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Encoder Instructions

M180, M182
 INACTIVE DESIGN
 Replaced by Model AV850

Description

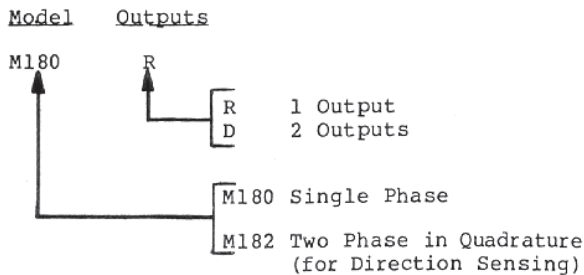
The Avtron Model M180 and M182 Slaptach™ Pulse Generators are designed to be compatible with the accessory mounting provisions of the General Electric Kinematic™ line of DC motors. Both stub shaft and through shaft mountings are accommodated for motor frame sizes from 180 through 500. This space saving design eliminates the need for costly adapters and shaft couplings. It not only saves installation time but, more importantly, completely eliminates common failures resulting from poor coupling alignment.

The magnetic pulse generating circuitry is completely encapsulated and immune to dirt and oil. One or two electrically isolated outputs with or without direction sensing capabilities are available. All outputs are zero speed; that is, they can work effectively down to zero RPM.

The Avtron Slaptach™ Pulse Generator consists of two separate parts: a rotor and a stator housing. These precision machined parts, when mounted to the accessory end of a motor that conforms to NEMA MG 1-11.67 for Type FC Face Mounting, will function properly without further adjustment.

The available options are:

Stator Part Numbers



Rotor Part Numbers. All are 240 pulses per revolution.

For Shaft Size Stub Shaft Through Shaft

| | | |
|---------------|--------|--------|
| 1.1250/1.1245 | B16782 | B17088 |
| 1.3750/1.3745 | B16782 | B17089 |
| 1.6250/1.6245 | B16782 | B17090 |
| 1.8750/1.8745 | B16782 | B17091 |
| 2.1250/2.1245 | B16783 | B17092 |
| 2.3750/2.3745 | B16784 | B17093 |
| 2.8750/2.8745 | B16785 | B17094 |

Rotor Installation Hardware Required For Following Rotor Part Numbers (Not furnished)

- B16782**
 One roll pin tubular, slotted wall, .131/.135 dia., 3/4 long.
 One 3/8-16 x 1 bolt with springlock and flat washer.
- B16783**
 Two 10-24 x 7/8 machine screw with springlock washer.
- B16784 - B16785**
 Two 3/8-16 x 1 bolt with springlock washer.
- B17088 - B17094**
 Two set screws, oval point, 10-32 x 1/4 chemical thread locking adhesive.

Installation

In preparation for installing the Avtron Slaptach™ Pulse Generator, it is first necessary to clean both the accessory motor shaft and the mounting face. These surfaces must be inspected and paint, burrs, and other surface imperfections removed. Coat the cleaned surfaces with a light grade of oil.

Rotor Installation

Rotor installation for the most part is straightforward. Position the rotor on the shaft and tighten with the hardware indicated. The B16782 uses a roll pin to prevent rotation of the rotor on the shaft. Install the pin in the rotor first, and then position the rotor on the shaft and lightly tap into place. Install the center bolt and flat washer with springlock washer and tighten.

Slide the through shaft type rotor onto the shaft with the set screw hub away from the motor face. Position the rotor .25 ± .06 inches away from the motor face. Use a chemical fastener on the set screw threads.

Stator Housing Installation

The stator housing is retained to the motor using four 1/2-13 x 3-1/4 inch bolts and spring type lock washers (not furnished). If the stator is to be sandwich mounted between an accessory such as a fan and the motor, select the bolt length accordingly. Carefully move the stator housing into position, trying to avoid contact with the rotor. Install the four mounting bolts and torque to 30 to 35 foot pounds.

