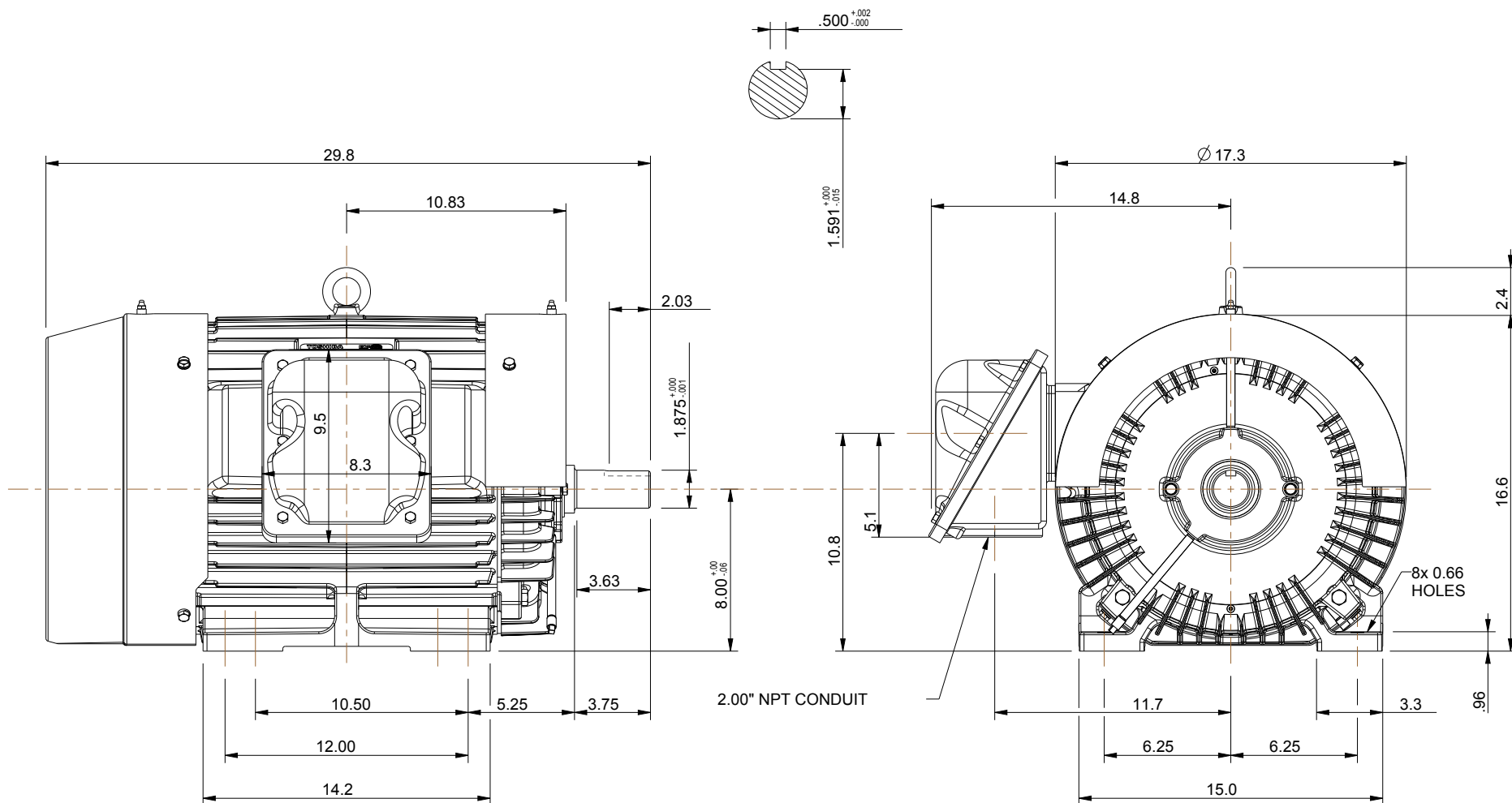




# NOTES:

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)

0.500" x 0.500" x 2.00"

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.

## 320TS TEFC FRAME F1 ASSEMBLY

MDSL002-06

**TOSHIBA**

TOSHIBA INTERNATIONAL CORPORATION

### TOLERANCES

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

MAXIMUM  
MOTOR WEIGHT

651 lbs.  
295 kgs.

| NO | REVISION                          | DRAWN BY  | DATE     | CHECK |
|----|-----------------------------------|-----------|----------|-------|
| 3  | CHANGED "H" DIMENSION FROM 0.67   | MO        | 04/17/14 | JR    |
| 2  | ADDED AIR DEFLECTOR (GUIDE PLATE) | M. O'DOWD | 12/07/12 | JR    |
| 1  | ADDED KEY DIMENSIONS              | S. CLANCY | 08/10/12 | JR    |
| 0  | FIRST ISSUE                       | N. MOMIN  | 09/15/10 | 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: 0402SDSC41B-P

| HP        | kW | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|----|------------|--------|-------|----------------|-------------|----------|--------------|
| 40        | 30 | 2          | 3540   | 324TS | 575            | 60          | 3        | 38           |
| Enclosure | IP | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55 | F          | 1.15   | CONT  | 92.4           | B           | G        | 40 C         |

| Load         | HP    | kW   | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|-------|------|---------|----------------|------------------|
| Full Load    | 40    | 29.8 | 38.0    | 92.5           | 87.7             |
| ¾ Load       | 30.00 | 22.4 | 28.2    | 91.7           | 86.0             |
| ½ Load       | 20.00 | 14.9 | 20.4    | 89.5           | 80.9             |
| ¼ Load       | 10.00 | 7.5  | 13.9    | 83.6           | 64.2             |
| No Load      |       |      | 9.7     |                |                  |
| Locked Rotor |       |      | 232.00  |                |                  |

| Torque            |                      |                 |                    | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) |                            |
| 59.3              | 270                  | 225             | 280                | 5.74                       |

| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |         | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|---------|----------------------------|
| Cold               | Hot |                           | DE        | NDE     |                            |
| 35                 | 15  | -                         | 6312ZC3   | 6312ZC3 |                            |

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

**Motor Options:**  
Product Family:EQP Global SD  
Mounting:Footed,Shaft:TS Shaft

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

Tag:

All characteristics are average expected values.

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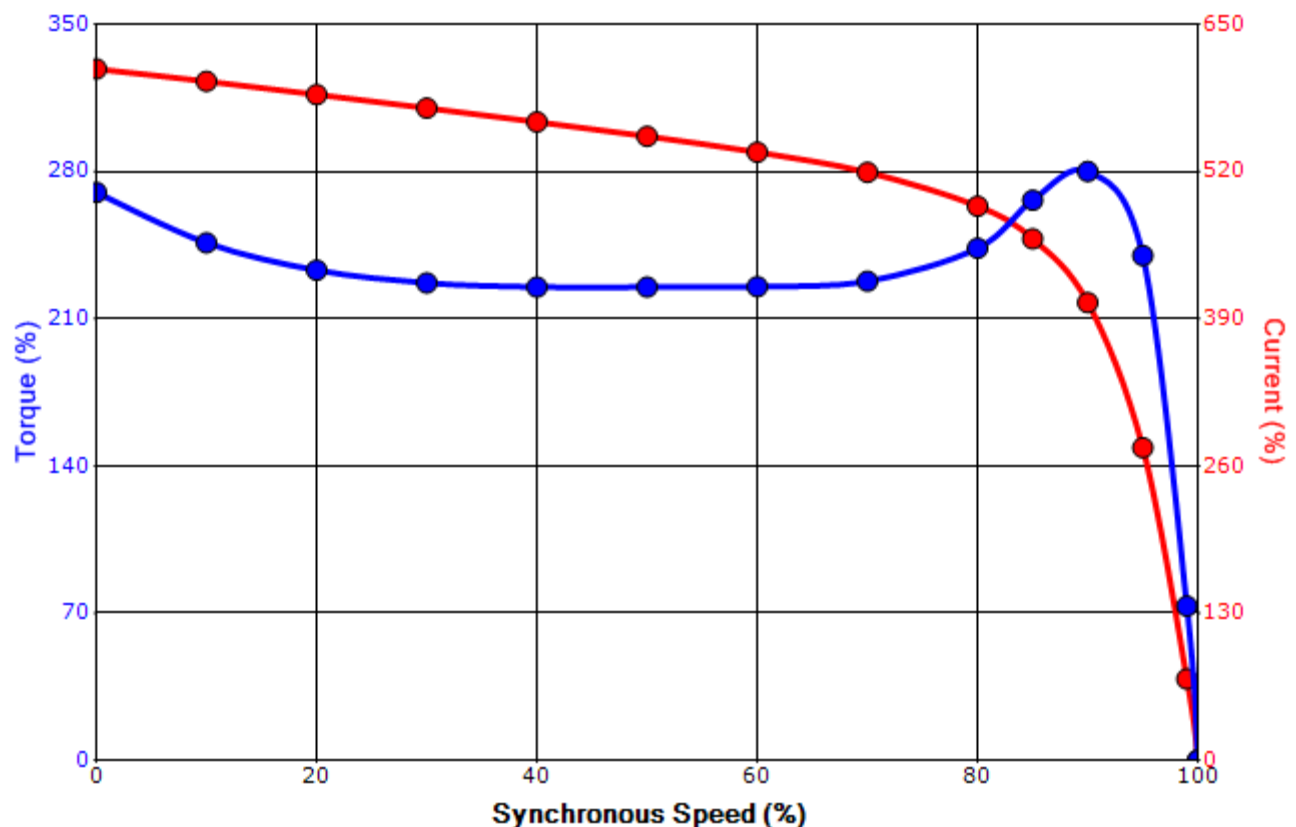
|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | garce     | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 8/21/2015 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

## SPEED TORQUE/CURRENT CURVE

Model: 0402SDSC41B-P

| HP                | kW                                                  | Pole              | FL RPM           | Frame       | Voltage        | Hz             | Phase    | FL Amps      |
|-------------------|-----------------------------------------------------|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 40                | 30                                                  | 2                 | 3540             | 324TS       | 575            | 60             | 3        | 38           |
| Enclosure         | IP                                                  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design    | kVA Code | Ambient (°C) |
| TEFC              | 55                                                  | F                 | 1.15             | CONT        | 92.4           | B              | G        | 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 (%) |          |              |
| 232.00            | 5.74                                                | 59.3              | 270              | 225         |                | 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:

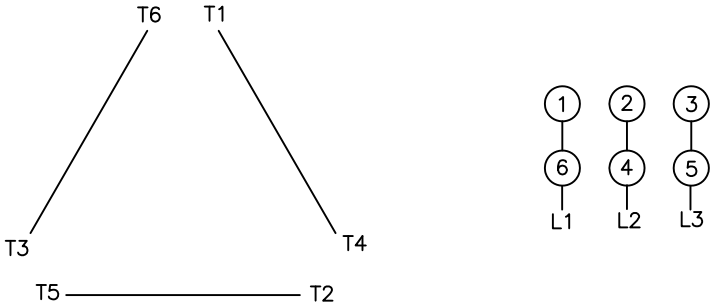
All characteristics are average expected values.

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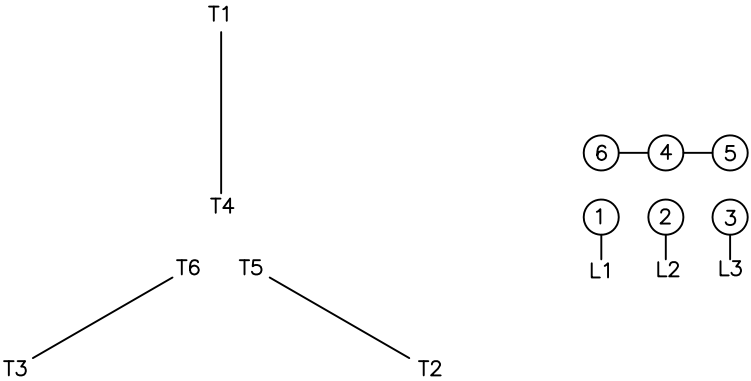
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|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | garce     | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date  | 8/21/2015 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

**Motor Connection Diagrams**  
6 Leads

Across the Line Starting / Run - Delta:



Alternate Starting Connection - Wye:



Switch L1 and L2 to reverse rotation