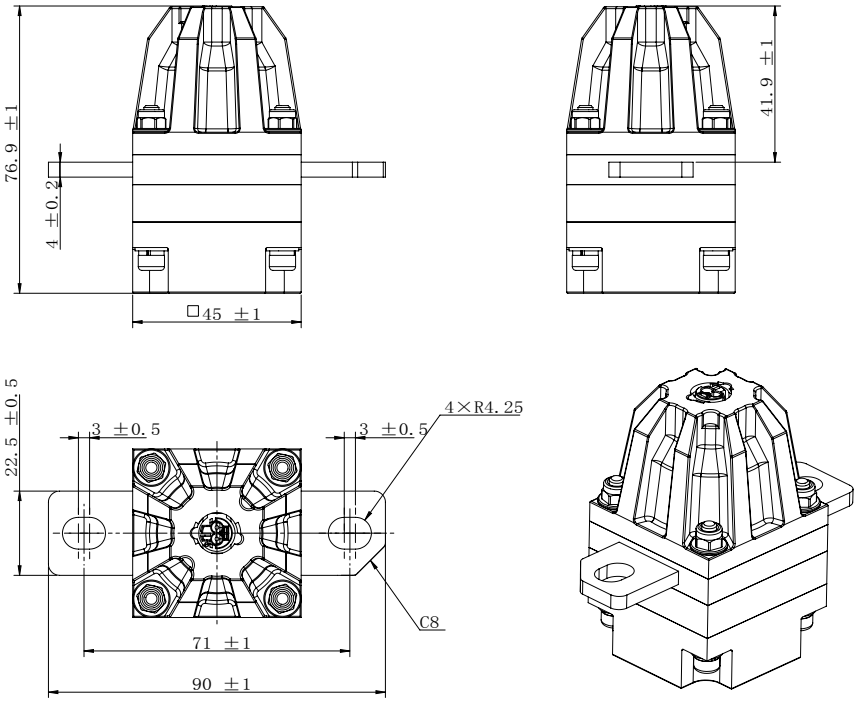
Catalogue numbers	Weight (g)	Packing Quality	Box weight(kg)
EBPS65F40	277	36 per box	12
EBPS100F40	311	22 per box	9
EBPS50F40A	449	24 per box	12
EBPS100F40A	484	24 per box	13

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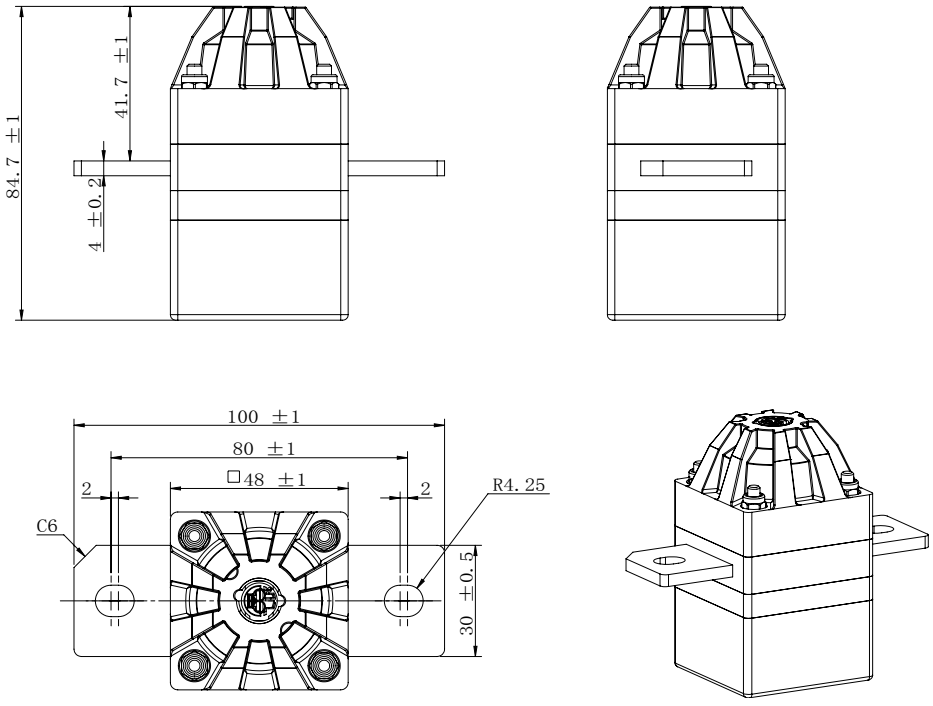
EBPS Series Pyro Switch
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Dimensions - mm

EBPS65F40



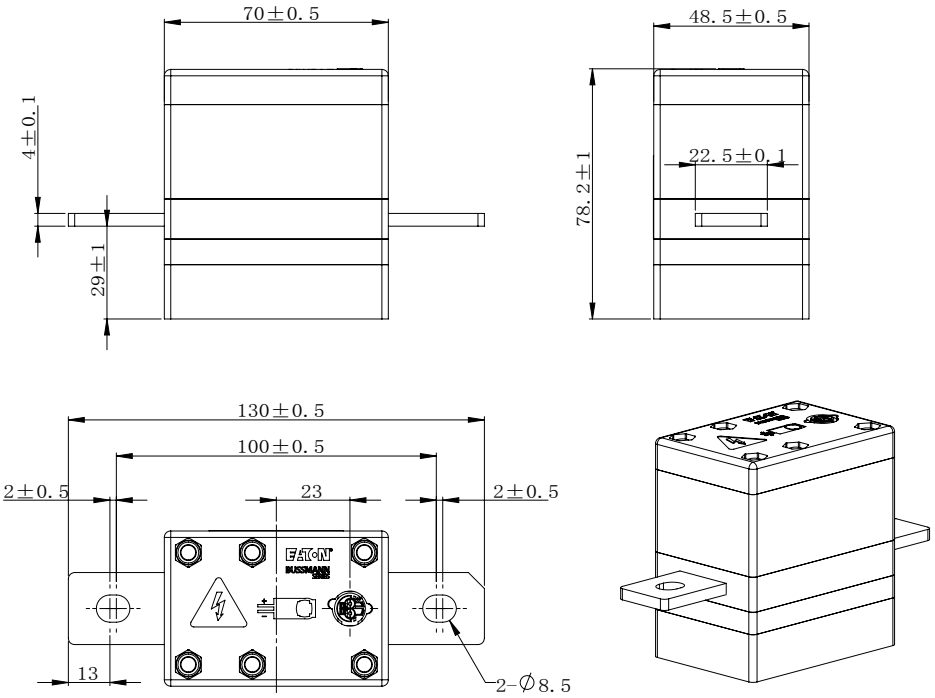
EBPS100F40



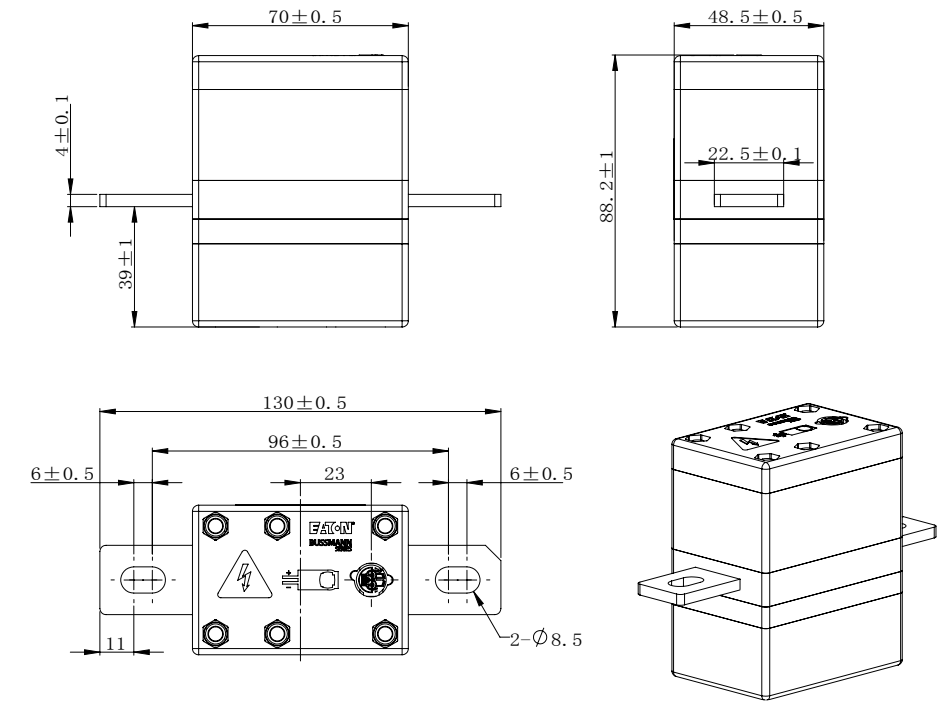
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Dimensions - mm

EBPS50F40A



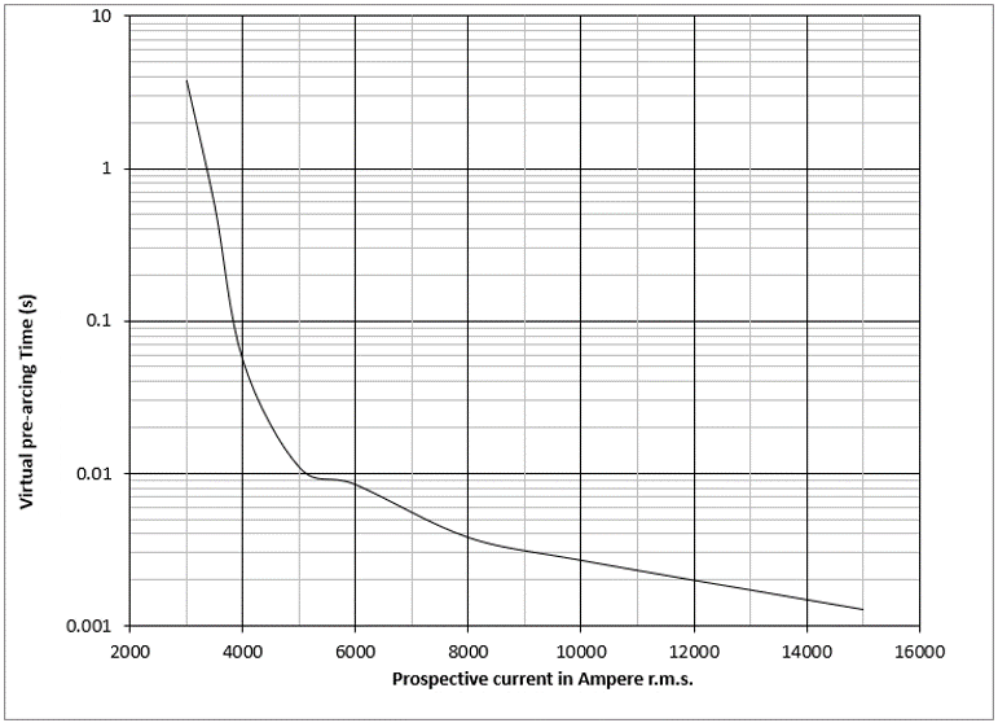
EBPS100F40A



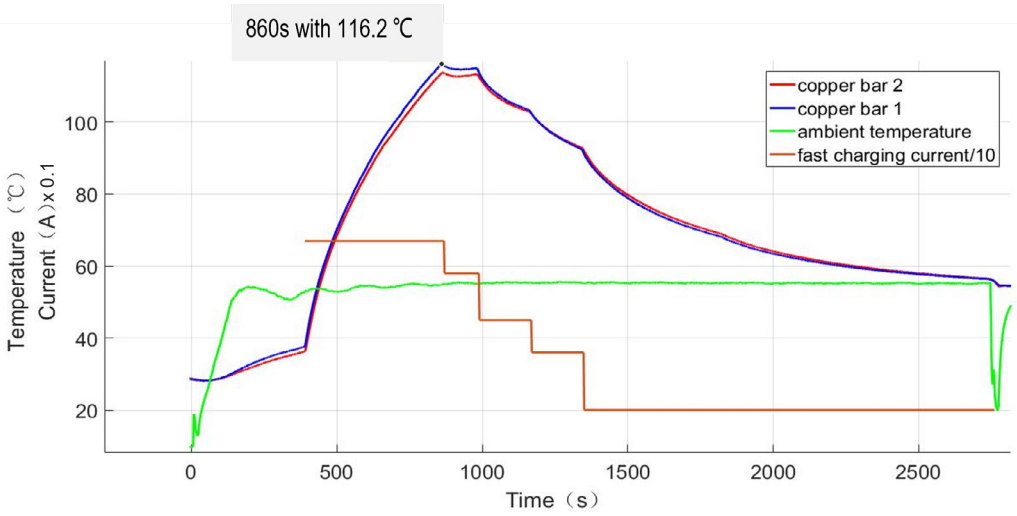
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Electrical characteristics

Internal arc trigging Pyro C-T curve



Thermal test on typical quick-charging profile



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Eaton entered the Asia-Pacific market during the 1970s, and has grown significantly since then. Eaton moved its Asia-Pacific headquarters from Hong Kong to Shanghai in 2004. Today, Eaton has nearly 17,000 employees and 34 manufacturing facilities in the Asia-Pacific region.

For more information, visit **www.eaton.com**.

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