



FFC1 高频交流滤波电容——单相

HEAVY-DUTY AC FILTER CAPACITOR __FFC1 (SINGLE PHASE)

主要特点

- 可承受高有效值电流
- 可承受高频工作环境：up to 20kHz
- 可靠性高，使用寿命长
- 无极性介质

应用领域

- 大功率变频器中作高频交流滤波
- 风电变流器、光伏逆变器中作高频交流滤波
- UPS中作高频交流滤波

Highlight Features

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

Applications

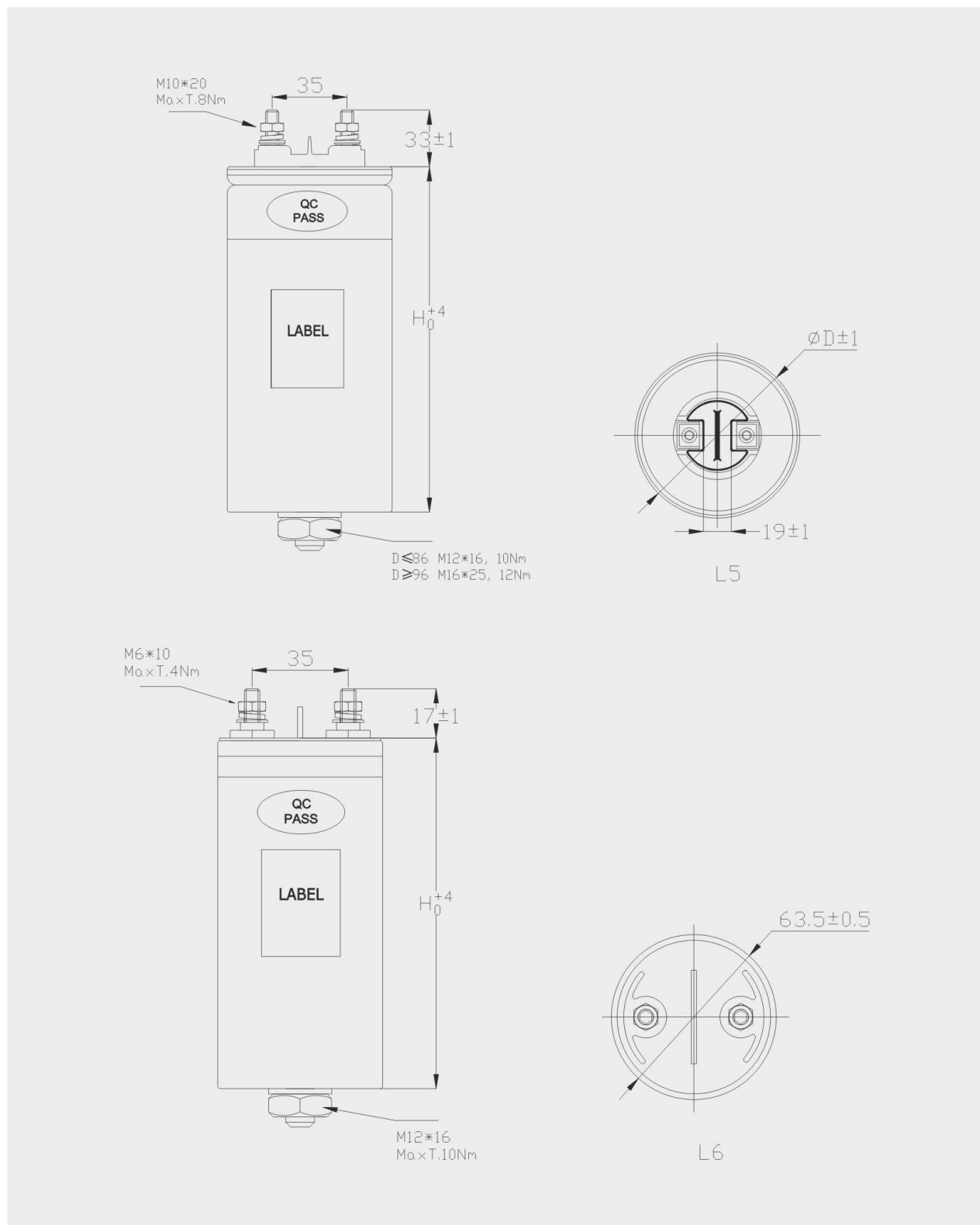
- Heavy-duty AC filter in frequency converter
- Heavy-duty AC filter in wind power converter
- Heavy-duty AC filter in PV inverter
- Heavy-duty AC filter in UPS



技术参数 Parameters

容量范围 Rated Capacitance	20 μ F ~ 200 μ F (25°C)
额定电压 Rated RMS Voltage	200Vac~ 1000Vac
容量偏差 Tolerance	$\pm 10\%$ (standard), $\pm 5\%$ (upon request)
电介质 Dielectric	Metallized polypropylene
介质损耗 Dissipation factor	Tan d ≤ 0.0002 (100Hz, 25°C)
运行温度 Operating temperature (T _{min} /T _{max})	-40°C~+70°C
核心温度 Hotspot temperature (Ths)	$\leq +85^\circ\text{C}$
储存温度 Storage temperature (Ts)	-40°C~+85°C
海拔高度 Altitude	$\leq 2000\text{m}$
预期寿命 Life expectancy	100,000 hours at UNAC and Ths $\leq 70^\circ\text{C}$
极间耐压 Test voltage between terminals	1.5Urms / 10s at 25°C
极壳耐压 Test voltage terminal to case	3000VAC / 2s at 25°C, 50/60Hz
过电压 Over voltage	1.1Urms (30% of on-load-duration) 1.15Urms (30 min / day) 1.2Urms (5 min / day) 1.3Urms (1 min / day)
结构 Construction	Filling with inert gas/ silicone oil, Non-inductive, over-pressure
外壳 Case	Aluminum case
参考标准 Reference standards	IEC61071-2007, GB17702-2013, UL810, UL94-V0
安全认证 Safety Approvals	UL (Certificate NO.E237947)

外观尺寸 Outline Drawing





常用规格选型表 General Specifications Table

型号规格 Specification	C	φ D	H	ESR	I _{peak}	I _{max}	R _{th}	产品代码 Code
	μf	mm	mm	mΩ	A	A	°C/W	
Urms=300Vac Un AC = 420Vac								
FFC1SY 300-150	150	76	175	2.83	1270	29	5.21	L0300F1500UKN1EH3P
FFC1SY 300-200	200	76	235	2.20	1300	28	6.63	L0300F2000UKN1EU3P
Urms=330Vac Un AC = 460 Vac								
FFC1SY 330-80	80	76	105	2.45	890	20	7.38	L0330F0800UKN1EU3P
FFC1SY 330-100	100	76	105	2.68	980	26	6.52	L0330F1000UKN1EU3P
FFC1SY 330-200	200	86	175	1.50	1750	33	5.00	L0330F2000UKN1FU2P
Urms=400Vac Un AC = 560 Vac								
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
FFC1SY 400-350	350	116	210	1.00	3200	68	4.20	L0400F3500UJN1EIU2P
Urms=480Vac Un AC = 680 Vac								
FFC1SY 480-70	70	76	145	2.00	4000	50	6.23	L0480F0700UJN1EEU2P
FFC1SY 480-100	100	96	125	2.00	3500	80	3.90	L0480F1000UJN1EGU2P
FFC1SY 480-160	160	86	200	1.50	3000	36	4.80	L0480F1600UJN1EFU2P
FFC1SY 480-250	250	96	240	1.21	2700	55	4.25	L0480F2500UKN1GL3P
FFC1SY 480-300	300	86	285	1.20	2500	78	3.85	L0480F1000UJN1EFM2P
Urms=500Vac Un AC = 700 Vac								
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
FFC1SY 500-200	200	96	220	1.25	3800	45	3.89	L0500F2000UKN1EFU2P
FFC1SY 500-250	250	96	240	1.15	4000	50	3.56	L0500F2500UKN1GL3P
Urms=550Vac Un AC = 780 Vac								
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 550-100	100	76	200	1.60	3500	50	6.84	L0550F1000UKN1EEJ2P
FFC1SY 550-133	133	86	200	1.50	4000	55	6.84	L0550F1330UKN1EFJ2P
Urms=600Vac Un AC = 850Vac								
FFC1SY 600-150	150	96	240	2.10	3000	52	3.87	L0600F1500UKN1GL3P
FFC1SY 600-200	200	116	240	1.89	3200	55	3.12	L0600F2000UKN1IL3P
Urms=640Vac Un AC = 900 Vac								
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
Urms=850Vac Un AC = 1200 Vac								
FFC1SY 850-50	50	96	240	1	2700	62	4.05	L0850F0500UJN1EGL2P
Urms=1000Vac Un AC = 1400 Vac								
FFC1SY 1000-30	30	86	175	3.68	650	38	5.44	L1000F0300UKN1EFH2P
Urms=1400Vac Un AC = 1900 Vac								
FFC1SY 1400-15	15	116	150	2.50	740	35	5.21	L1400F0150UKN1EIU2P

注：特殊规格，可按客户要求定制。

Note: Customized products are available upon request.