



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
-	16/06/20	First issue	A. G.
A	16/11/21	Addend EN45545 standard and fixing DATA value	A. G.



DUCATI energia

CAPACITOR for
POWER ELECTRONIC
- Low inductance DC Filters capacitors -

DCH 85 C Cn=3200µF Un=900Vdc

Part. Number: **416.85V.1890**


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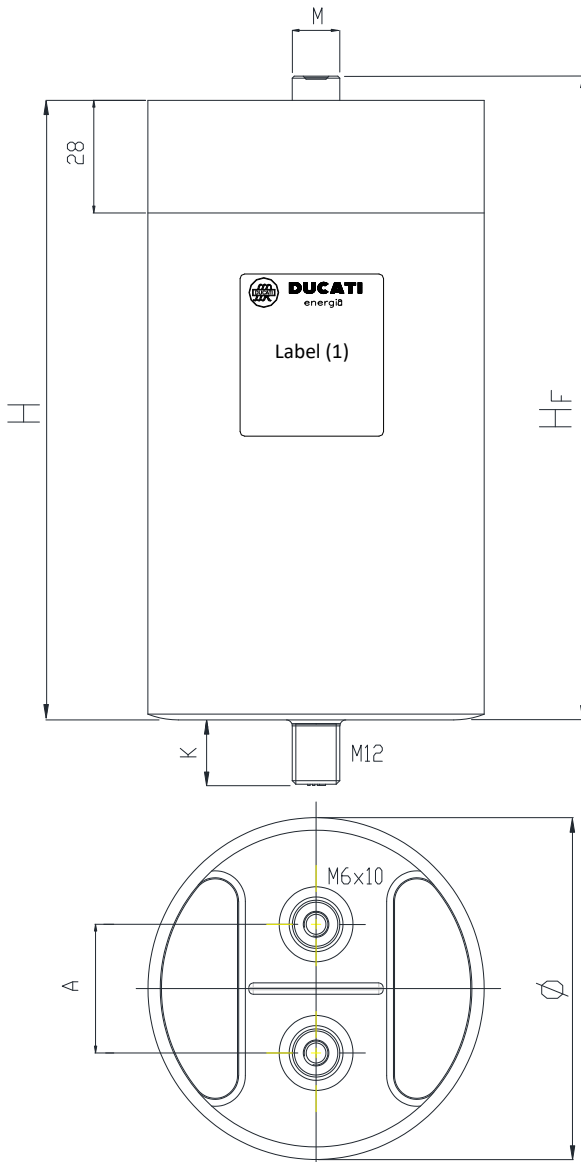
STANDARDS

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

Length: 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	12 ±0.5

Electrical connection:

M6x10 female type.

external Ø = 12mm.

Material: tinned brass.

Permissible tightening torque: 6Nm

Spacings

Through air: 38 mm

Over surface: > 54 mm

Labels description:

Label (1): Rating and identification

Release	Date	Description	Technician
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