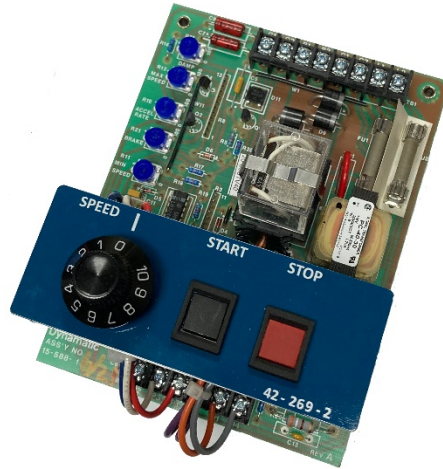


CONTROLLERS

MODEL 3000 Controllers



Description

The Model 3000 Dynamatic Analog Controller is a complete controller on one printed circuit board. Input is 115 VAC, single phase, 50/60 Hz. Output is 5.5 Amp, 45 VDC and is available for use with Air-Cooled Drives rated .25 through 20 horsepower; or 4.3 Amp, 90 VDC which is available for use with Dynamatic Air-Cooled Drives rated .25 through 200 horsepower. The controller will provide either speed control or torque control, depending on the positioning of an on-board jumper. To accommodate a wide range of drive sizes and time constants the controller is manufactured in two separate versions to optimize performance: one for integral horsepower drives and the other for fractional horsepower drives. Not recommended for continuous low speed operation under 200 RPM.

Features & Benefits

- Provides soft starts with a linear acceleration circuit, adjustable from 1-30 seconds.
- Accurate speed control through closed loop control, which keeps drive output speed within 0.5% for load changes from 0-100%.
- On-board, selectable speed or torque voltage control allows application versatility.
- Stopping brake circuit is adjustable from 0-45 VDC.
- Optional small wall mount enclosure is complete with easy-to-understand operator's elements.
- Short circuit and ground fault protection by fused input isolates controller components from short circuits.
- Transient suppression by input suppressor prevents controller damage due to transient spikes.
- Compatible with existing wiring and plant power with a low installation cost.
- Controller and operator's station can be mounted up to 500 feet from the drive when proper wire size and type are used. Can be used in hard-to-get-at locations.

CONTROLLERS

Model 3000 Controllers Specifications

3000 Controller	<p>Units used with 45 VDC, 5.5 Amp</p> <p>90 VDC, 4.3 Amp</p> <p>Horsepower range</p> <p>Input power, maximum</p> <p>Output power, maximum</p> <p>Speed regulation, no load to full load change</p> <p>Enclosures</p> <p>Built-in modifications</p> <p>Field modifications</p> <p>Controller protective features</p> <p>Line regulation for +/-10% input line voltage change</p> <p>Thermal drift per degree C</p> <p>Minimum regulated speed range</p> <p>Maximum ambient</p> <p>Operator devices (on controller cover)</p>	<p>Fractional HP Drives AS-14 - 25 Drives AT-140 – 250 Drives</p> <p>AS-14 - 27 Drives AT-140 - 440 Drives</p> <p>.25 - 20 HP - 45 VDC .75 - 200 HP - 90 VDC</p> <p>115 VAC +/- 10%, 1 phase, 50/60 Hz, 575 VA</p> <p>45 VDC, 5.5 A, 248 watts, or 90 VDC, 4.3 A, 387 watts</p> <p>0.5% Standard</p> <p>NEMA 1- Standard, panel mount -Optional</p> <p>Linear acceleration, adjustable braking, torque control</p> <p>Not available</p> <p>Input fuses, low line voltage, line transients, isolated signal circuits, output over-current.</p> <p>+/-1.0%</p> <p>+/-0.05%</p> <p>50 RPM</p> <p>113° F (45° C) enclosed 149° F (65° C) panel mount</p> <p>Start push button, Stop push button, adjustable speed potentiometer -Standard</p>
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CONTROLLERS

Model 3000 Ordering Information

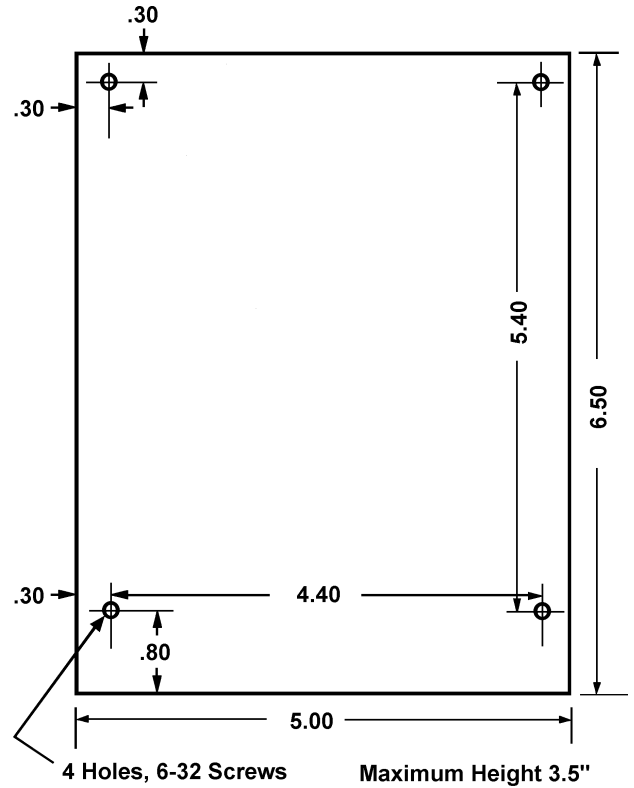
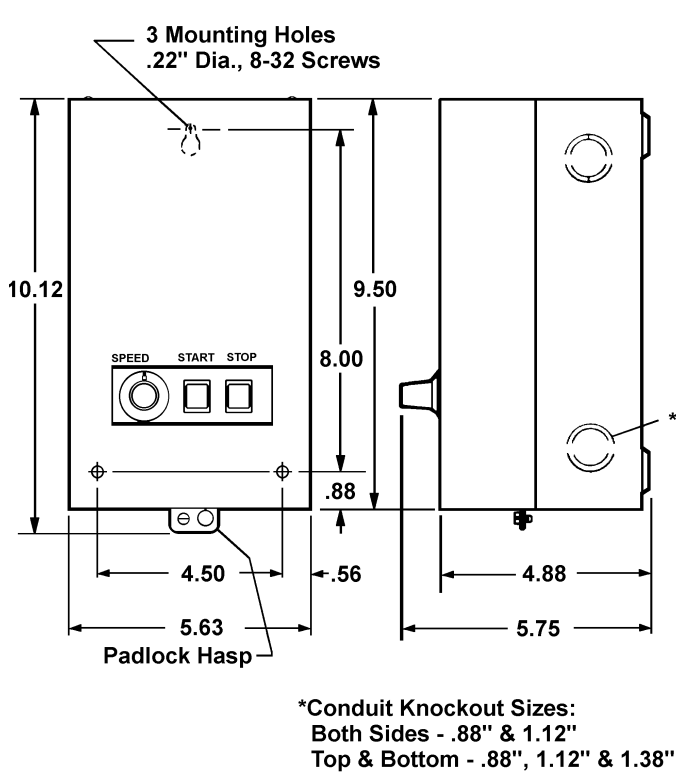
The Model 3000 Controller includes a single printed circuit board, rated for a 115 VAC, 1 phase, 50/60 Hz input and a 45-volt, 5.5 Amp, 248 watt or 90-volt, 4.3 Amp, 387-watt output with or without operator's elements (Start and Stop push buttons and Run Speed potentiometer). Separate configurations are available for fractional horsepower models (FAS) and integral horsepower models (AS & AT). If the mechanical unit includes a spring set brake a larger controller must be used (4000, 4050, Mark III or EC-2000).

Model 3000 Selection Table

Description	45 VDC Part Number	90 VDC Part Number
Model AS & AT NEMA 1 enclosure with operator elements	15-000595-0001	15-000889-0001
Model AS & AT, Panel mount with operator elements	15-000588-0001	
Model AS & AT, Panel mount without operator elements	15-000588-0002	15-000888-0001
Model FD, NEMA 1 enclosure with operator elements	15-000595-0003	--
Model FD, Panel mount with operator elements	15-000588-0003	--
Model FD, Panel mount without operator elements	15-000588-0004	--

CONTROLLERS

Model 3000 Enclosure Outline Drawings



MODEL 3000 - NEMA 1 ENCLOSURE

PANEL MOUNT

Approximate Shipping Weights for the Model 3000 Controller:

NEMA 1	5 lbs.
Panel Mount	3 lbs.

DIMENSIONS ARE IN INCHES