

UNITS: INCHES

ROTATION FROM NDE

|   |                             |
|---|-----------------------------|
|   |                             |
| <input checked="" type="checkbox"/> CCW | <input type="checkbox"/> 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 0.375"x 0.375"x 2.88" (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**  
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TOSHIBA INTERNATIONAL CORPORATION

SEVERE DUTY  
**EQP** **SD**

TOTALLY ENCLOSED FAN COOLED  
FOOTED C-FACED (NEMA BA)  
3 PHASE INDUCTION MOTOR  
254TC-256TC F1 ASSEMBLY

DRAWING #: MDSL005-04  
REV. DATE: 06/29/18 REV. #: 3 PER.: M. O'DOWD  
REV. DESCRIP.:



|             |            |            |  |
|-------------|------------|------------|--|
| Issued Date | 12/18/2019 | Transmit # |  |
| Issued By   | dschoeck   | Issued Rev |  |

### TYPICAL MOTOR PERFORMANCE DATA

Model: 0152SDSR47A-P

| HP        | kW | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|----|------------|--------|-------|----------------|-------------|----------|--------------|
| 15        | 11 | 2          | 3530   | 254TC | 230/460        | 60          | 3        | 36/18.0      |
| Enclosure | IP | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55 | F          | 1.15   | CONT  | 91             | B           | G        | 40 C         |

| Load         | HP    | kW   | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|-------|------|---------|----------------|------------------|
| Full Load    | 15    | 11.2 | 18.0    | 91.2           | 86.6             |
| ¾ Load       | 11.25 | 8.4  | 13.8    | 90.3           | 84.4             |
| ½ Load       | 7.50  | 5.6  | 10.2    | 87.6           | 78.4             |
| ¼ Load       | 3.75  | 2.8  | 7.3     | 79.6           | 59.7             |
| No Load      |       |      | 5.5     |                | 9.8              |
| Locked Rotor |       |      | 116     |                | 40.5             |

| 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) |   |
| 22.3                 | 230                     | 195                | 280                   | 1.19  |

| Safe Stall Time(s) |     | Sound Pressure<br>dB(A) @ 1M | Bearings* |          | Approx. Motor Weight<br>(lbs) |
|--------------------|-----|------------------------------|-----------|----------|-------------------------------|
| Cold               | Hot |                              | DE        | NDE      |                               |
| 35                 | 15  | -                            | 6309ZZC3  | 6309ZZC3 | 309                           |

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

**Motor Options:**  
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 | aacosta   | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 1 |
| Engr. Date  | 4/19/2012 | Doc. Approved By | M. Campbell | Doc. Issued | 9/20/2019     |



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|-----------|----|------------|--------|-------|----------------|-------------|----------|--------------|
| 15        | 11 | 2          | 2910   | 254TC | 190/380        | 50          | 3        | 44/22        |
| Enclosure | IP | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55 | F          | 1.0    | CONT  | 90.2           | B           | G        | 40 C         |

| Load         | HP    | kW   | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|-------|------|---------|----------------|------------------|
| Full Load    | 15    | 11.2 | 22.0    | 91.9           | 86.5             |
| ¾ Load       | 11.25 | 8.4  | 16.3    | 91.9           | 84.3             |
| ½ Load       | 7.50  | 5.6  | 11.7    | 90.8           | 78.3             |
| ¼ Load       | 3.75  | 2.8  | 7.9     | 83.1           | 64.5             |
| No Load      |       |      | 5.2     |                | 8.5              |
| Locked Rotor |       |      | 130     |                | 37.9             |

| 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) |   |
| 27.1                 | 165                     | 105                | 230                   | 1.19  |

| Safe Stall Time(s) |     | Sound Pressure<br>dB(A) @ 1M | Bearings* |         | Approx. Motor Weight<br>(lbs) |
|--------------------|-----|------------------------------|-----------|---------|-------------------------------|
| Cold               | Hot |                              | DE        | NDE     |                               |
| 24                 | 15  | -                            | 6309ZC3   | 6309ZC3 | 309                           |

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

**Motor Options:**

Mounting:C-Face Footed,Shaft:T Shaft

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

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All characteristics are average expected values.

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| Engineering | jhock    | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 1 |
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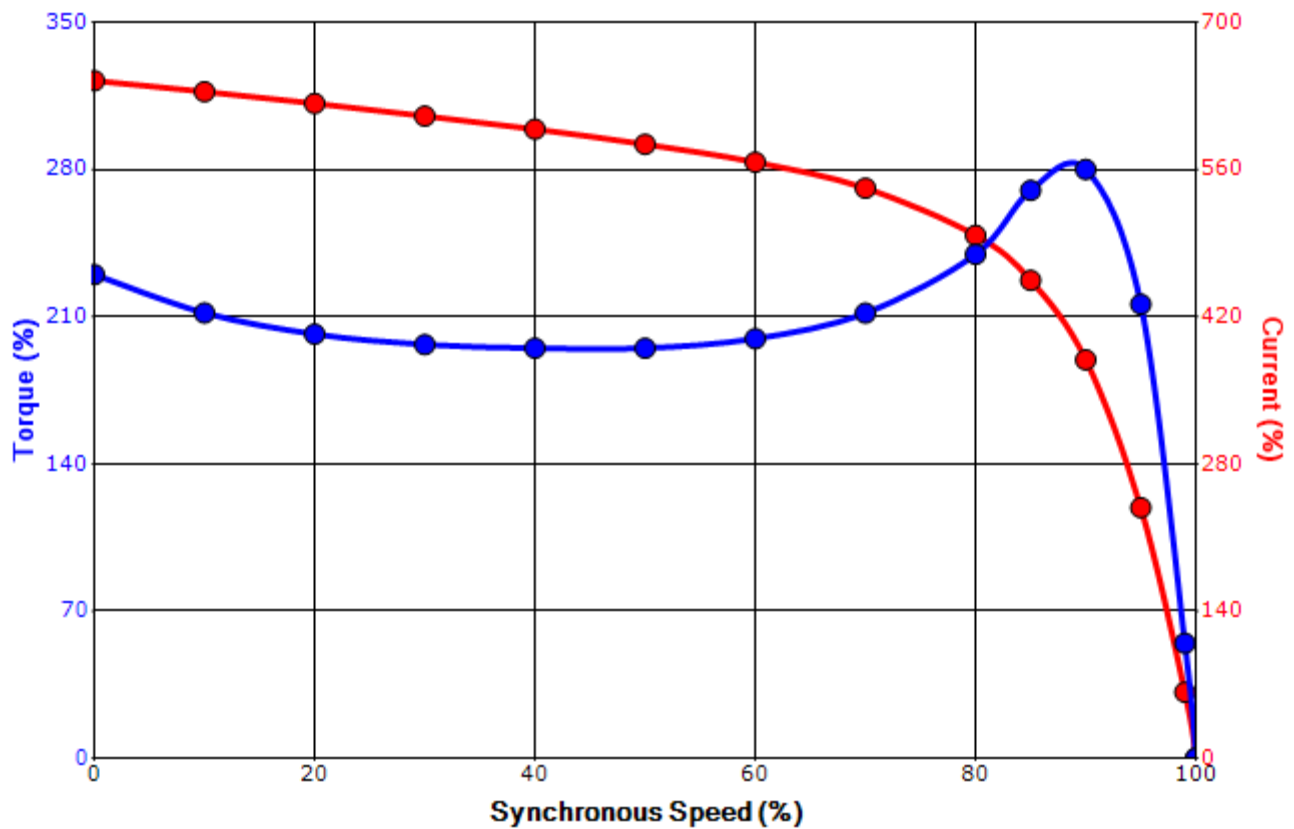
|             |            |            |  |
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### SPEED TORQUE/CURRENT CURVE

Model: 0152SDSR47A-P

|                   |   |                   |                  |       |                |             |                |              |
|-------------------|---|-------------------|------------------|-------|----------------|-------------|----------------|--------------|
| HP                | kW  | Pole              | FL RPM           | Frame | Voltage        | Hz          | Phase          | FL Amps      |
| 15                | 11  | 2                 | 3530             | 254TC | 230/460        | 60          | 3              | 36/18.0      |
| Enclosure         | IP  | Ins. Class        | S.F.             | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code       | Ambient (°C) |
| TEFC              | 55  | F                 | 1.15             | CONT  | 91             | B           | G              | 40 C         |
| Locked Rotor Amps | Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> ) | Torque            |                  |       |                | Pull Up (%) | Break Down (%) |              |
|                   |   | Full Load (lb-ft) | Locked Rotor (%) |       |                |             |                |              |
| 116               | 1.19  | 22.3              | 230              |       | 195            | 280         |                |              |

### 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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|             |           |                  |             |             |             |
|-------------|-----------|------------------|-------------|-------------|-------------|
| Engineering | aacosta   | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121/1 |
| Engr. Date  | 4/19/2012 | Doc. Approved By | M. Campbell | Doc. Issued | 9/20/2019   |



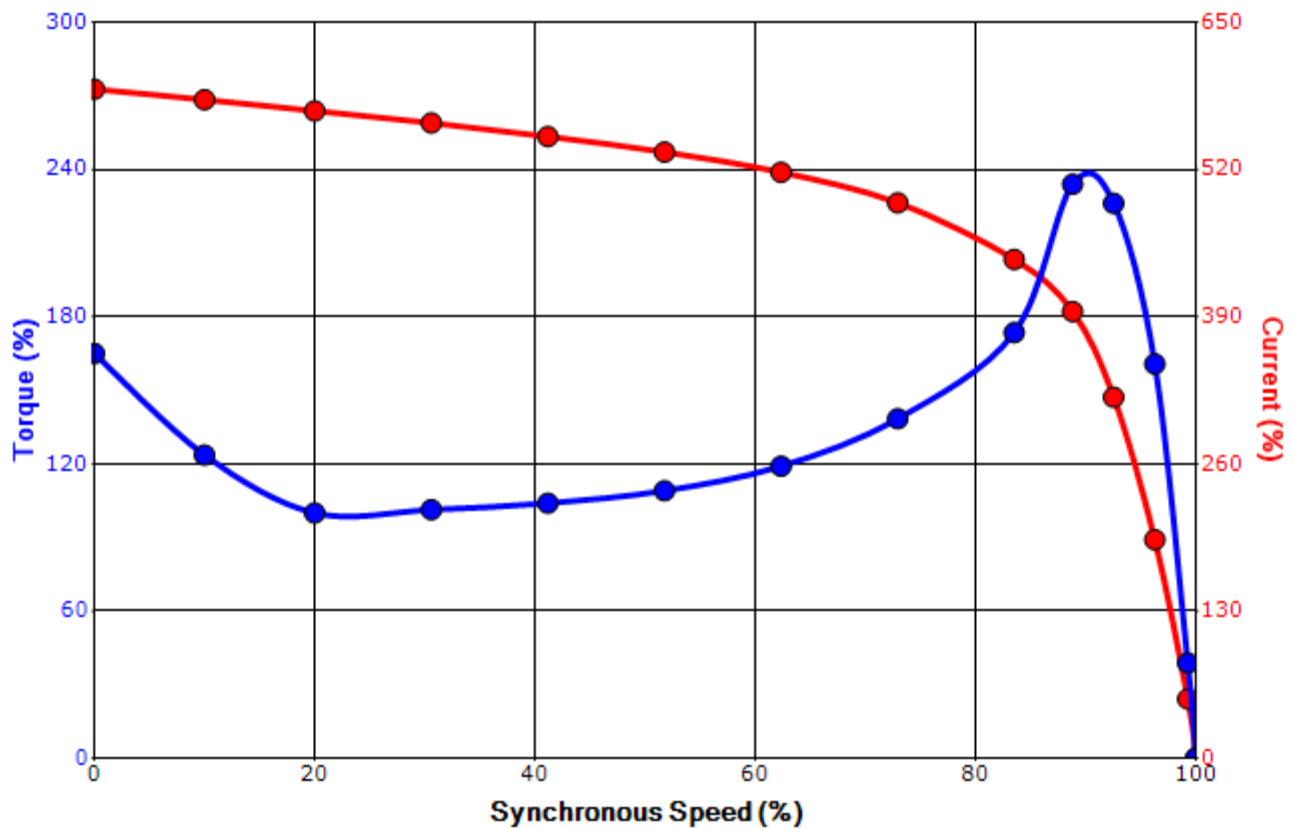
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|                   |   |                   |                  |       |                |             |                |              |
|-------------------|---|-------------------|------------------|-------|----------------|-------------|----------------|--------------|
| HP                | kW  | Pole              | FL RPM           | Frame | Voltage        | Hz          | Phase          | FL Amps      |
| 15                | 11  | 2                 | 2910             | 254TC | 190/380        | 50          | 3              | 44/22        |
| Enclosure         | IP  | Ins. Class        | S.F.             | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code       | Ambient (°C) |
| TEFC              | 55  | F                 | 1.0              | CONT  | 90.2           | B           | G              | 40 C         |
| Locked Rotor Amps | Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> ) | Torque            |                  |       |                | Pull Up (%) | Break Down (%) |              |
|                   |   | Full Load (lb-ft) | Locked Rotor (%) |       |                |             |                |              |
| 130               | 1.19  | 27.1              | 165              |       | 105            | 230         |                |              |

### 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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**Motor Connection Diagrams**  
12 Leads

Across-the-Line Starting / Running Connections

Low Voltage Delta



High Voltage Delta



Switch L1 and L2 to reverse rotation

Suitable for Wye-Delta Starting and Limited Part-Winding-Starting.  
Please Contact Toshiba International for specific connections.