SECTION 26 05 83

WIRING CONNECTIONS (600 V AND BELOW)

PART 1 - DESIGN DIRECTIVES

1.1 DESIGN CRITERIA

A. None

PART 2 - PRODUCTS

2.1 WIRE CONNECTORS, INTERIOR DRY LOCATIONS, WHERE NOT SUBJECT TO VIBRATION

A. For Wires Sizes up to #10 and not Subject to Vibration: Ideal “twister” brand splicing device (wire nut) or approved equal.

B. Crimp splices for feeders.

C. Polaris Connectors: Acceptable for some situations such as three-wire connections. Contact FOM-Electric shop for proposed use.

2.2 MOTOR CONNECTIONS AND OTHER CONNECTIONS SUBJECT TO VIBRATION

A. Bolted stub connections on ring-type compression terminations with Raychem type RVC motor connection insulation.

B. Motors at or Under 1 HP: Crimp and Cap connections.

2.3 EXTERIOR LOCATIONS

A. Must be listed for wet location.

B. Insulated Mechanical Splice Connectors (“Polaris”): Not allowed at exterior locations.

C. Exterior Splices: Made with compression type or split-bolt type connectors.

2.4 GROUNDING ELECTRODES

A. Grounding Electrodes Systems: Compression crimps. Burndy type YGHC-C HYTAP connectors and type YGL-C HYGRID cross connectors or approved equals.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Splicing:

1. Wire Nut: For conductors up to and including #10 wire.

a. Number of Connectors Joined by a Single Wire Nut: As defined by the wire nut manufacturer.

2. Compression Crimp Connector: For conductors larger than #10.

B. Motor Splices: Ring type compression connectors attached to feeders and motor leads.

1. Ring Type Connectors: Bolt together with machine screws facilitating removal and re-connection.
2. Insulation Used on Splices: Applied to minimize residue that will hinder future disconnection and reconnection activities.
   a. Rubber compound that melts into the connectors and onto the insulation must be separated from the joint by a dry insulating material before application.

C. Connections of Grounding Electrode Conductors:

1. Use compression crimp or exothermic welding processes.
2. Single and Multiple Hole Setscrew Lugs: Are not be used on grounding system except at grounding bushings and where supplied on equipment by the manufacturer.

D. All Splices: Cover with electrical insulating material.

1. Insulation Rating: Equal to or greater than insulation rating of conductors being spliced.

E. Direct Buried Underground Splicing of Conductors: Not allowed under any circumstances.

F. Medium Voltage Electrical Connections: Refer to Section 26 05 13 Medium Voltage Cable and Terminations for electrical connections over 1000 Volts.

END OF SECTION