

AC INDUCTION MOTOR CONTROLLER

MODEL 1230



CURTIS



DESCRIPTION

Curtis Model 1230 programmable speed controllers provide smooth and seamless control of AC induction motors. An advanced MOSFET power section, combined with a sophisticated micro-processor provides high efficiency and silent operation.

APPLICATION

The Curtis 1230 AC controller is designed for small material handling and other light industrial vehicles using AC induction motors, such as pallet movers, stackers, personnel carriers and sweeper/scrubbers.

FEATURES

State-of-the-art Design

- Responsive and accurate closed-loop speed control.
- Smooth regenerative braking and seamless reversing.
- Internal battery discharge indicator (BDI), hour meter and maintenance timer.
- High frequency, silent MOSFET design.
- Compact and rugged housing with fuse mounting.

Highly Flexible and Programmable

- Fully compatible with the Curtis 1311 handheld and 1314 PC programming station for testing, diagnostics and parameter adjustments.
- Multimode™ feature allows two selectable vehicle operating profiles.
- Programmable forward and reverse speeds, acceleration and deceleration/braking rates.
- Serial interface for the Model 840 gauge for BDI, hour meter, timer and fault code display
- Multiple throttle types supported; 5k Ω , 0-5V and wig-wag.
- Easily configured to match most AC induction motors.
- Electromagnetic brake driver (2 amps).

Safe and Protected

- Meets or exceeds EEC fault detection and safety requirements.
- Emergency reverse function with signal continuity check.
- "Ramp restraint" feature restricts vehicle movement while in neutral.
- Power-on self test and continuous fault monitoring.
- Dual watchdog circuits ensure proper software operation.
- Programmable High Pedal Disable (HPD) and Static Return to Off (SRO) functions.
- Shorted and open throttle faults are detected with proper controller shutdown.

MODEL 1230

FEATURES *continued*

- Internal clamps for inductive fly-back of coils.
- Controller over-temperature protection.
- Over and under-voltage protection.
- Low battery charge LED warns operator of possible battery damage.
- On-board fault code status LED with external LED driver for remote viewing of fault codes.

Meets or complies with relevant US and International Regulations

EN50081-2 emissions
EN50082-2 immunity
IEC 801-2 level 4 ESD
VDE0117
EN1175-1 safety
IP 53 environmental protection

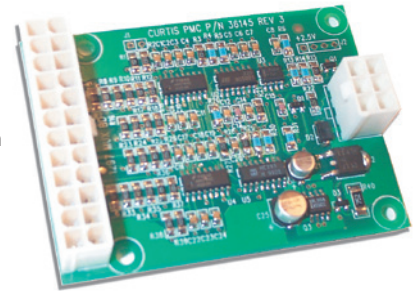
OPTIONS

- Internal main contactor.
- Multiplexed control signals to reduce vehicle/tiller wiring.
- Auxiliary outputs (2) for relays, horn or solenoid control.
- CAN Bus communications for integration into distributed control systems.

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.



Model 1312 Tiller Multiplexer provides monitoring and control capability for up to 12 analog or digital signals from operator controls on tiller. Each signal is sampled every 20 milliseconds for fast response.



The Curtis Model 1311 Handheld Programmer provides a simple and intuitive interface to Curtis products for testing, diagnostics and parameter adjustments.

MODEL 1230

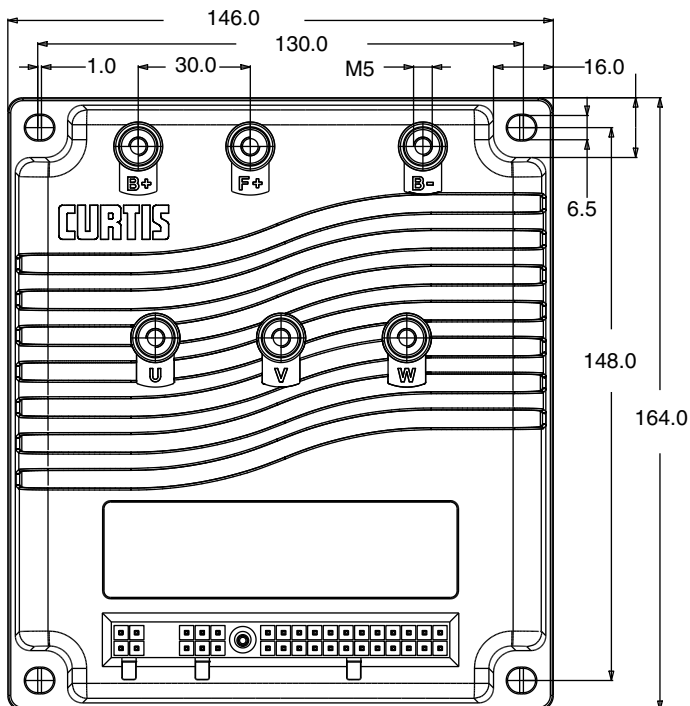
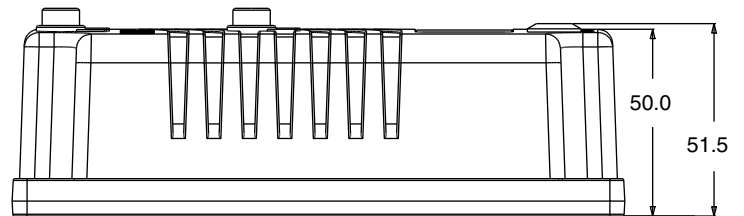
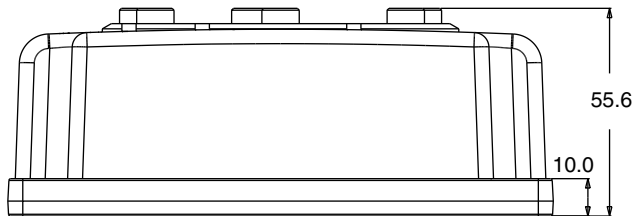
MODEL CHART

Model No.	Battery Voltage (volts)	Motor Current 2 minutes (amps rms)	Motor Current 1 hour (amps rms)	Options			
				Main Contactor	1312 Interface	2 Aux. Outputs	CAN
1230-2001	24	60	30	√	√	√	
1230-2002	24	60	30				
1230-2101	24	90	40	√	√	√	
1230-2102	24	90	40				
1230-2201	24	120	50	√	√	√	
1230-2202	24	120	50				
1230-2301	24	150	60		√	√	
1230-2302	24	150	60				
1230-2401	24	200	80		√	√	
1230-2402	24	200	80				
1230-2403	24	200	80			√	√

Note: xx01 = Options; xx02 = No Options; xx03 = CAN

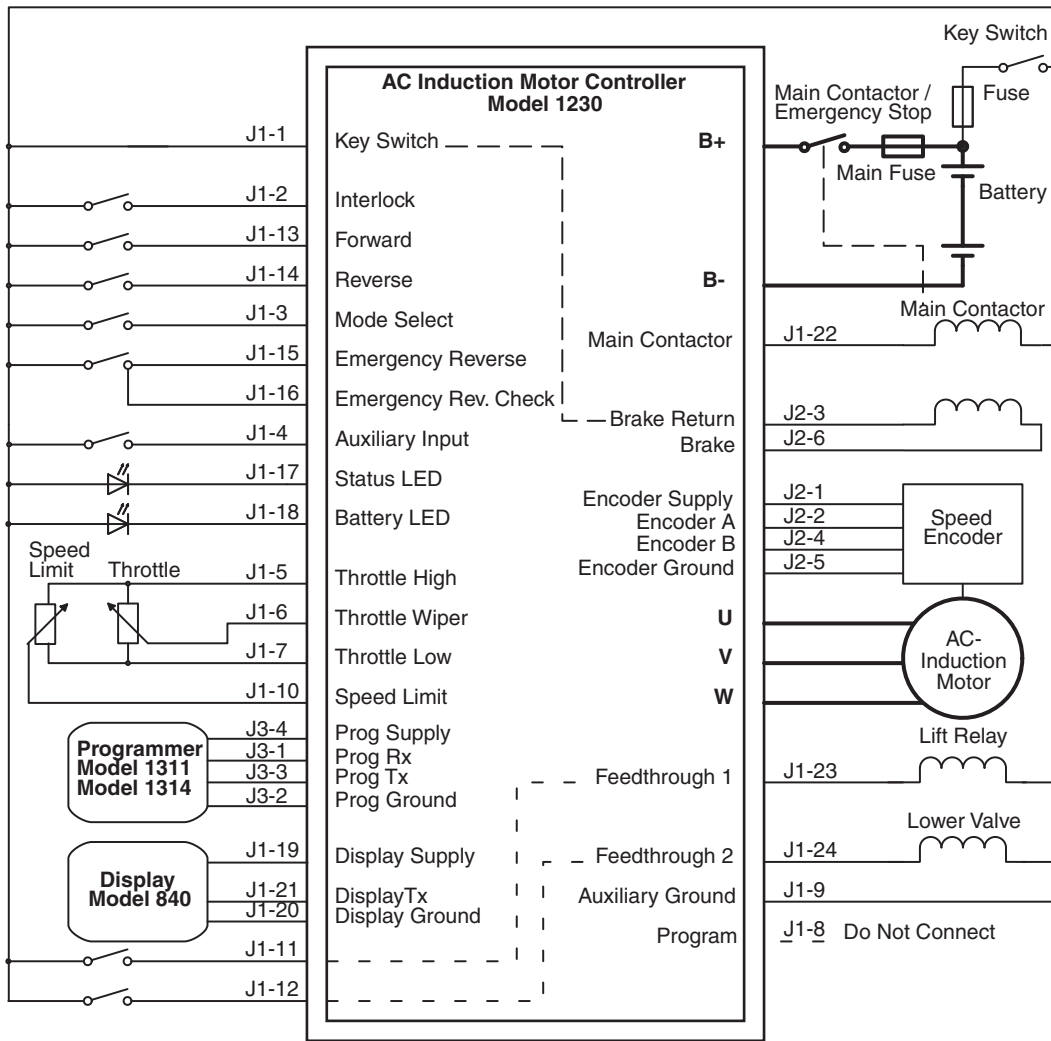
For more information please contact your local CURTIS sales office.

DIMENSIONS: mm

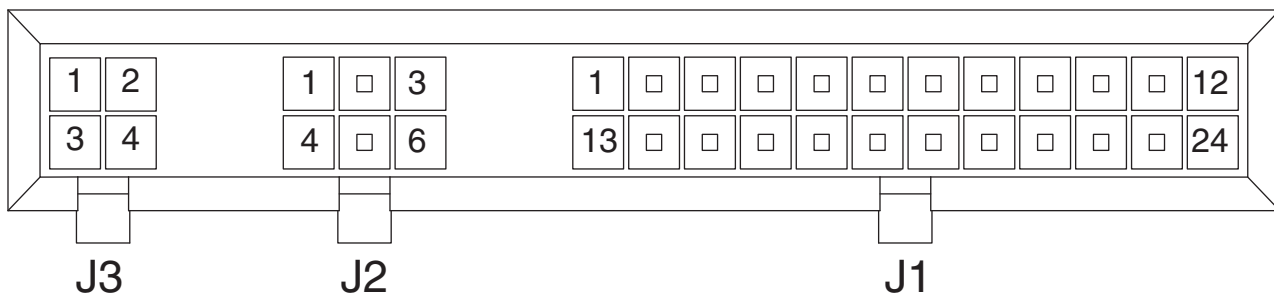


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TYPICAL WIRING 1230-2X02 (NO OPTIONS)



CONNECTOR DETAIL



WARRANTY Two year limited warranty from time of delivery.

