

## Aegis Power Solution

### AG2605

#### Electric Vehicle Power Converter

(Rev A02, 06/08/10)



**Specifications: (25°C, nominal line, 100% load unless otherwise specified.)**

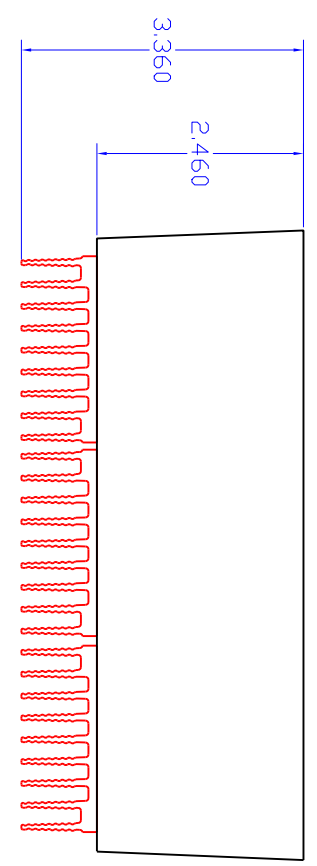
<b><u>DC Input Voltage:</u></b>	336VDC Nominal, 185VDC to 375VDC Range.
<b><u>DC Input Current:</u></b>	6A Max @ 185VDC.
<b><u>Input Power:</u></b>	1108W Maximum.
<b><u>Output Power:</u></b>	920W Maximum at 13.8VDC Output.
<b><u>Output Current:</u></b>	66.6A Maximum.
<b><u>Efficiency:</u></b>	85% Typical, 83% Minimum.
<b><u>Startup Time:</u></b>	1 Second Maximum.
<b><u>Inrush Current:</u></b>	20A Maximum.
<b><u>Output Voltage:</u></b>	+13.8VDC, 66.6A, 920W.
<b><u>Temperature Regulation:</u></b>	+/-0.02% per degree Centigrade.
<b><u>Line/Load Regulation:</u></b>	13.8VDC output: +/- 1%, 10-100% Load.
<b><u>Output Ripple:</u></b>	150mV (Max. pk-pk 20MHz BW).
<b><u>Current Limit:</u></b>	Short Circuit Protected, Auto Restart.
<b><u>EMC:</u></b>	No Filtering.
<b><u>Safety:</u></b>	Designed to meet UL 60950 (not submitted to UL).
<b><u>Temperature:</u></b>	-32 °C to +55°C Operating Ambient. -40 to +100°C Non-Operating. +85C transient, Thermal Shutdown 90+/-2°C, automatic recovery.
<b><u>Cooling:</u></b>	Customer to provide cooling air in line with fins.
<b><u>Size:</u></b>	See attached Mechanical Drawing.
<b><u>Weight:</u></b>	4.94 lb. Maximum.
<b><u>Environmental:</u></b>	Water Tight Enclosure, Water Resistant Connector.
<b><u>Connector:</u></b>	See attached Mechanical Drawing.
<b><u>Shock:</u></b>	15G, 11msec half sine wave pulse, three shocks each axis.
<b><u>Vibration:</u></b>	0.04G <sup>2</sup> /Hz 80-350 Hz Random Vibration.
<b><u>Humidity:</u></b>	0-95% non-condensing.

DWG NO.		REV		SH		REV	
ZONE	REV	DESCRIPTION	DATE	APPROVED			
A01		INITIAL RELEASE	05/09/06	JFS			

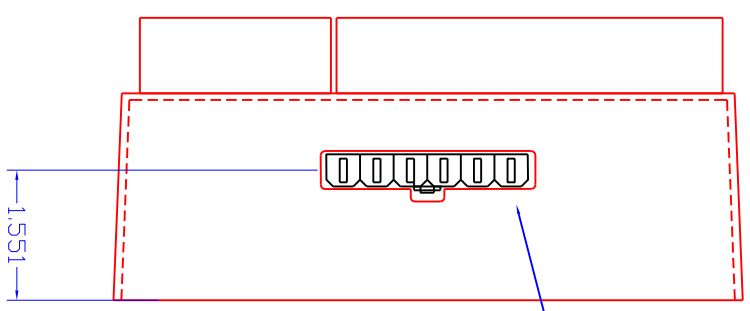
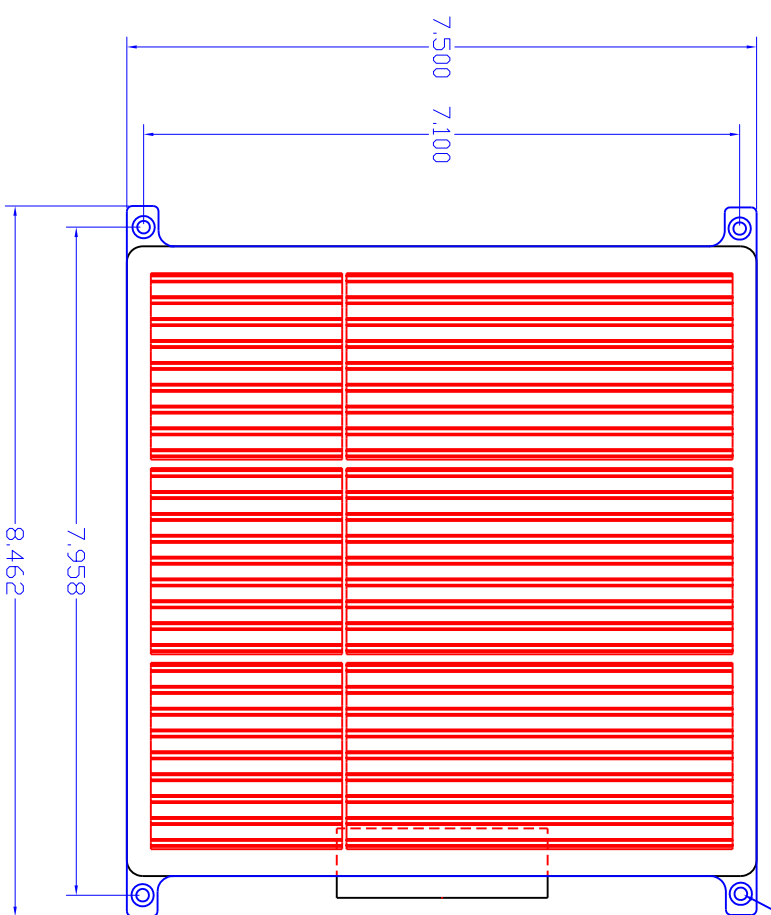
CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

NOTES: UNLESS OTHERWISE SPECIFIED

1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M-1994.
2. MATERIAL:
3. FINISH:



4X Ø.150 THRU HOLE,  
COUNTER SINK  
MOUNTING HOLE



INPUT / OUTPUT CONNECTOR  
MOLEX Mini-Fit Sr. P/N42816-0612.

Connector Wiring Table

Connection	Signal
Pin 1	PDS Input
Pin 2	NEG Input
Pin 3	PDS Output
Pin 4	PDS Output
Pin 5	NEG Output
Pin 6	NEG Output

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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS AND DEGREES		CONTRACT NO.		APPROVALS		DATE		TITLE	
* N/A	.xx * .02	* 5		DRAWN	MVS	08/17/06		AEGIS POWER SYSTEMS MURPHY, NORTH CAROLINA	
.xxx * .005				CHECKED				AG2605 CONCEPT DRAWING	
				PROJ. ENG.				AEGIS P/N: AG2605	
				FINISH				SIZE FSCM NO. DWG NO.	
				SEE NOTE 3				D 06ES8 AG2605-M01	
				DO NOT SCALE DRAWING				REV	
								A01	
								SCALE 1/1	
								SHEET 1 OF 1	

A

B

C

D

A

C

D