 <b>DUCATI</b> energia	<b>CAPACITOR for POWER ELECTRONIC</b> - High current DC Filters capacitors -	DC89 HC – Cn =100uF 1100V
		Part Number: <b>416.89.1180</b>

## DC 89 HC

DC – Link, High current Capacitors on cylindrical plastic case.



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

ELECTRICAL CHARACTERISTICS		
Rated Capacitance and tolerance	µF	100 ±10%
Rated DC Voltage (Un)	V	1100
Maximum DC Voltage	V	1200 (<8hours x day)
Series resistance (Rs)	mΩ	< 1.25
Maximum Current (Imax) - RMS @ 70°C	A	24
Maximum Current (Imax) - RMS @ 50°C	A	55
Maximum peak Currents (Ip)	kA	4,00
Thermal resistance (R <sub>THC</sub> ) nat. cool. (*)	°C/W	7,8
Maximum peak voltage (Upk) - repetitive	V	1650
Maximum peak Voltage (Us) – no repetitive	V	2200
Self-inductance	nH	<40
Max. voltage raise of rise (dV/dt)	V/us	40
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.
Case		Self extinguishing plastic case (UL94 V0) with an aluminum dissipative plate on the bottom side.
Dimensions (Ø x h)	mm	≈ Ø87 x 64
Weight	Kg	≈ 0.600
Environment / Mounting position		Indoor / All
Safety system		This capacitors are designed with a particular type of polypropylene metalized film 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
-	11/01/12	First issue	A.G.
A	07/03/13	Changed max. torque for fixing holes and terminals	A.G.
B	29/08/14	Added list of internal material and CAS number	A.G.
C	25/07/18	Added compliance to EN 45545 / UL file.	A.G.



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POWER ELECTRONIC**  
- High current DC Filters capacitors -

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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

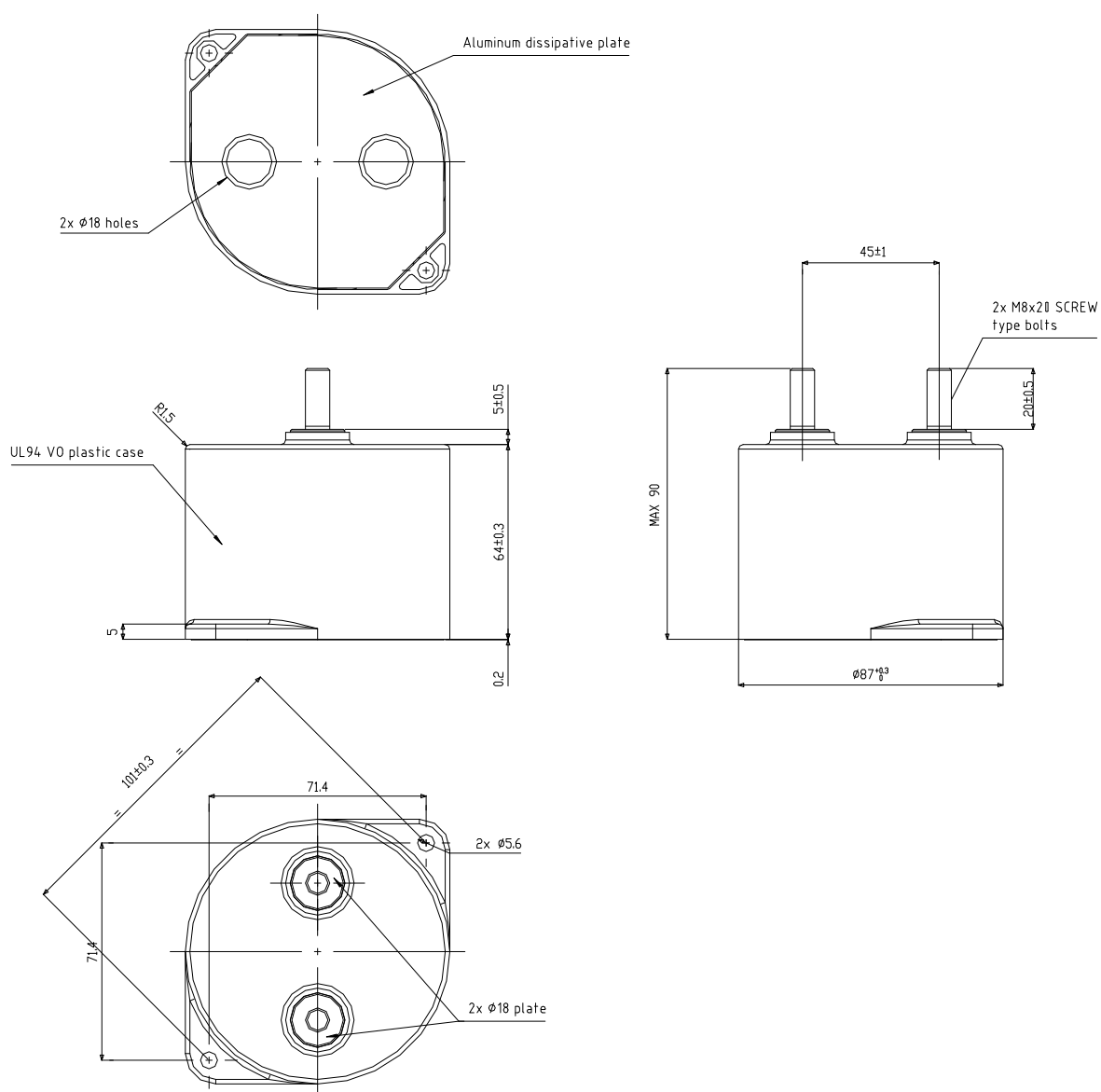
### STANDARDS

According to IEC 61071 / 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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### 3. Internal material.

List of the internal material and CAS number:

Construction Element	Material group	Material detail	CAS no. (if available)	Average mass [%]	Sum [%]
Internal capacitive element	Metals	Zinc metal spraying	7440-66-6	2,0	42,5
	Metals	SnCu tin	7440-31-5	1,5	
	Polymer	PP film (dielectric)	9003-07-0	38,3	
	Polymer	PBT plastic pin	26062-94-2	0,7	
Encapsulation	Metals	Bottom aluminum heatsink	7429-90-5	11	48
	Polymer	PBT Plastic Cover	26062-94-2	9	
	Polymer	Polyurethane resin		15	
	Metals	Cu-Sn internal wire connection	7440-50-8	13	
Terminals	Metals	Brass terminal		8,7	9
	Metals	Sn Coating	7440-31-5	0,3	
				<b>Sum</b>	<b>100,0</b>

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