DC 86 P series

High Density, Low Inductance DC-Link Capacitors
Prismatic Plastic Case

This very large Prismatic Box variant is particularly convenient for applications requiring very large capacity or high operating voltages; the tried and proven Ducati Energia PPMh technology provides competitive and reliable performances for all common DC-Link applications.
When coupled with the exclusive Ducati Energia High Crystallinity Film the DC 86 P construction provides superior temperature performance with 100khrs life @ 90°C HotSpot or extended life of 400khrs @70°C HotSpot.

The exclusive Ducati Energia metallization profiles guarantee high capacity stability and a controlled, open-circuit condition at the end of DC 86 P operational life, while maximizing the current capability.

Main characteristics:

- Very High Capacity Density
- Self-Healing Metallized Polypropylene Film
- V0 Plastic Case
- DRY Resin filling
- Low ESL

Main applications:

- DC-Link
- Energy Storage / Pulse Generation

DC 86 B Versions with Ducati Energia High Crystallinity Film:

- Standard Life expectancy 100.000hrs at 90°C HotSpot
- Extended Life expectancy 400.000hrs at 70°C HotSpot

General Characteristics

DC Voltage range	550÷6800 V
Maximum ripple current	300 A
Capacitance range	Up to 15000 µF
Capacitance tolerance	standard: +0%/-15%; others on request
Thermal resistance natural cooling (R_{THc})	0.52 °C/W
Equivalent series inductance (ESL)	< 45 nH
Terminals	4 x M6 internal threads per pole or bus-bars
Test voltage	U_{tc}= 12 kVac @50 Hz 60 s U_{tt}= 1.5 x UnDC 10 s
Working temperature (θ_{MIN} – θ_{MAX})	–25 / +85 °C
Storage temperature	–25 / +85 °C
Filling	Self-extinguishing (UL94 V0) polyurethane resin
Dielectric	Self healing PPMd film
Container	Self-extinguishing (UL94 V0) plastic box
Failure quota	50 /10E9
Life expectancy	100.000 h (*)
Maximum altitude	2000 m a.s.l.
Reference standard	IEC 1071-1/2 - IEC 1881 - UL 810
M6 internal thread terminals	Max 3 Nm
Fixing slots	Max 10 Nm
In according to fire protection standard	EN 45545-2

Safety system: These capacitors are designed with a particular type of polypropylene metalized film (PPMd film) that assures an open circuit at the end of life, if the operation is within the specification.

(*) For details please refer to page 75.

Capacitance Cn [µF]	Rated DC Voltage Un [V]	Repet. Peak Voltage Up [kV]	Surge Voltage Us [kV]	Max. RMS Current I_{MAX} [A]	Repet. Peak Current Ip [A]	Surge Current Is [kA]	Series Resistance Rs [mΩ]	Thermal Resistance R_{THC} [°C/W]	Weight [kg]	Terminal solution A / B	Part n. 416.86.
15000	550	0.8	1.3	300	34500	45	< 0.30	0.52	< 19.0	A / B	009.x
11000	650	1.0	1.5	300	30800	45	< 0.30	0.52	< 19.0	A / B	109.x
8500	800	1.2	1.8	300	28050	45	< 0.30	0.52	< 19.0	A / B	159.x
5600	1000	1.5	2.3	250	26880	40	< 0.45	0.52	< 19.0	A / B	209.x
3800	1200	1.8	2.8	250	22800	40	< 0.50	0.52	< 19.0	A / B	259.x
2800	1350	2.0	3.1	250	22400	40	< 0.50	0.52	< 19.0	A / B	309.x
2100	1600	2.4	3.7	200	21000	40	< 0.65	0.52	< 19.0	A / B	359.x
1700	1800	2.7	4.1	200	20400	40	< 0.70	0.52	< 19.0	A / B	409.x
1050	2100	3.1	4.8	200	19950	40	< 0.70	0.52	< 19.0	A / B	459.x
650	2700	4.0	6.2	200	19500	35	< 0.75	0.52	< 19.0	A / B	508.x
500	3200	4.8	7.4	200	17500	35	< 0.75	0.52	< 19.0	A / B	559.x
300	3800	5.7	8.7	200	13500	35	< 0.75	0.52	< 19.0	A / B	609.x
200	4500	6.7	10.0	150	13000	30	< 1.20	0.52	< 19.0	A	659.0
160	5200	7.8	10.0	150	11200	30	< 1.20	0.52	< 19.0	A	709.0
120	6000	9.0	10.0	150	10800	25	< 1.40	0.52	< 19.0	A	759.0
80	6800	10.0	10.0	120	9600	20	< 1.50	0.52	< 19.0	A	809.0

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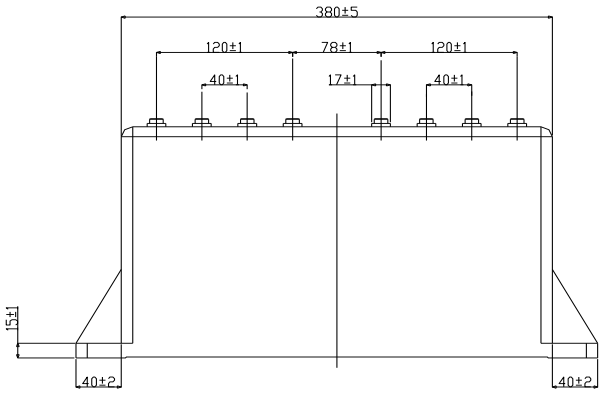
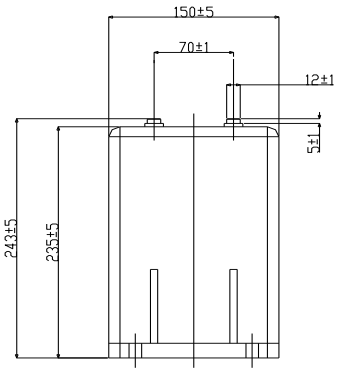
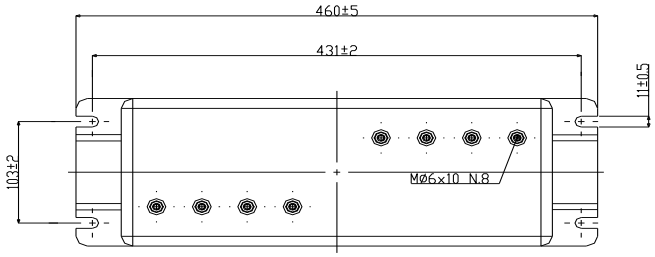
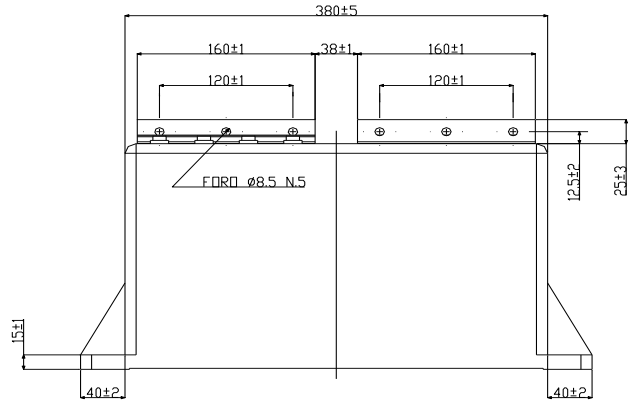
Box TYPE	
Standard box dimensions	mm 477 x 252 x 172
No. pieces x box:	1

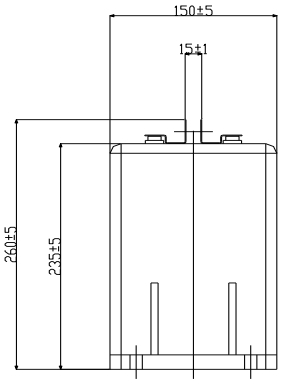


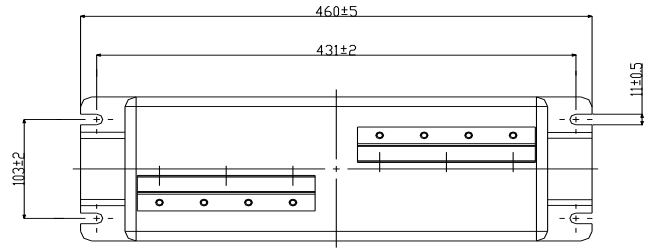




A SOLUTION







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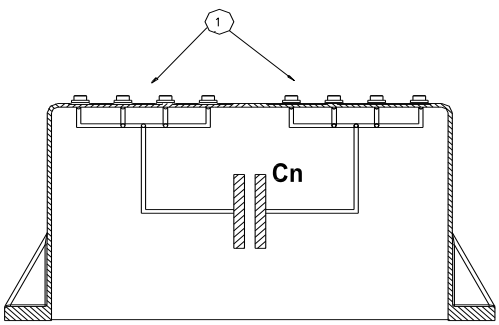

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