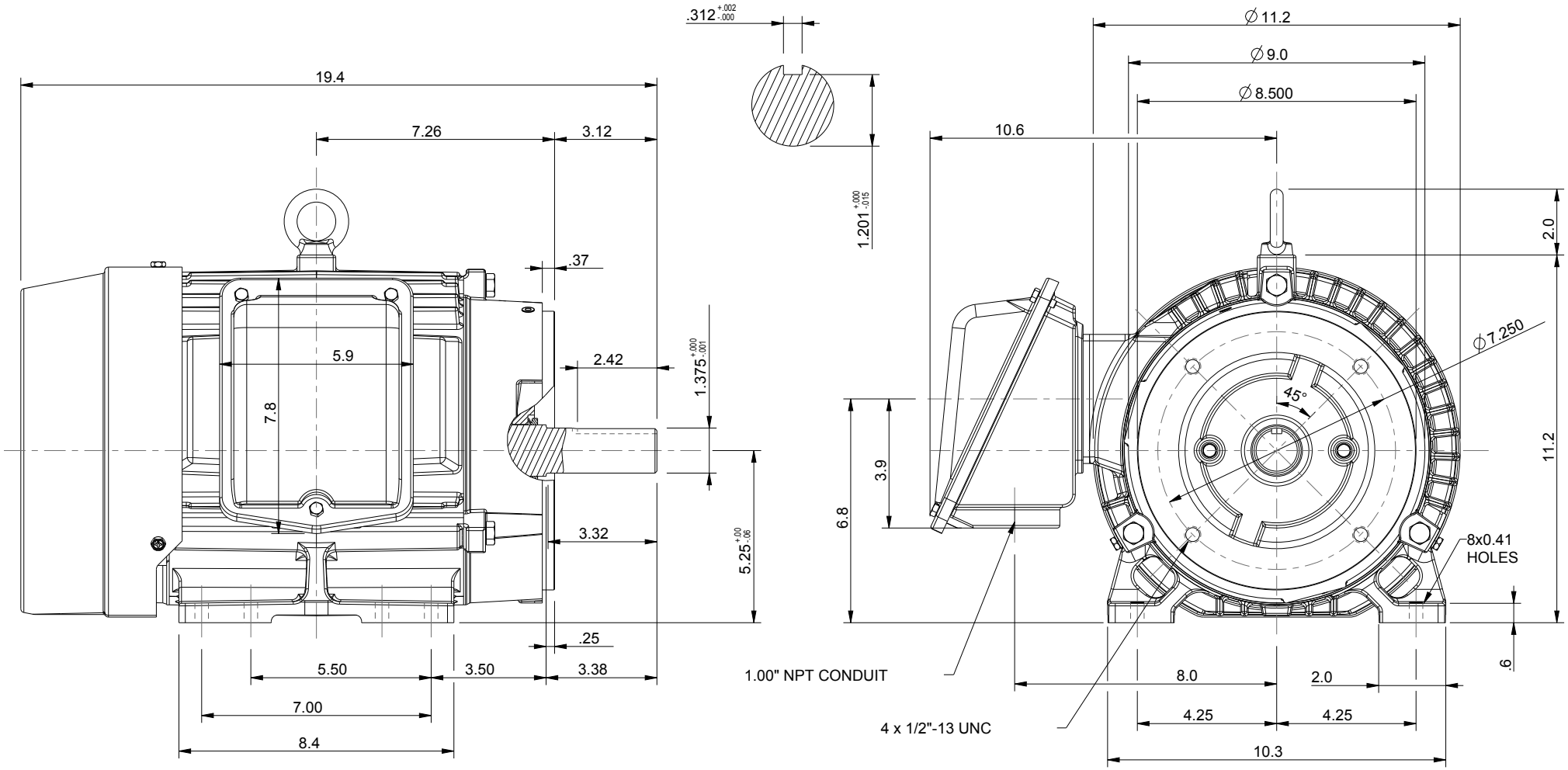


| UNITS: INCHES | NOTES: |
|---|---|
| ROTATION FROM NDE | 1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS |
| X CCW  CW | 2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE. |
| | 3. KEY DIMENSIONS EQUAL 0.312"x 0.312"x 2.38" (MOTOR SUPPLIED WITH KEY) |



☐ PRELIMINARY

☒ CERTIFIED

**TOSHIBA** SEVERE DUTY EQP Global SD

www.toshiba.com/tic

**TOSHIBA INTERNATIONAL CORPORATION**

# TOTALLY ENCLOSED FAN COOLED FOOTED C-FACED 3 PHASE INDUCTION MOTOR

213TC-215TC F1 ASSEMBLY

DRAWING #: MDSLV003-03

REV. DATE: 06/27/18 REV. #: 2 PER.: M. O'DOWD

REV. DESCRIP.:

| Issued Date | 6/19/2025 | Transmit # | |
|---|---|---|---|
| Issued By | dschoeck | Issued Rev | |

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# TYPICAL MOTOR PERFORMANCE DATA

**Model:** 0104SDSR42A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|---|---|---|---|---|---|---|---|---|
| 10 | 7.5 | 4 | 1770 | 215TC | 230/460 | 60 | 3 | 26.4/13.2 |
| **Enclosure** | **IP** | **Ins. Class** | **S.F.** | **Duty** | **NEMA Nom. Eff.** | **NEMA Design** | **kVA Code** | **Ambient (°C)** |
| TEFC | 55 | F | 1.15 | CONT | 91.7 | B | | 40 C |

| Load | HP | kW | Amperes | Efficiency (%) | Power Factor (%) |
|---|---|---|---|---|---|
| **Full Load** | 10.00 | 7.5 | 13.2 | 91.9 | 77.0 |
| **¾ Load** | 7.50 | 5.6 | 10.8 | 90.9 | 71.5 |
| **½ Load** | 5.00 | 3.7 | 8.6 | 88.4 | 61.4 |
| **¼ Load** | 2.50 | 1.9 | 5.8 | 82.0 | 48.9 |
| **No Load** | | | 6.8 | | 5.0 |
| **Locked Rotor** | | | 87 | | 43.7 |

| Torque | | | | Rotor wk² Inertia |
|---|---|---|---|---|
| **Full Load (lb-ft)** | **Locked Rotor (% FLT)** | **Pull Up (% FLT)** | **Break Down (% FLT)** | **(lb-ft²)** |
| 29.7 | 305 | 225 | 350 | 1.33 |

| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight |
|---|---|---|---|---|---|
| **Cold** | **Hot** | | **DE** | **NDE** | **(lbs)** |
| 35 | 15 | - | 6308ZZC3 | 6308ZZC3 | 198 |

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

**Motor Options:**
Product Family:EQP Global SD CFace Footed
Mounting:C-Face Footed,Shaft:T Shaft

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

**Tag:**

All characteristics are average expected values.

**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

| Engineering | bmammen | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1119 / 0 |
|---|---|---|---|---|---|
| Engr. Date | 5/5/2025 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

| Issued Date | 6/19/2025 | Transmit # | |
|---|---|---|---|
| Issued By | dschoeck | Issued Rev | |

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# TYPICAL MOTOR PERFORMANCE DATA

**Model:** 0104SDSR42A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|---|---|---|---|---|---|---|---|---|
| 10 | 7.5 | 4 | 1455 | 215TC | 190/380 | 50 | 3 | 31.2/15.6 |
| **Enclosure** | **IP** | **Ins. Class** | **S.F.** | **Duty** | **NEMA Nom. Eff.** | **NEMA Design** | **kVA Code** | **Ambient (°C)** |
| TEFC | 55 | F | 1.0 | CONT | 89.5 | B | | 40 C |

| Load | HP | kW | Amperes | Efficiency (%) | Power Factor (%) |
|---|---|---|---|---|---|
| **Full Load** | 10.00 | 7.5 | 15.6 | 89.9 | 80.8 |
| **¾ Load** | 7.50 | 5.6 | 12.3 | 89.9 | 76.9 |
| **½ Load** | 5.00 | 3.7 | 9.4 | 88.3 | 68.0 |
| **¼ Load** | 2.50 | 1.9 | 6.3 | 82.7 | 53.9 |
| **No Load** | | | 6.9 | | 4.7 |
| **Locked Rotor** | | | 86 | | 39.7 |

| Torque | | | | Rotor wk² Inertia |
|---|---|---|---|---|
| **Full Load (lb-ft)** | **Locked Rotor (% FLT)** | **Pull Up (% FLT)** | **Break Down (% FLT)** | **(lb-ft²)** |
| 36.1 | 200 | 155 | 275 | 1.33 |

| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight |
|---|---|---|---|---|---|
| **Cold** | **Hot** | | **DE** | **NDE** | **(lbs)** |
| 35 | 15 | - | 6308ZZC3 | 6308ZZC3 | 198 |

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

**Motor Options:**
Product Family:EQP Global SD CFace Footed
Mounting:C-Face Footed,Shaft:T Shaft

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

**Tag:**

All characteristics are average expected values.

**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

| Engineering | bmammen | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1119 / 0 |
|---|---|---|---|---|---|
| Engr. Date | 5/5/2025 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

| | | | |
|---|---|---|---|
| Issued Date | 6/19/2025 | Transmit # | |
| Issued By | dschoeck | Issued Rev | |

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# SPEED TORQUE/CURRENT CURVE

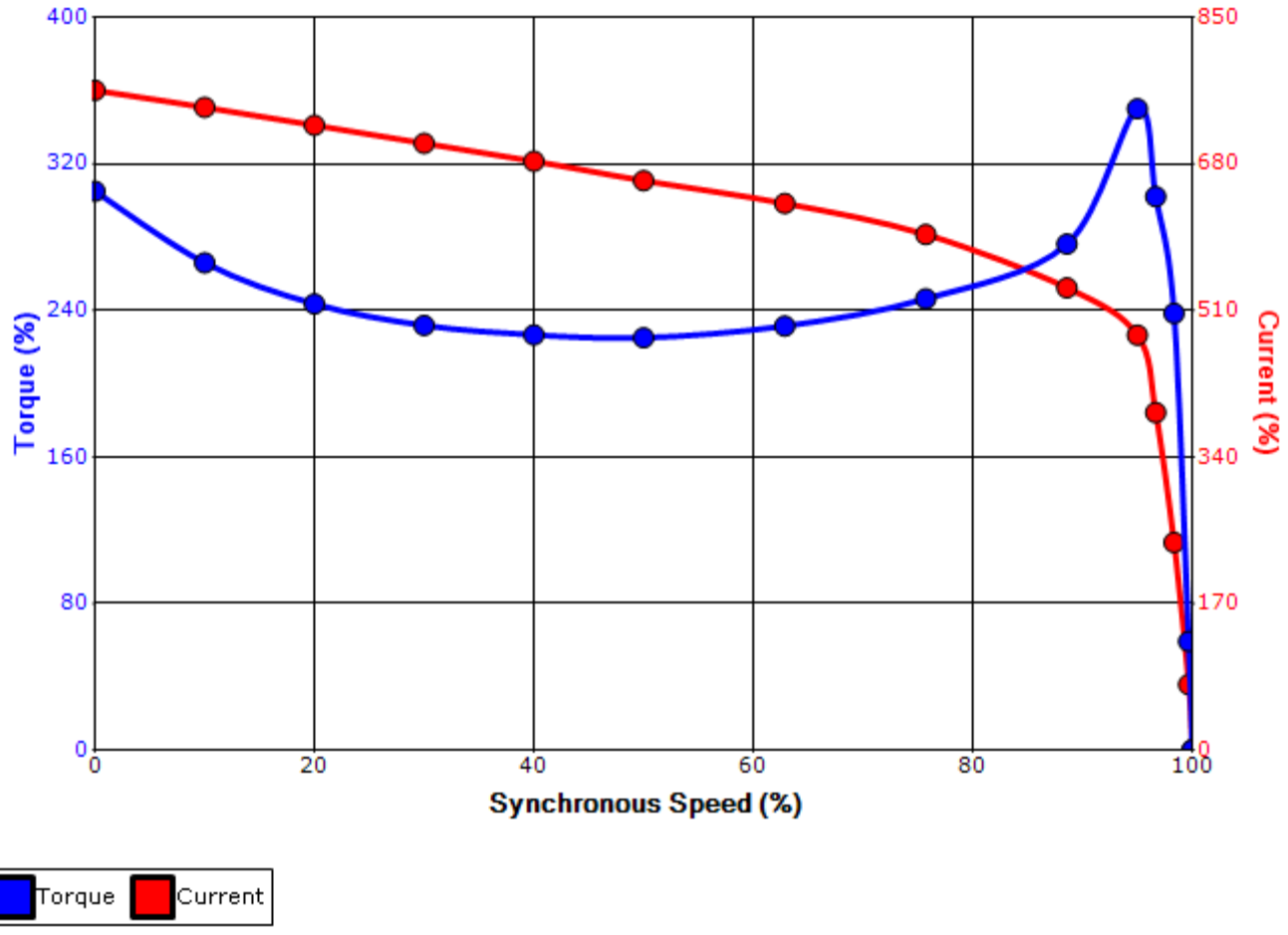
**Model:** 0104SDSR42A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|---|---|---|---|---|---|---|---|---|
| 10 | 7.5 | 4 | 1770 | 215TC | 230/460 | 60 | 3 | 26.4/13.2 |

| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
|---|---|---|---|---|---|---|---|---|
| TEFC | 55 | F | 1.15 | CONT | 91.7 | B | | 40 C |

| Locked Rotor Amps | Rotor wk² Inertia (lb-ft²) | Torque | | | |
|---|---|---|---|---|---|
| | | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | Break Down (%) |
| 87 | 1.33 | 29.7 | 305 | 225 | 350 |

## Design Values




| | | | | |
|---|---|---|---|---|
| Customer | | wk² Load Inertia (lb-ft²) | - | |
| Customer PO | | Load Type | - | |
| Sales Order | | Voltage (%) | 100 | |
| Project # | | Accel. Time | - | |

**Tag:**

All characteristics are average expected values.

**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

| | | | | | |
|---|---|---|---|---|---|
| Engineering | bmammen | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date | 5/5/2025 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

| | | | |
|---|---|---|---|
| Issued Date | 6/19/2025 | Transmit # | |
| Issued By | dschoeck | Issued Rev | |

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# SPEED TORQUE/CURRENT CURVE

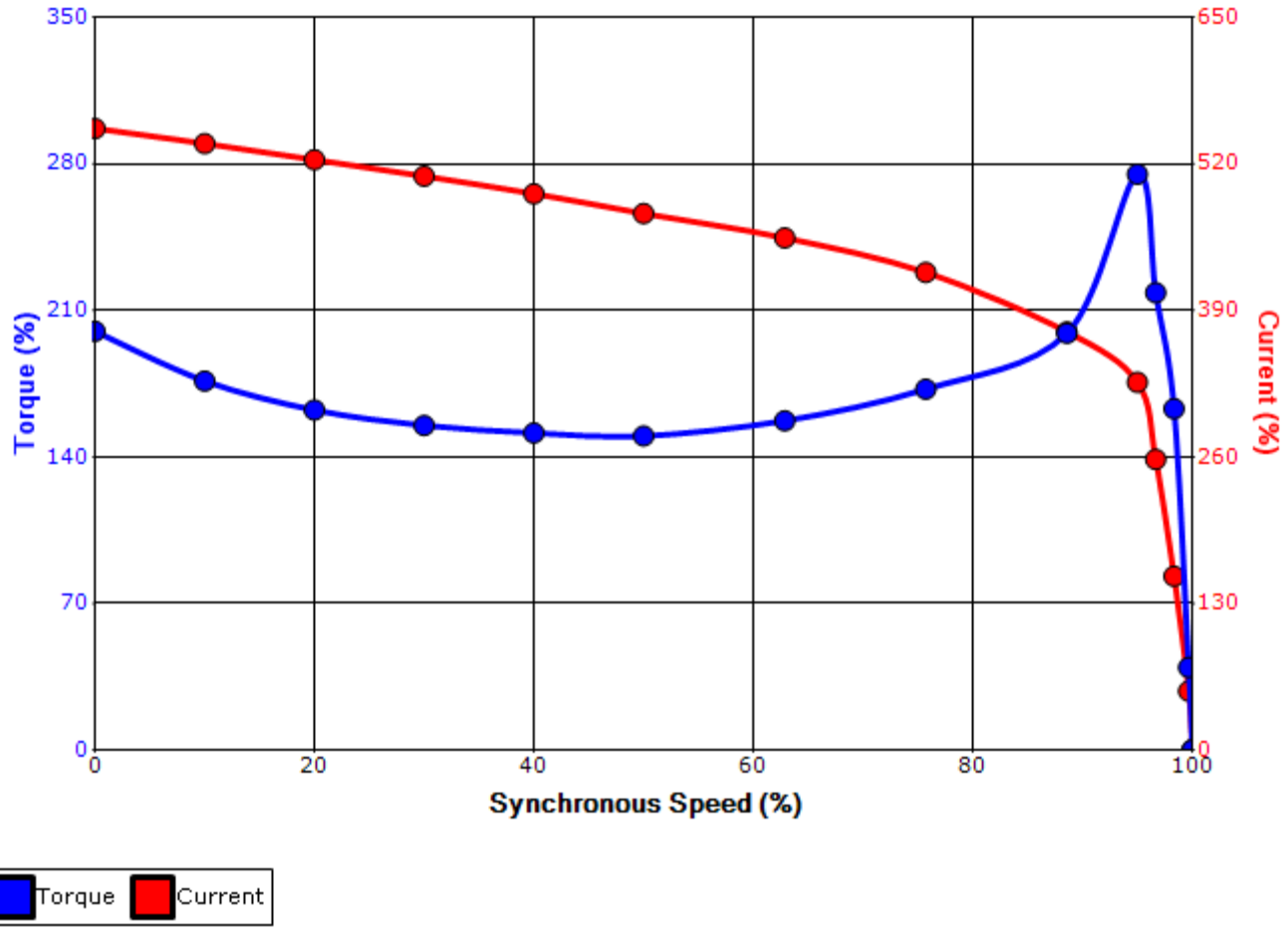
**Model:** 0104SDSR42A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|---|---|---|---|---|---|---|---|---|
| 10 | 7.5 | 4 | 1455 | 215TC | 190/380 | 50 | 3 | 31.2/15.6 |

| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
|---|---|---|---|---|---|---|---|---|
| TEFC | 55 | F | 1.0 | CONT | 89.5 | B | | 40 C |

| Locked Rotor Amps | Rotor wk² Inertia (lb-ft²) | Torque | | | |
|---|---|---|---|---|---|
| | | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | Break Down (%) |
| 86 | 1.33 | 36.1 | 200 | 155 | 275 |

## Design Values




| | | | | |
|---|---|---|---|---|
| Customer | | wk² Load Inertia (lb-ft²) | - |
| Customer PO | | Load Type | - |
| Sales Order | | Voltage (%) | 100 |
| Project # | | Accel. Time | - |

**Tag:**

All characteristics are average expected values.

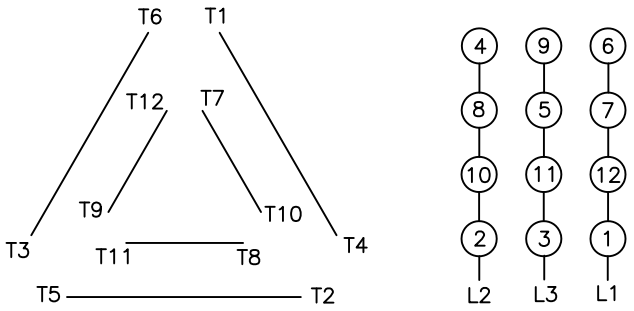
**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

| | | | | | |
|---|---|---|---|---|---|
| Engineering | bmammen | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date | 5/5/2025 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

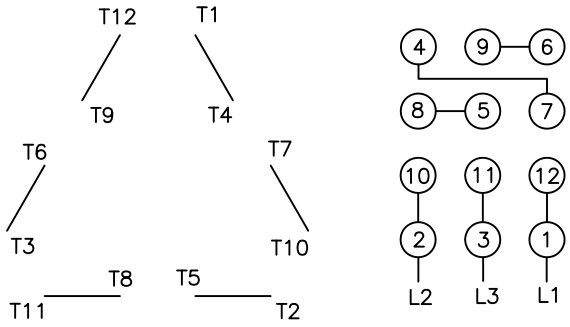
# Motor Connection Diagrams
## 12 Leads

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.

| | | | |
|---|---|---|---|
| **Issued Date:** | 6/19/2025 | **Transmit #:** | |
| **Issued By:** | dschoeck | **Issued Rev:** | |

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# SPARE PARTS LIST*

**Model:** 0104SDSR42A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|---|---|---|---|---|---|---|---|---|
| 10 | 7.5 | 4 | 1770 | 215TC | 230/460 | 60 | 3 | 26.4/13.2 |
| **Enclosure** | **IP** | **Ins. Class** | **S.F.** | **Duty** | **NEMA Nom. Eff.** | **NEMA Design** | **kVA Code** | **Ambient (°C)** |
| TEFC | 55 | F | 1.15 | CONT | 91.7 | B | | 40 C |

| | |
|---|---|
| **Bearings DE** | 6308ZZC3 / 40BC03JPP3OA |
| **Bearings NDE** | 6308ZZC3 / 40BC03JPP3OA |

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

Other than the grease used for regreasable bearings and the oil used for oil-lubricated bearings, Toshiba advises that there are no "use" parts. The only insurance spares that Toshiba suggests for these squirrel-cage induction motors are industry-standard and commercially available off-the-shelf bearings as noted above.

Motor components such as terminal boxes, fan covers and other machined parts are available on special request. In these cases, please advise our order entry department of the model and serial numbers found on the motor nameplate and a description of the needed components. With this information they will be able to furnish the current part number, price and availability.

Note: Our internal part numbers are subject to change without notice and are not published.

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

**Tag:**

All characteristics are average expected values.

**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

| | | | | | |
|---|---|---|---|---|---|
| **Engineering** | bmammen | **Doc. Written By** | D. Suarez | **Doc.# / Rev** | MPCF-1125 / 0 |
| **Engr. Date** | 5/5/2025 | **Doc. Approved By** | M. Campbell | **Doc. Issued** | 6/8/2011 |