

DC-DC Converter – 120Vdc-24Vdc-1000W

Catalog Item Number 100-1602-PL-01



FEATURES

- Max continuous output power rating: 1000W
- DC to DC converter employing switch mode technology
- Input voltage range from 100Vdc to 140Vdc
- Fixed output voltage: 24V dc
- Industrial operating temperature range: -40C to +55C
- Vertical or Horizontal installation
- Soft-Start feature
- Common Input/Output Negative configuration



ELECTRICAL

Characteristics	Value			Units	Comments
	Min	Typical	Max		
Nominal Input Voltage	100	120	140	Vdc	
Input Low Voltage Shutdown		95		Vdc	Programmable firmware feature to be added on request
Input Low Voltage Hysteresis	+/-2	-	+/-5	Vdc	Programmable firmware feature to be added on request
Input Low Voltage Disconnect		85		Vdc	Hardware disconnect feature could be added on request
Input Low Voltage Hysteresis	+/-2	-	+/-5	Vdc	Programmable firmware feature to be added on request
Minimum start-up voltage		48		Vdc	Control circuits will be operational above 16Vdc
Input Current	8.0	9.2	10.5	Adc	
Input Fuse		20		Adc	
Nominal Output Voltage	22	24	28	Vdc	Programmable value as additional feature
Nominal Output Voltage ripple		100		mV	Voltage RMS
Nominal Output Current		42		Adc	
Max Output Shortcircuit Current			45	Adc	
Max Output Overload Power			110	%	overload for 10 sec
Output Short-circuit Protection		16		Vdc	If in an overload condition output voltage drops under 16Vdc – short circuit protection is triggered

ENVIRONMENTAL

Characteristics	Value			Units	Comments
	Min	Typical	Max		
Operating Temperature	-40	-	+55	C	De-rating applies above 50C
Storage Temperature	-45	-	+70	C	
Humidity	10	60	85	%	Non -condensing
Module cooling		-			Natural convection – vertical mount
Module cooling		External fan			External Fan - optional

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MECHANICAL

Characteristics	Value			Units	Comments
	Min	Typical	Max		
Length		12.00		inch	305.00mm
Width		8.00		inch	203.00mm
Height		5.25		inch	134.00mm (3U)
Weight		6000		g	
Mounting				Vertical or Horizontal mount	
Input Wires AWG	10	-	12	AWG	
Output Wires AWG	24	-	12	AWG	
3D Model					File: 100-1603-ASY-01.pdf

Note: Options

Model B – Base Model – No Status Display Panel



Model D – Advanced Model with Status Display Panel



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CERTIFICATION and COMPLIANCE

- Power Converter compliance with - UL1012; UL 1741
- EMC compliance - Radiated Emissions - FCC Part 15B
- EMC compliance - Electrostatic Discharge - IEC 61000-4-2
- EMC compliance - Surge Immunity - IEC 61000-4-5
- EMC compliance – Radiated Immunity - IEC 61000-4-6
- Enclosure Protection – IP30 – boards are conformal coated
- Flammability rating – UL94V0

OTHER TECHNICAL DETAILS

- Installation vertical or horizontal – mounting tabs and 4 bolts minimum M5 x 20mm
- Isolation – Input to Chassis – 1500Vdc
- Isolation – Output to Chassis – 1000Vdc