

- Surge-proof capacitor in aluminium can with insulation sleeve.
- Poles brought out to heavy duty screw terminals.
- To be mounted with ring clips or with threaded stud.
- Very high CV for unit volume with low ESR.
- High ripple current.
- Excellent electrical data in small dimensions case size.

APPLICATIONS

Designed for professional power electronics.
Switch mode power supplies, converters, filtering devices.

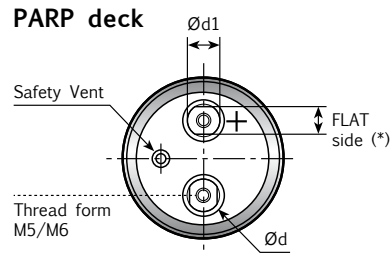
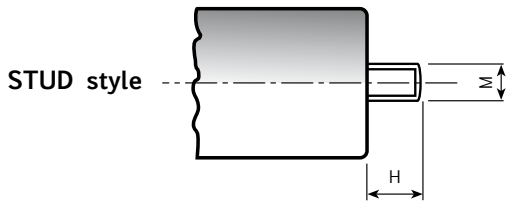
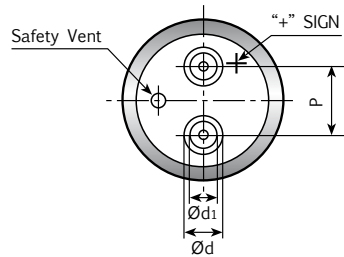
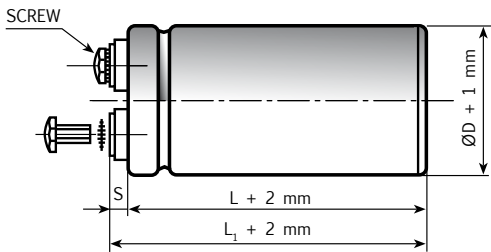


Diagram of dimensions (unit=mm)
Insert and screw threads: Metric (mm), UNF (inches)

ØD	d	d1	P	STUD		INSERT	SCREW	L1	-L[-1+3]	S[-1+1]	INSERT STYLE CODE
				M	H						
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
51	13	13 (10)*	22.7	M12	16	PARP M5	5MA x 9.5	6		7	K
63	15	15 (13)*	28.6	M12	16	PARP M5	5MA x 9.5	6		7	K
76	19	15 (13)*	31.8	M12	16	PARP M5	5MA x 9.5	6		7	K
76	19	15 (13)*	31.8	M12	16	PARP M6	6MA x 10	6		7	Q
90	19	15 (13)*	31.8	M12	16	PARP M6	6MA x 10	6		7	Q

Note: (*) quote on the PARP deck of the flat side (PARP = Protection Against Reverse Polarity).

SPECIFICATIONS

Temperature Range	Operating: -40°C +85°C Storage : Preferably below +25°C, not exceeding +40°C	[Environmental classification 40/85/56 IEC-68]
Rated Voltage Range (V_r)	from 16V to 500V DC	
Surge Voltage (V_p)	V _p = 1.05 V _r (V _r > 450V DC) V _p = 1.15 V _r (V _r ≤ 250V DC) V _p = 1.10 V _r (V _r > 250V DC)	
Rated Capacitance Range	from 220 µF to 1500000 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 At 85°C max I _L = 0.04 C _r V _r µA	Kendeil product limit: I _L = 0.003 C _r V _r
Ripple current (I_r)	Refer to table at 85°C and 100Hz. For different temperature and frequency multiplier must be used as follows:	
	FREQUENCY	50Hz 100Hz 500 Hz 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
	Maximum internal temperature	98°C
	Due to the current load capability of the contact elements, the following limits must not be exceeded:	
	CAPACITOR DIAMETER	35mm 51mm 63mm 76mm 90mm
	Maximum current	20A 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	
Withstand voltage (between terminals bundled and plate)	2500 VAC for 1 min	
Life test	After 2,000 hours application of rated voltage at 85°C capacitors meet characteristics aside	Cap change ≤ 10% tan δ ≤ 130% Leakage current (I _L) < initial limit Impedance (Z) ≤ 130%
Shelf life	After leaving capacitors under no load for 500 hours at 85°C, when restored at 20°C meet specifications aside	Cap change ≤ ±15% tan δ ≤ 150% Leakage current (I _L) < initial limit
Useful life (V _n , Temp rated I ripple applied)	> 200000 h at 40°C > 12000 h at 85°C for V _r ≤ 100V and for V _r ≥ 500V > 15000 h at 85°C for 100V < V _r < 500V	
Failure percentage Failure rate	≤ 1% (during useful life) ≤ 25 fit (25 10 ⁻⁹ /h) (V _r ≤ 160V DC) ≤ 33 fit (33 10 ⁻⁹ /h) (V _r > 160V DC)	
Self inductance	Approx. 20 nH	
Damp heat test (V _n applied, 2000 hours, 85% RH)	Stable electrical parameters in humidity ambient condition 85°C	
Electrolyte	All the capacitors of this series have self-extinguishing electrolyte in accordance with IEC EN 60695-11-10	
Reference standards	CECC 30.300 IEC 60384-4 LONG LIFE GRADE	