

## GENERAL INFORMATION

### APPLICATION INFORMATION

Fincor Electronics Series 9850 motors are industrial rated AC motors which have been qualified for use as a ideal replacement of PMDC motors where up to a 20:1 constant torque speed range is required.

The motors are suitable for a wide range of industrial applications, including machine tools, conveyors, packaging machinery, and printing equipment.

### ENCLOSURES: GENERAL PURPOSE

TENV - Totally Enclosed Non-Ventilated: Self cooled by internal air circulation. Heat is dissipated from the frame by convection and radiation. Since there is no free exchange of air between the motor and the operating environment, they are suitable for use in nonhazardous areas containing dust, dirt, lint, metal particles and other impurities. Fincor Electronics 9850 series TENV motors operate within the constant torque load range shown in Figure 1.

TEFC—Totally Enclosed, Fan Cooled: Self cooled by the external circulation of air directed over the motor frame. The fan is coupled to the motor shaft. Heat is dissipated from the frame by convection and radiation. Since there is no free exchange of air between the motor and the operating environment, these motors are suitable for use in non-hazardous areas containing dust, dirt, lint, metal particles and other impurities. TEFC motors can be modified for satisfactory use outdoors except in areas where icing conditions exist. The constant torque load range is shown in Figure 1.

### INVERTER DUTY

“Inverter Duty” describes a class of motors that are capable of operation from a Adjustable Frequency Controllers. These general purpose, NEMA Design B motors are suitable for most variable-torque applications such as fans, blowers and pumps. While the motor design accommodates operation from zero to base speed, applications of this type rarely require more than a 20:1 speed range. In addition, Fincor Electronics inverter duty motors provide a limited constant torque speed range for applications such as conveyors, mixers, positive displacement pumps, etc. The specific capability depends on motor design. Consult figure 1 to determine the typical maximum (continuous duty) constant torque speed range. These motors do not have provisions for mounting encoders, but are suitable for use with open loop vector drives.

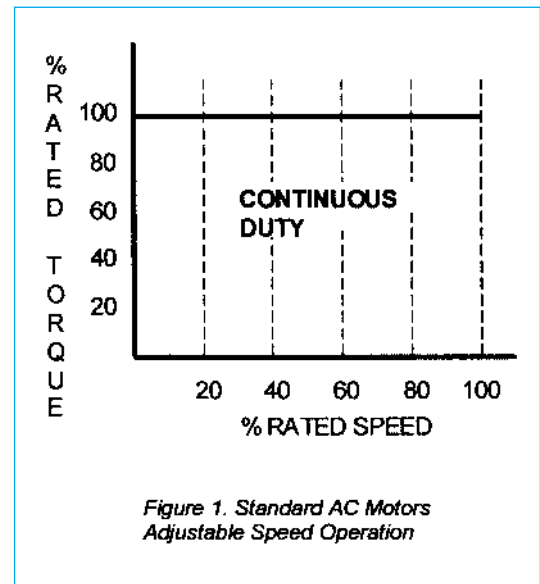
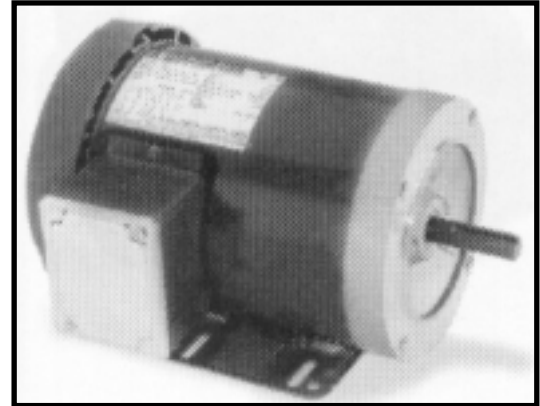
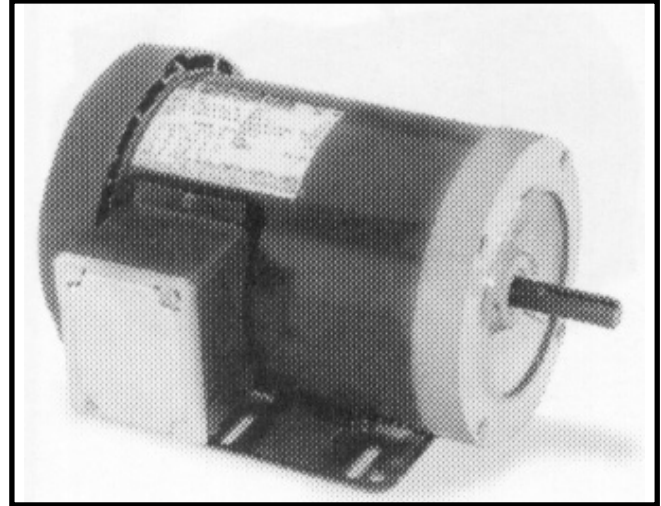


Figure 1. Standard AC Motors Adjustable Speed Operation

1/4-3 HP  
230, TENV, TEFC,  
C-Face with Rigid Base

- Replaces 90v & 120v PM DC
- TEFC & TENV Design
- 1/4 through 3 HP
- NEMA B Design
- 20:1 Constant Torque Speed Range
- Eliminates Brush and Commutator Maintenance



1/4-3 HP Quick Select

HP	Model	RPM	Frame	Enclosure	Voltage	Weight
1/4	985025TNM	1725	56C	TENV	230	18
1/3	985033TNM	1725	56C	TENV	230	18
1/2	985050TNM	1725	56C	TENV	230	20
3/4	985075TEM	1725	56C	TEFC	230	24
1	985100TEEM-M	1725	56C	TEFC	230	25
1-1/2	985150TNM	1725	145TC	TENV	230	50
2	985200TEM	1725	145TC	TEFC	230	51
3	985300TEM	1725	182TC/145TC	TEFC	230	55