

# Fincor Series 2330

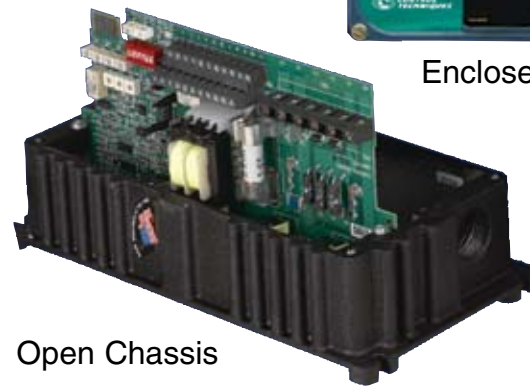
Fincor Series 2330 drives features a fully isolated regulator using surface mount technology. It includes an isolated customer run contact, low voltage operator control circuitry, and full wave power conversion.



Bookcase



Enclosed



Open Chassis

- 1/8 to 5 hp (115-230V)
- Fully Isolated Regulator
- Speed or Torque Control
- 0-10 VDC or 4-20 mA Input Signal
- Fused Input
- Line Start (Auto Restart)
- Dual Field Supply
- Tachometer Input standard

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## RATINGS: 1/8 TO 5 hp (115-230 VAC)

Series 2330 Non-Regenerative DC Drives										
Model	Motor HP	Input		Output				Run-Stop, (Basic)	Run-Stop, Arm. Cont. DB	Run-Stop, Arm. Cont., Rev. & DB
		AC Volts	Amps	DC Volts		Amps		Order Code	Order Code	Order Code
				Arm	Field	Arm	Field			
Chassis w/o Operator Controls	1/8-1.0	115	15.8	90	50/100	10.5	1.0	2331	2331B	2331A
	1/2-2.0	230	15.8	180	100/200	11.6	1.0			
	1/8-1.0	115	15.8	90	50/100	10.5	1.0	2332	2332B	2332A
	1/2-3.0	230	22	180	100/200	15.1	1.0			
Bookcase w/o Operator Controls	1/8-1.0	115	15.8	90	50/100	10.5	1.0	2335	2235B	2235A
	1/2-2.0	230	15.8	180	100/200	11.6	1.0			
	1/8-1.0	115	15.8	90	50/100	10.5	1.0	2336	2336B	2336A
	1/2-3.0	230	22	180	100/200	15.1	1.0			
NEMA 4/12 w/o Operator Controls	1/8-1.0	115	15.8	90	50/100	10.5	1.0	2331P0	2331BP0	2331AP0
	1/2-2.0	230	15.8	180	100/200	11.6	1.0			
NEMA 4/12 with Integral Operator Controls	1/8-1.0	115	15.8	90	50/100	10.5	1.0	2331P1*	2331BP1*	2331AP3
	1/2-2.0	230	15.8	180	100/200	11.6	1.0			
	1/8-1.0	115	15.8	90	50/100	10.5	1.0			2331P2*
	1/2-2.0	230	15.8	180	100/200	11.6	1.0			

Units shipped calibrated for desired hp rating but jumpers can be adjusted for others. Units shipped ready for 230VAC but may be reconnected for 115VAC.

\* P1, BP1, & P2 have additional Jog controls. 2331P2 includes switch reversing (not contactor) without DB.

# Fincor Series 2330

## SPECIFICATIONS:

### Operating Conditions

Horsepower	1/8 thru 3 hp, Jumper Selectable
Line Voltage	115-230 VAC ±10%, Jumper Selectable
Rated Frequency	50/60 Hz ±2%
Enclosure	Chassis, Bookcase, NEMA 4/12
Ambient Temperature	0 – 40°C (32°F - 104°F) ( <i>Enclosed</i> ) 0 – 55°C (32°F - 131°F) ( <i>Chassis</i> )
Altitude	1000 m (3,300 ft)
Relative Humidity	95% Non condensing
Overload Capacity	150% for 1 minute (UL Listed Motor Overload Protection) (120% Timing Threshold)

### Standard Features

Isolated Regulator Circuit	Grounded I/O signals possible
Regulator Function	Speed or Torque selectable
Power Conversion	4 SCR plus Freewheeling Diode
Field Supply Protection	Full or Half Wave MOV Voltage Transient Suppression High Interrupting Capacity Line Fuse
Speed Regulation	Armature or DC Tach Feedback
Line Start	Selectable for Auto Restart
Diagnostic LED	Green Normal – Red Current Limit
Option Connector	Connects Additional Option Boards

### Control

Control Logic Power	24 VDC for Maintained Switch or Push button Operation
Speed Potentiometer	5 KOhms, ½ Watt
Input Reference	0 – 10 VDC or 4 – 20 mA
Speed Regulation (95% Load Change)	2% with Armature Feedback 0.5% with Tachometer Feedback

### Adjustments

Maximum Speed	50% – 100% of Motor Base Speed
Minimum Speed	0% – 40% of Motor Base Speed
Current Limit	0 – 150% of Full Load
IR Compensation	0 – 100% Boost
Acceleration/Deceleration	0.2 – 30 Seconds

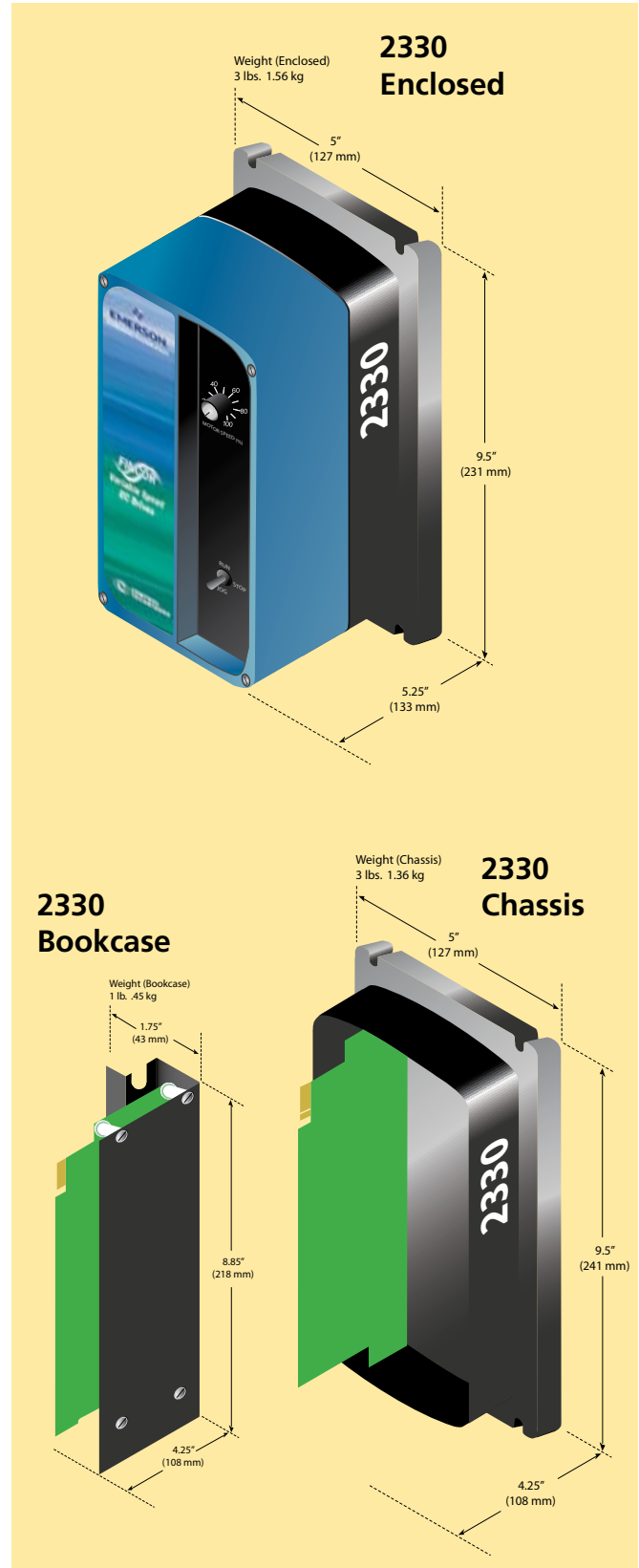
### Efficiency

Controller (only)	98%
With Motor (typical)	85%

### Approvals & Listings

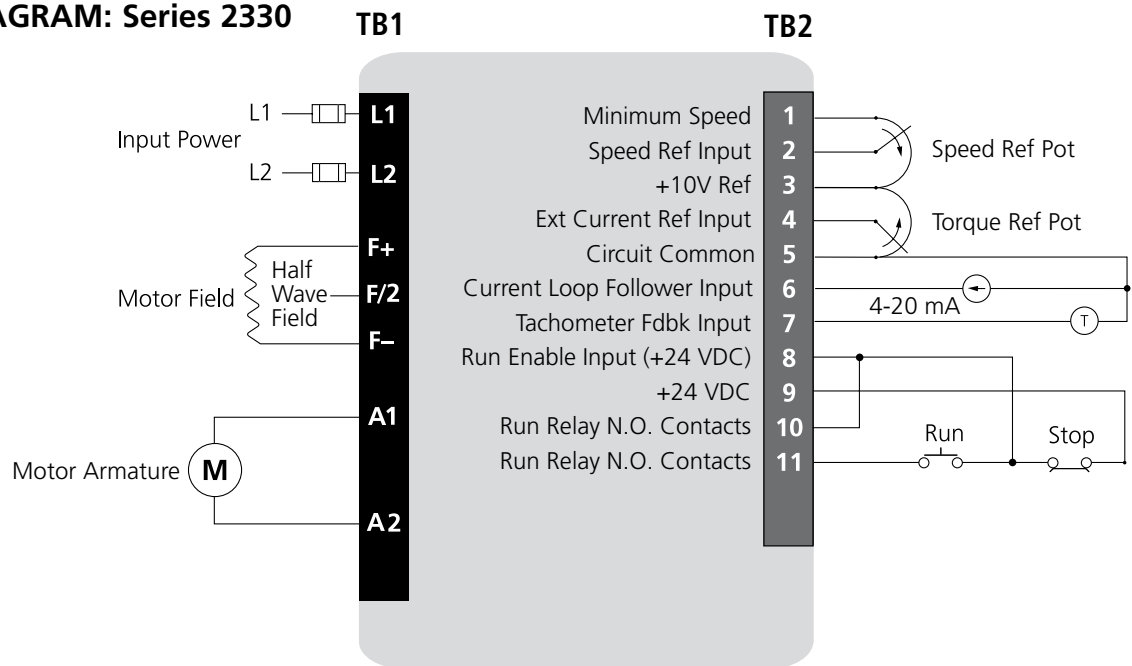
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## DIMENSIONS



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**TERMINAL DIAGRAM: Series 2330**



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**TERMINAL DESCRIPTION**

**TB1**

Pin#	Type	Notes
L1	Line Voltage Input	115 or 230 VAC J1 Selectable
L2	Line Voltage Input	115 or 230 VAC J1 Selectable
F+	Field Voltage Output	+100 VDC @ 115 VAC or +200 VDC @230 VAC Input
F/2	Field Voltage (Half-Wave) Output	+50 VDC @ 115 VAC or +100 VDC @230 VAC Input
F-	Field Voltage Output	Field Minus Output
A1	Armature + Output	0 to +90 VDC @ 115 VAC or 0 to +180 VDC @ 230 VAC Input
A2	Armature - Output	Armature Minus Output

**TB2**

Pin#	Type	Notes
1	Speed Reference Pot '0' End	With On-board Min Speed Pot Active
2	Speed Reference Input	200 KΩ Input Resistance
3	+10V Reference Output	5mA max
4	External Current Reference Input FWD	Refer to DIP Switch SW3-
5	Circuit Common	Isolated From Line – Can be connected to Earth
6	Current Loop Follower Input	Refer to DIP Switch SW3-2 (1 – 5 mA, 4 – 20 mA, 5 – 50 mA)
7	Tachometer Input (Speed Feedback)	Polarity Insensitive for Reversing Applications (3-30 Vdc, 31-175 VDC)
8	Enable Input (+24 VDC) – Run Relay	24 VDC @ 6ma Input
9	+24 VDC	For drive enable use only
10	Run Relay N.O. Contacts	Form A Contact Rated 0.5 A @ 115 VAC or 2 A @ 30 VDC
11	Run Relay N.O. Contacts	