

UNITS: INCHES

ROTATION FROM NDE



CCW  CW

NOTES:

1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
3. KEY DIMENSIONS EQUAL 0.250"x 0.250"x 1.75" (MOTOR SUPPLIED WITH KEY)

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT AND THE DATA MAY CHANGE WITHOUT NOTICE

PRELIMINARY

DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS MARKED AS CERTIFIED

CERTIFIED

**TOSHIBA**  
www.toshiba.com/tic  
TOSHIBA INTERNATIONAL CORPORATION

SEVERE DUTY  
**EQP Global SD**

TOTALLY ENCLOSED FAN COOLED  
FOOTED C-FACED  
3 PHASE INDUCTION MOTOR  
182TC-184TC F1 ASSEMBLY

DRAWING #: MDSL003-02  
REV. DATE: 06/21/18 REV. #: 4 PER.: M. O'DOWD  
REV. DESCRIP.:

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 0034SDSR42A-P

|           |     |            |        |       |                |             |          |              |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| HP        | kW  | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
| 3         | 2.2 | 4          | 1760   | 182TC | 230/460        | 60          | 3        | 8.0/4.0      |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55  | F          | 1.15   | CONT  | 89.5           | B           |          | 40 C         |

|              |      |     |         |                |                  |
|--------------|------|-----|---------|----------------|------------------|
| Load         | HP   | kW  | Amperes | Efficiency (%) | Power Factor (%) |
| Full Load    | 3.00 | 2.2 | 4.0     | 89.5           | 79.6             |
| ¾ Load       | 2.25 | 1.7 | 3.1     | 88.9           | 75.0             |
| ½ Load       | 1.50 | 1.1 | 2.5     | 86.7           | 65.3             |
| ¼ Load       | 0.75 | 0.6 | 2.2     | 78.1           | 40.9             |
| No Load      |      |     | 1.8     |                | 6.6              |
| Locked Rotor |      |     | 32      |                | 47.6             |

|                   |                      |                 |                    |   |
|-------------------|----------------------|-----------------|--------------------|---|
| Torque            |                      |                 |                    | Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> ) |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) |   |
| 8.95              | 270                  | 225             | 390                | 0.37  |

|                    |     |                           |           |         |                            |
|--------------------|-----|---------------------------|-----------|---------|----------------------------|
| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |         | Approx. Motor Weight (lbs) |
| Cold               | Hot |                           | DE        | NDE     |                            |
| 35                 | 15  | -                         | 6306ZC3   | 6306ZC3 | 104                        |

\*Bearings are the only recommended spare part(s).

**Motor Options:**  
Product Family:EQP Global SD CFace Footed  
Mounting:C-Face Footed,Shaft:T Shaft

|             |  |
|-------------|--|
| Customer    |  |
| Customer PO |  |
| Sales Order |  |
| Project #   |  |

Tag:

All characteristics are average expected values.

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|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | mcampbell | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 2/2/2012  | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 0034SDSR42A-P

|           |     |            |        |       |                |             |          |              |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| HP        | kW  | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
| 3         | 2.2 | 4          | 1440   | 182TC | 190/380        | 50          | 3        | 9.4/4.7      |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55  | F          | 1.0    | CONT  | 85.5           | B           |          | 40 C         |

|              |      |     |         |                |                  |
|--------------|------|-----|---------|----------------|------------------|
| Load         | HP   | kW  | Amperes | Efficiency (%) | Power Factor (%) |
| Full Load    | 3.00 | 2.2 | 4.7     | 85.5           | 84.0             |
| ¾ Load       | 2.25 | 1.7 | 3.6     | 88.5           | 79.2             |
| ½ Load       | 1.50 | 1.1 | 2.8     | 88.9           | 69.3             |
| ¼ Load       | 0.75 | 0.6 | 2.2     | 79.9           | 47.5             |
| No Load      |      |     | 1.8     |                | 6.5              |
| Locked Rotor |      |     | 40      |                | 53.9             |

|                      |                         |                    |                       |   |
|----------------------|-------------------------|--------------------|-----------------------|---|
| Torque               |                         |                    |                       | Rotor wk <sup>2</sup><br>Inertia<br>(lb-ft <sup>2</sup> ) |
| Full Load<br>(lb-ft) | Locked Rotor<br>(% FLT) | Pull Up<br>(% FLT) | Break Down<br>(% FLT) |   |
| 10.9                 | 215                     | 170                | 265                   | 0.37  |

|                    |     |                              |           |         |                               |
|--------------------|-----|------------------------------|-----------|---------|-------------------------------|
| Safe Stall Time(s) |     | Sound Pressure<br>dB(A) @ 1M | Bearings* |         | Approx. Motor Weight<br>(lbs) |
| Cold               | Hot |                              | DE        | NDE     |                               |
| 26                 | 19  | -                            | 6306ZC3   | 6306ZC3 | 104                           |

\*Bearings are the only recommended spare part(s).

**Motor Options:**  
Product Family:EQP Global SD CFace Footed  
Mounting:C-Face Footed,Shaft:T Shaft

|             |  |
|-------------|--|
| Customer    |  |
| Customer PO |  |
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| Project #   |  |

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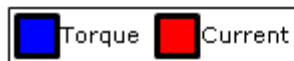
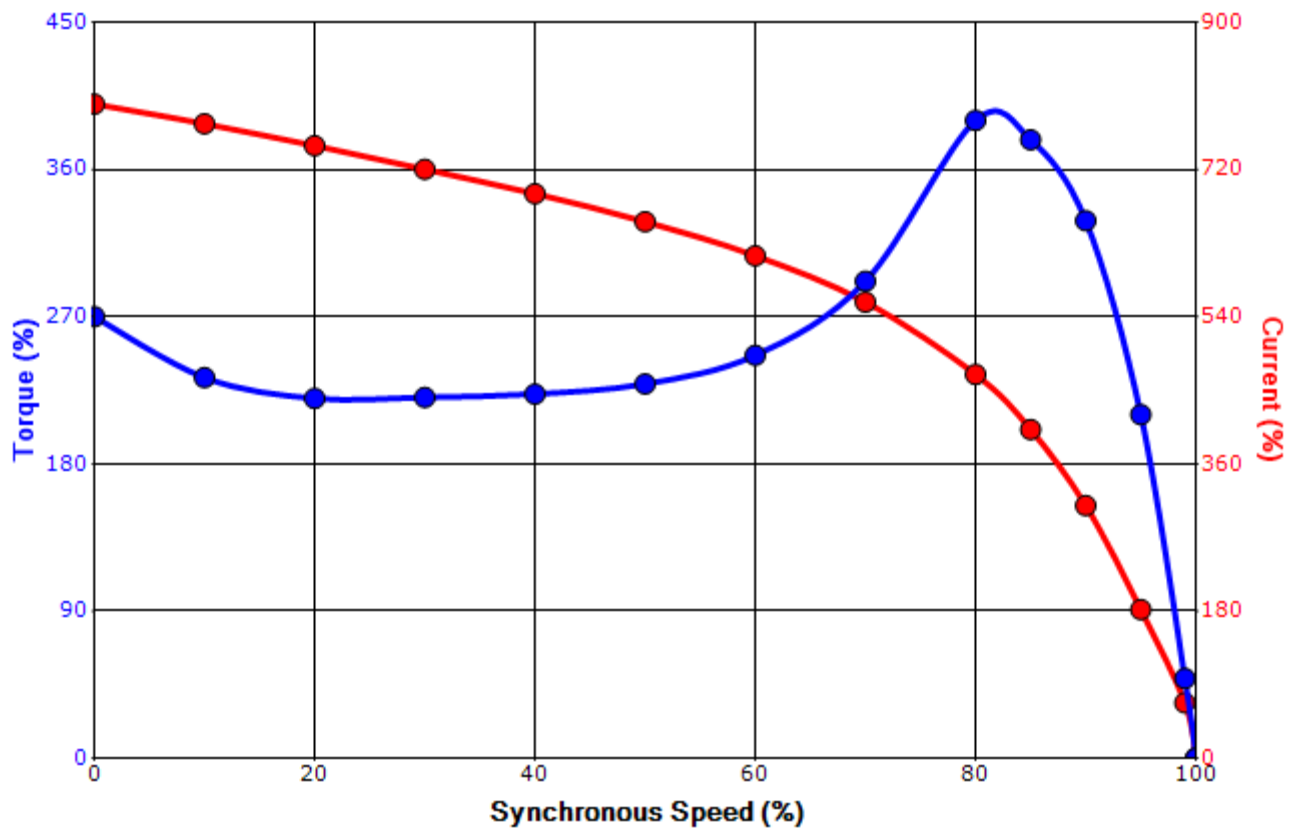
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|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | bmammen   | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 9/29/2020 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

**SPEED TORQUE/CURRENT CURVE**

Model: 0034SDSR42A-P

|                   |   |                   |                  |             |                |             |          |              |
|-------------------|---|-------------------|------------------|-------------|----------------|-------------|----------|--------------|
| HP                | kW  | Pole              | FL RPM           | Frame       | Voltage        | Hz          | Phase    | FL Amps      |
| 3                 | 2.2   | 4                 | 1760             | 182TC       | 230/460        | 60          | 3        | 8.0/4.0      |
| Enclosure         | IP  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC              | 55  | F                 | 1.15             | CONT        | 89.5           | B           |          | 40 C         |
| Locked Rotor Amps | Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> ) | Torque            |                  |             |                |             |          |              |
|                   |   | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | Break Down (%) |             |          |              |
| 32                | 0.37  | 8.95              | 270              | 225         | 390            |             |          |              |

**Design Values**



|             |  |  |     |
|-------------|--|--|-----|
| Customer    |  | wk <sup>2</sup> Load Inertia (lb-ft <sup>2</sup> ) | -   |
| Customer PO |  | Load Type  | -   |
| Sales Order |  | Voltage (%)  | 100 |
| Project #   |  | Accel. Time  | -   |

Tag:

All characteristics are average expected values.

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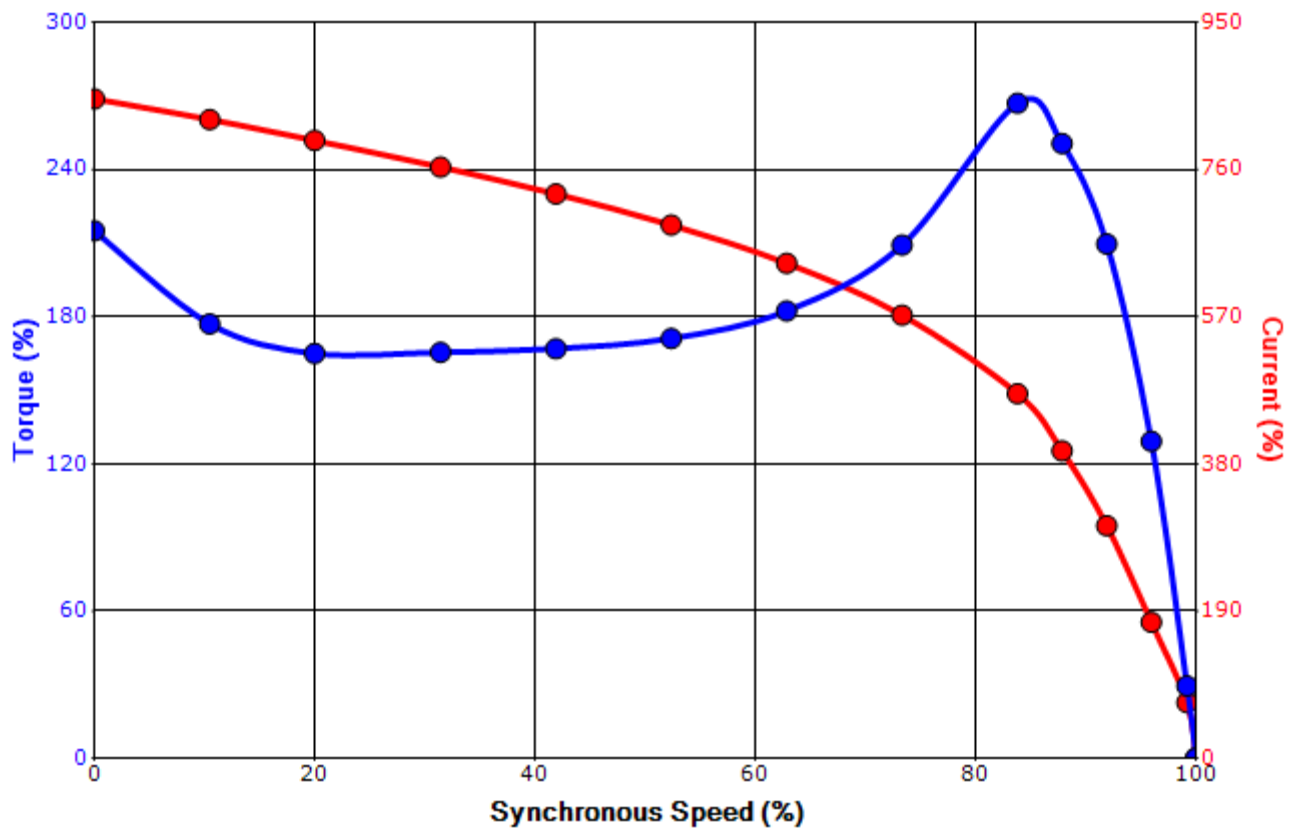
|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
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| Engr. Date  | 2/2/2012  | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

**SPEED TORQUE/CURRENT CURVE**

Model: 0034SDSR42A-P

|                   |   |                   |                  |             |                |             |          |              |
|-------------------|---|-------------------|------------------|-------------|----------------|-------------|----------|--------------|
| HP                | kW  | Pole              | FL RPM           | Frame       | Voltage        | Hz          | Phase    | FL Amps      |
| 3                 | 2.2   | 4                 | 1440             | 182TC       | 190/380        | 50          | 3        | 9.4/4.7      |
| Enclosure         | IP  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC              | 55  | F                 | 1.0              | CONT        | 85.5           | B           |          | 40 C         |
| Locked Rotor Amps | Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> ) | Torque            |                  |             |                |             |          |              |
|                   |   | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | Break Down (%) |             |          |              |
| 40                | 0.37  | 10.9              | 215              | 170         | 265            |             |          |              |

**Design Values**



|             |  |  |     |
|-------------|--|--|-----|
| Customer    |  | wk <sup>2</sup> Load Inertia (lb-ft <sup>2</sup> ) | -   |
| Customer PO |  | Load Type  | -   |
| Sales Order |  | Voltage (%)  | 100 |
| Project #   |  | Accel. Time  | -   |

Tag:

All characteristics are average expected values.

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|             |           |                  |             |             |               |
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| Engineering | bmammen   | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date  | 9/29/2020 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

**Motor Connection Diagrams**  
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation