

- 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 0.500" x 0.500" x 3.25" (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.

**280T TEXP FRAME  
F1 ASSEMBLY**

MDSL800-05

**TOSHIBA**  
TOSHIBA INTERNATIONAL CORPORATION

TOLERANCES

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

MAXIMUM MOTOR WEIGHT

|          |
|----------|
| 550 lbs. |
| 249 kgs. |

|    |  |          |          |       |
|----|--|----------|----------|-------|
| 1  | CHANGED T-BOX & BEARING BRACKETS (P/N) | MO       | 04/03/14 | JR    |
| 0  | FIRST ISSUE                            | MO       | 09/13/12 | 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: 0254XPEC41A-P

|           |      |            |        |       |                |             |          |              |
|-----------|------|------------|--------|-------|----------------|-------------|----------|--------------|
| HP        | kW   | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
| 25        | 18.5 | 4          | 1770   | 284T  | 575            | 60          | 3        | 24           |
| Enclosure | IP   | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 56   | F          | 1.15   | CONT  | 93.6           | B           | G        | 40 C         |

|              |       |      |         |                |                  |
|--------------|-------|------|---------|----------------|------------------|
| Load         | HP    | kW   | Amperes | Efficiency (%) | Power Factor (%) |
| Full Load    | 25    | 18.6 | 24.0    | 93.6           | 83.5             |
| ¾ Load       | 18.75 | 14.0 | 18.9    | 93.2           | 80.6             |
| ½ Load       | 12.50 | 9.3  | 14.1    | 91.5           | 73.1             |
| ¼ Load       | 6.25  | 4.7  | 10.4    | 84.1           | 53.3             |
| No Load      |       |      | 8.7     |                | 5.7              |
| Locked Rotor |       |      | 146.00  |                | 34.4             |

|                   |                      |                 |                    |                               |
|-------------------|----------------------|-----------------|--------------------|-------------------------------|
| Torque            |                      |                 |                    | Rotor wk <sup>2</sup>         |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | Inertia (lb-ft <sup>2</sup> ) |
| 74.2              | 185                  | 165             | 295                | 5.23                          |

|                    |     |                           |           |        |                            |
|--------------------|-----|---------------------------|-----------|--------|----------------------------|
| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |        | Approx. Motor Weight (lbs) |
| Cold               | Hot |                           | DE        | NDE    |                            |
| 30                 | 20  | -                         | 6310C3    | 6310C3 |                            |

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

**Motor Options:**  
Product Family:EQP Global Explosion Proof  
Mounting:Footed,Shaft:T Shaft

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

Tag:

All characteristics are average expected values.

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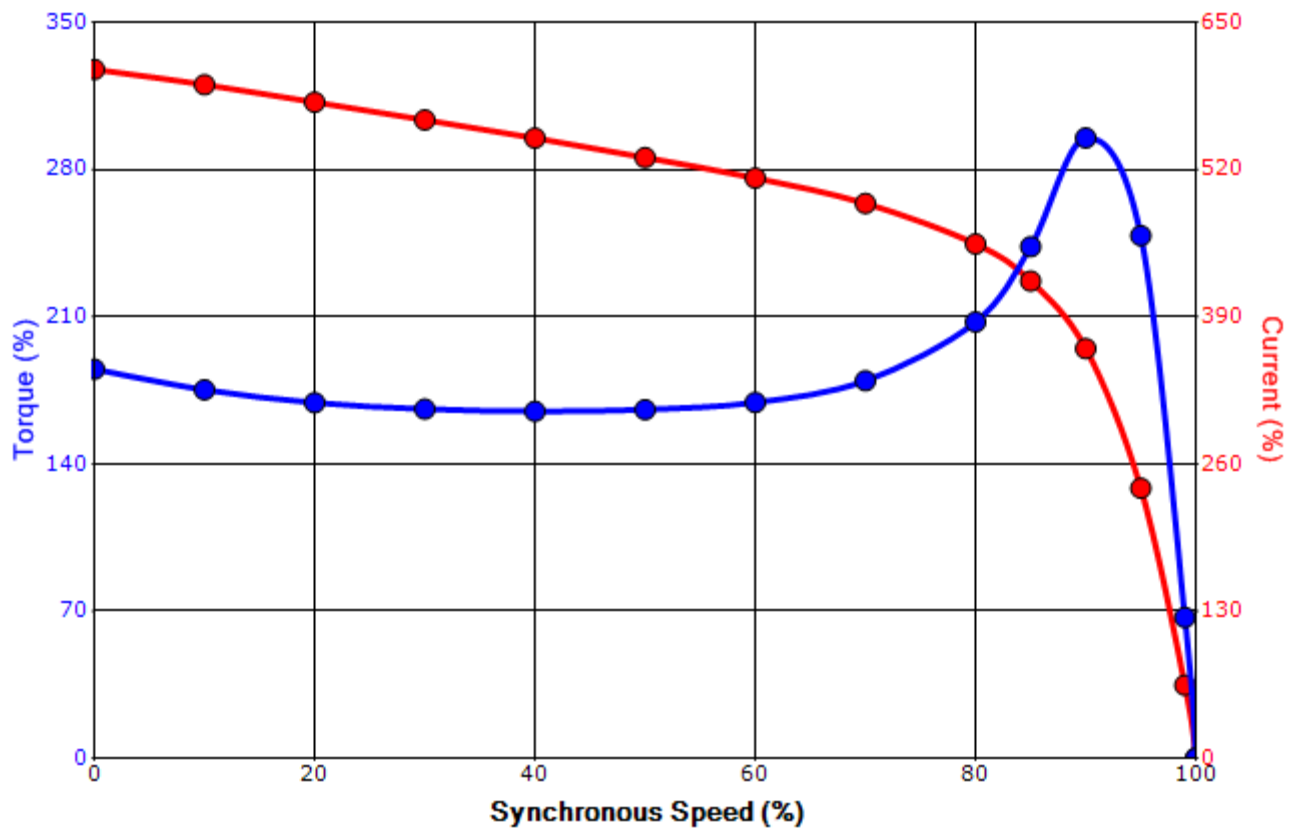
|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | jhock     | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 6/11/2014 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

**SPEED TORQUE/CURRENT CURVE**

Model: 0254XPEC41A-P

|                   |   |                   |                  |             |                |             |          |                |
|-------------------|---|-------------------|------------------|-------------|----------------|-------------|----------|----------------|
| HP                | kW  | Pole              | FL RPM           | Frame       | Voltage        | Hz          | Phase    | FL Amps        |
| 25                | 18.5  | 4                 | 1770             | 284T        | 575            | 60          | 3        | 24             |
| Enclosure         | IP  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C)   |
| TEFC              | 56  | F                 | 1.15             | CONT        | 93.6           | B           | G        | 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 (%) |                |             |          |                |
| 146.00            | 5.23  | 74.2              | 185              | 165         |                |             | 295      |                |

**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 | jhock     | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date  | 6/11/2014 | 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