

# CON-300W

## DC-DC CONVERTER



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**This range of wall mounting DC-DC Converters are available with either 110Vdc or 48/60Vdc inputs. The stabilised output is floating and isolated from the input.**

All units in the range have overload and short circuit protection as standard. Cooling is via an exterior heatsink which is integrated into the case. This helps to ensure that the CON-300W is ideal for applications that demand high reliability and low maintenance. These units are protected to IP30 and can operate in temperatures of -25°C to +60°C.

- + Extended Operating Temperature Range**
- + Wide DC Input Voltage Range**
- + Volt Free Alarm Contacts**
- + Rugged Construction**
- + Convection Cooled**
- + Parallel Operation**

# CON-300W

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## FURTHER DETAILS

Should power needs increase these units can be operated in parallel thus safeguarding your initial investment. Tolerance to shock and vibration according to EN50155 is another feature making these units ideal for use on railroad rolling stock. Along with other mobile applications the CON-300W can be found in many heavy duty industrial locations.

### SELECTION TABLE

Part Number	Maximum Power	Input Voltage	Output Voltage
CON-300W 110-48	300W	110VDC [77 - 150VDC], [165VDC peak 1 sec]	48VDC [adj. $\pm 2V$ ]
CON-300W 110-24	300W	110VDC [77 - 150VDC], [165VDC peak 1 sec]	24VDC [adj. $\pm 2V$ ]
CON-300W 60-60	300W	60VDC [38 - 72VDC]	60VDC [adj. $\pm 2V$ ]
CON-300W 60-48	300W	60VDC [38 - 72VDC]	48VDC [adj. $\pm 2V$ ]
CON-300W 60-24	300W	60VDC [38 - 72VDC]	24VDC [adj. $\pm 2V$ ]

## TECHNICAL DATA

	110-48	110-24	60-60	60-48	60-24
Electrical Safety	EN 60950, VDE 0805 Overload and short circuit protected				
Warranty	24 months				
INPUT					
Input Voltage Nominal	110VDC	110VDC	48 / 60VDC	48 / 60VDC	48 / 60VDC
Input Voltage Range	77 - 150VDC [165VDC peak 1sec]	77 - 150VDC [165VDC peak 1sec]	38 - 72VDC	38 - 72VDC	38 - 72VDC
OUTPUT					
Output Voltage	48VDC	24VDC	60VDC	48VDC	24VDC
Adjustable	46 - 50VDC	22 - 26VDC	58 - 62VDC	46 - 50VDC	22 - 26VDC
Stability	± 0.5Vdc				
Efficiency	>85%				
Output Power	300W				
Parallel Operation	Via passive load current sharing, falling curve				
AMBIENT CHARACTERISTICS					
Ambient Temperature	-25°C to +45°C (non-condensing)				
At Installation Point	-25°C to +60°C (non-condensing)				
Relative Humidity	<75% average per year				
Shock & Vibration	According to EN 50155 (mounted in the frame), frequency range: 5 - 150Hz transfer frequency: 8.2Hz				
Amplitude	Below transit frequency: 7.5mm				
Amplitude Acceleration	Above tranist frequency: 20m/s <sup>2</sup>				
EMC					
Burst	According to EN 50121-3-2, 2kV criteria A, directly coupled				
Surge	1.8kV/source 100Ω 1.0kV/source 2Ω (for alarm contact 1.5kV)				
Conductive HF	3Vrms 1kHz AM, 80% AM, 150kHz - 80MHz				
ESD	8kV air, 6kV contact				
Emitted Disturbance Immunity	10 V/m 80MHz - 1GHz, 80% AM, 900MHz pulse modulated				
Conductive emissions	99dB $\mu$ V QP 150kHz - 500kHz, 93dB $\mu$ V 500kHz - 30MHz				
Conductive disturbance radiated	30 - 230MHz 47 dB $\mu$ V/m QP, 230MHz - 1GHz 40 dB $\mu$ V/m QP (10m measuring distance)				
Test Voltage	According to EN 50155 with 1.5kVAC (primary -> secondary /PE) 500VAC (sec > primary/PE)				
SIGNAL					
Alarm Output	Potential free alarm contact, contact load 60VDC, 100mA				
Indicator	LED, yellow = converter ok				
MECHANICAL DATA					
Dimensions	140 × 85 × 180mm (W × H × D)				
Weight	Approx. 1.7kg				
Protection Class	IP30				
Cooling	Convection via integrated heat sink				
CONNECTION					
Input	Cage spring clamp, 2.5mm <sup>2</sup>				
Output	Cage spring clamp, 2.5mm <sup>2</sup>				
Signal	Cage spring clamp, 2.5mm <sup>2</sup>				

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.



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