



US Hybrid



## Three-Phase DC-AC Converter DA02 (Export Power)

### PRODUCT OVERVIEW:

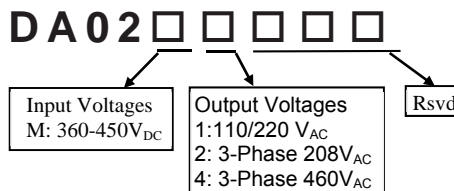
DC-AC converters utilizes advanced Digital Power Processing with high frequency magnetic design to provide efficient and high bandwidth dynamic response for voltage and current regulations with input and output voltage and current and power limits protections. The cost effective high frequency proven magnetic design with robust redundant control provides fast response, flexibility, reliability, light weight and volume product for Fuel Cell and alternative energy industry. Extensive diagnostics via CAN-J1939 and RS232.

### FEATURES:

- DC Input Voltage Range: 360-450V<sub>DC</sub>
- Output Voltage 110/220 V<sub>AC</sub>(15kW) or 208 V<sub>AC</sub>-3Φ, 30kW 60/50 Hz.
- Efficiency: 94% rated
- Short Circuit, OC, O/U V and OT protection.
- Stand alone operation.
- CAN command, control and diagnostics. Output voltages, Input and output current/power can be regulated or limited via CAN. Input and Output voltages, currents, power and temperature reporting.
- CAN communication parameters reconfigurable by user through RS232 interface.



### MODEL NUMBER:



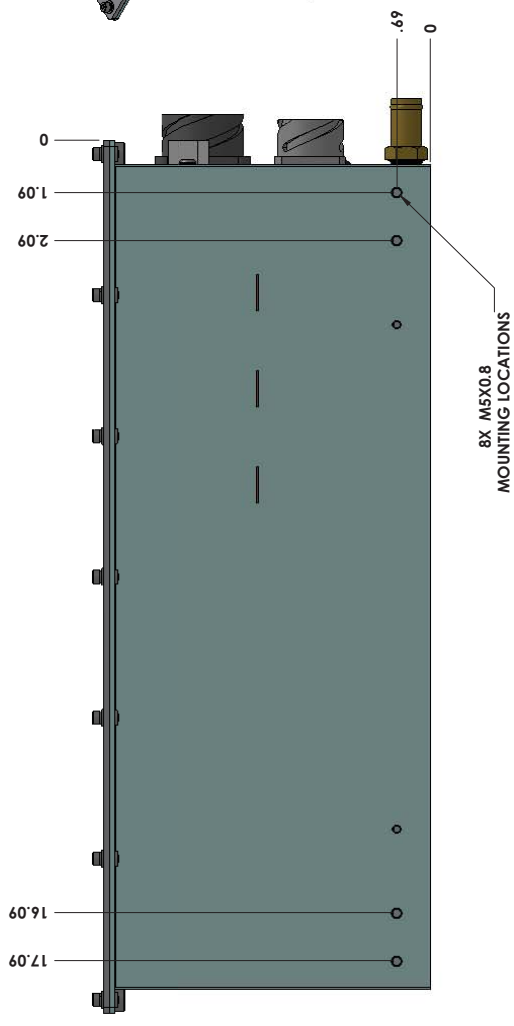
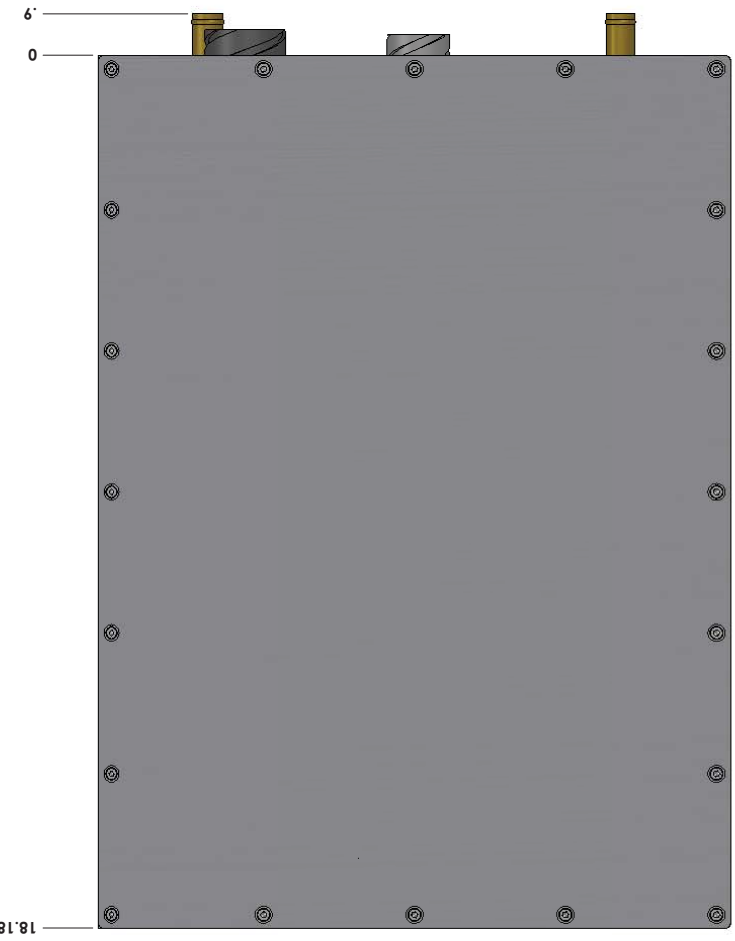
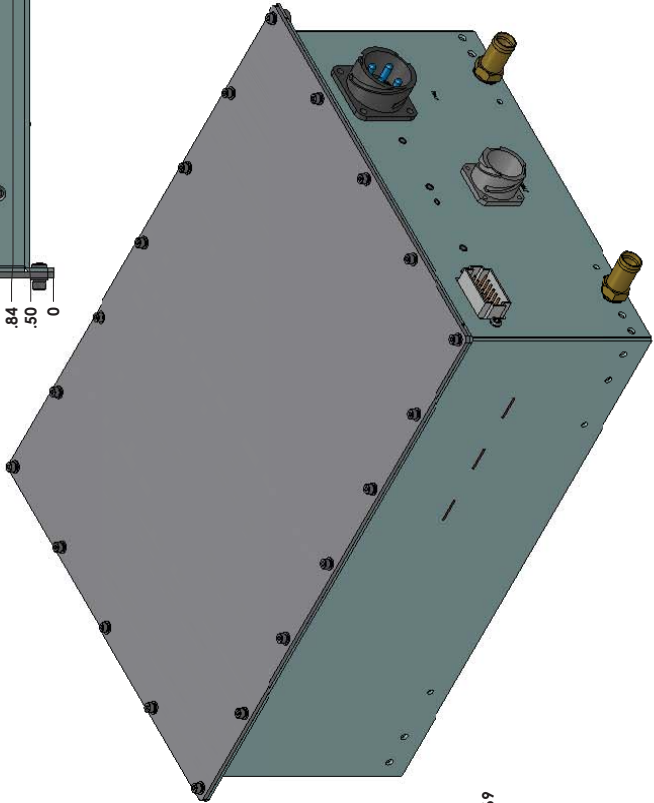
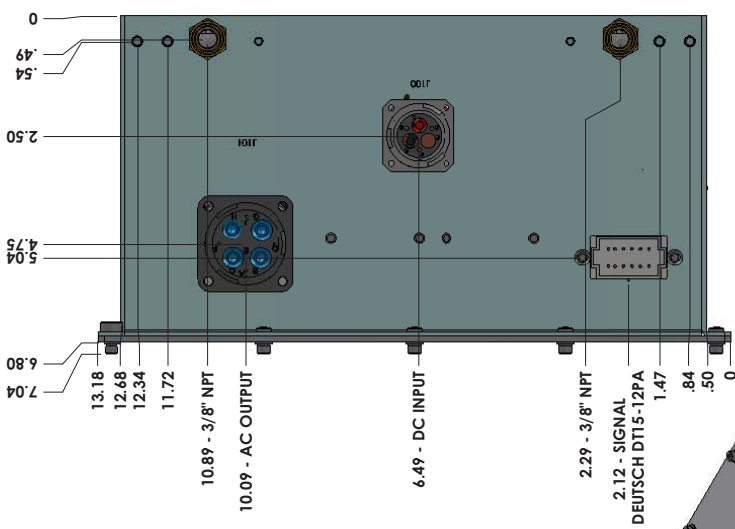
### APPLICATIONS:

Export Power, Hybrid Electric and Fuel Cell Vehicles and Renewable Energy Systems.

<b>Signal Connector: DEUTSCH DT15-12PA</b>	
1	GND
2	PWR_ON (Opto, 10-30V)
3	12V_POS
4	12V_NEG
5	VOUT_ANALOG_CMD
6	ANALOG_RTN
7	#FAULT (active low OC)
8	CAN_H
9	CAN_L
10	RS232_RX
11	RS232_TX
12	#PROGRAM
<b>Power Connector: ITT or Tyco</b>	

Line regulation (±10%)	±2 %
Load regulation	±2%
Ripple	< ±1% + 300 mVp-p
Load transient (10-90%)	< 5% typical
Response time	250 ms typical
Turn-on rise time	Soft-start, 450 ms typical
Output protection	Overload and short circuit
Cooling	Liquid cooled < 60°C, 12 Lpm
Operating temperature	-20°C to +70°C
Load de-rating	2.5% /°C from 60°C liquid
Storage temperature	-40/C to +105/C
Efficiency	> 94% (40%-100% load)
Isolation resistance	> 1 MΩ at 700Vdc
Weight	28 kg.

US HYBRID	
NAME	DATE
DRAWN F. ERICSSON	01-13-10
CHECKED	
ENG. APPR.	
MFG. APPR.	
G.A.	
TITLE: <b>30kW AUX POWER INVERTER OUTLINE &amp; MOUNTING</b>	
REV	SIZE DWG. NO.
<b>A</b>	<b>C DA020000DA</b>
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SCALE: 1:2	
SHEET 1 OF 1	



- NOTES: UNLESS OTHERWISE SPECIFIED
1. INVERTER WEIGHT: 1.64 kg (36 LBS.)
  2. COOLANT: 50/50 ETHYLENE GLYCOL / WATER.
  3. MIN FLOW: 11.4L / MIN (3.0 GPM).
  4. PRESSURE DROP: 14.05 kPa (2.1 PSI)@40 °C.
  5. INLET TEMP: -20 °C TO 60 °C.
  6. OPTIONAL HOSE FITTINGS: 3/8", 1/2", 5/8", 3/4" OR 90 DEG. FITTINGS.