Professional Grade

PG – 6D with Screw Terminals

PG – 6D range is suitable for industrial and telecom power supplies, UPS systems, heavy duty industrial process control equipment, linear power supplies.

Specifications

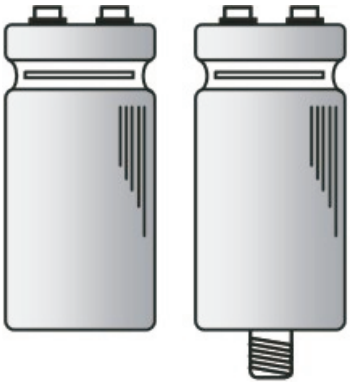
- **Voltage range** : 16VDC to 450VDC
- **Can sizes** : 35 x 62mm to 76 x 146mm
- **Operating temperature range** : –40°C to +85°C
- **Capacitance** : 220 MFD to 200000 MFD
  The value of capacitance is given in microfarads and within the following tolerances:
  10 to 100 VDC working + 50 % to – 10 %
  101 to 450 VDC working + 30 % to – 10 %
  Capacitors wirh a tolerance on the capacitance value, like – 0 % + 25 %, can be supplied on request.
- **Leakage current** : The maximum leakage current **(Ir)** is given by the formula :
  Ir = 0.006CV (microamps)
  C = capacitance in microfarads
  V = DC rated voltage
  Pre-conditioning of the capacitors, prior to testing for leakage current, is essential, (refer to page 4)
- **Ripple current** : All capacitors withstand **rms** ripple current at 100 Hz at 85°C. When capacitors operate at temperatures other than 85°C, the permissible **rms** ripple current, should be multiplied by the factors given below:

+35°C	+40°C	+45°C	+50°C	+65°C
2.20	2.10	2.00	1.90	1.60

Where capacitors are required to operate at frequencies other than 100Hz, the multiplying factors given below may be used to determine the ripple current capacity of the capacitor, at that particular frequency.

Frequency Hz	100	250	500	1K to 10 K	>10K
Multiplying Factor	1.0	1.05	1.20	1.32	1.35

- Can is negative. However it is isolated with a PVC insulating sleeve and polypropylene end-disc.



Custom - designed capacitors are available

Terminal styles

Capacitors are available in screw terminals in two can styles

AEST - Screw terminals with plain insulated base
AEST-D - Screw terminals with stud mounting

Note : For details of dimensions see page 25

Marking on capacitors

Each capacitor will have the following information printed on it sequentially :

1. The Company's symbol followed by the words ALCON ELECTROLYTIC
2. The capacitor grade viz. PG-6D
3. The capacitance value MFD
4. The rated voltage VDC
5. Capacity tolerance and manufacturing code
6. Part number on non-standard capacitors

ALCON ELECTRONICS PRIVATE LIMITED
Registered by UL to ISO 9001

Registered Office & Factory:
34-B MIDC Industrial Estate, Satpur, Nashik 422007, India.
Phone: +91 253 - 235 0533, 235 0237, Fax: +91 253 - 235 1682
email: mail@alconelectronics.com Website: www.alconelectronics.com

Professional Grade

PG – 6D with Screw Terminals

Standard Capacitor Values

Rated Voltage (VDC)	Surge Voltage (VDC)	Capacitance Nominal (MFD)	ESR at 100 Hz, 25°C (Ohms)	Impedance at 100 Hz, 25°C (Ohms)	Ripple at 100 Hz, 85°C (Amps)	Can Size Nominal D X L mm
16	20	10000	0.081	0.159	3.90	35x62
		15000	0.047	0.106	4.37	35x62
		20000	0.038	0.080	6.00	35x80
		22000	0.034	0.072	5.07	35x62
		33000	0.033	0.048	5.85	35x80
		33000	0.033	0.048	8.40	50x80
		47000	0.028	0.034	6.94	50x80
		100000	0.012	0.016	13.66	50x105
		150000	0.012	0.011	17.76	63x105
		200000	0.012	0.008	19.60	76x105
25	30	4700	0.108	0.338	3.30	35x62
		6800	0.081	0.234	3.80	35x62
		10000	0.063	0.159	4.30	35x62
		15000	0.048	0.106	5.18	35x62
		20000	0.029	0.072	6.02	35x80
		22000	0.029	0.072	5.45	35x80
		22000	0.029	0.072	6.28	35x105
		33000	0.028	0.048	9.00	50x80
		47000	0.027	0.034	9.32	50x80
		47000	0.027	0.034	11.50	50x105
		100000	0.014	0.016	19.20	63x105
		150000	0.013	0.011	19.70	76x105
		200,000	0.012	0.008	19.70	76x120
40	50	2500	0.127	0.636	2.60	35x62
		4700	0.067	0.338	3.60	35x62
		6800	0.058	0.234	4.04	35x62
		10000	0.047	0.159	5.12	35x62
		15000	0.032	0.106	6.84	35x80
		22000	0.022	0.072	9.38	35x105
		22000	0.022	0.072	11.70	50x105
		27000	0.022	0.059	10.55	50x80
		33000	0.019	0.048	10.86	50x80
		47000	0.019	0.034	14.20	63x105
		68000	0.018	0.023	15.70	76x105
		80000	0.017	0.019	16.00	76x105
		100000	0.016	0.016	17.10	76x105

Other capacitor values and sizes available on request

ALCON ELECTRONICS PRIVATE LIMITED
Registered by UL to ISO 9001

Registered Office & Factory:
34-B MIDC Industrial Estate, Satpur, Nashik 422007, India.
Phone: +91 253 - 235 0533, 235 0237, Fax: +91 253 - 235 1682
email: mail@alconelectronics.com Website: www.alconelectronics.com

Professional Grade

PG – 6D with Screw Terminals

Standard Capacitor Values

Rated Voltage (VDC)	Surge Voltage (VDC)	Capacitance Nominal (MFD)	ESR at 100 Hz, 25°C (Ohms)	Impedance at 100 Hz, 25°C (Ohms)	Ripple at 100 Hz, 85°C (Amps)	Can Size Nominal D X L mm
50	60	2000	0.159	0.795	2.34	35x62
		2500	0.134	0.640	2.95	35x62
		4700	0.067	0.338	3.61	35x62
		6800	0.059	0.234	3.87	35x62
		10000	0.044	0.159	4.70	35x62
		10000	0.044	0.159	5.11	35x80
		10000	0.044	0.159	8.35	50x80
		15000	0.029	0.106	9.66	50x80
		20000	0.024	0.080	8.65	50x80
		22000	0.022	0.072	9.04	50x80
		25000	0.019	0.064	9.72	50x105
		33000	0.016	0.048	13.58	50x105
		47000	0.014	0.034	16.44	63x105
		68000	0.014	0.024	16.84	76x105
63	75	4700	0.067	0.338	4.32	35x62
		5000	0.065	0.318	4.39	35x62
		6800	0.047	0.234	5.20	35x62
		10000	0.038	0.159	6.18	35x80
		10000	0.038	0.159	7.08	35x105
		10000	0.038	0.159	8.80	50x105
		15000	0.034	0.106	9.40	50x105
		22000	0.032	0.072	9.60	50x105
		33000	0.028	0.048	11.50	63x105
		47000	0.023	0.034	14.20	76x105
		68000	0.022	0.024	16.74	76x146
		100000	0.020	0.016	17.55	76x146
75	90	2200	0.144	0.720	2.50	35x62
		3300	0.096	0.482	3.17	35x62
		4700	0.067	0.338	4.10	35x80
		5000	0.065	0.318	4.18	35x80
		6800	0.065	0.234	7.10	50x80
		10000	0.038	0.159	7.74	50x80
		10000	0.038	0.159	8.80	50x105
		15000	0.034	0.106	9.40	50x105
		22000	0.030	0.072	11.23	63x105
		22000	0.030	0.072	12.40	76x105
		33000	0.028	0.048	12.85	76x105
		47000	0.022	0.034	16.74	76x146
		68000	0.021	0.024	17.13	76x146
		100000	0.019	0.016	18.01	76x146

Other capacitor values and sizes available on request

ALCON ELECTRONICS PRIVATE LIMITED
Registered by UL to ISO 9001

Registered Office & Factory:
34-B MIDC Industrial Estate, Satpur, Nashik 422007, India.
Phone: +91 253 - 235 0533, 235 0237, Fax: +91 253 - 235 1682
email: mail@alconelectronics.com Website: www.alconelectronics.com

Professional Grade

PG – 6D with Screw Terminals

Standard Capacitor Values

Rated Voltage (VDC)	Surge Voltage (VDC)	Capacitance Nominal (MFD)	ESR at 100 Hz, 25°C (Ohms)	Impedance at 100 Hz, 25°C (Ohms)	Ripple at 100 Hz, 85°C (Amps)	Can Size Nominal D X L mm
100	120	2000	0.150	0.795	2.53	35x62
		2200	0.140	0.720	2.96	35x62
		2500	0.127	0.636	3.00	35x80
		3300	0.081	0.480	3.77	50x80
		4700	0.063	0.338	4.80	35x80
		4700	0.063	0.338	5.32	50x80
		5000	0.061	0.318	4.88	35x80
		5000	0.061	0.318	5.41	50x80
		6800	0.058	0.234	7.17	50x105
		10000	0.047	0.159	7.71	50x80
		10000	0.047	0.159	8.76	50x105
		15000	0.026	0.106	12.00	63x105
		20000	0.024	0.079	13.41	63x146
		20000	0.024	0.079	13.80	76x120
		22000	0.024	0.072	13.74	63x146
		22000	0.024	0.072	14.10	76x120
		33000	0.020	0.048	16.74	76x146
		47000	0.018	0.034	17.65	76x146
150	175	1000	0.190	1.590	3.36	35x105
		1000	0.190	1.590	3.70	50x80
		1500	0.160	1.060	4.95	50x80
		2000	0.130	0.796	4.41	35x105
		2500	0.126	0.636	6.00	50x105
		3300	0.081	0.482	6.17	50x105
		4700	0.063	0.338	7.60	63x105
		5000	0.061	0.318	7.69	63x105
		6800	0.052	0.234	10.31	63x105
		10000	0.035	0.159	11.20	63x146
		10000	0.035	0.159	11.50	76x120
		10000	0.035	0.159	12.18	76x146
		12000	0.032	0.132	13.02	76x146
		15000	0.030	0.106	13.45	76x146
		20000	0.028	0.080	13.92	76x146
200	230	1000	0.270	1.590	2.71	35x80
		1000	0.270	1.590	3.10	35x105
		2000	0.128	0.796	4.90	50x80
		2000	0.128	0.796	5.60	50x105
		2200	0.123	0.720	4.30	50x80
		2200	0.123	0.720	4.93	50x105
		2500	0.091	0.636	7.30	63x105
		3300	0.070	0.482	7.58	63x105
		4700	0.050	0.338	9.12	63x120
		4700	0.050	0.338	9.60	76x105

Other capacitor values and sizes available on request

ALCON ELECTRONICS PRIVATE LIMITED
Registered by UL to ISO 9001

Registered Office & Factory:
34-B MIDC Industrial Estate, Satpur, Nashik 422007, India.
Phone: +91 253 - 235 0533, 235 0237, Fax: +91 253 - 235 1682
email: mail@alconelectronics.com Website: www.alconelectronics.com

Professional Grade

PG – 6D with Screw Terminals

Standard Capacitor Values

Rated Voltage (VDC)	Surge Voltage (VDC)	Capacitance Nominal (MFD)	ESR at 100 Hz, 25°C (Ohms)	Impedance at 100 Hz, 25°C (Ohms)	Ripple at 100 Hz, 85°C (Amps)	Can Size Nominal D X L mm
200	230	5000	0.047	0.318	9.88	76x105
		5000	0.047	0.318	9.40	63x120
		6800	0.035	0.234	11.75	63x146
		6800	0.035	0.234	12.20	76x120
		7200	0.031	0.221	12.20	76x120
		10000	0.030	0.159	14.22	76x146
		12000	0.028	0.132	14.72	76x146
		15000	0.026	0.106	15.28	76x146
250	300	470	0.480	3.385	1.75	35x80
		470	0.480	3.385	2.55	50x80
		680	0.330	2.340	1.95	35x105
		1000	0.210	2.340	3.27	50x80
		2000	0.110	0.796	6.00	63x105
		2200	0.101	0.720	6.82	63x105
		2500	0.081	0.636	6.70	63x105
		2500	0.081	0.636	7.05	63x120
		3300	0.072	0.482	7.66	63x120
		3300	0.072	0.482	8.00	76x105
		4700	0.050	0.338	9.12	63x146
		4700	0.050	0.338	9.49	76x105
		4700	0.050	0.338	10.13	76x120
		5000	0.046	0.318	9.99	76x105
		5000	0.046	0.318	10.56	76x120
		6800	0.034	0.234	13.99	76x146
		10000	0.028	0.159	14.72	76x146
350	400	220	0.700	7.238	1.17	35x62
		330	0.500	4.820	1.50	35x62
		470	0.370	3.385	2.24	35x105
		470	0.370	3.385	2.63	50x80
		500	0.350	3.185	2.71	50x80
		680	0.300	2.340	3.55	50x105
		1000	0.238	1.590	3.85	50x80
		1000	0.238	1.590	4.38	50x105
		1000	0.238	1.590	5.00	63x105
		1500	0.159	1.060	5.43	63x105
		2000	0.125	0.796	6.43	63x146
		2200	0.118	0.720	6.40	63x146
		2200	0.118	0.720	6.20	76x105
		2500	0.100	0.636	6.95	63x146
		2500	0.100	0.636	7.34	76x120
		3300	0.079	0.482	7.34	63x120
		3300	0.079	0.482	8.00	76x120
		4700	0.060	0.338	9.97	76x146
		5000	0.057	0.318	10.24	76x146
		6000	0.050	0.265	10.93	76x146
		6800	0.046	0.234	11.40	76x146

Other capacitor values and sizes available on request

ALCON ELECTRONICS PRIVATE LIMITED
Registered by UL to ISO 9001

Registered Office & Factory:
34-B MIDC Industrial Estate, Satpur, Nashik 422007, India.
Phone: +91 253 - 235 0533, 235 0237, Fax: +91 253 - 235 1682
email: mail@alconelectronics.com Website: www.alconelectronics.com

Professional Grade

PG – 6D with Screw Terminals

Standard Capacitor Values

Rated Voltage (VDC)	Surge Voltage (VDC)	Capacitance Nominal (MFD)	ESR at 100 Hz, 25°C (Ohms)	Impedance at 100 Hz, 25°C (Ohms)	Ripple at 100 Hz, 85°C (Amps)	Can Size Nominal D X L mm
400	460	330	0.530	4.820	1.47	35x80
		470	0.370	3.385	1.72	35x80
		500	0.340	3.185	1.79	35x80
		680	0.280	2.340	2.52	50x80
		1000	0.238	1.590	4.17	50x105
		1000	0.238	1.590	4.72	63x105
		1000	0.238	1.590	5.00	63x120
		1500	0.159	1.060	5.78	63x105
		1500	0.159	1.060	6.10	63x120
		2200	0.108	0.720	6.11	76x105
		2200	0.108	0.720	6.50	76x120
		2500	0.100	0.636	6.57	63x146
		2500	0.100	0.636	6.71	76x120
		3300	0.085	0.482	7.92	76x146
		4000	0.075	0.398	7.67	76x146
		4700	0.065	0.338	8.24	76x146
		5000	0.060	0.318	8.57	76x146
		5600	0.055	0.284	8.95	76x146
450	500	220	0.700	7.238	1.17	35x62
		330	0.620	4.820	1.49	35x80
		470	0.507	3.385	1.60	35x80
		500	0.490	3.185	1.67	35x80
		680	0.351	2.340	2.37	50x80
		1000	0.230	1.590	3.33	50x105
		1000	0.230	1.590	3.77	63x105
		1000	0.230	1.590	4.00	63x120
		1500	0.159	1.060	4.16	63x105
		1500	0.159	1.060	4.40	63x120
		2000	0.120	0.796	6.18	76x120
		2200	0.108	0.720	5.86	63x120
		2200	0.108	0.720	6.37	63x146
		2200	0.108	0.720	6.51	76x120
		2500	0.100	0.636	6.37	63x146
		2500	0.100	0.636	6.77	76x120
		3300	0.085	0.482	7.99	76x146
		3700	0.070	0.430	8.80	76x146
		4000	0.065	0.398	9.14	76x146
		4700	0.055	0.338	9.93	76x146

Other capacitor values and sizes available on request

ALCON ELECTRONICS PRIVATE LIMITED
Registered by UL to ISO 9001

Registered Office & Factory:
34-B MIDC Industrial Estate, Satpur, Nashik 422007, India.
Phone: +91 253 - 235 0533, 235 0237, Fax: +91 253 - 235 1682
email: mail@alconelectronics.com Website: www.alconelectronics.com

Screw Terminals type AEST/AEST-D

Fig. 1

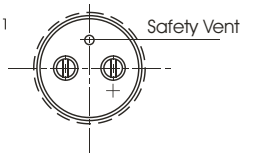
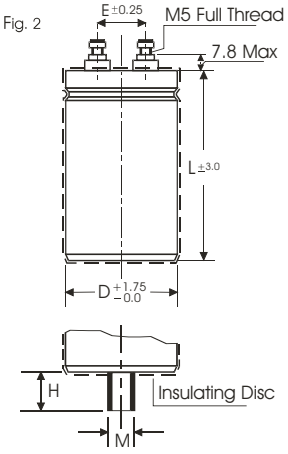


Fig. 2



D	E	L
35	12.6	62
35	12.6	80
35	12.6	105
50	22.1	80
50	22.1	105
50	22.1	120
63	28.5	80
63	28.5	105
63	28.5	120
63	28.5	146
76	31.6	80
76	31.6	105
76	31.6	120
76	31.6	146
76	31.6	175

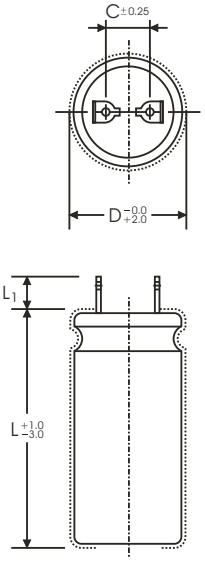
Stud Details

Can Diameter	Threads	Heights (H±1)
35	M8	12
50	M12	16
63	M12	16
76	M12	16

AEST : Screw terminals with plain insulated base
AEST-D : Screw terminals and stud mounting type

dimensions in mm

Solderable Terminals type AEC -H



D	L	C	L_1 ±1
45	72	18.25	13
45	80	18.25	13
45	96	18.25	13
50	96	18.25	13

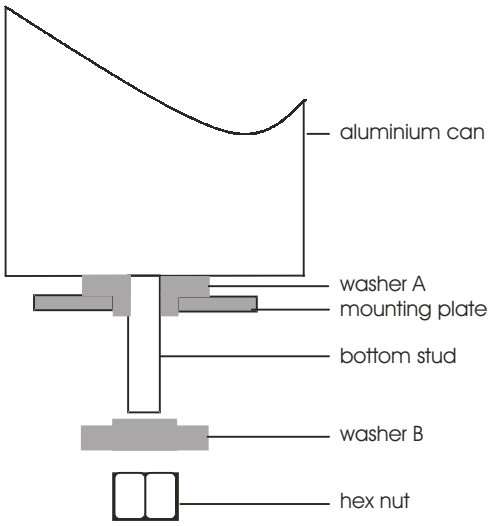
dimensions in mm

ALCON ELECTRONICS PRIVATE LIMITED
Registered by UL to ISO 9001

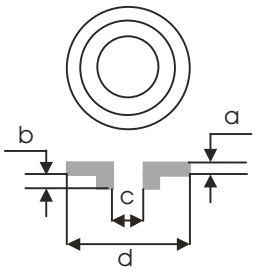
Registered Office & Factory:
34-B MIDC Industrial Estate, Satpur, Nashik 422007, India.
Phone: +91 253 - 235 0533, 235 0237, Fax: +91 253 - 235 1682
email: mail@alconelectronics.com Website: www.alconelectronics.com

Mounting Accessories

- **Mounting nut and washers for cans with bottom stud**

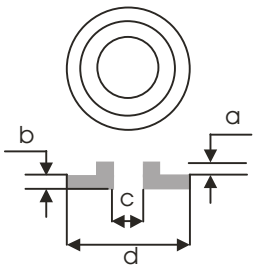


Washer A



Base stud threads	a	b	c	d
M8	1.0	1.5	8.6	25
M12	1.0	1.5	12.6	40

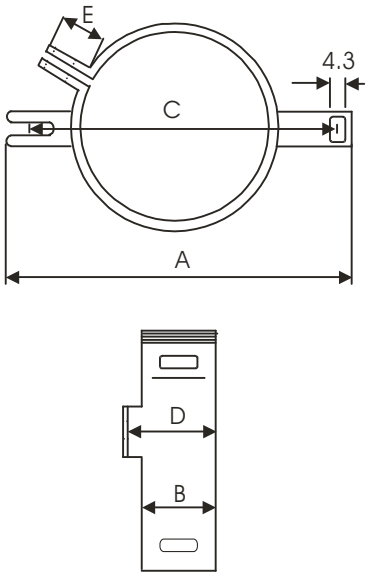
Washer B



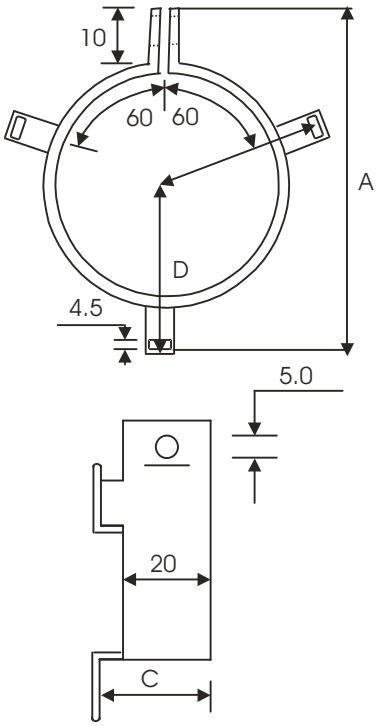
Base stud threads	a	b	c	d
M8	1.5	1.0	8.6	25
M12	1.5	1.0	12.6	40

All dimensions in mm

- **Vertical mounting clamps**



CAN DIA	A	B	C	D	E
35	63	35	54	20	10



CAN DIA	A	B	C	D
50	76	33	30	40
63	89	39.5	30	46.5
76	102	46	30	53

All dimensions in mm

ALCON ELECTRONICS PRIVATE LIMITED
Registered by UL to ISO 9001

Registered Office & Factory:
34-B MIDC Industrial Estate, Satpur, Nashik 422007, India.
Phone: +91 253 - 235 0533, 235 0237, Fax: +91 253 - 235 1682
email: mail@alconelectronics.com Website: www.alconelectronics.com