Section D — Panel Mounting Dimensions

<table>
<thead>
<tr>
<th>Shell</th>
<th>Back Mounting</th>
<th>Front Mounting</th>
<th>Blind Panel Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>601</td>
<td>0.10 18.3 0.5</td>
<td>0.10 18.3 0.5</td>
<td>0.10 18.3 0.5</td>
</tr>
<tr>
<td>602</td>
<td>0.10 20.7 0.5</td>
<td>0.10 20.7 0.5</td>
<td>0.10 20.7 0.5</td>
</tr>
<tr>
<td>603</td>
<td>0.10 22.5 0.5</td>
<td>0.10 22.5 0.5</td>
<td>0.10 22.5 0.5</td>
</tr>
<tr>
<td>604</td>
<td>0.10 25.4 0.5</td>
<td>0.10 25.4 0.5</td>
<td>0.10 25.4 0.5</td>
</tr>
<tr>
<td>605</td>
<td>0.10 27.6 0.5</td>
<td>0.10 27.6 0.5</td>
<td>0.10 27.6 0.5</td>
</tr>
</tbody>
</table>

Section E — Electrical Testing

WARNING

DO NOT connect power units until the following electrical tests have been performed.

- Make continuous checks of wiring to verify correct phasing and grounding connections.
- Check insulation resistance to be sure system does not have any short circuits or unwanted grounds.

Section F — Maintenance

Electrical and mechanical inspection of all components must be performed on a regular schedule determined by the environment and frequency of use. It is recommended that inspection be performed a minimum of once a year.

APPLICATION

ARK-trol® connectors are used with electrical and electronic equipment to provide quick connect and disconnect capability whenever a power, control or combination power and control connector is required. The lightweight, compact size makes it ideal for applications involving limited space.

When properly installed and maintained, ARK-trol connectors provide reliable operation in application environments ranging from tough, industrial installations to temperature controlled clean rooms. The ARK-trol connector construction is designed to resist corrosion, keep moisture out, and operates in a wide range of temperatures, making it ideal for use indoors or outdoors.

Three product series (RCP, RFE, RPK) make up the ARK-trol connector offering.

NOTE: The RCP Series of ARK-trol plugs and connectors are standard for use with the following: 220-460 V or cable as described in the National Electrical Code, Article 400.

Section G — Electrical Rating

The electrical ratings of ARK-trol connectors vary with the product series (RCP, RFE, RPK) and the contact configuration. Refer to the current Crouse-Hinds ECOM Catalog or the ARK-trol Connector Specification and Selection Guide (Bulletin 3028-0498) for details.

Table 3

<table>
<thead>
<tr>
<th>Contact Size</th>
<th>Maximum Ampacity</th>
<th>Minimum Required Contact Torque (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>25A</td>
<td>35</td>
</tr>
<tr>
<td>10</td>
<td>30A</td>
<td>35</td>
</tr>
<tr>
<td>4</td>
<td>65A</td>
<td>40</td>
</tr>
<tr>
<td>10</td>
<td>100A</td>
<td>50</td>
</tr>
<tr>
<td>40</td>
<td>200A</td>
<td>30</td>
</tr>
</tbody>
</table>

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Crouse-Hinds Division
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Cooper Crouse-Hinds

Cruise Industries

Crouse-Hinds

Crouse Industries

IF1222

Installation & Maintenance Information
2. Terminate conductors using appropriate method. See Section C “Cable Preparation and Conductor Termination” (pages for datas).

3. Place the plug clamping nut (2) on the plug shell (1).

4. Assemble the interior assembly as follows:

For configurations with contacts #16 through #4:

The front insulator always contains the digits “004” in the part number and should be installed into the shell with the part number facing away from the assembler.

A) Place the front insulator (3) in the plug shell lining up the machined keyway on the insulator with the key on the inner surface of the plug shell.

B) Place the silicone wafer (4) in the plug shell lining up the proper polarity letter designation on the wafer with the key on the inner surface of the plug shell. Install the wafer with the side marked “Socket Contact Rear” facing toward the assembler. The contact ports for the wafer and front insulator will be aligned.

C) Insert pin contacts (6) (previously assembled to cable and without retaining clips) into the back insulator (5), according to your predetermined wiring pattern.

D) Snap round retaining ring clips (4) into contact clip groove on each contact from the end of the contact as shown above.

E) Place the back insulator (5) and contact assembly into the plug shell using the machined keyway on the insulator and key on the plug shell as a guide. Contacts will be aligned with contact ports in front insulator and silicone wafer.

5. Tighten the handle body (6) to the plug shell. This is a left hand thread. Use the chart below for determining appropriate torque.

**RECOMMENDED TORQUE FOR LEFT HAND THREADS**

<table>
<thead>
<tr>
<th>Shell Size</th>
<th>007</th>
<th>021</th>
<th>034</th>
<th>041</th>
</tr>
</thead>
<tbody>
<tr>
<td>D10</td>
<td>15 to 20 ft. lbs.</td>
<td>20 to 25 ft. lbs.</td>
<td>25 to 35 ft. lbs.</td>
<td>35 to 45 ft. lbs.</td>
</tr>
</tbody>
</table>

**NOTE:** No lubricant should be used.

6. Position remaining components (bushing gasket (8) through gland nut (12)) to handle body and tighten gland nut to the handle body. This is a right hand thread. Proper torque should be attained by the physical characteristics of the cable to form a good arc back and grip. Insulator body should be held by a wrench or other suitable means while tightening gland nut.

**WARNING:** Neck cramping grip only: Tighten screw in mechanical cramping grip to attain adequate strain relief without damaging cable sheath.

**CAUTION:** Care should be used not to allow twisting or pulling of cable while tightening.

**SOLDER CONNECTION**

- 1. Using a solder with a minimum of 95% tin, tin the compound-coated portion of the conductors. Remove any excess solder from the conductor connections.

- 2. Solder together the conductor connections.苏

- 3. Terminate conductor using appropriate method.

**CAUTION:** Do not apply flux to the cable. A high heat source is required for good soldering. A torch may be used only if the surrounding conductor insulation is adequately protected.

**NOTE:** A high heat source is required for good soldering. A torch may be used only if the surrounding conductor insulation is adequately protected.

**CAUTION:** Hold contact securely with solder wick in upright position. Insert conductor into solder well as far as possible while applying heat to the wick. Allows solder to melt on conductor, then allow it to flow into the solder well. Continue adding solder slowly until the wire is soldered together. Solder forms a complete bond between the wire and the solder well tip. See figure below.

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