Bearingless AC Generators

These are AC generators of the most basic form, consisting only of a stator and a permanent magnet rotor which mounts on a rotating shaft in the customer's equipment. Designed primarily for use by OEM's, these extremely rugged and dependable generators have no bearings or brushes and therefore, require absolutely no maintenance.

Because they are impervious to oil, grease and relatively high temperatures, they may be installed in inaccessible areas, such as gear boxes, which permits the saving of space and the reduction of costs. They have extremely low torque burdens of less than one ounce-inch and are capable of speeds up to 100,000 rpm.

"Potted" Models. Units are available with the stator windings encapsulated with an epoxy material for greater protection. These are designed with the letter "P" in the type number. Minimum order of 6 pieces.

Mil-spec compliance. Model 758, types XPF86 and GF86 are designed to meet MIL-S-901 high shock, as required by specification MIL-T-16049.

Rotor Installation: The rotor of the generator unit should be mounted to the true center of the shaft with extreme care, particularly in higher speed applications. The relatively small inertia of the rotor makes it possible to secure it to the shaft with a right hand thread regardless of the direction of rotation. It is recommended that a steel screw having an SAE thread be used to permit maximum tightening.

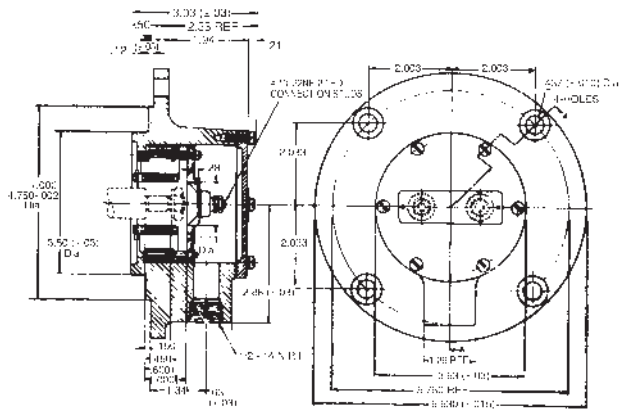
NOTE: DO not press fit the rotor to the shaft, or the rotor will shatter because of the brittle nature of the magnetic rotor material.

Indicators: ATC offers digital RPM indicators that operate from AC and DC voltage signals, and from AC frequency. These meters are specially modified to reduce the rapid fluctuation in display digits that result from varying speed rates. Consult factory for details.

TYPE	MODEL NUMBER	SPEED RANGE (RPM)	HOUSING	NO. OF STATOR POLES	ROTOR STYLE NO.	VOLT OUTPUT AT 1000 RPM (Open Circuit)	STATOR RESISTANCE (Ω ±20%)	FREQUENCY AT 1800 RPM (HO)
XF86	758-9989002	500-20,000	None	8	6	10 ± 1%	32	120
XPF86	758-0077533							
GF86	758-9912002	500-20,000	Cast Iron	8	6	10 ± 1%	32	120
GPF86	758-0300008							
XF44	758-0088466	20,000-40,000	None	4	4	+3% 2-0%	15	60
XPF44	758-0067273							
GF44	758-0049982	20,000-40,000	Cast Iron	4	4	+3% 2-0%	15	60
GPF44	758-D084866							

DIMENSIONS (INCHES/MILLIMETERS)

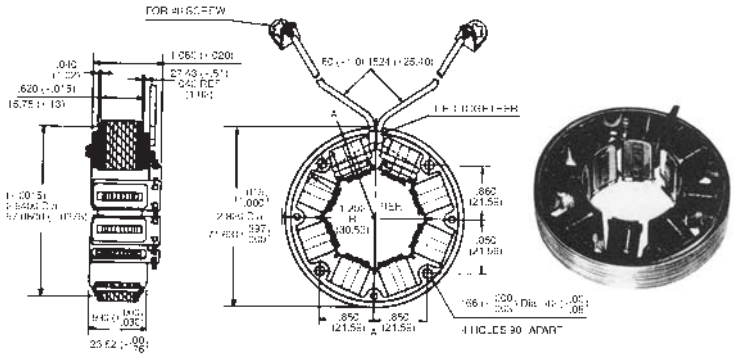
MODEL 758 –TYPE GF86



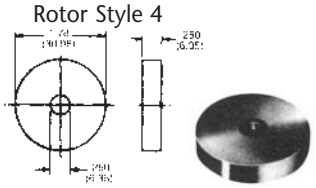
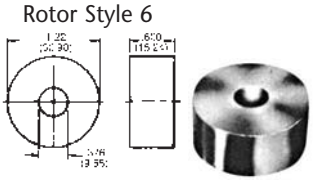
Mounted in cast iron housing.

Weight: 7.27 lbs.

MODEL 758 –TYPE XF86



Rotor Style 4



Rotor Style 6