



DUCATI energia

CAPACITOR for
POWER ELECTRONIC
- GENERAL PURPOSE APPLICATIONS -

GP84 Cn = 50µF Urms= 450V

Part. Number: **416.84.4180**

GP 84

AC / DC - Power electronic Capacitors

CHARACTERISTICS

Rated Capacitance (Cn)	50	µF
Capacitance Tolerance	±5%	
Rated RMS Voltage (Urms)	450	V
Max. AC Voltage (Un ac)	630	V
Rated DC Voltage (Un)	600	V
Maximum Current (Imax)	24	A
Self-inductance (L _{ESR})	< 160	nH
Equivalent series resistance (R _{ESR})	< 8	mΩ
Typical tan d (10 ⁻⁴)	4,5	(Measure @ 50Hz)
Thermal resistance natural cooling (R _{THC})	2,2	°C/W

Filler material: Polyurethane Resin
PPM film Dielectric - self healing technology.

Over pressure safety device:
Protected 10K AFC (UL 810)
Aluminium case, M12 fixing stud.

Weight	≤ 420	g
Dimension Ø x H	55 x 150	mm

MAXIMUM RATINGS

Over voltage	1.1 Un	8hours/day
Non-recurrent surge voltage (Us)	1600	V
Maximum peak current (I _{PK})	1.8	kA
Max. Voltage raise of rise (dV/dt)	35	V/µs
Maximum surge current (Is)	4.5	kA
Max. fixing torque for M12 stud	10	Nm
Max. fixing torque for M6 terminals	3	Nm

TEST DATA

DC Test voltage terminal to terminal	1,5xUnx 10s	Vdc
AC test voltage terminal to case	3kV x10s	Vac 50Hz

CLIMATIC CATEGORY

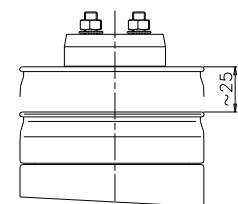
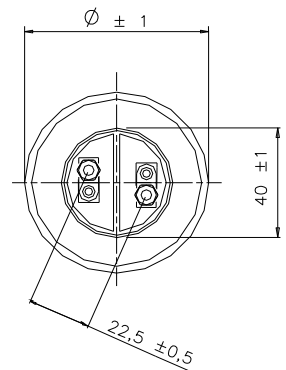
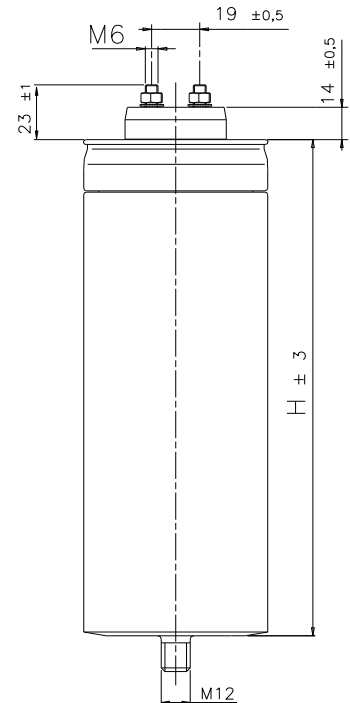
Min.operating temperature (θ _{MIN})	-25	°C
Max. operating temperature (θ _{MAX})	+70	°C
Storage temperature	-40 +85	°C
Altitude maximum	2000m	a.s.l.

Failure quota	300/10 ⁹	
Expected life (Ln)	100.000 h @ 450Vac / 50Hz	

STANDARDS

EN 61071-1/2
UL 810 approved (file N. E102953)

**Total elongation is about 20 mm after the overpressure disconnecter release.
Don't use rigid connections.**



Dimensioni con sistema antiscoppio attivato

Dimension with overpressure device activated

Release	Date	Description	Technician
A	17/12/12	Update ed.	A. G.