

E62

HEAVY DUTY

AC/DC CAPACITORS



- 2010 -

ISSUE_





Your perfect choice for universal or heavy duty AC/DC applications

In modern applications of power electronics, AC capacitors are among the most critical links in the chain of components when it comes to long operating life, safety and reliability of operation.

Decades of proprietary ELECTRONICON experience in metallizing capacitor films and designing high-end capacitors have created our very own Know-How, for instance in special metallizing patterns, our **SINECUT™** slitting technology and optimized winding geometries. This enables us to design AC capacitors with a high specific ratio of capacitance to volume, high AC-voltage load capacity and outstanding suitability for high rms and surge currents.

The cylindrical capacitors of our universal AC/DC series „E62“ are perfect for non-sinusoidal voltages and pulsed currents, e.g. as damping or commutation capacitors switched in parallel to thyristors, or connected in series with resistors (damping of undesirable voltage spikes during the switching of power semiconductors). They can be widely used as supporting, smoothing, and surge discharge capacitors, further in AC filters, a.m.o. The low loss factor of our MKP dielectric compensates to a large extent for the losses caused by the non-sinusoidal voltages. It goes without saying that all AC capacitors may as well be used for DC applications.

The E62s are housed in a hermetically sealed aluminium can which is filled with environmentally friendly plant oil as standard; optionally many of them can also be made available with a filling of inert gas. The gas filling is not only environmentally friendly, but also permits mounting in any position, while oil-filled capacitors should – for electrical as well as environmental considerations – always be mounted vertically.

The excellent self-healing characteristics of our film metallization and the integrated overpressure protection (BAM™) ensure safe operation and controlled disconnection in the event of overload or failure at the end of operating life.

E62.***
AC/DC
420...5000V AC / 700...5000V DC

AC/DC-Capacitors for General Use



CAPAGRIP™

Standards IEC 61071
 optional IEC 61881

can aluminium
 mounting position terminals pointing upwards
 filling material liquid, based on vegetable oil, non-PCB

Internal protection break-action mechanism (BAM)

fire load 40 MJ/kg

C_N tolerance ±10% (optional ±5%)
 insulation strength $C \times R_{is}$ 5000 s
 $\tan \delta_0$ 2×10^{-4}

operating temperatures
 $\Theta_{min} \dots \Theta_{max}$ -25 ... +85°C
 $\Theta_{HOTSPOT}$ ≤ 85°C

storing temperature -40 ... +85°C

Failure rate 100 FIT

reference service life 100000 h, $\Theta_{HOTSPOT} \leq 70^\circ$

C_N (µF)	R_S (mΩ)	L_e (nH)	R_{th} (K/W)	I_{max} (A)	\hat{I} (kA)	I_S (kA)	W_N (Ws)	$D_1 \times L_1$ (mm)	Design	m (kg)	order no.	pcs_ / Box
U_N 700V DC / 420V AC		U_{rms} 300V		U_S 1050V		U_{BB} 1050V DC		U_{BG} 3000V AC				
20	2.6	60	19.2	16	0.5	1.5	4.9	40 × 58	D1	0.08	E62.E58-203D10	36 / FB4
22	5.4	80	15.7	10	0.3	0.9	5.4	35 × 81	E2	0.1	E62.D81-223E20	50 / FB3
24	5.0	80	15.7	10	0.3	0.9	5.9	35 × 81	E2	0.1	E62.D81-243E20	50 / FB3
35	4.0	80	13.9	16	0.4	1.2	8.6	40 × 81	D1	0.11	E62.E81-353D10	36 / FB3
50	3.3	80	12.2	16	0.57	1.71	12.3	45 × 81	D1	0.14	E62.F81-503D10	32 / FB3
60	3.3	100	10.5	32	0.7	2.1	14.7	50 × 85	G1	0.18	E62.G85-603G10	21 / FB2
75	2.7	80	9.5	16	0.75	2.6	18.4	55 × 85	D1	0.21	E62.H85-753D10	18 / FB3
80	4.7	80	9.5	16	0.9	2.7	19.6	55 × 85	D1	0.21	E62.H85-803D10	18 / FB3
90	2.5	80	8.7	16	1.0	3.0	22.1	60 × 85	D1	0.25	E62.K85-903D10	18 / FB3
100	3.1	100	7.2	40	1.15	3.45	24.5	65 × 95	G1	0.33	E62.L95-104G10	10 / FB2
120	1.0	140	5.7	50	1.4	4.2	29.4	75 × 105	C6	0.5	E62.M10-124C60	8 / FB0
130	3.4	110	6.3	40	1.2	3.6	31.9	65 × 109	G1	0.4	E62.L10-134G10	10 / FB1
150	2.0	80	5.7	43	1.7	5.1	36.8	75 × 105	L1	0.5	E62.M10-154L10	8 / FB1
170	0.82	140	5.0	50	2.0	6.0	41.7	85 × 105	C6	0.6	E62.N10-174C60	10 / FB10
180	1.3	110	5.0	43	2.0	6.0	44.1	85 × 105	L1	0.6	E62.N10-184L10	10 / FB10
200	4.4	140	4.7	30	1.2	3.6	49.0	65 × 145	G1	0.5	E62.L14-204G10	10 / FB7
220	0.7	140	4.5	50	2.5	7.5	53.9	95 × 105	C6	0.8	E62.P10-224C60	6 / FB10
220	4.5	130	4.3	16	1.2	3.6	53.9	65 × 160	D2	0.6	E62.L16-224D20	10 / FB7
300	4.1	90	3.7	16	1.6	4.8	73.5	75 × 160	D2	0.7	E62.M16-304D20	8 / FB7
400	0.68	160	2.1	80	4.5	13.5	98.0	85 × 245	C6	1.7	E62.N24-404C60	5 / FB12
470	0.53	160	2.7	50	5.3	15.9	115.2	95 × 176	C6	1.3	E62.P17-474C60	3 / FB8



E62.***

AC/DC

420...5000V AC / 700...5000V DC

C_N (μ F)	R_S ($m\Omega$)	L_e (nH)	R_{th} (K/W)	I_{max} (A)	\hat{I} (kA)	I_S (kA)	W_N (Ws)	$D_1 \times L_1$ (mm)	Design	m (kg)	order no.	pcs_ / Box
U_N 700V DC / 420V AC			U_{rms} 300V			U_S 1050V		U_{BB} 1050V DC		U_{BG} 3000V AC		
500	0.57	160	2.5	80	5.7	17.1	122.5	100 × 176	C6	1.5	E62.Q17-504C60	3 / FB8
700	0.6	130	2.2	80	8.0	20 ²⁾	171.5	116 × 176	M1	2.0	E62.R17-704M10	3 / FB8
1100	0.49	130	1.6	80	12.8	20 ²⁾	269.5	116 × 245	M1	2.7	E62.R24-115M10	3 / FB12
1500	0.39	130	1.3	80	15 ²⁾	20 ²⁾	367.5	136 × 245	M1	3.7	E62.S24-155M10	2 / FB12
2000	0.60	190	1.0	100	15 ²⁾	20 ²⁾	490.0	136 × 320	C6	4.9	E62.S32-205C60	2 / FB13
U_N 840V DC / 500V AC			U_{rms} 360V			U_S 1260V		U_{BB} 1260V DC		U_{BG} 3000V AC		
1.0	18.6	60	37.1	6	0.1	0.3	0.4	25 × 48	E1	0.03	E62.B48-102E10	98 / FB4
25	4.3	80	13.8	16	0.4	1.1	8.8	40 × 81	D1	0.11	E62.E81-253D10	36 / FB3
33	3.7	80	12.2	16	0.5	1.4	11.6	45 × 81	D1	0.14	E62.F81-333D10	32 / FB3
40	3.6	100	10.5	30	0.6	1.7	14.1	50 × 85	G1	0.18	E62.G85-403G10	21 / FB2
50	3.0	80	9.5	16	0.7	2.1	17.6	55 × 85	D1	0.21	E62.H85-503D10	18 / FB3
60	2.8	80	8.7	16	0.8	2.5	21.2	60 × 85	D1	0.25	E62.K85-603D10	18 / FB3
75	2.3	100	7.2	40	1.0	3.0	26.5	65 × 95	G1	0.33	E62.L95-753G10	10 / FB2
100	2.1	110	5.7	43	1.4	4.2	35.3	75 × 105	L1	0.5	E62.M10-104L10	8 / FB0
160	1.2	110	4.5	43	2.2	6.6	56.4	95 × 105	L1	0.8	E62.P10-164L10	6 / FB10
160	4.2	100	4.3	16	1.0	3.0	56.4	65 × 160	D2	0.6	E62.L16-164D20	10 / FB7
200	2.2	130	3.4	43	2.8	8.4	70.6	75 × 176	L1	0.8	E62.M17-204L10	5 / FB8
200	3.9	140	3.7	16	1.3	3.9	70.6	75 × 160	D2	0.7	E62.M16-204D20	8 / FB7
300	0.6	160	2.7	80	4.1	12.3	105.8	95 × 176	C6	1.3	E62.P17-304C60	3 / FB8
300	0.7	130	2.7	80	4.1	12.3	105.8	95 × 176	M1	1.3	E62.P17-304M10	3 / FB8
350	0.8	130	2.5	80	4.8	14.4	123.5	100 × 176	M1	1.5	E62.Q17-354M10	3 / FB8
500	0.62	130	2.2	80	6.9	20 ²⁾	176.4	116 × 176	M1	2.0	E62.R17-504M10	3 / FB8
620	0.58	160	1.6	100	9.0	15.0	218.7	116 × 245	C6	2.7	E62.R24-624C60	3 / FB12
750	0.57	170	1.6	100	10.0	20 ²⁾	264.6	116 × 245	C6	2.7	E62.R24-754C60	3 / FB12
1000	0.56	170	1.3	100	14.0	20 ²⁾	352.8	136 × 245	C6	3.7	E62.S24-105C60	2 / FB12
1500	0.5	190	1.0	100	15 ²⁾	20 ²⁾	529.2	136 × 320	C6	4.9	E62.S32-155C60	2 / FB13
U_N 1000V DC / 640V AC			U_{rms} 450V			U_S 1500V		U_{BB} 1500V DC		U_{BG} 3000V AC		
4.7	5.4	60	25.6	10	0.24	0.72	2.4	30 × 58	E1	0.05	E62.C58-472E10	72 / FB4
5.0	4.9	60	25.6	10	0.26	0.8	2.5	30 × 58	E1	0.05	E62.C58-502E10	72 / FB4
6.0	4.5	60	21.9	16	0.35	1.02	3.0	35 × 58	E2	0.07	E62.D58-602E20	50 / FB4
6.8	4.1	60	21.9	16	0.35	1.04	3.4	35 × 58	E2	0.07	E62.D58-682E20	50 / FB4
10	3.2	60	19.2	16	0.40	1.2	5.0	40 × 58	D1	0.08	E62.E58-103D10	36 / FB4
15	5.5	80	13.8	16	0.24	0.72	7.5	40 × 81	D1	0.11	E62.E81-153D10	36 / FB3
15	2.9	100	14.4	25	0.24	0.7	7.5	50 × 62	G1	0.14	E62.G62-153G10	21 / FB3
18	4.8	80	13.8	16	0.29	0.87	9.0	40 × 81	D1	0.11	E62.E81-183D10	36 / FB3
22	4.3	80	12.2	16	0.35	1.1	11.0	45 × 81	D1	0.14	E62.F81-223D10	32 / FB3

2) higher values available on request_

Other values and dimensions available on request_



E62.***

AC/DC

420...5000V AC / 700...5000V DC



C_N (μF)	R_S ($m\Omega$)	L_e (nH)	R_{th} (K/W)	I_{max} (A)	\hat{I} (kA)	I_S (kA)	W_N (Ws)	$D_1 \times L_1$ (mm)	Design	m (kg)	order no.	pcs_ / Box
U_N 1000V DC / 640V AC				U_{rms} 450V		U_S 1500V		U_{BB} 1500V DC		U_{BG} 3000V AC		
25	4.0	80	12.2	16	0.4	1.2	12.5	45 × 81	D1	0.14	E62.F81-253D10	32 / FB3
30	3.9	100	10.5	33	0.5	1.4	15.0	50 × 85	G1	0.18	E62.G85-303G10	21 / FB2
40	3.4	80	9.5	16	0.6	1.9	20.0	55 × 85	D1	0.21	E62.H85-403D10	18 / FB3
47	2.9	80	8.7	16	0.8	2.3	23.5	60 × 85	D1	0.25	E62.K85-473D10	18 / FB3
50	3.4	100	7.2	40	0.8	2.4	25.0	65 × 95	G1	0.33	E62.L95-503G10	10 / FB2
68	3.7	100	6.3	30	0.9	2.7	34.0	65 × 109	G1	0.4	E62.L10-683G10	10 / FB1
75	2.7	110	5.7	43	1.2	3.6	37.5	75 × 105	L1	0.5	E62.M10-753L10	8 / FB1
80	1.4	110	5.0	43	1.3	3.8	40.0	85 × 105	L1	0.6	E62.N10-803L10	10 / FB10
100	0.53	100	4.4	80	3.0	9.0	50.0	85 × 120	C6	0.9	E62.N12-104C60	10 / FB11
120	1.6	110	4.5	43	1.9	5.8	60.0	95 × 105	L1	0.8	E62.P10-124L10	6 / FB10
120	5.0	130	4.3	16	0.9	2.7	60.0	65 × 160	D2	0.6	E62.L16-124D20	10 / FB7
150	4.6	110	3.7	16	1.1	3.3	75.0	75 × 160	D2	0.7	E62.M16-154D20	8 / FB7
150	1.5	100	3.4	30	2.3	6.9	75.0	75 × 176	K1	0.8	E62.M17-154K10	5 / FB8
200	0.7	160	2.7	80	3.5	10.5	100.0	95 × 176	C6	1.3	E62.P17-204C60	3 / FB8
250	0.63	160	2.5	80	4.0	12.02	125.0	100 × 176	C6	1.5	E62.Q17-254C60	3 / FB8
250	1.3	130	2.7	43	4.0	12.02	125.0	95 × 176	L1	1.3	E62.P17-254L10	3 / FB8
350	0.57	160	2.2	80	5.6	16.8	175.0	116 × 176	C6	2.0	E62.R17-354C60	3 / FB8
500	0.6	170	1.6	100	7.8	20 ²⁾	250.0	116 × 245	C6	2.7	E62.R24-504C60	3 / FB12
750	0.64	190	1.2	100	12.0	20 ²⁾	375.0	116 × 320	C6	3.5	E62.R32-754C60	3 / FB13
800	0.63	170	1.3	100	12.8	20 ²⁾	400.0	136 × 245	C6	3.7	E62.S24-804C60	2 / FB12
1000	0.62	190	1.0	100	15.6	20 ²⁾	500.0	136 × 320	C6	4.9	E62.S32-105C60	2 / FB13
U_N 1120V DC / 680V AC				U_{rms} 480V		U_S 1680V		U_{BB} 1680V DC		U_{BG} 3000V AC		
3.3	6.5	60	25.6	15	0.17	0.5	2.1	30 × 58	E1	0.05	E62.C58-332E10	72 / FB4
12	5.8	80	13.8	16	0.2	0.7	7.5	40 × 81	D1	0.11	E62.E81-123D10	36 / FB3
20	4.2	80	12.2	16	0.4	1.1	12.5	45 × 81	D1	0.14	E62.F81-203D10	32 / FB3
25	4.0	100	10.5	28	0.5	1.4	15.7	50 × 85	G1	0.18	E62.G85-253G10	21 / FB2
30	3.3	80	9.5	16	0.5	1.6	18.8	55 × 85	D1	0.21	E62.H85-303D10	18 / FB3
33	3.2	80	8.7	16	0.6	1.8	20.7	60 × 85	D1	0.25	E62.K85-333D10	18 / FB3
40	3.5	100	7.2	38	0.7	2.2	25.1	65 × 95	G1	0.33	E62.L95-403G10	10 / FB2
40	5.9	120	7.2	25	0.44	1.3	25.1	50 × 124	G1	0.3	E62.G12-403G10	21 / FB1
60	2.3	110	5.7	43	1.1	3.3	37.6	75 × 105	L1	0.5	E62.M10-603L10	8 / FB1
68	1.5	110	5.0	43	1.2	3.7	42.6	85 × 105	L1	0.6	E62.N10-683L10	10 / FB10
90	4.8	110	4.3	16	0.78	2.4	56.4	65 × 160	D2	0.6	E62.L16-903D20	10 / FB7
100	5.1	100	3.7	16	0.87	2.6	62.7	75 × 160	D2	0.7	E62.M16-104D20	8 / FB7
100	1.3	110	4.2	43	1.8	5.5	62.7	100 × 105	L1	0.9	E62.Q10-104L10	6 / FB10
110	1.5	100	3.4	30	2.0	6.0	69.0	75 × 176	K1	0.8	E62.M17-114K10	5 / FB8
180	1.4	130	2.7	43	3.3	9.9	112.9	95 × 176	L1	1.3	E62.P17-184L10	3 / FB8
200	0.66	160	2.5	80	3.7	11.1	125.4	100 × 176	C6	1.5	E62.Q17-204C60	3 / FB8
280	0.6	160	2.2	80	5.1	15.3	175.6	116 × 176	C6	2.0	E62.R17-284C60	3 / FB8
400	0.6	170	1.6	100	7.3	20 ²⁾	250.9	116 × 245	C6	2.7	E62.R24-404C60	3 / FB12
600	0.56	170	1.3	100	10.7	20 ²⁾	376.3	136 × 245	C6	3.7	E62.S24-604C60	2 / FB12
800	0.63	190	1.0	100	14.8	20 ²⁾	501.8	136 × 320	C6	4.9	E62.S32-804C60	2 / FB13

2) higher values available on request_

Other values and dimensions available on request_



E62.***

AC/DC

420...5000V AC / 700...5000V DC

C_N (μF)	R_S ($\text{m}\Omega$)	L_e (nH)	R_{th} (K/W)	I_{max} (A)	\hat{I} (kA)	I_S (kA)	W_N (Ws)	$D_1 \times L_1$ (mm)	Design	m (kg)	order no.	pcs_ / Box
U_N 1260V DC / 750V AC				U_{rms} 530V		U_S 1900V		U_{BB} 1890V DC		U_{BG} 3000V AC		
4.7	11.1	60	18.3	10	0.22	0.66	3.4	30 × 81	E1 ¹⁾	0.07	E62.C81-472E10	72 / FB3
10	6.1	110	13.8	16	0.45	1.35	7.9	40 × 81	D1	0.11	E62.E81-103D10	36 / FB3
10	3.1	110	14.4	20	0.40	1.2	7.9	50 × 62	G1	0.14	E62.G62-103G10	21 / FB3
15	5.9	110	11.6	16	0.3	0.9	11.9	45 × 85	B2	0.14	E62.F85-153B20	21 / FB1
20	4.2	100	10.5	27	0.4	1.2	15.9	50 × 85	G1	0.18	E62.G85-203G10	21 / FB2
22	3.5	120	8.7	16	0.5	1.5	17.5	60 × 85	D1	0.25	E62.K85-223D10	18 / FB3
24	3.8	110	9.5	29	0.5	1.5	19.1	55 × 85	G1	0.21	E62.H85-243G10	18 / FB1
26	3.4	120	8.7	16	0.5	1.5	20.6	60 × 85	D1	0.25	E62.K85-263D10	18 / FB3
29	3.2	120	8.7	16	0.6	1.8	23.0	60 × 85	D1	0.25	E62.K85-293D10	18 / FB3
33	3.6	100	7.2	37	0.7	2.0	26.2	65 × 95	G1	0.33	E62.L95-333G10	10 / FB2
47	2.4	110	5.7	43	1.0	2.9	37.3	75 × 105	L1	0.5	E62.M10-473L10	8 / FB1
60	1.5	110	5.0	43	1.2	3.7	47.6	85 × 105	L1	0.6	E62.N10-603L10	10 / FB10
70	5.6	140	4.3	16	0.68	2.0	55.6	65 × 160	D2	0.6	E62.L16-703D20	10 / FB7
75	1.4	110	4.5	43	1.5	4.6	59.5	95 × 105	L1	0.8	E62.P10-753L10	6 / FB10
80	5.3	130	3.7	20	0.78	2.3	63.5	75 × 160	D2	0.7	E62.M16-803D20	8 / FB7
80	1.6	100	3.4	30	1.60	4.8	63.5	75 × 176	K1	0.8	E62.M17-803K10	5 / FB8
80	1.4	110	4.2	43	1.60	5.0	63.5	100 × 105	L1	0.9	E62.Q10-803L10	6 / FB10
150	1.4	130	2.7	43	3.1	9.3	119.1	95 × 176	L1	1.3	E62.P17-154L10	3 / FB8
150	0.7	160	2.5	80	3.1	9.3	119.1	100 × 176	C6	1.5	E62.Q17-154C60	3 / FB8
220	0.61	160	2.2	80	4.5	13.5	174.6	116 × 176	C6	2.0	E62.R17-224C60	3 / FB8
330	0.61	170	1.6	100	6.8	20 ²⁾	262.0	116 × 245	C6	2.7	E62.R24-334C60	3 / FB12
500	0.56	170	1.3	100	10.1	20 ²⁾	396.9	136 × 245	C6	3.7	E62.S24-504C60	2 / FB12
600	0.64	190	1.0	100	12.4	20 ²⁾	476.3	136 × 320	C6	4.9	E62.S32-604C60	2 / FB13
U_N 1400V DC / 850V AC				U_{rms} 600V		U_S 2100V		U_{BB} 2100V DC		U_{BG} 3000V AC		
2.0	8.1	60	25.6	10	0.18	0.5	1.4	30 × 58	E1 ¹⁾ / E4	0.05	E62.C58-202E[1/4]0	72 / FB4
2.2	7.5	60	25.6	10	0.2	0.6	1.6	30 × 58	E1 ¹⁾ / E4	0.05	E62.C58-222E[1/4]0	72 / FB4
4.0	11.7	80	18.3	10	0.18	0.5	2.9	30 × 81	E1 ¹⁾ / E4	0.07	E62.C81-402E[1/4]0	72 / FB3
12	6.2	110	12.0	16	0.3	0.8	11.8	45 × 85	B2	0.14	E62.F85-123B20	21 / FB1
15	4.6	80	10.5	25	0.3	0.9	14.7	50 × 85	G1	0.18	E62.G85-153G10	21 / FB2
16	4.5	100	10.5	30	0.4	1.1	15.7	50 × 85	G1	0.18	E62.G85-163G10	21 / FB2
25	3.9	100	7.2	40	0.6	1.7	24.5	65 × 95	G1	0.33	E62.L95-253G10	10 / FB2
30	4.4	110	6.3	30	0.6	1.7	29.4	65 × 109	G1	0.4	E62.L10-303G10	10 / FB1
33	2.7	110	5.7	38	0.8	2.3	32.3	75 × 105	L1	0.5	E62.M10-333L10	8 / FB1
40	2.1	110	4.2	30	0.9	2.7	39.2	60 × 176	K1	0.5	E62.M17-403K10	5 / FB8
47	2.2	110	5.0	43	1.1	3.2	46.1	85 × 105	L1	0.6	E62.N10-473L10	10 / FB10
55	6.0	130	4.3	16	0.6	1.8	53.9	65 × 160	D2 ¹⁾	0.6	E62.L16-553D20	10 / FB7
60	1.4	110	4.5	43	1.4	4.1	58.8	95 × 105	L1	0.8	E62.P10-603L10	6 / FB10
68	5.4	100	3.7	16	0.74	2.2	66.6	75 × 160	D2 ¹⁾	0.7	E62.M16-683D20	8 / FB7
70	1.6	110	3.4	30	1.6	4.8	68.6	75 × 176	K1	0.8	E62.M17-703K10	5 / FB8
120	0.74	160	2.7	80	2.7	8.2	117.6	95 × 176	C6	1.3	E62.P17-124C60	3 / FB8
130	0.71	160	2.5	80	3.0	8.9	127.4	100 × 176	C6	1.5	E62.Q17-134C60	3 / FB8
180	0.63	160	2.2	80	4.1	12.3	176.4	116 × 176	C6	2.0	E62.R17-184C60	3 / FB8
270	0.62	170	1.6	100	6.2	18.6	264.6	116 × 245	C6	2.7	E62.R24-274C60	3 / FB12



E62.***

AC/DC

420...5000V AC / 700...5000V DC



C_N (μF)	R_S ($m\Omega$)	L_e (nH)	R_{th} (K/W)	I_{max} (A)	\hat{I} (kA)	I_S (kA)	W_N (Ws)	$D_1 \times L_1$ (mm)	Design	m (kg)	order no.	pcs_ / Box
U_N 1400V DC / 850V AC				U_{rms} 600V		U_S 2100V		U_{BB} 2100V DC		U_{BG} 3000V AC		
400	0.58	170	1.3	100	9.2	20 ²⁾	392.0	136 × 245	C6	3.7	E62.S24-404C60	2 / FB12
500	0.4	190	1.0	100	11.4	20 ²⁾	490.0	136 × 320	C6	4.9	E62.S32-504C60	2 / FB13
U_N 1680V DC / 1000V AC				U_{rms} 720V		U_S 2500V		U_{BB} 2520V DC		U_{BG} 3500V AC		
1.5	5.0	60	25.6	10	0.3	0.9	2.1	30 × 58	E1 ¹⁾ / E4	0.05	E62.C58-152E[1/4]0	72 / FB4
2.2	3.8	60	21.9	16	0.25	0.8	1.6	35 × 58	E2 ¹⁾	0.07	E62.D58-222E20	50 / FB4
3.0	7.2	80	18.3	10	0.35	1.05	4.2	30 × 81	E1 ¹⁾ / E4	0.07	E62.C81-302E[1/4]0	72 / FB3
4.0	5.8	80	15.7	10	0.45	1.35	2.9	35 × 81	E2 ¹⁾	0.1	E62.D81-402E20	50 / FB3
5.0	5.0	80	14.0	16	0.6	1.8	3.6	40 × 81	D1 ¹⁾	0.11	E62.E81-502D10	36 / FB3
6.8	4.1	80	12.2	16	0.8	2.4	4.9	45 × 81	D1 ¹⁾	0.14	E62.F81-682D10	32 / FB3
8.0	5.0	110	11.6	16	0.5	1.4	11.3	45 × 85	B2	0.14	E62.F85-802B20	21 / FB1
10	3.6	100	10.5	32	0.6	1.7	14.1	50 × 85	G1	0.18	E62.G85-103G10	21 / FB2
12	3.0	110	9.5	30	0.7	2.1	16.9	55 × 85	G1	0.21	E62.H85-123G10	18 / FB1
15	2.7	110	8.7	16	0.9	2.6	10.8	60 × 85	D1 ¹⁾	0.25	E62.K85-153D10	18 / FB3
16	3.3	110	7.2	40	0.95	2.9	22.6	65 × 95	G1	0.33	E62.L95-163G10	10 / FB2
18	3.2	100	7.2	40	1.0	3.1	25.4	65 × 95	G1	0.33	E62.L95-183G10	10 / FB2
20	6.2	120	5.9	25	0.5	1.5	28.2	50 × 151	G1	0.35	E62.G15-203G10	21 / FB7
20	1.2	140	5.7	50	1.2	3.5	28.2	75 × 105	C6	0.5	E62.M10-203C60	8 / FB0
28	0.94	140	5.0	50	1.6	4.9	39.5	85 × 105	C6	0.6	E62.N10-283C60	10 / FB10
28	1.7	110	4.2	30	1.6	4.8	39.5	60 × 176	K1	0.5	E62.K17-283K10	10 / FB8
33	0.85	140	4.5	50	1.9	5.7	46.6	95 × 105	C6	0.8	E62.P10-333C60	6 / FB10
38	4.8	140	4.3	20	1.0	3.0	53.6	65 × 160	D2 ¹⁾	0.6	E62.L16-383D20	10 / FB7
46	1.4	110	3.4	30	2.6	7.8	64.9	75 × 176	K1	0.8	E62.M17-463K10	5 / FB8
53	4.3	130	3.7	20	1.4	4.2	74.8	75 × 160	D2 ¹⁾	0.7	E62.M16-533D20	8 / FB7
68	0.65	160	2.7	80	3.9	11.7	96.0	95 × 176	C6	1.3	E62.P17-683C60	3 / FB8
80	0.61	160	2.5	80	4.6	13.8	112.9	100 × 176	C6	1.5	E62.Q17-803C60	3 / FB8
120	0.54	160	2.2	80	7.0	20 ²⁾	169.3	116 × 176	C6	2.0	E62.R17-124C60	3 / FB8
180	0.57	170	1.6	100	10.4	20 ²⁾	254.0	116 × 245	C6	2.7	E62.R24-184C60	3 / FB12
220	0.64	180	1.2	100	14.2	20 ²⁾	310.5	116 × 320	C6	3.5	E62.R32-224C60	3 / FB13
250	0.54	170	1.3	100	14.5	20 ²⁾	352.8	136 × 245	C6	3.7	E62.S24-254C60	2 / FB12
330	0.61	190	1.0	100	15 ²⁾	20 ²⁾	465.7	136 × 320	C6	4.9	E62.S32-334C60	2 / FB13
U_N 1200V AC		U_{rms} 850V		U_S 2100V		U_{BB} 2580V DC		U_{BG} 3000V AC				
0.1	15.0	60	30.7	8	0.10	0.3	0.1	25 × 58	E1	0.05	E62.B58-101E10	98 / FB4
0.15	10.4	60	25.6	8	0.10	0.3	0.1	30 × 58	E1	0.05	E62.C58-151E10	72 / FB4
0.22	7.5	60	25.6	10	0.20	0.6	0.2	30 × 58	E1	0.05	E62.C58-221E10	72 / FB4
0.33	6.5	60	25.6	10	0.20	0.6	0.2	30 × 58	E1	0.05	E62.C58-331E10	72 / FB4
0.47	8.2	60	25.6	10	0.20	0.6	0.3	30 × 58	E1	0.05	E62.C58-471E10	72 / FB4
0.5	5.9	60	25.6	10	0.16	0.48	0.4	30 × 58	E1	0.05	E62.C58-501E10	72 / FB4
0.68	6.6	60	25.6	10	0.22	0.7	0.5	30 × 58	E1	0.05	E62.C58-681E10	72 / FB4
1.0	6.0	60	25.6	10	0.25	0.8	0.7	30 × 58	E1	0.05	E62.C58-102E10	72 / FB4
1.5	9.9	60	18.3	10	0.23	0.7	1.1	30 × 81	E1	0.07	E62.C81-152E10	72 / FB3
2.0	8.7	60	18.3	10	0.25	0.8	1.4	30 × 81	E1	0.07	E62.C81-202E10	72 / FB3

1) U_N DC ≤ 1200V 2) higher values available on request_

Other values and dimensions available on request_



E62.***

AC/DC

420...5000V AC / 700...5000V DC

C_N (μ F)	R_S ($m\Omega$)	L_e (nH)	R_{th} (K/W)	I_{max} (A)	\hat{I} (kA)	I_S (kA)	W_N (Ws)	$D_1 \times L_1$ (mm)	Design	m (kg)	order no.	pcs_ / Box
U_N 1200V AC		U_{rms} 850V		U_S 2100V		U_{BB} 2580V DC		U_{BG} 3000V AC				
2.2	11.1	90	16.0	10	0.2	0.6	1.6	30 × 93	E1	0.08	E62.C93-222E10	72 / FB3
4.0	5.2	80	13.8	16	0.3	0.9	2.9	40 × 81	D1	0.11	E62.E81-402D10	36 / FB3
4.7	4.7	60	13.8	16	0.42	1.3	3.4	40 × 81	D1	0.11	E62.E81-472D10	36 / FB3
5.0	4.5	80	12.2	16	0.35	1.1	3.6	45 × 81	D1	0.14	E62.F81-502D10	32 / FB3
5.75	3.8	80	10.5	16	0.5	1.5	4.1	50 × 85	D1	0.18	E62.G85-582D10	21 / FB3
6.8	3.7	80	10.5	16	0.5	1.5	4.9	50 × 85	D1	0.18	E62.G85-682D10	21 / FB3
10	3.1	80	8.7	16	0.7	2.1	7.2	60 × 85	D1	0.25	E62.K85-103D10	18 / FB3
15	4.7	100	6.5	16	0.6	1.8	10.8	55 × 124	D1	0.3	E62.H12-153D10	18 / FB1
22	5.4	100	4.9	16	1.2	3.6	15.8	60 × 151	D1	0.4	E62.K15-223D10	18 / FB0
30	4.5	130	4.3	16	1.0	3.0	21.6	65 × 160	D2	0.6	E62.L16-303D20	10 / FB7
33	4.8	120	3.7	16	0.93	2.79	23.8	75 × 160	D2	0.7	E62.M16-333D20	10 / FB7
40	4.5	130	3.7	16	1.2	3.6	28.8	75 × 160	D2	0.7	E62.M16-403D20	8 / FB7
U_N 2000V DC / 1200V AC				U_{rms} 850V		U_S 3000V		U_{BB} 3000V DC		U_{BG} 4000V AC		
0.5	5.9	60	25.6	10	0.16	0.5	1.0	30 × 58	E4	0.07	E62.C58-501E40	50 / FB4
1.0	6.0	60	25.6	10	0.25	0.8	2.0	30 × 58	E4	0.07	E62.C58-102E40	50 / FB4
2.0	8.7	60	18.3	10	0.25	0.8	4.0	30 × 81	E4	0.09	E62.C81-202E40	50 / FB2
2.2	11.1	90	16.0	10	0.2	0.6	4.4	30 × 93	E4	0.08	E62.C93-222E40	50 / FB2
3.3	4.0	80	14.4	16	0.8	2.4	6.6	50 × 62	B2	0.15	E62.G62-332B20	21 / FB2
6.8	3.7	100	10.5	33	0.5	1.5	13.6	50 × 85	G1	0.18	E62.G85-682G10	21 / FB2
10	3.7	100	7.2	40	0.7	2.1	20.0	65 × 95	G1	0.33	E62.L95-103G10	10 / FB2
15	3.9	120	6.3	40	0.8	2.4	30.0	65 × 109	G1	0.4	E62.L10-153G10	10 / FB1
20	4.7	120	5.1	30	0.8	2.4	40.0	65 × 135	G1	0.47	E62.L13-203G11	10 / FB0
30	5.3	130	4.3	40	1.0	3.0	60.0	65 × 160	G1	0.6	E62.L16-303G10	10 / FB7
32	0.79	140	4.2	50	2.0	6.0	64.0	100 × 105	C6	0.9	E62.Q10-323C60	6 / FB10
35	1.5	110	3.4	30	2.3	6.9	70.0	75 × 176	K1	0.8	E62.M17-353K10	5 / FB8
40	0.76	160	3.0	80	2.7	8.1	80.0	85 × 176	C6	1.2	E62.N17-403C60	5 / FB8
100	1.0	150	2.2	80	3.2	9.6	200.0	116 × 176	C6	2.0	E62.R17-104C60	3 / FB8
U_N 2250V DC / 1350V AC				U_{rms} 960V		U_S 3300V		U_{BB} 3375V DC		U_{BG} 4200V AC		
1.5	9.9	80	18.3	10	0.2	0.7	3.8	30 × 81	E4	0.09	E62.C81-152E40	50 / FB2
4.0	6.0	130	11.6	16	0.32	1.0	10.1	45 × 85	B2	0.14	E62.F85-402B20	21 / FB1
4.0	5.0	120	10.5	26	0.32	0.96	10.1	50 × 85	G1	0.18	E62.G85-402G10	21 / FB2
5.0	4.4	100	10.5	25	0.4	1.2	12.7	50 × 85	G1	0.18	E62.G85-502G10	21 / FB2
6.8	4.0	110	9.5	25	0.5	1.6	17.2	55 × 85	G1	0.21	E62.H85-682G10	18 / FB1
7.5	3.0	110	7.1	30	0.6	1.7	18.9	60 × 105	K1	0.3	E62.K10-752K10	10 / FB1
10	1.6	140	5.7	45	0.8	2.3	25.3	75 × 105	C6	0.5	E62.M10-103C60	8 / FB0
13	2.3	110	5.7	30	1.0	2.9	32.9	75 × 105	K1	0.5	E62.M10-133K10	5 / FB0
15	1.2	120	5.0	50	1.1	3.3	38.0	85 × 105	C6	0.6	E62.N10-153C60	10 / FB10
16	1.1	140	5.0	50	1.2	3.7	40.5	85 × 105	C6	0.6	E62.N10-163C60	10 / FB10
20	0.96	140	4.5	50	1.5	4.6	50.6	95 × 105	C6	0.8	E62.P10-203C60	6 / FB10
22	0.97	160	3.4	80	1.9	5.7	55.7	75 × 176	C6	0.8	E62.M17-223C60	5 / FB8
40	0.71	160	2.7	80	3.1	9.3	101.3	95 × 176	C6	1.3	E62.P17-403C60	3 / FB8
47	0.67	160	2.5	80	3.6	10.8	119.0	100 × 176	C6	1.5	E62.Q17-473C60	3 / FB8



E62.***

AC/DC

420...5000V AC / 700...5000V DC



C_N (μF)	R_S ($m\Omega$)	L_e (nH)	R_{th} (K/W)	I_{max} (A)	\hat{I} (kA)	I_S (kA)	W_N (Ws)	$D_1 \times L_1$ (mm)	Design	m (kg)	order no.	pcs_ / Box
U_N 2250V DC / 1350V AC				U_{rms} 960V		U_S 3300V		U_{BB} 3375V DC		U_{BG} 4200V AC		
68	0.59	160	2.2	80	5.3	15.9	172.1	116 × 176	C6	2.0	E62.R17-683C60	3 / FB8
100	0.6	170	1.6	100	7.7	20 ²⁾	253.1	116 × 245	C6	2.7	E62.R24-104C60	3 / FB12
150	0.56	170	1.3	100	11.6	20 ²⁾	379.7	136 × 245	C6	3.7	E62.S24-154C60	2 / FB12
200	0.62	190	1.0	100	15 ²⁾	20 ²⁾	506.3	136 × 320	C6	4.9	E62.S32-204C60	2 / FB13
U_N 2800V DC / 1700V AC				U_{rms} 1200V		U_S 4200V		U_{BB} 4200V DC		U_{BG} 5000V AC		
0.33	6.5	60	25.6	10	0.2	0.6	1.3	30 × 58	E4	0.07	E62.C58-331E40	50 / FB4
0.47	8.2	60	25.6	10	0.2	0.6	1.8	30 × 58	E4	0.07	E62.C58-471E40	50 / FB4
1.0	11.5	80	18.3	10	0.2	0.6	3.9	30 × 81	E4	0.09	E62.C81-102E40	50 / FB2
1.0	5.8	150	16.0	16	0.4	1.2	3.9	45 × 62	B2	0.10	E62.F62-102B20	21 / FB3
2.2	7.3	80	11.6	10	0.2	0.6	8.6	45 × 85	B2	0.14	E62.F85-222B20	21 / FB1
2.5	6.8	120	11.6	16	0.2	0.7	9.8	45 × 85	B2	0.14	E62.F85-252B20	21 / FB1
3.3	5.9	120	10.5	16	0.3	1.0	12.9	50 × 85	B2	0.17	E62.G85-332B20	21 / FB1
4.0	2.8	140	5.7	48	0.8	1.8	15.7	75 × 105	C6	0.5	E62.M10-402C60	8 / FB0
4.7	5.0	120	9.5	16	0.5	1.4	18.4	55 × 85	B2	0.21	E62.H85-472B20	18 / FB2
6.8	1.8	140	5.7	46	0.7	2.0	26.7	75 × 105	C6	0.5	E62.M10-682C60	8 / FB0
10	1.3	140	5.0	50	1.0	2.9	39.2	85 × 105	C6	0.6	E62.N10-103C60	10 / FB10
12	1.2	140	4.5	50	1.2	3.5	47.0	95 × 105	C6	0.8	E62.P10-123C60	6 / FB10
25	0.8	160	2.7	80	2.4	7.3	98.0	95 × 176	C6	1.3	E62.P17-253C60	3 / FB8
30	0.73	160	2.5	80	2.9	8.7	117.6	100 × 176	C6	1.5	E62.Q17-303C60	3 / FB8
40	0.65	160	2.2	80	3.9	11.7	156.8	116 × 176	C6	2.0	E62.R17-403C60	3 / FB8
50	1.6	150	2.2	80	2.3	6.9	196.0	116 × 176	C6	2.0	E62.R17-503C60	3 / FB8
60	0.64	170	1.6	100	5.8	17.4	235.2	116 × 245	C6	2.7	E62.R24-603C60	3 / FB12
90	0.58	170	1.3	100	8.7	20 ²⁾	352.8	136 × 245	C6	3.7	E62.S24-903C60	2 / FB12
125	0.64	190	1.0	100	12.1	20 ²⁾	490.0	136 × 320	C6	4.9	E62.S32-134C60	2 / FB13
U_N 3400V DC / 2000V AC				U_{rms} 1400V		U_S 5100V		U_{BB} 5100V DC		U_{BG} 5800V AC		
10	2.1	170	3.4	40	1.2	3.5	57.8	75 × 176	C6	0.8	E62.M17-103C60	5 / FB8
15	1.6	170	2.7	40	1.0	3.1	86.7	95 × 176	C6	1.3	E62.P17-153C60	3 / FB8
20	1.3	160	2.5	50	2.3	7.0	115.6	100 × 176	C6	1.5	E62.Q17-203C60	3 / FB8
30	1.0	160	2.2	50	3.6	10.8	173.4	116 × 176	C6	2.0	E62.R17-303C60	3 / FB8
40	1.1	190	1.2	80	4.6	13.8	231.2	116 × 320	C6	3.5	E62.R32-403C60	3 / FB13
60	1.0	180	1.2	100	6.0	18.0	346.8	116 × 320	C6	3.5	E62.R32-603C60	3 / FB13
90	1.0	190	1.0	100	9.7	20 ²⁾	520.2	136 × 320	C6	4.9	E62.S32-903C60	2 / FB13

2) higher values available on request_



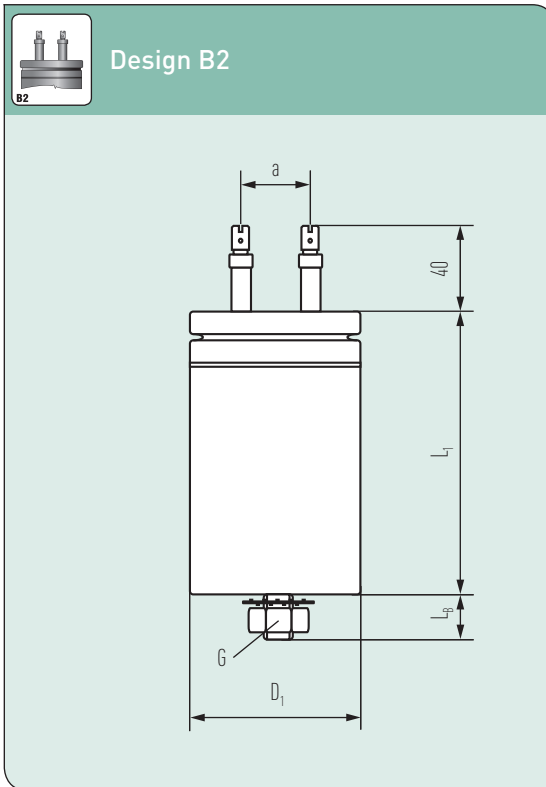
E62.***

AC/DC

420...5000V AC / 700...5000V DC

C_N (μ F)	R_s ($m\Omega$)	L_e (nH)	R_{th} (K/W)	I_{max} (A)	\hat{I} (kA)	I_s (kA)	W_N (Ws)	$D_1 \times L_1$ (mm)	Design	m (kg)	order no.	pcs_ / Box
U_N 3600V DC / 2100V AC				U_{rms} 1500V		U_s 5400V		U_{BB} 5400V DC		U_{BG} 6200V AC		
0.1	12.7	60	25.6	9	0.10	0.3	0.6	30 × 58	E4	0.07	E62.C58-101E40	50 / FB4
0.15	10.4	60	25.6	9	0.10	0.3	1.0	30 × 58	E4	0.07	E62.C58-151E40	50 / FB4
0.22	7.5	60	25.6	10	0.20	0.6	1.4	30 × 58	E4	0.07	E62.C58-221E40	50 / FB4
0.47	5.7	100	16.0	16	0.40	1.2	3.0	45 × 62	B2	0.10	E62.F62-471B21	21 / FB3
0.68	4.7	100	14.4	16	0.5	1.5	4.4	50 × 62	B2	0.15	E62.G62-681B20	21 / FB2
1.0	7.4	140	9.4	16	0.8	2.4	6.5	45 × 105	B2	0.18	E62.F10-102B21	21 / FB1
1.5	5.7	120	7.7	16	1.2	3.6	9.7	55 × 105	B2	0.26	E62.H10-152B20	18 / FB0
33	1.2	150	1.9	80	3.3	9.9	213.8	116 × 205	C6	2.4	E62.R20-333C60	3 / FB9
40	1.1	180	1.2	100	5.4	16.2	259.2	116 × 320	CR	3.5	E62.R32-403CR0	3 / FB13
U_N 4000V DC / 2400V AC				U_{rms} 1700V		U_s 6000V		U_{BB} 6000V DC		U_{BG} 6800V AC		
2.0	5.6	120	8.5	16	0.5	1.5	16.0	50 × 105	B2	0.24	E62.G10-202B20	21 / FB0
4.0	7.5	190	5.3	16	0.6	1.8	32.0	55 × 151	B2	0.4	E62.H15-402B20	12 / FB8
6.8	2.5	160	3.4	40	0.9	2.8	54.4	75 × 176	C6	0.8	E62.M17-682C60	5 / FB8
10	1.9	170	3.0	40	1.4	4.2	80.0	85 × 176	C6	1.2	E62.N17-103C60	5 / FB8
22	1.1	160	2.2	50	2.8	8.7	176.0	116 × 176	CR	2.0	E62.R17-223CR0	3 / FB8
U_N 5000V DC / 4000V AC				U_{rms} 2800V		U_s 7500V		U_{BB} 8600V DC		U_{BG} 8200V AC		
0.1	9.6	100	12.2	16	0.4	1.2	1.3	45 × 81	B2	0.14	E62.F81-101B20	21 / FB1
0.15	7.0	90	12.2	16	0.5	1.5	1.9	45 × 81	B2	0.14	E62.F81-151B20	21 / FB1
0.22	14.5	140	9.4	16	0.4	1.3	2.8	45 × 105	B2	0.18	E62.F10-221B21	21 / FB1
0.33	14.0	140	9.4	16	0.3	0.9	4.1	45 × 105	B2	0.18	E62.F10-331B20	21 / FB1
0.47	10.8	140	9.4	16	0.37	1.1	5.9	45 × 105	B2	0.18	E62.F10-471B20	21 / FB1
0.68	8.5	120	7.7	16	0.5	1.5	8.5	55 × 105	B2	0.26	E62.H10-681B20	18 / FB0
1.0	3.9	150	5.0	40	0.8	2.4	12.5	75 × 120	CR	0.6	E62.M12-102CR0	10 / FB11
2.2	2.0	150	3.9	40	1.7	5.1	27.5	95 × 120	CR	0.9	E62.P12-222CR0	3 / FB8
4.7	1.2	170	2.3	40	3.7	11.1	58.8	95 × 205	CR	1.6	E62.P20-472CR0	3 / FB9
6.0	0.8	160	1.9	80	4.7	14.1	75.0	116 × 205	CR	2.7	E62.R20-602CR0	3 / FB9
10	2.6	180	1.4	50	6.0	18.0	125.0	116 × 280	CR	3.1	E62.R28-103CR0	3 / FB10
U_N 5000V AC		U_{rms} 3500V		U_s 7500V		U_{BB} 8750V DC						
0.33	8.7	140	6.2	16	0.73	2.19	4.1	60 × 120	CD	0.3	E62.K12-331CD0	18 / FB7
0.47	7.1	140	6.2	16	0.92	2.76	5.9	60 × 120	CD	0.3	E62.K12-471CD0	18 / FB7
0.68	8.9	140	5.3	16	0.94	2.82	8.5	60 × 140	CD	0.4	E62.K14-681CD0	12 / FB8
1.0	6.5	140	4.2	16	1.39	4.17	12.5	75 × 140	CD	0.6	E62.M14-102CD0	5 / FB8
1.5	4.8	140	3.7	16	2.08	6.24	18.8	85 × 140	CD	0.8	E62.N14-152CD0	5 / FB8
2.0	3.9	140	3.4	16	2.77	8.31	25.0	95 × 140	CD	1.0	E62.P14-202CD0	3 / FB8





CAPACITORS WITH A CAN DIAMETER OF 45...55 mm

- Can material aluminium
- Base mounting stud see chart
- Lid brass with rubber sealing, flanged can
- Terminals single tab connector 6.3×0.8 mm on
..... soldered ceramic bushing
- I_{max} (Terminals) 16 A
- Degree of protection IP 00
- Humidity class F

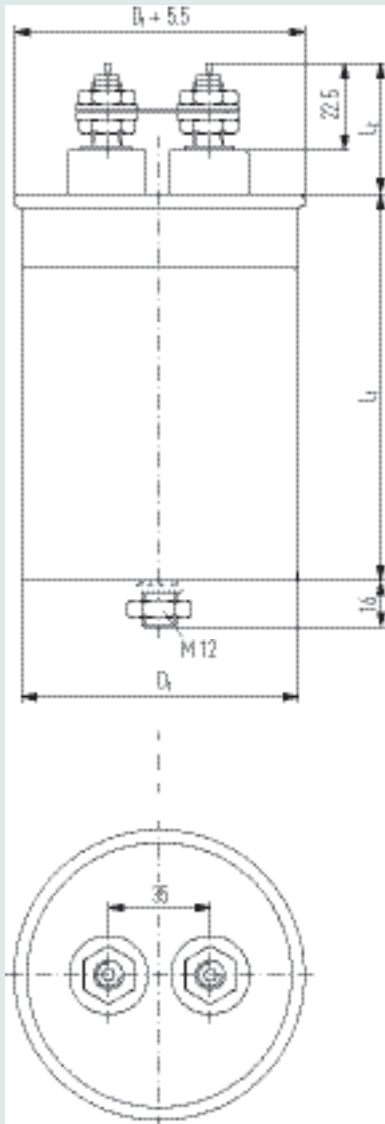
D_1	L_b	G	a	K	L
45	10	M8	19	20	9
50	16	M12	26	20	16
55	16	M12	26	20	16



C6



Design C6



CAPACITORS WITH A CAN DIAMETER OF 75...136 mm

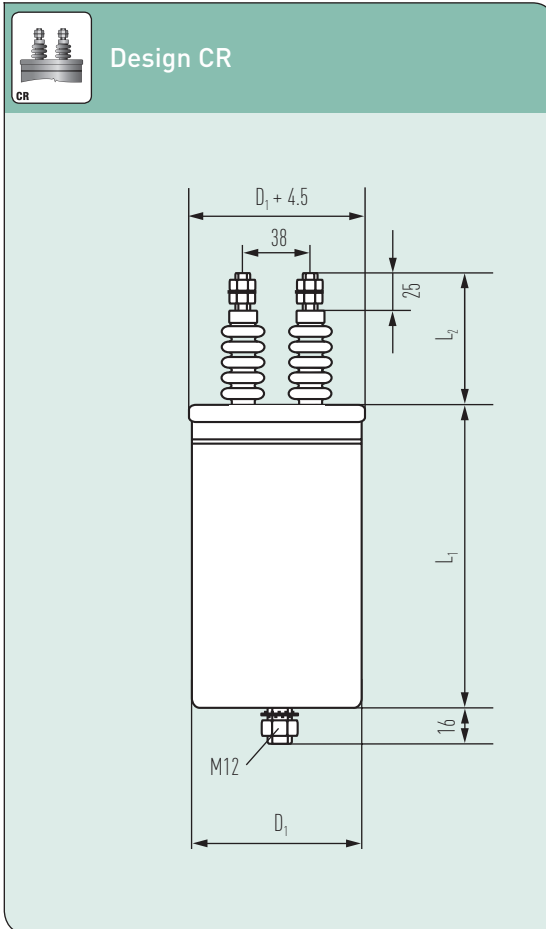
- Can material aluminium
- Base mounting stud M12
- Lid flanged aluminium (folded edge)
- Terminals threaded stud M10 on soldered
..... plastic bushing
- I_{max} (Terminals) 100 A
- Degree of protection IP 00
- K 25 mm
- L 15 mm
- Humidity class C

D_1	L_2
75	45
85	45
95	45
100	45
116	41
136	41





CR

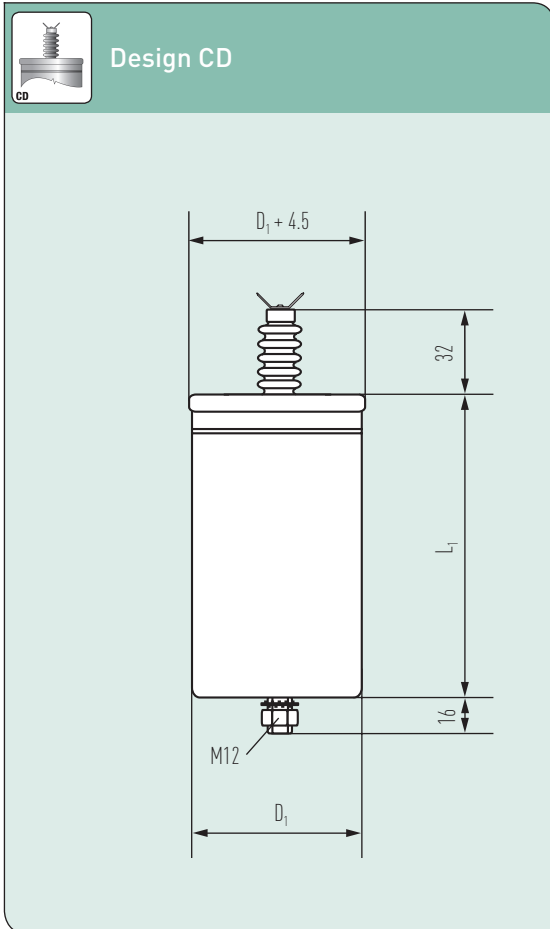


CAPACITORS WITH A CAN DIAMETER OF 75...136 mm

- Can material aluminium
- Base mounting stud M12
- Lid flanged copper (folded edge)
- Terminals threaded stud M10 on soldered ceramic
..... bushing
- I_{max} (Terminals) 100 A
- Degree of protection IP 00
- K 54 mm
- L 17 mm
- Humidity class C

D_1	L_2
75	55
85	55
95	55
100	55
116	55
136	52

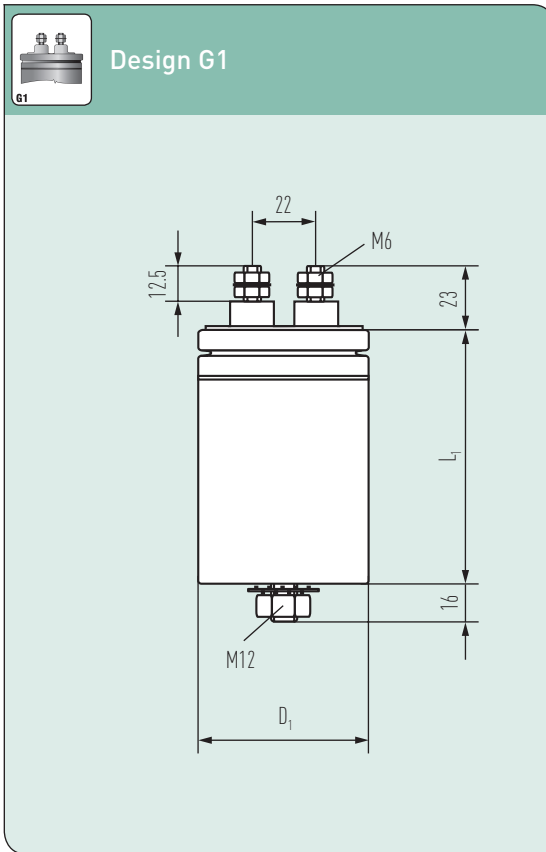




CAPACITORS WITH A CAN DIAMETER OF 60...95 mm

Can material	aluminium
Base mounting stud	M12
Lid	flanged copper (folded edge)
Terminals	dual tab connectors 6.3×0.8
I_{max} (Terminals)	16 A
Degree of protection	IP 00
K	54 mm
L	35 mm
Humidity class	C



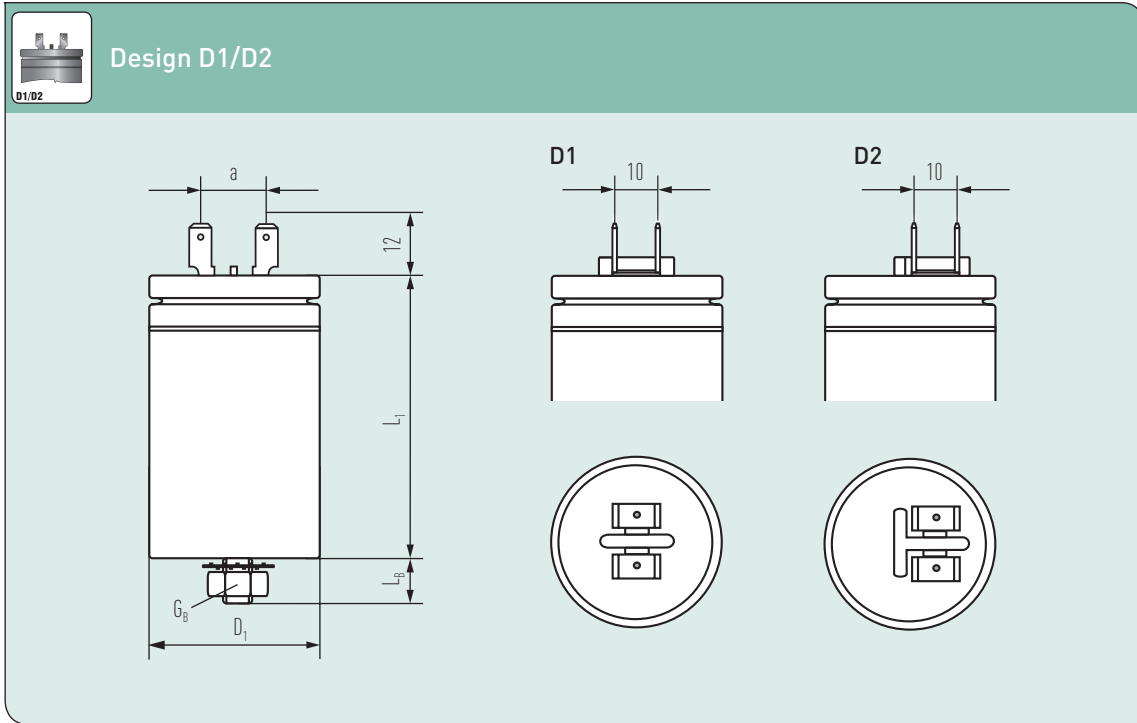
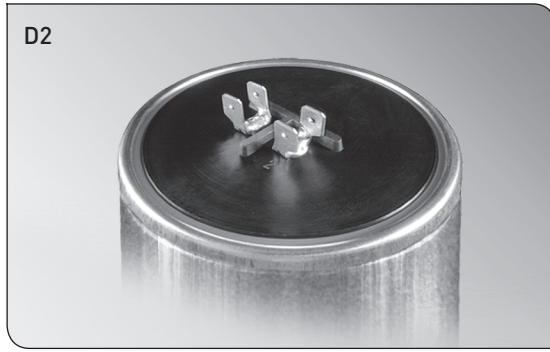


CAPACITORS WITH A CAN DIAMETER OF 50/55/65 mm

- Can material aluminium
- Base mounting stud M12
- Lid plastic with rubber sealing, flanged can
- Terminals threaded stud M6 on integrated plastic
..... bushing
- I_{max} (Terminals) 40 A
- Degree of protection IP 00
- L 10
- Humidity class F

D_1	K
50	15
55	16
65	21





D1 CAPACITORS WITH A CAN DIAMETER OF 35...60 mm

D2 CAPACITORS WITH A CAN DIAMETER OF 65...75 mm

Can material aluminium

Base mounting stud see chart

Lid plastic with rubber sealing, flanged can

Terminals dual tab connectors 6.3 × 0.8 mm

..... (tinned steel, riveted)

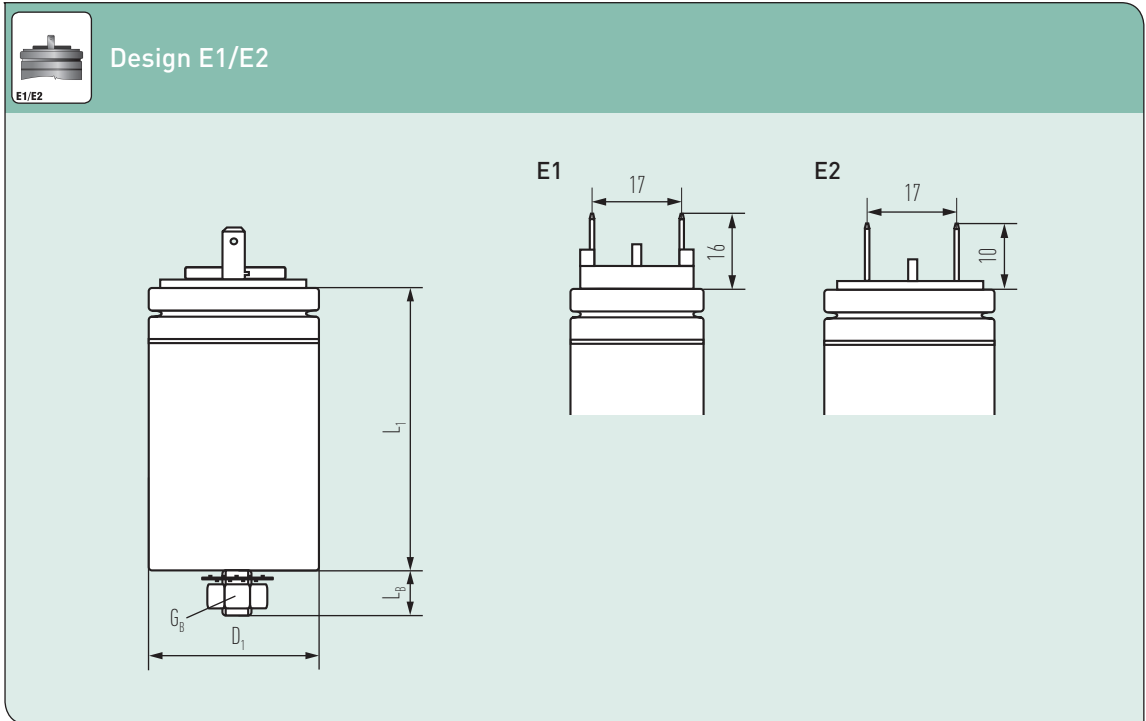
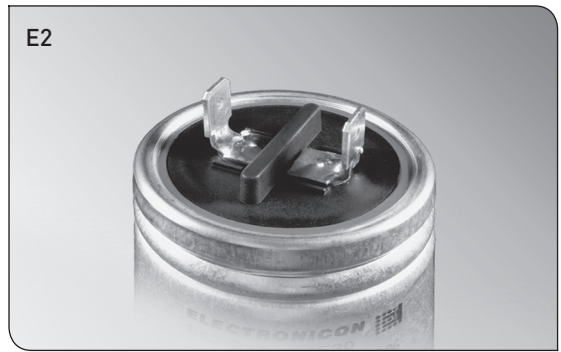
I_{max} (Terminals) 16 A

Degree of protection IP 00

Humidity class F

D_1	a	G_b	L_b	K	L
35	13.5	M8	10	6.5	6.5
40	13.5	M8	10	9	6.5
45	13.5	M8	10	10	6.5
50	13.5	M12	16	10	6.5
55	13.5	M12	16	10	6.5
60	13.5	M12	16	10	6.5
65	16.5	M12	16	10	8
75	16.5	M12	16	10	8





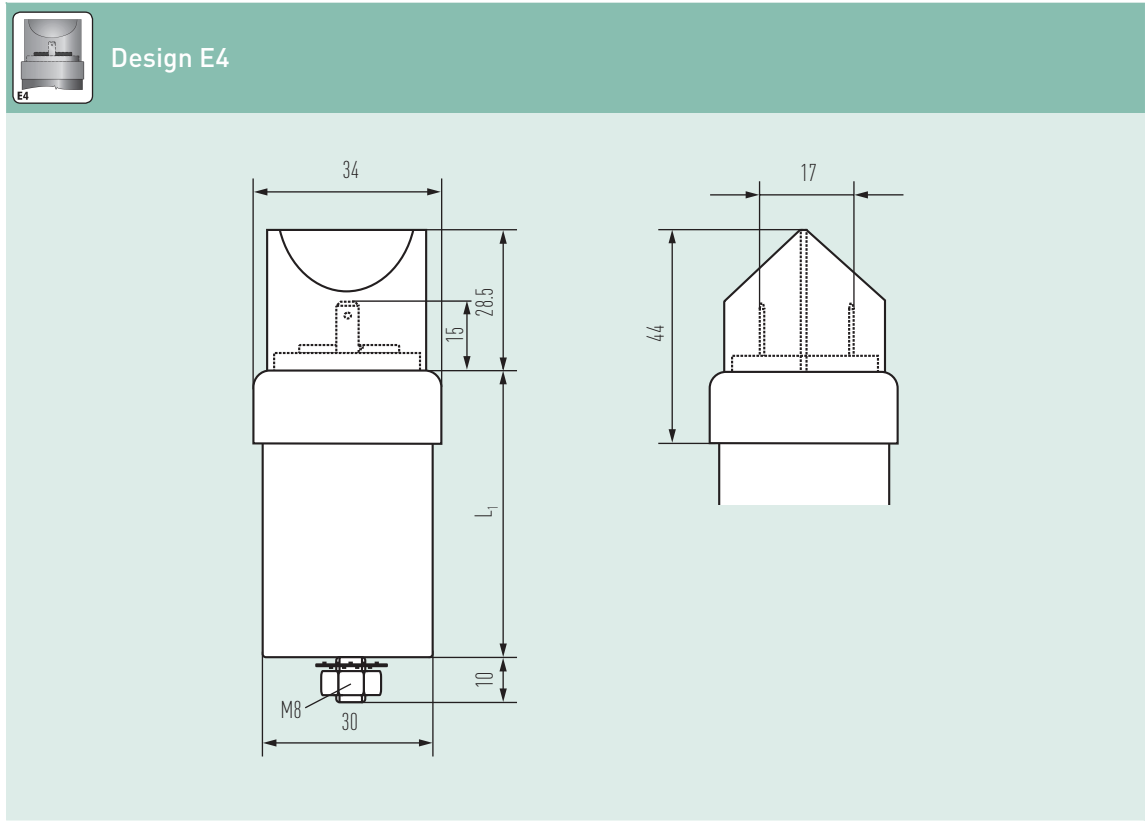
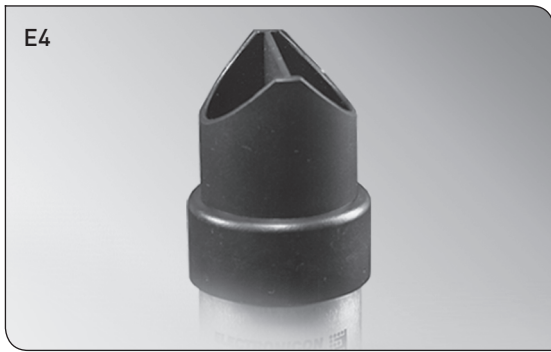
E1 CAPACITORS WITH A CAN DIAMETER OF 25...30 mm

E2 CAPACITORS WITH A CAN DIAMETER OF 35...65 mm

- Can material aluminium
- Base mounting stud see chart
- Lid plastic (UL94: V0)
- Terminals tab connector 6.3 × 0.8 mm
..... (tinned steel, riveted)
- I_{max} (Terminals) 16 A
- Degree of protection IP 00
- Humidity class F

D_1	G_b	L_b	K	L
25	M8	10	7.5	7.5
30...45	M8	10	9	7.5
50...65	M12	16	9	7.5



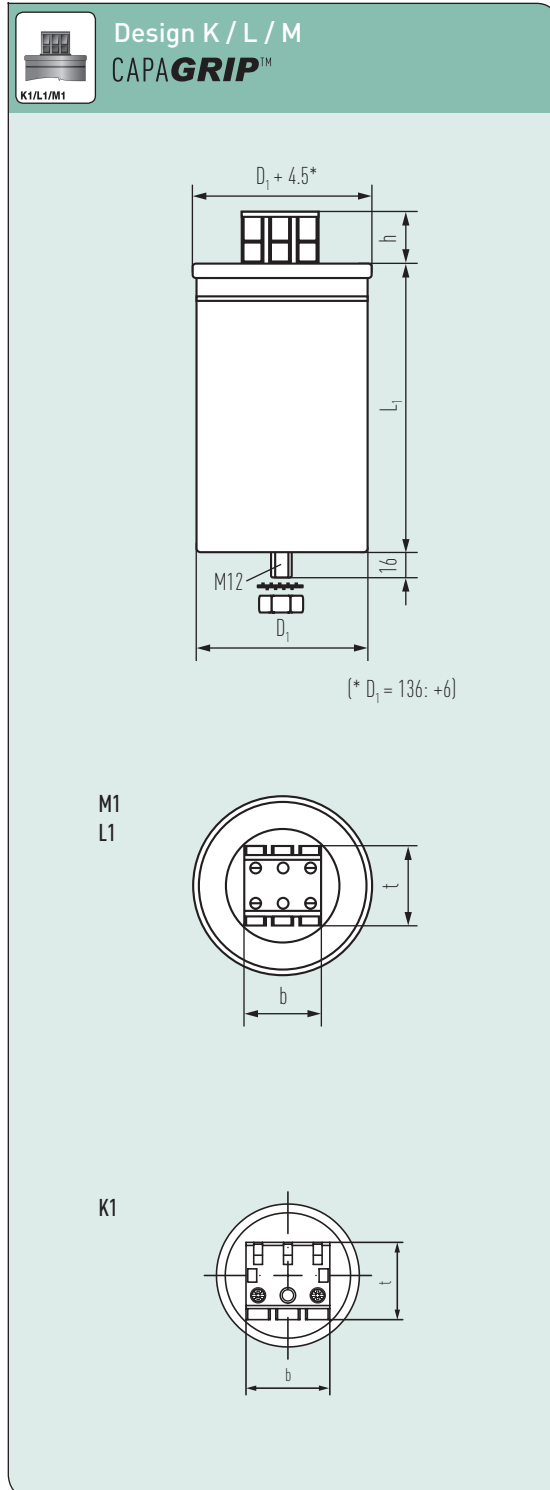
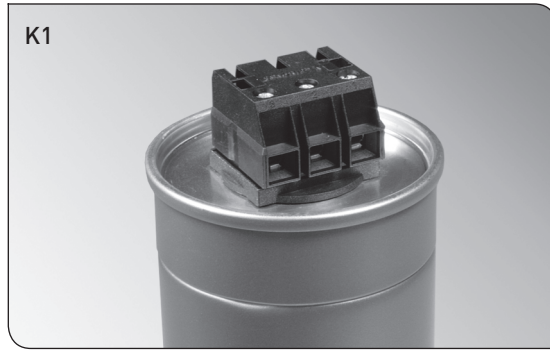


CAPACITORS WITH A CAN DIAMETER OF 30 mm

Extended clearance and creepage distances by special plastic insulating top (UL 94 : V0)

- Can material aluminium
- Base mounting stud M8
- Lid plastic (UL94: V0) with rubber sealing,
..... flanged can
- Terminals dual tab connectors 6.3 × 0.8 mm
..... (tinned steel, riveted)
- I_{max} (Terminals) 16 A
- Degree of protection IP 00
- K 40 mm
- L 30 mm
- Humidity class F





CAPACITORS WITH A CAN DIAMETER OF 60...136 mm

- Can material aluminium
- Base mounting stud M12
- Lid flanged aluminium (folded edge)
- Terminals**
- L1 $2 \times 25 \text{ mm}^2$ per contact¹⁾
- M1 $2 \times 50 \text{ mm}^2$ per contact¹⁾
- K1 $1 \times 10 \text{ mm}^2$ per contact¹⁾
- I_{max} (Terminals)**
- L1 56 A
- M1 104 A
- K1 39 A
- Degree of protection** IP 20
- K 16 mm
- L 16 mm
- Humidity class** C

1) For design K1, L1 and M1 the central screw has no contact_

	Design L1	Design M1	Design K1
h	35	45	26
b	42	49	38
t	44	55	35.5



Important Remarks

Safety

ELECTRONICON will not indemnify or be responsible for any kind of damages to persons or property due to the improper application of any capacitors purchased from ELECTRONICON or its distributors.

The capacitors should only be used for the application intended.

Mind that electrical or mechanical misapplication of capacitors can become hazardous. Misapplied capacitors can explode or catch fire and cause bodily injury or property damage due to the expulsion of material or metal fragments.

Please consult the detailed instructions for mounting and application stated in our brochure „Application Notes“, and on the ELECTRONICON website.

If in doubt about how to connect, operate, or discharge a capacitor, consult ELECTRONICON engineering.

Mounting And Cooling

The useful life of a capacitor may be reduced dramatically if exposed to excessive heat. Typically an increase in the ambient temperature of 7°C will halve the expected life of the capacitor. Make sure to obey the permitted operating temperatures.

To avoid overheating the capacitors must be allowed to cool unhindered and should be shielded from external heat sources. We recommend forced ventilation for all applications with detuning reactors.

Give at least 20mm clearance between the capacitors for natural or forced ventilation, and do not place them directly above or next to heat sources such as detuning or tuning reactors, bus bars, etc.

Protection against Overvoltages And Short Circuits:

Self-Healing Dielectric

All dielectric structures used in our power capacitors are „selfhealing“: In the event of a voltage breakdown the metal layers around the breakdown channel are evaporated by the temperature of the electric arc that forms between the electrodes. They are removed within a few microseconds and pushed apart by the pressure generated in the centre of the breakdown spot. An insulation area is formed which is reliably resistive and voltage proof for all operating requirements of the capacitor. The capacitor remains fully functional during and after the breakdown.

For voltages within the permitted testing and operating limits the capacitors are short-circuit- and overvoltage-proof. They are also proof against external short circuits as far as the resulting surge discharges do not exceed the specified surge current limits.





Failure Rate

The failure probability of a component is a statistical value which is described by a log-normal distribution:

$$N = N_0 \times e^{-\lambda t}$$

N = number of functional components after period t

N_0 = total number of components at time $t = 0$

λ = failure rate

λ is the failure rate, which alternatively is also stated as the so-called FIT-rate (FIT = Failures In Time = $\lambda \times 10^9$).

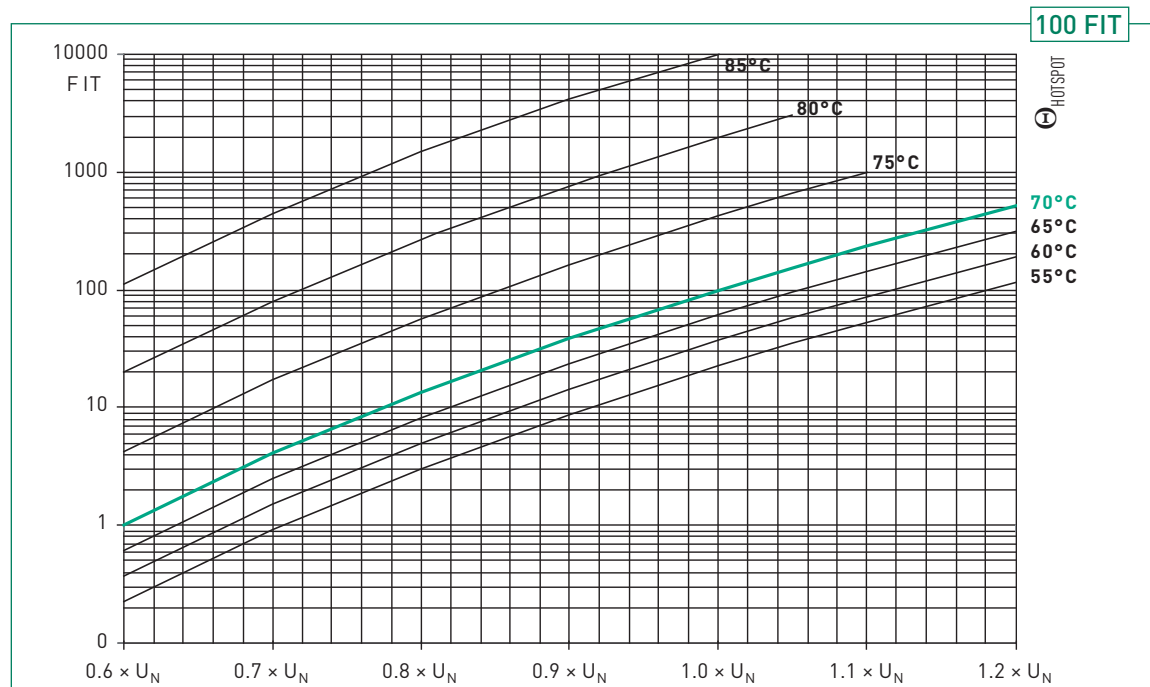
The failure rate is very closely linked with operating temperature and operating voltage of the capacitor. The FIT rates stated in this catalogue are related to the capacitors' rated voltage and a dielectric temperature (= HOTSPOT temperature) of 70°C.

The simultaneous operation of capacitors at highest permissible voltage and operating temperature should be avoided; otherwise, failure rates may increase beyond reasonable technical reliability.

The standard reference period for the failure rate statement is 100.000 hours.

Please note that FIT rates can be altered or improved by technical adjustments. Please contact us for details.

The following diagram demonstrates the correlation between FIT rate, operating voltages and operating temperatures.

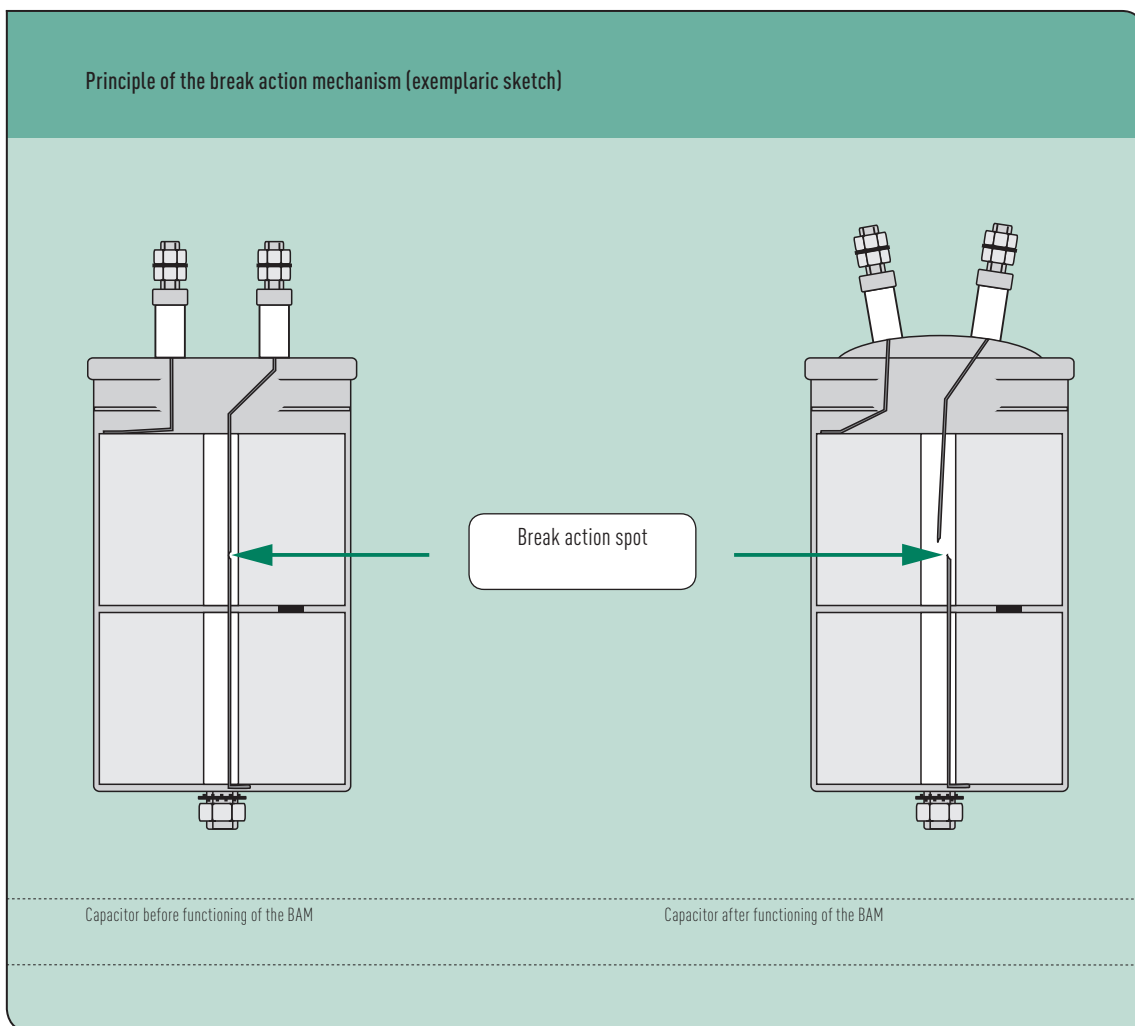


Functioning of the BAM™ (Break Action Mechanism)

In the event of overvoltage or thermal overload or ageing at the end of the capacitor's useful service life, an increasing number of selfhealing breakdowns may cause rising pressure inside the capacitor.

To prevent it from bursting, the capacitor is fitted with an obligatory „break action mechanism“ (BAM™).

The BAM™ is based on an attenuated spot at one of the connecting wires inside the capacitor. With rising pressure the case begins to expand, mainly by opening the folded crimp and pushing the lid upwards. As a result, the prepared connecting wire is separated at the attenuated spot, and the current path is interrupted irreversibly.



Warning:

It has to be noted that this safety system can act properly only within the permitted limits of loads and overloads. The simple presence of a safety mechanism does not mean that catastrophic failures are completely impossible. Strong overvoltages, permanent external heat, and heavy current overload, e.g. during harmonic resonances may cause sudden, uncontrollable rise of temperature and pressure inside the can which may not leave sufficient time for the BAM™ to act properly, and result in explosion and fire.

For more detailed information, please order our long-version catalogue „Capacitors for Power Electronics“, and the „General Safety Advice for Power Capacitors“ issued by the German Electrical and Electronic Manufacturer's Association (ZVEI).

3 Year Limited Warranty

All our products are designed, manufactured, and tested with the highest care and workmanship. The satisfaction of our customers is our highest goal. We therefore warrant remedying any defect in the goods resulting from faulty design, materials or workmanship, which appears within 3 years from the date of sale.

This warranty does not cover defects due to improper use of the goods or operation at conditions exceeding the rated values stated in the catalogue or special data sheet. Nor does it cover defects due to faulty maintenance or incorrect installation, alterations or faulty repairs undertaken by the Buyer. Finally the warranty does not cover normal wear and tear or deterioration.

See our „General Conditions“ for details on Warranty and Product liability.

Find more information and detailed instructions in our „Application Notes“ and on www.electronicon.com

