

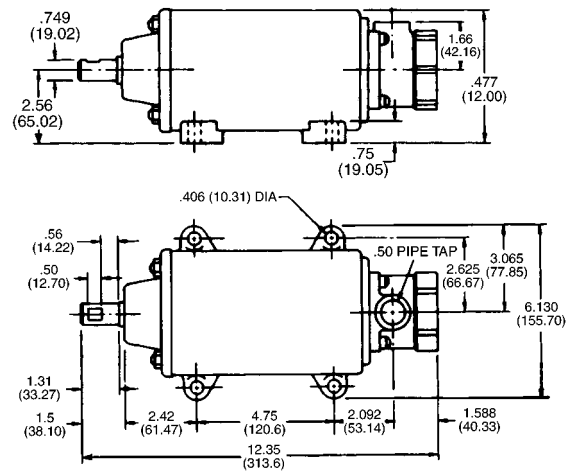
# Model 750 – Type E



Explosion-Proof



## DIMENSIONS INCHES (MILLIMETERS)



File #E102224

The Model 750 DC Tachometer-Generator embodies a permanent magnet field surrounding a rotating armature. The commutator segments are made from a special non-corrosive alloy which has an exceptionally long life. The brushes are of a self-lubricating material and are carried in a self-aligning holder which equalizes the pressure of both brushes. The armature shaft rotates on ball bearings which under normal operation do not need lubrication for 15,000 hours running time or approximately 3 years, whichever comes first. Maximum recommended speed is 5,000 rpm. Brush life is greatest at the lower speeds.

Rigid, heavy-duty cast-iron housing and mounting base. 3/4" diameter shaft, supported by heavy-duty ball bearings. Includes conduit junction box with 1/2" N.P.T. opening suitable for flexible conduit, mountable in any one of four positions. This unit is listed by Underwriter laboratories for use in hazardous locations Division 1 (vapors exist continuously), Class 1, Group D (natural gas or the vapors from lacquer solvents, acetone, alcohols, and petroleum derivatives), and Class 2, Groups F and G (carbon black, coal or coke dust, grain dust, etc.).

Approximate torque. 2. oz.-in. starting, 2.0 oz.-in., running (1000 RPM).

Approximate weight: 24.5 lbs. (11.1 kg). **Cat. No. 750-9905001**

### Replacement Brush Kit

Metallic leaf brushes are of an alloy which will wear before the commutator bars. Brush replacement is a simple field operation.

**Part No. 249302.901**

## SPECIFICATIONS

### VOLTAGE OUTPUT AT 1000 RPM:

6 Volts  $\pm 1\%$  Per 1000 RPM

### ACCURACY:

$\pm 1\%$

### EMF LINEARITY 1:

$\pm 0.15\%$

### PERMISSIBLE CURRENT DRAIN:

50 mA

### MAX. RMS VALUE OF AC RIPPLE:

2%

### ALLOWABLE END PLAY:

.005"

### MAX OPERATING TEMPERATURE:

250°F

### INTERNAL RESISTANCE AT 25°C:

20 Ohms  $\pm 2\%$

### NUMBER OF BRUSHES:

2 Per Set

### COMPOSITION OF BRUSHES:

Palladium Silver Alloy

### ARMATURE:

12 Bars, 12 Slots

### INSULATION:

Insulation Class 105

### HI-POT TEST:

500 Volts for 1 Min.

### BEARINGS:

Ball

### TEMPERATURE COMPENSATION:

0.1% Per 10°C Change

### NORMAL CONTINUOUS SPEED:

2000 RPM

### MIN. SPEED:

100 RPM

### MAX. TOP SPEED 2:

5000 RPM

### STARTING TORQUE:

2.0 oz. ins.

### RUNNING TORQUE:

2.0 oz. ins.

### WEIGHT:

24.5 lbs.

### LENGTH:

12.35"

### HEIGHT:

4.77"

### WIDTH:

6.13"

### MOUNTING:

Base

### ENCLOSURE:

Explosion Proof

### SHAFT DIAMETER:

3/4"

### SHAFT CONNECTION:

Direct, Geared or Belted

### SHAFT LENGTH:

1 1/2"

### ADJUSTABLE MAGNETIC SHUNT

RANGE:

$\pm 4\%$

### DIRECTION OF ROTATION

EFFECT:

$\pm 0.6\%$