CME-AS

Polypropylene Capacitors for Power Electronics

PERFORMANCE DATA

Capacitance tolerance	-5% / +5%.
Rated voltage AC	250 / 300 / 400 / 500 / 550 V
Rated voltage DC	400 / 480 / 750 / 900 V
Application class	HPFLS
Safety device	Overpressure disconnector
Expected life	> 30.000 hours

The **CME-AS** capacitors are particularly suitable for use in **static circuits** and in all applications where components are required to withstand high current and peak current values as well as **high voltage peaks**.

TECHNICAL DATA

Dielectric	Self-healing metallised polypropylene (MKP).
Case	Aluminum.
Execution	Resin. Dry type.
Fixing and installation	Threaded bolt for ground fixing. Installation in any position.
Degree of protection	IP 00.
Test voltage	2,15 Un / 3 seconds between terminal and terminal. 2500 Vac / 3 seconds between terminal and ground.
Terminal tightening torque	M6 – 5 Nm M10 – 10 Nm
Bolts tightening torque	M8 – 8 Nm M12 – 12 Nm
Failure rate	3%
Capacity variation during life	-5% after 30.000 hours at Urms
Thermal category	25/85/21.
Temperature range	-25...+85°C.

QUALITY AND APPROVALS

Reference standards	IEC 1071, VDE 560-12

CONFIGURATION

Table

250 Vac - 400 Vdc - 550 Upkr

Type	Capacitance µF	I_r A	Irms A	Ipkr A(r)	dV/dt V/ms(r)	D	H mm	Bolt	Screw	Faston
CME 10-250	10	0,79	5	700	70	45	66	M8	M6	FD 6.3
CME 15-250	15	1,18	5	705	47	45	78	M8	M6	FD 6.3
CME 20-250	20	1,57	6	820	41	45	78	M8	M6	FD 6.3
CME 22-250	22	1,73	7	770	35	45	78	M8	M6	FD 6.3
CME 25-250	25	1,96	8	875	35	45	78	M8	M6	FD 6.3
CME 30-250	30	2,36	9	750	25	50	103	M8	M6	FD 6.3
CME 33-250	33	2,59	10	825	25	50	103	M8	M6	FD 6.3
CME 40-250	40	3,14	11	1.000	25	50	103	M8	M6	FD 6.3
CME 50-250	50	3,93	12	1.100	22	50	103	M8	M6	FD 6.3
CME 60-250	60	4,71	13	1.320	22	60	135	M12	M6	-
CME 66-250	66	5,18	14	1.450	22	55	103	M12	M6	-
CME 70-250	70	5,50	15	1.540	22	60	103	M12	M6	-
CME 80-250	80	6,28	17	2.000	25	60	135	M12	M6	-
CME 90-250	90	7,07	20	2.250	25	60	135	M12	M6	-
CME 100-250	100	7,85	20	2.500	25	60	135	M12	M6	-
CME 133-250	133	10,45	25	3.325	25	70	135	M12	M6	-
CME 150-250	150	11,78	30	3.750	25	70	135	M12	M6	-
CME 166-250	166	13,04	35	4.150	25	75	135	M12	M6	-
CME 200-250	200	15,71	35	4.400	22	75	165	M12	M10	-
CME 250-250	250	19,63	40	4.000	16	75	185	M12	M10	-
CME 300-250	300	23,56	60	3.000	10	85	255	M12	M10	-
CME 330-250	330	25,91	60	3.000	10	85	255	M12	M10	-
CME 400-250	400	31,41	60	3.000	10	85	285	M12	M10	-

300 Vac - 480 Vdc - 660 Upkr

Type	Capacitance µF	I_r A	Irms A	Ipkr A(r)	dV/dt V/ms(r)	D	H mm	Bolt	Screw	Faston
CME 10-300	10	0,94	5	650	65	45	78	M8	M6	FD 6.3
CME 15-300	15	1,41	5	675	45	45	78	M8	M6	FD 6.3
CME 20-300	20	1,88	6	800	40	45	103	M8	M6	FD 6.3
CME 22-300	22	2,07	7	880	40	45	103	M8	M6	FD 6.3
CME 25-300	25	2,36	8	1.000	40	45	103	M8	M6	FD 6.3
CME 30-300	30	2,83	10	1.050	35	45	103	M8	M6	FD 6.3
CME 33-300	33	3,11	12	1.155	35	50	103	M8	M6	FD 6.3
CME 40-300	40	3,77	12	1.400	35	50	103	M12	M6	FD 6.3
CME 50-300	50	4,71	15	1.750	35	55	135	M12	M6	-
CME 60-300	60	5,65	15	1.800	30	55	135	M12	M6	-
CME 66-300	66	6,22	17	1.980	30	55	135	M12	M6	-
CME 70-300	70	6,60	20	1.960	28	60	135	M12	M6	-
CME 80-300	80	7,54	20	2.240	28	60	135	M12	M6	-
CME 90-300	90	8,48	22	2.250	25	65	135	M12	M6	-
CME 100-300	100	9,42	22	2.500	25	70	135	M12	M6	-
CME 133-300	133	12,53	25	3.325	25	85	135	M12	M6	-
CME 150-300	150	14,14	30	2.700	18	70	200	M12	M6	-
CME 166-300	166	15,64	35	2.988	18	70	185	M12	M6	-
CME 200-300	200	18,85	35	3.200	16	75	200	M12	M10	-
CME 250-300	250	23,56	40	4.000	16	85	200	M12	M10	-
CME 300-300	300	28,27	45	4.500	15	85	300	M12	M10	-

CME-AS

Polypropylene Capacitors for Power Electronics

440 Vac - 750 Vdc - 950 Upkr

Type	Cn µF	I_r A	Irms A	Ipkr A(r)	dV/dt V/ms(r)	D	H mm	Bolt	Screw	Faston
CME 5-440	5	0,69	5	350	70	45	66	M8	M6	FD 6.3
CME 6.6-440	6,6	0,91	6	396	60	45	78	M8	M6	FD 6.3
CME 7.5-440	7,5	1,04	7	450	60	45	78	M8	M6	FD 6.3
CME 10-440	10	1,38	8	370	37	45	105	M8	M6	FD 6.3
CME 15-440	15	2,07	10	555	37	50	105	M8	M6	FD 6.3
CME 20-440	20	2,76	12	720	37	55	105	M12	M6	FD 6.3
CME 22-440	22	3,04	15	880	40	55	105	M12	M6	-
CME 25-440	25	3,46	18	1.000	40	60	105	M12	M6	-
CME 30-440	30	4,15	20	1.200	40	65	135	M12	M6	-
CME 33-440	33	4,56	20	1.320	40	60	135	M12	M6	-
CME 40-440	40	5,53	22	1.600	40	65	103	M12	M6	-
CME 50-440	50	6,91	22	2.000	40	70	135	M12	M6	-
CME 60-440	60	8,29	25	2.100	35	75	135	M12	M6	-
CME 66-440	66	9,12	25	2.310	35	85	135	M12	M6	-
CME 75-440	75	10,37	30	1.875	25	70	185	M12	M6	-
CME 80-440	80	11,06	30	2.000	25	70	185	M12	M6	-
CME 90-440	90	12,44	30	2.250	25	75	185	M12	M6	-
CME 100-440	100	13,82	30	2.500	25	85	185	M12	M6	-
CME 133-440	133	18,38	35	2.527	19	85	235	M12	M10	-
CME 150-440	150	20,73	35	2.850	19	85	235	M12	M10	-
CME 166-440	166	22,95	35	3.154	19	85	235	M12	M10	-

500 Vac - 900 Vdc - 1100 Upkr

Type	Cn µF	I_r A	Irms A	Ipkr A(r)	dV/dt V/ms(r)	D	H mm	Bolt	Screw	Faston
CME 3.3-500	3,3	0,52	5	313	95	45	66	M8	M6	FD 6.3
CME 4-500	4	0,63	6	380	95	45	66	M8	M6	FD 6.3
CME 5-500	5	0,79	7	350	70	45	78	M8	M6	FD 6.3
CME 6.6-500	6,6	1,04	8	462	70	45	78	M8	M6	FD 6.3
CME 7.5-500	7,5	1,18	9	525	70	45	105	M8	M6	FD 6.3
CME 10-500	10	1,57	10	450	45	45	105	M8	M6	FD 6.3
CME 15-500	15	2,36	12	675	45	55	105	M8	M6	FD 6.3
CME 20-500	20	3,14	15	900	45	65	105	M12	M6	-
CME 22-500	22	3,46	17	990	45	65	105	M12	M6	-
CME 25-500	25	3,93	20	1.125	45	60	135	M12	M6	-
CME 30-500	30	4,71	22	1.350	45	65	135	M12	M6	-
CME 33-500	33	5,18	22	1.485	45	65	135	M12	M6	-
CME 35-500	35	5,50	25	1.575	45	70	135	M12	M6	-
CME 40-500	40	6,28	25	1.600	40	75	135	M12	M6	-
CME 50-500	50	7,85	25	2.000	40	85	135	M12	M6	-
CME 60-500	60	9,42	30	1.800	30	75	185	M12	M6	-
CME 66-500	66	10,37	30	1.960	30	85	185	M12	M6	-
CME 75-500	75	11,78	30	2.250	30	85	185	M12	M10	-
CME 80-500	80	12,57	35	2.400	30	85	185	M12	M10	-
CME 100-500	100	15,71	35	2.500	25	75	235	M12	M10	-
CME 133-500	133	20,89	35	3.325	25	85	235	M12	M10	-
CME 150-500	150	23,56	35	3.750	25	85	290	M12	M10	-

CME-NO AS

Polypropylene Capacitors for Power Electronics

PERFORMANCE DATA

Capacitance tolerance	-5% / +5%.
Rated voltage AC	250 / 300 / 400 / 500 / 550 V
Rated voltage DC	400 / 480 / 750 / 900 V
Application class	HPFLS
Safety device	Absent
Expected life	> 30.000 hours

The **CME-AS** capacitors are particularly suitable for use in **static circuits** and in all applications where components are required to withstand high current and peak current values as well as **high voltage peaks**.

TECHNICAL DATA

Dielectric	Self-healing metallised polypropylene (MKP).
Case	Aluminum.
Execution	Resina. Dry type.
Fixing and installation	Threaded bolt for ground fixing. Installation in any position.
Degree of protection	IP 00.
Test voltage	2,15 Un / 3 seconds between terminal and terminal. 2500 Vac / 3 seconds between terminal and ground.
Terminal tightening torque	M6 – 5 Nm M10 – 10 Nm
Bolts tightening torque	M8 – 8 Nm M12 – 12 Nm
Failure rate	3%
Capacity variation during life	-5% after 30.000 hours at Urms
Thermal category	25/85/21.
Temperature range	-25...+85°C.

QUALITY AND APPROVALS

Reference standards	IEC 1071, VDE 560-12

CONFIGURATION

Table

250 Vac - 400 Vdc - 550 Upkr

Type	Cn µF	I_r A	Irms A	Ipkr A(r)	dV/dt V/ms(r)	D	H mm	Bolt	Screw
CME NO-AS 50-250	**50**	0,98	15	20	1000	60	103	M12	M6
CME NO-AS 70-250	**70**	1,37	20	20	1400	60	135	M12	M6
CME NO-AS 90-250	**90**	1,77	20	20	1800	65	135	M12	M6
CME NO-AS 100-250	**100**	1,96	20	15	1500	70	135	M12	M6
CME NO-AS 150-250	**150**	2,94	20	10	1500	75	185	M12	M10
CME NO-AS 180-250	**180**	3,53	30	10	1800	85	185	M12	M10
CME NO-AS 200-250	**200**	3,92	30	10	2000	85	185	M12	M10
CME NO-AS 300-250	**300**	5,89	20	10	3000	85	135	M12	M10
CME NO-AS 300-250	**300**	5,89	30	10	3000	75	285	M12	M10
CME NO-AS 400-250	**400**	7,85	40	10	4000	85	265	M12	M10

300 Vac - 480 Vdc - 660 Upkr

Type	Cn µF	I_r A	Irms A	Ipkr A(r)	dV/dt V/ms(r)	D	H mm	Bolt	Screw
CME NO-AS 50-300	**50**	1,41	15	20	1000	60	103	M12	M6
CME NO-AS 70-300	**70**	1,98	20	20	1400	60	135	M12	M6
CME NO-AS 90-300	**90**	2,54	20	20	1800	65	135	M12	M6
CME NO-AS 100-300	**100**	2,82	20	15	1500	70	135	M12	M6
CME NO-AS 100-300	**100**	2,82	25	15	1500	60	185	M12	M6
CME NO-AS 150-300	**150**	4,24	20	10	1500	75	185	M12	M10
CME NO-AS 180-300	**180**	5,09	30	10	1800	85	185	M12	M10
CME NO-AS 200-300	**200**	5,65	30	10	2000	85	185	M12	M10
CME NO-AS 200-300	**200**	5,65	30	10	2000	75	200	M12	M6
CME NO-AS 300-300	**300**	8,48	20	10	3000	85	135	M12	M10
CME NO-AS 300-300	**300**	8,48	30	10	3000	75	285	M12	M10
CME NO-AS 400-300	**330**	9,33	30	10	3000	85	265	M12	M10

500 Vac - 800 Vdc - 1000 Upkr

Type	Cn µF	I_r A	Irms A	Ipkr A(r)	dV/dt V/ms(r)	D	H mm	Bolt	Screw
CME NO-AS 33,3-500	**33,3**	2,61	15	15	500	60	155	M12	M6
CME NO-AS 50-500	**50**	3,93	15	15	750	60	155	M12	M6
CME NO-AS 66,6-500	**66,6**	5,23	20	15	1000	70	155	M12	M6
CME NO-AS 100-500	**100**	7,85	20	10	1000	70	235	M12	M10
CME NO-AS 133-500	**133**	10,44	20	10	1330	85	235	M12	M10
CME NO-AS 150-500	**150**	11,78	25	10	1500	75	285	M12	M10

550 Vac - 850 Vdc - 1200 Upkr

Type	Cn µF	I_r A	Irms A	Ipkr A(r)	dV/dt V/ms(r)	D	H mm	Bolt	Screw
CME NO-AS 33,3-550	**33,3**	3,16	15	10	333	60	185	M12	M6
CME NO-AS 50-550	**50**	4,75	15	10	500	65	185	M12	M6
CME NO-AS 66,6-550	**66,6**	6,33	20	10	633	75	185	M12	M6
CME NO-AS 100-550	**100**	9,50	20	10	1000	75	265	M12	M10
CME NO-AS 133-550	**133**	12,6	20	10	1330	85	235	M12	M10
CME NO-AS 150-550	**150**	14,25	25	10	1500	85	265	M12	M10

Other solutions are available on request.

ELP

Electrolytic Capacitors for Power Electronics

The electrolytic capacitors of the **ELP** series are of high quality and comply with the most important international standards.
They offer great reliability, low electrical losses and small dimensions suitable for any professional application.

PERFORMANCE DATA

- **Duration and Storage**

  Electrolytic capacitors can be stored without being powered for a period of :
  - 6 years, if their nominal voltage value (Vn) <100 V
  - 3 years, if their nominal voltage value (Vn) > 100V, with temperatures up to 50 ° C.

  When the capacitors are stored for long periods the leakage current will initially be very high. Storage does not significantly affect expected life.

TECHNICAL DATA

Maximum Peak Current (as dimensions change)

D(mm)	L(mm)	Ipk(A)
35	52	200
35	79	300
35	105	400
51	79	300
51	105	400
63	105	800
76	105	1200
76	146	1800

Effective Maximum Current (as dimensions change)

D(mm)	L(mm)	Irms Max(A)
35	52	22
35	79	22
35	105	22
51	79	25
51	105	25
63	105	50
76	105	50
76	146	50

QUALITY AND APPROVALS

Reference standards IEC 384 part 4 (1977) Long Life Grade .- IEC 382 part1 (1972) – CECC 30300 (1977) Long Life Grade
DIN 41240 (1975) – DIN 45919 part 12 (1977) Long Life Grade

CONFIGURATION

Table

Type	Vn/Vp (V)d.c.	Cn µF	Ø x H (mm)	Tgδ Max 100Hz 20°C	ESR 100Hz 20°C		Z Typ. 10kHz 20°C	If 5min. 20°C	Irms (ripple) 100Hz 85°C
					Typ.(mΩ)	Max (mΩ)	(mΩ)	(mA)	(A)
ELP 63/73 3300	63/73	3300	35x52	0.15	39	72	30	0.5	4.9
ELP 63/73 4700		4700	35x60	0.15	29	61	25	0.5	6.2
ELP 63/73 6800		6800	35x79	0.18	21	47	20	0.6	8.2
ELP 63/73 10000		10000	51x79	0.20	18	35	16	1.5	10.3
ELP 63/73 15000		15000	51x70	0.25	15	32	13	2.7	12.4
ELP 63/73 22000		22000	51x105	0.30	13	32	11	4.2	14.6
ELP 63/73 33000		33000	63x105	0.35	11	28	10	5.0	17.9
ELP 63/73 47000		47000	76x105	0.45	11	21	10	6.5	21.5
ELP 75/86 6800	75/86	6800	35x79	0.2	20	47	20	0.6	8.5
ELP 75/86 10000		10000	51x79	0.25	18	35	16	1.5	11.0
ELP 75/86 15000		15000	51x79	0.30	15	32	13	2.7	12.7
ELP 75/86 22000		22000	51x105	0.35	12	24	11	4.4	15.2
ELP 75/86 33000		33000	76x105	0.45	11	19	10	5.5	18.5
ELP 100/115 3300	100/115	3300	35x79	0.15	38	58	33	1.2	6.8
ELP 100/115 4700		4700	51x60	0.15	30	44	26	1.8	12.7
ELP 100/115 6800		6800	51x79	0.20	21	35	20	2.2	12.9
ELP 100/11510000		10000	51x105	0.20	16	38	14	2.5	13.7
ELP 100/115 15000		15000	51x105	0.25	13	32	12	3.0	16.4
ELP 100/115 22000		22000	63x105	0.30	12	25	12	3.9	18.2
ELP 160/185 1500	160/185	1500	51x79	0.11	62	116	60	1.2	5.3
ELP 160/185 2200		2200	51x79	0.13	50	94	43	1.7	7.0
ELP 160/185 3300		3300	51x105	0.14	35	67	30	2.6	8.6
ELP 160/185 4700		4700	63x105	0.17	25	57	25	3.7	10.9
ELP 160/185 6800		6800	63x105	0.20	22	47	22	5.5	13.0
ELP 200/230 1000	200/230	1000	51x79	0.11	86	159	88	1.0	4.2
ELP 200/230 1500		1500	51x79	0.12	60	127	63	1.5	5.8
ELP 200/230 2200		2200	51x105	0.15	47	108	44	2.2	7.2
ELP 200/230 3300		3300	63x105	0.17	35	82	33	3.0	9.0
ELP 200/230 4700		4700	63x105	0.19	30	64	28	4.1	11.1
ELP 200/230 6800		6800	76x105	0.23	25	58	20	5.5	13.9
ELP 250/290 680	250/290	680	35x79	0.13	157	304	150	1.0	3.5
ELP 250/290 1000		1000	51x79	0.13	110	207	95	1.3	4.6
ELP 250/290 1500		1500	51x105	0.13	56	138	48	1.9	6.1
ELP 250/290 2200		2200	51x105	0.13	40	95	36	2.7	7.5
ELP 250/290 3300		3300	63x105	0.16	35	77	29	3.6	9.8
ELP 250/290 4700		4700	76x105	0.18	28	60	25	4.8	11.8
ELP 250/290 6800		6800	76x143	0.25	25	50	21	6.5	14.3
ELP 350/385 330	350/385	330	35x79	0.12	294	579	178	0.6	2.5
ELP 350/385 470		470	35x79	0.12	152	406	136	0.8	3.3
ELP 350/385 680		680	51x79	0.12	108	281	95	1.2	4.4
ELP 350/385 1000		1000	51x105	0.12	79	191	62	1.7	5.5
ELP 350/385 1500		1500	51x105	0.12	60	127	52	3.0	7.8
ELP 350/385 2200		2200	63x105	0.12	44	101	40	4.2	9.5
ELP 350/385 3300		3300	76x105	0.18	35	88	30	5.0	10.1
ELP 350/385 4700		4700	76x143	0.18	32	68	25	8.0	12.6
ELP 350/385 10000		10000	76x146	0.11	14	18	13	15.0	20.3
ELP 400/450 220	400/450	220	35x79	0.12	455	868	375	0.4	2.1
ELP 400/450 300		330	35x79	0.12	290	579	273	0.7	2.9
ELP 400/450 470		470	51x79	0.12	160	406	149	0.9	3.8
ELP 400/450 680		680	51x105	0.12	124	281	120	1.4	4.7
ELP 400/450 1000		1000	51x105	0.12	110	191	85	2.0	6.3
ELP 400/450 1500		1500	63x105	0.12	67	127	55	3.5	8.2
ELP 400/450 2200		2200	76x105	0.15	60	108	47	5.0	9.8
ELP 400/450 3300		3300	76x143	0.18	35	86	30	5.5	10.4
ELP 400/450 4700		4700	76x143	0.20	32	70	30	8.5	13.9
ELP 450/500 150	450/500	150	35x79	0.12	600	1273	580	0.4	1.5
ELP 450/500 200		220	35x79	0.12	412	868	350	0.5	2.2
ELP 450/500 330		330	35x79	0.12	210	627	175	0.7	3.1
ELP 450/500 470		470	51x79	0.12	160	440	151	1.1	4.0
ELP 450/500 680		680	51x105	0.12	124	351	120	1.5	5.0
ELP 450/500 1000		1000	51x105	0.12	110	238	85	2.5	6.5
ELP 450/500 1500		1500	63x105	0.15	67	159	55	4.0	8.5
ELP 450/500 2200		2200	76x143	0.18	60	144	47	5.0	10.3
ELP 450/500 3300		3300	76x143	0.22	35	76	30	6.0	11.2
ELP 450/500 4700		4700	76x143	0.25	32	71	30	8.5	15.0

Other solutions are available on request.