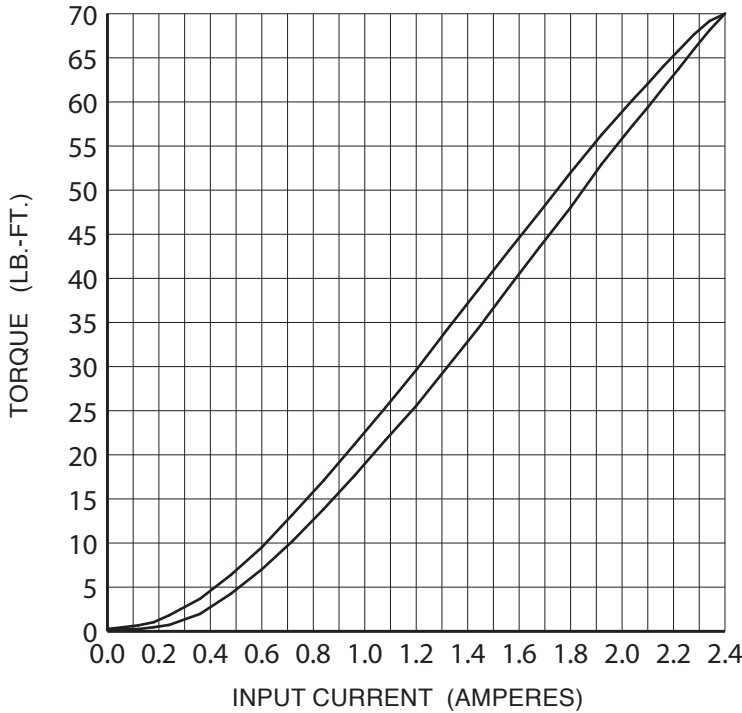


DATA SHEET



**CHARACTERISTICS** - With no electrical excitation, the shaft freely rotates. With electrical excitation, the shaft becomes coupled to the housing. Torque is proportional to input current (see torque graph), and independent of RPM. While the load torque is less than the output torque, the shaft won't rotate. When the load torque is increased, the brake will slip smoothly at the torque level set by the coil input current.

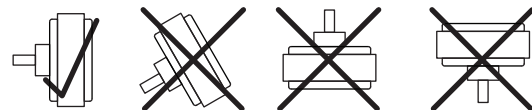
- Torque range . . . . . 0.5 to 70 lb.-ft.
- Maximum RPM . . . . . 1800 RPM
- Maximum overhung load . . . . . 175 lbs.
- Shaft inertia . . . . . 0.31 lb.-in.-sec<sup>2</sup>
- Weight . . . . . 78 lbs.

See separate sheet for heat dissipation ratings.

**TORQUE CURVE** - Use the lower torque curve when an input current value is approached from 0 amperes. Use the upper torque curve when the input current value is approached from the 100% input current.

At brake temperature :	68°F	160°F
COIL RESISTANCE (ohms)	8.2	10
INPUT D.C. VOLTAGE, @ 2.4 amps	20	24

Do not exceed 2.4 Amperes or 70 lb.-feet torque.



Mount horizontally only.

**BRAKE PERFORMANCE**

**TORQUE:** At 20 volts, the brake will draw 100% of the rated input current, at 68°F. Output torque will be 70 lb.-ft.

**POWER SUPPLY:** A "constant-current" D.C. power supply is recommended for the best accuracy in open-loop control systems.

**INSTALLATION INFORMATION**

Do not drop, or strike with a hammer. Keep away from fine metal filings and fine metal chips. Shield from liquids.

Do not attempt to remove the brake shaft or retaining ring.

All pulleys, sprockets, couplings, etc. must mount as slide fits. Use a puller to remove stuck components. Never pry or hammer to install or remove components.

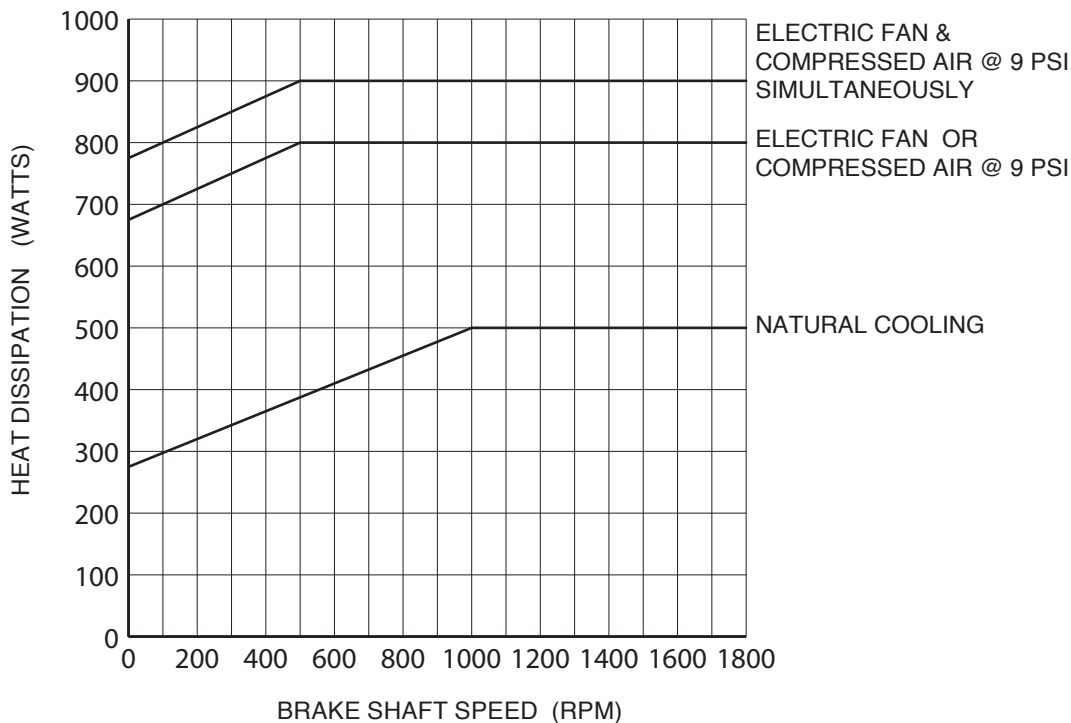
Always use a flexible coupling when connecting the shaft of a rigidly mounted brake to the shaft of another rigidly mounted device. Precisely align both shafts.

Always electrically ground the brake.



DATA SHEET

**HEAT DISSIPATION** - Heat dissipation can be increased by using the attached electric fan or by connecting compressed air to the cooling port, or both.



**BRAKE PERFORMANCE**

**HEAT DISSIPATION:** Fins on the internal rotor move air which increases cooling with increasing RPM. The fan or compressed air flowing into cooling ports increases cooling. For continuous slip, calculate the heat input by the formula :

$$\text{HEAT (watts)} = \text{RPM} \times \text{TORQUE (lb.-ft.)} \times 0.14$$

The brake can dissipate higher amounts of heat for short periods of time, but the average must not exceed ratings. The case temperature must never exceed 160 degrees F.

**INSTALLATION INFORMATION**

**ELECTRIC FAN COOLING**  
 Voltage: 220v volt A.C., 50/60 Hz  
 Input Current: 0.06 amps  
 Fan Electric Power Consumption: 14 watts

**COMPRESSED AIR COOLING**

Connect low pressure compressed air to the port. For lowest case & coil temperature, both electric fan & compressed air cooling may be used simultaneously.

Pressure Range: 0 - 9 psi  
 Air Flow: 0 - 5 cubic feet / minute  
 Port: 3/8-19 BSPT tapped hole.  
 (British Standard Tapered Pipe Thread)  
 Adaptor fittings to 3/8" NPT & 3/8" hose are included.  
 Use clean, filtered, oil free, moisture free air.

