

# Heavy-duty AC filter capacitor \_FFC1

## Highlight Features

- Withstand high Irms
- Withstand high frequency: up to 20kHz
- High reliability and life expectancy
- Non-polar

## Applications

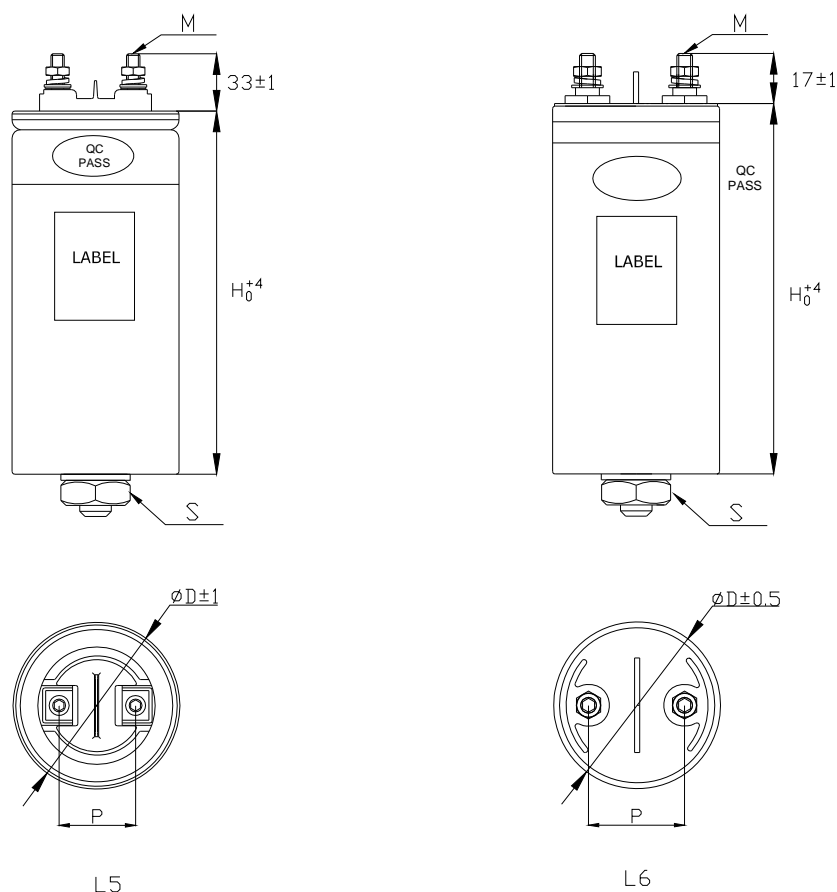
- Heavy-duty AC filter in frequency converter
- Heavy-duty AC filter in wind power converter
- Heavy-duty AC filter in PV inverter
- Heavy-duty AC filter in UPS
- Alternating PFC capacitor in heavy duty state



## Parameter

Rated Capacitance	20 $\mu$ F ~ 200 $\mu$ F
Rated Voltage	230VAC ~ 1000VAC
Tolerance	$\pm$ 10% (standard), $\pm$ 5% (upon request)
Dielectric	Metalized polypropylene
Dissipation factor	$\tan\delta\leq 0.0002$ ( 100Hz , 25 $^{\circ}$ C )
Operating temperature (Tw)	-40 $^{\circ}$ C ~ +70 $^{\circ}$ 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(AC) / 10s at 25 $^{\circ}$ C
Test voltage terminal to case	3000VAC / 2s at 25 $^{\circ}$ C, 50/60Hz
Construction	Filling with inert gas/ silicon oil, Non-inductive, over-pressure
Case	Aluminum case
Reference standards	IEC61071-2007, UL810, GB/T 17702-2013

## Dimensions



Type	D/mm	P/mm	Terminal		Bottom Stud	
			M/mm	Max T	S/mm	Max T
L5	≤86	35/37	M10*20	8Nm	M12*16	10Nm
L5	≥96	35/37	M10*20	8Nm	M16*25	12Nm
L6	63.5	35	M6*10	4Nm	M12*16	10Nm

## General

Specification	C	φD	H	ESR	Ipeak	I <sub>max</sub>	R <sub>th</sub>	Code
	μf	mm	mm	mΩ	A	A	°C/W	
<b>Urms=250Vac Un AC = 350Vac</b>								
FFC1SY 250-20	20	45	80	4.4	350	6	18.62	L0250F0200UKN1SYU2P
FFC1SY 250-50	50	50	100	4.76	468	8	13.44	L0250F0500UKN1AAU2P
FFC1SY 250-100	100	63.5	107	2.1	988	20	9.63	L0250F1000UKN1RRB2P
FFC1SY 250-150	150	63.5	130	2.23	1086	22	7.04	L0250F1500UKN1RRU2P
FFC1SY 250-200	200	63.5	140	2.35	1579	25	6.39	L0250F2000UKN1RRE2P
<b>Urms=300Vac Un AC = 420Vac</b>								
FFC1SY 300-25	25	50	80	3.26	458	7	16.02	L0300F0250UKN1SAU2P
FFC1SY 300-50	50	63.5	100	2.15	570	18	11.3	L0300F0500UKN1RRA2P
FFC1SY 300-120	120	76	150	2.79	1043	28	6.32	L0300F1200UKN1EEF2P
FFC1SY 300-200	200	76	205	2.88	1385	31	4.74	L0300F2000UKN1EEJ2P

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

Specification	C	φD	H	ESR	I <sub>peak</sub>	I <sub>max</sub>	R <sub>th</sub>	Code
	μf	mm	mm	mΩ	A	A	°C/W	
<b>Urms=330Vac Un AC = 460 Vac</b>								
FFC1SY 330-80	80	63.5	107	3.12	476	14	9.30	L0330F0800UKN1RRB2P
FFC1SY 330-100	100	63.5	140	2.79	1150	25	7.4	L0330F1000UKN1RRE2P
FFC1SY 330-200	200	76	240	2.10	1753	45	4.51	L0330F2000UKN1EEL2P
<b>Urms=400Vac Un AC = 560 Vac</b>								
FFC1SY 400-50	50	76	110	3.50	785	29	9.53	L0400F0500UKN1EEC2P
FFC1SY 400-100	100	86	150	2.82	2648	41	6.26	L0400F1000UKN1EFF2P
FFC1SY 400-200	200	86	240	2.53	3467	49	4.89	L0400F2000UKN1EFL2P
<b>Urms=500Vac Un AC = 700 Vac</b>								
FFC1SY 500-33	33	76	115	3.86	752	29	9.05	L0500F0330UKN1EEU2P
FFC1SY 500-60	60	76	150	3.72	953	33	7.23	L0500F0600UKN1EEF2P
FFC1SY 500-100	100	76	200	3.05	1047	37	6.78	L0500F1000UKN1EEJ2P
FFC1SY 500-133	133	86	200	2.87	1392	40	6.41	L0500F1330UKN1EFJ2P
<b>Urms=550Vac Un AC = 780 Vac</b>								
FFC1SY 550-22	22	63.5	90	4.01	500	24	12.4	L0550F0220UKN1RRU2P
FFC1SY 550-50	50	63.5	140	3.58	980	34	7.1	L0550F0500UKN1RRE2P
FFC1SY 550-92	92	76	200	3.02	1560	38	6.84	L0550F0920UKN1EEJ2P
FFC1SY 550-150	150	96	175	2.67	2500	41	6.64	L0550F1500UKN1EGH2P
<b>Urms=640Vac Un AC = 900 Vac</b>								
FFC1SY 640-15	15	63.5	90	5.70	350	22	10.74	L0640F0150UKN1RRU2P
FFC1SY 640-22	22	76	130	4.28	680	29	7.93	L0640F0220UKN1EEU2P
FFC1SY 640-33	33	76	130	3.56	800	33	7.39	L0640F0330UKN1EEU2P
FFC1SY 640-68	68	86	240	2.56	1496	45	5.61	L0640F0680UKN1EFL2P
<b>Urms=850Vac Un AC = 1200 Vac</b>								
FFC1SY 850-56	56	86	240	2.84	480	46	4.86	L0850F0560UKN1EFL2P
FFC1SY 850-68	68	86	240	2.62	650	50	4.56	L0850F0680UKN1EFL2P
<b>Urms=1000Vac Un AC = 1400 Vac</b>								
FFC1SY 1000-30	30	86	175	3.68	650	38	5.44	L1000F0300UKN1EFH2P
<b>Urms=1400Vac Un AC = 1900 Vac</b>								
FFC1SY 1400-15	15	116	150	2.50	740	35	5.21	L1400F0150UKN1EIF2P

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