# Horizontal Motors with NEMA "C" Bracket

**Frame:** 140 thru 250TC  
**Basic Type:** TC

---

## All Dimensions are in Inches

<table>
<thead>
<tr>
<th>Frame</th>
<th>C</th>
<th>P^2</th>
<th>U^3</th>
<th>V</th>
<th>AA</th>
<th>AB</th>
<th>AC</th>
<th>AF</th>
<th>AH</th>
<th>AJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>140TC</td>
<td>13.50</td>
<td>8.00</td>
<td>.8750</td>
<td>2.13</td>
<td>3/4 NPT</td>
<td>6.91</td>
<td>5.38</td>
<td>1.75</td>
<td>2.13</td>
<td>5.875</td>
</tr>
<tr>
<td>180TC</td>
<td>17.44</td>
<td>9.50</td>
<td>1.1250</td>
<td>2.63</td>
<td>3/4 NPT</td>
<td>8.03</td>
<td>5.75</td>
<td>2.13</td>
<td>2.63</td>
<td>7.250</td>
</tr>
<tr>
<td>180TC</td>
<td>17.44</td>
<td>9.50</td>
<td>1.1250</td>
<td>2.63</td>
<td>3/4 NPT</td>
<td>8.03</td>
<td>5.75</td>
<td>2.13</td>
<td>2.63</td>
<td>7.250</td>
</tr>
<tr>
<td>210TC</td>
<td>20.75</td>
<td>11.13</td>
<td>1.3750</td>
<td>3.13</td>
<td>1 NPT</td>
<td>9.75</td>
<td>7.25</td>
<td>2.00</td>
<td>3.13</td>
<td>7.250</td>
</tr>
<tr>
<td>250TC</td>
<td>24.88</td>
<td>13.31</td>
<td>1.625</td>
<td>3.75</td>
<td>1 1/2 NPT</td>
<td>11.50</td>
<td>8.53</td>
<td>2.63</td>
<td>3.75</td>
<td>7.250</td>
</tr>
</tbody>
</table>

**Tolerances:**

1. All rough dimensions may vary by .25" due to casting and/or fabrication variations.
2. Largest motor width.
3. Shaft extension diameter tolerance: +.0000; -.0005 up 1-1/2" inclusive. Large diameters: +.0005; -.001.
4. Tap size and bolt penetration allowance.
5. Conduit box may be located on either side or on top of motor. Conduit openings may be located in steps of 90 degrees regardless of location. Standard as shown with conduit opening down.
6. All tapped holes are Unified National coarse, right hand thread.
7. 140TC TCF types only.

---

**Issued by:** R. King  
**Approved by:** K. Potter

Nidec Motor Corporation  
St. Louis, Missouri
HORIZONTAL MOTORS
WITH NEMA "C" BRACKET
FRAME: 140 THRU 250TC
BASIC TYPE: TC

FRAME C P^2 U^3 V MIN AA AB AC AF AH AJ
140TC 343 203 22.225 54 3/4 NPT 176 137 44 54 149.23
180TC 443 241 28.575 67 3/4 NPT 204 146 54 67 184.15
180TC 443 241 28.575 67 3/4 NPT 204 146 54 67 184.15
210TC 527 283 34.925 80 1 NPT 248 164 51 80 184.15
250TC 632 338 41.28 95 1-1/2 NPT 292 217 67 95 184.15

TOLERANCES
FACE RUNOUT .004 T.I.R.
PERMISSIBLE ECCENTRICITY OF MOUNTING RABBIT .004 T.I.R.
PERMISSIBLE SHAFT RUNOUT .002 T.I.R.

1: ALL ROUGH DIMENSIONS MAY VARY BY .25" DUE TO CASTING AND/OR FABRICATION VARIATIONS.
2: LARGEST MOTOR WIDTH.
3: SHAFT EXTENSION DIAMETER TOLERANCE: +.0000; -.0005 UP 1-1/2" INCLUSIVE. LARGE DIAMETERS: +.005; -.001.
4: TAP SIZE AND BOLT PENETRATION ALLOWANCE.
5: CONDUIT BOX MAY BE LOCATED ON EITHER SIDE OR ON TOP OF MOTOR. CONDUIT OPENINGS MAY BE LOCATED IN STEPS OF 90 DEGREES REGARDLESS OF LOCATION.
6: ALL TAPPED HOLES ARE UNIFIED NATIONAL COARSE, RIGHT HAND THREAD.
7: 140TC TCF TYPES ONLY

INFORMATION DISCLOSED ON THIS DOCUMENT IS CONSIDERED PROPRIETARY AND SHALL NOT BE REPRODUCED OR DISCLOSED WITHOUT WRITTEN CONSENT OF NIDEC MOTOR CORPORATION

Nidec Motor Corporation
St. Louis, Missouri