



**DUCATI** energia

CAPACITOR for  
POWER ELECTRONIC  
- GENERAL PURPOSE APPLICATIONS -

**GP84 Cn = 500µF Urms= 330V**

Part. Number: **416.84.3997**

## GP 84

### AC / DC - Power electronic Capacitors

#### CHARACTERISTICS

Rated Capacitance (Cn)	500	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 <sub>MAX</sub>	80	A
Maximum Current (Imax) @ 45°C	95	A
Self-inductance (L <sub>ESR</sub> )	< 300	nH
Equivalent series resistance (R <sub>ESR</sub> )	< 5.8	mΩ
Typical tan d (10 <sup>-4</sup> )	7,5	(Measure @ 50Hz)
Thermal resistance natural cooling (R <sub>THC</sub> )	0,8	°C/W
Filler material: Polyurethane Resin PPM film Dielectric - self healing technology.		
Over pressure safety device Aluminium case, M12 fixing stud.		
Weight	≤ 1750	g
Dimension Ø x H	85 x 290	mm

#### MAXIMUM RATINGS

Over voltage	1.1 Un	8hours/day
Non-recurrent surge voltage (Us)	1150	V
Maximum peak current (I <sub>PK</sub> )	120	A
Max. Voltage raise of rise (dV/dt)	25	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 <sub>MIN</sub> )	-25	°C
Max. operating temperature (θ <sub>MAX</sub> )	+70	°C
Storage temperature	-40 +85	°C
Altitude maximum	2000m	a.s.l.

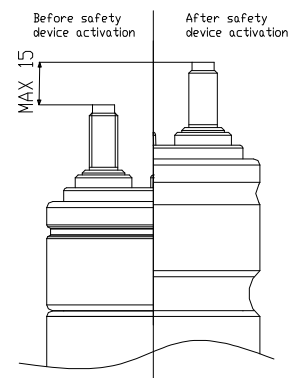
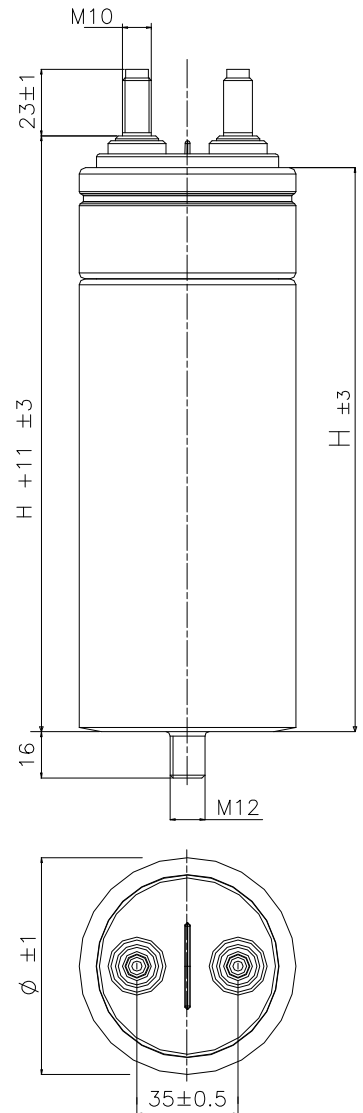
Failure quota	300/10 <sup>9</sup>
Expected life (Ln)	100.000 h @ 330Vac / 50Hz

#### STANDARDS

EN 61071-1/2  
UL - CSA approval

**Total elongation is about 15 mm after the overpressure disconnecter release.**

**Don't use rigid connections.**



Release	Date	Description	Technician
-	22/02/12	First issue: equivalent to 416843991, but with new plastic cover	A. G.