

UNITS: INCHES

ROTATION FROM NDE

CCW
 CW

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 0.75x0.75x5.62 (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

CERTIFIED

TOSHIBA
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 TOSHIBA INTERNATIONAL CORPORATION

SEVERE DUTY
EQP SD

TOTALLY ENCLOSED FAN COOLED
 HORIZONTAL FOOT MOUNT
 3 PHASE INDUCTION MOTOR
 404T/405T F1 ASSEMBLY

DRAWING #: MDSL001-08
 REV. DATE: 08/16/17 REV. #: 3 PER.: J. HOCK
 REV. DESCRIP.: CHANGED DRAWING TABLE FORMAT



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

TYPICAL MOTOR PERFORMANCE DATA

Model: 1004SDSR41A-P

| | | | | | | | | |
|-----------|----|------------|--------|-------|----------------|-------------|----------|--------------|
| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
| 100 | 75 | 4 | 1775 | 405T | 230/460 | 60 | 3 | 231/116 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 54 | F | 1.15 | CONT | 95.4 | B | G | 40 C |

| | | | | | |
|--------------|-------|------|---------|----------------|------------------|
| Load | HP | kW | Amperes | Efficiency (%) | Power Factor (%) |
| Full Load | 100 | 74.6 | 115.7 | 95.6 | 84.6 |
| ¾ Load | 75.00 | 55.9 | 91.0 | 95.2 | 81.0 |
| ½ Load | 50.00 | 37.3 | 69.1 | 93.9 | 72.1 |
| ¼ Load | 25.00 | 18.6 | 52.3 | 89.2 | 50.1 |
| No Load | | | 38.8 | | 3.6 |
| Locked Rotor | | | 725 | | 34.6 |

| | | | | |
|-------------------|----------------------|-----------------|--------------------|---|
| Torque | | | | Rotor wk ² Inertia (lb-ft ²) |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | |
| 296 | 215 | 175 | 310 | 25.95 |

| | | | | | |
|--------------------|-----|---------------------------|-----------|--------|----------------------------|
| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight (lbs) |
| Cold | Hot | | DE | NDE | |
| 16 | 8 | 75 | 6317C3 | 6313C3 | |

*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:

All characteristics are average expected values.

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| | | | | | |
|-------------|------------|------------------|-------------|-------------|---------------|
| Engineering | bammen | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1119 / 1 |
| Engr. Date | 11/15/2018 | Doc. Approved By | M. Campbell | Doc. Issued | 9/20/2019 |



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TYPICAL MOTOR PERFORMANCE DATA

Model: 1004SDSR41A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|-----------|----|------------|--------|-------|----------------|-------------|----------|--------------|
| 75 | 55 | 4 | 1475 | 405T | 190/380 | 50 | 3 | 213/107 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 54 | F | 1.15 | CONT | 94.6 | B | H | 40 C |

| Load | HP | kW | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|-------|------|---------|----------------|------------------|
| Full Load | 75 | 55.9 | 106.6 | 94.4 | 84.4 |
| ¾ Load | 56.25 | 41.9 | 84.7 | 93.9 | 80.1 |
| ½ Load | 37.50 | 28.0 | 65.3 | 92.4 | 70.3 |
| ¼ Load | 18.75 | 14.0 | 50.8 | 87.1 | 47.9 |
| No Load | | | 39.3 | | 3.1 |
| Locked Rotor | | | 722 | | 34.4 |

| Torque | | | | Rotor wk ² Inertia (lb-ft ²) |
|----------------------|-------------------------|--------------------|-----------------------|---|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | |
| 267 | 225 | 170 | 310 | 25.95 |

| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight (lbs) |
|--------------------|------|------------------------------|-----------|--------|-------------------------------|
| Cold | Hot | | DE | NDE | |
| 20.4 | 11.2 | 75 | 6317C3 | 6313C3 | |

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

Motor Options:

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

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| Customer | |
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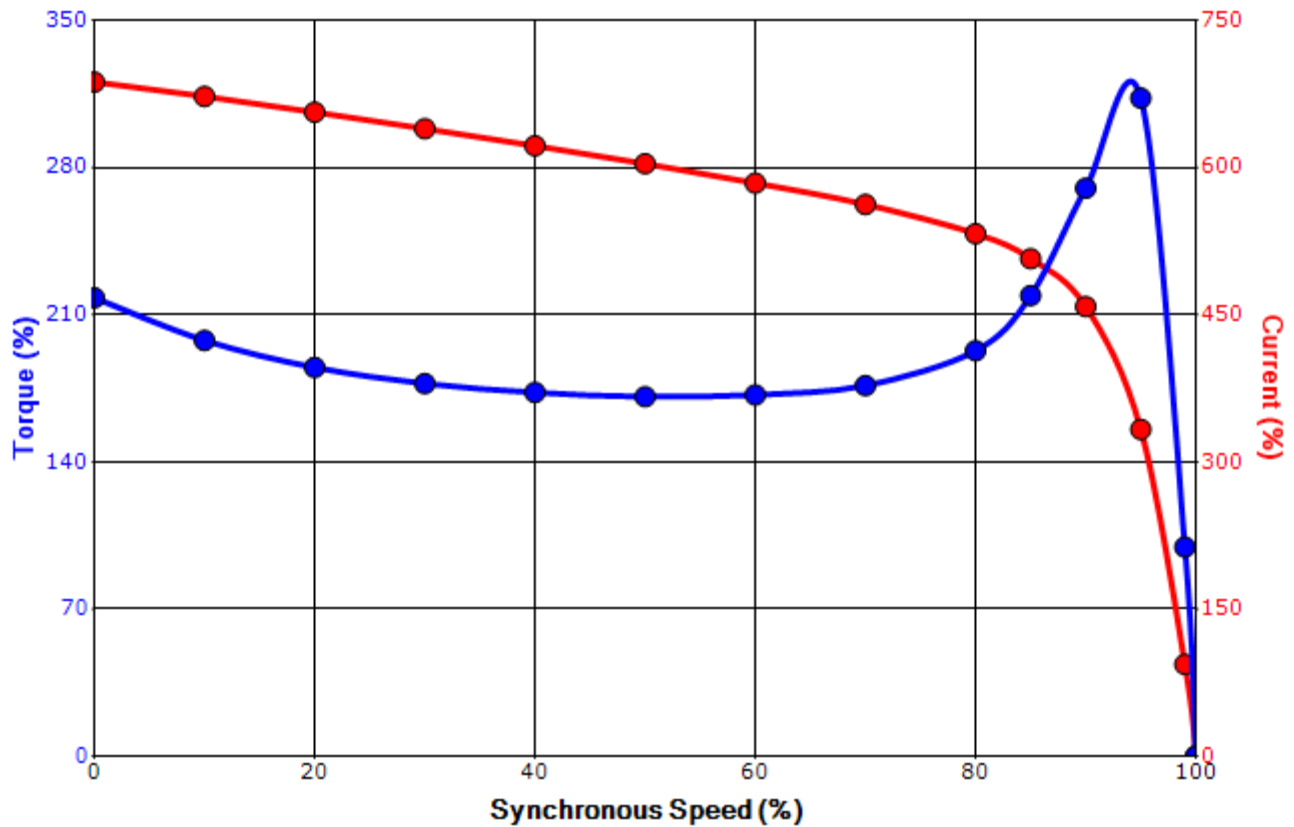
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SPEED TORQUE/CURRENT CURVE

Model: 1004SDSR41A-P

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|-------------------|---|-------------------|------------------|-------|----------------|-------------|----------------|--------------|
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| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 54 | F | 1.15 | CONT | 95.4 | B | G | 40 C |
| Locked Rotor Amps | Rotor wk ² Inertia (lb-ft ²) | Torque | | | | Pull Up (%) | Break Down (%) | |
| | | Full Load (lb-ft) | Locked Rotor (%) | | | | | |
| 725 | 25.95 | 296 | 215 | | 175 | 310 | | |

Design Values



| | | | |
|-------------|--|--|-----|
| Customer | | wk ² Load Inertia (lb-ft ²) | - |
| Customer PO | | Load Type | - |
| Sales Order | | Voltage (%) | 100 |
| Project # | | Accel. Time | - |

Tag:

All characteristics are average expected values.

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|-------------|------------|------------------|-------------|-------------|-------------|
| Engineering | bmammen | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1121/1 |
| Engr. Date | 11/15/2018 | Doc. Approved By | M. Campbell | Doc. Issued | 9/20/2019 |



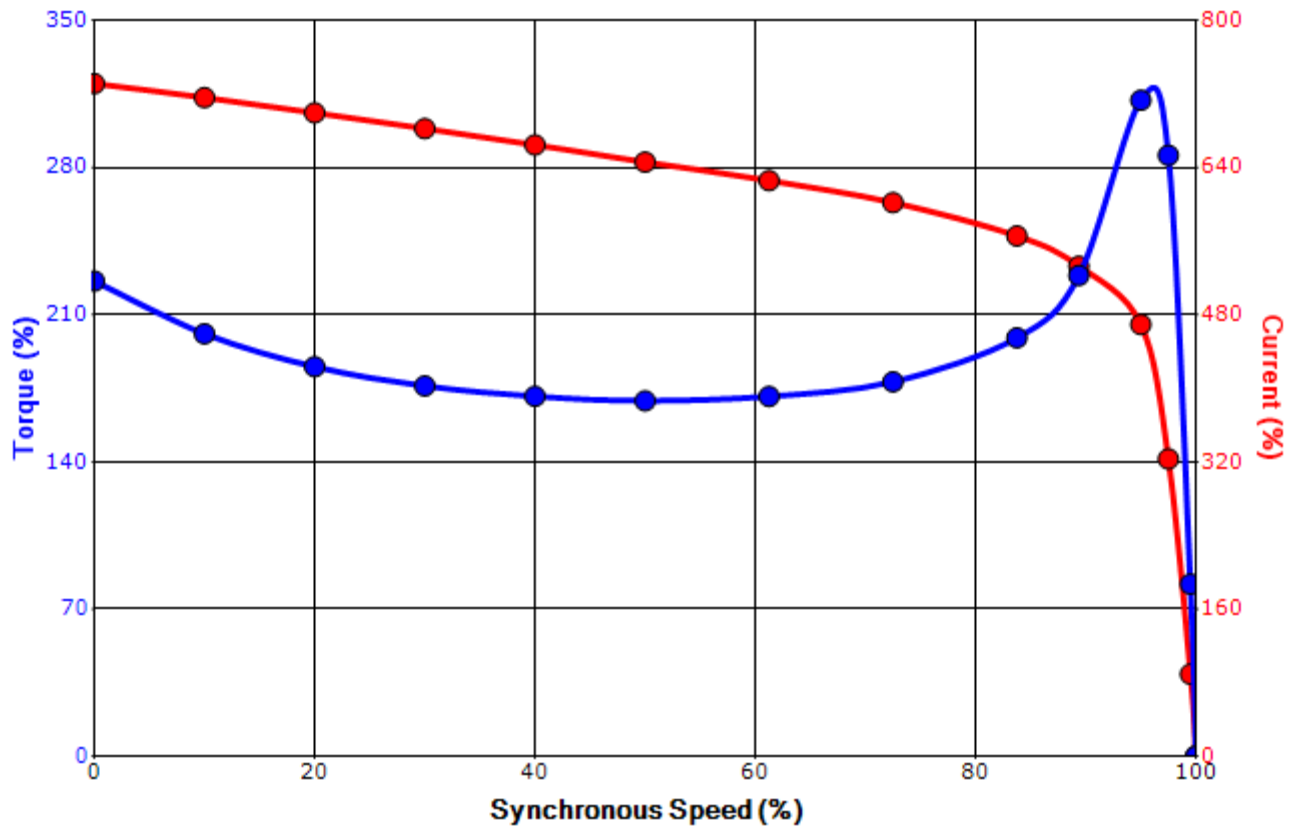
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| 722 | 25.95 | 267 | 225 | | 170 | 310 | | |

Design Values



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|-------------|--|--|-----|
| Customer | | wk ² Load Inertia (lb-ft ²) | - |
| Customer PO | | Load Type | - |
| Sales Order | | Voltage (%) | 100 |
| Project # | | Accel. Time | - |

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All characteristics are average expected values.

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Motor Connection Diagrams
12 Leads

Across-the-Line Starting / Running Connections

Low Voltage Delta



High Voltage Delta



Switch L1 and L2 to reverse rotation

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