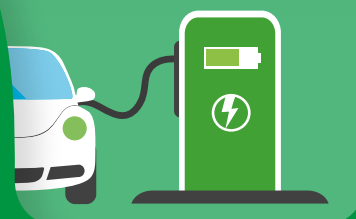


History drives the future

SINCE 1926



Power Electronic Capacitors



DUCATI energia



Company

DUCATI ENERGIA owns its fame to the Ducati brothers who established the DUCATI Company in **1926**.

22 years later, DUCATI was split in two other companies, **DUCATI Elettrotecnica** and **DUCATI Meccanica** (today DUCATI Motor Holding).

DUCATI ENERGIA was then founded in **1985** due to the merge of DUCATI Elettrotecnica and Zanussi Elettromeccanica, expanding the technological offer on the market and reinforcing its Capacitors' Production Expertise.

It is nowadays considered one of the most important companies in the Bologna area with a staff list of more than 1400 employees working in its 9 worldwide plants.

 **>1400**
employees

 **9**
worldwide plants

The main fields of activities are the following:

- Motor Lighting Capacitors
- Power Electronics Capacitors
- Power Factor Correction Capacitors and Systems (LV and MV)
- Alternators and Ignition Systems
- Electrical Vehicles and Charging Stations for Electrical Vehicles
- Energy Analysers
- Control Systems for energy grids
- Railways Signalling systems
- Ticketing and Transport Automation systems



Customized products

CUSTOMIZED PRODUCTS designed to leverage the advantages of Ducati high crystallinity film technology for ev/hev applications

There are applications for which is necessary to **develop with the customer** the appropriate product to **fulfill the expected performances**. Combining the **long experience** of Ducati Energia in **designing film capacitor** with the **advantages of Ducati's High-Crystallinity Films**, it's possible to **reach** these aspiring goals while maintaining the **excellent cost/performance** ratio of Metallized Polypropylene Film Capacitors.

Technical Aspects

- Ducati High-Crystallinity Film Technology
- PA66 or TPS Cases
- Dry-Winding – Dry-Potting Technology

Smart Features

- Special Multi-Core Assembly minimizes field effects for extremely low ESL
- Bare/Tinned Copper or Laminated Busbars for maximum project flexibility
- Proprietary Metallization Pattern/Profiles maximize safety and optimize capacity changes across the useful life

Customized Approach

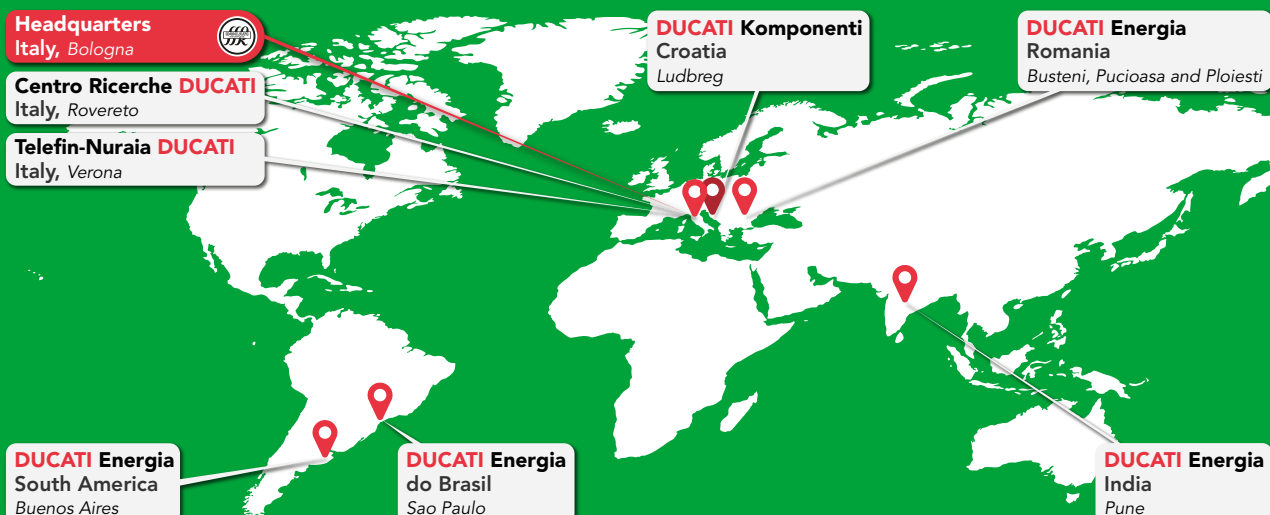
The rapidly evolving market for these technologies demands **project-specific developments**.

Ducati Energia studies each specification and mission-profile applying its expertise to provide the most suitable solution for each case.

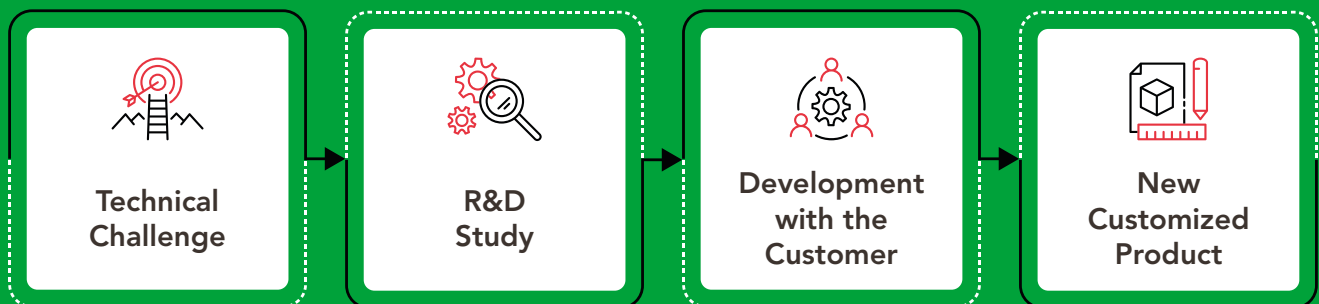
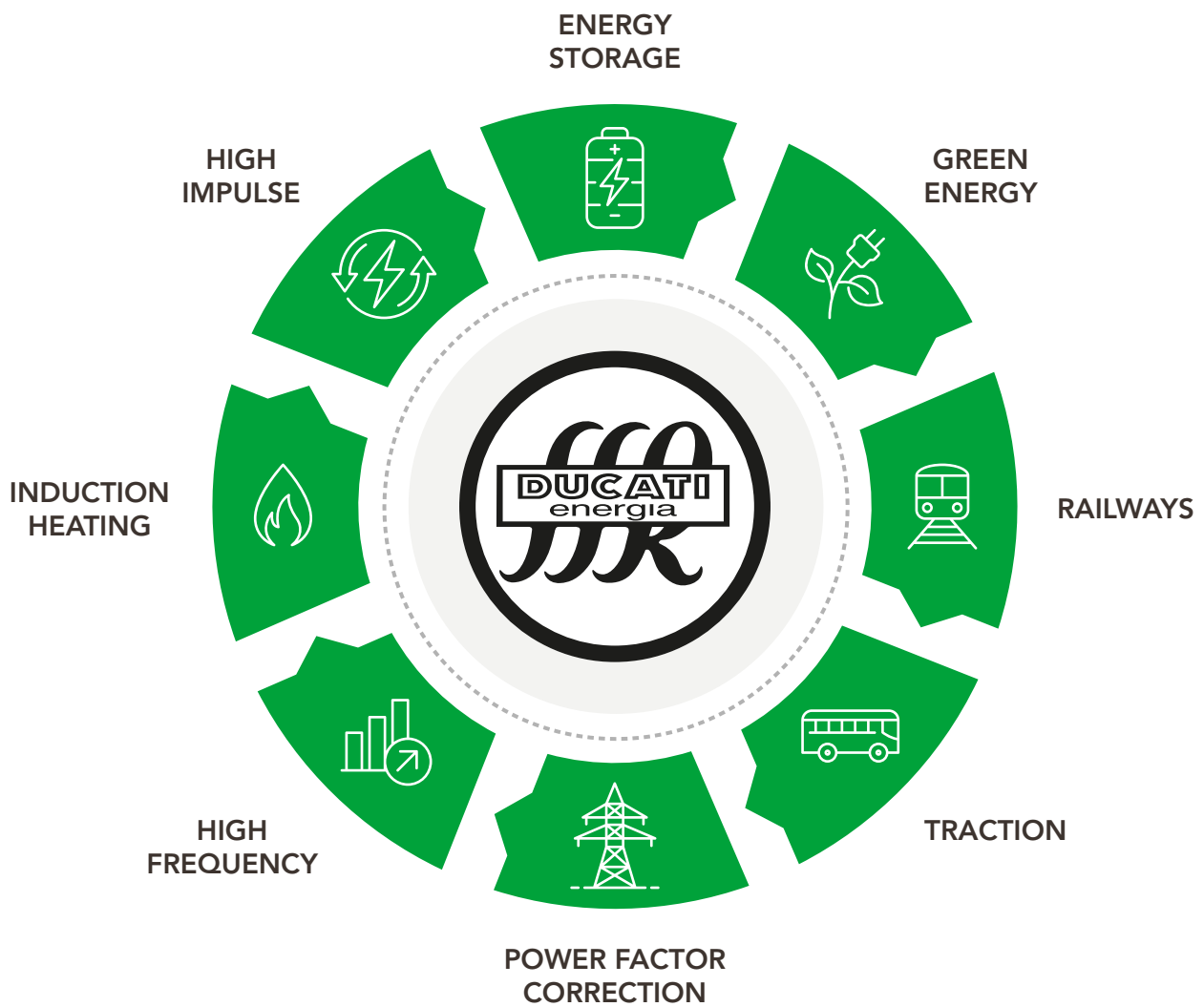
DUCATI has been among the first in the world to start industrial production of capacitors, and has been a market leader ever since.

Since its foundation, **DUCATI Energia** has always been in the forefront of technical and industrial development, leading the research shaping today's technology and cooperating to the upgrades and improvements leading to the current IEC and EN Standards for Capacitors.

DUCATI Energia firstly introduced the Metallised Polypropylene Film technology and its innovative PPM and PPMh film set the reference for this technology, outclassing the obsolete paper/oil and gas technology in terms of superior performance and reduced dimensions.



Wide range of application



AC Filter Capacitors

Main characteristics:

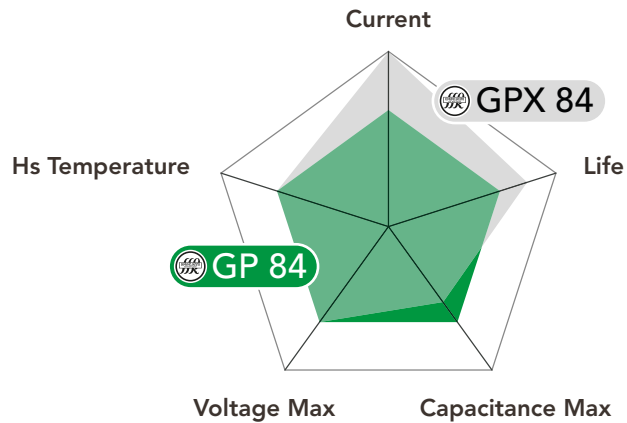
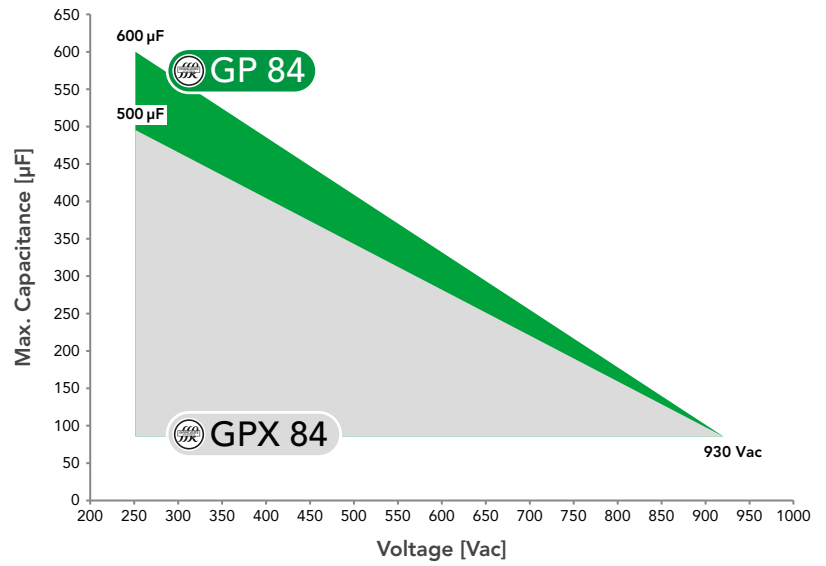
- Self-Healing Metallized Polypropylene Film
- UL-Approved Overpressure Safety Device
- Aluminum Case
- DRY Resin filling

Main applications:

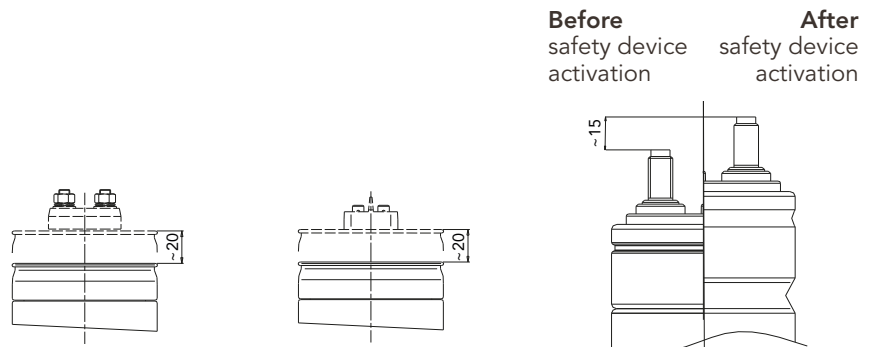
- AC Filtering
- High-Performance Power Factor Correction (high harmonics, voltage and RMS/surge current)
- UPS and Wind-Power Applications



GP 84



GPX 84



Dimension with overpressure device activated



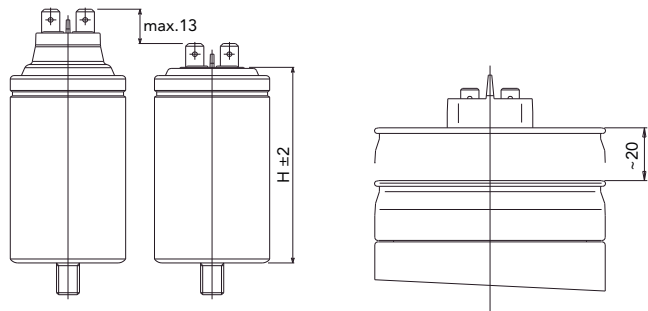
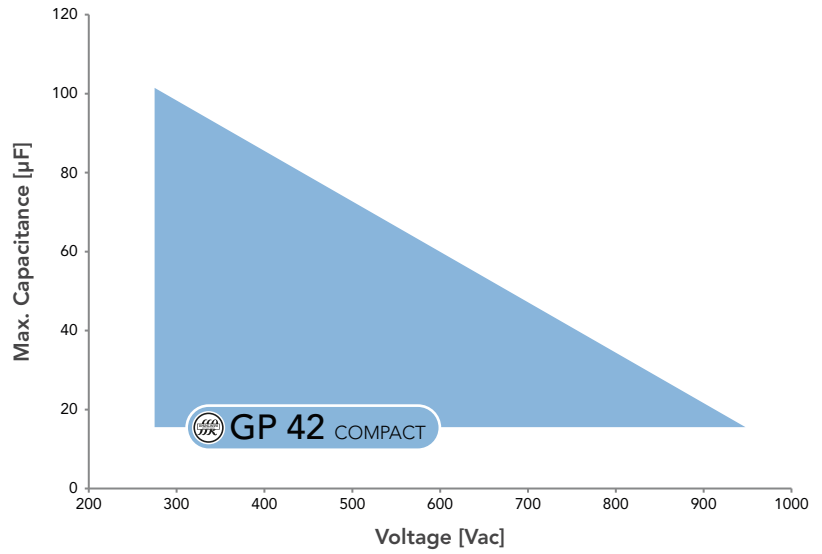
AC Filter Capacitors

Main characteristics:

- Self-Healing Metallized Polypropylene Film
- UL-Approved Overpressure Safety Device
- Aluminum Case
- DRY Resin filling
- Wide range of connections with high current capability

Main applications:

- AC Filtering
- High-Performance Power Factor Correction (high harmonics, voltage and RMS/surge current)
- UPS and Wind-Power Applications

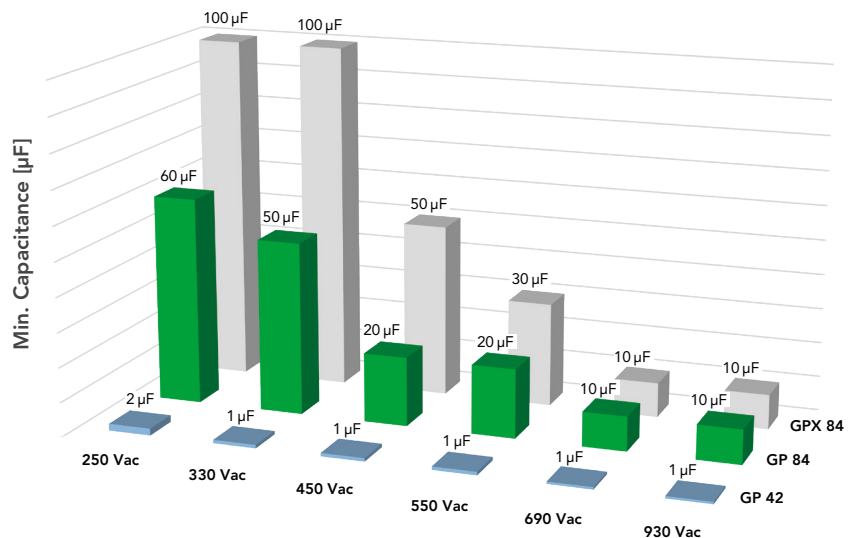


OVERPRESSURE SAFETY DEVICE

GP 42 COMPACT

Min. Capacitance [µF]

	GP 42	GP 84	GPX 84
250 Vac	2 µF	60 µF	100 µF
330 Vac	1 µF	50 µF	100 µF
450 Vac	1 µF	20 µF	50 µF
550 Vac	1 µF	20 µF	30 µF
690 Vac	1 µF	10 µF	10 µF
930 Vac	1 µF	10 µF	10 µF



Cylindrical DC-Link

Main characteristics:

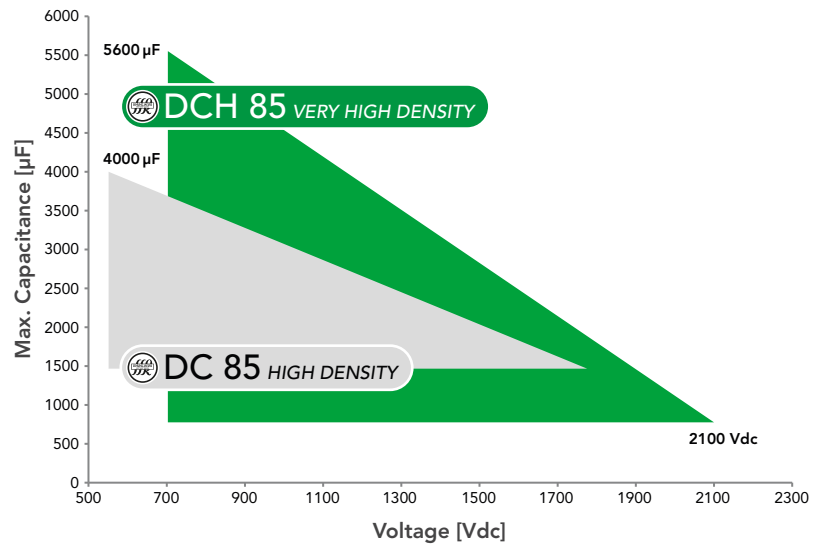
- Self-Healing Metallized Polypropylene Film
- UL-Approved Overpressure Safety Device
- Aluminum Case
- DRY Resin filling

Main applications:

- DC-Link
- Energy Storage / Pulse Generation



DC 85 & DCH 85



Main characteristics:

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

Main applications:

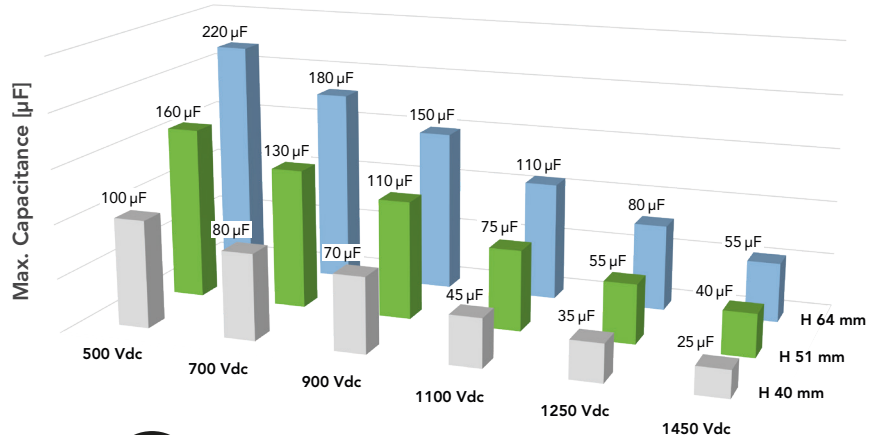
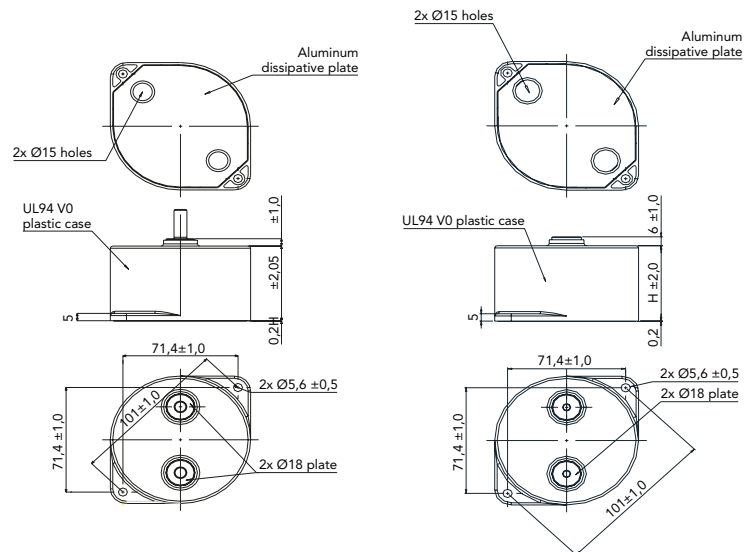
- High Switching Frequency DC-Link



DC 89 HC HIGH CURRENT

Max. Capacitance [µF]

	H 40mm	H 51mm	H 64mm
500 Vdc	100 µF	160 µF	220 µF
700 Vdc	80 µF	130 µF	180 µF
900 Vdc	70 µF	110 µF	150 µF
1100 Vdc	45 µF	75 µF	110 µF
1250 Vdc	35 µF	55 µF	80 µF
1450 Vdc	25 µF	40 µF	55 µF



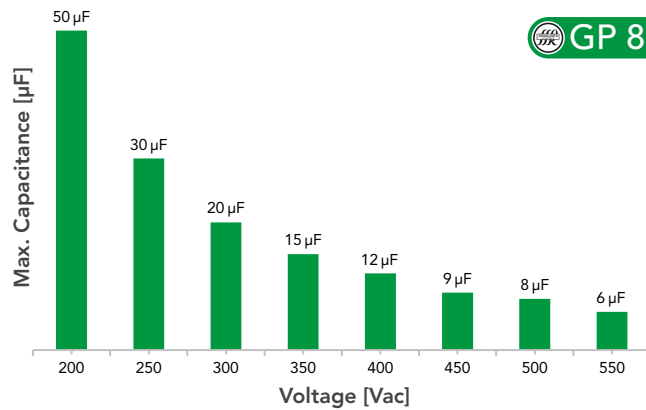
Prismatic Capacitor

Main characteristics:

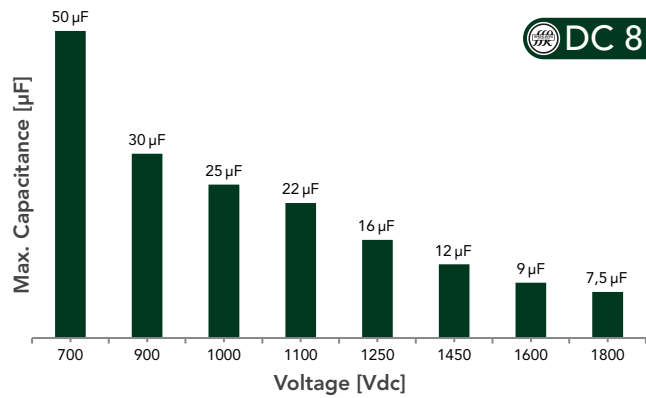
- Wide Voltage & Capacitance range
- High Current withstanding
- Low ESL
- Modular design
- Both DC-Link and AC Versions
- EL > 100.000 h @70°C Hot spot / Un
- Self extinguishing resin
- IEC 1071/ 1-2



AC-Filter GP 81 series



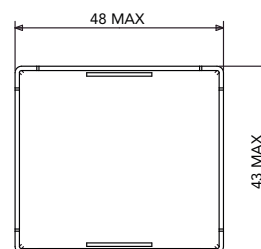
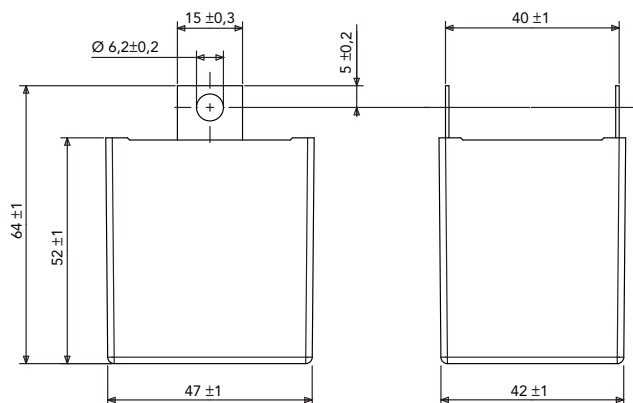
GP 81 SERIES



DC 81 SERIES



DC-Link DC 81 series



Prismatic DC-Link



DC 86 PS & DCH 86 PS

Dimensions BxHxL 225x162x75 mm

Main characteristics:

- High Capacity Density
- Self-Healing Metallized Polypropylene Film
- UL-Approved Construction
- V0 Plastic Case
- DRY Resin filling
- REAL Low ESL

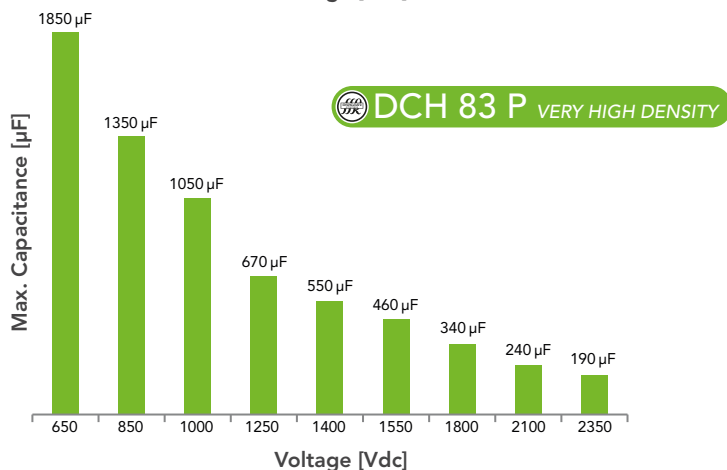
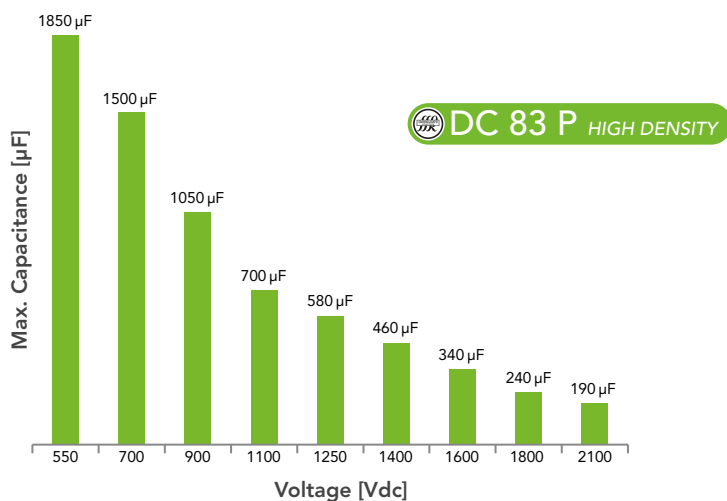
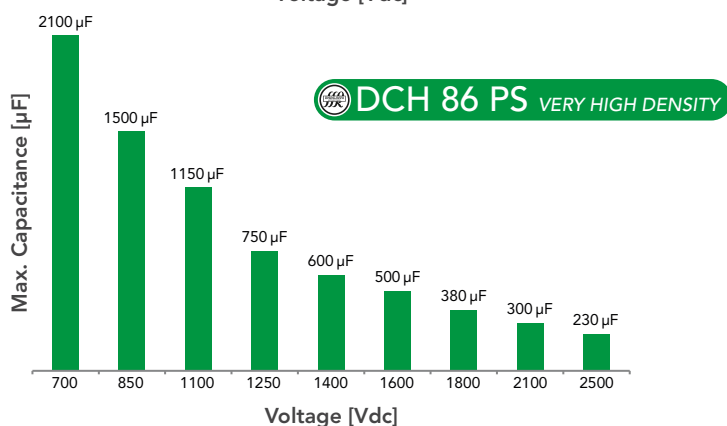
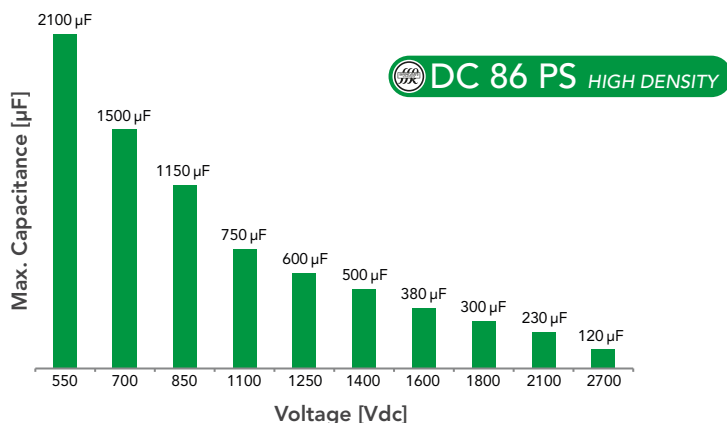
Main applications:

- DC-Link
- Energy Storage / Pulse Generation
- **Standard Life expectancy 100.000hrs at 85°C HotSpot**



DC 83 P & DCH 83 P

Dimensions BxHxL 165x170x75 mm

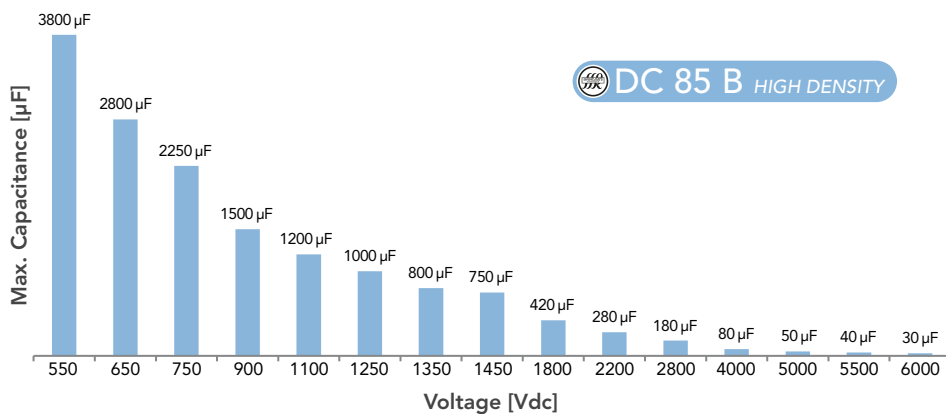


Prismatic DC-Link High Power



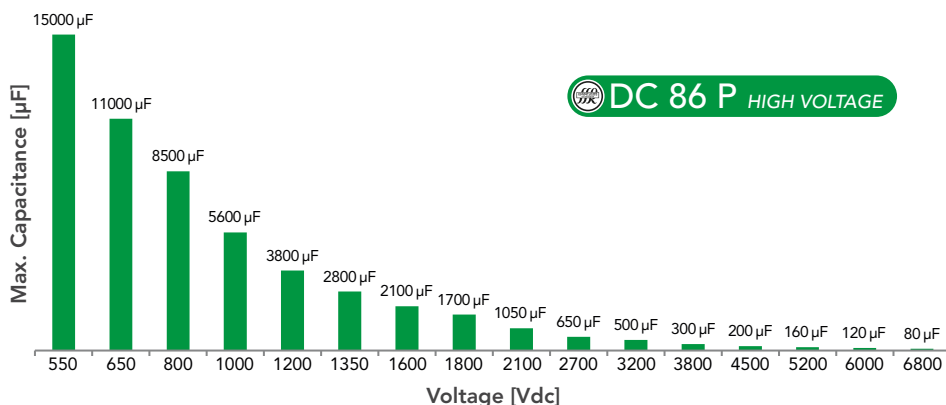
DC 85 B

Dimensions BxHxL 165x153x165 mm



DC 86 P

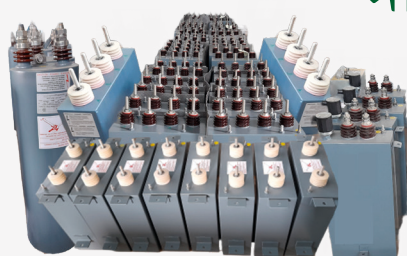
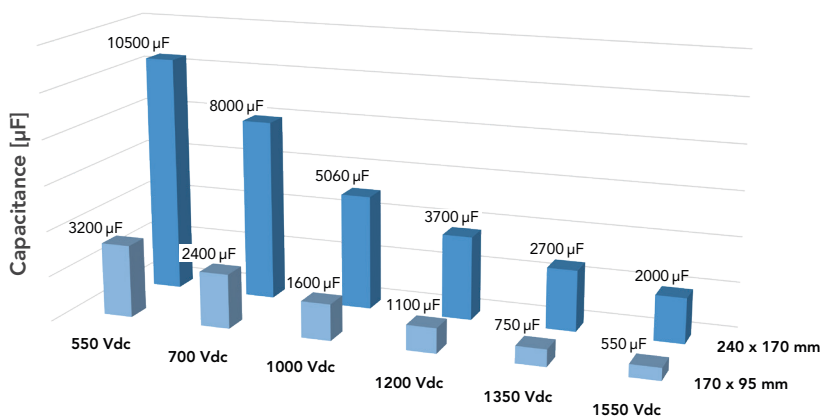
Dimensions BxHxL 380x235x150 mm



DC 88 M



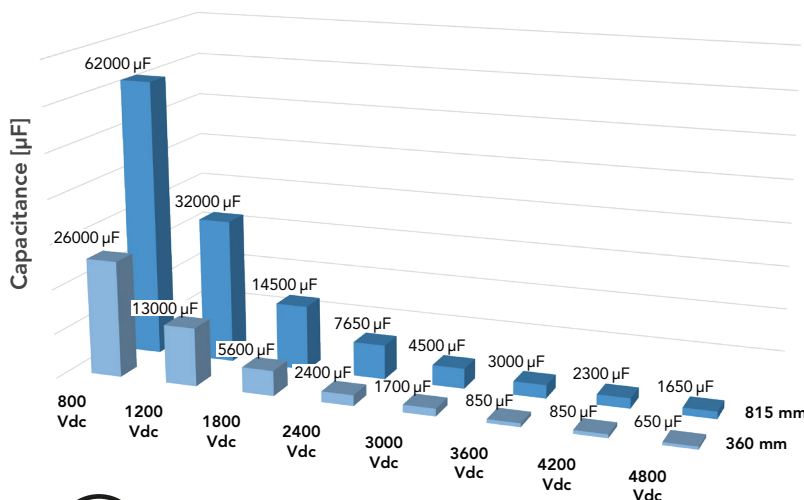
METALLIC DC-LINK



DC 45

Base: (W)165 x (L) 480 mm

*Complete Datasheet catalog upon request



Quality & certifications

Utmost attention to product quality and customer service are constants in DUCATI's history and the main factors contributing to its success worldwide. DUCATI has always been one of the first companies in its field, in Italy and in Europe, to adopt the most modern standards and procedures in order to assure the highest level of product quality and reliability.

The **QUALITY SYSTEM** of DUCATI Energia SpA, capacitor division, as described in the Quality Manual, was one of the first in Italy to be approved by the BSI in accordance with ISO 9002 (EN 29002) procedures: Certificate of Registration N. FM22004. DUCATI Energia is fully certified following ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 27001: 2013, Iso 37001:2016, ISO 50001: 2018 and the SA8000: 2014.

All this has been achieved thanks to fully automated and integrated production processes, completely new and innovative machines, production process control methods based on accurate specifications and the assigning of responsibility to operators at all levels.

Capacitors, systems and relays comply with the requirements set forth in EC Directives 2014/35 ("Low Voltage Directive"), when applicable.

Nearly all models are certified by international institutes and all are manufactured in full compliance with the requirements of said standards.



Quality Management System
ISO 9001:2015



Environmental Management System
ISO 14001:2018



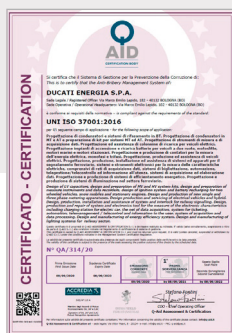
Energy Management System
ISO 50001:2018



Occupational Health and Safety Management System
ISO 45001:2018



Information Security Management
ISO 27001:2013



Information Security Management
ISO 37001:2016



SA8000:2014



Cross reference table Rated DC / AC voltage (V) versus Capacitance (µF)

CAPACITANCE Cn [µF]

DC rated voltage Un [V]	400 - 800	800 - 1400	1400 - 2000	2000 - 2500	2500 - 3000	3000 - 4000	4000 - 6800
AC rated voltage Urms [V]	250 - 550	690 - 930	-	-	-	-	-
0 - 50	DC 81	DC 81	DC 81		DC 85 B	DC 85 B	DC 85 B
	GP 42 GP 84 - GPX 84 GP 81	DC8 9 HC GP 42 GP 84 - GPX 84	DC 89 HC				
50 - 100	DC89 HC	DC89 HC	DCH 85 C	DCH 85 C	DC 85 B	DC 85 B	DC86 P
	GP 42 GP 84 - GPX 84	GP 84 - GPX 84	DC 85 C				
100 - 150	DC 89 HC	DC 89 HC	DCH 85 C	DCH 85 C	DC 85 B		DC 86 P
	GP 84 - GPX 84	GP 84 - GPX 84	DC 85 C	DC 85 B	DC 86 PS		
150 - 200	DC 89 HC	DC 89 HC	DCH 85 C	DCH 85 C	DC 85 B	DC 86 P	DC 86 P
	GP 84 - GPX 84	DCH 85 C	DC 85 C	DC 85 B			
200 - 250	DC89 HC	DCH 85 C	DCH 85 C	DCH 85 C		DC 86 P	DC 86 P
	GP84 - GPX84		DC 85 C	DC 85 B DC 86 PS DCH 86 PS DC 83 P DCH 83 P			
250 - 300	GP84 - GPX84	DCH 85 C	DCH 85 C	DCH 85 C		DC 86 P	
300 - 400	DC 85 C	DCH 85 C	DCH 85 C	DCH 85 C		DC 86 P	
	GP84 - GPX84	DC 85 C	DC 85 C	DC 86 PS DCH 86 PS DC 83 P DCH 83 P			
400 - 500	DCH 85 C	DCH 85 C	DCH 85 C	DCH 85 C	DC 86 P	DC 86 P	
	DC 85 C GP84 - GPX84	DC 85 C DC 83 P	DC 85 C DCH 83 P				
500 - 600	DC 85 C	DCH 85 C	DCH 85 C	DCH 85 C	DC 86 P		DC 45
	GP84 - GPX84	DC 85 C DC 83 P	DC 85 C DCH 83 P DC 86 PS DCH 86 PS				
600 - 1000	DCH 85 C	DCH 85 C	DCH85 C	DCH 85 C	DC86 P	DC 45	
	DC 85 C	DC 85 C DC 85 B DC 86 PS DCH 86 PS DC 83 P DCH 83 P	DC 85 C DC 86 P	DC 86 P			
1000 - 2000	DCH 85 C	DCH 85 C	DCH 85 C	DC 86 P	DC 88 M		
	DC 85 C DC 85 B DC 83 P DCH 83 P DC 86 PS	DC 85 C DC 85 B DC 86 P DCH 83 P DC 83 P DC 86 PS DCH 86 PS	DC 85 C DC 86 P		DC 45		
2000 - 3000	DCH 85 C	DCH 85 C	DC 86 P	DC 88 M			
	DC 85 C DC 85 B DC 86 PS DCH 86 PS	DC 85 C DC 85 B DC 86 P		DC 45			
3000 - 6000	DCH 85 C	DCH 85 C	DC 88 M				
	DC 85 C DC 85 B DC 86 P	DC 85 C DC 86 P					
6000 - 10000	DC 86 P	DC 86 P DC 88 M DC 45					


- DC - series: - DC Application: expressly designed for operation with DC voltage.
- GPX - series: - General purpose application: designed for operation both AC and DC voltage.




DUCATI energia

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Online Catalogue

