

UNITS: INCHES

ROTATION FROM NDE

CCW       CW

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT AND THE DATA MAY CHANGE WITHOUT NOTICE

DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS MARKED AS CERTIFIED

PRELIMINARY  
 CERTIFIED

NOTES:

1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
3. KEY DIMENSIONS EQUAL 0.500" x 0.500" x 2.00" (MOTOR SUPPLIED WITH KEY)

TOTALLY ENCLOSED FAN COOLED DRAWING #: MDSL V002-06

HORIZONTAL FOOT MOUNTED REV. DATE: 07/09/18 REV. #: 4 PER.: M. D'DOVD

3 PHASE INDUCTION MOTOR REV. DESCRIP.:

324TS-326TS F1 ASSEMBLY

**TOSHIBA**

SEVERE DUTY

**EQP Global SD**

www.toshiba.com/tic

**TOSHIBA INTERNATIONAL CORPORATION**

**TYPICAL MOTOR PERFORMANCE DATA**

Model: 0502SDSC41B-P

| HP        | kW | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|----|------------|--------|-------|----------------|-------------|----------|--------------|
| 50        | 37 | 2          | 3555   | 326TS | 575            | 60          | 3        | 46           |
| Enclosure | IP | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55 | F          | 1.15   | CONT  | 93.0           | B           |          | 40 C         |

| Load         | HP    | kW   | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|-------|------|---------|----------------|------------------|
| Full Load    | 50.00 | 37.3 | 45      | 94.0           | 87.1             |
| ¾ Load       | 37.50 | 28.0 | 35      | 93.4           | 85.5             |
| ½ Load       | 25.00 | 18.6 | 25      | 91.6           | 80.7             |
| ¼ Load       | 12.50 | 9.3  | 17.0    | 85.6           | 64.3             |
| No Load      |       |      | 13.2    |                | 6.5              |
| Locked Rotor |       |      | 315     |                | 37.7             |

| 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) |   |
| 73.9                 | 255                     | 195                | 325                   | 6.39  |

| Safe Stall Time(s) |     | Sound Pressure<br>dB(A) @ 1M | Bearings* |         | Approx. Motor Weight<br>(lbs) |
|--------------------|-----|------------------------------|-----------|---------|-------------------------------|
| Cold               | Hot |                              | DE        | NDE     |                               |
| 14                 | 7   | -                            | 6312ZC3   | 6312ZC3 | 625                           |

\*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 | 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      |

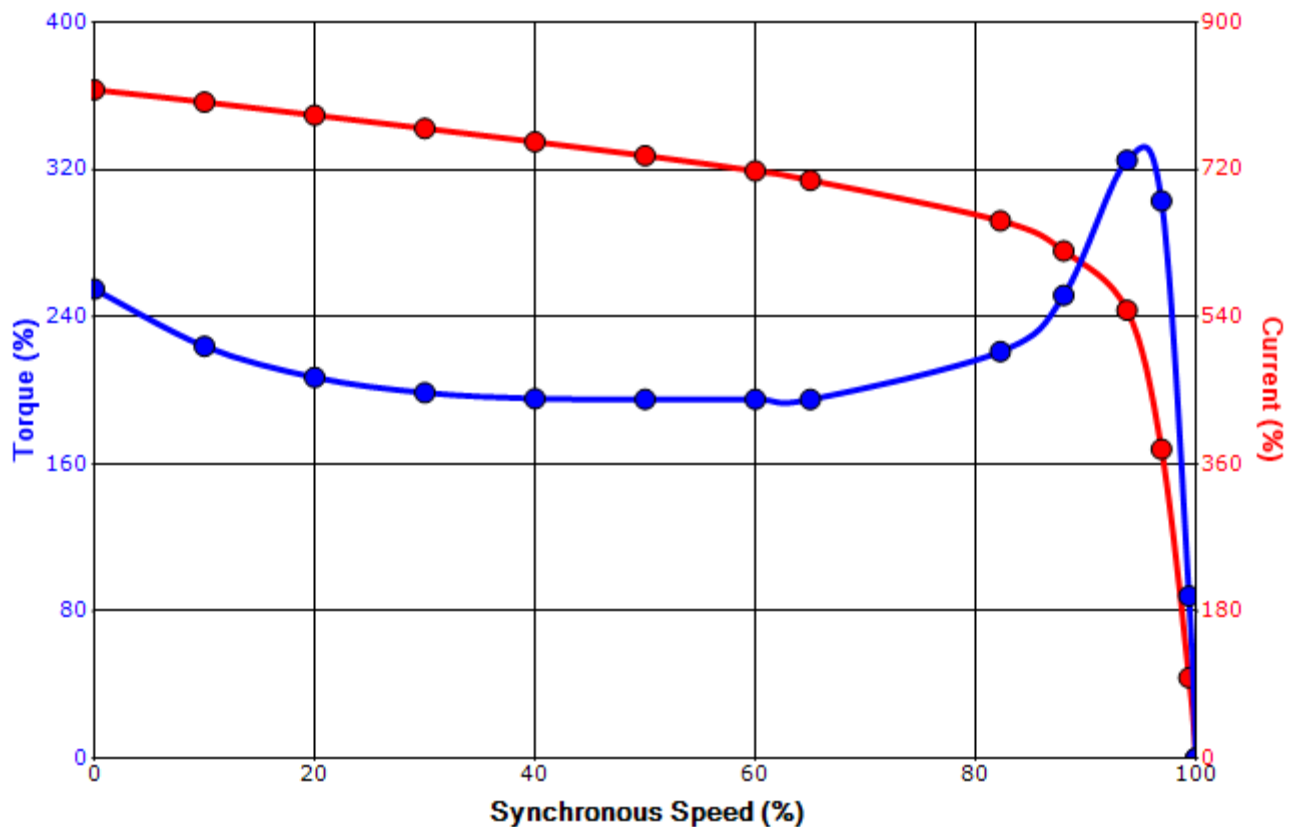
|             |            |            |  |
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**SPEED TORQUE/CURRENT CURVE**

Model: 0502SDSC41B-P

|                   |   |                   |                  |             |                |             |          |                |
|-------------------|---|-------------------|------------------|-------------|----------------|-------------|----------|----------------|
| HP                | kW  | Pole              | FL RPM           | Frame       | Voltage        | Hz          | Phase    | FL Amps        |
| 50                | 37  | 2                 | 3555             | 326TS       | 575            | 60          | 3        | 46             |
| Enclosure         | IP  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C)   |
| TEFC              | 55  | F                 | 1.15             | CONT        | 93.0           | B           |          | 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 (%) |                |             |          |                |
| 315               | 6.39  | 73.9              | 255              | 195         |                |             | 325      |                |

**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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**Motor Connection Diagrams**  
6 Leads

Across the Line Starting / Run - Delta:



Alternate Starting Connection - Wye:



Switch L1 and L2 to reverse rotation