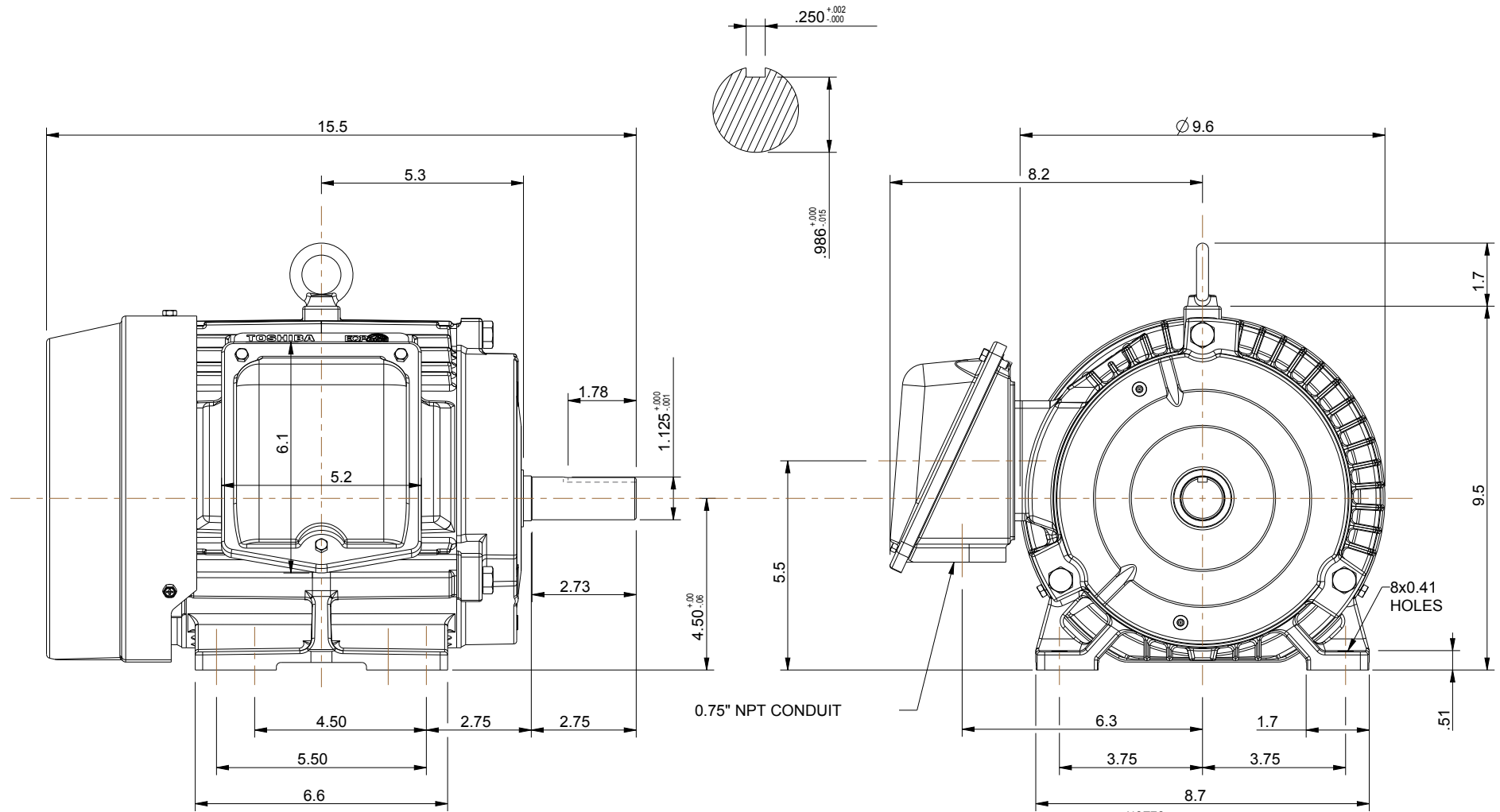




# NOTES:

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

0.250" x 0.250" x 1.75"

UNITS: INCHES

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT WITHOUT NOTICE. DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS CERTIFIED.

## 180T TEFC FRAME F1 ASSEMBLY

MDSL001-02

**TOSHIBA**

TOSHIBA INTERNATIONAL CORPORATION

### TOLERANCES

|       |       |
|-------|-------|
| .X    | .1    |
| .XX   | .03   |
| .XXX  | .005  |
| .XXXX | .0005 |

### MAXIMUM MOTOR WEIGHT

97 lbs.  
44 kgs.

| NO | REVISION                              | DRAWN BY  | DATE     | CHECK |
|----|---------------------------------------|-----------|----------|-------|
| 2  | CHANGE "U" DIMENSION (OVERRIDE VALUE) | M. O'DOWD | 07/12/13 | JR    |
| 1  | ADDED KEY DIMENSIONS                  | S. CLANCY | 08/08/12 | JR    |
| 0  | FIRST ISSUE                           | N. MOMIN  | 09/02/10 | JR    |

**EQP** Global SD  
**XT SERIES**

DRAWN BY: N. MOMIN  
CHECK BY: J. RUSSELL  
APPROVED BY:

www.toshiba.com/ind

## TYPICAL MOTOR PERFORMANCE DATA

Model: 0054SDSR41A-P

| HP        | kW  | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| 5         | 3.7 | 4          | 1750   | 182T  | 230/460        | 60          | 3        | 14/7         |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 54  | F          | 1.15   | CONT  | 89.5           | B           | J        | 40 C         |

| Load         | HP   | kW  | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|------|-----|---------|----------------|------------------|
| Full Load    | 5    | 3.7 | 6.5     | 89.7           | 81.2             |
| ¾ Load       | 3.75 | 2.8 | 5.0     | 89.3           | 77.6             |
| ½ Load       | 2.50 | 1.9 | 4.0     | 87.6           | 69.1             |
| ¼ Load       | 1.25 | 0.9 | 2.8     | 81.7           | 51.1             |
| No Load      |      |     | 2.7     |                | 5.9              |
| Locked Rotor |      |     | 46.00   |                | 52.8             |

| Torque            |                      |                 |                    | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) |                            |
| 15                | 255                  | 240             | 370                | 0.50                       |

| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |          | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|----------|----------------------------|
| Cold               | Hot |                           | DE        | NDE      |                            |
| 35                 | 15  | -                         | 6306ZZC3  | 6306ZZC3 |                            |

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

### Motor Options:

Product Family:EQP Global SD  
Mounting:Footed,Shaft:T Shaft

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

Tag:

All characteristics are average expected values. The declared locked rotor current has a tolerance of 20%.

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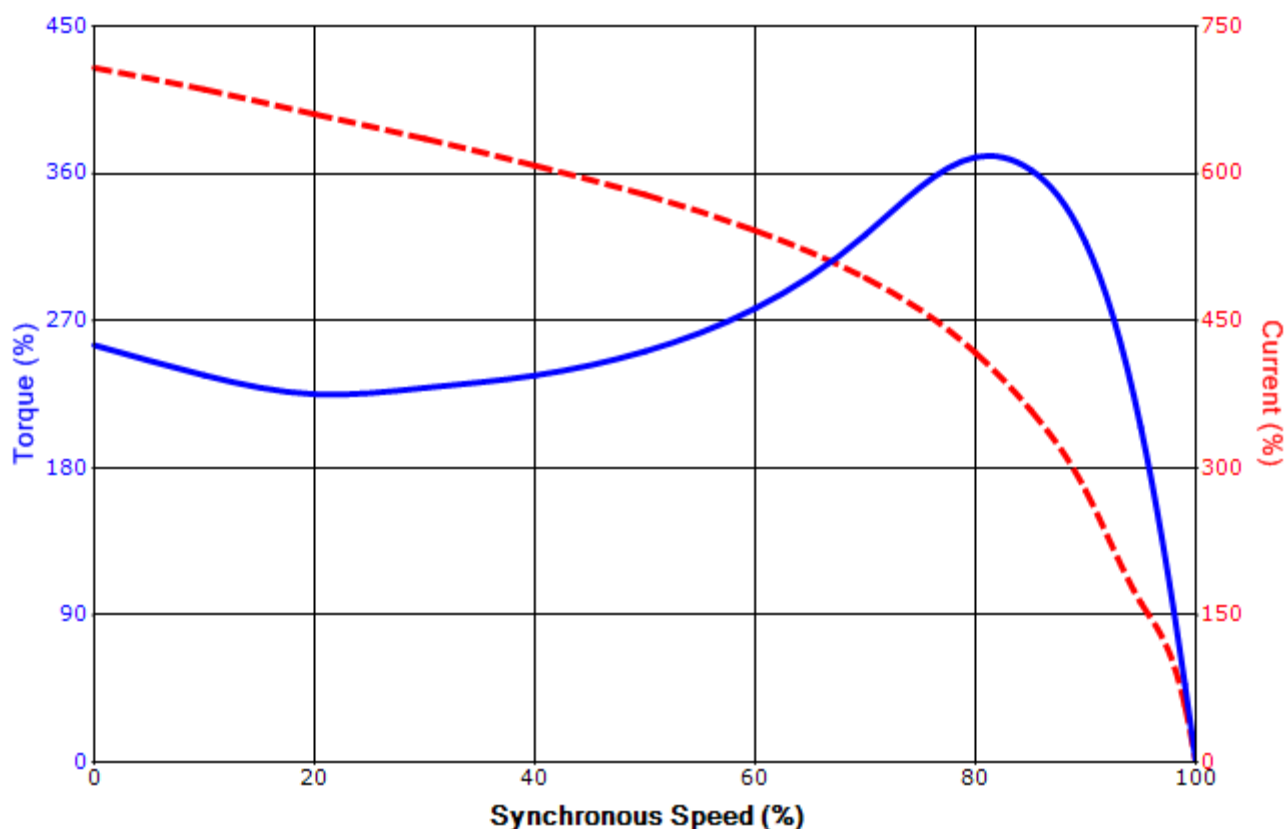
|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | mcampbell | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 1 |
| Engr. Date  | 2/2/2012  | Doc. Approved By | M. Campbell | Doc. Issued | 7/31/2013     |

## SPEED TORQUE/CURRENT CURVE

Model: 0054SDSR41A-P

| HP                | kW                                                  | Pole              | FL RPM           | Frame       | Voltage        | Hz             | Phase    | FL Amps      |
|-------------------|-----------------------------------------------------|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 5                 | 3.7                                                 | 4                 | 1750             | 182T        | 230/460        | 60             | 3        | 14/7         |
| Enclosure         | IP                                                  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design    | kVA Code | Ambient (°C) |
| TEFC              | 54                                                  | F                 | 1.15             | CONT        | 89.5           | B              | J        | 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 (%) |          |              |
| 46.00             | 0.50                                                | 15                | 255              | 240         |                | 370            |          |              |

### 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 | mcampbell | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date  | 2/2/2012  | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

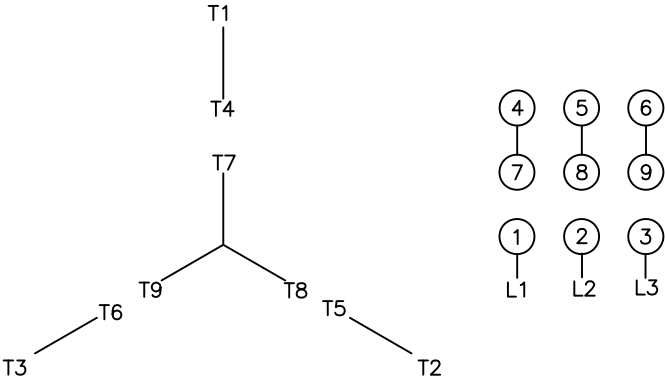
**Motor Connection Diagrams**  
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation