

REVERSING DC MOTOR SPEED CONTROL



130 Series



- Provides DC Motor Speed Control with Reversing Capability
- Speed Regulation is $\pm 1\%$ of Base Speed
- Adjustable Minimum/Maximum Speed
- Adjustable Current Limit
- Speed Adjustment Using 5 k Ω Speedpot or 0 to 10 Vdc Analog Input Signal
- Onboard Dynamic Braking Resistor
- 5K Speed Pot with 8" Leads, Dial and Knob Included
- 50:1 Speed Range

Applications

- Door Openers
- Pumps
- Feeders
- Screen Presses
- Tapping Machines
- Conveyors

The 130 Series reversing speed control is designed to provide instant reversing, quick precise stopping or rapid cycling for a wide range of DC motor applications. The 130 Series reversing control outperforms other dynamic braking and reversing controls by utilizing unique zero-speed detect and dynamic braking circuits. These circuits eliminate the contact arcing and failed braking problems associated with other reversing and dynamic braking controls. The zero speed detect circuit also eliminates motor plug reversing problems. In the event of a power loss or emergency stop condition, the 130 Series control will drop into a dynamic brake condition to safely and quickly bring the motor to a stop and remain there until power is reapplied and a run condition is recognized.

SPECIFICATIONS

AC Input Voltage: $\pm 10\%$ of rated line voltage

Acceleration: 0.5 seconds

Amps—DC Output

130xx12 and 132xx25: 500 mA to 1.2 ADC

130LC100 and 132LC200: 500 mA to 5.5 ADC*

130HC100 and 132HC200: 500 mA to 10 ADC

Controller Overload Capacity: 200% for one minute

Current Limit Trimpot Range

Models 130xx100 and 132xx200: 1 to 18 ADC

Deceleration: 0.5 seconds

Dimensions:

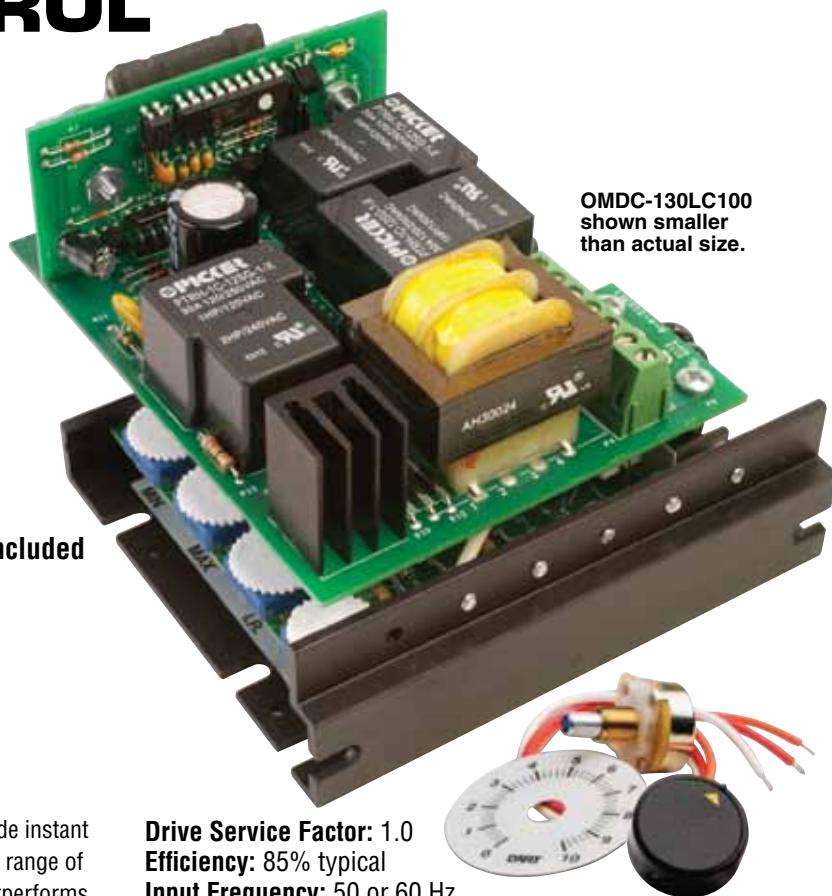
LC Models: 126.16 W x 107.95 L x 68.27 mm D (4.96 x 4.25 x 2.68")

HC Models: 158.75 W x 177.8 L x 103.2 mm D (6.25 x 7.0 x 4.06")

Weight:

LC Models: 489.87 g (1.08 lb)

HC Models: 1496.80 g (3.30 lb)



OMDC-130LC100 shown smaller than actual size.

Drive Service Factor: 1.0

Efficiency: 85% typical

Input Frequency: 50 or 60 Hz

Trimpot Speed Range

Maximum: 60 to 110% of base speed

Minimum: 0 to 30% of maximum speed

Power Devices: Isolated case tab

Shunt Field Voltage: 100 Vdc for 120 Vac input; 200 Vdc for 240 Vac input

Shunt Field Current: 1 amp DC maximum

Speed Control: Via 5 k Ω 0.5 W potentiometer or 0 to 10 Vdc isolated signal

Speed Range: 50:1

Speed Regulation: $\pm 1\%$ of base speed

Temperature Range: -10 to 45°C ambient (15 to 115°F)

Terminal Block Torque Setting: 4.4 in. lb. maximum or 0.05 Nm

Transient Protection: G-Mov

Trigger: Opto-isolator

Start/Brake Cycle Per Minute

LC Models: 3 per min**

HC Models: 30 per min**

Operating Conditions

Temperature: -10 to 45°C (14 to 113°F)

AC Input Voltage: $\pm 10\%$ rated line voltage

Input Frequency: 50/60 Hz

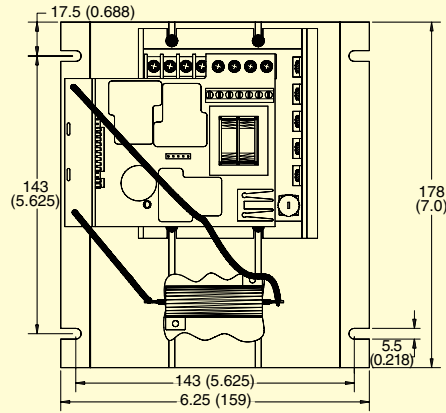
* With suitable external heat sink (where 130 extrusion temperature does not exceed 70°C), maximum rating for output amps can be increased to 10 amps D.C.

** Cycles per minute are based on typical inertia type loads. Higher cycle per minute rates may be achieved with constant torque or low inertia type loads. Lower cycle rates may be required for very high inertia type loads.

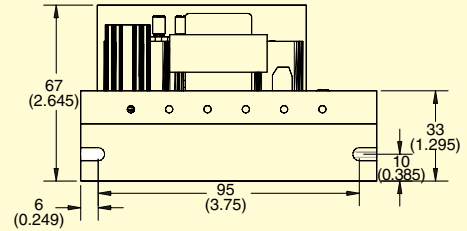
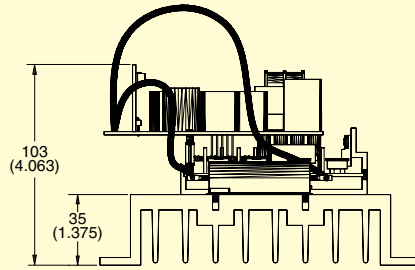
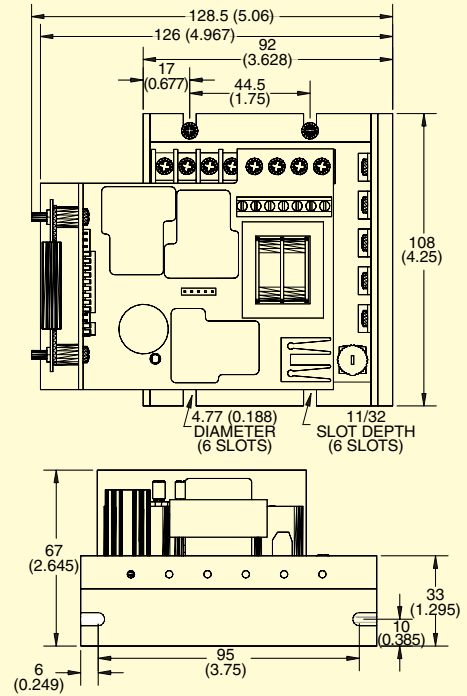


Dimensions: mm (inch)

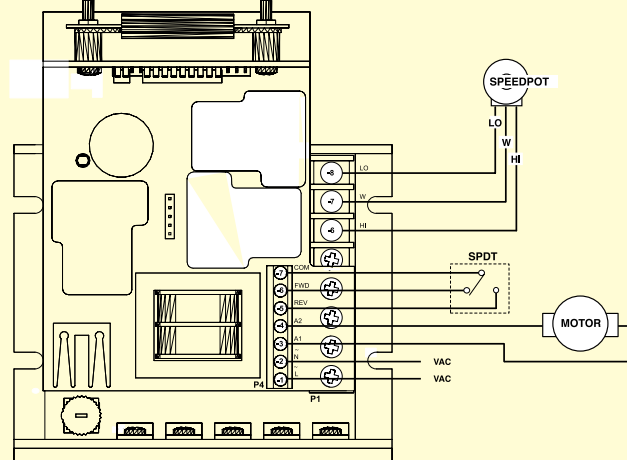
HC Models



LC Models



Hook-Up Diagram



TYPICAL MOTOR CURRENTS

Horsepower	1/50	1/20	1/8	1/4	1/3	1/2	3/4	1.0	1.5	2.0
Typical AC Amps (120 Vac)	0.50	1.00	2.00	3.50	4.40	6.50	9.30	13.20	—	—
Typical Arm Amps (120 Vac)	0.42	0.871	1.60	2.70	3.40	5.00	8.20	10.90	—	—
Typical AC Amps (240 Vac)	—	0.80	1.20	1.80	2.20	3.30	4.80	6.50	9.70	12.90
Typical Arm Amps (240 Vac)	—	0.40	0.60	1.40	1.70	2.50	3.70	5.00	8.20	11.60

To Order Visit Trodex.com/130_series for Details and Pricing

MODEL NO.	DESCRIPTION
OMDC-130LC100	Reversing DC Drive, 120 Vac input, 0 to 90 Vdc output, ½ HP, 5.5A current*, 3 cycles/minute
OMDC-130HC100	Reversing DC Drive, 120 Vac input, 0 to 90 Vdc output, 1 HP, 10A current, 30 cycles/minute
OMDC-132LC200	Reversing DC Drive, 240 Vac input, 0 to 180 Vdc output, 1 HP, 5.5A current**, 3 cycles/minute
OMDC-132HC200	Reversing DC Drive, 240 Vac input, 0 to 180 Vdc output, 2 HP, 10A current, 30 cycles/minute
OMDC-HS125	Heat Sink for higher current output (LC100/LC200 models)

Comes complete with manual, speedpot kit, dial and knob.

* Up to 10A continuous current output at 1 HP 90 Vdc with heat sink.

** Up to 10A continuous current output at 2 HP 180 Vdc with heat sink.

Ordering Example: **OMDC-130LC100**, reversing DC drive speed control.