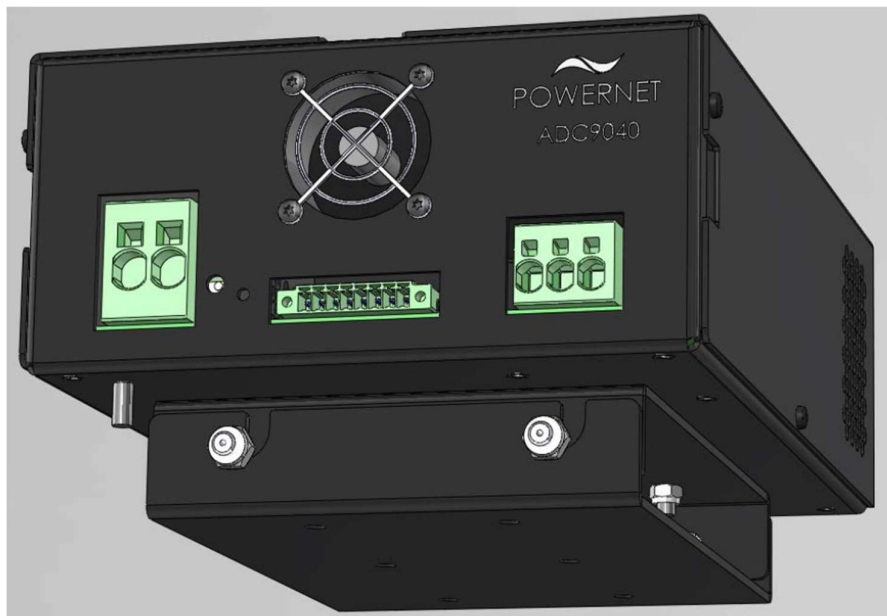


PRODUCT SPECIFICATION

ADC9040 500W AC/DC CHARGER 230VAC/24VDC

FOR RAIL



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Version history

Date	Version	Remarks	Author
2011-03-02	1.00	Product specification created	Jari Manninen/ Powernet Oy

1 General description

ADC9040 is 500W isolated AC/DC charger with 230VAC input and 24V output.

1.1 General Data

Parameter	Value/range
Safety	EN 50155
EMC	EN 50121-3-2
Cooling	Internal fan
Mechanical dimensions	W: 165 mm, H: 81,7 mm, D: 240 mm (mounting brackets excluded)
Enclosure	Aluminium enclosure
Weight	2,0 kg
Output grounding	Isolated
Over temperature protection	NA

1.2 Input data

Parameter	Value/range	Note
Input voltage	230V _{AC} / 190 – 250 V _{AC}	
Input current	2,5A	100% load, 230VAC
Power factor	>0,97	at load range 50...100%
Input current limitation	Fuse T10A	
Inrush current limitation	NCT resistor 10 ohm	
Input frequency	47...63 Hz	
Input current harmonics	According to EN 61000-3-2	100% load, 230VAC
Isolation voltages	According to EN 60950	1,5kVAC/3,0kVAC or corresponding DC-values

1.3 Output data

Parameter	Value/range	Note
Output voltage (unit 32A02)	29,0V _{DC}	fixed voltage
Output voltage (unit 32A01)	29,4V _{DC} @T _{batt} =25degC (depends on battery temperature)	NTC-resistor connected to sensor pins
Output current	See chart	
Output power limitation	See chart	
Efficiency	>90%	at load range 50...100%
Battery temperature compensation	-30mV / degC	only in unit 32A01
Temperature compensation sensor	2,2kOhm NTC resistor	only in unit 32A01
Output ripple voltage	<50mV _{rms}	(20Hz...300kHz, 25°C)
Rev.-polarity-protection	n/a	
Isolation - output / ground	50V _{DC}	68V VDR connected between output - and PG

