

UNITS: INCHES

ROTATION FROM NDE

X CCW CW

- 2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
- 3. KEY DIMENSIONS EQUAL

0.188"x 0.188"x 1.38"

(MOTOR SUPPLIED WITH KEY)

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

PRELIMINARY

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

X CERTIFIED

TOSHIBA www.toshiba.com/tic

TOSHIBA INTERNATIONAL CORPORATION



TOTALLY ENCLOSED FAN COOLED
HORIZONTAL FOOT MOUNTED
3 PHASE INDUCTION MOTOR
143T-145T F1 ASSEMBLY

REV. DATE: 06/19/18 REV. #: 4 PER.: M. O'DOWD

REV. DESCRIP.:

INLV. DEGOINI ..



| Issued Date | 12/18/2019 | Transmit # |  |
|-------------|------------|------------|--|
| Issued By   | dschoeck   | Issued Rev |  |

## **TYPICAL MOTOR PERFORMANCE DATA**

Model: 0014SDSR41A-P

| HP        | kW   | Pole       | FL RPM | Frame | Voltage           | Hz             | Phase    | FL Amps         |
|-----------|------|------------|--------|-------|-------------------|----------------|----------|-----------------|
| 1         | 0.75 | 4          | 1760   | 143T  | 230/460           | 60             | 3        | 3.2/1.6         |
| Enclosure | IP   | Ins. Class | S.F.   | Duty  | NEMA<br>Nom. Eff. | NEMA<br>Design | kVA Code | Ambient<br>(°C) |
| TEFC      | 55   | F          | 1.15   | CONT  | 85.5              | В              | M        | 40 C            |

| Load         | HP   | kW  | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|------|-----|---------|----------------|------------------|
| Full Load    | 1    | 0.7 | 1.6     | 86.1           | 67.5             |
| ¾ Load       | 0.75 | 0.6 | 1.4     | 84.3           | 58.9             |
| ½ Load       | 0.50 | 0.4 | 1.2     | 79.5           | 46.4             |
| ¼ Load       | 0.25 | 0.2 | 1.1     | 66.5           | 29.9             |
| No Load      |      |     | 1.1     |                | 7.9              |
| Locked Rotor |      |     | 13.8    |                | 65.7             |

| Torque    |              |         |            |          |  |  |  |
|-----------|--------------|---------|------------|----------|--|--|--|
| Full Load | Locked Rotor | Pull Up | Break Down | Inertia  |  |  |  |
| (lb-ft)   | (% FLT)      | (% FLT) | (% FLT)    | (lb-ft²) |  |  |  |
| 2.98      | 340          | 295     | 490        | 0.11     |  |  |  |

| Safe Stall Time(s) |                         | Sound | Bearin   | Approx. Motor Weight |    |
|--------------------|-------------------------|-------|----------|----------------------|----|
| Cold               | Hot Pressure dB(A) @ 1M |       | DE       |                      |    |
| 35                 | 15                      | -     | 6305ZZC3 | 6305ZZC3             | 58 |

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

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

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

Tag:

| TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A. |            |                  |             |             |               |  |  |  |
|---|------------|------------------|-------------|-------------|---------------|--|--|--|
| Engineering   | BMammen    | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 1 |  |  |  |
| Engr. Date  | 11/20/2019 | Doc. Approved By | M. Campbell | Doc. Issued | 9/20/2019     |  |  |  |



| Issued Date | 12/18/2019 | Transmit # |  |
|-------------|------------|------------|--|
| Issued By   | dschoeck   | Issued Rev |  |

## **TYPICAL MOTOR PERFORMANCE DATA**

Model: 0014SDSR41A-P

| HP        | kW   | Pole       | FL RPM | Frame | Voltage           | Hz             | Phase    | FL Amps         |
|-----------|------|------------|--------|-------|-------------------|----------------|----------|-----------------|
| 1         | 0.75 | 4          | 1450   | 143T  | 190/380           | 50             | 3        | 3.6/1.8         |
| Enclosure | IP   | Ins. Class | S.F.   | Duty  | NEMA<br>Nom. Eff. | NEMA<br>Design | kVA Code | Ambient<br>(°C) |
| TEFC      | 55   | F          | 1.0    | CONT  | 84                | В              | N        | 40 C            |

| Load         | HP   | kW  | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|------|-----|---------|----------------|------------------|
| Full Load    | 1    | 0.7 | 1.8     | 86.1           | 68.5             |
| ¾ Load       | 0.75 | 0.6 | 1.5     | 85.3           | 60.4             |
| ½ Load       | 0.50 | 0.4 | 1.2     | 84.2           | 48.0             |
| ¼ Load       | 0.25 | 0.2 | 0.9     | 71.8           | 40.3             |
| No Load      |      |     | 1.0     |                | 8.1              |
| Locked Rotor |      |     | 18      |                | 85.2             |

| Torque    |   |         |         |          |  |  |  |
|-----------|---|---------|---------|----------|--|--|--|
| Full Load | Full Load Locked Rotor Pull Up Break Down |         |         |          |  |  |  |
| (lb-ft)   | (% FLT)                                   | (% FLT) | (% FLT) | (lb-ft²) |  |  |  |
| 3.62      | 275                                       | 235     | 320     | 0.11     |  |  |  |

| Safe Stall | Safe Stall Time(s) Sound |            | Rearin    | Approx. Motor Weight |                      |
|------------|--------------------------|------------|-----------|----------------------|----------------------|
| Cold       | Hot                      | Pressure   | Bearings* |                      | Approx. Motor Weight |
| oola       | 1100                     | dB(A) @ 1M | DE        | NDE                  | (lbs)                |
| 26         | 21                       | -          | 6305ZZC3  | 6305ZZC3             | 58                   |

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

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

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

Tag:

| TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A. |          |                  |             |             |               |  |  |  |  |
|---|----------|------------------|-------------|-------------|---------------|--|--|--|--|
| Engineering   | jhock    | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 1 |  |  |  |  |
| Engr. Date  | 4/1/2014 | Doc. Approved By | M. Campbell | Doc. Issued | 9/20/2019     |  |  |  |  |



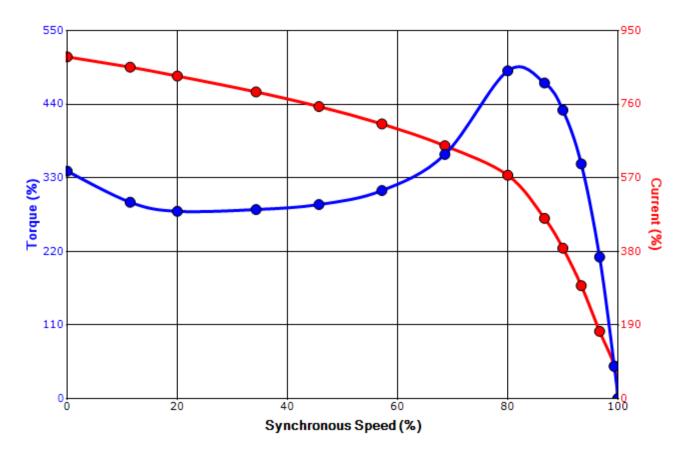
| Issued Date | 12/18/2019 | Transmit # |  |
|-------------|------------|------------|--|
| Issued By   | dschoeck   | Issued Rev |  |

#### SPEED TORQUE/CURRENT CURVE

Model: 0014SDSR41A-P

| HP                   | kW        | Pole       | FL RPM | Frame      | Voltage           | Hz             | Phase    | FL Amps         |
|----------------------|-----------|------------|--------|------------|-------------------|----------------|----------|-----------------|
| 1                    | 0.75      | 4          | 1760   | 143T       | 230/460           | 60             | 3        | 3.2/1.6         |
| Enclosure            | IP        | Ins. Class | S.F.   | Duty       | NEMA<br>Nom. Eff. | NEMA<br>Design | kVA Code | Ambient<br>(°C) |
| TEFC                 | 55        | F          | 1.15   | CONT       | 85.5              | В              | М        | 40 C            |
| Lealerd Dates        | Rotor wk² | Torque     |        |            |                   |                |          |                 |
| Locked Rotor<br>Amps | Inertia   | Full Load  | Locked | Rotor      | Pull U            | р              | Break    | Down            |
| Allips               | (lb-ft²)  | (lb-ft)    | (%     | <b>6</b> ) | (%)               |                | (%       | <b>%</b> )      |
| 13.8                 | 0.11      | 2.98       | 340    |            | 295               |                | 490      |                 |

# Design Values





| Customer    | wk² Load Inertia (lb-f | 2) -   |
|-------------|------------------------|--------|
| Customer PO | Load Typ               | е -    |
| Sales Order | Voltage ( <sup>o</sup> | 6) 100 |
| Project #   | Accel. Tin             |        |

Tag:

| TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A. |            |                  |             |             |             |  |  |  |  |
|---|------------|------------------|-------------|-------------|-------------|--|--|--|--|
| Engineering   | BMammen    | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121/1 |  |  |  |  |
| Engr. Date  | 11/20/2019 | Doc. Approved By | M. Campbell | Doc. Issued | 9/20/2019   |  |  |  |  |



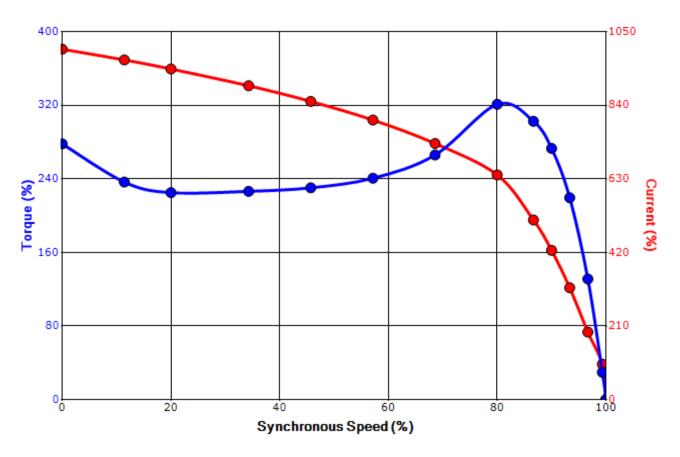
| Issued Date | 12/18/2019 | Transmit # |  |
|-------------|------------|------------|--|
| Issued By   | dschoeck   | Issued Rev |  |

#### SPEED TORQUE/CURRENT CURVE

Model: 0014SDSR41A-P

| HP                   | kW        | Pole       | FL RPM | Frame      | Voltage           | Hz             | Phase    | FL Amps         |
|----------------------|-----------|------------|--------|------------|-------------------|----------------|----------|-----------------|
| 1                    | 0.75      | 4          | 1450   | 143T       | 190/380           | 50             | 3        | 3.6/1.8         |
| Enclosure            | IP        | Ins. Class | S.F.   | Duty       | NEMA<br>Nom. Eff. | NEMA<br>Design | kVA Code | Ambient<br>(°C) |
| TEFC                 | 55        | F          | 1.0    | CONT       | 84                | В              | N        | 40 C            |
| Laskad Datas         | Rotor wk² | Torque     |        |            |                   |                |          |                 |
| Locked Rotor<br>Amps | Inertia   | Full Load  | Locked | l Rotor    | Pull U            | р              | Break    | Down            |
| Amps                 | (lb-ft²)  | (lb-ft)    | (%     | <b>6</b> ) | (%)               |                | (%       | <b>%</b> )      |
| 18                   | 0.11      | 3.62       | 275    |            | 235               |                | 32       | 20              |

# Design Values





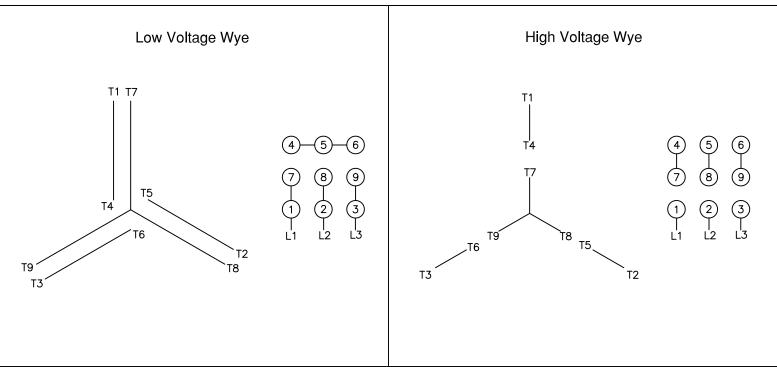
| Customer    | wk² Load Inertia (lb- | (t²) - |
|-------------|-----------------------|--------|
| Customer PO | Load Ty               | pe -   |
| Sales Order | Voltage               | %) 100 |
| Project #   | Accel. Ti             | ne -   |

Tag:

| TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A. |          |                  |             |             |             |  |  |  |  |
|---|----------|------------------|-------------|-------------|-------------|--|--|--|--|
| Engineering   | jhock    | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121/1 |  |  |  |  |
| Engr. Date  | 4/1/2014 | Doc. Approved By | M. Campbell | Doc. Issued | 9/20/2019   |  |  |  |  |

# Motor Connection Diagrams 9 Leads

## Across-the-Line Starting / Running Connections



Switch L1 and L2 to reverse rotation

By: R. Murillo Date: 4/9/08 Checked: MDC Date: 5/17/11 Revision 0