

# K01 TYPE

- 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 electricals data in small dimensions case size.



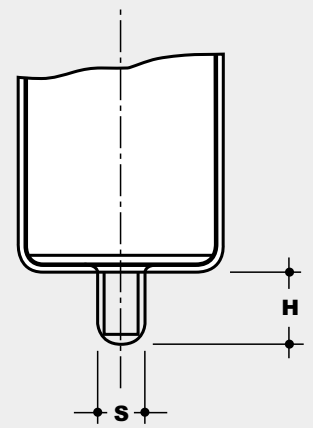
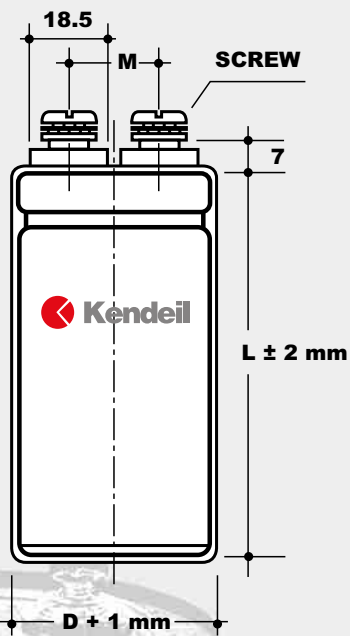
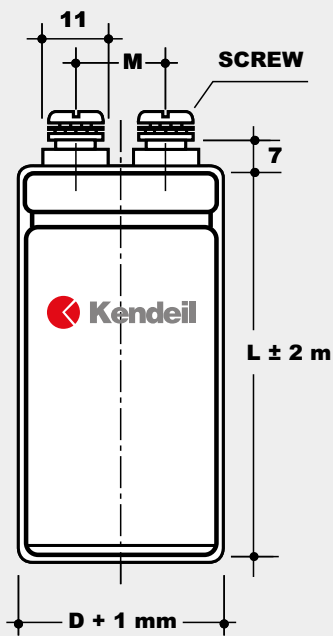
## APPLICATIONS

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

## SPECIFICATIONS

### GENERAL CHARACTERISTICS

<b>Temperature Range</b>	Operating: -40°C +85°C [Environmental classification 40/85/56 IEC-68] Storage : Preferably below +25°C, not exceeding +40°C	
<b>Rated Voltage Range (V<sub>r</sub>)</b>	from 16V to 500V DC	
<b>Surge Voltage (V<sub>p</sub>)</b>	V <sub>p</sub> = 1.15 V <sub>r</sub> (V <sub>r</sub> 250V DC) V <sub>p</sub> = 1.10 V <sub>r</sub> (V <sub>r</sub> > 250V DC)	
<b>Rated Capacitance Range</b>	from 220 µF to 1,500,000 µF	
<b>Capacitance Tolerance</b>	±20% at 100 Hz, 20°C [M class IEC-62]	on request: -10% +30% at 100 Hz, 20°C [Q class IEC-62]
<b>Leakage Current (I<sub>L</sub>) (mA, 5 min, 20°C)</b>	max I <sub>L</sub> = 0.006 C <sub>r</sub> V <sub>r</sub> + 4 µA At 85°C max I <sub>L</sub> = 0.04 C <sub>r</sub> V <sub>r</sub> µA	Kendeil product limit : I <sub>L</sub> = 0.003 C <sub>r</sub> V <sub>r</sub>
<b>Ripple current (I<sub>r</sub>)</b>	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
<b>Insulation Resistance</b>	At 100V DC for 1 min is >100 MΩ across insulating sleeve and terminals.	
<b>Vibration Resistance</b>	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	
<b>Life test</b>	After 2,000 hours application of rated voltage at 85°C capacitors meet characteristics aside	Cap change                    20% tan δ                            200% Leakage current (I <sub>L</sub> )       < initial limit Impedance (Z)                200%
<b>Shelf life</b>	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 <sub>L</sub> )       < initial limit
<b>Useful life</b>	> 200,000 h at 40°C > 10,000 h at 85°C	
<b>Failure percentage</b>	1% (during useful life)	
<b>Failure rate</b>	40 fit (40 10 <sup>-9</sup> /h (V <sub>r</sub> 160V DC) 70 fit (70 10 <sup>-9</sup> /h (V <sub>r</sub> > 160V DC)	
<b>Self inductance</b>	Approx. 20 nH	
<b>Reference standards</b>	CECC 30.300 IEC 60384-4 LONG LIFE GRADE	



#### DIMENSIONS (mm)

D	L	M	S	H	SCREW
35	51	12.7	M 8	12	TC 5MA x 9,5
35	60	12.7	M 8	12	TC 5MA x 9,5
35	79	12.7	M 8	12	TC 5MA x 9,5
35	105	12.7	M 8	12	TC 5MA x 9,5
51	60	22.2	M12	16	TC 5MA x 9,5
51	79	22.2	M12	16	TC 5MA x 9,5
51	105	22.2	M12	16	TC 5MA x 9,5
63	105	28.6	M12	16	TC 5MA x 9,5
76	105	31.8	M12	16	TC 5MA x 9,5
76	143	31.8	M12	16	TC 5MA x 9,5
76	222	31.8	M12	16	TC 5MA x 9,5
90	222	31.8	M12	16	TC 6MA x 10

