

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)

0.500" x 0.500" x 3.25"

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 TEFC FRAME
 F1 ASSEMBLY**

MDSL001-05

TOSHIBA
 TOSHIBA INTERNATIONAL CORPORATION

TOLERANCES

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

MAXIMUM MOTOR WEIGHT

| |
|----------|
| 448 lbs. |
| 203 kgs. |

| | | | | |
|----|---------------------------------------|----------|----------|-------|
| 0 | FIRST ISSUE (OVERRIDE 'R' DIM. VALUE) | N. MOMIN | 09/02/10 | JR |
| NO | REVISION | DRAWN BY | DATE | CHECK |



DRAWN BY: N. MOMIN
 CHECK BY: J. RUSSELL
 APPROVED BY: _____
 www.toshiba.com/ind

TYPICAL MOTOR PERFORMANCE DATA

Model: 0206SDSR41A-P

| | | | | | | | | |
|-----------|----|------------|--------|-------|----------------|-------------|----------|--------------|
| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
| 20 | 15 | 6 | 1170 | 286T | 230/460 | 60 | 3 | 50/25 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 55 | F | 1.15 | CONT | 91.7 | A | G | 40 C |

| | | | | | |
|--------------|-------|------|---------|----------------|------------------|
| Load | HP | kW | Amperes | Efficiency (%) | Power Factor (%) |
| Full Load | 20 | 14.9 | 25.0 | 91.8 | 79.7 |
| ¾ Load | 15.00 | 11.2 | 20.6 | 91.8 | 75.9 |
| ½ Load | 10.00 | 7.5 | 16.4 | 90.7 | 67.1 |
| ¼ Load | 5.00 | 3.7 | 13.5 | 83.0 | 41.6 |
| No Load | | | 11.2 | | 5.3 |
| Locked Rotor | | | 158.00 | | 46.0 |

| | | | | |
|-------------------|----------------------|-----------------|--------------------|-------------------------------|
| Torque | | | | Rotor wk ² |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | Inertia (lb-ft ²) |
| 89.8 | 255 | 225 | 275 | 6.10 |

| | | | | | |
|--------------------|-----|---------------------------|-----------|---------|----------------------------|
| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight (lbs) |
| Cold | Hot | | DE | NDE | |
| 35 | 15 | - | 6310ZC3 | 6310ZC3 | |

*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 | aacosta | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date | 4/19/2012 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

TYPICAL MOTOR PERFORMANCE DATA

Model: 0206SDSR41A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|-----------|----|------------|--------|-------|----------------|-------------|----------|--------------|
| 20 | 15 | 6 | 960 | 286T | 190/380 | 50 | 3 | 64/32 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 55 | F | 1.0 | CONT | 88.5 | B | G | 40 C |

| Load | HP | kW | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|-------|------|---------|----------------|------------------|
| Full Load | 20 | 14.9 | 32.0 | 91.7 | 78.5 |
| ¾ Load | 15.00 | 11.2 | 23.7 | 92.4 | 74.8 |
| ½ Load | 10.00 | 7.5 | 17.6 | 92.2 | 66.2 |
| ¼ Load | 5.00 | 3.7 | 13.0 | 84.5 | 51.3 |
| No Load | | | 11.2 | | 5.2 |
| Locked Rotor | | | 191.00 | | 47.0 |

| Torque | | | | Rotor wk ² Inertia (lb-ft ²) |
|----------------------|-------------------------|--------------------|-----------------------|---|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | |
| 109 | 200 | 195 | 215 | 6.10 |

| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight (lbs) |
|--------------------|-----|------------------------------|-----------|---------|-------------------------------|
| Cold | Hot | | DE | NDE | |
| 29 | 14 | - | 6310ZC3 | 6310ZC3 | |

*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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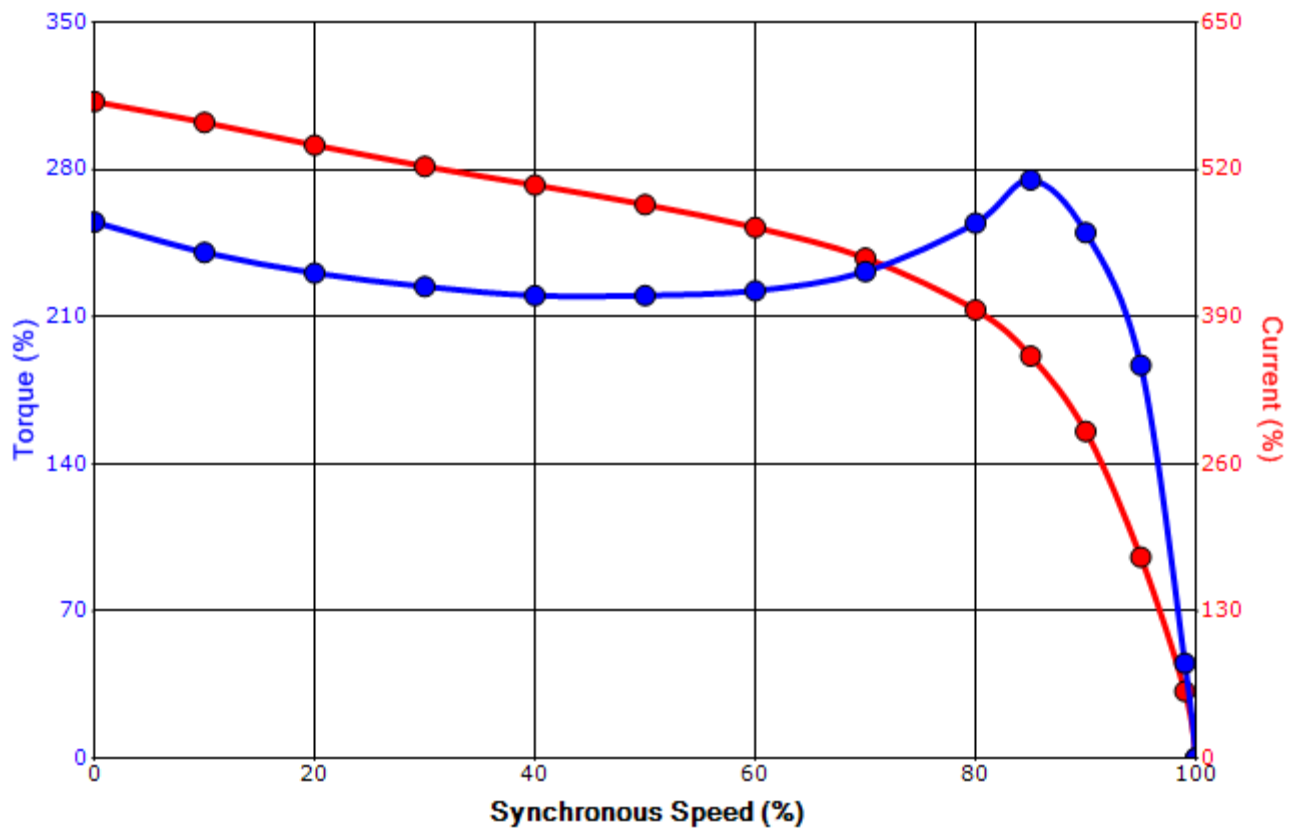
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|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | jhock | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date | 6/17/2014 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

SPEED TORQUE/CURRENT CURVE

Model: 0206SDSR41A-P

| | | | | | | | | |
|-------------------|---|-------------------|------------------|-------------|----------------|-------------|----------|----------------|
| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
| 20 | 15 | 6 | 1170 | 286T | 230/460 | 60 | 3 | 50/25 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 55 | F | 1.15 | CONT | 91.7 | A | G | 40 C |
| Locked Rotor Amps | Rotor wk ² Inertia (lb-ft ²) | Torque | | | | | | Break Down (%) |
| | | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | | | | |
| 158.00 | 6.10 | 89.8 | 255 | 225 | | | 275 | |

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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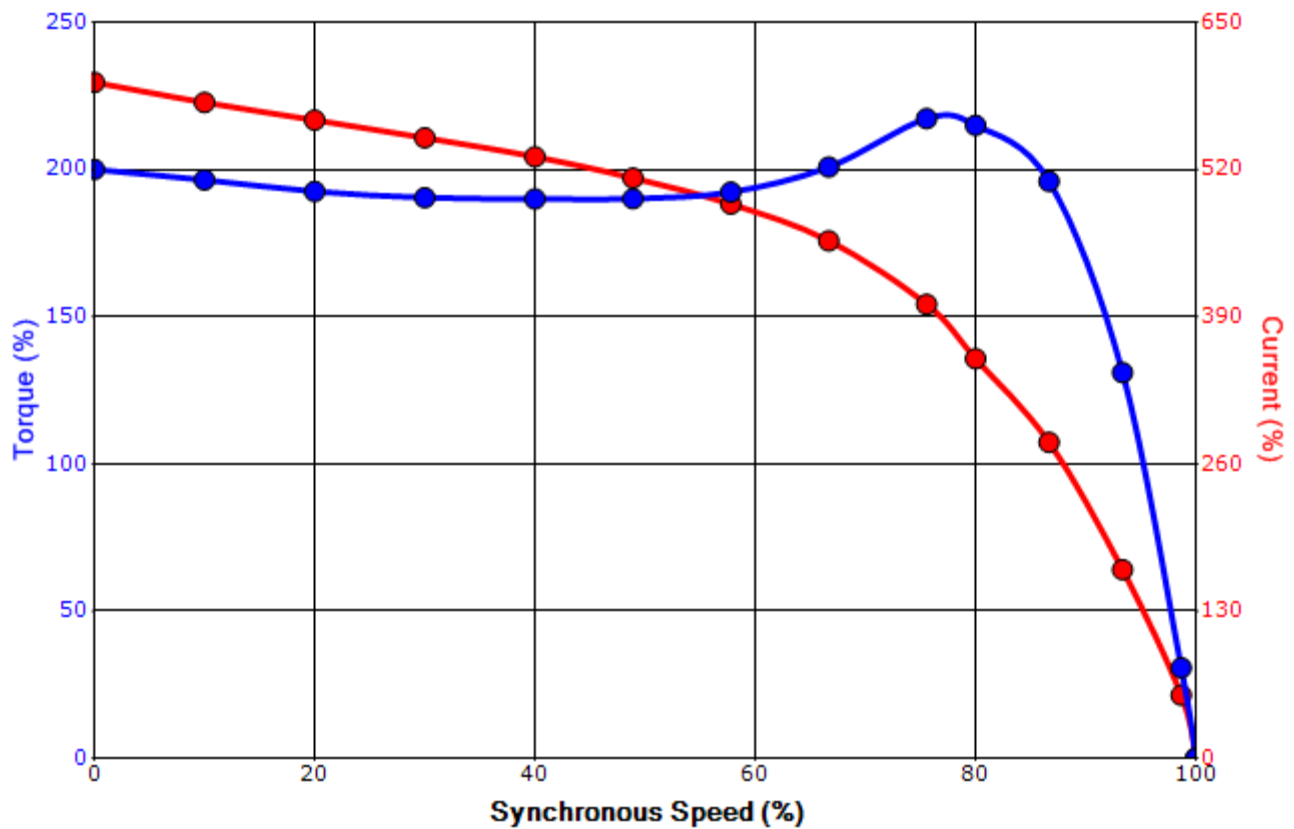
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|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | aacosta | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date | 4/19/2012 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

SPEED TORQUE/CURRENT CURVE

Model: 0206SDSR41A-P

| | | | | | | | | |
|-------------------|---|-------------------|------------------|-------------|----------------|-------------|----------|----------------|
| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
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| Locked Rotor Amps | Rotor wk ² Inertia (lb-ft ²) | Torque | | | | | | Break Down (%) |
| | | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | | | | |
| 191.00 | 6.10 | 109 | 200 | 195 | | | 215 | |

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.

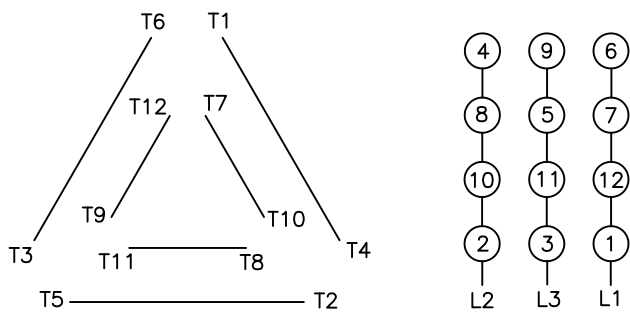
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| | | | | | |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | jhock | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date | 6/17/2014 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

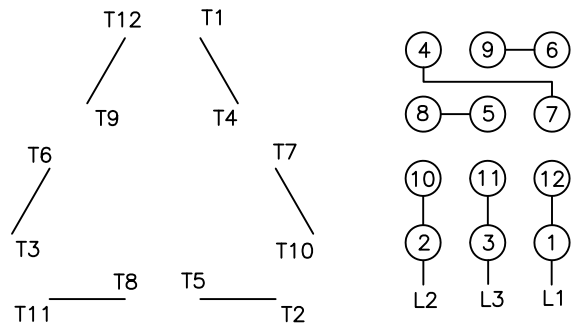
Motor Connection Diagrams
12 Leads

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.