



FTCAP & LECLANCHÉ CAPACITORS ARE NOW MERSEN

PROFESSIONAL
CAPACITOR SOLUTIONS

ENERGY CAP
FILM CAPACITORS



Reliable DC-link capacitors for demanding environments

Capacitors are exposed to high loads in many applications (e.g. railway, wind turbines, power conversion). To ensure proper lifetime, they must be robust.

FTCAP Energy Cap capacitors from Mersen are ideally suited for these applications. The FTCAP Energy Cap Series from Mersen not only withstand extreme temperatures and strong vibrations - they are also built with top-grade self-healing polypropylene dielectrics.

Designed and built to withstand temperatures ranging from -40°C to +85°C and offering capacitances from 130µF to 3070 µF, voltages from 600 Vdc to 1500Vdc and currents up to 91 A.

Thanks to their self-healing polypropylene dielectric, they can withstand internal short circuits without permanent damage or loss of performance. For additional stability, the Energy Cap capacitors come with a threaded mechanical stud at the base.

For use on bus bars, Mersen manufactures a series of Energy Caps with terminals of different heights. They facilitate the installation of the capacitors because, unlike conventional film capacitors, spacers are no longer required for compensating the differences in terminal height.



FTCAP
FISCHER & TAUSCHE
CAPACITORS

Leclanché
Capacitors

FEATURES & BENEFITS

- Very high currents up to 91 Arms, Peak Current up to 8,5 kA
- Inductance as low as 35 nH
- Life expectancy @ hot spot 70°C: 100 000 h
- Robust design, aluminium housing
- Mounting bolt for optimal stability
- Self-healing polypropylene dielectric
- Built to IEC norms
- RoHs / REACH compliant
- UL approval pending
- Customized solutions on request

OPERATING RANGE

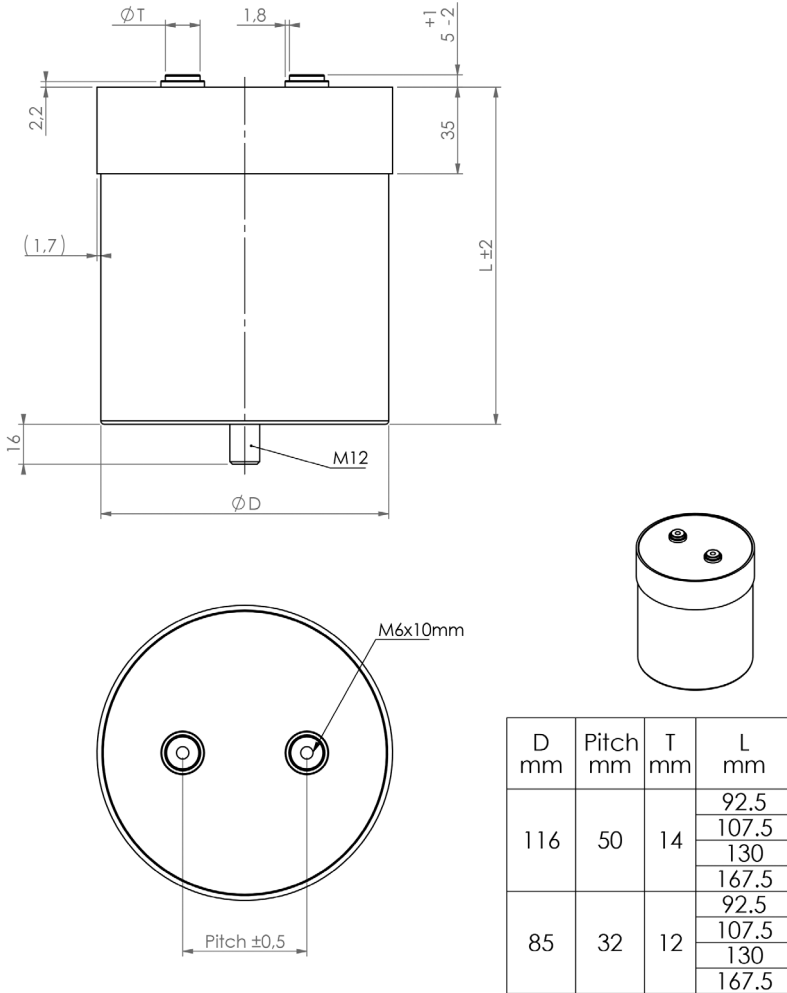
- 130 µF ... 3070 µF , ± 10 %
- 600 Vdc ... 1500 Vdc
- - 40°C ... + 85°C
- M6 female terminals (standard) Screw-in depth: 10 mm
- Max torque: 6 Nm @ screw-in depth of min. 9 mm
- upon request terminals with different heights for convenient busbar mounting
- M12 mounting bolt at bottom side Max Torque: 10 Nm

APPLICATIONS

- Industrial applications
- Renewable energies
- High voltage power supplies
- High current applications
- Railway technology

ENERGY CAP FILM CAPACITORS

How to order / Technical drawings and standard sizes



How to order / Explanation order code:

EE	42	d	110	A	K	F6
↑ Product family	↑ Capacitance / 10 in μF	↑ DC/AC Code d = DC a = AC	↑ Voltage / 10 in volt	↑ Dimension Code in mm (diameter x height) A = 85 x 93 B = 85 x 108 C = 85 x 130 D = 85 x 168 E = 116 x 93 F = 116 x 108 G = 116 x 130 H = 116 x 168 S = customized	↑ Tolerance K = $\pm 10 \%$ J = $\pm 5 \%$ other tolerances upon request	↑ Terminals F6 female terminals are standard and will not be added to order code others upon request

Example: EE42d110AK = Energy Cap; 420 μF ; dc ; 1100 V; 85 mm x 93 mm; $\pm 10 \%$; F6 terminals

ENERGY CAP FILM CAPACITORS

Catalog numbers

ORDER CODE	Un [V]	Cn [μF]	Diam [mm]	Height [mm]	ESR (1kHz) [mOhm]	Rth [K/W]	I _{max} [A]	I _{peak} [kA]	dU/dt [V/μs]	ESL [nH]	Energy [J]	Weight [kg]
EE76d60A*	600	760	85	93	1,3	4,8	63	4,3	6,0	35	137	0,6
EE92d60B*	600	920	85	108	1,5	4,3	62	4,3	4,9	42	166	0,7
EE116d60C*	600	1160	85	130	1,7	3,8	62	4,3	3,9	52	209	0,9
EE149d60E*	600	1490	116	93	1,0	3,2	89	8,5	6,0	38	268	1,2
EE156d60D*	600	1560	85	168	2,2	3,1	60	4,3	2,9	69	281	1,1
EE181d60F*	600	1810	116	108	1,1	2,9	89	8,5	4,9	46	326	1,4
EE228d60G*	600	2280	116	130	1,2	2,5	91	8,5	3,9	57	410	1,6
EE307d60H*	600	3070	116	168	1,5	2,1	89	8,5	2,9	77	553	2,1
EE55d70A*	700	550	85	93	1,4	4,8	61	3,7	7,0	35	135	0,6
EE67d70B*	700	670	85	108	1,6	4,3	60	3,7	5,7	42	164	0,7
EE85d70C*	700	850	85	130	2,0	3,8	57	3,7	4,6	52	208	0,9
EE109d70E*	700	1090	116	93	1,0	3,2	89	7,3	7,0	38	267	1,2
EE114d70D*	700	1140	85	168	2,5	3,1	57	3,7	3,4	69	279	1,1
EE133d70F*	700	1330	116	108	1,1	2,9	89	7,3	5,7	46	326	1,4
EE167d70G*	700	1670	116	130	1,3	2,5	87	7,3	4,6	57	409	1,6
EE225d70H*	700	2250	116	168	1,6	2,1	86	7,3	3,4	77	551	2,1
EE42d80A*	800	420	85	93	1,6	4,8	57	3,2	8,0	35	134	0,6
EE51d80B*	800	510	85	108	1,8	4,3	57	3,2	6,6	42	163	0,7
EE65d80C*	800	650	85	130	2,2	3,8	55	3,2	5,2	52	208	0,9
EE84d80E*	800	840	116	93	1,1	3,2	85	6,4	8,0	38	269	1,2
EE87d80D*	800	870	85	168	2,7	3,1	55	3,2	3,9	69	278	1,1
EE101d80F*	800	1010	116	108	1,2	2,9	85	6,4	6,6	46	323	1,4
EE128d80G*	800	1280	116	130	1,4	2,5	84	6,4	5,2	57	410	1,6
EE172d80H*	800	1720	116	168	1,8	2,1	81	6,4	3,9	77	550	2,1
EE33d90A*	900	330	85	93	1,7	4,8	55	2,9	8,9	35	134	0,6
EE40d90B*	900	400	85	108	2,0	4,3	54	2,9	7,4	42	162	0,7
EE51d90C*	900	510	85	130	2,4	3,8	52	2,9	5,9	52	207	0,9
EE66d90E*	900	660	116	93	1,2	3,2	81	5,7	8,9	38	267	1,2
EE69d90D*	900	690	85	168	3,0	3,1	52	2,9	4,4	69	279	1,1
EE80d90F*	900	800	116	108	1,3	2,9	82	5,7	7,4	46	324	1,4
EE101d90G*	900	1010	116	130	1,5	2,5	81	5,7	5,9	57	409	1,6
EE136d90H*	900	1360	116	168	1,9	2,1	79	5,7	4,4	77	551	2,1
EE27d110A*	1100	270	85	93	1,9	4,8	52	2,6	9,9	35	163	0,6
EE33d110B*	1100	330	85	108	2,2	4,3	51	2,6	8,2	42	200	0,7
EE41d110C*	1100	410	85	130	2,6	3,8	50	2,6	6,5	52	248	0,9
EE53d110E*	1100	530	116	93	1,3	3,2	78	5,1	9,9	38	321	1,2
EE56d110D*	1100	560	85	168	3,3	3,1	49	2,6	4,8	69	339	1,1
EE65d110F*	1100	650	116	108	1,4	2,9	79	5,1	8,2	46	393	1,4
EE82d110G*	1100	820	116	130	1,6	2,5	78	5,1	6,5	57	496	1,6
EE110d110H*	1100	1100	116	168	2,0	2,1	77	5,1	4,8	77	666	2,1

* = Tolerance of C
 = J for ± 5 %
 = K for ±10 %

ENERGY CAP FILM CAPACITORS

Catalog numbers

ORDER CODE	Un [V]	Cn [μF]	Diam [mm]	Height [mm]	ESR (1kHz) [mOhm]	Rth [K/W]	I _{max} [A]	I _{peak} [kA]	dU/dt [V/μs]	ESL [nH]	Energy [J]	Weight [kg]
EE19d130A*	1300	190	85	93	2,2	4,8	48	2,2	11,9	35	161	0,6
EE23d130B*	1300	230	85	108	2,5	4,3	48	2,2	9,8	42	194	0,7
EE29d130C*	1300	290	85	130	3,0	3,8	47	2,2	7,8	52	245	0,9
EE37d130E*	1300	370	116	93	1,4	3,2	75	4,2	11,9	38	313	1,2
EE39d130D*	1300	390	85	168	3,8	3,1	46	2,2	5,8	69	330	1,1
EE45d130F*	1300	450	116	108	1,6	2,9	74	4,2	9,8	46	380	1,4
EE57d130G*	1300	570	116	130	1,9	2,5	72	4,2	7,8	57	482	1,6
EE76d130H*	1300	760	116	168	2,3	2,1	72	4,2	5,8	77	642	2,1
EE13d150A*	1500	130	85	93	2,5	4,8	45	1,9	13,9	35	146	0,6
EE16d150B*	1500	160	85	108	2,9	4,3	45	1,9	11,5	42	180	0,7
EE21d150C*	1500	210	85	130	3,4	3,8	44	1,9	9,1	52	236	0,9
EE27d150E*	1500	270	116	93	1,6	3,2	70	3,6	13,9	38	304	1,2
EE28d150D*	1500	280	85	168	4,4	3,1	43	1,9	6,8	69	315	1,1
EE33d150F*	1500	330	116	108	1,8	2,9	69	3,6	11,5	46	371	1,4
EE41d150G*	1500	410	116	130	2,1	2,5	68	3,6	9,1	57	461	1,6
EE56d150H*	1500	560	116	168	2,6	2,1	67	3,6	6,8	77	630	2,1

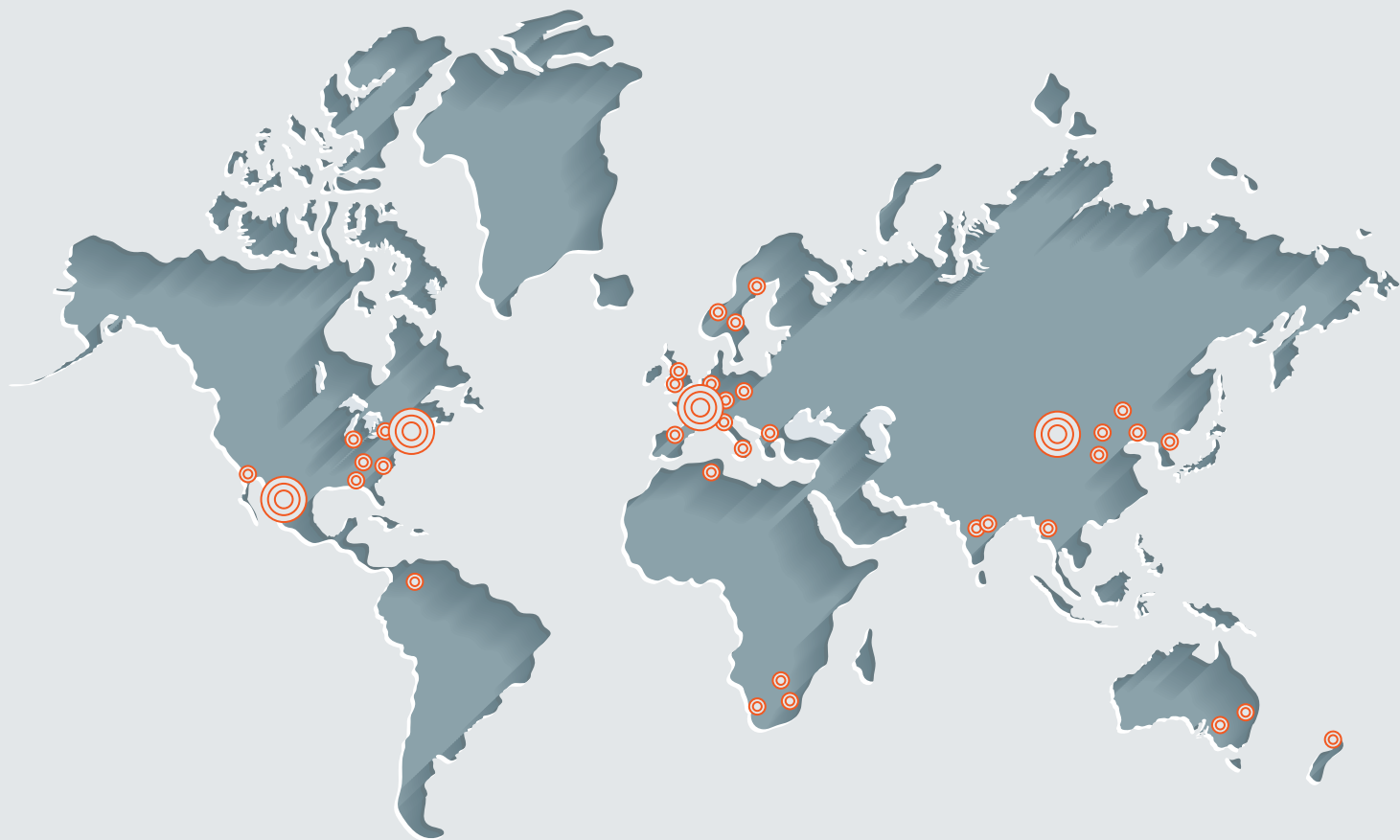
* = Tolerance of C
 = J for ± 5 %
 = K for ±10 %

About MERSEN / FTCAP

Mersen, with the acquisition of FTCAP Fischer and Tausche Capacitors, brings more than 70 years of experience in the development and production of capacitors used in diverse industries, especially those with a strong focus on power electronics applications.

The products include both film and electrolytic capacitors and FTCAP is one of the few companies to still manufacture and design all capacitors in Germany. In addition to standard capacitors in small and medium-sized quantities, the Germany-based manufacturer also offers special custom-made products for demanding applications: the company's experts work in close cooperation with the customer to deliver reliable, robust solutions to even the most complex demands.

Since 2018 FTCAP belongs to the Mersen Group. The merger of the two enterprises will result in substantial growth potentials for both parties. The explicit goal is to offer innovative modules, in which FTCAP capacitors are optimised for use with busbars and heat sinks from Mersen.



GLOBAL EXPERT
IN ELECTRICAL POWER
AND ADVANCED MATERIALS

EUROPE

+ 49 (0) 4841 89 57 0
sales.hsm@mersen.com

NORTH AMERICA

+ 1 978-465-4821
oemcs.nby@us.mersen.com

ASIA

JAPAN
sales.ep.jpn@mersen.com

CHINA
sales.epchina@mersen.com

INDIA
sales.ep.india@mersen.com

SOUTH KOREA
+82-(0)10-2438-1017
namhyuk.lee@mersen.com



EP.MERSEN.COM