

Ordering Information

Model Number	Output Voltage	Vout Adjust Range (-0% / +15%)	Minimum Load	Max. Continuous Load (Free Air)	Max. Peak Load (Free Air) ¹	Max. Continuous Load (Forced Air) ²	Max. Peak Load (Forced Air) ²	Regulation ³	Ripple (p-p) ⁴
CNS653-ME ^{5,6}	12 V	12 - 13.8 V	0 A	54.2 A	62.5 A	NA	NA	±2%	120 mV
CNS653-MF ⁵	12 V	12 - 13.8 V	0 A	30.8 A	54.2 A	54.2 A	62.5 A	±2%	120 mV
CNS653-MU	12 V	12 - 13.8 V	0 A	33.3 A	54.2 A	54.2 A	62.5 A	±2%	120 mV
CNS655-MU	24 V	24 - 27.6 V	0 A	16.7 A	27.1 A	27.1 A	31.3 A	±2%	240 mV
CNS658-MU	48 V	48 - 55.2 V	0 A	8.3 A	13.5 A	13.5 A	15.6 A	±2%	480 mV

¹ Peak load current not to exceed 10 seconds, Ta = 50 °C.

² Requires at least 400 LFM of airflow.

³ At 25 °C including factory setpoint, line voltage and load current variations.

⁴ Peak-to-peak ripple measured at the output terminal with 20 MHz bandwidth and 10 µF (tantalum capacitor) in parallel with 0.1 µF capacitor across the output.

⁵ Optional suffix "-ME" (end-fan) and "-MF" (open-frame) available on the 12 V output.

⁶ 80 PLUS certified.

Input Connections (-MU and -MF Suffix)

Pin	Function	Power Supply Side	System Side
TB1	PE	Dinkle EHK762V-03P Max Torque: 4kgf-cm	Recommended Wire Size: AWG #22 to #14
TB2	L2/Neutral		
TB3	L1/Line		

Input Connections (-ME Suffix)

Pin	Function	Power Supply Side	System Side
IEC Inlet	Input AC	IEC 60320 C14 (Male)	IEC Cord C13 (Female)

Output Connections

Pin	Function	Power Supply Side	System Side
BAR1	-Vout	Output Terminal Screw: M4X8 (4X) Max Torque: 10kgf-cm	Molex 19099-0032 or 19141-0063 for AWG #16 to #14 Molex 19099-0048 or 19141-0083 for AWG #12 to #10
BAR2	-Vout		
BAR3	+Vout		
BAR4	+Vout		

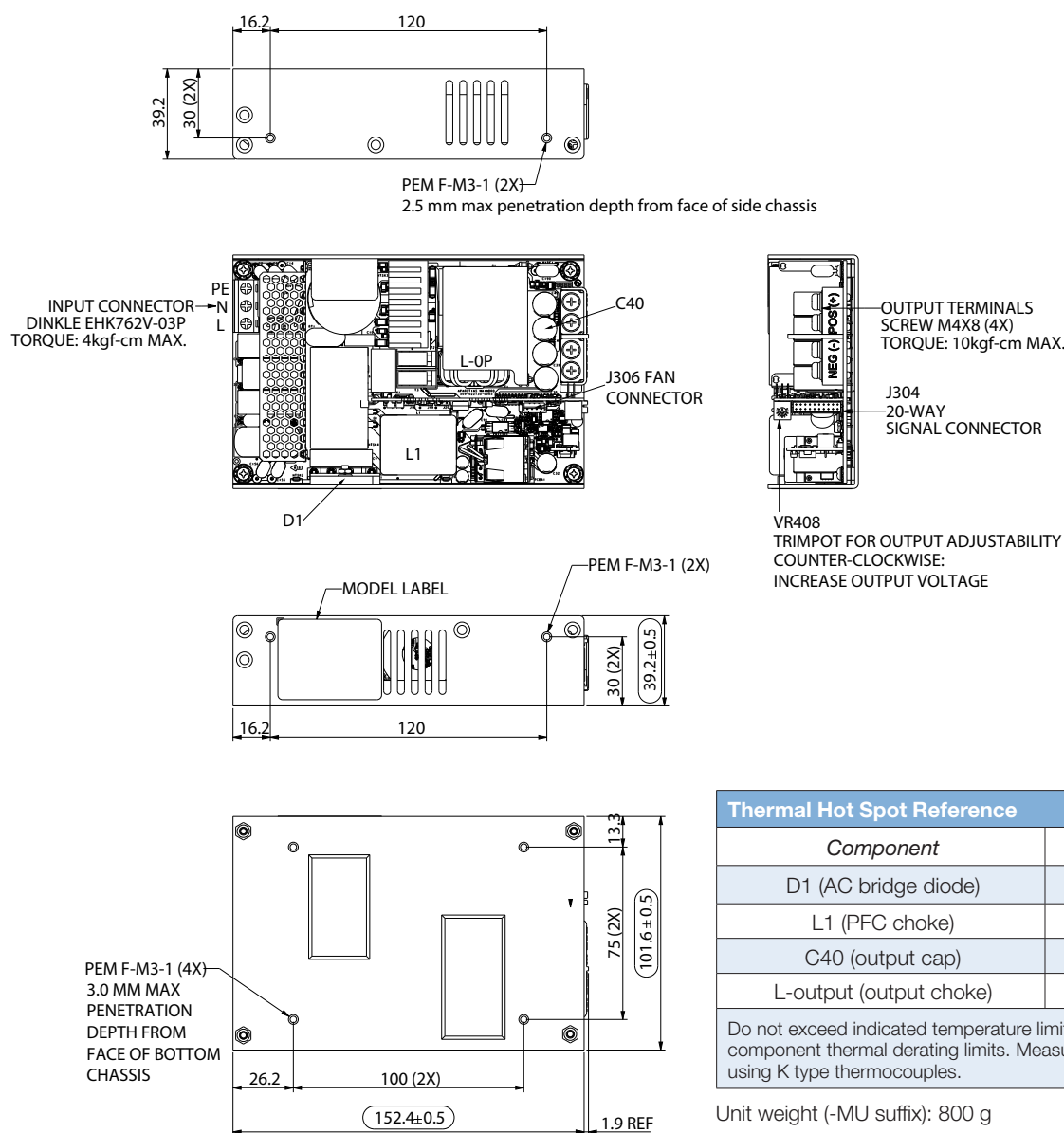
Other Output and Control Connections (Connector J304)

Pin	Designation	Description	
1	5VSB	+5 V Standby Output	J304 20-Pin Connector (PSU Side): Landwin: 2052P20008T or CviLux: CI0120P1HD0-LF
2	5VSB	+5 V Standby Output	
3	5VSB_GND	+5 V Standby Output Return/Ground	
4	SCL	Serial Clock Signal (I2C)	Recommended Mating Connectors: CviLux: CI0120SD000 (housing) CI01TD21PE0 (contact pins)
5	A0	EEPROM Address	
6	SDA	Serial Data Signal (I2C)	
7	I_SHARE	Active current share pin	Landwin: 2050S2000 (housing) 2053T021V (contact pins)
8	SYS_GND	Return Ground for signals and I2C	
9	12VFAN	12 V Fan Output	
10	REMOTE INHIBIT	Output Inhibit Pin (Main Output)	JST: PHDR-20VS (housing)
11	FAN_RTN	12 V Fan Output Return/Ground	SPHD-001T-P0.5 (contact pins)
12	VIN_GOOD	Input Line OK Signal	See ACCESSORIES Section
13	FAN_PWM1	FAN PWM	
14	PWOK	Output Power OK Signal	
15	FAN_TACH1	Fan1 Tacho Signal	
16	FAN_OVERRIDE	External Fan Sensor for Override	
17	FAN_FAIL	Fan Fail Signal	
18	FAN_FAULT_EN	FAN Fault Enable Due to low RPM	
19	REMOTE_SENSE+	Positive Remote Sense	
20	REMOTE_SENSE-	Remote Sense Return	

Fan Output Connector for -MU, -MF Suffix (Connector J306)

Pin	Function	Description	
1	12VFAN	12 V fan output	J306 4-Pin Connector (PSU Side):
2	FAN_RTN	12 V fan return	CviLux: CI0104P1HK0-LF
3	FAN_PWM1	Fan PWM	Landwin: 2003P0401V
4	FAN_TACH1	Fan1 tach signal	Recommended Mating Connectors:
			CviLux: CI0104S0000 (housing)
			CviLux: CI01T01MPP0 (contact pins)
			Landwin: 2001S0400 (housing)
			Landwin: 2005T011R (contact pins)

Mechanical Drawings (“-MU” Suffix for U-Base Construction/12 V, 24 V and 48 V)



Thermal Hot Spot Reference

Component	Temperature Limit (-MU)
D1 (AC bridge diode)	105 °C
L1 (PFC choke)	115 °C
C40 (output cap)	100 °C
L-output (output choke)	125 °C

Do not exceed indicated temperature limits to ensure operation is within the component thermal derating limits. Measure the component temperatures using K type thermocouples.

Unit weight (-MU suffix): 800 g