LARGE CAPACITANCE ALUMINUM ELECTROLYTIC CAPACITORS Inverter-use screw terminal, 85℃

RHB New! Series

- Realized higher voltage than RWE series. (575 to 700V$_{dc}$)
- Endurance with ripple current : 2,000 hours at 85℃
- Suitable for X-ray and welder power supply where high energy is required
- RoHS Compliant

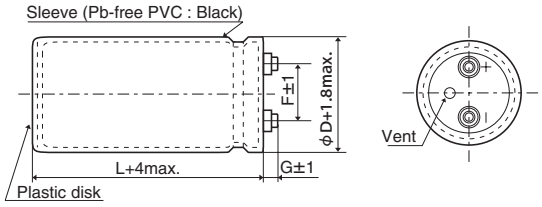
RHB
↑ Higher voltage
RWE P308

◆SPECIFICATIONS

Items	Characteristics	
Category Temperature Range	-25 to +85℃	
Rated Voltage Range	575 to 700V$_{dc}$	
Capacitance Tolerance	±20% (M)	(at 20℃, 120Hz)
Leakage Current	I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)	(at 20℃ after 5 minutes)
Dissipation Factor (tan δ)	0.25 max.	(at 20℃, 120Hz)
Low Temperature Characteristics	Capacitance change C(-25℃)/C(+20℃)≧0.6	(at 120Hz)
Insulation Resistance	When measured between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of 500V$_{dc}$, the insulation resistance shall not be less than 100MΩ.	
Insulation Withstanding Voltage	When a voltage of 2,000V$_{ac}$ is applied for 1 minute between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 2,000 hours at 85℃.	
	Capacitance change	≦±20% of the initial value
	D.F. (tan δ)	≦200% of the initial specified value
	Leakage current	≦The initial specified value
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 500 hours at 85℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.	
	Capacitance change	≦±20% of the initial value
	D.F. (tan δ)	≦200% of the initial specified value
	Leakage current	≦The initial specified value

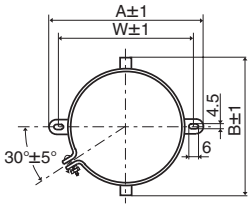
◆DIMENSIONS (Screw-Mount) [mm]

●Terminal Code : LG



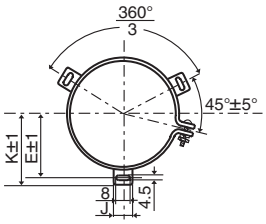
φ63.5 : G=6
φ76.2 & φ89 : G=5

●Mounting Clamp Code : B



φD	A	B	W	F
63.5	90.0	76.0	80.0	28.0
76.2	104.5	90.0	93.5	31.5

●Mounting Clamp Code : C



φD	E	K	F	J
63.5	38.1	43.5	28.0	14.0
76.2	44.5	50.0	31.5	14.0
89	50.8	56.5	31.5	16.0

<Screw specifications>
to φ89 Plus hexagon-headed screw :M5×0.8×10
Maximum screw tightening torque :3.23Nm
* The screw and the mounting clamp are separately supplied and not attached to the product.

◆PART NUMBERING SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
E	R	H	B				L	G					M				M

Supplement code
Size code
Capacitance tolerance code
Capacitance code (ex. 1,000μF:102, 3,300μF:332)
Mounting clamp code (N, B, C)
Terminal code
Voltage code (ex. 575V:5H1, 700V:701)
Series code
Category

Please refer to "Product code guide (screw-mount terminal type)"

RHB New! Series

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85℃,120Hz)	Part No.
575	1,000	63.5×70	0.25	3.80	ERHB5H1LGC102MD70M
	1,200	63.5×80	0.25	4.40	ERHB5H1LGC122MD80M
	1,500	63.5×95	0.25	5.30	ERHB5H1LGC152MD95M
	1,500	76.2×70	0.25	5.20	ERHB5H1LGC152ME70M
	1,800	63.5×100	0.25	5.90	ERHB5H1LGC182MDA0M
	1,800	76.2×80	0.25	6.00	ERHB5H1LGC182ME80M
	2,200	63.5×120	0.25	7.10	ERHB5H1LGC222MDC0M
	2,200	76.2×95	0.25	7.20	ERHB5H1LGC222ME95M
	2,700	76.2×105	0.25	8.30	ERHB5H1LGC272MEA5M
	2,700	89×85	0.25	7.00	ERHB5H1LGC272MF85M
	3,300	76.2×120	0.25	9.70	ERHB5H1LGC332MEC0M
	3,300	89×100	0.25	8.30	ERHB5H1LGC332MFA0M
	3,900	89×105	0.25	9.10	ERHB5H1LGC392MFA5M
	4,700	89×130	0.25	11.1	ERHB5H1LGC472MFD0M
	5,600	89×145	0.25	12.7	ERHB5H1LGC562MFE5M
630	1,000	63.5×85	0.25	4.10	ERHB631LGC102MD85M
	1,200	63.5×95	0.25	4.80	ERHB631LGC122MD95M
	1,500	63.5×115	0.25	5.80	ERHB631LGC152MDB5M

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85℃,120Hz)	Part No.
630	1,500	76.2×85	0.25	5.60	ERHB631LGC152ME85M
	1,800	63.5×125	0.25	6.60	ERHB631LGC182MDC5M
	1,800	76.2×95	0.25	6.40	ERHB631LGC182ME95M
	1,800	89×85	0.25	5.70	ERHB631LGC182MF85M
	2,200	76.2×115	0.25	7.80	ERHB631LGC222MEB5M
	2,200	89×90	0.25	6.50	ERHB631LGC222MF90M
	2,700	76.2×130	0.25	9.10	ERHB631LGC272MED0M
	2,700	89×100	0.25	7.40	ERHB631LGC272MFA0M
	3,300	89×120	0.25	9.00	ERHB631LGC332MFC0M
700	1,000	63.5×115	0.25	4.70	ERHB701LGC102MDB5M
	1,200	63.5×125	0.25	5.40	ERHB701LGC122MDC5M
	1,500	76.2×115	0.25	6.40	ERHB701LGC152MEB5M
	1,800	76.2×125	0.25	7.20	ERHB701LGC182MEC5M
	1,800	89×105	0.25	6.20	ERHB701LGC182MFA5M
	2,200	76.2×155	0.25	8.80	ERHB701LGC222MEF5M
	2,200	89×115	0.25	7.10	ERHB701LGC222MFB5M
	2,700	89×135	0.25	8.50	ERHB701LGC272MFD5M
	3,300	89×155	0.25	9.90	ERHB701LGC332MFF5M

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency (Hz)	50	120	300	1k	3k
Coefficient	0.8	1.0	1.2	1.3	1.4

Note : The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5 to 10℃ rise. When long life performance is required in actual use, the rms ripple current has to be reduced. Also, for the RHA series capacitors, using them at operating voltage less than their rated voltage can extend their lifetime. For details, please contact a representative of Nippon Chemi-Con.