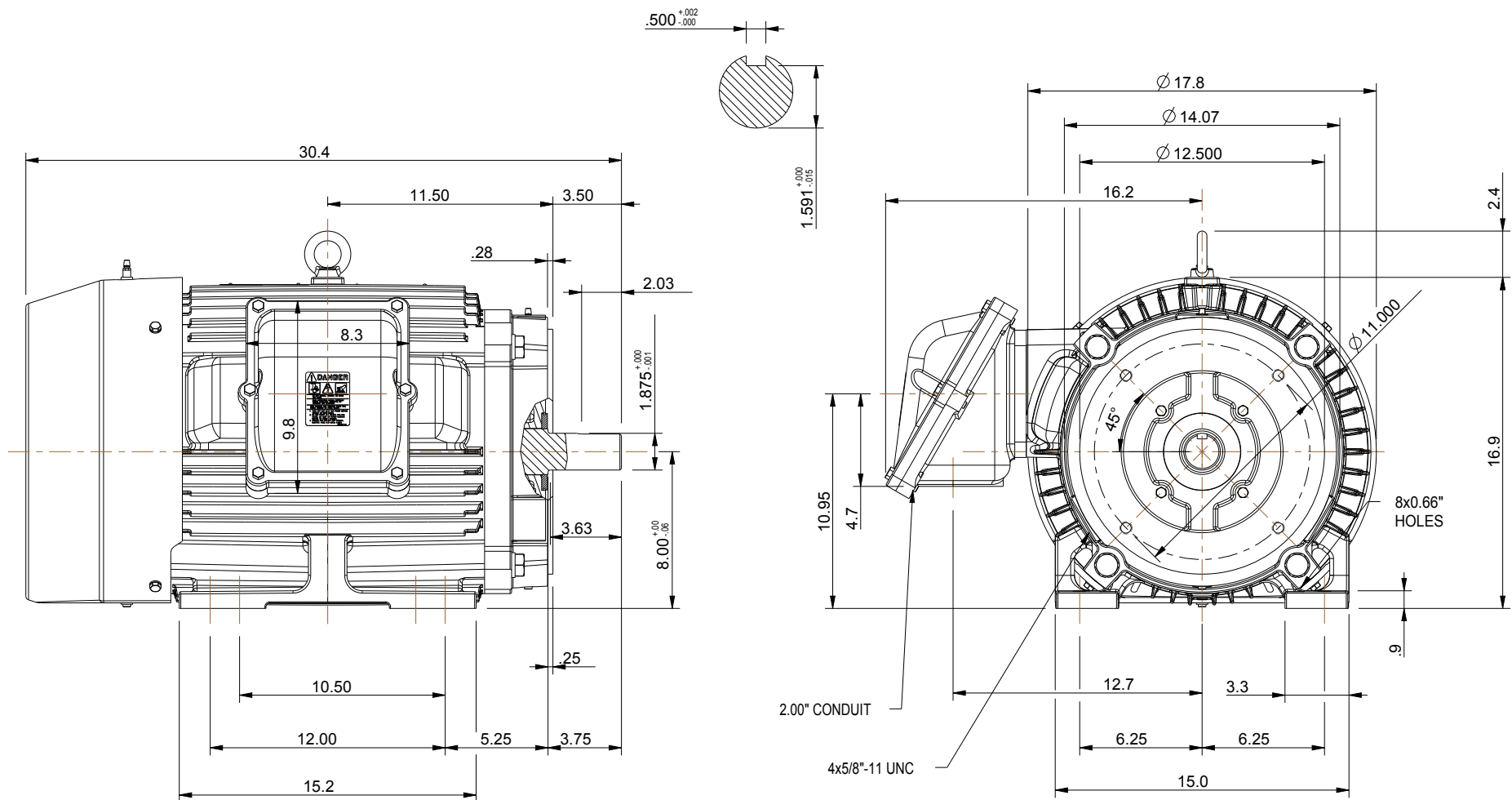




- NOTES:
1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
  2. STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
  3. KEY DIMENSIONS EQUAL 0.5"x0.5"x2" (MOTOR SUPPLIED WITH KEY)

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.

## 320TSC TEXP FRAME F1 ASSEMBLY

MDSL805-06

# TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

### TOLERANCES

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

### MAXIMUM MOTOR WEIGHT

755 lbs.  
342 kgs.

|    |             |          |          |       |
|----|-------------|----------|----------|-------|
| 0  | FIRST ISSUE | MO       | 04/09/14 | JR    |
| NO | REVISION    | DRAWN BY | DATE     | CHECK |

**EQP** Global **XP**  
**XT SERIES**

DRAWN BY: M. O'DOWD  
CHECK BY: J. RUSSELL  
APPROVED BY:

www.toshiba.com/ind

## TYPICAL MOTOR PERFORMANCE DATA

Model: 0502XPEA42B-P

| HP        | kW | Pole       | FL RPM | Frame  | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|----|------------|--------|--------|----------------|-------------|----------|--------------|
| 50        | 37 | 2          | 3555   | 326TSC | 230/460        | 60          | 3        | 114/57       |
| Enclosure | IP | Ins. Class | S.F.   | Duty   | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 56 | F          | 1.15   | CONT   | 93.0           | B           |          | 40 C         |

| Load         | HP    | kW   | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|-------|------|---------|----------------|------------------|
| Full Load    | 50.00 | 37.3 | 57      | 93.9           | 87.1             |
| ¾ Load       | 37.50 | 28.0 | 44      | 93.3           | 85.3             |
| ½ Load       | 25.00 | 18.6 | 31      | 91.6           | 80.0             |
| ¼ Load       | 12.50 | 9.3  | 21      | 85.8           | 62.7             |
| No Load      |       |      | 16.5    |                |                  |
| Locked Rotor |       |      | 394     |                |                  |

| Torque            |                      |                 |                    | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) |                            |
| 73.9              | 255                  | 195             | 320                | 6.39                       |

| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |        | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|--------|----------------------------|
| Cold               | Hot |                           | DE        | NDE    |                            |
| 14                 | 7   | -                         | 6312C3    | 6312C3 |                            |

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

**Motor Options:**  
Product Family:EQP Global Explosion Proof  
Mounting:C-Face Footed,Shaft:TS Shaft

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

Tag:

All characteristics are average expected values.

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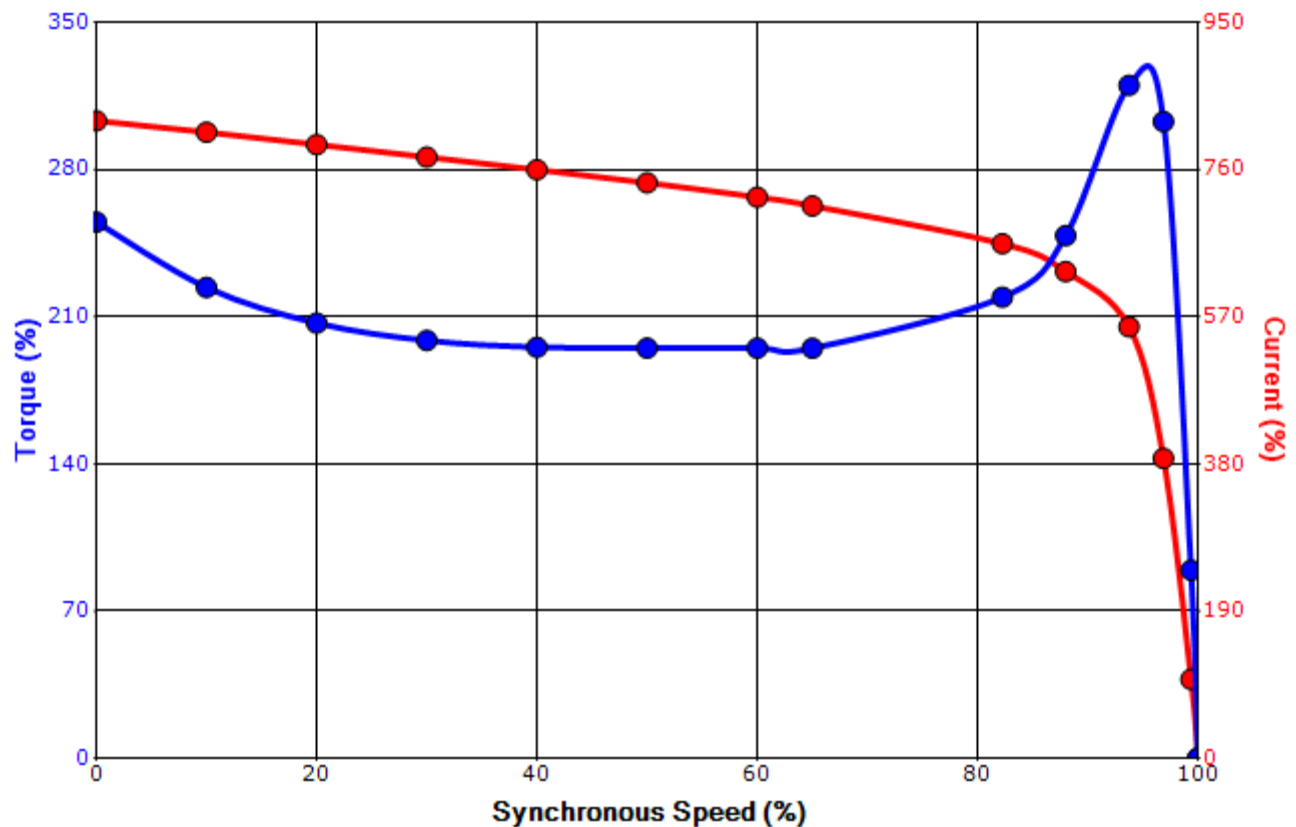
|             |             |                  |             |             |               |
|-------------|-------------|------------------|-------------|-------------|---------------|
| Engineering | aguerrretaz | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 8/12/2024   | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

## SPEED TORQUE/CURRENT CURVE

Model: 0502XPEA42B-P

| HP                | kW                                                  | Pole              | FL RPM           | Frame       | Voltage        | Hz             | Phase    | FL Amps      |
|-------------------|-----------------------------------------------------|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 50                | 37                                                  | 2                 | 3555             | 326TSC      | 230/460        | 60             | 3        | 114/57       |
| Enclosure         | IP                                                  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design    | kVA Code | Ambient (°C) |
| TEFC              | 56                                                  | F                 | 1.15             | CONT        | 93.0           | 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 (%) |          |              |
| 394               | 6.39                                                | 73.9              | 255              | 195         |                | 320            |          |              |

### 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 | aguerrettaz | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date  | 8/12/2024   | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

## Across-the-Line Starting / Running Connections

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