

# Model 6200 Open-Loop Dynamometer Controller

## **FEATURES**

- Open-Loop Dynamometer Control
- Built-in Pass/Fail Motor Testing Capability
- Interfaces: RS-232 and IEEE-488
- High Speed Data Acquisition: 120 torque and speed points per second via IEEE bus (approx. 60/sec. via RS-232)
- High Quality, Easy-to-Read Vacuum Fluorescent Readout: Displays torque, speed, power and auxiliary values
- Current-Regulated Supply: Provides up to 1 amp output
- Adjustable Torque Units: English, Metric and SI are standard
- Dynamometer Overload Protection
- Internal Data Storage: Up to 100 data points
- Auxiliary ± 5 V DC Analog Input: For additional transducer
- Closed Box Calibration
- Rack Mounting: 19" (482.6 mm) with handles

#### **DESCRIPTION**

Magtrol's Model 6200 is an Open-Loop Controller designed for use with any Magtrol Hysteresis Dynamometer. The unit provides open-loop control of the dynamometer via an internal current-regulated power supply. With a high-quality vacuum fluorescent readout, the Model 6200 displays torque, speed



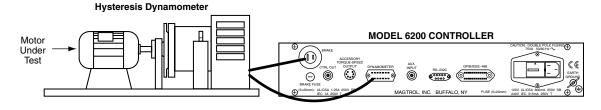
and mechanical power values of the motor under test. In place of mechanical power, it can also display auxiliary transducer readings via the  $\pm 5$  VDC analog input. These displayed values can be stored internally or output via the RS-232 or IEEE-488 interface.

## PASS/FAIL MOTOR TESTING

The Model 6200 comes with an easy-to-use motor testing Pass/Fail feature. This feature is ideal for quick pass/fail (go/no go) testing in production and incoming inspection applications.

When the 6200 is operated in the Pass/Fail mode, one of three readings is used as the tested parameter: torque, speed or the auxiliary transducer. The two parameters not used are set with user-defined upper and lower acceptable limits. As the motor is loaded to the tested parameter value (for example, speed), the other two parameters (in this case, torque and transducer) are measured. Test results (for the other 2 parameters) are indicated with a "PASS" or "FAIL", or the display can be toggled to show the actual values.

#### SYSTEM CONFIGURATION



### ORDERING INFORMATION

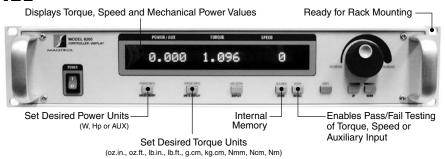
6200 Open Loop Dynamometer Controller 120 VAC6200A Open Loop Dynamometer Controller 240 VAC



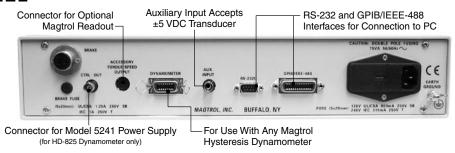
| MEASUREMENT CHARACTERISTICS      |  |  |  |
|----------------------------------|--|--|--|
| Maximum Torque                   | 2000 units   |  |  |
| Maximum Speed                    | 99,999 rpm   |  |  |
| Accuracy                         | Speed: 0.01% of reading from 10 rpm to 100,000 rpm Torque: 0.2% of range (±2 V) Aux: 0.1% of range (±5 V)                |  |  |
| ELECTRICAL CHARACTERISTICS       |  |  |  |
| Fuses (5 × 20 mm)                | Brake: UL/CSA 1.25 A 250 V SB IEC 1.00 A 250 V T Power (120 V): UL/CSA 800 mA 250 V SB Power (240 V): IEC 315 mA 250 V T |  |  |
| Power Requirements               | 75 VA  |  |  |
| Voltage Requirements             | 120/240 V 60/50 Hz   |  |  |
| Max. Compliance Voltage          | 45 V DC  |  |  |
| <b>INPUTS AND OUTPUTS</b>        |  |  |  |
| Auxiliary Input                  | ±5 VDC   |  |  |
| Accessory<br>Torque/Speed Output | Torque: ±2 V DC<br>Speed: 60 TTL pulses/rev, 50% duty cycle  |  |  |
| Ctrl Out                         | 0-3 V DC   |  |  |
| ENVIRONMENT                      |  |  |  |
| Operating Temperature            | 18 °C to 25 °C   |  |  |
| Relative Humidity                | < 80%  |  |  |
| Temperature Coefficient          | 0.001% of range/°C   |  |  |

| DIMENSIONS   |          |         |  |
|--------------|----------|---------|--|
| Width        | 19.0 in  | 483 mm  |  |
| Height       | 3.5 in   | 89 mm   |  |
| Depth        | 12.4 in  | 315 mm  |  |
| with handles | 13.8 in  | 351 mm  |  |
| Weight       | 16.37 lb | 7.42 kg |  |

### FRONT PANEL



### **REAR PANEL**



Due to the continual development of our products, we reserve the right to modify specifications without forewarning.



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