

Appendix E

R or T Series Motor with C10 (C10H)

Motor Connections - R or T Series Motor with C10 Option (or C10H)

The C10 (C10H) option for Compumotor's R or T series motors includes a removable braided cable and all necessary hardware for making an EMC compliant installation. Instructions for attaching the cable follow.

The C10 (C10H) Motor cable is 10 feet (3 m) long. Longer cable lengths are not available from Compumotor. If you extend the motor cable, follow the appropriate guidelines in the LVD regulations published by the EEC.

CAUTION - At no time during the following procedure should the motor cable be allowed to twist within the gland assembly. This can damage the cable and greatly reduce its life.

Procedure for attaching C10 (C10H) Cable to R or T Series Motor and ZETA6xxx Indexer Drive.

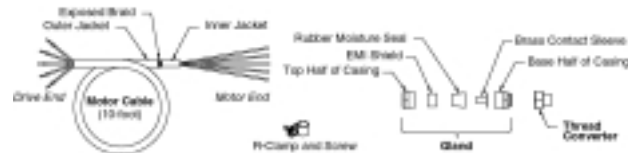
1. **Inventory** (ship kit contents are listed below in next drawing).

- Thread converter
- Gland assembly (5 pieces)
- Motor cable, 10 ft. (3 m)
- R-Clamp with 6-32 x 1/2 inch screw

Required Assembly Hardware:

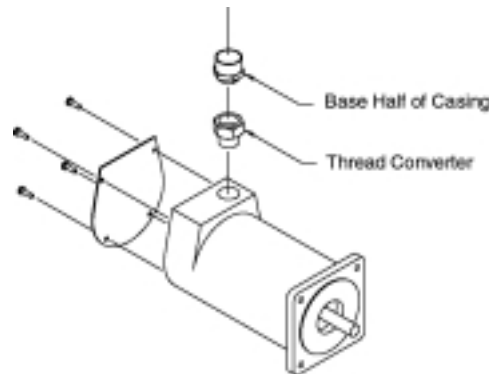
- Phillips screwdriver #2
- Wire strippers
- Standard slotted screwdriver, approximately 0.25 in (6mm)
- Crimp-on ring terminals sized for 18AWG* (0.75 mm²) wire:
 - 9 required for series wiring
 - 13 required for parallel wiring
- 18AWG* (0.75 mm²) wire jumpers 4 in (100 mm) long:
 - 2 required for series wiring
 - 4 required for parallel wiring
- Crimp tool
- Open end 15/16-inch wrench

*Note: 16 AWG (1.50 mm²) for motors operating above 10 amperes.



2. Install Thread Converter and Casing Base.

- Remove and discard the motor's plastic thread insert (CCW rotation).
- Remove endbell cover plate from the rear of the motor.
- Insert the thread converter into the motor rear endbell tighten. The NPT thread is designed for compression fit into the motor body and therefore will not bottom out.
- Insert the base half of the outer casing into the thread converter and tighten securely.

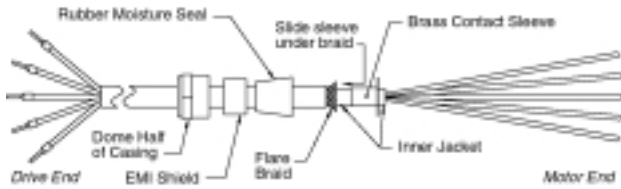


3. Arrange Components on Cable.

- From the motor end of the cable, first slide on the dome casing half, then the EMI shield, and finally, the rubber moisture seal. The EMI shield is installed blunt end first. The tapered end of the EMI shield fits over the tapered end of the rubber moisture seal.
- The next step is critical and if not done properly will impair the EMC performance of the system:**

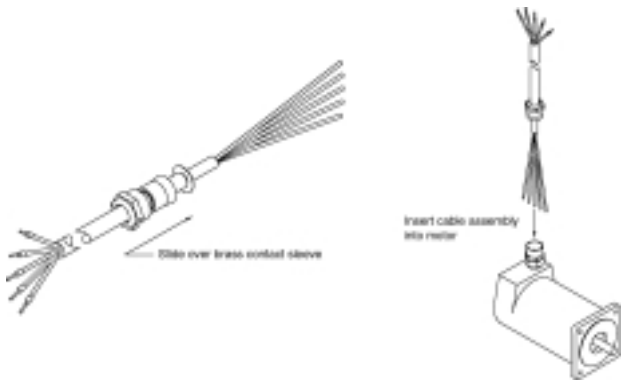
With a finger tip, flare the braid away from the inner jacket of the cable (all the way around). This will allow the braid to relax, and eases insertion of the brass sleeve.

- C. Carefully slide the brass sleeve as far under the exposed braid as possible. The sleeve must not cause the braid to bunch up or slide up under the outer jacket. The sleeve flange should butt up against the inner jacket of the cable.



4. Assemble Components on Cable.

- A. Slide the rubber moisture seal up to the flange of the brass sleeve.
- B. Slide the EMI shield onto the rubber moisture seal.
- C. Slide the dome half of the outer casing over the EMI shield.



5 Insert Cable Assembly into Motor.

Insert the assembly into the prepare motor and screw the dome half of the outer casing until snug. **Do not twist the cable.**

6. Wire Motor for Series or Parallel Operation.

See *Selecting Series or Parallel Motor Wiring* in Chapter 1 of this manual.

7. Connect the Cable to the ZETA6xxx Indexer Drive.

At the drive end of the motor cable, expose a short length of braiding and anchor the cable to ZETA6xxx Indexer Drive with an R-clamp and screw included in the C10 (C10H) Cable Kit. Avoid looping the motor cable. The motor cable should be kept away from I/O cables carrying control signals.

The next figure shows dimensions for your cable preparation.

