

- Design optimized for extremely high miniaturization.
- 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.

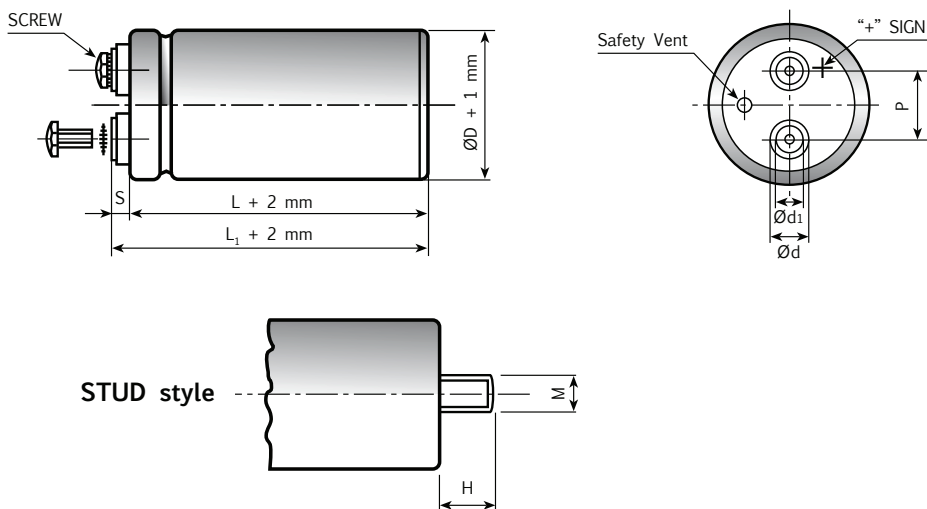


Diagram of dimensions (unit=mm)
Insert and screw threads: Metric (mm), UNF (inches)

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 350V to 450V DC																																																															
Surge Voltage (V _p)	V _p = 1.10 V _r																																																															
Rated Capacitance Range	from 2200 µF to 36000 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="7"></td><td></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			
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MULTIPLIER	0.8	1.0	1.2	1.3	1.5																																																											
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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																																																															

K71 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
3300	51x79	0.09	25	20	9.00	K71350332__M0G079
3500	51x79	0.09	24	17	9.05	K71350352__M0G079
4700	51x105	0.09	17	13	11.60	K71350472__M0G105
6800	63x105	0.09	15	11	17.60	K71350682__M0H105
7600	63x105	0.09	14	10	18.00	K71350762__M0H105
10000	76x105	0.10	12	11	22.20	K71350103__M0J105
11000	76x105	0.10	12	11	22.30	K71350113__M0J105
16000	90x105	0.11	10	8	26.10	K71350163__M0L105
17000	76x143	0.11	9	8	30.80	K71350173__M0J143
24000	76x214	0.11	7	5	44.00	K71350243__M0J214
24000	90x145	0.11	7	5	35.90	K71350243__M0L145
36000	90x220	0.13	5	4	51.30	K71350363__M0L220

**RATED
VOLTAGE
VDC**

350V

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
2200	51x79	0.09	42	33	8.21	K71400222__M0G079
2900	51x79	0.09	38	30	8.64	K71400292__M0G079
3300	51x105	0.09	29	22	10.80	K71400332__M0G105
3900	51x105	0.09	28	19	11.10	K71400392__M0G105
4700	63x79	0.09	21	17	9.97	K71400472__M0H079
5600	63x105	0.09	19	15	16.60	K71400562__M0H105
6200	63x105	0.09	18	14	17.10	K71400622__M0H105
6800	76x105	0.09	17	13	18.60	K71400682__M0J105
8200	76x105	0.09	16	12	19.00	K71400822__M0J105
9200	76x105	0.09	14	11	21.20	K71400922__M0J105
13000	76x143	0.10	9	8	29.30	K71400133__M0J143
13000	90x105	0.10	10	9	25.20	K71400133__M0L105
20000	76x214	0.11	8	7	41.90	K71400203__M0J214
20000	90x145	0.11	8	7	34.50	K71400203__M0L145
30000	90x220	0.13	6	5	49.50	K71400303__M0L220

**RATED
VOLTAGE
VDC**

400V

K71 TYPE STANDARD RATINGS

Cap μ F	$\varnothing$ x 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
2200	51x79	0.09	42	33	8.21	K71420222__M0G079
2500	51x79	0.09	40	22	8.42	K71420252__M0G079
3300	51x105	0.09	29	22	10.80	K71420332__M0G105
4700	63x79	0.09	21	17	9.97	K71420472__M0H079
5600	63x105	0.09	19	15	16.60	K71420562__M0H105
6800	76x105	0.09	17	13	18.60	K71420682__M0J105
8200	76x105	0.09	16	12	19.00	K71420822__M0J105
12000	76x143	0.09	9	8	28.60	K71420123__M0J143
12000	90x105	0.09	9	8	24.50	K71420123__M0L105
15000	90x145	0.09	8.5	7	32.60	K71420153__M0L145
18000	76x214	0.10	8	7	40.90	K71420183__M0J214
23000	90x220	0.13	7	6	46.80	K71420233__M0L220

**RATED
VOLTAGE
VDC**

420V

Cap μ F	$\varnothing$ x 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
2200	51x79	0.09	43	34	8.07	K71450222__M0G079
3300	51x105	0.09	32	24	10.40	K71450332__M0G105
4700	63x105	0.09	23	19	15.80	K71450472__M0H105
5600	76x105	0.09	21	18	17.60	K71450562__M0J105
6800	76x105	0.09	18	12	17.70	K71450682__M0J105
10000	90x105	0.09	14	11	22.90	K71450103__M0L105
11000	76x143	0.09	12	10	27.30	K71450113__M0J143
12000	76x214	0.09	11	9	39.10	K71450123__M0J214
15000	90x145	0.09	9	8	32.60	K71450153__M0L145
23000	90x220	0.13	7	6	46.80	K71450233__M0L220

**RATED
VOLTAGE
VDC**

450V

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