

# DC-Link capacitor \_ DCL

## Highlight Features

- High Irms rating
- High Ipeak rating
- Low self-inductance
- High reliability and life expectancy
- Non-polar

## Applications

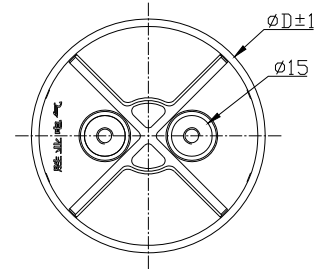
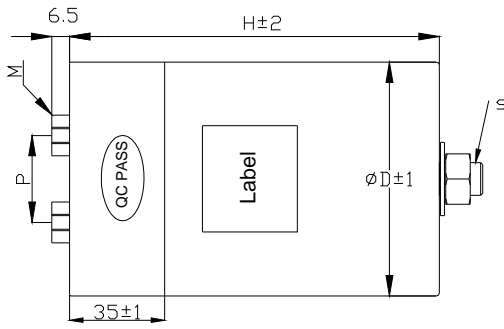
- DC-linking and DC-filtering in frequency converter
- DC-linking in wind power converter
- DC-Linking in PV inverter
- DC-filtering in UPS
- Alternating aluminum electrolytic capacitors (lower capacitance, higher current)



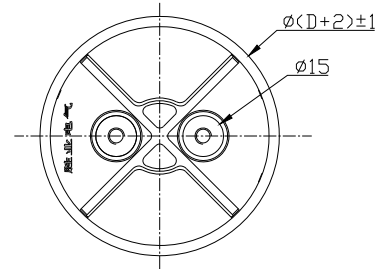
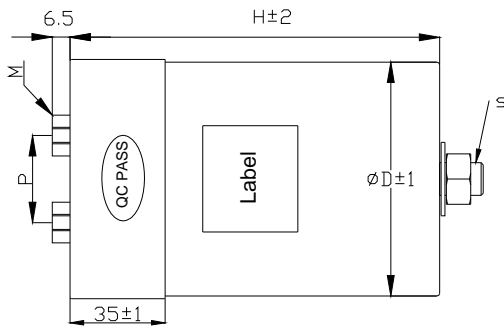
## Parameter

Rated Capacitance	160 $\mu$ F ~ 3200 $\mu$ F ( 25 $^{\circ}$ C )
Rated Voltage	600VDC ~ 2200VDC
Tolerance	$\pm$ 10% (standard), $\pm$ 5% (upon request)
Dielectric	Metalized polypropylene, Segmented MKP (upon request)
Dissipation factor	$\tan\delta\leq 0.0002$ ( 100Hz , 25 $^{\circ}$ C )
Insulation resistor (RC)	$\geq 20,000s$ ( 500VDC , 25 $^{\circ}$ C )
Operating temperature (Tw)	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C
Hotspot temperature (Th)	$\leq +85^{\circ}$ C
Storage temperature (Ts)	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C
Altitude	$\leq 2000m$
Life expectancy	100,000 hours at Un and Th $\leq 70^{\circ}$ C
Test voltage between terminals	1.5Un / 10s at 25 $^{\circ}$ C
Test voltage terminal to case	3000VAC / 10s at 25 $^{\circ}$ C
Construction	Dry, Filling with epoxy resin, UL94V-0, Anti-flaming, Non-inductive
Case	Aluminum case, with black color anodized finish
Reference standards	IEC61071-2007, UL94V-0, GB/T17702-2013

## Dimensions

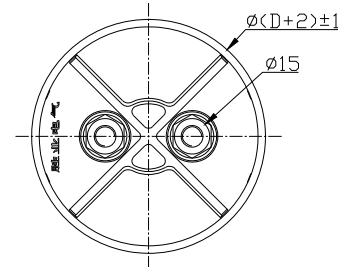
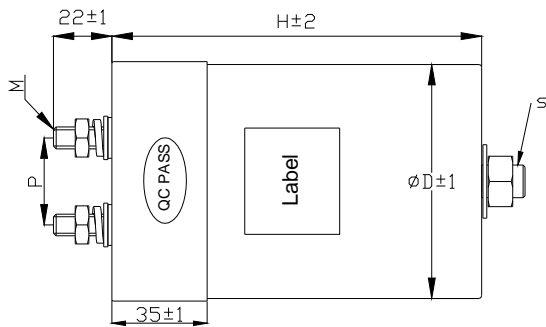


Type L1-2

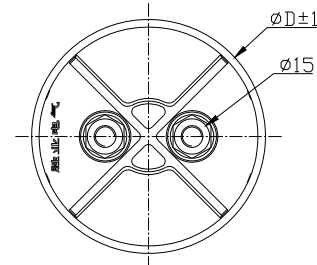
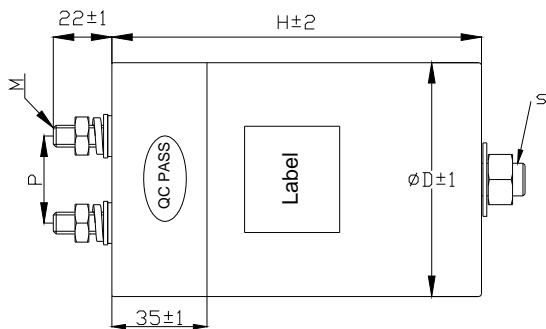


Type L1-1

Type	D/mm	P/mm	Terminal		Bottom Stud	
			M/mm	Max T	S/mm	Max T
L1	86	32	M6*13	6Nm	M12*16	10Nm
L1	96	32	M6*13	6Nm	M16*25	12Nm
L1	116	50	M6*13	6Nm	M16*25	12Nm



Type L3-1



Type L3-2

Type	D/mm	P/mm	Terminal		Bottom Stud	
			M/mm	Max T	S/mm	Max T
L3	86	32	M8*20	8Nm	M12*16	10Nm
L3	96	32	M8*20	8Nm	M16*25	12Nm
L3	116	50	M10*20	8Nm	M16*25	12Nm

## General specification table

Specification	C	φD	H	ESR	I <sub>rms</sub> 10kHz 40°C	I <sub>rms</sub> 10kHz 55°C	I <sub>rms</sub> 10kHz 70°C	R <sub>th</sub>	Code
	μF	mm	mm	mΩ	A	A	A	°C/W	
<b>Un = 600 VDC</b>									
DCLSY600-650	650	86	100	2.56	50	33	13	5.3	IO600L6500UKN4BFA3N
DCLSY600-900	900	86	125	3.1	48	34	13	4.25	IO600L9000UKN4BFD3N
DCLSY600-950	950	86	140	0.99	70	47	21	5.63	IO600L9500UKN4BFE3N
DCLSY600-1300	1300	86	180	1.34	74	52	20	4.18	IO600L1301UKN4BFI3N
DCLSY600-1650	1650	86	230	1.82	70	49	18	3.44	IO600L1651UKN4BFK3N
DCLSY600-1000	1000	96	125	3.00	51	36	14	3.94	IO600L1001UKN4BGD3N
DCLSY600-1500	1500	96	180	1.10	82	58	22	4.10	IO600L1501UKN4BGI3N
DCLSY600-2000	2000	96	230	1.5	79	56	21	3.22	IO600L2001UKN4BGK3N
DCLSY600-1700	1700	116	140	0.52	100	64	31	4.88	IO600L1701UKN4BIE3N
DCLSY600-2350	2350	116	180	0.70	105	75	28	3.78	IO600L2351UKN4BII3N
DCLSY600-3200	3200	116	230	0.9	105	75	28	2.94	IO600L3201UKN4BIK3N
<b>Un = 900 VDC</b>									
DCLSY900-350	350	86	100	3.60	40	28	12	5.30	IO900L3500UKN4BFA3N
DCLSY900-470	470	86	125	4.80	39	27	11	4.27	IO900L4700UKN4BFD3N
DCLSY900-500	500	86	140	1.33	60	40	18	5.66	IO900L5000UKN4BFE3N
DCLSY900-700	700	86	180	1.80	62	44	18	4.37	IO900L7000UKN4BFI3N
DCLSY900-960	960	86	230	2.30	62	44	18	3.40	IO900L9600UKN4BFK3N
DCLSY900-630	630	96	125	3.50	48	33	13	3.91	IO900L6300UKN4BGD3N
DCLSY900-1000	1000	96	180	1.09	74	47	21	4.11	IO900L1001UKN4BGI3N
DCLSY900-1150	1150	96	230	1.90	70	50	20	3.20	IO900L1151UKN4BGK3N
DCLSY900-950	950	116	140	0.70	86	55	26	4.89	IO900L9500UKN4BIE3N
DCLSY900-1350	1350	116	180	0.90	94	66	27	3.74	IO900L1351UKN4BII3N
DCLSY900-1800	1800	116	230	1.20	93	65	24	2.94	IO900L1801UKN4BIK3N
<b>Un = 1100 VDC</b>									
DCLSY1100-230	230	86	100	4.00	38	27	10	5.26	I1100L2300UKN4BFA3N
DCLSY1100-420	420	86	136	2.05	62	42	21	3.90	I1100L4200UKN4BFU3N
DCLSY1100-420-S	420	86	155	1.30	75	50	25	4.10	I1100L4200UKN4BFF3N
DCLSY1100-500	500	86	180	1.71	58	37	17	4.29	I1100L5000UKN4BFI3N
DCLSY1100-620	620	86	230	2.70	58	40	15	3.39	I1100L6200UKN4BFK3N
DCLSY1100-360	360	96	125	1.61	62	39	18	3.94	I1100L3600UKN4BGD3N
DCLSY1100-520	520	96	180	1.55	62	40	18	4.16	I1100L5200UKN4BGI3N
DCLSY1100-720	720	96	230	2.50	62	44	17	3.22	I1100L7200UKN4BGK3N
DCLSY1100-400	400	116	100	2.50	52	37	14	4.45	I1100L4000UKN4BIA3N
DCLSY1100-600	600	116	140	0.89	76	49	23	4.92	I1100L6000UKN4BIE3N
DCLSY1100-920	920	116	180	1.10	87	62	23	3.64	I1100L9200UKN4BII3N
DCLSY1100-1020	1020	116	230	1.80	73	52	21	3.08	I1100L1021UKN4BIK3N
DCLSY1100-1100	1100	116	230	1.60	79	56	22	2.99	I1100L1101UKN4BIK3N
DCLSY1100-1200	1200	116	230	1.50	83	60	23	2.89	I1100L1201UKN4BIK3N
DCLSY1100-1200-S	1200	116	248	0.80	120	90	48	2.70	I1100L1201UKN4BIU3N

**Note:** Customized products are available upon request.

## General specification table

Specification	C	φD	H	ESR	Irms 10kHz 40°C	Irms 10kHz 55°C	Irms 10kHz 70°C	Rth	Code
	μF	mm	mm	mΩ	A	A	A	°C/W	
<b>Un = 1200Vdc</b>									
DCLSY1200-330	330	86	140	3.5	50	35	20	3.42	I1200L3300UKN4BFE3S
DCLSY1200-350	350	96	136	0.90	80	59	34	5.32	I1200L3500UKN4BGU3N
DCLSY1200-500	500	116	136	0.70	93	66	38	4.92	I1200L5000UKN4BIU3N
<b>Un = 1300 VDC</b>									
DCLSY1300-160	160	86	100	2.90	45	31	12	5.25	I1300L1600UKN4BFA3N
DCLSY1300-210	210	86	125	5.20	37	26	10	4.26	I1300L2100UKN4BFD3N
DCLSY1300-330	330	86	180	2.60	52	37	14	4.27	I1300L3300UKN4BFI3N
DCLSY1300-470	470	86	230	3.30	52	36	14	3.42	I1300L4700UKN4BFK3N
DCLSY1300-250	250	96	125	5.40	38	27	10	3.94	I1300L2500UKN4BGD3N
DCLSY1300-400	400	96	180	1.86	56	36	16	4.16	I1300L4000UKN4BGI3N
DCLSY1300-500	500	96	230	2.90	57	40	15	3.22	I1300L5000UKN4BGK3N
DCLSY1300-420	420	116	140	1.06	70	45	21	4.90	I1300L4200UKN4BIE3N
DCLSY1300-600	600	116	180	1.12	77	49	22	3.74	I1300L6000UKN4BII3N
DCLSY1300-820	820	116	230	1.70	78	55	21	2.91	I1300L8200UKN4BIK3N
<b>Un = 2000 VDC</b>									
DCLSY2000-160	160	86	230	3.74	44	28	13	3.39	I2000L1600UKN4BFD3N
DCLSY2000-300	300	116	230	2.00	65	41	18	2.93	I2000L3000UKN4BIK3N
<b>Un = 2200 VDC</b>									
DCLSY2200-160	160	86	230	3.74	44	28	13	3.39	I2200L1600UKN4BFK3N
DCLSY2200-385	385	116	293	1.81	67	43	20	3.03	I2200L3850UKN4BIU3N

Note: Customized products are available upon request.