



TRANSISTORIZED MOTOR CONTROLLER
EVT1000 1000 Amp Series
Motor Controller 48 - 144 Volt

Specification Sheet

Authorized Service



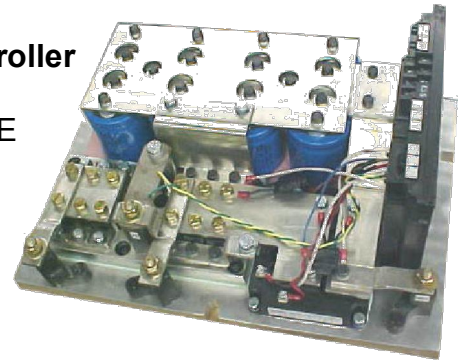
GE Electric Vehicle Controls



COMPLETE KIT INCLUDES

1000A EVT1000 Transistorized Series Motor Controller

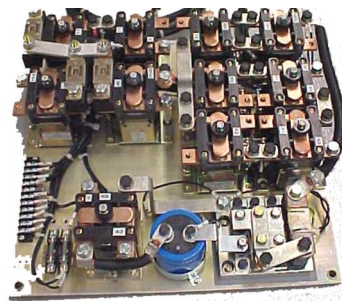
IGBT Technology with programmable control card allows for easy programming using the GE LX handset or Sentry software.



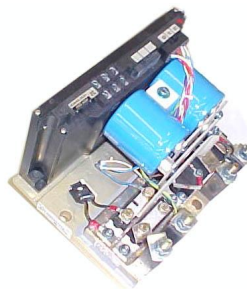
Contactor Panel (Reverser)

Contactors:

- Line
- Forward and Reverse
- 1A (Bypass)
- Regenerative Braking
- Hydraulic Pump
- Hydraulic Steer Pump
- Power and Control Fuses
- Interconnecting wiring and cables
- Hydraulic Pump Interrupt Driver



Hydraulic Pump Panel (EVT100)



Dash Display



Accelerator



Power Steering Panel (STAR)



Kit shown designed to replace GE EV1-D Systems

SPECIFICATIONS AND FEATURES

On-Board Diagnostics	Standard, Displayed to Handset or Dash Display
Hourmeter	1-Displayed to Dash1-Secure (Handset Read)
Stored Status Codes	16 Codes with BDI and Hourmeter Reference
Card Type Selection	Standard Enable/Disable Features
PWM Frequency	2 KHZ
Creep Speed	Adjustable 2% to 15% On Time
Current Limit	Adjustable See C/L Curves
Plugging	Adjustable 200 to 800 Amps
Pedal Position Plug	Adjustable 100 to 800 Amps Can be Disabled
Ramp Start	Standard
1A Operation Arcless	Standard
Full Power Transition	Standard with 1A Contactor
Controlled Acceleration	Adjustable 0.1 to 22 seconds
1A Timed Pick-Up	Follows CA by 0.2 seconds when Accel Volts are < 0.5V or Accel Ohms are < 200
1A Thermal Hold-Off	Standard at 90° Cutback at 20% Time On
1A Plugging Hold-Off	Standard
PMT (Fault Shut Down)	Standard Look Ahead and Reset Two Count
Thermal Protection	Standard 90° C Cutback
Static Return to Off	Standard 2 Second Delay
Voltage Range	48 – 144 VDC
Accelerator Input	Accelerator Input 0-5000 Ohms, 0-3.5 VDC
Low Battery Operation	Standard, 50% at 36VDC
Reverse Batt Protection	Standard
Ambient Temperature	-30 to +50 °C
Coil Drivers	
- F/R - Line	On-Board
- 1A - Regen	On-Board
- SP	On-Board
Shorted Driver Protection	Standard
Shorted 3 REC Protection	Standard
Switch Loading for F/R and Speed Input	Logic Current
Regen Operation Arcless	Standard
Regenerative Braking	Adjustable Regen C/L = 75A to 630A Regen Start = 15% to 96%
Steer Pump Time Delay	Seat = 0.5 to 63 Seconds Neutral = 0.5 to 63 Seconds
Accelerator Volts Hold-Off	Standard, Accel volts > 2.5 VDC
Battery Volts Check	Standard
RS-232 Comm Port	Standard
BDI	Standard
Stall Current	1000A - 2 Minutes in Air
One Hour Rating	300A with 0.3 °C/Watt Heatsink at 40 °C Ambient
Plug Current Limit	
- Min-Max at 1 Second	330/800 Amps
- Min-Max at 3 Second	330/650 Amps

ENVIRONMENTAL TESTING

Temperature Storage Test

-40 ° for 48 Hours and +85 ° for 48 Hours

Thermal Cycle Test

+85°C to 40 ° Cycle Every 6 Hours for 24 Hours

Humidity Test

95% Humidity, +25 ° C to +50 ° Cycle Every 6 Hours for 72 Hours

Shock Test

10 Shock's of 20G's on Each of Three Axis (Total of 30 Shocks)

Functional Test at Temperature

4 Hours at -40 ° C and 4 Hours at +70 ° C (Operate at Temperature)

Vibration Test

0.10" Amplitude from 10 to 30 Hz and 0.025" Amplitude from 40 to 60 Hz

ORDERING INFORMATION (Order thru FSIP)

Traction and Contactor Panel: 05-T1KR144G02

05-TIKR	144	G02
BASIC	ARG 1	ARG 2

ARG 1 Voltage

048 - 48 VDC

072 - 72 VDC

096 - 96 VDC

120 - 120 VDC

144 - 144 VDC

ARG 2 Options

G01 – Contactor panel with Pump Contactor

G02 – Contactor panel with Pump Panel

Hydraulic Pump Panel:

05-T1KP-LPW 48 – 72 Volt

05-T1KP-HPV 96 – 144 Volt

Power Steering Panel:

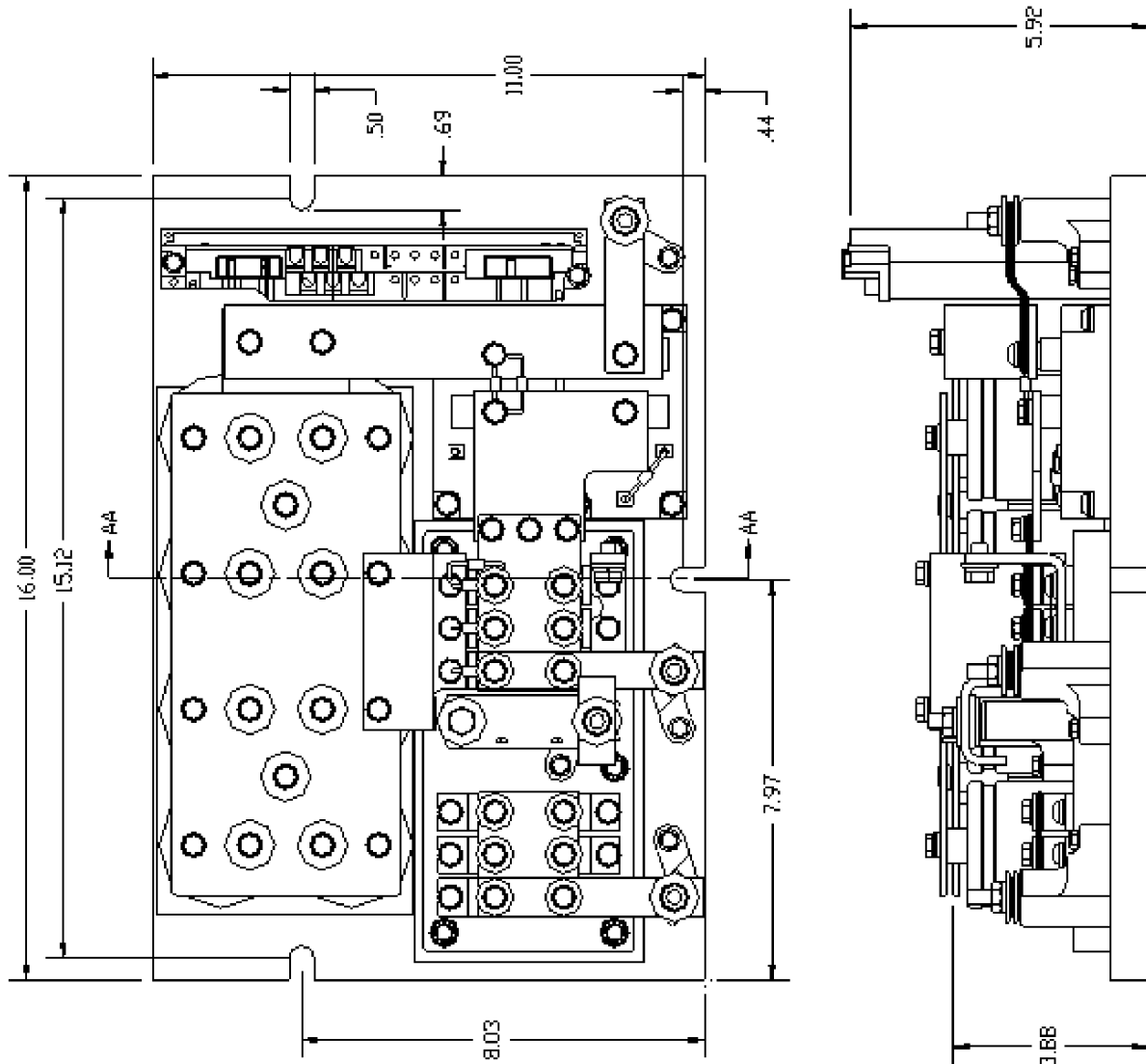
50-72L350NN5S 72 Volt

50-HVL125NN5S 96 – 144 Volt

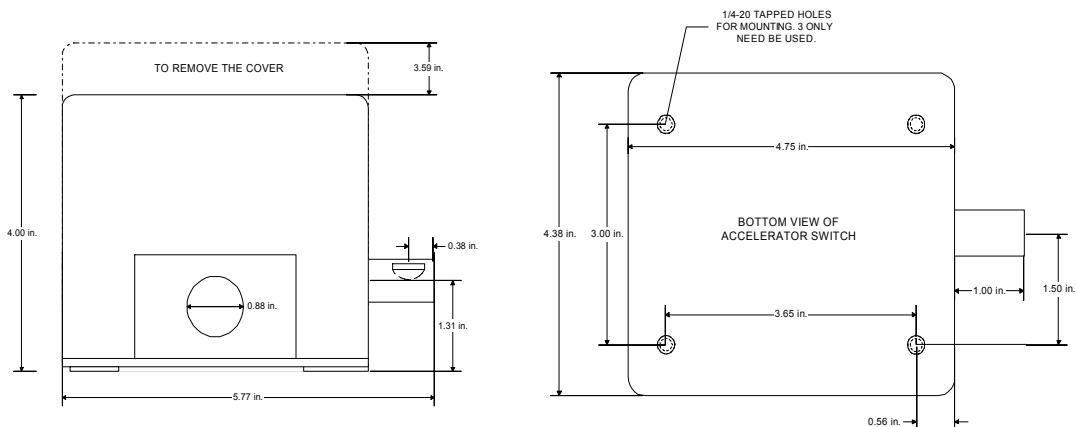
Dash Display with Harness: 05-T1KDD-01

Accelerator Switch Assembly: 05-T1KAC-01

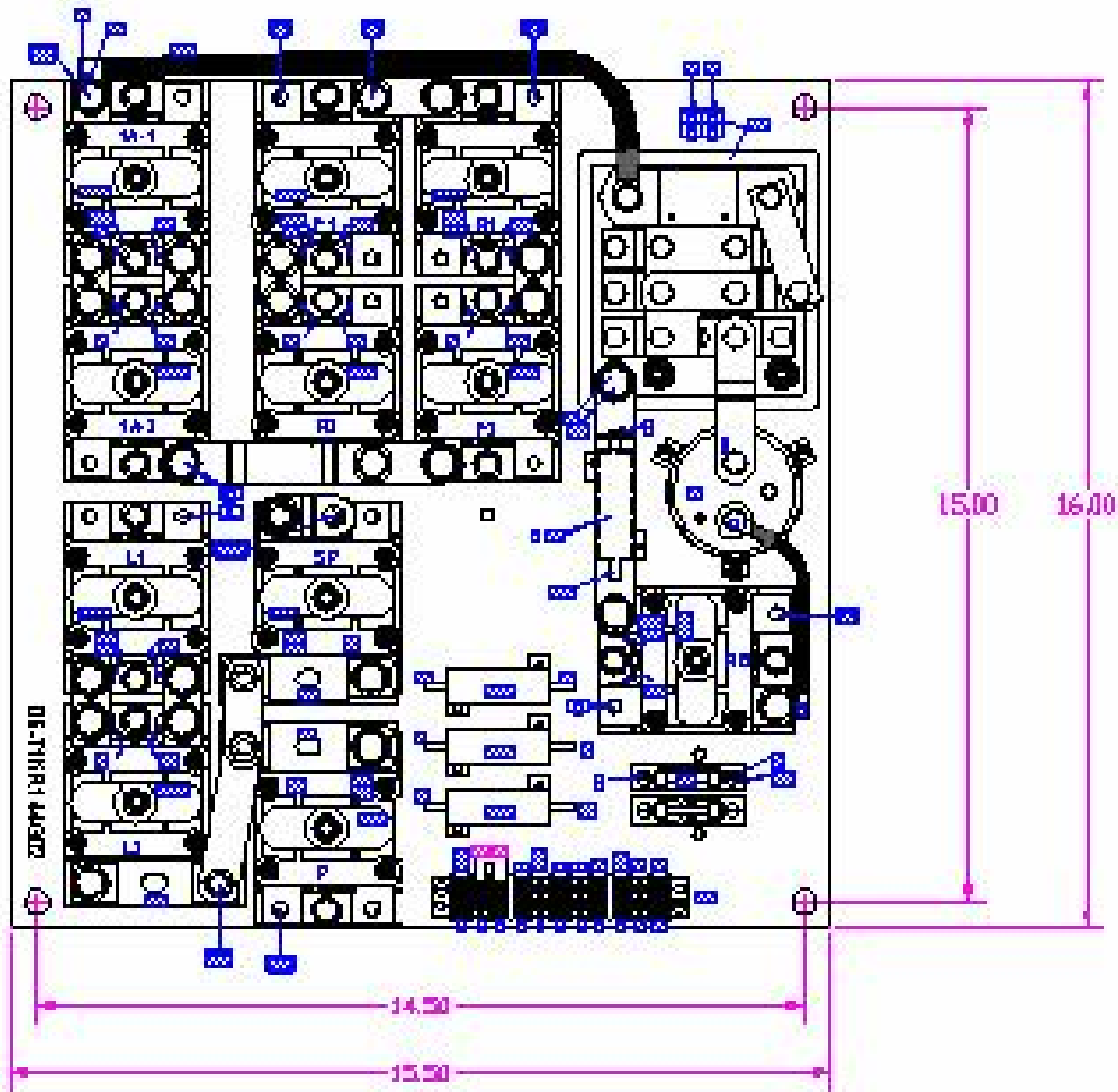
OUTLINE DRAWING – EVT1000 Traction Panel



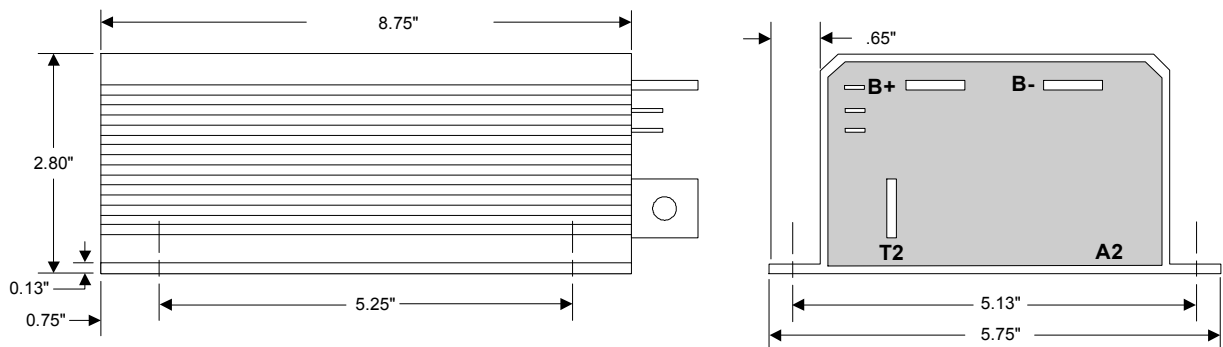
OUTLINE DRAWING – Accelerator



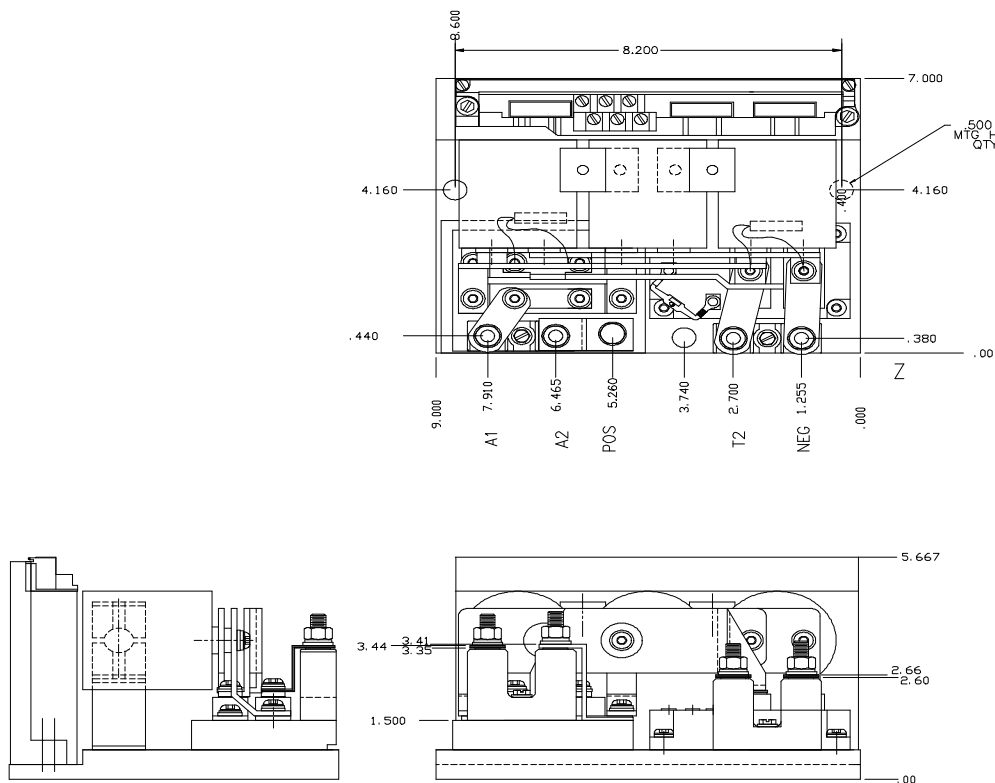
OUTLINE DRAWING – Contactor Panel



OUTLINE DRAWING – Steer Pump Panel



OUTLINE DRAWING – Hydraulic Pump Panel



OUTLINE DRAWING – Dash Display

