

# EAC10

## 10 x 32 mm high breaking capacity fuse



### Product features

- 10 x 32 mm fuse
- Current rating: 40 A to 63 A
- Up to 500 Vac rating
- High breaking capacity for high energy application
- Cartridge, bolt-down terminal and PCB terminal options available

### Applications

- Uninterruptible power supplies (UPS)
- 3-phase EVSE and charging infrastructure
- Motor protection
- Vac input protection in rectifiers
- Vac output in inverters

### Agency information

cURus Recognition file number: E91958 for for EAC10-XX-PCB



### Environmental compliance



### Ordering part number

**EAC10-40-PCB**

Family code

Ampere rating

Option code

### Option code

None - Cartridge fuse without lead terminal

PCB - PCB terminal

T - Bolt-down terminal

**Electrical characteristics**

**Current and time characteristics**

1.0 I <sub>n</sub>	1 hour minimum
2.0 I <sub>n</sub>	120 seconds maximum

**Product specifications**

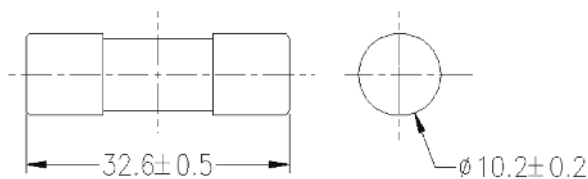
Part number	Rated voltage	Rated current	Breaking capacity	Typical cold resistance <sup>1</sup> (mOhms)	Power Loss at 1.0 I <sub>n</sub> (W)
EAC10-40	500 Vac 250 Vac	40 A	2000 A @ 500 Vac 10000 A @ 250 Vac	1.71	4.7
EAC10-50	500 Vac 250 Vac	50 A	2000 A @ 500 Vac 10000 A @ 250 Vac	1.33	5.7
EAC10-63	500 Vac 250 Vac	63 A	2000 A @ 500 Vac 10000 A @ 250 Vac	1.05	7.5

1. DC Cold Resistance measured at <10% of rated current in the ambient temperature of +25 °C

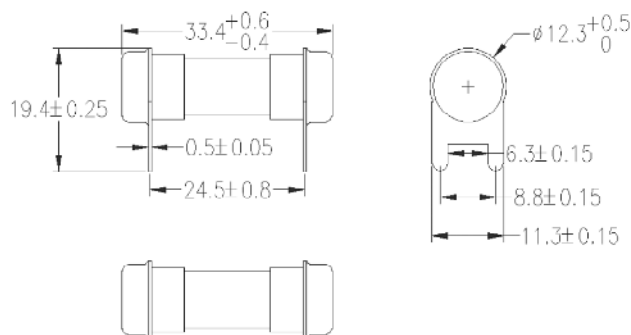
**Dimensions- mm**

Drawing not to scale

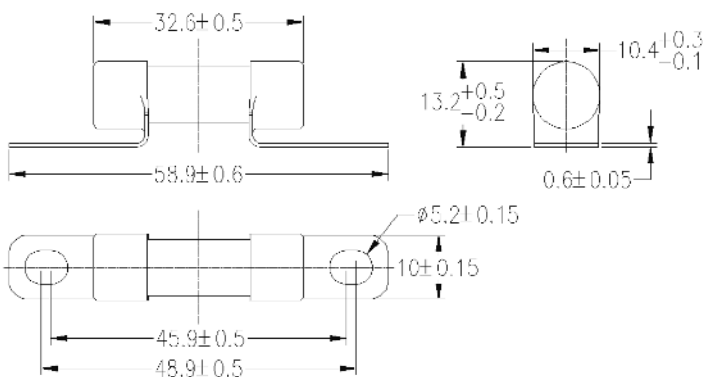
**Cartridge version**



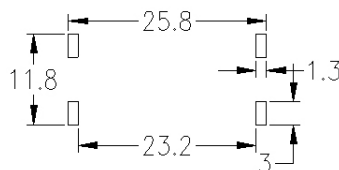
**PCB terminal version**



**Bolt version**



**Recommended PCB layout**



**Part marking** (Example: EAC10-63)



Note: recommend tightening torque is 3.5-4 Nm for M5 screw

### General specifications

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Mechanical vibration: MIL-STD-202, Method 201, For EAC10-XX; EAC10-XX-PCB and EAC10-XX-T

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Thermal shock: MIL-STD-202, Method 107, Test Condition B (5 cycles -65°C to 125°C), For EAC10-XX; EAC10-XX-PCB and EAC10-XX-T

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Humidity: MIL-STD-202, Method 103, Test Condition A: 95% RH and 40 °C for 240 hours, For EAC10-XX; EAC10-XX-PCB and EAC10-XX-T

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Salt spray: MIL-STD-202, Method 101 Test condition B, For EAC10-XX; EAC10-XX-PCB and EAC10-XX-T

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Thermal shock resistance: JASO D622 6.3.6, For EAC10-XX-PCB and EAC10-XX-T only

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Transient current intermittent cycle durability: JASO D622 6.3.2, For EAC10-XX-PCB and EAC10-XX-T only

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Heat resistance to soldering: MIL-STD-202 Method 210, For EAC10-XX-PCB only

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Terminal strength: MIL-STD-202, Method 211, Test Condition A, For EAC10-XX-T only

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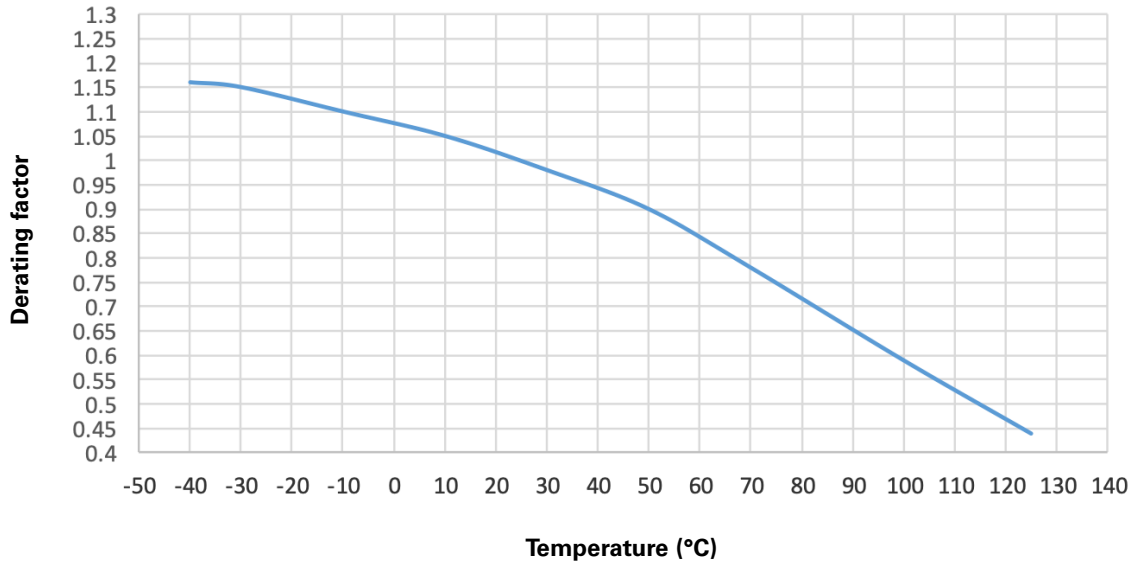
Lead solderability: MIL-STD-202, Method 208, For EAC10-XX-PCB only

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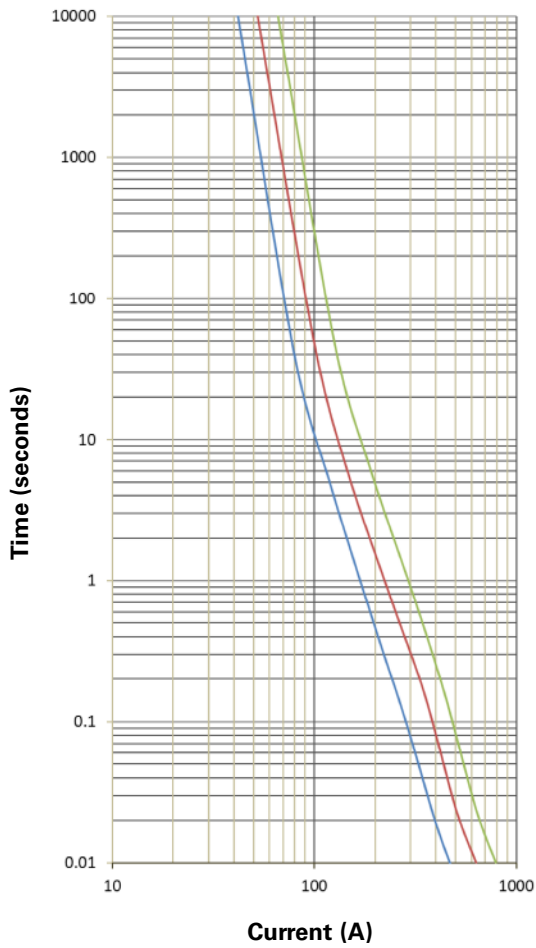
### Packaging information - mm

45 pcs in a plastic tray, 10 trays (450 pcs) in a carton

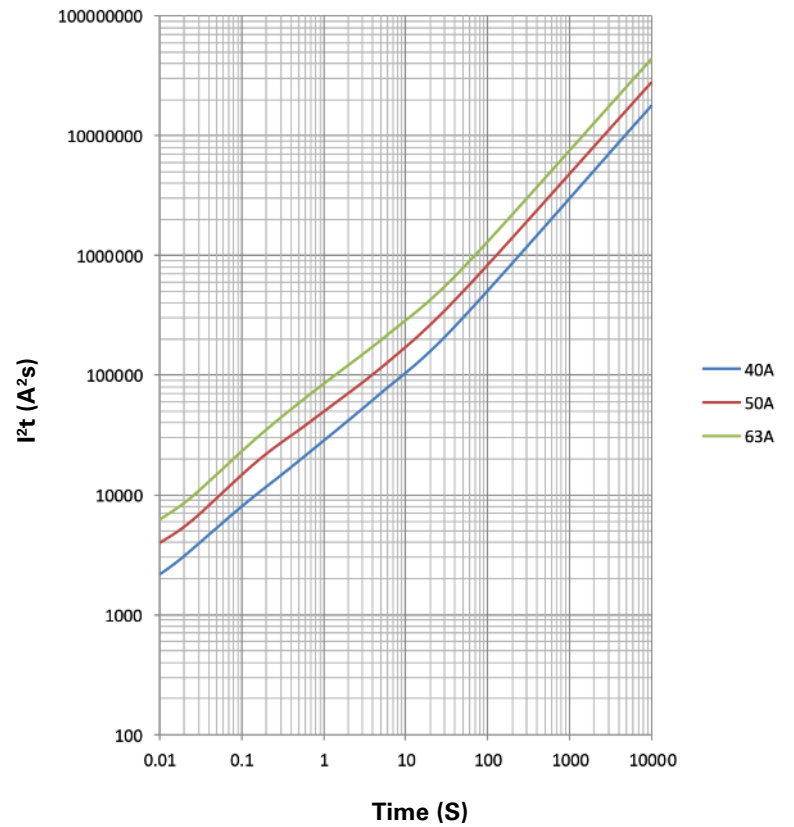
**Temperature derating curve**



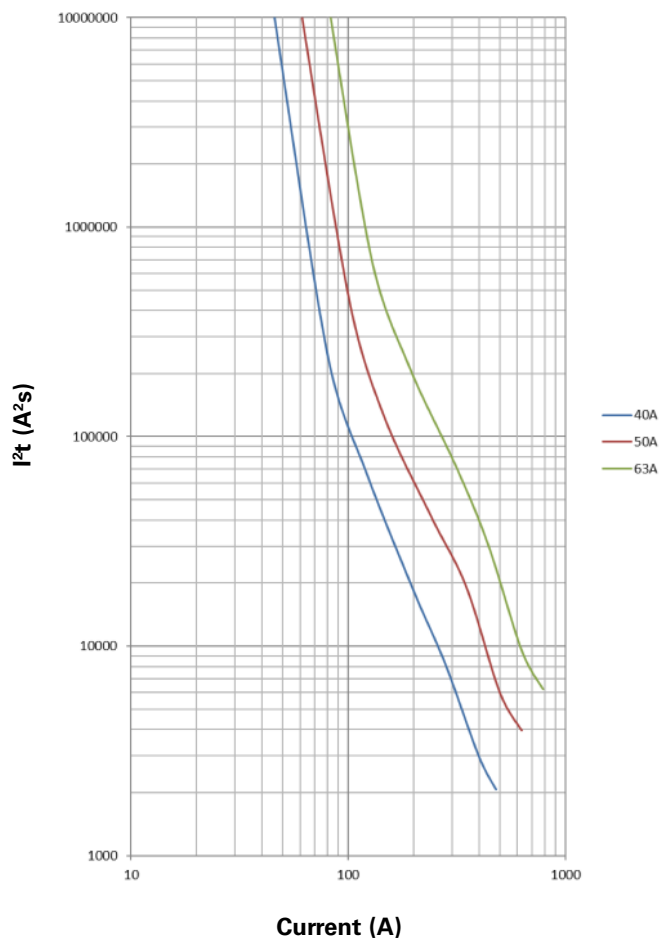
**Current vs. time curve**



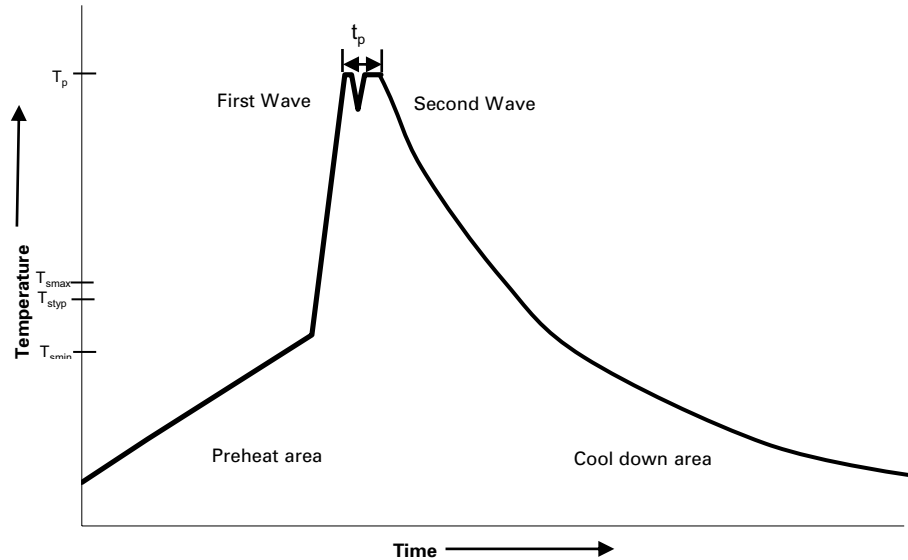
**I²t and time curve**



**I<sup>2</sup>t and current curve**



**Wave solder profile--PCB version only**



**Reference EN 61760-1:2006**

Profile feature	Standard SnPb solder	Lead (Pb) free solder
Preheat		
• Temperature min. ( $T_{smin}$ )	100 °C	100 °C
• Temperature typ. ( $T_{styp}$ )	120 °C	120 °C
• Temperature max. ( $T_{smax}$ )	130 °C	130 °C
• Time ( $T_{smin}$ to $T_{smax}$ ) ( $t_s$ )	70 seconds	70 seconds
$\Delta$ preheat to max Temperature	150 °C max.	150 °C max.
Peak temperature ( $T_p$ )*	235 °C – 260 °C	250 °C – 260 °C
Time at peak temperature ( $t_p$ )	10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each wave
Ramp-down rate	~ 2 K/s min ~3.5 K/s typ ~5 K/s max	~ 2 K/s min ~3.5 K/s typ ~5 K/s max
Time 25 °C to 25 °C	4 minutes	4 minutes

**Manual solder**

+350 °C (4-5 seconds by soldering iron), generally manual/hand soldering is not recommended.

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