

## RL Series 105°C

### Features

#### Long Endurance

##### Applications

- ◆ Frequency converters
- ◆ Professional power supplies
- ◆ Uninterruptible power supplies

##### Features

- ◆ Outstanding reliability
- ◆ Wide temperature range
- ◆ Version with low-inductance design available
- ◆ All-welded construction ensures reliable electrical contact
- ◆ Self-extinguishing electrolyte
- ◆ RoHS-compatible

##### Construction

- ◆ Charge-discharge proof, polar
- ◆ Aluminum case with insulating sleeve
- ◆ Poles with screw terminal connections
- ◆ Mounting with ring clips, clamps or threaded stud

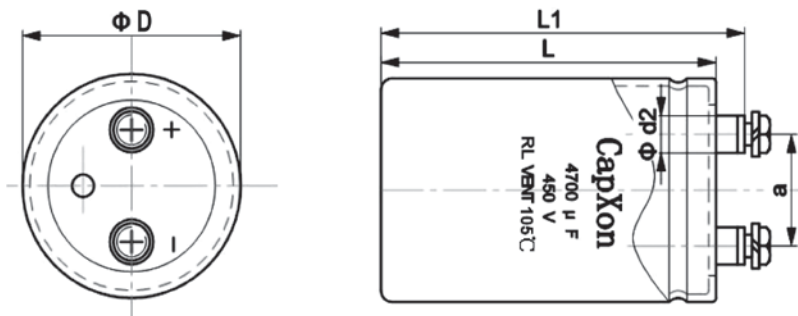


### Specifications

Item	Performance Characteristics					
Rated voltage $V_R$	350... 450 V DC					
Surge voltage $V_S$	1.15 $V_R$ (for $V_R \leq 315$ V) or 1.10 $V_R$ (for $V_R > 315$ V)					
Rated capacitance $C_R$	680 ... 15000 $\mu$ F					
Capacitance tolerance	$\pm 20\%$					
tan $\delta$ (at 20°C · 120Hz)	Less than the value under table(%)					
	$\Phi D$	35	51	63.5	76.2	89
	WV	20	20	25	25	25
Leakage Current $I_{leak}$ (20 °C, 5 min)	$I_{leak} \leq 0.3\mu A * (C*V)^{0.7} + 4\mu A$					
Endurance test 105 °C; $V_R$	5000 h	Requirements: $\Delta C/C \leq \pm 20\%$ of initial value ESR $\leq 2$ times initial specified limit $I_{leak} \leq$ initial specified limit				
Vibration Resistance test	To IEC 60068-2-6, test Fc: Displacement amplitude 0.75 mm, frequency range 10 ... 55 Hz, acceleration max. 10 g, duration 3X2 h. Capacitor mounted by its body which is rigidly clamped to the work surface.					
Low Temperature Characteristics	Max. impedance ratio at 120 Hz					
	$Z_{-25^\circ C} / Z_{20^\circ C}$	3				
	$Z_{-40^\circ C} / Z_{20^\circ C}$	12				
Sectional specification	IEC 60384-4 and JIS-C-5101					

## Dimensional drawings

Ring clip/clamp mounting:



M5:Min.reach of screw = 8mm  
M6:Min.reach of screw = 12mm

## Dimensions

Terminal	Dimensions(mm) with insulating sleeve				
	$D \pm 2$	$L \pm 3$	$L_1 \pm 3$	$d_2 \text{max.}$	$a \pm 0.5$
M5	35	50~120	56.5~126.5	10.3	12.7
M5	51	80~140	86.5~146.5	10.3	22
M5	63.5	80~140	86.5~146.5	10.3	28.6
M5	76.2/89	100~240	106.4~246.5	10.3	31.8
M6	76.2/89	100~240	106.4~246.5	17.5	31.8

## Packing

Diameter d(mm)	Length L(mm)	Packing (pcs.)
35	$\leq 70\text{mm}$	120
	$> 70\text{mm}$	60
42	$\leq 70\text{mm}$	120
	$> 70\text{mm}$	60
51	$\leq 70\text{mm}$	70
	$> 70\text{mm}$	35
63.5	all	24
76.2	all	15
89	all	12

## Accessories

The following items are included in the delivery package, but are not fastened to the capacitors.

	Thread	Maximum torque
For terminal	M5	2 Nm
	M6	2.5 Nm

## Case Size

		φ DxL(mm)					
WV(V) Cap(μF)	350		400		450		
	Size	Ripple	Size	Ripple	Size	Ripple	
680	51x80	4.0					
1000	51x80	6.5	51x80	6.6	63.5x115	12.1	
1200	51x80	6.8	51x80	7.0	63.5x120	12.3	
1500	51x100	8.6	51x120	9.0	63.5x120	12.5	
1800	51x120	9.2	51x140	10.8	63.5x120	13.0	
			63.5x100	10.8			
2200	51x120	11.0	63.5x110	11.6	76.2x100	14.0	
2700	63.5x100	12.5	63.5x115	13.7	76.2x110	16.9	
3300	63.5x110	14.5	63.5x130	16.1	76.2x130	18.0	
3900	63.5x130	16.5	63.5x150	17.9	76.2x140	19.0	
			76.2x110	18.2	89x120	19.5	
4700	63.5x150	20.0	76.2x130	21.2	76.2x140	22.6	
	76.2x120	20.0			89x140	24.5	
5600	63.5x170	22.5	76.2x150	24.3	76.2x160	25.2	
	76.2x130	22.5			89x150	26.5	
6800	76.2x150	26.0	89x150	27.1	89x160	26.0	
8200	76.2x170	30.0	89x170	29.8	89x190	28.3	
	89x150	29.0					
10000	89x150	32.5					
12000	89x190	36.0					
15000	89x220	43.0					

Ripple Current(A,rms) at 105°C 120Hz