

# DC High-Voltage Fuses

## CBP-ESX SERIES FUSE



- **Semiconductor Protection Fuses – IEC60269-4 Compliant**

| Size | Rated Voltage | Operating Class | Rated Breaking Capacity        |          |
|------|---------------|-----------------|--------------------------------|----------|
| C    | 1500Vdc       | aR              | <700A@250kA<br>700A&750A@100kA | TC: <5ms |

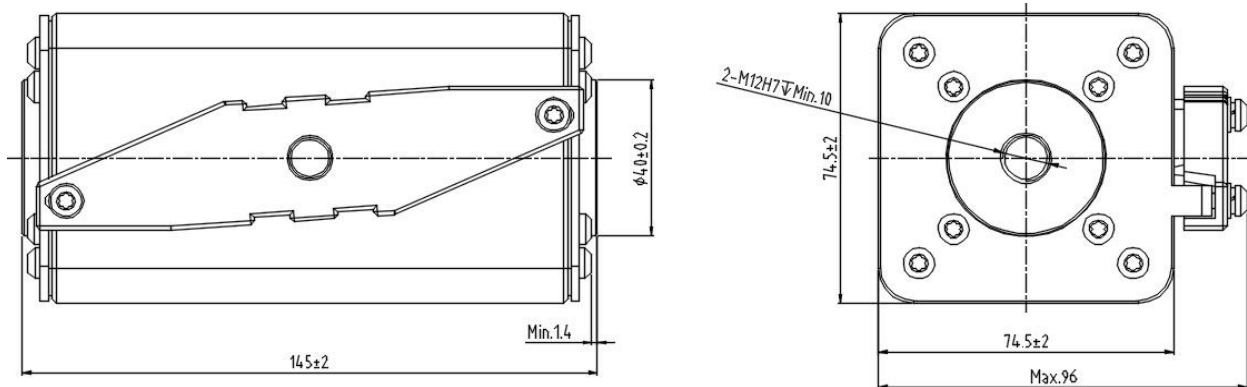
- **Series Reference**

**CBP-ESX-C-H/E 100A-750A**

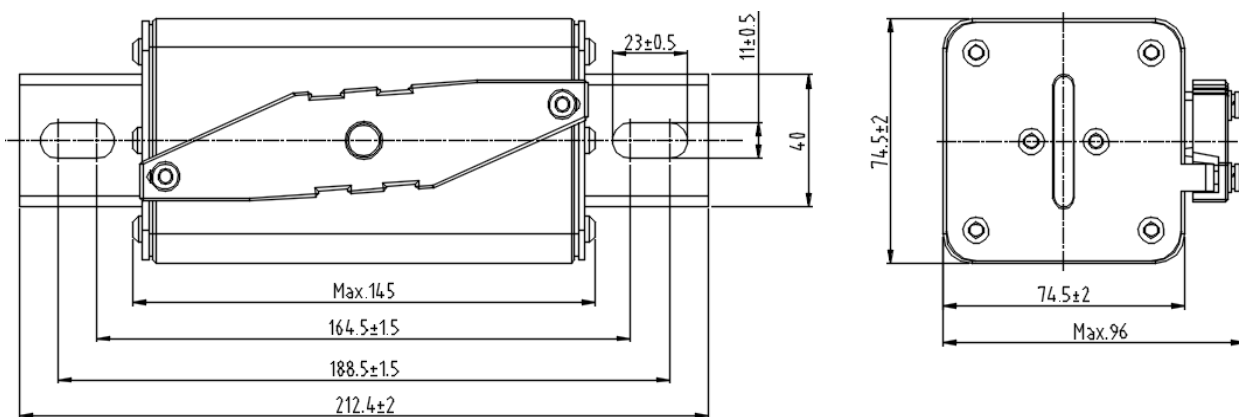
- **Key Features & Benefits**

- **Optimized for Energy Storage:** Specifically engineered for the demanding protection requirements of Battery Energy Storage Systems (BESS), PCS units, and other high-voltage DC applications.
- **Superior Electrical Performance:** Offers excellent current-limiting capabilities and a low  $I^2t$  value to rapidly and safely interrupt fault currents, protecting sensitive semiconductor devices.
- **Reliable & Secure Connection:** Features a robust bolt-on mounting design (US Style) ensuring safe, reliable, and low-resistance electrical connections.
- **Certified Quality:** Designed in conformance with IEC 60269-4 standards for semiconductor protection and manufactured in a process conforming to IATF 16949 automotive quality standards. All materials and packaging are RoHS compliant.

● Dimensions



CBP-ESX-C-H

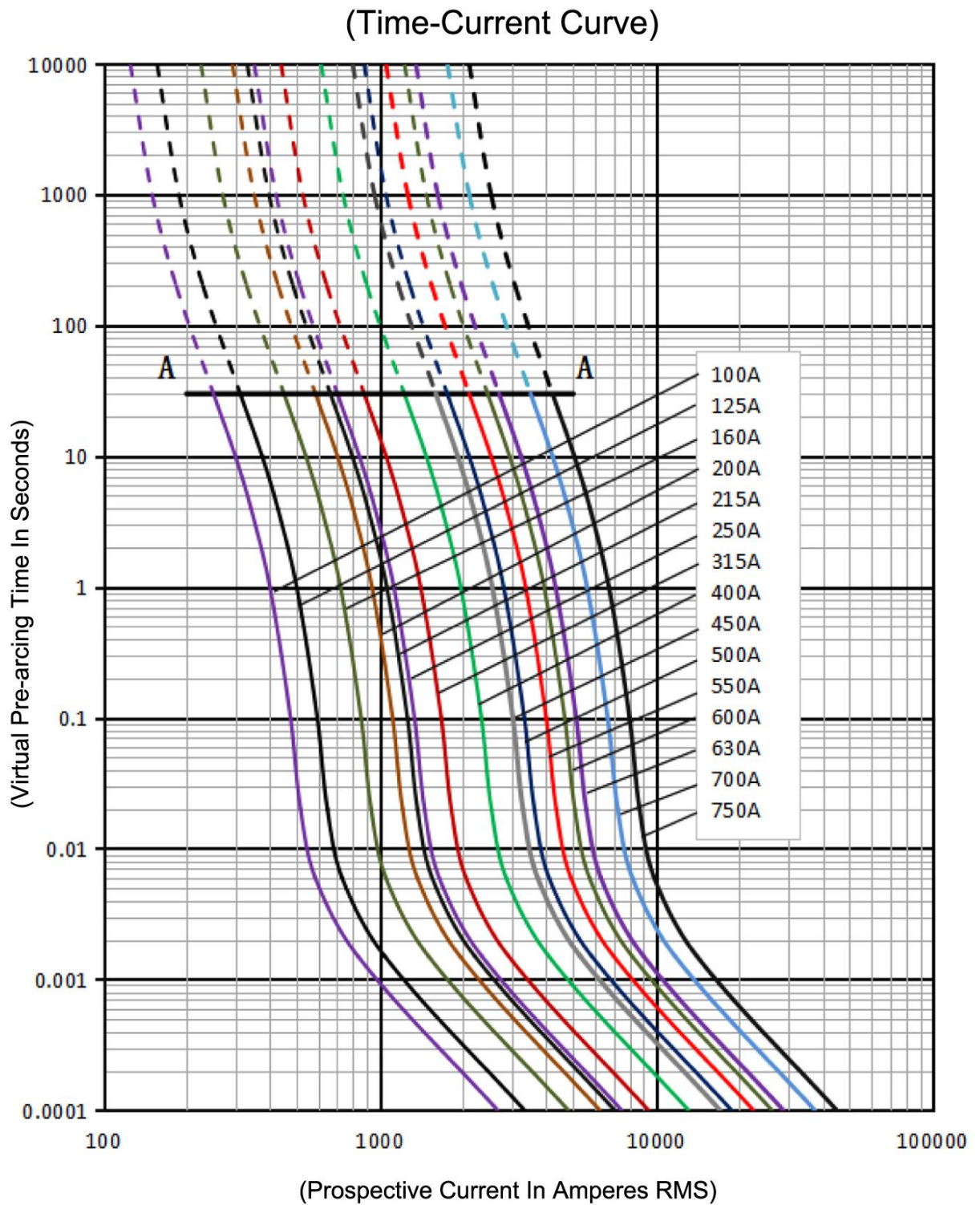


CBP-ESX-C-E

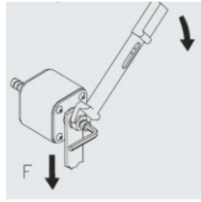
● Specification Matrix

| Rated Current (A) | Rated Voltage (V) | Part Number    |                | Power Loss (W) (typ.) | Pre-arcing I <sup>2</sup> t (A <sup>2</sup> s) | Total Clearing I <sup>2</sup> t @ 1500V (A <sup>2</sup> s) | Pack Q |
|-------------------|-------------------|----------------|----------------|-----------------------|--|--|--------|
| 100               | 1500Vdc           | CBP-ESX-C-100H | CBP-ESX-C-100E | 40                    | 1100   | 7000   | 1      |
| 125               | 1500Vdc           | CBP-ESX-C-125H | CBP-ESX-C-125E | 50                    | 2000   | 11000  | 1      |
| 160               | 1500Vdc           | CBP-ESX-C-160H | CBP-ESX-C-160E | 65                    | 3800   | 18000  | 1      |
| 200               | 1500Vdc           | CBP-ESX-C-200H | CBP-ESX-C-200E | 75                    | 5800   | 35000  | 1      |
| 250               | 1500Vdc           | CBP-ESX-C-250H | CBP-ESX-C-250E | 85                    | 13500  | 72000  | 1      |
| 315               | 1500Vdc           | CBP-ESX-C-315H | CBP-ESX-C-315E | 90                    | 23800  | 135000   | 1      |
| 350               | 1500Vdc           | CBP-ESX-C-350H | CBP-ESX-C-350E | 100                   | 33600  | 175000   | 1      |
| 400               | 1500Vdc           | CBP-ESX-C-400H | CBP-ESX-C-400E | 108                   | 58500  | 310000   | 1      |
| 450               | 1500Vdc           | CBP-ESX-C-450H | CBP-ESX-C-450E | 120                   | 75000  | 350800   | 1      |
| 500               | 1500Vdc           | CBP-ESX-C-500H | CBP-ESX-C-500E | 130                   | 95000  | 455000   | 1      |
| 550               | 1500Vdc           | CBP-ESX-C-550H | CBP-ESX-C-550E | 140                   | 108000   | 513000   | 1      |
| 600               | 1500Vdc           | CBP-ESX-C-600H | CBP-ESX-C-600E | 150                   | 158000   | 721000   | 1      |
| 630               | 1500Vdc           | CBP-ESX-C-630H | CBP-ESX-C-630E | 158                   | 168000   | 785000   | 1      |
| 700               | 1500Vdc           | CBP-ESX-C-700H | \              | 175                   | 253000   | 1188000  | 1      |
| 750               | 1500Vdc           | CBP-ESX-C-750H | \              | 190                   | 348000   | 1958000  | 1      |

● Time- Current Characteristics Curve



## ● Usage Conditions

| No | Parameter                    | Specification   |
|----|------------------------------|---|
| 1  | <b>Operating Voltage</b>     | 1500V DC or less  |
| 2  | <b>Operating Environment</b> | -40°C~85°C  |
|    |                              | <b>Relative Humidity:</b> <50%(≥40°C)   |
|    |                              | <b>Relative Humidity:</b> <90%(≤20°C)   |
| 3  | <b>Storage Conditions</b>    | <b>Temperature :</b> -5°C~40°C<br><b>Relative Humidity:</b> <75%  |
| 4  | <b>Maximum Altitude</b>      | ≤ 2000 meters (Consult factory for operation above this altitude)   |
| 5  | <b>Mounting Torque</b>       | M12(8.8) studs:8Nm<br>M12(8.8) nuts:39Nm<br>M10:22Nm<br> |
| 6  | <b>Pollution Degree</b>      | III (Suitable for industrial environments)  |

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