



GP 84 series

General purpose capacitors Cylindrical Aluminum Case

GP84 single-phase, cylindrical AC & DC Capacitors are the ideal solution for most AC Filter requirements as well as special PFC projects.

The sturdy construction with Aluminum case and plastic lid, the wide range of available connections and the safety features based on the integrated UL-approved overpressure disconnecter and DRY resin impregnation ensure GP84 can be easily and reliably integrated into any application and environmental condition.

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 PFC (high harmonics, voltage and RMS/surge current)
- UPS and Wind-Power Applications



General Characteristics

RMS Voltage range	250 ÷ 1000 V
Capacitance range	10 ÷ 600 µF
Capacitance tolerance	±5% / ±10%
Max. RMS current	80 A
Series resistance (Rs)	< 8 mΩ
Thermal resistance natural cooling (R _{THC})	< 3.0 °C/W
Max. voltage raise of rise (dV/dT)	≤ 100 V/µs
Terminals	M6 or M10 screw-type bolts or double tag 6.3 x 0.8 mm
Operating temperature	-40 / +85 °C
Storage temperature	-40 / +85 °C
Test voltage	U _{tc} = 3 kVac / 6 kVac @50 Hz 10 s U _{tt} = 1.5 x UnDC 10 s
Filling	Dry polyurethane resin
Dielectric	Metallized PPMh film
Cylindrical case	Aluminum
Life expectancy	100.000 h (*)
Failure quota	50 / 10E9
Reference standards	IEC 1071-1/2 - UL 810
UL-CSA approved (c us) -10 kA AFC	File n. E102953 (**)
M6 Screw Terminals	3 Nm
M10 Screw Terminals	6 Nm
M12 fixing bolt	Max 10 Nm

Life expectancy	4.16.84.2xxx Series	4.16.84.3xxx Series	4.16.84.4xxx Series	4.16.84.5xxx Series	4.16.84.6xxx Series	4.16.84.9xxx Series
100.000 h (rated)	250 V	330 V	450 V	550 V	690 V	930 V
50.000 h	275 V	360 V	500 V	575 V	760 V	1025 V
25.000 h	300 V	400 V	540 V	630 V	830 V	1120 V
12.500 h	330 V	450 V	600 V	690 V	930 V	1250 V

(*) Life Derating at operating voltage (according to the chart on page 10)

(**) UL Approved for A, C and F solution (excepted series 690 V - 930 V solution A).





Cn [μF]	I _{MAX} [*] [A]	I _{PK} C _w [A]	I _{PK} I _w [kA]	I _s [kA]	R _{THC} natural cooling [°C/W]	LESR [nH]	Tan MAX @50Hz [10-4]	Ø [mm]	H [mm]	Weight [g]	Mechanical solution	Part n. 416.84.	Pcs. / box	Box type
Urms= 250 V Un_{AC} = 350 V Un_{DC}= 490 V Us= 950 V														
60	22	33	1.7	9	2.7	130	5.0	55	115	300	A / C	2.1x.y	28	1
80	22	33	1.7	9	2.7	130	5.0	55	115	340	A / C	2.1x.y	28	1
100	25	38	1.9	11	2.2	160	5.0	55	150	370	A / C	2.2x.y	21	1
120	25	38	1.9	11	2.2	160	5.0	55	150	390	A / C	2.2x.y	21	1
150	32	48	2.4	13	2.0	160	5.5	60	150	450	A / C	2.3x.y	18	1
175	36	54	2.7	16	1.8	170	6.0	65	150	520	A / C	2.4x.y	16	1
200	38	57	2.9	12	1.7	180	6.5	65	165	580	A / C	2.5x.y	16	1
230	40	60	3.0	20	1.3	200	7.0	75	180	820	F	2.6x.7	6	2
250	40	60	3.0	20	1.3	200	7.0	75	180	830	F	2.6x.7	6	2
300	40	60	3.0	20	1.3	200	7.0	75	180	860	F	2.6x.7	6	2
350	45	68	3.4	20	1.1	210	7.5	85	180	980	F	2.7x.7	6	2
400	45	68	3.4	20	1.1	210	7.5	85	180	1050	F	2.7x.7	6	2
500	78	117	5.9	20	0.9	230	8.5	90	210	1400	F	2.9x.7	6	3
600	80	120	6.0	18	0.8	300	9.0	85	280	1700	F	2.9x.7	6	4
Urms= 330 V Un_{AC} = 470 V Un_{DC}= 600 V Us= 1150 V														
50	22	33	1.7	7	2.7	160	5.0	55	115	320	A / C	3.1x.y	28	1
80	26	39	2.0	8	2.2	160	6.0	55	150	390	A / C	3.2x.y	21	1
100	26	39	2.0	8	2.2	160	6.0	55	150	400	A / C	3.2x.y	21	1
120	30	45	2.3	10	2.0	160	6.0	60	150	460	A / C	3.3x.y	18	1
150	34	51	2.6	13	1.8	170	6.5	65	150	540	A / C	3.4x.y	16	1
175	38	57	2.9	10	1.7	180	7.0	65	165	600	A / C	3.5x.y	16	1
200	40	60	3.0	14	1.3	200	7.5	75	180	860	F	3.6x.7	6	2
250	40	60	3.0	14	1.3	200	7.5	75	180	860	F	3.6x.7	6	2
300	45	68	3.4	18	1.1	210	7.5	85	180	1100	F	3.7x.7	6	2
350	70	105	5.3	16	1.0	230	8.0	85	210	1350	F	3.8x.7	6	3
400	75	113	5.6	18	0.9	230	8.5	90	210	1450	F	3.9x.7	6	3
450	80	120	6.0	13	0.8	300	9.0	85	280	1750	F	3.9x.7	6	4
Urms= 450 V Un_{AC}= 630 V Un= 825 V Us= 1600 V														
20	20	30	1.5	4	2.7	130	5.0	55	115	250	A / C	4.0x.y	28	1
30	20	30	1.5	4	2.7	130	5.0	55	115	300	A / C	4.0x.y	28	1
40	24	36	1.8	4.5	2.2	160	6.0	55	150	370	A / C	4.1x.y	21	1
50	24	36	1.8	4.5	2.2	160	6.0	55	150	400	A / C	4.1x.y	21	1
70	28	42	2.1	6.8	1.8	170	6.5	65	150	530	A / C	4.3x.y	16	1
80	28	42	2.1	6.8	1.8	170	6.5	65	150	550	A / C	4.3x.y	16	1
90	32	48	2.4	5.2	1.7	180	7.0	65	165	590	A / C	4.4x.y	16	1
100	38	57	2.9	7.4	1.3	200	7.5	75	180	860	F	4.5x.7	6	2
150	42	63	3.2	9.9	1.1	210	8.0	85	180	1100	F	4.6x.7	6	2
200	70	105	5.3	9.7	0.9	230	8.5	90	210	1450	F	4.8x.7	6	3
250	75	113	5.6	7.9	0.8	300	9.0	85	280	1710	F	4.9x.7	6	4
300	78	117	5.9	9.1	0.7	300	9.0	90	280	1920	F	4.9x.7	6	4

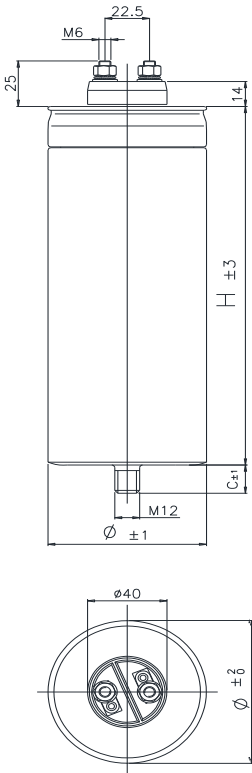




Cn [μF]	I _{MAX} * [A]	I _{PK} C _w [A]	I _{PK} I _w [kA]	I _s [kA]	R _{THC} natural cooling [°C/W]	LESR [nH]	Tan MAX @50Hz [10-4]	Ø [mm]	H [mm]	Weight [g]	Mechanical solution	Part n. 416.84.	Pcs. / box	Box type
Urms= 550 V Un_{AC}= 790 V Un_{DC}= 940 V Us= 1800 V														
20	18	27	1.4	2.9	2.7	130	5.0	55	115	300	A / C	5.0x.y	28	1
30	20	30	1.5	3.3	2.2	160	5.5	55	150	350	A / C	5.1x.y	21	1
40	20	30	1.5	3.3	2.2	160	5.5	55	150	390	A / C	5.1x.y	21	1
50	22	33	1.7	4.1	2.0	160	6.0	60	150	460	A / C	5.2x.y	18	1
70	26	39	2.0	3.9	1.7	180	7.0	65	165	590	A / C	5.4x.y	16	1
80	34	51	2.6	5.3	1.3	200	7.5	75	180	820	F	5.5x.7	6	2
100	38	57	2.9	7.2	1.1	210	8.0	85	180	950	F	5.6x.7	6	2
125	38	57	2.9	7.2	1.1	210	8.0	85	180	1050	F	5.6x.7	6	2
150	70	105	5.3	5.7	0.8	300	8.5	85	280	1550	F	5.8x.7	6	4
200	70	105	5.3	5.7	0.8	300	8.5	85	280	1700	F	5.8x.7	6	4
250	76	114	5.7	8.3	0.6	320	9.0	100	280	2100	F	5.9x.7	6	5
300	76	114	5.7	8.3	0.6	320	9.0	100	280	2400	F	5.9x.7	6	5
Urms= 690 V Un_{AC}= 990 V Un_{DC}= 1350 V Us= 2600 V														
10	20	30	1.0	1.8	2.2	160	5.0	55	150	310	A / C	6.0x.y	21	1
15	20	30	1.0	1.8	2.2	160	5.0	55	150	350	A / C	6.0x.y	21	1
20	22	33	1.1	2.8	1.8	170	5.0	65	150	500	A / C	6.1x.y	16	1
30	26	39	1.3	2.9	1.7	180	5.0	65	165	560	A / C	6.2x.y	16	1
40	30	45	1.5	4.0	1.3	200	5.5	75	180	780	F	6.3x.7	6	2
50	30	45	1.5	4.0	1.3	200	5.5	75	180	850	F	6.3x.7	6	2
70	34	51	1.7	4.9	1.0	210	6.0	85	210	1150	F	6.5x.7	6	3
85	36	54	1.8	5.5	0.9	220	6.5	90	210	1400	F	6.6x.7	6	3
100	38	57	1.9	7.1	0.8	220	7.0	100	210	1680	F	6.7x.7	6	5
125	40	60	2.0	4.2	0.7	300	7.5	90	280	1860	F	6.8x.7	6	4
150	45	68	2.3	5.3	0.6	300	8.0	100	280	2150	F	6.9x.7	6	5
175	45	68	2.3	5.3	0.6	300	8.0	100	280	2360	F	6.9x.7	6	5
Urms = 930 V Un_{AC} = 1300 V Un = 1700 V Us = 3250 V														
10	18	27	0.9	1.2	2.2	160	4.5	55	150	360	A / C	9.0x.y	21	1
15	20	30	1.0	1.8	1.8	170	4.7	65	150	480	A / C	9.1x.y	16	1
20	22	33	1.1	2.6	1.7	180	5.0	65	165	550	A / C	9.2x.y	16	1
30	24	36	1.2	2.3	1.3	200	5.3	75	180	840	F	9.3x.7	6	2
35	28	42	1.4	3.1	1.1	210	5.5	75	210	980	F	9.4x.7	6	3
40	30	45	1.5	3.1	1.0	210	5.5	85	210	1150	F	9.5x.7	6	3
45	30	45	1.5	3.1	1.0	210	5.5	85	210	1220	F	9.5x.7	6	3
50	30	45	1.5	3.1	1.0	210	5.5	85	210	1280	F	9.5x.7	6	3
55	34	51	1.7	3.5	0.9	220	5.7	90	210	1380	F	9.6x.7	6	3
70	38	57	1.9	4.5	0.8	220	5.7	100	210	1720	F	9.7x.7	6	5
85	42	63	2.1	2.7	0.7	300	6.0	90	280	1840	F	9.8x.7	6	4
100	45	68	2.3	3.4	0.6	300	6.5	100	280	2250	F	9.9x.7	6	5

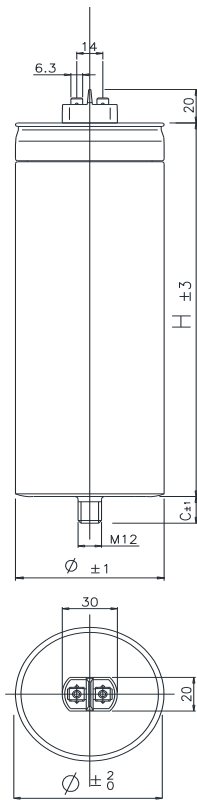
(Cn) Standard values, other values on request. Code "x": internal reference. Code "y": mechanical solution.

(*) The maximum rms current is referred to A or F solutions. I_{max} ≤ 16 A for C solution.



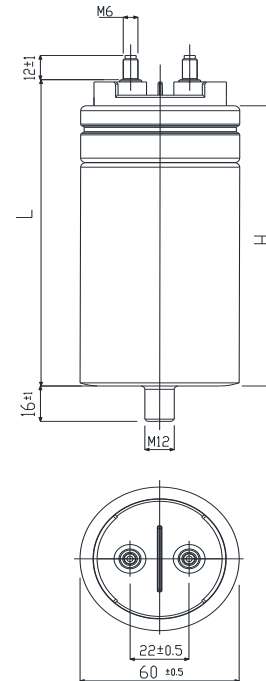
A SOLUTION

M6 Screw-type bolts
CODE: 41684.xxx.0
code "y" = 0



C SOLUTION

Double tag 6,3x0,8 mm
CODE: 41684.xxx.2
code "y" = 2

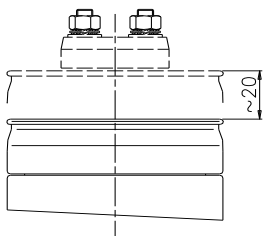


D SOLUTION (*) - Ø60

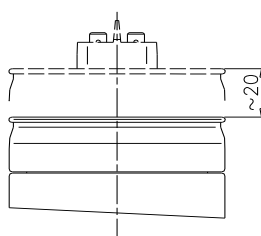
M6 screw -type bolts.
UL94 V0 plastic cover
CODE: 41684.xxx.6
code "y" = 5

Overpressure safety device

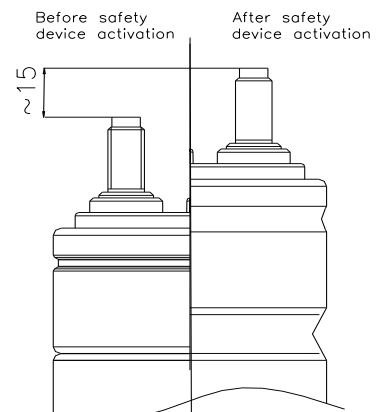
In order to ensure proper device operation, when the capacitor is installed, a clearance of at least the values given on drawing below must be left above terminals.



Dimension with overpressure device activated

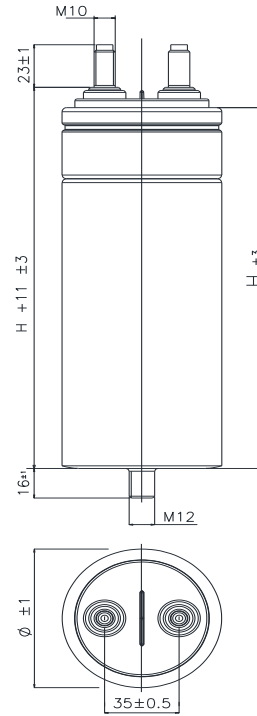
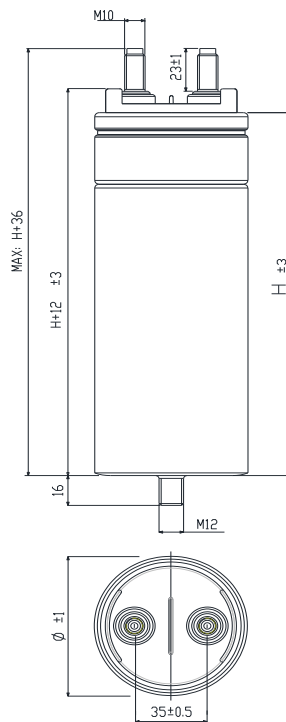
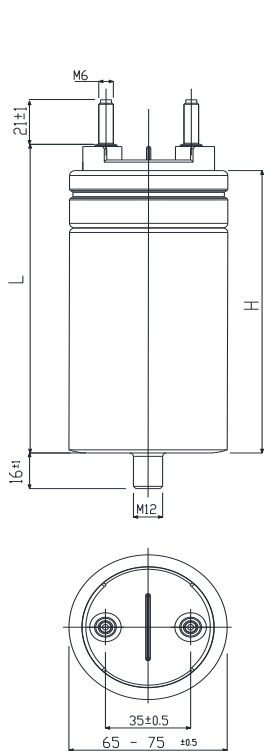


Dimension with overpressure device activated



Dimension with overpressure device activated





E SOLUTION (*) - Ø65/75 mm

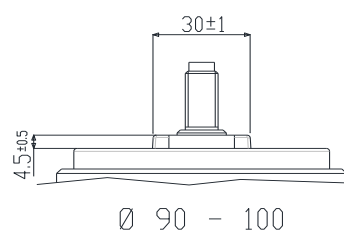
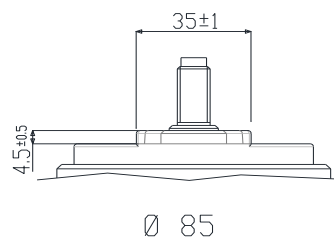
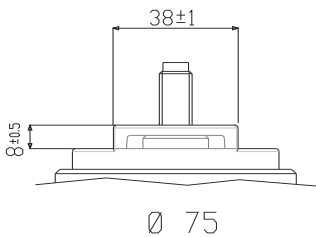
M6 screw -type bolts.
UL94 V0 plastic cover
CODE: 41684.xxx.5
code "y"= 6

F SOLUTION - Ø75/85 mm

M10 Screw-type bolts
UL94 V0 plastic cover
CODE: 41684.xxx.7
code "y"= 7

F SOLUTION - Ø90/100 mm

M10 Screw-type bolts
UL94 V0 plastic cover
CODE: 41684.xxx.7
code "y"= 7



F SOLUTION

different mechanical spacing
M10 screw -type bolts, Ø75-Ø100 mm.
UL94 V0 plastic cover

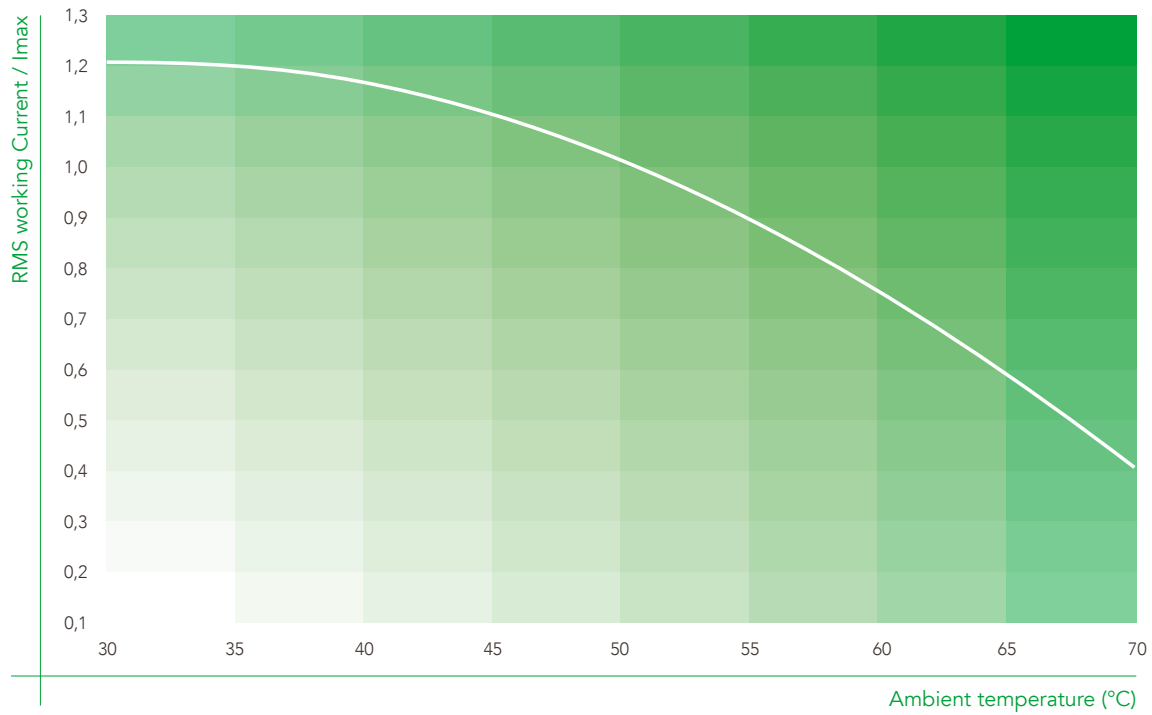
Box TYPE	Standard box dimensions
1	mm 250 x 386 x 190
2	mm 190 x 285 x 265
3	mm 190 x 285 x 325
4	mm 190 x 285 x 375
5	mm 335 x 220 x 375

(*) On request, available also on different diameters.

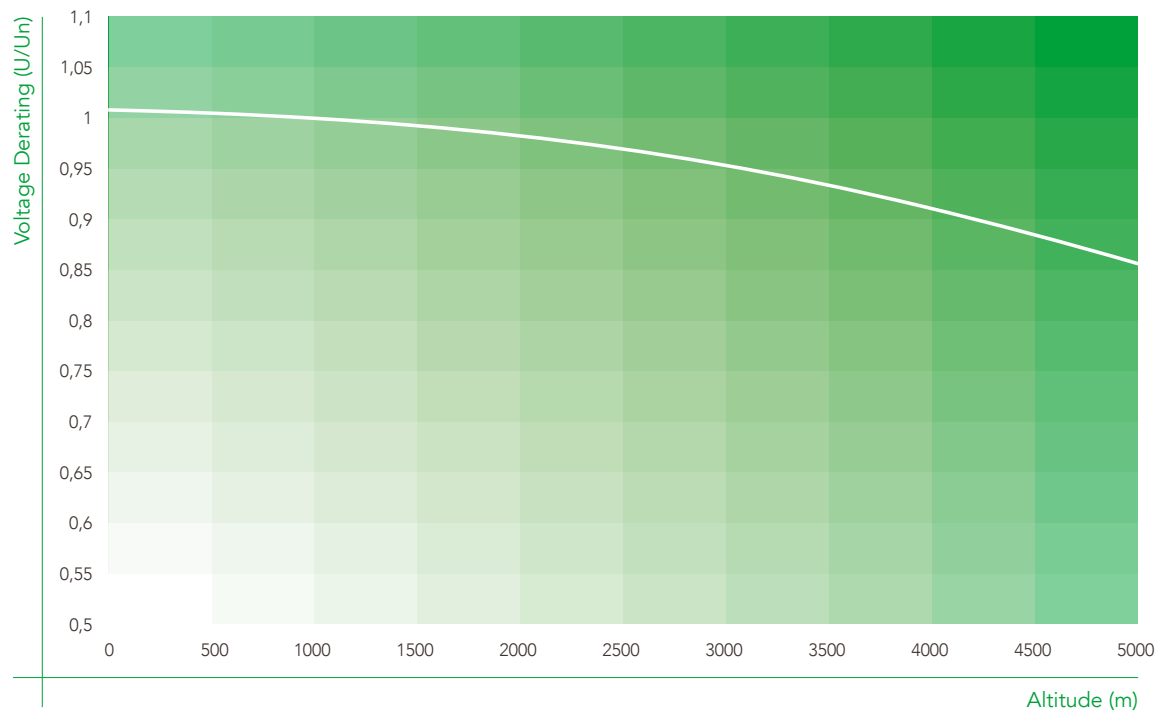




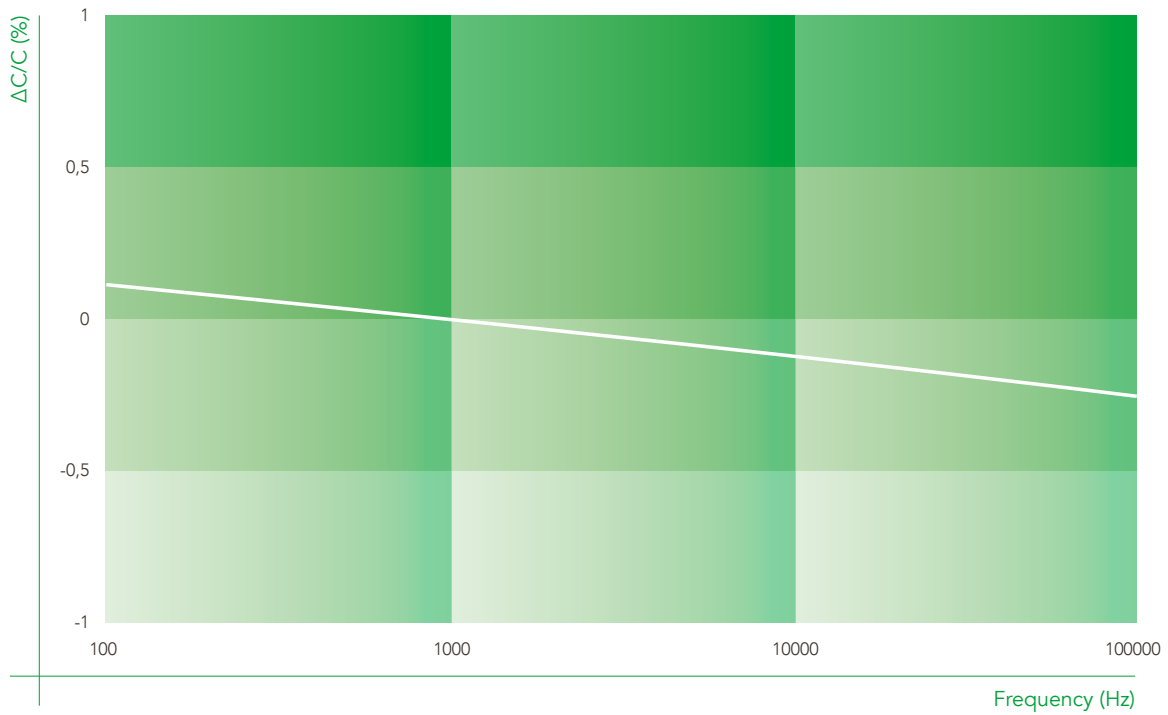
RMS working current vs Ambient temperature



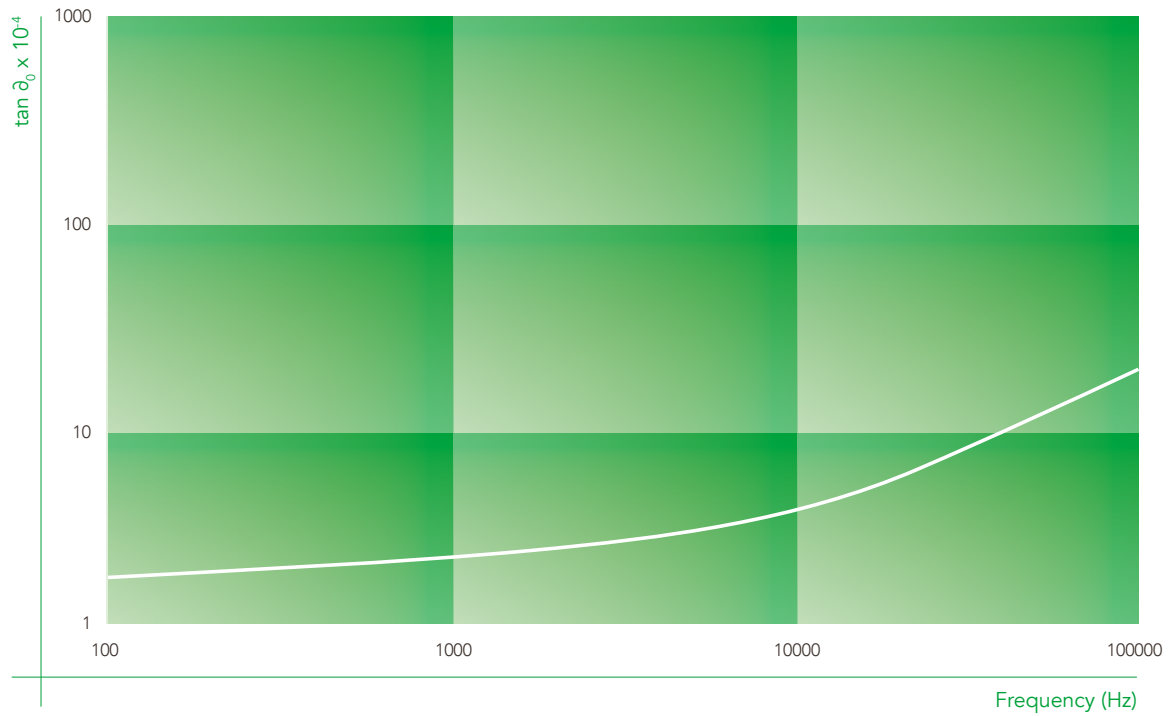
Voltage Derating vs Altitude



Capacitance change vs Frequency (25°C)



Dissipation factor change vs Frequency (25°C)





GPX 84 series

High Performance General Purpose Capacitor Cylindrical Aluminum Case

GPX 84 single-phase, cylindrical AC & DC Capacitors are the ideal solution for High Performance applications requiring very high current capability, higher operating temperatures and a lifecycle characterised by very stable capacity values.

In addition to the sturdy construction with Aluminum case and plastic lid, the wide range of available connections and the safety features based on the integrated UL-approved overpressure disconnecter and DRY resin impregnation, GPX 84 includes a fortified internal construction based on busbar connections and a special metallised film design resulting in superior current, temperature and capacity stability parameters.

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 PFC (high harmonics, voltage and RMS/surge current)
- UPS and Wind-Power Applications



General Characteristics

Rated AC voltage (U_{RMS}) - effective	250V - 950V
Rated DC voltage (U_N)	490V - 1850V
Maximum effective current (I_{max}) - continuous	120 Arms
Capacitance tolerance	±10%
Series resistance (RS)	1 - 10 mΩ
Terminals	Screw type bolts - M6 / M10
Container	Aluminum
Cover	UL 94 V0 plastic cover
Film Dielectric type	Self-healing metallized polypropylene film
Maximum altitude	2000 m a.s.l.
Mounting	Any position / Indoor
Maximum torque for fixing stud	10 Nm
Maximum torque for M6 terminals	3 Nm
Maximum torque for M10 terminals	6 Nm
Working ambient temperature	-40 .. +50 °C
Operating temperature MIN/MAX (case)	-25 .. +70 °C
Maximum Hotspot temperature	+85 °C
Storage temperature	-40 .. +85 °C
Humidity category class (DIN 40040)	F
AC test Voltage between terminals and container (to ground)	AC: 3 - 6 KV5 50Hz 10 s
Life expectancy (@ U_N / 70°C hot spot)	> 120.000 h
Failure quota	50FIT
Reference standards	IEC 1071-1/2
Material and insulation distance designed according to:	UL 810



Cn [μF]	I _{MAX} [A]	I _{PK} [kA]	I _S [kA]	R _{THC} natural cooling [°C/W]	R _S [mΩ]	L _S [nH]	Ø [mm]	H [mm]	Weight [g]	Technical solution	Code n. 416.84H	Pcs. / box	Box type
Urms= 250 V Un_{AC} = 350 V Un_{DC} = 490 V Us= 950 V													
100	45	3.0	11	2.2	4.5	150	60	40	390	D	2255	18	A
150	50	3.5	13	2.0	4,0	160	60	160	530	D	2355	18	A
200	55	4.5	15	1.8	3.7	180	65	160	560	E1	2556	16	A
250	60	5.0	20	1.4	4.0	190	75	170	850	E2	2656	6	B
300	70	6.0	20	1.2	3.5	210	75	205	1100	F1	2657	6	B
400	80	8.0	20	1.1	2.9	230	85	205	1300	F2	2757	6	B
500	90	10.0	20	0.9	2.8	240	90	220	1600	F3	2857	6	C
Urms= 350 V Un_{AC} = 510 V Un_{DC} = 700 V Us= 1200 V													
100	50	3.5	8	1.7	4.8	180	65	160	640	E1	3256	16	A
200	60	5.0	14	1.0	5.6	210	85	205	1150	F2	3497	6	C
250	80	5.5	15	1.0	3.2	230	85	205	1300	F2	3557	6	C
300	90	6.0	15	0.9	2.8	240	90	220	1450	F3	3687	6	C
400	110	8.0	16	0.7	2.4	280	100	245	2150	F3	3857	6	E
450	115	9.0	18	0.6	2.6	320	100	270	2350	F3	3957	6	E
500	120	10.0	20	0.6	2.4	320	100	270	2400	F3	3987	6	E
Urms= 450 V Un_{AC} = 630 V Un = 850 V Us= 1600 V													
50	45	2.0	6	2.1	4.8	150	60	140	490	D	4185	18	A
100	60	3.0	8	1-3	4.3	200	75	170	850	F1	4387	6	B
150	75	4.0	10	1.1	3.3	210	90	170	1150	F3	4487	6	B
200	95	6.0	12	0.9	2.5	240	90	220	1550	F3	4697	6	C
250	100	6.5	14	0.8	2.5	310	90	270	1950	F3	4757	6	D
300	110	6.8	15	0.6	2.8	320	100	270	2350	F3	4857	6	E
400	120	9.0	20	0.4	3.5	400	100	360	3050	F3	4957	6	F

(Cn) Standard values, other values on request.

Standard capacitance tolerance: ±10%. Other tolerance values on request



Cn [μF]	I _{MAX} [A]	I _{PK} [kA]	I _S [kA]	R _{THC} natural cooling [°C/W]	R _S [mΩ]	L _S [nH]	Ø [mm]	H [mm]	Weight [g]	Technical solution	Code n. 416.84H	Pcs. / box	Box type
Urms= 550 V Un_{AC} = 790 V Un_{DC} = 940 V Us= 1800 V													
30	35	1.6	5	2.1	7.8	150	60	140	490	D	5185	18	A
50	45	2.4	7	1.3	7.6	200	75	170	870	E2	5256	6	B
70	60	3.2	8	1.1	5.1	230	75	205	1050	F1	5277	6	C
100	75	4.0	10	1.0	3.6	230	85	205	1300	F2	5387	6	C
150	90	5.0	12	0.8	3.1	310	90	270	1950	F3	5487	6	D
200	105	6.4	14	0.6	3.1	320	100	270	2350	F3	5567	6	E
250	110	8.2	15	0.4	4.2	400	100	360	3050	F3	5747	6	F
300	120	10.0	20	0.4	3.5	400	100	360	3100	F3	5897	6	F
Urms= 730 V Un_{AC} = 1050 V Un_{DC} = 1450 V Us= 2600 V													
10	35	0.8	2.2	2.1	7.8	150	60	140	490	D	6045	18	A
30	50	1.5	4	1.3	6.2	200	75	170	880	E2	6286	6	B
50	70	2.5	8	1.0	4.1	230	85	205	1350	F2	6357	6	B
70	90	3.6	10	0.9	2.8	250	90	245	1700	F3	6557	6	C
100	100	5.0	12	0.7	2.9	300	100	245	2150	F3	6697	6	E
125	110	6.2	12.6	0.6	2.8	320	100	270	2350	F3	6897	6	E
150	120	7.5	18	0.4	3.5	400	100	360	3100	F3	6977	6	F
Urms= 950 V Un_{AC} = 1350 V Un = 1850 V Us= 3300 V													
10	32	0.8	3.0	1.8	10.9	170	65	160	480	E1	9166	16	A
20	45	1.4	3.0	1.1	9.0	230	75	205	1050	F1	9287	6	B
30	55	1.8	5.0	1.0	6.7	230	85	205	1350	F2	9397	6	B
50	60	3.0	7.0	0.8	7.0	310	90	270	1950	F3	9597	6	E
65	80	4.2	10.0	0.6	5.3	320	100	270	2350	F3	9697	6	E
80	90	5.0	12.0	0.4	6.2	400	100	360	3050	F3	9797	6	F
90	110	6.0	15.0	0.4	4.2	400	100	360	3100	F3	9897	6	F

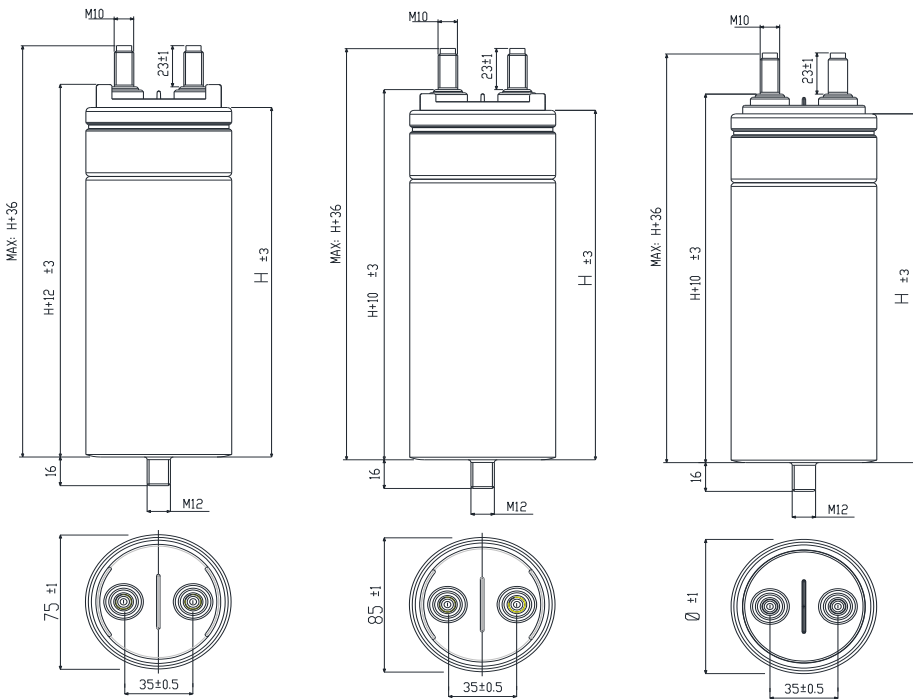
(Cn) Standard values, other values on request.

Standard capacitance tolerance: ±10%. Other tolerance values on request

Box TYPE	Standard box dimensions
A	mm 190 x 250 x 386
B	mm 190 x 285 x 265
C	mm 190 x 285 x 325
D	mm 190 x 285 x 375
E	mm 220 x 335 x 375
F	mm 220 x 335 x 450

Box TYPE	D	E1	E2	F1	F2	F3
Min. Creepage distance (mm)	30	32	32	28	28	28
Min. Clearance distance (mm)	14	21	21	20	20	20





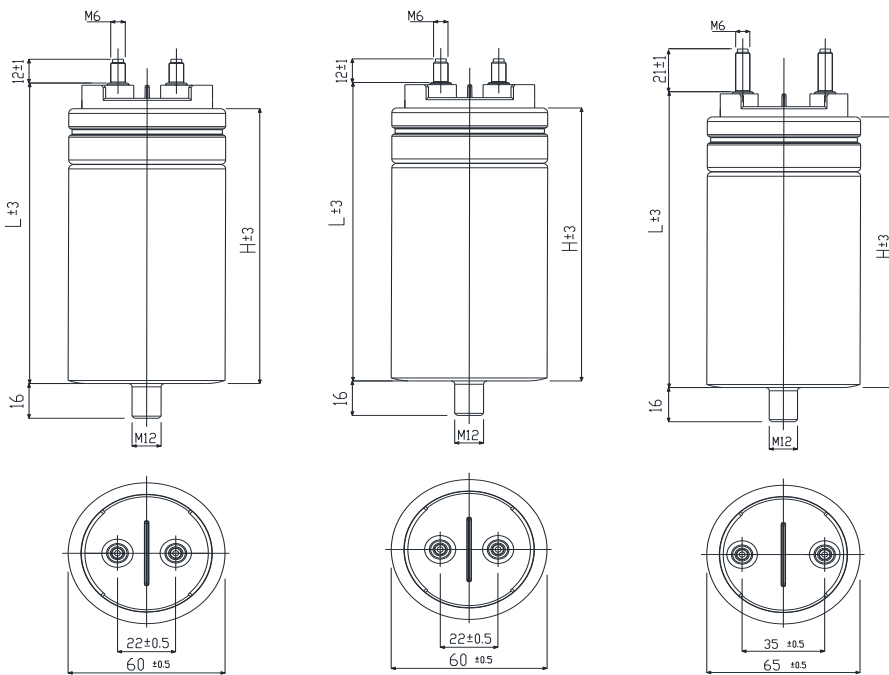
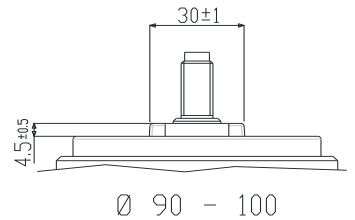
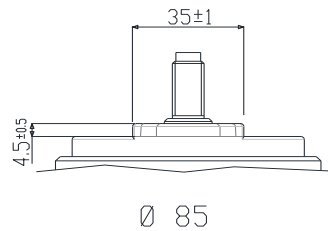
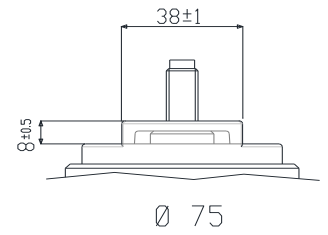
Ø75 M10 F1

Ø85 M10 F2

Ø90 - 100 - (116)
M10 F3

Overpressure safety device

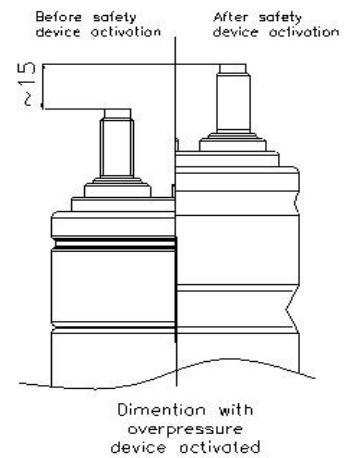
In order to ensure proper device operation, when the capacitor is installed, a clearance of at least the values given on drawing below must be left above terminals.



Ø60 M6 D

Ø65 M6 E1

Ø75 M6 E2





GP 42 series

Compact General Purpose Capacitors Cylindrical Aluminum Case

With its compact size and simple construction, GP42 is an efficient solution for AC Filtering applications requiring relatively low capacities and currents.

Main characteristics:

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

Main applications:

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

General Characteristics

RMS Voltage range	250 ÷ 930 V
Capacitance range	0.1 ÷ 100 µF
Capacitance tolerance	±5% / ±10%
Max. RMS current	10 A / 16 A
Maximum working frequency	10 kHz
Thermal resistance natural cooling (RTHc)	< 12 °C/W
Series resistance (RS)	< 5 mΩ
Terminals	Single or double tag 6.3x0.8 mm
Working temperature	-40 / +70 °C
Storage temperature	-40 / +85 °C
Test voltage	U _{tc} = 3 kVac / 6 kVac @50 Hz 10 s U _{tt} = 1.5 x UnDC 10 s
Filling	Dry polyurethane resin
Dielectric	Metallized PPM film
Cylindrical case	Aluminum
Life expectancy	80.000 h (*)
Failure quota	300/10E9
Reference standards	IEC 1071-1/2 - UL 810
Overpressure Safety Device	Integrated
M8 fixing bolt	Max 5 Nm
M12 fixing bolt	Max 10 Nm



Life expectancy	4.16.42.1xxx Series	4.16.42.2xxx Series	4.16.42.3xxx Series	4.16.42.4xxx Series	4.16.42.6xxx Series	4.16.42.9xxx Series
80.000 h (rated)	250 V	330 V	450 V	550 V	690 V	930 V
40.000 h	275 V	360 V	500 V	575 V	760 V	1025 V
20.000 h	300 V	400 V	540 V	630 V	830 V	1120 V
10.000 h	330 V	450 V	600 V	690 V	930 V	1250 V

(*) Life Derating at operating voltage (according to the chart on page 75).



Cn [μF]	I _{MAX} [A]	I _{PK} C _w [A]	I _{pk} I _w [kA]	dV/dTmax [V/μs]	R _{THC} natural cooling [°C/W]	Tan MAX @50Hz [10-4]	Ø [mm]	H [mm]	Weight [g]	Part n. 416.42.	Pcs. / box	Box type
Urms= 250 V Un_{AC}= 350 V Un_{DC}= 490 V Us= 840 V												
2	5.0	8	0.1	50	11.7	3.5	25	60	40	1.05.x	250	6
5	6.5	10	0.3	50	9.4	4.0	30	60	50	1.23.x	200	6
10	7.5	11	0.5	45	6.8	4.5	35	72	80	1.42.x	100	7
15	8.0	12	0.7	45	5.8	5.0	40	72	100	1.55.x	100	6
20	8.5	13	0.7	30	4.5	5.5	40	98	140	1.63.x	50	7
25	8.5	13	0.8	30	4.5	5.5	40	98	150	1.68.x	50	7
30	9.0	14	1.0	30	3.9	5.5	40	98	170	1.69.x	50	7
40	10.0	15	0.9	20	3.3	6.0	45	122	220	1.82.x	25	7
50	10.0	15	1.1	20	3.3	6.0	45	122	230	1.89.x	25	7
60	10.0	15	1.3	20	2.9	6.0	50	122	270	1.92.x	25	7
70	10.0	15	1.5	20	2.6	6.5	55	122	320	1.95.x	25	6
80	10.0	15	1.5	20	2.6	6.5	55	122	330	1.97.x	25	6
100	10.0	15	1.7	15	2.1	7.0	60	137	420	1.99.x	25	6
Urms= 330 V Un_{AC}= 470 V Un= 600 V Us= 1120 V												
1	5.0	8	0.1	50	11.7	3.5	25	60	40	2.03.x	250	6
2	6.0	9	0.2	70	10.4	3.5	30	53	50	2.12.x	200	7
5	7.0	11	0.3	50	7.8	4.5	35	60	80	2.39.x	125	6
10	8.0	12	0.5	45	5.8	5.0	40	72	100	2.49.x	100	6
15	8.5	13	0.5	30	4.5	5.5	40	98	140	2.58.x	50	7
20	9.0	14	0.7	30	3.9	5.5	45	98	180	2.68.x	50	6
25	10.0	15	0.6	20	3.3	6.0	45	122	220	2.75.x	25	7
35	10.0	15	0.8	20	2.9	6.5	50	122	270	2.88.x	25	7
50	10.0	15	0.8	15	2.4	6.5	55	132	350	2.94.x	25	6
60	10.0	15	1.0	15	2.1	7.0	60	137	430	2.98.x	25	6
Urms= 450 V Un_{AC}= 640 V Un= 890 V Us= 1400 V												
1	5.0	8	0.1	50	11.7	3.5	25	60	40	3.08.x	250	6
2	6.5	10	0.1	50	9.4	4.0	30	60	50	3.29.x	200	6
5	8.0	12	0.2	45	5.8	5.0	40	72	100	3.47.x	100	6
10	8.5	13	0.3	30	4.5	5.5	40	98	140	3.58.x	50	7
15	10.0	15	0.3	20	3.3	6.0	45	122	220	3.77.x	25	7
20	10.0	15	0.4	20	2.9	6.5	50	122	270	3.88.x	25	7
25	10.0	15	0.4	15	2.4	6.5	55	132	350	3.92.x	25	6
30	10.0	15	0.5	15	2.4	6.5	55	132	360	3.95.x	25	6
35	10.0	15	0.6	15	2.1	7.0	60	137	430	3.97.x	25	6
40	10.0	15	0.7	15	2.1	7.0	60	137	440	3.99.x	25	6



GP 42 series

Compact General Purpose Capacitors

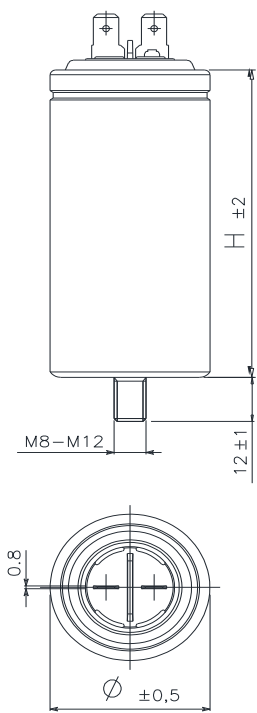
Cn [μF]	I _{MAX} [A]	I _{PK} C _w [A]	I _{PK} I _w [kA]	dV/dTmax [V/μs]	R _{THC} natural cooling [°C/W]	Tan MAX @50Hz [10-4]	Ø [mm]	H [mm]	Weight [g]	Part n. 416.42.	Pcs. / box	Box type
Urms= 550 V Un_{AC}= 780 V Un_{DC}= 940 V Us= 1680 V												
1	7.0	11	0.1	60	6.3	3.0	30	98	70	4.10.x	125	6
2	7.0	11	0.1	60	5.2	3.0	30	98	80	4.15.x	125	6
5	8.5	13	0.3	60	4.5	3.5	40	98	140	4.33.x	50	7
10	9.5	14	0.7	60	3.5	4.0	50	98	220	4.58.x	25	7
15	10.0	15	0.7	40	2.4	4.5	55	132	360	4.63.x	25	6
20	10.0	15	0.9	40	2.4	4.5	55	132	370	4.68.x	25	6
25	10.0	15	1.1	40	2.1	5.0	60	137	420	4.78.x	25	6
35	10.0	15	1.0	25	1.7	5.5	60	181	560	4.88.x	18	6
Urms= 690 V Un_{AC}= 990 V Un= 1350 V Us= 2240 V												
0.68	7.0	11	0.1	60	6.3	3.0	30	98	80	6.12.x	125	6
1	7.0	11	0.1	60	6.3	3.0	30	98	90	6.15.x	125	6
2	8.0	12	0.1	60	5.2	3.0	35	98	110	6.23.x	50	7
5	9.5	14	0.3	60	3.5	4.0	50	98	220	6.51.x	25	7
8	10.0	15	0.4	40	2.4	4.5	55	132	360	6.62.x	25	6
10	10.0	15	0.4	40	2.4	4.5	55	132	370	6.68.x	25	6
12	10.0	15	0.7	40	2.1	5.0	60	137	420	6.74.x	25	6
20	10.0	15	0.6	25	1.7	5.5	60	181	560	6.88.x	18	6
Urms= 930 V Un_{AC}= 1300 V Un= 1700 V Us= 2800 V												
0.68	8.5	13	0.1	60	3.9	3.0	40	115	160	9.10.4	50	7
1	8.5	13	0.1	60	3.9	3.0	40	115	170	9.14.4	50	7
2	8.5	13	0.1	60	3.9	3.0	40	115	190	9.18.4	50	7
5	10.5	16	0.3	60	2.7	4.0	55	115	300	9.49.4	25	6
8	12.0	18	0.4	40	2.0	4.5	60	150	470	9.61.4	25	6
10	14.0	21	0.4	40	1.8	5.0	65	150	550	9.75.4	20	6
12	16.0	24	0.5	35	1.7	5.5	65	165	600	9.85.4	15	6
14	16.0	24	0.5	35	1.7	5.5	65	165	620	9.89.4	15	6

(Cn) Standard values, other values on request.

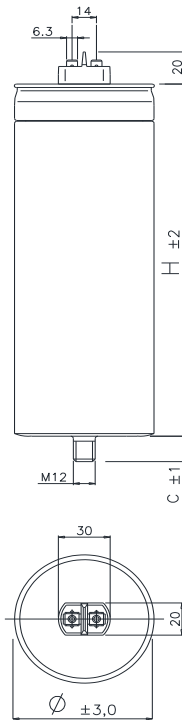
Code "x": according to the mechanical configuration, see figures at page 17 (only for A solution).

Box TYPE	Standard box dimensions
6	mm 195 x 390 x 250
7	mm 195 x 390 x 200

STUD	Capacitor diameter
M8	Ø 25 - 30 - 40 - 45 - 50
M12	Ø 55 - 60

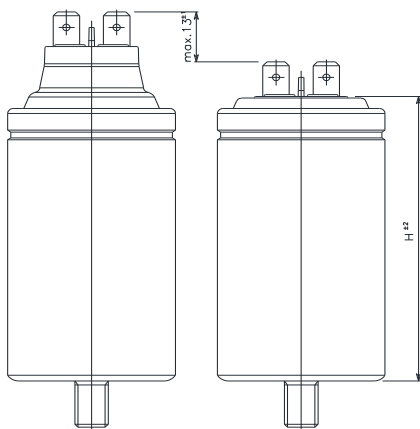


Example of cover configuration - A solution according as shown in "Table 1", the code "x" in this example cover configuration is equal to "3": 6,3x0,8 single tag terminals



Cover configuration - B solution for this type of solution, is set only x = 4 configuration: 6,3x0,8 double tag terminals

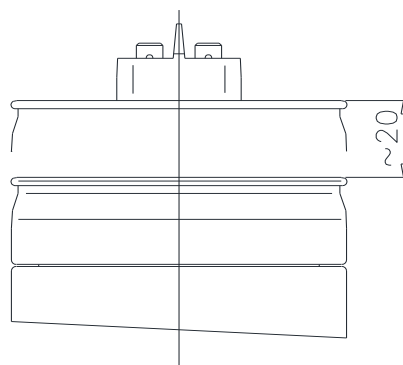
C is equal to 12 mm for diameter up to Ø 60 mm. For higher diameter, C is equal to 16 mm.



A SOLUTION

Overpressure safety device

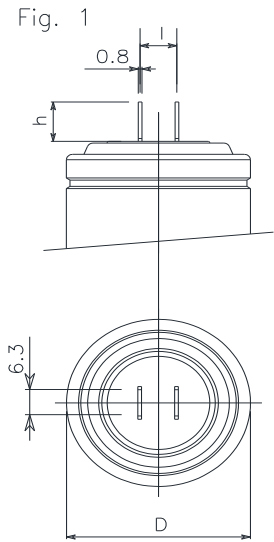
In order to ensure proper device operation, when the capacitor is installed, a clearance of at least 10mm must be left above terminals.



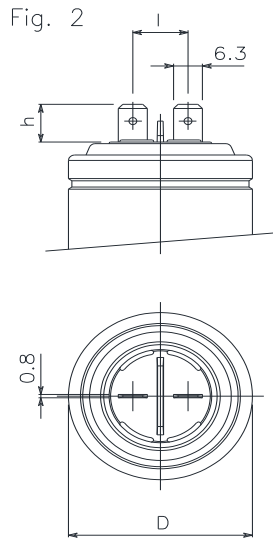
B SOLUTION

Overpressure safety device

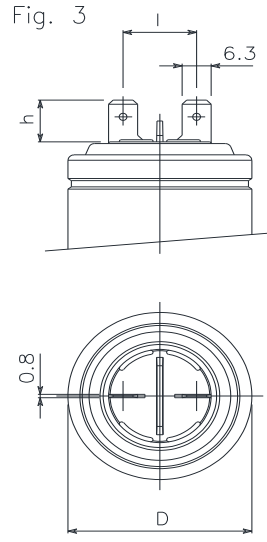
In order to ensure proper device operation, when the capacitor is installed, a clearance of at least 20mm must be left above terminals.



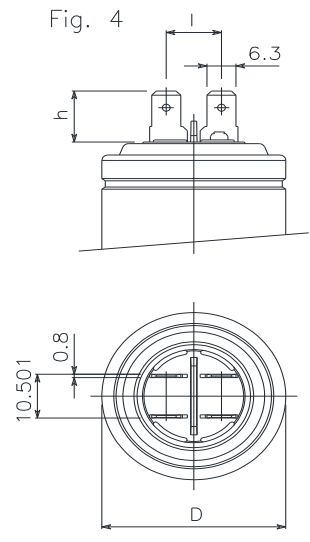
CODE .x. = 1



CODE .x. = 2



CODE .x. = 3



CODE .x. = 4

Capacitance Cn [μF]	Fig 1		Fig 2		Fig 3		Fig 4	
	h (mm)	h (mm)	h (mm)	h (mm)	h (mm)	h (mm)	h (mm)	h (mm)
25	10.9	8						
30	10.9	8	9	12				
35			9	12			12.2	12
40			9	12	10	16	12.2	12
45			9	12	10	16	12.2	12
50			9	12	10	16	12.2	12
55			9	12	10	16	12.2	12
60			8.9	15.5			12	20.5

