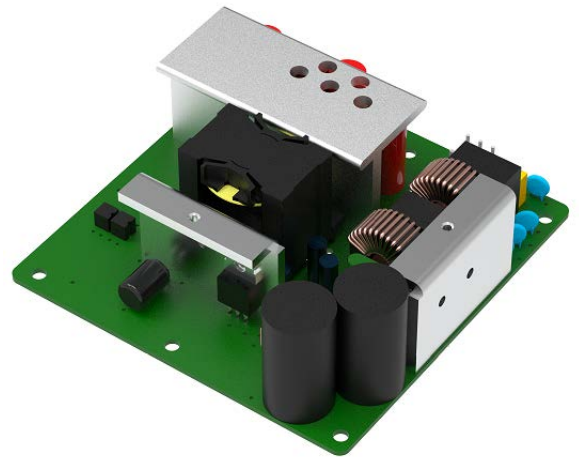


The PLD080-2DAL054-24 is an open frame 80 Watt AC/DC converter with 12VDC @ 2.67A and 24VDC @ 2A outputs with an input range of 190 VAC to 265 VAC.



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Features

- 3000 VAC Isolation
- Open frame construction
- MTBF >550,000 Hours
- RoHS Compliant
- Designed to meet EN55022 B &
- FCC Class B
- 3 year warranty

Applications

Industrial Controller Power Supply

Model List

PLD080-2DAL054-24

Input Specifications

Parameter	Min.	Typ.	Max.	Units
Input Voltage Range	190		265	VAC
Input Frequency		50		Hz
Input Over-voltage Protection			300	VAC
Input Current Steady State (220 VAC)		1		A
Inrush Current			70	A
Input Fuse	3.15A/250V			

Output Specifications

Parameters	Min	Typ.	Max	Units
Output Voltage		12.0		VDC
Output Current	40		2670	mA
Output Current (70°C)	40		2000	mA
Total Voltage Accuracy		5		%
Cross Regulation	11.4		12.6	VDC
Load Regulation		2		%
Line Regulation Vin=Min. to Max.		2		%
Ripple & Noise (20MHz)			120	mV P-P
Load Transient Recovery Time 50%-100% step change 100%-50% step change			20	mSec
Voltage change due to load transient			1	VDC
Start-Up Time		1		Sec

Rise Time (10%-90%)			50	mSec
Hold-Up Time (Full Load)	20			mSec
Output over Current			150	%
Short Circuit Protection < 5 minutes no damage	Automatic recovery			
Parameters	Min	Typ	Max	Units
Output Voltage		24		VDC
Output Current	0		2000	mA
Output Current (70°C)	0		1500	mA
Total Voltage Accuracy		5		%
Cross Regulation	22.8		26.2	VDC
Load Regulation		2		%
Line Regulation Vin=Min. to Max.		2		%
Ripple & Noise (20MHz)			240	mV P-P
Load Transient Recovery Time 50%-100% step change 100%-50% step change			20	mSec
Voltage change due to load transient			1	VDC
Start-Up Time		1		Sec
Rise Time (10%-90%)			50	mSec
Hold-Up Time (Full Load)	20			mSec
Output over Current Test one output at a time			150	%
Short Circuit Protection < 5 minutes no damage	Automatic recovery			

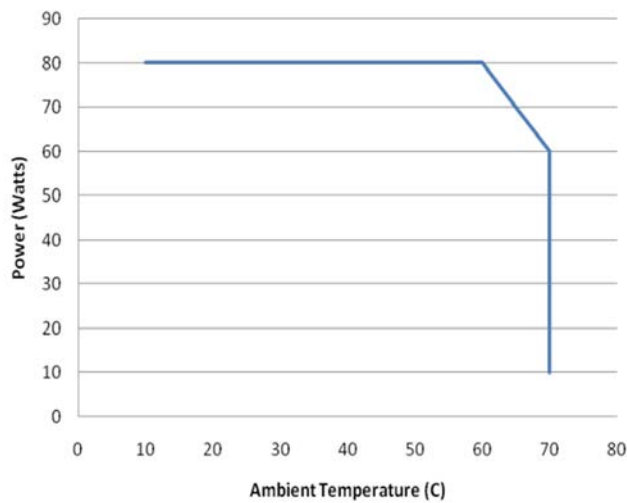
General Specifications

Parameters	Min	Typ.	Max	Units
Efficiency @ max load	80			%
Power Factor	0.4			
Capacitive Load			1000	uF
Isolation Voltage Input to Output 3 sec @ <10mA	3000			VAC
Isolation Voltage Input to Chassis 3 sec @ <10mA	1500			VAC
Leakage Current to Safety Ground			300	uA
Grounding	At least one mounting hole shall provide an electrical connection to chassis ground			
Operating Temperature (Ambient)	-20		+70	°C
Storage Temperature	-50		+125	°C
Humidity	5		90	%
MTBF	550,000			Hours
Cooling	Free Air Convection			
Shock & Vibration	ISTA 3A Shipping Vibration Test			

Agency Approvals	Designed to meet EN60950-1
Conducted EMI	Designed to meet FCC Part 15 class B (6 dB Margin)

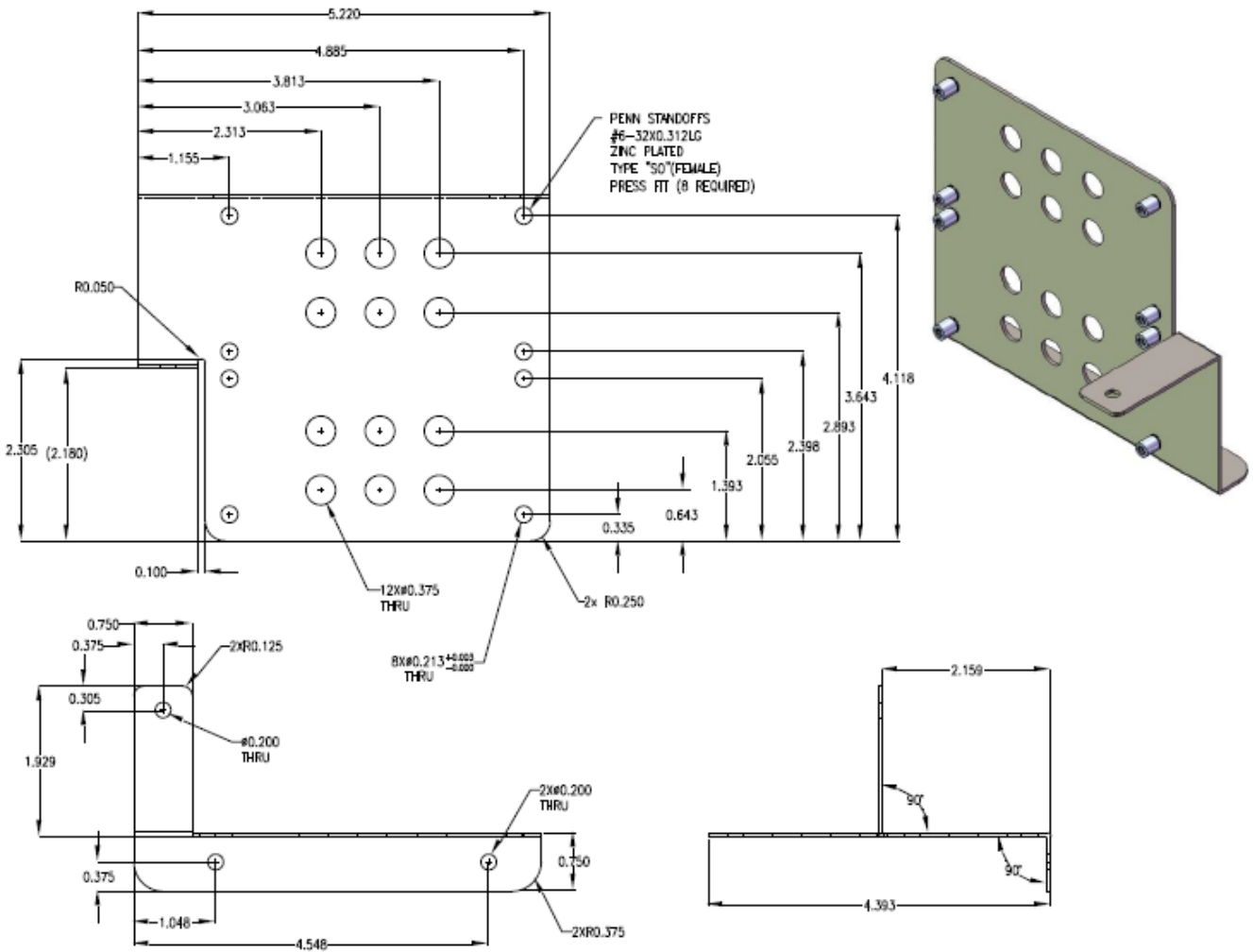
Notes:

1. Specifications typical at $T_a=+25^{\circ}\text{C}$, 220VAC, 50Hz input voltage, rated output current unless otherwise noted.
2. Ripple & Noise measured with a $0.1\mu\text{F}$ ceramic and $22\mu\text{F}$ electrolytic in parallel with output, 20MHz bandwidth.
3. Long term (> 5 minute) short circuit operation may cause damage to the unit.

De-Rating Curve**Mechanical Drawings**

PCB Mounting Bracket provided as a reference for PCB design.

PCB Bracket is not included with the PLD080-2DAL054-24.

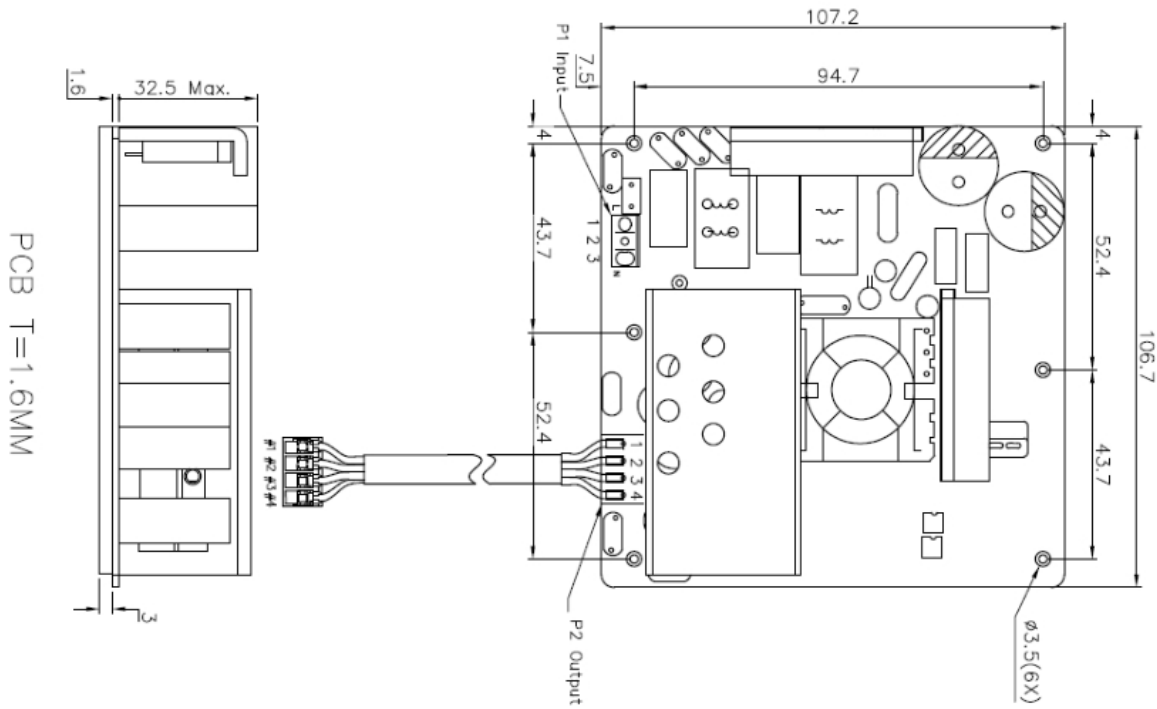


**Mechanical Tolerances
Unless noted**

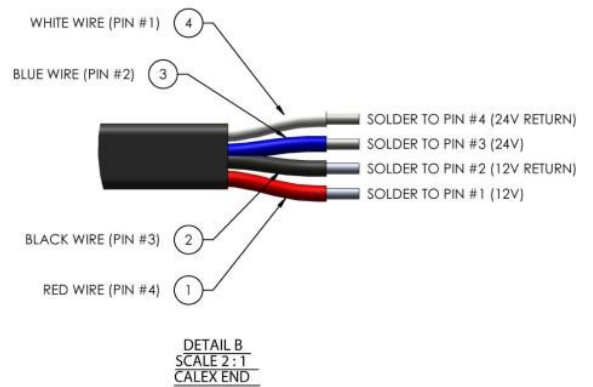
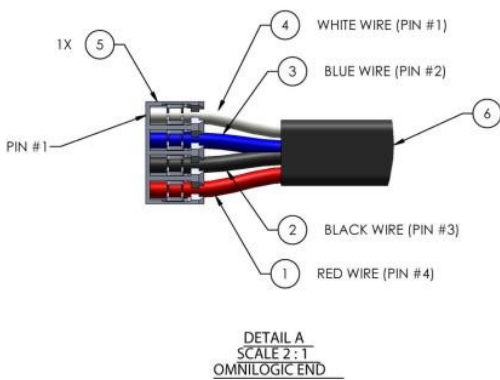
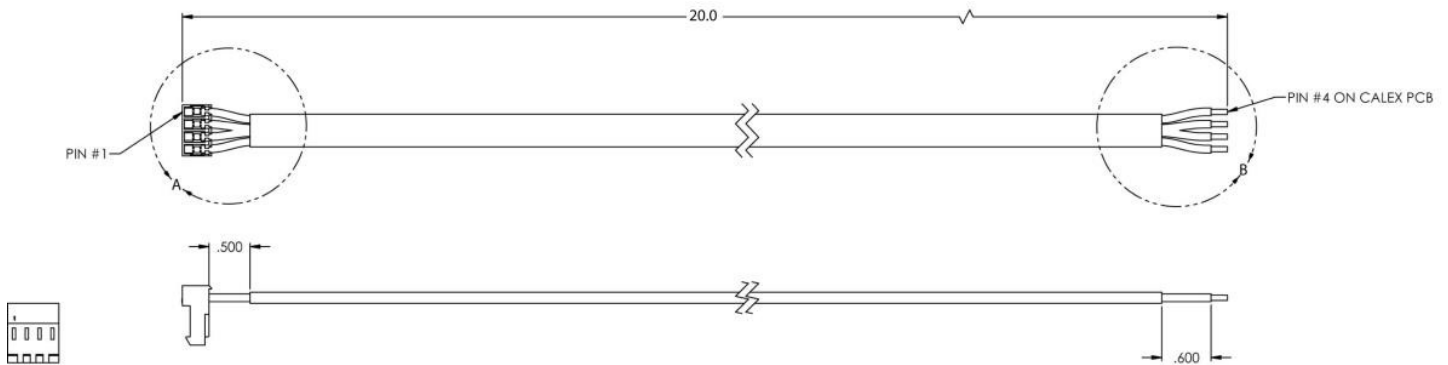
X.XXX ±0.020 inches

PCB shall fit within 4.3"x 4.3"x 1.25" envelope

Each mounting hole will have a keep out area of 0.4 " in diameter



Mechanical Tolerances Unless noted X.X :±0.125 m



PIN	Color	Output
1	White	24V Rtn
2	Blue	24V
3	Black	12V Rtn
4	Red	12V

Dimensions are in inches

Revision History

Date	Revision	Remarks		
		Section	From	To
2020-09-11	V1.0	First Released		