### MAXIMUM CONDUCTOR SIZE

<table>
<thead>
<tr>
<th>Conductor Type</th>
<th>Number and Size of Secondary Mole</th>
<th>Number of Total Permanent Conductors</th>
<th>Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Phase - 4/0</td>
<td>3–6 Positions</td>
<td>12</td>
<td>EC5–2.0501</td>
</tr>
<tr>
<td>Single Phase - 500 KCM</td>
<td>3–6 Positions</td>
<td>12</td>
<td>EC5–2.0505</td>
</tr>
<tr>
<td>Single Phase - 350 KCM</td>
<td>3–8 Positions</td>
<td>18</td>
<td>EC5–2.0505</td>
</tr>
</tbody>
</table>

*(SEE DESIGN NOTES 4 & 5)*

### MEASUREMENTS

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>19&quot;</td>
<td>23.5&quot;</td>
<td>12&quot;</td>
<td>12&quot;</td>
<td>16.5&quot;</td>
<td>EC5–2.0501</td>
</tr>
<tr>
<td>24&quot;</td>
<td>30&quot;</td>
<td>15&quot;</td>
<td>14.625&quot;</td>
<td>22.625&quot;</td>
<td>EC5–2.0505</td>
</tr>
</tbody>
</table>

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**EC5–2.0513**

DRAINAGE BOX

**EC5–2.0508**

SECONDARY BOX
ASSEMBLY EC5-2.0501
19" X 23" SECONDARY J-BOX WITH PLASTIC NON TRAFFIC BEARING LID
1. 348-0000485  1 EA  LIDSEC12"X16"PLSTC GREEN
2. 348-0000525  1 EA  BXPUL19X23X12"PLST GREEN

ASSEMBLY EC5-2.0502
12" X 16" SECONDARY PLASTIC LID
1. 348-0000485  1 EA  LIDSEC12"X16"PLSTC GREEN

ASSEMBLY EC5-2.0503
19" X 23" SECONDARY NON TRAFFIC BEARING J-BOX
2. 348-0000525  1 EA  BXPUL19X23X12"PLST GREEN

ASSEMBLY EC5-2.0505
24" X 30" SECONDARY J-BOX WITH PLASTIC NON TRAFFIC BEARING LID
1. 348-0000488  1 EA  LID SEC 15"X23" PLSTC GREEN
2. 348-0000528  1 EA  BXPUL24X30X15"PLST GREEN

ASSEMBLY EC5-2.0506
15" X 23" SECONDARY PLASTIC LID
1. 348-0000488  1 EA  LID SEC 15"X23" PLSTC GREEN

ASSEMBLY EC5-2.0507
15" X 23" PLASTIC SECONDARY BOX EXTENSION
3. 348-0000529  1 EA  EXT BOX 15"X23" PLSTC GREEN

ASSEMBLY NOTES:
1. 2" extension available for correcting height of secondary box to match grade on a 24"x 30" plastic sec box w/ 15"x 23" flat lid.

ASSEMBLY EC5-2.0508
24" X 30" SECONDARY NON TRAFFIC BEARING J-BOX
2. 348-0000528  1 EA  BXPUL24X30X15"PLST GREEN

ASSEMBLY EC5-2.0513
NON TRAFFIC BEARING 24" X 30" DRAINAGE BOX WITH PLASTIC FLAT LID
1. 348-0000528  1 EA  BXPUL24X30X15"PLST GREEN
2. 348-0000488  1 EA  LID SEC 15"X23" PLSTC GREEN

ASSEMBLY NOTES:
1. See design note 3.
CONSTRUCTION NOTES:
1. For assemblies EC5-2.0501 through EC5-2.0508 all conduits shall enter the same end of the secondary box a maximum of 8” from the bottom inside edge of the secondary box.

2. Conduits shall not extend more than shown above the crushed rock base.

3. For customer service conduit entering a secondary box, a 90 degree elbow with a 24” radius for conduits smaller than 5” and 48” radius for 5” conduit is required.

4. The exposed ends of all conduits shall be cut off square, chamfered, free of any sharp edges and temporarily sealed to prevent rocks or other materials from entering them after mandreling.

5. Field bending of PVC conduits is not allowed. All sweeps shall be made with manufactured elbows.

6. Base for box shall allow drainage.

7. Provide compacted backfill as shown in excavated area around all vaults and boxes.

8. Top of secondary box base shall be set 2” above the surrounding final grade. If depth of landscaping material is not known at time of secondary box installation, top of box base shall be 4” above surrounding dirt to allow for landscaping material, if not located in a sidewalk or other pedestrian areas that would cause a "trip hazard".

9. For assemblies EC5-2.0501 through EC5-2.0508 the secondary service tails shall extend into the secondary box a distance equal to the length of the box (Measurement “B”).

DESIGN NOTES:

ASSEMBLY EC5-2.0501
1. THIS ASSEMBLY REQUIRES PRIOR APPROVAL BY ELECTRIC OPERATIONS.

ASSEMBLY EC5-2.0505
2. THIS ASSEMBLY REQUIRES PRIOR APPROVAL BY ELECTRIC OPERATIONS.

ASSEMBLY EC5-2.0513
3. This assembly has been created for designer, and shall be installed when required, in a customers service lateral as a drainage box per standard EC5-9.0100 for conduit sealing guidelines.

4. The number of secondary mole positions and conductors (see chart on page 1 of 3) has been revised to provide a minimum of (2) open secondary mole positions for future temporary service. (1) open position is allowed to be used for street lighting.

5. When the number of permanent conductors, (excluding street lighting) exceed the allowed secondary mole or box capacity, a larger secondary box and/or change of the size and number of conductors SHALL be required.

REFERENCE STANDARDS:
A) Refer to EC5-2.0400 for Above grade secondary box and lid.

B) Refer to EC5-6.3400 for 350 & 500 KCM urd underground moles.

C) Refer to EC5-9.0100 for Conduit sealing guideline.

D) Refer to EC5-2.0100 for Required minimum feeder, primary and secondary service conductor makeup lengths for vaults and secondary boxes.

E) Refer to ED5-1.0100 for Electrical Equipment placement clearances at a street corner, maximum size & setback requirements.

F) Refer to EC5-A.0500 for Customer requirements for vegetation management for underground systems.

G) Refer to ED5-1.6000 for Low voltage design tool.

H) Refer to EC5-B.1000 for Underground service conduit and conductor requirements.

I) Refer to standard EC5-2.9500 for Secondary boxes & lids catalog numbers.