FEATURES

HP3200 Series **3200W 3 Phase Power Supply**

- Active Power Factor Correction
- Redundant operation
- 93% Efficiency
- True Three Phase Delta & Y 480Vac Input
- Single Wire Current Sharing
- I2C interface, PMBus Compatible
- Variable fan speed control
- UL, cUL, CB, CE and DEMKO Certified
- RoHS Compliant
- Two Year Warranty

SPECIFICATIONS

	Model	HP3200-2121
Output	DC Output	12Vdc (3200 Watts with self-contained fan cooling) and 12VSB
	Ripple & Noise	1% Pk to Pk
	Line Regulation	±0.2%
	Load Regulation	±1% on both outputs
	Transient Response	2% Maximum deviation; returns to initial condition in 1 msec max.
	Long Term Stability	0.01% after 20 minute warm-up
	Hold-Up Time	12mS minimum
	OVP	115% to 135% on both outputs
Input	Input Range	180-523VAC 3 Phase
	Frequency	47-63Hz
	EMI filter	EN55022 Class A, FCC
	Inrush Current	≤64A@480
	Input Current	30A @ 305VAC
	Isolation (Input to Output)	4242 VDC
	Efficiency	93% Max.
	Active PFC	0.99
	Switching Frequency	130KHz
	Leakage	≤3.5mA
Protections	Short-circuit	Constant current with delayed latching method on the primary output. The 12V standby utilizes the hiccup method.
	Overload (1)	Constant current with delayed latching method on the primary output. The 12V standby utilizes the hiccup method.
	Over Temperature	The power supply will shut down if temperature is greater than 100°C (internal temperature). The power supply is self-recovering once the internal temperature falls bellow 71°C
Environment	Humidity	Up to 95% non-condensing
	Temperature Coef.	±0.01% / °C
	Operating Temperature	0 to ±50°C continuous duty, full rating. Derate linearly to 50% of full rating at ±71°C.

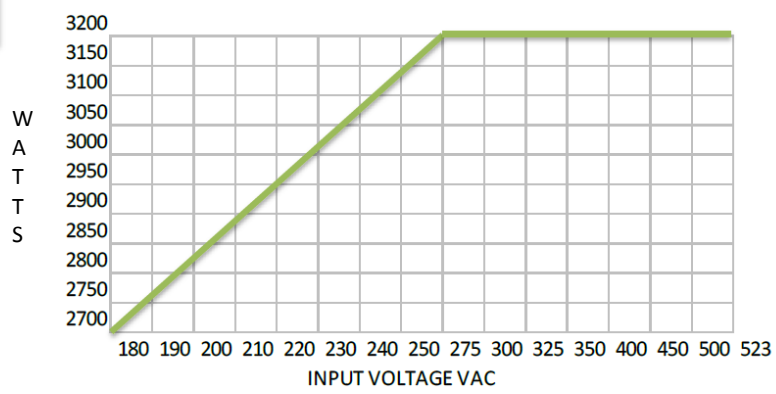
Autec Power Systems
667 E Cochran St, Simi Valley, CA93065
Tel: (805)522-0888
Fax: (805)522-8777

Safety	UR	UL60950-1 Second Edition
	cUR	cUL60950-1 Second Edition
	DEMKO	EN60950-1 Second Edition
	CE	
	CB	IEC 60960
Features	FET Isolation	Internal FET isolation provided for N+1 redundant operation.
	Current Sharing	Outputs will current share within 5% when interconnected by a single wire
	Digital Voltage Adjustment	The voltage adjustment allows +/- 10% remote adjustment
	PS On	The secondary outputs are enable only upon mating a shorter enable pin to output common on the customers backplane.
	AC Ok	A TTL low signal provides a 4ms warning prior to DC outputs dropping out of regulation.
	Fault	A TTL high logic signal provides warning of output voltage below 90% of nominal, fan fault or over temperature.
	Power Okay	A TTL high logic signal is provided when the input and output voltages are within normal operating conditions.
	PS Present	A pin on the power supply is used to identify that the power supply has been installed into the customers backpane.
	Inhibit	A TTL low logic signal sent to inhibit the main output. Upon release of the signal, output are restored.
	I2C	Monitors temperature, output voltage, input voltage, input current, and output current; control Fan speed, Fan LED and connects to a serial NVRAM which is programmed with serial number. PMBUS software allows monitoring of overall operation of power supply.
Other	Dimensions	16.98" L*3.9" W * 1.58"H (431.3mm * 99.0mm * 40.2mm)
	Weight	6.7 lbs.
	RoHS	Complies with EU Directive 2011/65/EU for the restriction of certain hazardous substances

Model No. / OUTPUT VOLTAGE / CURRENT RATINGS CHART

Model No.	O/P Voltage (Vdc)	Minimum	Maximum
HP3200-X121	12V	0A	266.6A
	12VSB	0A	2.0A

Derating Curve



Autec Power Systems
667 E Cochran St, Simi Valley, CA93065
Tel: (805)522-0888
Fax: (805)522-8777

Notes

1. The constant current method allows for a 5-second delay before the power supply shuts down if the output current rating exceeds 110% to 130% of maximum rated output current. The input must be recycled manually or digitally reset.

LED Operation

Status of power supply	Green LED	Yellow LED
Normal Operation	ON	OFF
Standby Mode	BLINK	OFF
PSU Tripped due to INPUT UNDER VOLTAGE	OFF	ON
PSU Tripped due to OUTPUT OVER VOLTAGE	OFF	ON
PSU Tripped due to FAN1 & FAN2 FAULTS	OFF	ON
PSU Tripped due to OVER TEMP FAULT	OFF	ON
PSU Tripped due to OUPUT OVER CURRENT FAULT	OFF	ON
PSU Tripped due to INPUT OVER POWER FAULT	OFF	ON
PSU has a Warning Condition due to OUT OV	ON	BLINK
PSU has a Warning Condition due to OUT UV	ON	BLINK
PSU has a Warning Condition due to OVER TEMP.	ON	BLINK
PSU has a Warning Condition due to FAN1 SPEED.	ON	BLINK
PSU has a Warning Condition due to FAN2 SPEED.	ON	BLINK
PSU has a Warning Condition due to INPUT OVER CURRENT	ON	BLINK
PSU as Warning Condition due to OUTPUT OVER POWER	ON	BLINK

Autec Power Systems Tel: (805)522-0888
667 E Cochran St, Simi Valley, CA93065 Fax: (805)522-8777

Limit Values

Parameters of PSU	Limit Value Default
Over-Temperature Fault Limit	120°C
Over-Temperature Warning Limit	110°C
Over-Temperature Fault Recovery Limit	75°C
Over-Temperature Warning Recovery Limit	107°C
MAIN OUTPUT	
Maximum Output Current Limit	268 Amps
Maximum Output Power Warning Limit	2800W at 180VAC Input 3300W at 250VAC Input
Minimum Output Under Voltage Limit	11.0 VDC
SECONDARY OUTPUT	
Maximum Output Current Limit	2.50 Amps
Maximum Output Over Voltage Limit	12.80 VDC
FAN SPEED	
Minimum Speed for Fans 1 & 2	2500 RPM

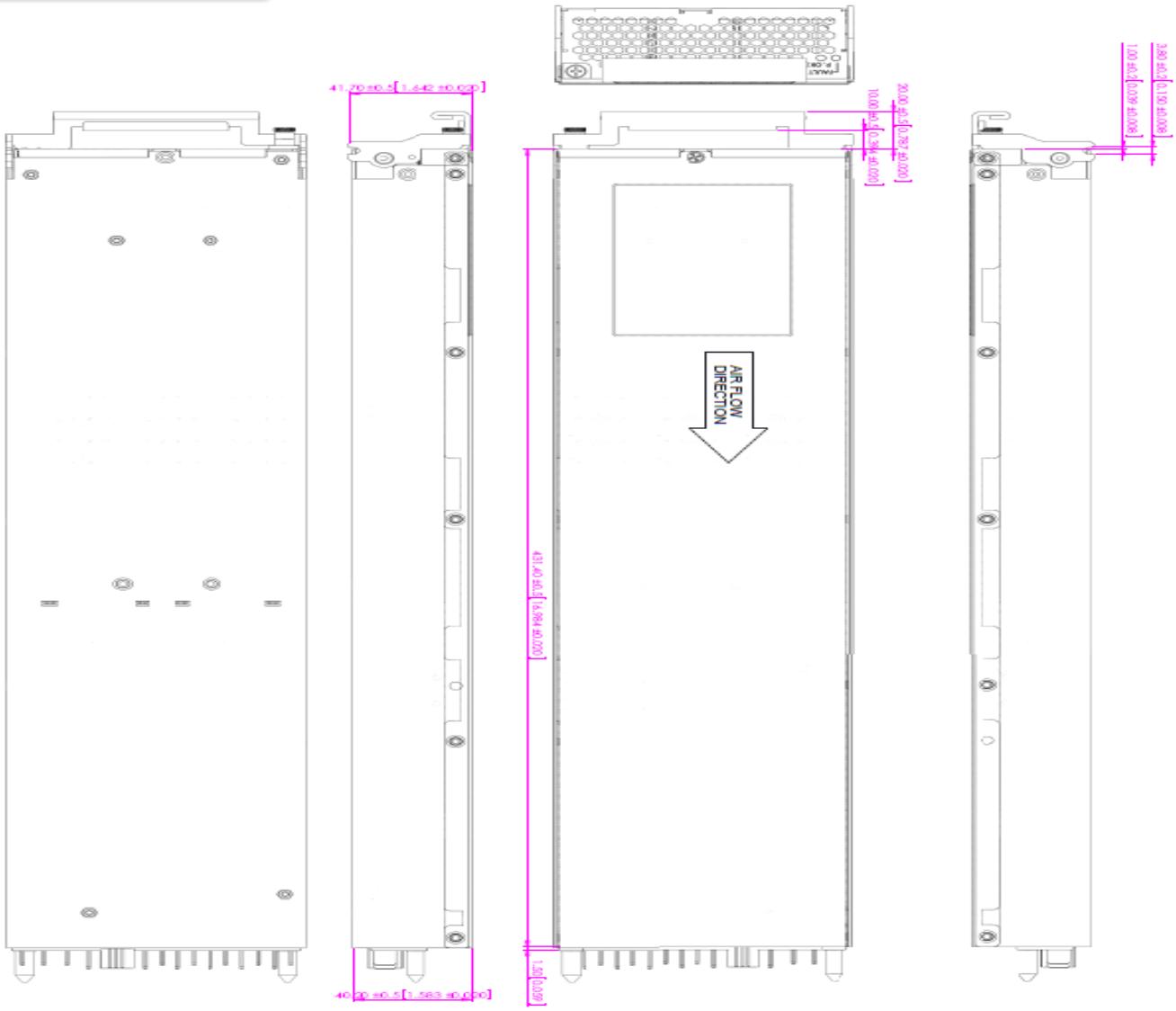
Autec Power Systems Tel: (805)522-0888
667 E Cochran St, Simi Valley, CA93065 Fax: (805)522-8777

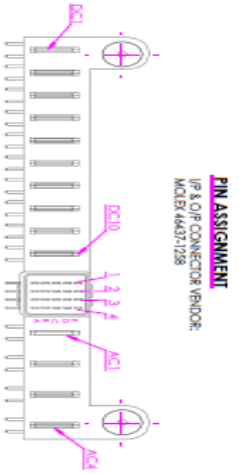
SMBus Alerts

Status of power supply	SMB_ALERT State
Power up	LOW
Normal Operation	HIGH
Standby Mode	LOW
PSU Tripped due to INPUT UNDER VOLTAGE	LOW
PSU Tripped due to OUTPUT OVER VOLTAGE	LOW
PSU Tripped due to FAN1 FAULT	LOW
PSU Tripped due to FAN2 FAULT	LOW
PSU Tripped due to OVER TEMP FAULT	LOW
PSU Tripped due to OUPUT OVER CURRENT FAULT	LOW
PSU Tripped due to INPUT PIN OVER POWER FAULT	LOW
PSU has a Warning Condition due to OUT OV	LOW
PSU has a Warning Condition due to OUT UV	LOW
PSU has a Warning Condition due to OVER TEMP. See Note.1	LOW
PSU has a Warning Condition due to FAN1 SPEED	LOW
PSU has a Warning Condition due to FAN2 SPEED	LOW
PSU has a Warning Condition due to INPUT OVER CURRENT	LOW
PSU as Warning Condition due to OUTPUT OVER POWER	LOW
PSU has a Warning Condition due to UNDER TEMPERATURE.	LOW

Autec Power Systems
667 E Cochran St, Simi Valley, CA93065
Tel: (805)522-0888
Fax: (805)522-8777

Mechanical Specifications



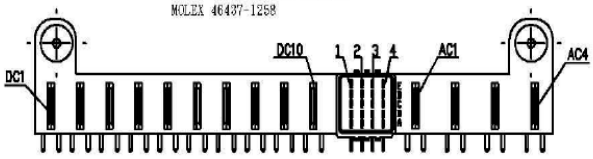


Pin Configuration

INPUTS :

ASSIGNMENT	A.C. VOLTAGE	CURRENT	PIN NBR
L1:	3-PHASE		AC4
L2:	220V	50~440Hz	AC3
L3:	or		AC2
GND:	380V		AC1
	or		
	480V		

PIN ASSIGNMENT
I/P & O/P CONNECTOR VENDOR:
MOLEX 46437-1258



	1	2	3	4
E	12VI	12VSB	-12VS	COM
D	AC_OK	12VSB	ALERT	DC_OK
C	RESET	SDA_1	SCL_1	NU
B	A2	A1	A0	NU
A	PSPresent	+12VS	PS_KILL	PS_ON

OUTPUTS :

ASSIGNMENT	D.C. VOLTAGE	CURRENT	PIN NBR
VO1:	12V ⎓	266A	DC1,3,5,7,9
DC COM:			DC2,4,6,8,10
12VSB:			E2
12VI:			E1
+12VS:			A2
PS_Present:			A1
COM:			E4
DC_OK:			D4
PS_KILL:			A3
PS_ON:			A4
NU:			B4
A0:			B3
A1:			B2
A2:			B1
-12VS:			E3
AC_OK:			D1
12VSB:			D2
ALERT:			D3
NU:			C4
SDA_1:			C2
SCL_1:			C3
RESET:			C1

Autec Power Systems Tel: (805)522-0888
667 E Cochran St, Simi Valley, CA93065 Fax: (805)522-8777