

3PD-60096 Electric Vehicle Drive

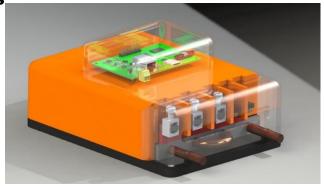
Invention House provides custom and off-the-shelf power drive solutions for demanding OEM applications. These compact drives operate in rugged environments over a wide range of voltage, frequency, and temperature. A certified small business, Invention House has been delivering inverters and motor controls with in-house design, test and production for 20 years.

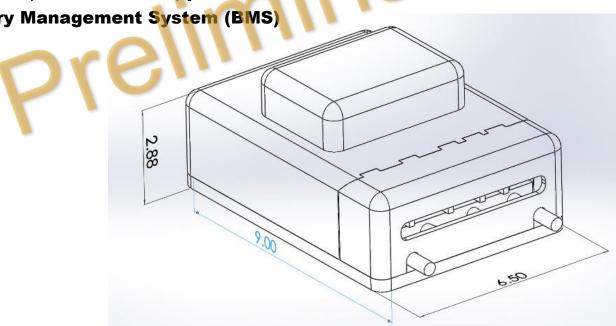
- **Electric Vehicles, Battery Carts & Lifts**
- Fork machines, stackers
- **DCV In Three-Phase Out**
- Up 108Vpc Input, 600Amps rms Output
- **Drives Induction or PM motors**
- **Vector Control, Torque Regulating**
- -40C to +55C Operation
- **No Electrolytic Capacitors**



- **Identical footprint to Curtis 1236**
- **Optional User Boards:**
 - CAN Bus, other serial interfaces
 - 5-24V I/O, limit switches, pressure sensors







See reverse side for technical specifications

3PD-60096 Electric Vehicle Drive

Model		3PD-60096	Custom
Maximum Continuous Motor Capacity (HP)		25Нр	
Input	Input Current (Adc)* *Input current varies depending on the power supply impedance	280Adc continuous 560A peak	
	Rated Voltage	108Vdc	
	Rated Frequency	DC	
	Allowable Voltage Fluctuation	-25% to +10%	
Output	Rated Output Capacity (kVA)	39KVA	
	Rated Output Current (A)	300	
	Overload Tolerance	200% of rated output current for 60s	
	Carrier Frequency	18kHz	
	Maximum Output Voltage (V)	75Vac proportional to input	
Control Characteristics	Control Method	V/F Control	Sensorless Vector, ECM
	Frequency Control Range (Hz)	2-400	
	Frequency Accuracy	1% -40 ° C to 55 ° C	
	Frequency Setting Resolution	.25Hz	
	Frequency Setting Signal	Serial, Preset speed Se	rial, 0-10V,4-20ma, presets
	Speed Response	5 Hz	
	Current Limit	Runs in limit, does not trip	
	Accel/Decel time	3 to 20 second	
	Braking Torque	N/A	
	Main Control Functions	Speed Control, Run in current limit, upper lower limits for frequency reference, fault restart	
Protection Functions	Motor Protection	Current limit function but not UL recognized	
	Overload Protection	Drive folds back when output current exceeds 200%	
	Overvoltage Protection	Stops when DC bus voltage exceeds approx. 125 V	
	Undervoltage Protection	Stops when DC bus voltage falls below approx. 80 V	
	Heatsink Overheat Protection	100 ° C	
	Stall Prevention	Stall prevention is available during acceleration, deceleration, and run	
Environment	Area of Use	Indoors, outdoors with appropriate enclosure	
	Ambient Temperature	-40 °C to +55 °C	
	Storage Temperature	-40 °C to +60 °C	
	Humidity	95 RH% or less (no condensation)	
	Altitude	1000 meters w/o derating, up to 3000 m with derating	
	Vibration	2grms per MIL STD-810 Composite Wheel	
	Shock	40gs per MIL STD-810	