

- Design optimized for low equivalent series resistance and high ripple current.
- Surge-proof capacitor in aluminium can with insulation sleeve.
- To be mounted with ring clips or with threaded stud.

APPLICATIONS

Designed for professional application.

Switch mode power suppliers, high ripple current converters, motor drives.

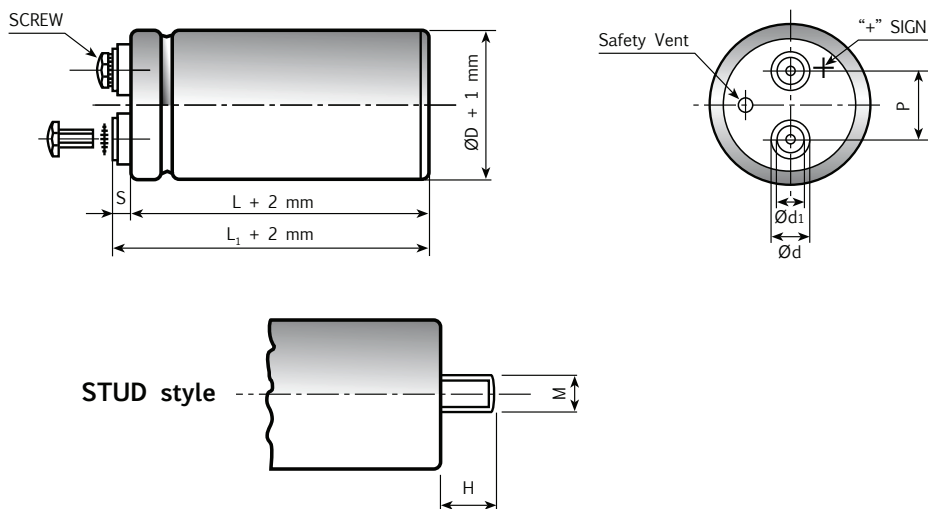


Diagram of dimensions (unit=mm)

Insert and screw threads: Metric (mm), UNF (inches)

ØD	d	d1	P	STUD M	H	INSERT	SCREW	L ₁ -L[-1+3]	S[-1+1]	INSERT STYLE CODE
35	11	7.9	12.7	M8	12	M5	5MA x 9.5	2.5	5	0
51	18.5	13	22.7	M12	16	M5	5MA x 9.5	2.5	5	H
63	18.5	13	28.6	M12	16	M5	5MA x 9.5	2.5	5	H
63	17.3	17.3	28.6	M12	16	UNF 1/4-28 Low Post	1/4-28 x 3/8"	3	4	W
63	17.3	17.3	28.6	M12	16	UNF 1/4-28 High Post	1/4-28 x 1/2"	6	7	R
63	7.9	7.9	28.6	M12	16	UNF 10-32 Low Post	10-32 x 1/4"	2	2.5	Z
63	12	7.9	28.6	M12	16	UNF 10-32 High Post	10-32 x 3/8"	6	7	U
76	18.5	13	31.8	M12	16	M5	5MA x 9.5	2.5	5	H
76	18.5	13	31.8	M12	16	M5	5MA x 9.5	2.5	7	L
76	23.2	17.7	31.8	M12	16	M6	6MA x 10	4.5	7	6
76	17.3	17.3	31.8	M12	16	UNF 1/4-28 Low Post	1/4-28 x 3/8"	3	4	W
76	17.3	17.3	31.8	M12	16	UNF 1/4-28 High Post	1/4-28 x 1/2"	6	7	R
76	7.9	7.9	31.8	M12	16	UNF 10-32 Low Post	10-32 x 1/4"	2	2.5	Z
76	12	7.9	31.8	M12	16	UNF 10-32 High Post	10-32 x 3/8"	6	7	U
90	23.2	17.7	31.8	M12	16	M6	6MA x 10	4.5	7	H

SPECIFICATIONS

Temperature Range	Operating : -40°C +85°C [Environmental classification 40/85/56 IEC-68] Storage : Preferably below +25°C, not exceeding +40°C																																																															
Rated Voltage Range (V _r)	from 400V to 450V DC																																																															
Surge Voltage (V _p)	V _p = 1.10 V _r																																																															
Rated Capacitance Range	from 470 μF to 15000 μF																																																															
Capacitance Tolerance	±20% at 100 Hz, 20°C [M class IEC-62] on request : -10% +30% at 100 Hz, 20°C [Q class IEC-62]																																																															
Leakage Current (I _L) (mA, 5 min, 20°C)	max I _L = 0.006 C _r V _r + 4 μA																																																															
Ripple current (I _r)	Refer to table at 85°C and 100Hz : <table><tr><td>FREQUENCY</td><td>50Hz</td><td>100Hz</td><td>500Hz</td><td>1000Hz</td><td>>10kHz</td><td colspan="2"></td></tr><tr><td>MULTIPLIER</td><td>0.8</td><td>1.0</td><td>1.2</td><td>1.3</td><td>1.5</td><td colspan="2"></td></tr><tr><td colspan="8"> </td></tr><tr><td>AMBIENT TEMP</td><td>35°C</td><td>45°C</td><td>55°C</td><td>65°C</td><td>75°C</td><td>85°C</td><td>95°C</td></tr><tr><td>MULTIPLIER</td><td>2.2</td><td>2.1</td><td>1.8</td><td>1.6</td><td>1.4</td><td>1.0</td><td>0.5</td></tr></table> Due to the current load capability of the contact elements, the following limits must not be exceeded: <table><tr><td>CAPACITOR DIAMETER</td><td>51mm</td><td>63mm</td><td>76mm</td><td>90mm</td><td colspan="3"></td></tr><tr><td>Maximum current</td><td>30A</td><td>40A</td><td>50A</td><td>70A</td><td colspan="3"></td></tr></table>								FREQUENCY	50Hz	100Hz	500Hz	1000Hz	>10kHz			MULTIPLIER	0.8	1.0	1.2	1.3	1.5											AMBIENT TEMP	35°C	45°C	55°C	65°C	75°C	85°C	95°C	MULTIPLIER	2.2	2.1	1.8	1.6	1.4	1.0	0.5	CAPACITOR DIAMETER	51mm	63mm	76mm	90mm				Maximum current	30A	40A	50A	70A			
FREQUENCY	50Hz	100Hz	500Hz	1000Hz	>10kHz																																																											
MULTIPLIER	0.8	1.0	1.2	1.3	1.5																																																											
AMBIENT TEMP	35°C	45°C	55°C	65°C	75°C	85°C	95°C																																																									
MULTIPLIER	2.2	2.1	1.8	1.6	1.4	1.0	0.5																																																									
CAPACITOR DIAMETER	51mm	63mm	76mm	90mm																																																												
Maximum current	30A	40A	50A	70A																																																												
Insulation Resistance	At 100V DC for 1 min is >100 MΩ across insulating sleeve and terminals.																																																															
Vibration Resistance	Frequency range : 10 Hz to 55 Hz, amplitude 0.75 mm Capacitor length ≤ 143 : max acceleration 10g for 3x2 h Capacitor length > 143 : max acceleration 5g for 3x0.5 h																																																															
Life test	After 2,000 hours application of rated voltage at 85°C capacitors meet characteristics aside				Cap change tan δ Leakage current (I _L) Impedance (Z)		≤ 10% ≤ 130% < initial limit ≤ 130%																																																									
Shelf life	After leaving capacitors under no load for 2000 hours at 85°C, when restored at 20°C meet specifications aside				Cap change tan δ Leakage current (I _L)		≤ ±15% ≤ 150% < initial limit																																																									
Useful life (85°C, V _n , I _r applied)	> 15.000 h at 85°C																																																															
Operation up to 105°C with voltage derating 0,88 x V rated																																																																
Failure percentage Failure rate	≤ 1% (during useful life) ≤ 33 fit (33 10 ⁻⁹ /h)																																																															
Self inductance	Approx. 20 nH																																																															
Reference standards	CECC 30.300 IEC 60384-4 LONG LIFE GRADE																																																															

K91 TYPE STANDARD RATINGS

Cap μ F	$\varnothing \times L$ mm	Tan δ MAX 100 Hz 20°C	ESR TYP $m\Omega$ 100 Hz 20°C	Z TYP $m\Omega$ 10kHz 20°C	Ir a.c. A max 100 Hz 85°C	PART NUMBER stud and insert style excluded
680	51x79	0.08	97	75	5.11	K91400681__M0G079
680	51x105	0.08	97	75	5.74	K91400681__M0G105
1000	51x79	0.08	75	67	6.06	K91400102__M0G079
1000	51x105	0.08	75	67	6.87	K91400102__M0G105
1500	51x105	0.08	53	40	8.18	K91400152__M0G105
1500	63x105	0.08	53	40	9.29	K91400152__M0H105
2200	51x105	0.08	40	31	9.40	K91400222__M0G105
2200	63x105	0.08	40	31	10.70	K91400222__M0H105
2200	76x105	0.08	40	31	12.30	K91400222__M0J105
3300	63x105	0.08	25	16	13.60	K91400332__M0H105
3300	76x105	0.08	25	16	14.50	K91400332__M0J105
3300	76x143	0.08	25	16	16.80	K91400332__M0J143
4700	76x105	0.08	20	15	16.40	K91400472__M0J105
4700	76x143	0.08	20	15	19.50	K91400472__M0J143
5600	76x143	0.08	17	11	20.90	K91400562__M0J143
6800	76x143	0.08	15	10	22.20	K91400682__M0J143
10000	76x143	0.09	13	10	23.00	K91400103__M0J143
10000	76x214	0.09	13	10	28.70	K91400103__M0J214
15000	90x220	0.10	9	8	36.50	K91400153__M0L220

**RATED
VOLTAGE
VDC**

400V

Cap μ F	$\varnothing \times L$ mm	Tan δ MAX 100 Hz 20°C	ESR TYP $m\Omega$ 100 Hz 20°C	Z TYP $m\Omega$ 10kHz 20°C	Ir a.c. A max 100 Hz 85°C	PART NUMBER stud and insert style excluded
680	51x79	0.08	97	75	5.11	K91420681__M0G079
680	51x105	0.08	97	75	5.74	K91420681__M0G105
1000	51x79	0.08	75	67	6.06	K91420102__M0G079
1000	51x105	0.08	75	67	6.87	K91420102__M0G105
1500	51x105	0.08	53	40	8.18	K91420152__M0G105
1500	63x105	0.08	53	40	9.29	K91420152__M0H105
2200	51x105	0.08	40	31	9.40	K91420222__M0G105
2200	63x105	0.08	40	31	10.70	K91420222__M0H105
2200	76x105	0.08	40	31	12.30	K91420222__M0J105
3300	63x105	0.08	25	16	13.60	K91420332__M0H105
3300	76x105	0.08	25	16	14.50	K91420332__M0J105
3300	76x143	0.08	25	16	16.80	K91420332__M0J143
4700	76x105	0.08	20	15	16.40	K91420472__M0J105
4700	76x143	0.08	20	15	19.50	K91420472__M0J143
5600	76x143	0.08	17	11	20.90	K91420562__M0J143
6800	76x143	0.08	15	10	22.20	K91420682__M0J143
10000	76x143	0.09	13	10	23.00	K91420103__M0J143
10000	76x214	0.09	13	10	28.70	K91420103__M0J214
15000	90x220	0.10	9	8	36.50	K91420153__M0L220

**RATED
VOLTAGE
VDC**

420V

K91 TYPE STANDARD RATINGS

Cap μF	Ø x L mm	Tan δ MAX 100 Hz 20°C	ESR TYP mΩ 100 Hz 20°C	Z TYP mΩ 10kHz 20°C	Ir a.c. A max 100 Hz 85°C	PART NUMBER stud and insert style excluded
470	51x79	0.08	159	120	4.36	K91450471__M0G079
680	51x79	0.08	114	105	4.94	K91450681__M0G079
680	51x105	0.08	114	105	5.57	K91450681__M0G105
1000	51x79	0.08	83	70	5.84	K91450102__M0G079
1000	51x105	0.08	83	70	6.60	K91450102__M0G105
1500	51x105	0.08	57	42	7.89	K91450152__M0G105
1500	63x105	0.08	57	42	8.97	K91450152__M0H105
2200	63x105	0.08	44	33	10.20	K91450222__M0H105
2200	76x105	0.08	44	33	11.90	K91450222__M0J105
2200	76x143	0.08	44	33	13.60	K91450222__M0J143
3300	76x105	0.08	30	18	14.00	K91450332__M0J105
3300	76x143	0.08	30	18	16.30	K91450332__M0J143
4700	76x143	0.08	21	15	18.80	K91450472__M0J143
5600	76x143	0.08	18	12	20.20	K91450562__M0J143
6800	76x143	0.08	16	11	21.30	K91450682__M0J143
8200	76x143	0.08	14	10	23.00	K91450822__M0J143
10000	76x143	0.09	13	10	23.10	K91450103__M0J143
10000	76x214	0.09	13	10	26.20	K91450103__M0J214
12000	76x214	0.09	13	10	26.20	K91450123__M0J214
15000	90x220	0.10	11	9	35.00	K91450153__M0L220

**RATED
VOLTAGE
VDC**

450V

PLEASE TO CONTACT OUR TECHNICAL SERVICE FOR MORE INFORMATION OR SPEC-IN ANALYSIS.