Repair of this equipment shall only be carried out by C.E. Niehoff & Co.

Installation Instructions

Explosion hazard. Do not open when an explosive atmosphere is present. Improper installation of alternator in an explosive environment can cause severe personal injury, death, or substantial property damage. Alternator must be installed by a qualified person trained and familiar with requirements for selection, installation, and maintenance of flameproof equipment to IEC 60079-14 and IEC 60079-17 respectively.

"Authority Having Jurisdiction (AHJ)" is defined as the employee of a company taking full responsibility for the safety, welfare, and supervision of all other employees under their control. (See Inspection and Maintenance Section referenced above.)

1. Gland and cable and pulley/fan are specified and ordered separately and are factory-installed. Cable and gland have their own application requirements. DO NOT DISMANTLE. Failure to observe any instructions in the installation instruction may invalidate any certificate or warranty agreement.

The alternator contains no user serviceable parts. DO NOT DISMANTLE. Failure to observe any instructions in the installation instruction may invalidate any certificate or warranty agreement.

The alternator incorporates flameproof joints with dimensions that are other than the relevant maximum or minimum, specified in Table 1 of IEC 60079-1:2007. The user shall contact the original manufacturer for information on the dimensions of the flameproof joints.

The user shall refer to the manufacturer’s instructions with respect to the enclosure providing a degree of ingress protection IP66.
ALTERNATOR CHARACTERISTICS FOR: C192/C193

OUTPUT CURVE: OUTPUT AMPERES VERSUS ALTERNATOR SHAFT SPEED IN RPM AT 14.0 OR 28.0 VOLTS, RESPECTIVELY.

TORQUE CURVE: DRIVE TORQUE IN Nm VERSUS ALTERNATOR SHAFT SPEED IN RPM REQUIRED TO PRODUCE OUTPUT CURVE.

ALL MEASUREMENTS DEPICTED ON PERFORMANCE CURVES ARE TAKEN AT 104°F (40°C) AMBIENT TEMPERATURE (UNLESS OTHERWISE SPECIFIED) AND A STABILIZED MACHINE TEMPERATURE AT MAXIMUM OUTPUT WITH VOLTAGE CONSTANT AS SPECIFIED.

ABBREVIATIONS:

RPM REVOLUTIONS PER MINUTE

Nm NEWTON-METER

Conversion: 1 Nm = 8.85 Pound Inch (LBIN)
All connections shown (except where noted) should be torqued to 2.9-3.9 Nm/26-35 lb. in.

**Phase Wire Connections:**
- Terminal A (wht)
- Terminal B (wht w/blk)
- Terminal C (wht w/red)

**Field Coil Connection:**
- Terminal F: B– (wht)
- Field Coil Connection: D+ (wht w/yellow: C192) (wht w/red: C193)

**Internal Earthing Bonding:**
- M6 x 1 x 8mm screw w/sems lockwasher
- Torque to 14.9 Nm/132 lb. in.
  - See Table 1 and Step 3

**External Earthing Bonding:**
- M6 x 1 x 10mm screw w/sems lockwasher
- Torque to 14.9 Nm/132 lb. in.
  - See Table 1, Page 1

**Output Cable:**
- See Step 1, Page 1

**Figure 3 – Wiring Diagram**

**Figure 4 – Connections and Torque Values for Reference Only**