TS/M016V0058FPA



APPLICATIONS

- New Energy Vehicle
- Engineering Machinery
- Electrical Power System
- Industrial Equipment

FEATURES AND ADVANTAGES

- One Million Cycles Lifetime
- High Power Density
- Wide Range of Operation Temperature

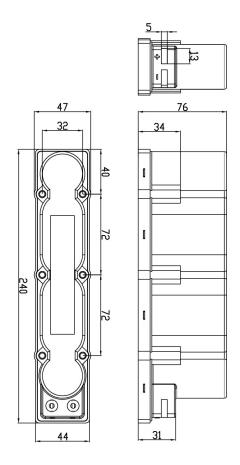


Electrical Perform	ance					
	Rated Capacity		58F			
Capacity	Capacity Tolerance		0/+20%			
	Rated voltage		16V DC			
Voltage	Surge Voltage		17V DC			
Internal resistance	ESR(initial)	22mΩ				
		Lorquintal)				
Electric current	Maximum leakage current		25mA (25℃,after 72h)			
	Maximum continuous	19A				
F	Maximum peak current		200A			
Energy	Stored energy Esta	ored	2.1Wh			
Dower density	Energy density En	nax	3.2wh/kg			
Power density	Power density P _{max}		4588W/kg			
Temperature Feat	ures					
Temperature	Operating Temperatu	ire Range	-40 ~ +65°C			
features	Storage Temperatur	e Range	-40 ~ +70°C			
Monitor and Cont	trol					
Alarm Monitor	Over voltage alarm		N/A			
Alarm Monitor	Temperature monitor		N/A			
Service Lifetime						
Lifetime Under	Operated over 10 years under 25°C at rated voltage					
	Ch	≤20%				
Normal Temperature	Change in capa	City				
Normal Temperature	Change in internal re		≤100%			
		esistance	≤100%			
Lifetime Under	Change in internal re	esistance Oh under 65	≤100%			
	Change in internal re	esistance Oh under 65 city	≤100% °C at rated voltage			
Lifetime Under	Change in internal re After operated for 150 Change in capa	esistance 0h under 65 city esistance	≤100% °C at rated voltage ≤20% ≤100%			
Lifetime Under High Temperature	Change in internal re After operated for 150 Change in capa Change in internal re	esistance Oh under 65 city esistance t storage ter	≤100% °C at rated voltage ≤20% ≤100% nperature, uncharged)			
Lifetime Under High Temperature Storage Lifetime	Change in internal re After operated for 150 Change in capa Change in internal re 4 years (under the highest 1 million cycles between rat	esistance Oh under 65 city esistance t storage ter	≤100% °C at rated voltage ≤20% ≤100% Imperature, uncharged) Ind half rated voltage at			
Lifetime Under High Temperature	Change in internal re After operated for 150 Change in capa Change in internal re 4 years (under the highest 1 million cycles between rat	esistance Oh under 65 city esistance t storage ten ed voltage a	≤100% °C at rated voltage ≤20% ≤100% Imperature, uncharged) Ind half rated voltage at			
Lifetime Under High Temperature Storage Lifetime	Change in internal re After operated for 150 Change in capa Change in internal re 4 years (under the highest 1 million cycles between rat	esistance Oh under 65 city esistance t storage tened voltage an constant cu	≤100% °C at rated voltage ≤20% ≤100% Imperature, uncharged) Ind half rated voltage at arrent			
Lifetime Under High Temperature Storage Lifetime Cycling Test	Change in internal re After operated for 150 Change in capa Change in internal re 4 years (under the highest 1 million cycles between rat 25°C with	esistance Oh under 65 city esistance t storage ten ed voltage a constant cu city esistance	≤100% °C at rated voltage ≤20% ≤100% superature, uncharged) and half rated voltage at arrent ≤20%			
Lifetime Under High Temperature Storage Lifetime Cycling Test	Change in internal re After operated for 150 Change in capa Change in internal re 4 years (under the highest 1 million cycles between rat 25°C with Change in capa Change in internal re	esistance Oh under 65 city esistance t storage ten ed voltage a n constant cu city esistance	≤100% °C at rated voltage ≤20% ≤100% superature, uncharged) and half rated voltage at arrent ≤20%			
Lifetime Under High Temperature Storage Lifetime Cycling Test	Change in internal re After operated for 150 Change in capa Change in internal re 4 years (under the highest 1 million cycles between rat 25°C with Change in capa Change in internal re	esistance Oh under 65 city esistance t storage ten ed voltage a n constant cu city esistance es 500V DCInsu	≤100% °C at rated voltage ≤20% ≤100% superature, uncharged) such half rated voltage at current ≤20% ≤100%			
Lifetime Under High Temperature Storage Lifetime Cycling Test Safety Specification	Change in internal re After operated for 150 Change in capa Change in internal re 4 years (under the highest 1 million cycles between rat 25°C with Change in capa Change in internal re on and Mechanical Featur Insulation resistance	esistance Oh under 65 city esistance t storage ten ed voltage a n constant cu city esistance es 500V DCInsu	≤100% °C at rated voltage ≤20% ≤100% Imperature, uncharged) Ind half rated voltage at arrent ≤20% ≤100%			
Lifetime Under High Temperature Storage Lifetime Cycling Test Safety Specification	Change in internal re After operated for 150 Change in capa Change in internal re 4 years (under the highest 1 million cycles between rat 25°C with Change in capa Change in internal re on and Mechanical Featur Insulation resistance Insulation intensity	esistance Oh under 65 city esistance t storage ter ed voltage a n constant cu city esistance es 500V DCInsu	≤100% °C at rated voltage ≤20% ≤100% Imperature, uncharged) Ind half rated voltage at arrent ≤20% ≤100% Leakage current ≤10mA			
Lifetime Under High Temperature Storage Lifetime Cycling Test Safety Specification	Change in internal re After operated for 150 Change in capa Change in internal re 4 years (under the highest 1 million cycles between rat 25°C with Change in capa Change in internal re on and Mechanical Featur Insulation resistance Insulation intensity Protection level	esistance Oh under 65 city esistance t storage ten ed voltage a constant cu city esistance es 500V DCInsu GR	≤100% °C at rated voltage ≤20% ≤100% Imperature, uncharged) Ind half rated voltage at arrent ≤20% ≤100% Lalation resistance ≥100MΩ Leakage current ≤10mA IP54			



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Outline Drawing(For Reference)



External Dimension						
Weight	Unit: kg			≤0.65		
Size	Unit: mm			240*47*76 (L*W*H)		
Shell	Plastic shell					
Module Fastener (For Reference Only)						
Positon	Name	Specification		Material	Quantity	Torque
Module installation	Screw bolt	M4×40	Stainless steel 10.9 level	6	3N*m	
	Flat gasket	Ф4		6		
	Spring gasket	Ф4		6		
	Nut	M4		6		
Module Output	Screw bolt	M5×10		2	6N*m	
Terminal Installation	Flat gasket	Ф5				2



TS/M048V0165FAA



APPLICATIONS

- New Energy Vehicle
- Engineering Machinery
- Rail transit
- UPS and Telecom Systems
- Industrial Equipment

FEATURES AND ADVANTAGES

- One Million Cycles Lifetime
- High Power Density
- Active Voltage Equilibrium
- Wide Range of Operation Temperature
- Temperature and Voltage Control

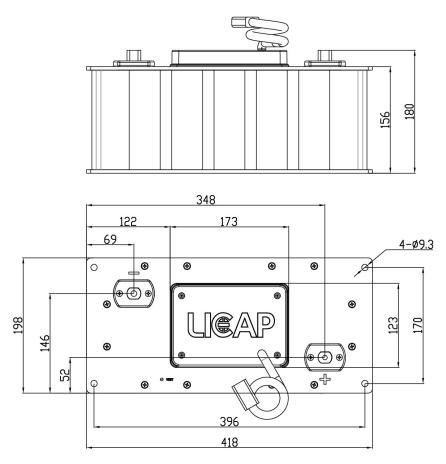


Electrical Perform	ance					
Constitution	Rated Capacity 165F					
Capacity	Capacity Toler	0/+20%				
	Rated voltage		48V DC			
Voltage	Surge Voltag	ge	51V DC			
Internal resistance	ESR(initial)	6mΩ			
Electric current	Maximum leakage current		6mA (25℃, after 72h)			
	Maximum continuo	us current	150A			
F	Maximum peak o	current	2000A			
Energy	Stored energy I	stored	52.8Wh			
Danier danaite	Energy density E _{max}		3.7wh/Kg			
Power density	Power density	6760W/Kg				
Temperature Feat	ures					
Temperature	Operating Tempera	ature Range	-40 ~ +65°C			
features	Storage Temperat	ture Range	-40 ~ +70°C			
Monitor and Cont	rol					
Alarm Monitor	Over voltage alarm	The voltage	voltage of single module≥2.7V			
Alarm Monitor	Temperature monitor		NTC10K			
Service Lifetime						
Lifetime Under	Operated over 10 y	ears under 25°	°C at rated voltage			
N1000000000000000000000000000000000000	Change in ca	≤20%				
Normal Temperature	Change in interna	≤100%				
Lifetime Under	After operated for 1	°C at rated voltage				
High Temperature	Change in ca	≤20%				
nigii Temperature	Change in interna	≤100%				
Storage Lifetime	4 years (under the highest storage temperature, uncharged)					
	1 million cycles between rated voltage and half rated voltage at					
Cycling Tost	25°C with constant current					
Cycling Test	Change in ca	≤20%				
	Change in interna	≤100%				
Safety Specification	on and Mechanical Feat	ures				
	Insulation resistance	500V DCInst	V DCInsulation resistance ≥100MΩ			
Safety	Insulation intensity	2500V DC	Leakage current ≤10mA			
	Protection level		IP65			
	Operation vibration	GI	3/T 11287-2000			
Mechanical	Transportation vibration	GE	3/T 4798.2-2008			
Vibration	Impact	Impact GB				



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Outline Drawing(For Reference)



External Dimension						
Weight	Unit: kg		≤14.2			
Size	Unit: mm		418*198*180 (L*W*H)			
Shell	Aluminum					
Module Fastener (For Reference Only)						
Positon	Name	Specification		Material	Quantity	Torque
	Screw bolt	M8×30			4	

Positon	Name	Specification	Material	Quantity	Torque
Module installation	Screw bolt	M8×30	Stainless steel 10.9 level	4	20N*m
	Flat gasket	Ф8		4	
	Spring gasket	Ф8		4	
	Nut	M8		4	
	Screw bolt	M8×12		1	
	Flat gasket	Ф8		1	
Module Output	Spring gasket	Ф8		1	
Terminal Installation	Screw bolt	M10×12		1	
	Flat gasket	Ф10		1	30N*m
	Spring gasket	Ф10		1,	

