

**DUCATI** energia

CAPACITOR for
POWER ELECTRONIC
- High current DC Filters capacitors -

DC89 HC – Cn =40uF 1450V

Part Number: **416.89.1450**

DC 89 HC

DC-Link, High current Capacitors in cylindrical plastic case.



1. Technical data (in according to IEC 61071).

ELECTRICAL CHARACTERISTICS

| | | |
|---|------|-------------------|
| Rated Capacitance and tolerance | µF | 40 ±10% |
| Rated DC Voltage (Un) | V | 1450 |
| Series resistance (Rs) | mΩ | < 1.45 |
| Maximum Current (Imax) - @50°C ambient | ARMS | 60 |
| Maximum peak Currents (Ip) | kA | 3.2 |
| Thermal resistance (R _{THC}) nat. cool. (*) | °C/W | 5.7 |
| Surge Current (Is) | kA | 4.8 |
| Maximum peak voltage (Upk) - repetitive | V | 2200 |
| Maximum peak Voltage (Us) – non repetitive | V | 2900 |
| Self-inductance | nH | < 30 |
| Max. voltage raise of rise (dV/dt) | V/us | 80 |
| Voltage test terminal - terminal | V | 1.5 x Un - 10s |
| Voltage test terminal – ground | V | 3 kVac 50Hz - 60s |

MECHANICAL CHARACTERISTICS

| | | |
|--|---|-------------|
| Filler material | Polyurethane self extinguishing resin. | |
| Dielectric | Self healing Polypropilene metallized film – segmented internal pattern. | |
| Case | Self extinguishing plastic case (UL94 V0) with an aluminum dissipative plate on the bottom side. | |
| Dimensions (Ø x h) | mm | ≈ Ø87 x h51 |
| Weight | kg | ≈ 0.550 |
| Environment / Mounting position | Indoor / All | |
| Safety system | This capacitors are designed with a particular type of polypropylene metallized film (segmented internal pattern) that assure an open circuit at the end of life, if the service is within the specification. | |
| Fixing type | mm | 2x Ø5.6 |
| Max. tightening torque on fixing holes | Nm | 2.5 |

TERMINALS AND INSULATION

| | | |
|---------------------------------------|----|---|
| Terminals type | mm | M8x20 screw type bolts (also available with threads female connection type) |
| Max. tightening torque on M8 terminal | Nm | 5 |
| Creepage distance | mm | 35 |
| Clearance distance | mm | 27 |

| Release | Date | Description | Technician |
|---------|----------|--|------------|
| - | 25/01/12 | First issue | A.G. |
| A | 07/03/13 | Changed max. torque for fixing holes and terminals | A.G. |
| B | 26/09/18 | Added compliance to EN 45545 / UL file. | A.G. |



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CLIMATIC CATEGORY

| | | |
|---------------------------------|-------|------------|
| Min. Operating temperature | °C | -25 |
| Max. Operating temperature | °C | +75 |
| Storage temperature | °C | -40 .. +85 |
| Maximum altitude | m | 2000 |
| Expected life @ 70°C / Un (Vdc) | hours | 100.000 |

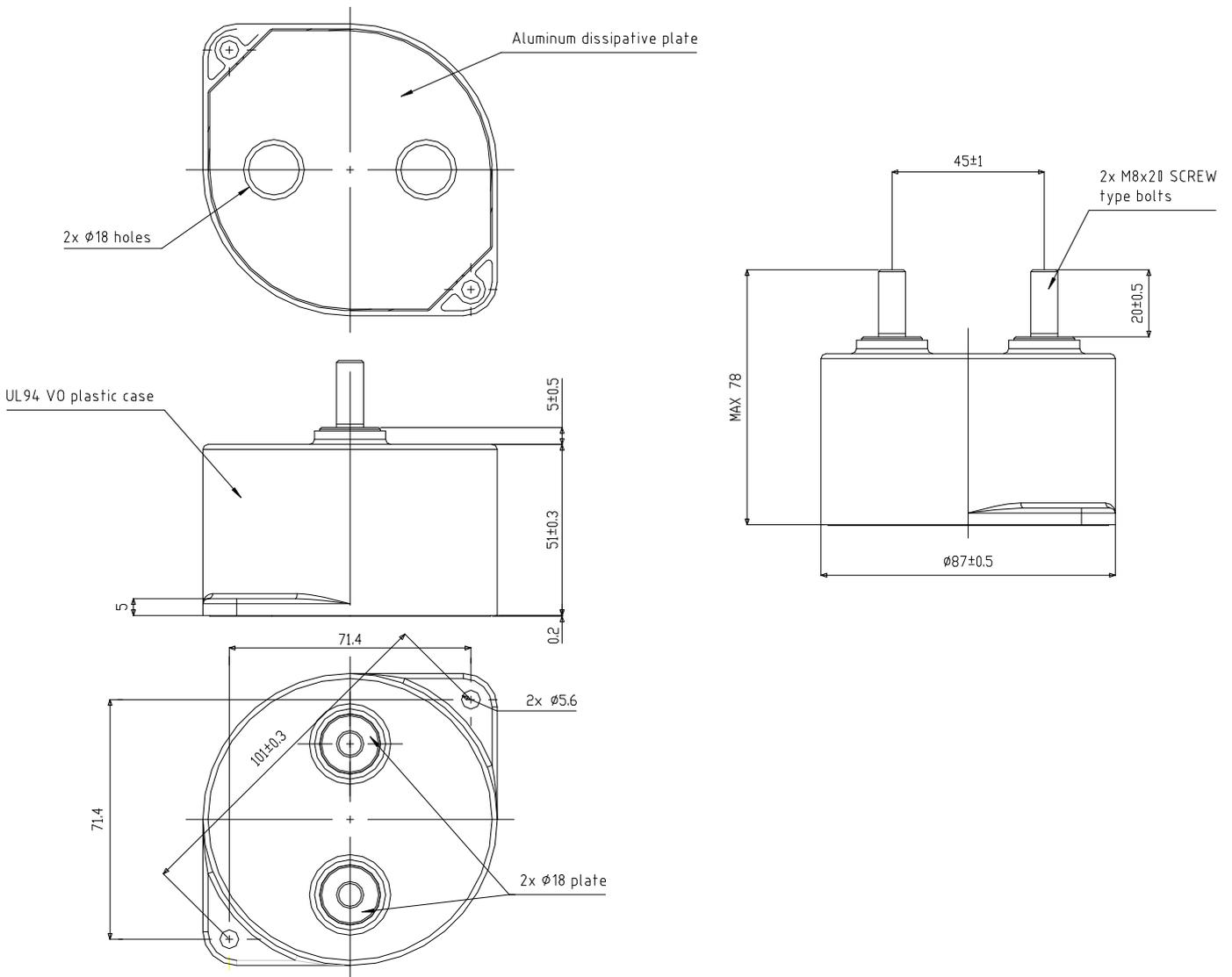
STANDARDS

According to IEC 1071 / 1-2

In according to fire protection standard EN 45545-2 (2013)

UL – CSA approved File n. E192559

2. Mechanical configuration.



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