

# LARGE ALUMINUM ELECTROLYTIC CAPACITORS

## I14101 (WT)

### Screw Terminal Type, Wide Temperature Range Series

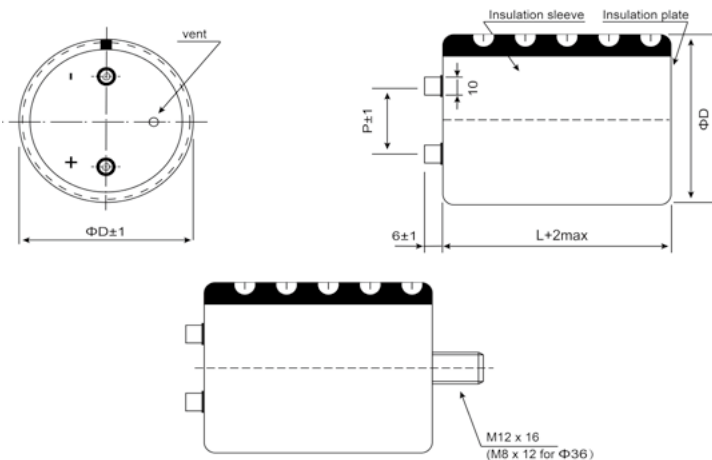
- Standard at 105°C
- Professional Inverters and Power Supplies
- Complied to the RoHS directive

Items	Performance characteristics
<b>Operating temperature range</b>	-40 ~ +105°C (25V~100V); -25 ~ +105°C (160V~450V)
<b>Leakage current max.</b>	$I=0.01CV$ or 5mA whichever is smaller (after 5 minutes)
<b>Capacitance tolerance</b>	±20% at 120Hz, 20°C
<b>Dissipation factor max. (at 120Hz, 20°C)</b>	Less than values shown in the standard ratings

	Useful Life		Load Life	Endurance Test	Shelf Life
Life Time	>4000h	>200000h	2000h	2000h	1000h
Leakage Current	Not more than specified value		Not more than specified value	Not more than specified value	Not more than specified value
Capacitance Change	Within ±30% of initial value		Within ±20% of initial value	Within ±10% of initial value	Within ±20% of initial value
Dissipation Factor	Not more than 300% of specified value		Not more than 200% of specified value	Not more than 130% of specified value	Not more than 200% of specified value
Condition:					
Applied Voltage	$U_R$	$U_R$	$U_R$	$U_R$	$U_R=0$
Applied Current	$I_R$	$1.2 \times I_R$	$I_R$	$I_R=0$	$I_R=0$
Applied Temperature	105°C	40°C	105°C	105°C	105°C
					After test $U_R$ to be applied for 60min>24h before measurement

### DRAWING

Unit: mm



ΦD/mm	36	51	64	77	90
P/mm	12.7	22.0	28.2	31.4	31.4

- \*Hex head screw M5×10 and M6×12 are standard screws. Longer screws are available on request.
- \*Max tightening torque for screw terminal M5:3Nm, M6:4Nm. Max torque for bolt mounting M12:12.5Nm.
- \*Screws, Bracket and cap nut will be delivered separately if necessary.

### Ripple Current Coefficient

Frequency(Hz)	Rated Voltage(V)				
	50/60	120	300	1k	>10k
25~100	0.95	1.00	1.04	1.10	1.15
160~250	0.90	1.00	1.08	1.15	1.20
350~450	0.80	1.00	1.18	1.35	1.40

Coefficient	Ambient Temp(°C)					
	40	55	70	85	105	
	25~100V	4.9	3.9	3.0	1.8	1.0
160~250V	3.8	3.3	2.5	2.0	1.0	
350~450V	2.44	2.28	2.12	2.0	1.0	

The useful life can be prolonged by operating capacitor at loads below the rated values (e.g. lower operating voltage, Rms ripple current or ambient temperature) and by appropriate cooling measures.

It is advisable not to apply a ripple current exceeding the rated ripple current without any cooling measures as this will shorten capacitor's life.

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## I14101 (WT) Series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV(SV) μF	25 (32)				35 (44)				50 (63)			
	3300									36×53	0.20	50
4700									36×53	0.25	36	3.3
6800					36×53	0.30	25	2.6	36×83	0.25	32	3.4
10000	36×53	0.35	25	2.9	36×83	0.30	20	3.7	36×83	0.25	22	4.1
15000	36×83	0.35	20	4.2	36×83	0.30	13	4.5	36×100	0.30	14	4.9
22000	36×83	0.40	13	5.1	36×100	0.35	10	5.5	51×75	0.35	10	5.9
33000	36×100	0.40	10	6.3	51×75	0.40	7	6.7	51×115	0.40	7	7.8
47000	51×75	0.40	7	8.0	51×96	0.45	6	8.1	64×96	0.40	6	9.5
68000	51×115	0.50	6	10.0	51×115	0.50	5	10.0	64×115	0.45	5	11.6
100000	64×96	0.60	5	11.3	64×115	0.60	4	12.1	77×115	0.50	4	14.1
150000	64×115	0.80	4	12.9	77×115	0.70	3	13.8	90×131	0.50	3	18.9
220000	77×115	1.00	3	14.8	90×131	0.70	2	17.6				
330000	90×131	1.00	2	19.9								

WV(SV) μF	63 (79)				80 (100)				100 (125)			
	1000									36×53	0.15	70
1500									36×53	0.15	55	1.7
2200	36×53	0.15	70	2.1	36×53	0.15	57	2.1	36×83	0.15	38	2.5
3300	36×53	0.20	50	2.2	36×83	0.15	38	3.0	36×83	0.15	25	3.0
4700	36×83	0.20	36	3.1	36×83	0.15	27	3.6	36×100	0.15	21	3.9
6800	36×83	0.20	25	3.7	36×100	0.20	19	4.0	51×75	0.15	19	5.0
10000	36×100	0.25	20	4.4	51×75	0.20	17	5.2	51×96	0.15	13	6.5
15000	51×75	0.25	14	5.7	51×96	0.25	11	6.2	64×96	0.20	9	7.6
22000	51×96	0.30	10	6.8	64×96	0.25	8	8.2	77×96	0.20	7	9.7
33000	64×96	0.30	7	9.2	77×96	0.30	7	9.7	77×130	0.25	6	11.8
47000	64×115	0.35	6	10.9	77×115	0.30	6	12.5	90×131	0.25	5	15.0
68000	77×115	0.40	5	13.0	90×131	0.30	5	16.4				
100000	90×131	0.40	4	17.2								

WV(SV) μF	160 (200)				200 (250)				250 (300)			
	330					36×53	0.15	375	0.8	36×53	0.15	160
470	36×53	0.15	265	1.0	36×53	0.15	262	1.0	36×53	0.15	120	1
680	36×53	0.15	186	1.1	36×53	0.15	180	1.1	36×83	0.15	85	1.4
1000	36×83	0.15	125	1.7	36×83	0.15	125	1.7	36×100	0.15	55	1.9
1500	36×83	0.15	85	2.0	36×100	0.15	75	2.2	51×75	0.15	40	2.3
2200	36×100	0.15	55	2.7	51×75	0.15	50	2.8	51×96	0.15	28	3.1
3300	51×83	0.15	38	3.5	51×96	0.15	36	3.7	64×96	0.15	20	4.2
4700	51×96	0.15	35	4.4	64×96	0.15	24	4.9	64×115	0.15	15	5.4
6800	64×96	0.15	25	5.9	64×115	0.15	16	6.3	64×115	0.15	10	6.9
10000	77×96	0.15	15	7.6	77×115	0.15	12	8.1	77×155	0.15	8	9.3
15000	77×130	0.15	11	10.3	90×131	0.15	6	10.9	90×157	0.15	6	12.2
22000	90×131	0.15	6	13.2								

WV(SV) μF	400 (450)				450 (500)			
	220					36×53	0.15	415
330					36×100	0.15	277	1.5
470					51×83	0.15	195	2.1
680					51×96	0.15	135	2.7
1000	51×75	0.15	82	2.5	51×100	0.15	90	4.2
1200	51×96	0.15	70	3				
1500	51×115	0.15	49	3.6	51×130	0.15	54	5.7
1800	51×130	0.15	39	4.1				
2200	64×96	0.15	30	4.5	64×115	0.15	33	7.3
2700	64×115	0.15	22	5.3				
3300	64×130	0.15	20	6.2	77×130	0.15	22	10.1
3900	64×155	0.15	18	7.2				
	77×115	0.15	18	6.8				
4700	64×195	0.15	13	8.7	77×155	0.15	15	12.6
	77×130	0.15	13	7.8				
5600	64×195	0.15	12	9.6	90×157	0.15	11	15.8
	77×155	0.15	12	9.2				
6800	90×157	0.15	11	10.7				
8200	90×157	0.15	10	11.8				
10000	90×196	0.15	9	14.1				

Typ ESR(mΩ) at 20°C, 120Hz  
Ripple current (A rms) at 105°C, 120Hz

Dissipation Factor max at 20°C, 120Hz  
Case size Φ D×L (mm)