

- 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)
- 0.188" x 0.188" x 1.38"

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.

**140TC TEXP FRAME  
F1 C-FLANGE ASSEMBLY**

MDSL802-01

**TOSHIBA**

TOSHIBA INTERNATIONAL CORPORATION

TOLERANCES

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

MAXIMUM MOTOR WEIGHT

77 lbs.  
35 kgs.

|    |  |          |          |       |
|----|--|----------|----------|-------|
| 0  | FIRST ISSUE (OVERRIDE D, R, & S DIMS.) | MO       | 03/14/14 | JR    |
| NO | REVISION                               | DRAWN BY | DATE     | CHECK |



DRAWN BY: M. O'DOWD  
 CHECK BY: J. RUSSELL  
 APPROVED BY: \_\_\_\_\_  
 www.toshiba.com/ind

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 0024XPEA42A-P

| HP        | kW  | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| 2         | 1.5 | 4          | 1750   | 145TC | 230/460        | 60          | 3        | 6/3          |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55  | F          | 1.15   | CONT  | 86.5           | B           | L        | 40 C         |

| Load         | HP   | kW  | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|------|-----|---------|----------------|------------------|
| Full Load    | 2    | 1.5 | 3.0     | 86.5           | 84.8             |
| ¾ Load       | 1.50 | 1.1 | 2.4     | 86.0           | 67.5             |
| ½ Load       | 1.00 | 0.7 | 2.0     | 83.4           | 55.2             |
| ¼ Load       | 0.50 | 0.4 | 1.2     | 79.8           | 48.1             |
| No Load      |      |     | 1.7     |                | 7.8              |
| Locked Rotor |      |     | 24.00   |                | 68.4             |

| 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) |   |
| 6                    | 255                     | 225                | 390                   | 0.13  |

| Safe Stall Time(s) |      | Sound Pressure<br>dB(A) @ 1M | Bearings* |          | Approx. Motor Weight<br>(lbs) |
|--------------------|------|------------------------------|-----------|----------|-------------------------------|
| Cold               | Hot  |                              | DE        | NDE      |                               |
| 23                 | 16.9 | -                            | 6305ZZC3  | 6305ZZC3 |                               |

\*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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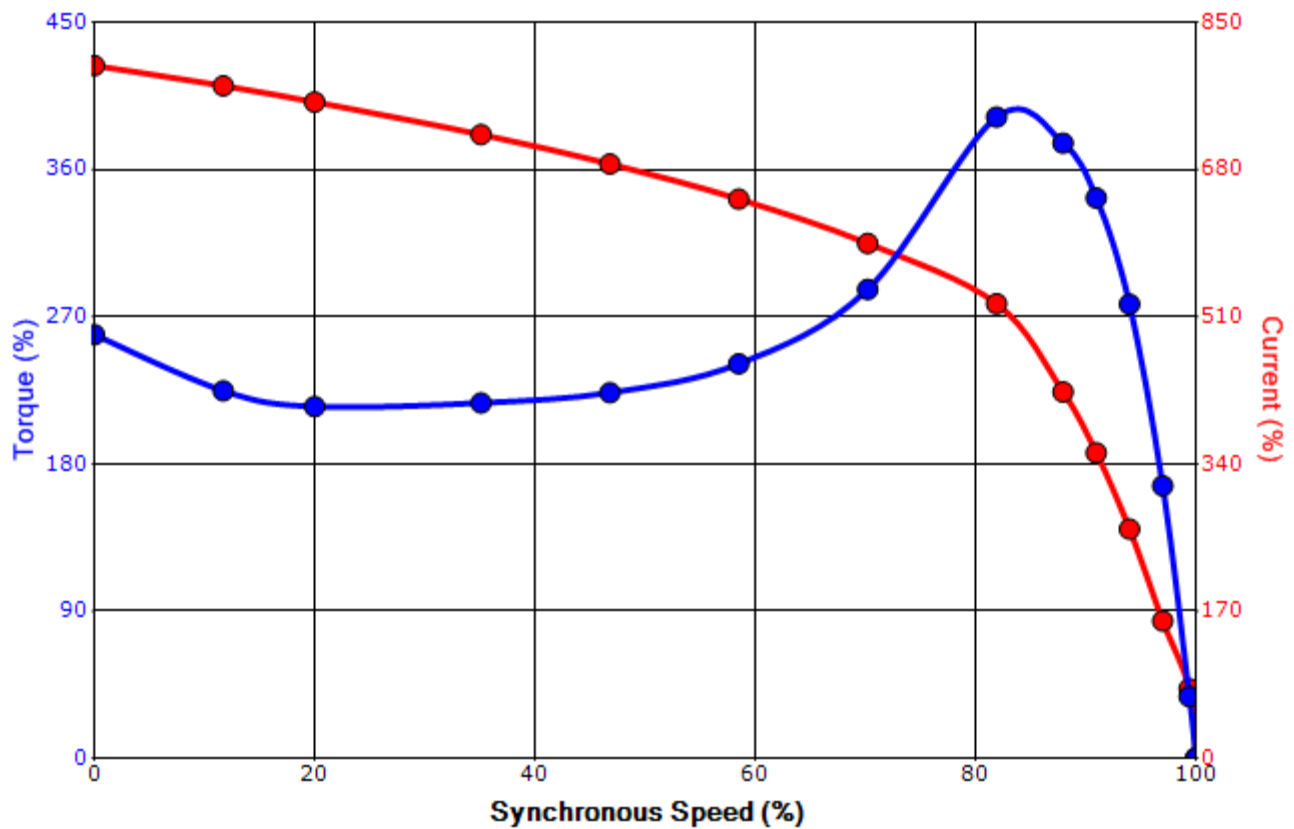
|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | pdivecha  | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 4/30/2014 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

**SPEED TORQUE/CURRENT CURVE**

Model: 0024XPEA42A-P

|                   |   |                   |                  |             |                |             |          |                |
|-------------------|---|-------------------|------------------|-------------|----------------|-------------|----------|----------------|
| HP                | kW  | Pole              | FL RPM           | Frame       | Voltage        | Hz          | Phase    | FL Amps        |
| 2                 | 1.5   | 4                 | 1750             | 145TC       | 230/460        | 60          | 3        | 6/3            |
| Enclosure         | IP  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C)   |
| TEFC              | 55  | F                 | 1.15             | CONT        | 86.5           | B           | L        | 40 C           |
| Locked Rotor Amps | Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> ) | Torque            |                  |             |                |             |          | Break Down (%) |
|                   |   | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) |                |             |          |                |
| 24.00             | 0.13  | 6                 | 255              | 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  | 4/30/2014 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

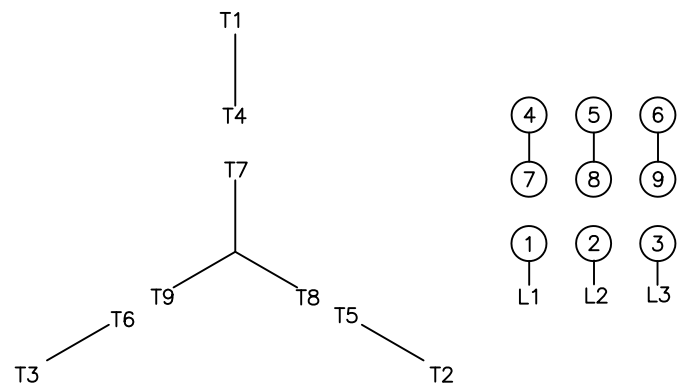
**Motor Connection Diagrams**  
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation