



DUCATI energia

CAPACITOR for
POWER ELECTRONIC
- GENERAL PURPOSE APPLICATIONS -

GP84 Cn = 400µF Urms= 330V

Part. Number: **416.84.3987**

GP 84

AC / DC - Power electronic Capacitors

CHARACTERISTICS

Rated Capacitance (Cn)	400	µF
Capacitance Tolerance	±5%	
Rated RMS Voltage (Urms)	330	V
Max. AC Voltage (Un ac)	470	V
Rated DC Voltage (Un dc)	600	V
Maximum Current (Imax) @ θ _{MAX}	75	A
Maximum Current (Imax) @ 45°C	91	A
Self-inductance (L _{ESR})	< 230	nH
Equivalent series resistance (R _{ESR})	< 7	mΩ
Typical tan d (10 ⁻⁴)	7,2	(Measure @ 50Hz)
Thermal resistance natural cooling (R _{THC})	0,9	°C/W
Filler material: Polyurethane Resin PPM film Dielectric - self healing technology.		
Over pressure safety device Aluminium case, M12 fixing stud.		
Weight	≤ 1500	g
Dimension Ø x H	90 x 220	mm

MAXIMUM RATINGS

Over voltage	1.1 Un	8hours/day
Non-recurrent surge voltage (Us)	1150	V
Maximum peak current (I _{PK})	113	A
Max. Voltage raise of rise (dV/dt)	40	V/µs
Maximum surge current (Is)	18	kA
Maximum Fault current - UL810	10.000	A
Max .Fixing Torque for terminals (*)	6	Nm
Max .Fixing Torque for M12 stud	10	Nm

(*) To avoid breaking, complete the tightening of the nuts using two wrenches.

TEST DATA

AC Test voltage terminal to terminal	2,15xUrms 2s	V
AC test voltage terminal to case	3kV x 10s	V - 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 (FIT)	300/10 ⁹
Expected life (Ln)	100.000 h @ 330Vac / 50Hz
Criteria of end of life (EL)	ΔC/C < 30% or SD activated (Cn=0µF) according to FIT

STANDARDS

EN 61071-1/2
UL - CSA approval [File No. E192559]

**Total elongation is about 15 mm after the overpressure disconnecter release.
Don't use rigid connections.**

Release	Date	Description	Technician
-	25/01/12	First issue: equivalent to 416843981, but with new plastic cover	A. G.
A	21/10/15	2 nd ed. Added end of life criteria.	A. G.

