

AC INDUCTION MOTOR CONTROLLERS

MODEL 1236/1238

CURTIS



Application

The Curtis Model 1236 and 1238 Motor Speed Controllers are designed for use in all ranges of electric vehicles including material handling, industrial, golf and light-on-road.

Features

State-of-the-art Design

- Advanced Indirect Field Orientation motor control algorithms.
- Voltage-Space-Vector pulse width modulation for efficient use of battery voltage, low motor harmonics, low torque ripple, and minimized switching losses.
- Extremely wide torque/speed range including full regeneration capability and zero speed.
- Internal BSOC, hour meter and maintenance timers.
- High frequency silent operation from 0-400Hz.
- 24V-80V battery systems, 350-800Arms 2 minute current rating.
- CAN Bus communications for integration into distributed control systems
- Extensive array of I/O included as standard

Highly Flexible and Programmable

- FLASH downloadable main operating code for simple and secure field upgrade.
- VCL (Vehicle Control Language) allows OEM developed software to run on-board and utilize the I/O and the motor control routines.
- Built-in BDI, hour meter, PID, throttle, CAN and other powerful software modules can be custom configured through VCL.
- Several generic application specific VCL programs are available for immediate use or for use as a starting point for customization.

DESCRIPTION

Advanced motor drive software provides extremely smooth control over full speed and torque ranges in all modes including full regenerative braking, zero speed, and torque control.

WARRANTY

Two Year Limited Warranty
(see terms of sale for specifics)

CURTIS INSTRUMENTS, INC.

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Features...continued

Robust Safety Features

- Meets or exceeds EEC fault detection requirements. Software and hardware circuitry detects faults in the throttle and power section that could cause unsafe operation.
- Motor and controller thermal protection, cutback, warning and automatic shutdown.
- Designed to meet Global emissions and immunity requirements.
- Rugged sealed housing and connectors designed to meet IP65 environmental protection.

Meets US and International Regulations:

- The Curtis Model 1236 and 1238 AC Motor Speed Controllers are designed to meet:
 - EN 50081-2:1994 IEC 529
 - EN 61000-6-2:1995 IP65 Rated
 - EN 1175
 - UL Recognized Component Status UL 583

Model Chart

Model	Battery Voltage V	Current Rating Arms (2 min)
1236-44XX	24-36	400
1236-45XX	24-36	500
1238-46XX	24-36	600
1238-48XX	24-36	800
1236-53XX	36-48	350
1238-54XX	36-48	450
1238-56XX	36-48	650
1236-63XX	48-80	300
1238-65XX	48-80	550

System Accessories



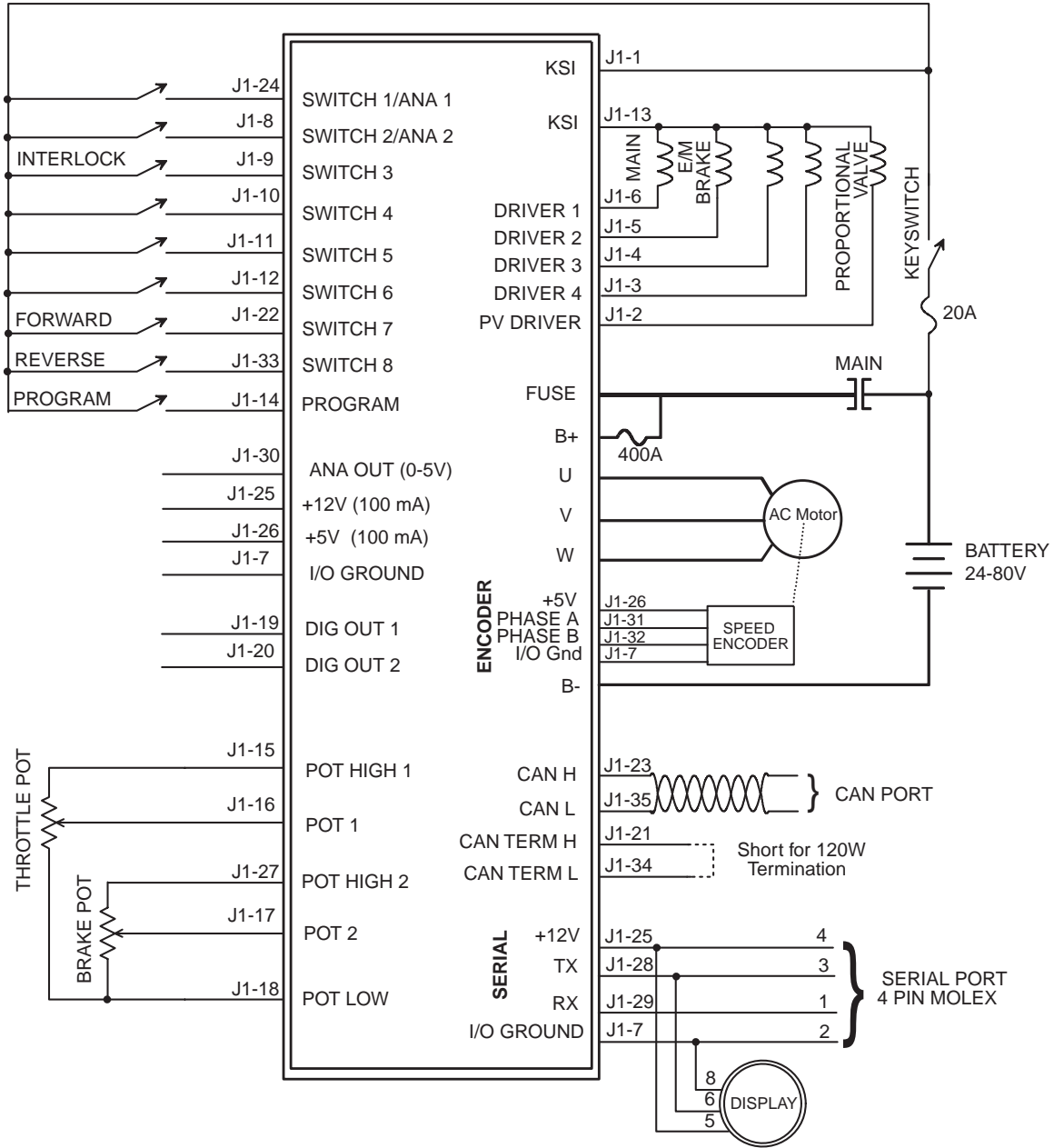
The Curtis Model 840 LCD Multifunction display contains 8 large, easy to read characters to provide display of battery discharge (BDI), hour meter and error messages. Built-in backlight is also available.



The CAN compatible Curtis Model 1311 Handheld Programmer is ideal for setting parameters and performing diagnostic functions.

Contact Curtis to obtain the VCL Vehicle Control Language compiler and development tools.

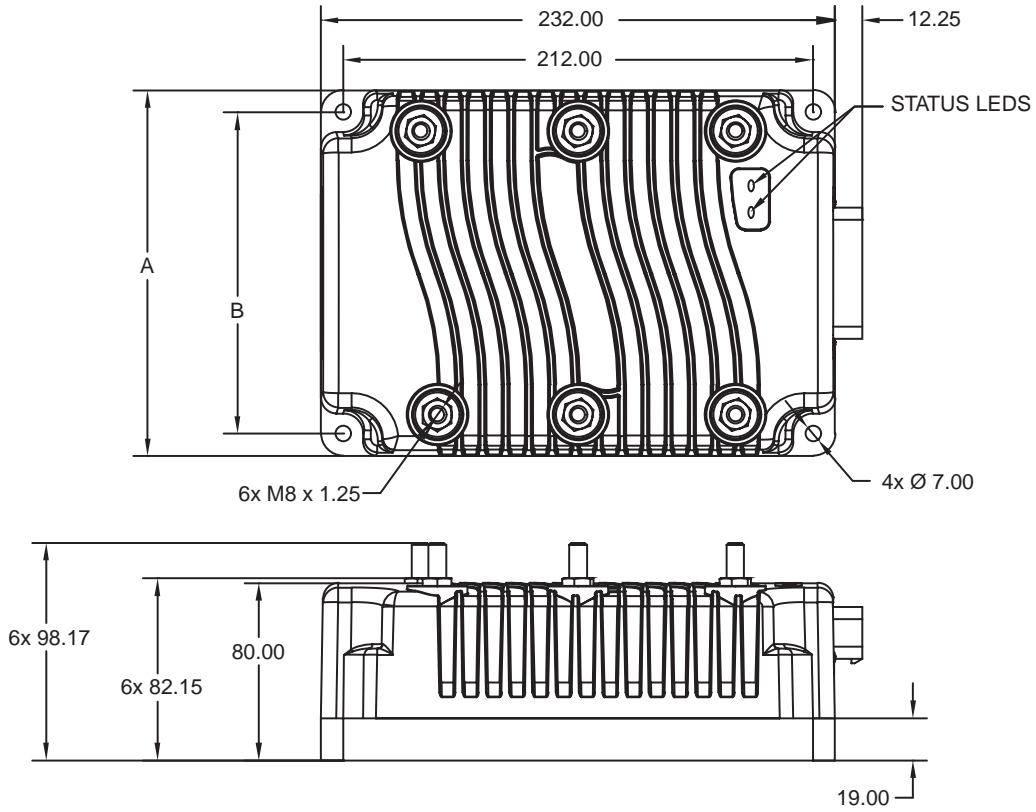
Typical Wiring



Dimensions - mm

Model	A	B
1236-XXXX	165mm	145mm
1238-XXXX	275mm	255mm

All other dimensions shown in the drawing are identical for both the 1236 and the 1238 models.



Connector Wiring

