



DCH 85 C

High Density DC - Link Capacitors on cylindrical can



CHARACTERISTICS

| | | |
|--|-------------------------------------|------------------|
| Rated Capacitance | 3200 | µF |
| Capacitance Tolerance | ±10% | |
| Rated DC Voltage (Un) | 900 | Vdc |
| Max. repetitive peak Voltage (Upk) | 1350 | V |
| Max. Current (Imax) | 85 | A rms |
| Max. fundamental freq. (fo) | < 10 | KHz |
| Dielectric Loss Tangent (tanδ _e) | 2x10 ⁻⁴ | |
| Capacitor Loss Tangent (tanδ) | < 20x10 ⁻⁴ | @1KHz 25°C 1Vrms |
| Series resistance (R _s) | < 1.2 mΩ | @1KHz 25°C 1Vrms |
| Thermal resistance forced cooling | 1.7 | °C/W |
| Self-inductance | < 80 | nH |
| Filler material | UL94 V0 resin. | |
| Dielectric | Self healing PPM-DH Film. | |
| Cover | Self extinguishing UL94 plastic top | |
| Can | Aluminum | |
| Mechanical and electrical connection | See drawing and notes on page 2 | |
| Fire Load | < 300 MJ | |

MAXIMUM RATINGS

| | | |
|------------------------------------|--------|------------|
| Over voltage | 1.1 Un | 8hours/day |
| Max. ripple voltage | 150 | Vrms |
| Non-recurrent surge voltage (Us) | 1900 | V |
| Max. repetitive peak current (Ipk) | 8 | KA |
| Max. Voltage raise of rise (dV/dt) | 7.5 | V/µs |
| Maximum surge current (Is) | 24,5 | kA |

TEST DATA

| | | |
|--------------------------------------|------------|---------------|
| DC Test voltage terminal to terminal | 1,5xUn 60s | V – 25°C |
| AC test voltage terminal to case | 3.5 kV 60s | V/50Hz – 25°C |

CLIMATIC CATEGORY

| | | |
|--|---------|--------|
| Min. operating temp. (θ _{MIN}) | -25 | °C |
| Max. operating temp. (θ _{MAX}) | +75 | °C |
| Max. Hot Spot temperature (θ _{HS}) | +85 | °C |
| Storage temperature | -40 +85 | °C |
| Altitude maximum | 2000m | a.s.l. |

LIFE TIME AND RELIABILITY

| | | |
|----------------------------|------------|------------------------|
| Failure quota (FIT) | 50/10E9 | |
| Expected life (Ln) | 100.000 h | @900V / 70°C Hot spot. |
| End of life criteria (EoL) | ΔC/C < 5% | |

| Release | Date | Description | Technician |
|----------|----------|---|------------|
| - | 21/09/22 | First issue (preliminary code: 21685V0085) | A. G. |
| A | 10/10/22 | E.C.: changed "M" quote on table page 2, from 12 to 16 mm | |
| | | | |



DUCATI energia

CAPACITOR for
POWER ELECTRONIC
- Low inductance DC Filters capacitors -

DCH 85 C Cn=3200µF Un=900Vdc

Part. Number: **416.85V.1893**


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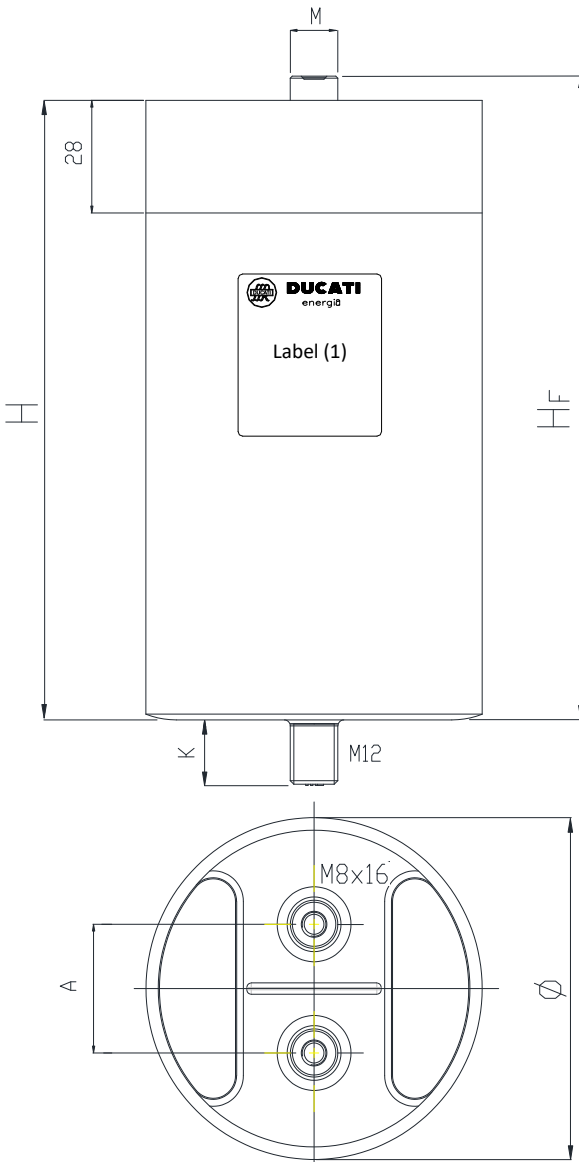
STANDARDS

According to: IEC 61071 / IEC 61881

UL approved, FILE nr. E192559 

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

MECHANICAL DRAWING



Fixing:

M12 Fixing Stud
Lenght: 16mm (K)
Permissible tightening torque: 10Nm

Mechanical specifications:

Weight (approximate): <3.5 Kg

Dimensions:

| Ø [mm] | H [mm] | HF [mm] | A [mm] | M [mm] |
|--------|--------|---------|---------|---------|
| 116 ±1 | 285 ±2 | 291 ±2 | 50 ±0.5 | 16 ±0.5 |

Electrical connection:

M8x10 female type.
external Ø = 16mm.
Material: tinned brass.
Permissible tightening torque: 6Nm

Spacings

Through air: 34 mm
Over surface: > 50 mm

Labels description:

Label (1): Rating and identification

| Release | Date | Description | Technician |
|---------|----------|---|------------|
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