

LAPS-4000

ACDC and DCDC power supply with safety interlock



Solution for

Baseplate cooled for DC and pulsed applications, 3 phase universal mains (no neutral) or DC input. Current sharing, up to 6 units in parallel. Special design to handle any kind of pulsed loads. Safety interlock PLe according to ISO 13849-1



Industry



Laser



Semicon



Analytical



MotorDrive

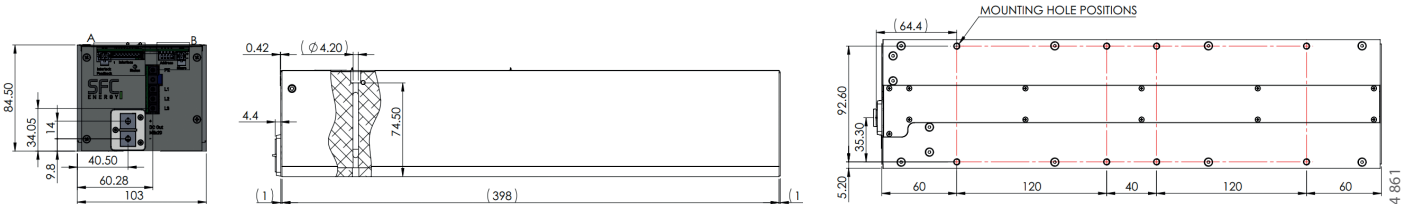


Telecom /
Broadcasting

Model		LAPS-4000-55	LAPS-4000-90	
Output	Voltage	9-55 V	15-90 V	
	Current	0-80 A	0-53 A	
	Power	4000 W		
	Ripple and noise	< 35 mVpp	<70 mVpp	
	Transient response	Load step of 50 % - 100 %, < 0,3 V		Load step of 50 % - 100 %, < 0.5 V
		Recovery time (< 0,5 %) = 0 ms		Recovery time (< 0.5 %) = 0 ms
		Load step of 0 % - 100 %, < 0,5 V		Load step of 0 % - 100 %, < 1 V
		Recovery time (< 0.5 %) < 1 ms		Recovery time (< 0.5 %) < 1 ms
	Line regulation	< 0.1 %		
	Load regulation	< 0.1 %		
Start-up time	< 1.5 s			
Hold up time	> 10 ms, at 90 % load			
Input AC	Voltage	180 V - 528 Vac, 3 Phase + PE. No derating at low line. 50/60 Hz, or 200-500 Vdc		
	Frequency range	47 - 63 Hz		
	Power factor (typ)	0.95		
	Efficiency at 4000 W, 200 Vac	91.7 %	91.7 %	
	Efficiency at 4000 W, 400 Vac	93.3 %	93.3 %	
	Inrush current	< 5 Arms, at 400 Vac		
	Leakage current	< 3 mA		
Input DC	Voltage	200 - 500 Vdc		
	Derating	0.35 %/V below 300 Vdc		
	Efficiency at 4000 W, 400 Vdc	92.8		
Protections	Over voltage, over temperature	< 59 V	< 100 V	
	Protections	Over temperature, Over current, input under and over voltage, phase loss etc.		
Functions	Output voltage programming	15 - 100 %		
	Current sharing	Yes, typical < 3 A between units	Yes, typical < 2 A between units	
	Remote ON/OFF	Yes		
	Safety interlock	2 interlock signals, 2 feedbacks		
	Remote control and monitoring	RS 485 interface		
	Status outputs	Fail and AC-fail		
	Interface	Galvanic isolated (except current share signals)		
Environmental	Cooling type	Baseplate		
	Baseplate temperature	0 - 50 °C, derating above 35 °C [- 4 % /°C]		
	Ambient temperature	0 - 70 °C		
	Storage temperature	- 40 °C - 85 °C		
	Humidity	5 - 90%, non-condensing		
Safety & EMC	Safety	IEC / UL / CSA 61010		
	Interlock	ISO 13849-1 PLe, MTTFd > 1000 Years, DCavg > 99 %		
	EMC emission	IEC 61000 - 6 - 4		
	EMC Immunity	IEC 61000 - 6 - 2		
	Semi	F 47		
Others	MTBF	> 250.000 hours		
	Dimensions	103 mm x 402.4 mm x 84.5 mm (4.06 x 15.84 x 3.33")		
	Parallel/series operation	Max. 3 units in series, up to 6 units in parallel	Max. 2 units in series, up to 6 units in parallel	

Interface

Output	Connector	M5 screw connectors																																
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