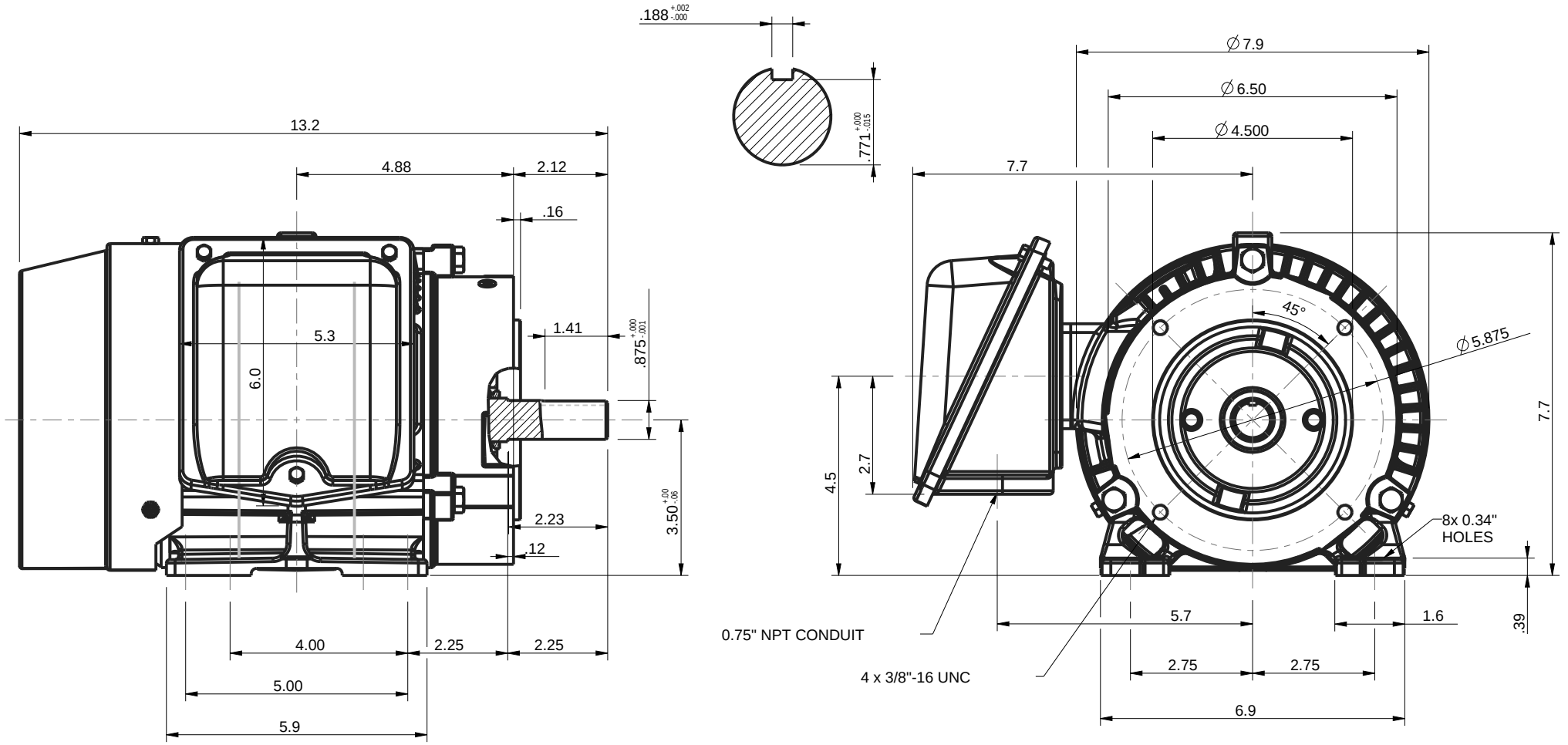


| UNITS: INCHES | NOTES: |
|---|---|
| ROTATION FROM NDE | 1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS |
| X CCW  CW | 2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE. |
| | 3. KEY DIMENSIONS EQUAL 0.188"x 0.188"x 1.38" (MOTOR SUPPLIED WITH KEY) |



☐ PRELIMINARY



☒ CERTIFIED

TOSHIBA

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TOSHIBA INTERNATIONAL CORPORATION

SEVERE DUTY EQP SD

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

143TC-145TC F1 ASSEMBLY

DRAWING #: MDSLV003-01

REV. DATE: 06/20/18 REV. #: 5 PER.: M. O'DOWD

REV. DESCRIP.:

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

TOSHIBA

# TYPICAL MOTOR PERFORMANCE DATA

**Model:** 0014SDSR42A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | 4 | 1760 | 143TC | 230/460 | 60 | 3 | 3.2/1.6 |

| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
|---|---|---|---|---|---|---|---|---|
| TEFC | 55 | F | 1.15 | CONT | 85.5 | B | 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 | | | | Rotor wk² Inertia |
|---|---|---|---|---|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | (lb-ft²) |
| 2.98 | 340 | 295 | 490 | 0.11 |

| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight |
|---|---|---|---|---|---|
| Cold | Hot | | DE | NDE | (lbs) |
| 35 | 15 | - | 6305ZZC3 | 6305ZZC3 | 63 |

*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 / 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 | |

TOSHIBA

# TYPICAL MOTOR PERFORMANCE DATA

**Model:** 0014SDSR42A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | 4 | 1450 | 143TC | 190/380 | 50 | 3 | 3.6/1.8 |

| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
|---|---|---|---|---|---|---|---|---|
| TEFC | 55 | F | 1.0 | CONT | 84 | B | 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 | | | | Rotor wk² Inertia |
|---|---|---|---|---|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | (lb-ft²) |
| 3.62 | 275 | 235 | 320 | 0.11 |

| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight |
|---|---|---|---|---|---|
| Cold | Hot | | DE | NDE | (lbs) |
| 26 | 21 | - | 6305ZZC3 | 6305ZZC3 | 63 |

*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.

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

TOSHIBA

# SPEED TORQUE/CURRENT CURVE

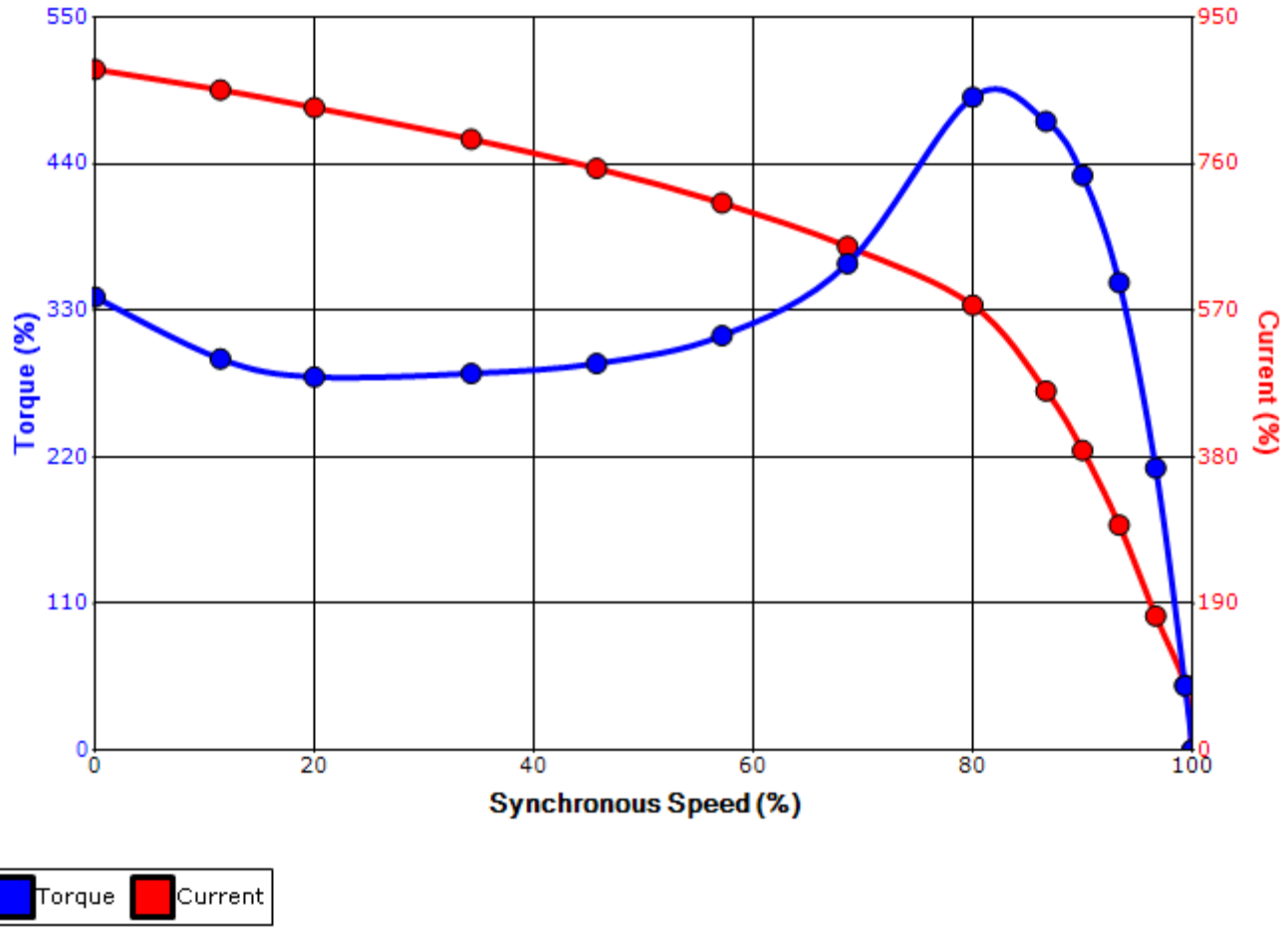
**Model:** 0014SDSR42A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | 4 | 1760 | 143TC | 230/460 | 60 | 3 | 3.2/1.6 |

| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
|---|---|---|---|---|---|---|---|---|
| TEFC | 55 | F | 1.15 | CONT | 85.5 | B | M | 40 C |

| Locked Rotor Amps | Rotor wk² Inertia (lb-ft²) | Torque | | | |
|---|---|---|---|---|---|
| | | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | Break Down (%) |
| 13.8 | 0.11 | 2.98 | 340 | 295 | 490 |

## 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-1121/1 |
| 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 | |

TOSHIBA

# SPEED TORQUE/CURRENT CURVE

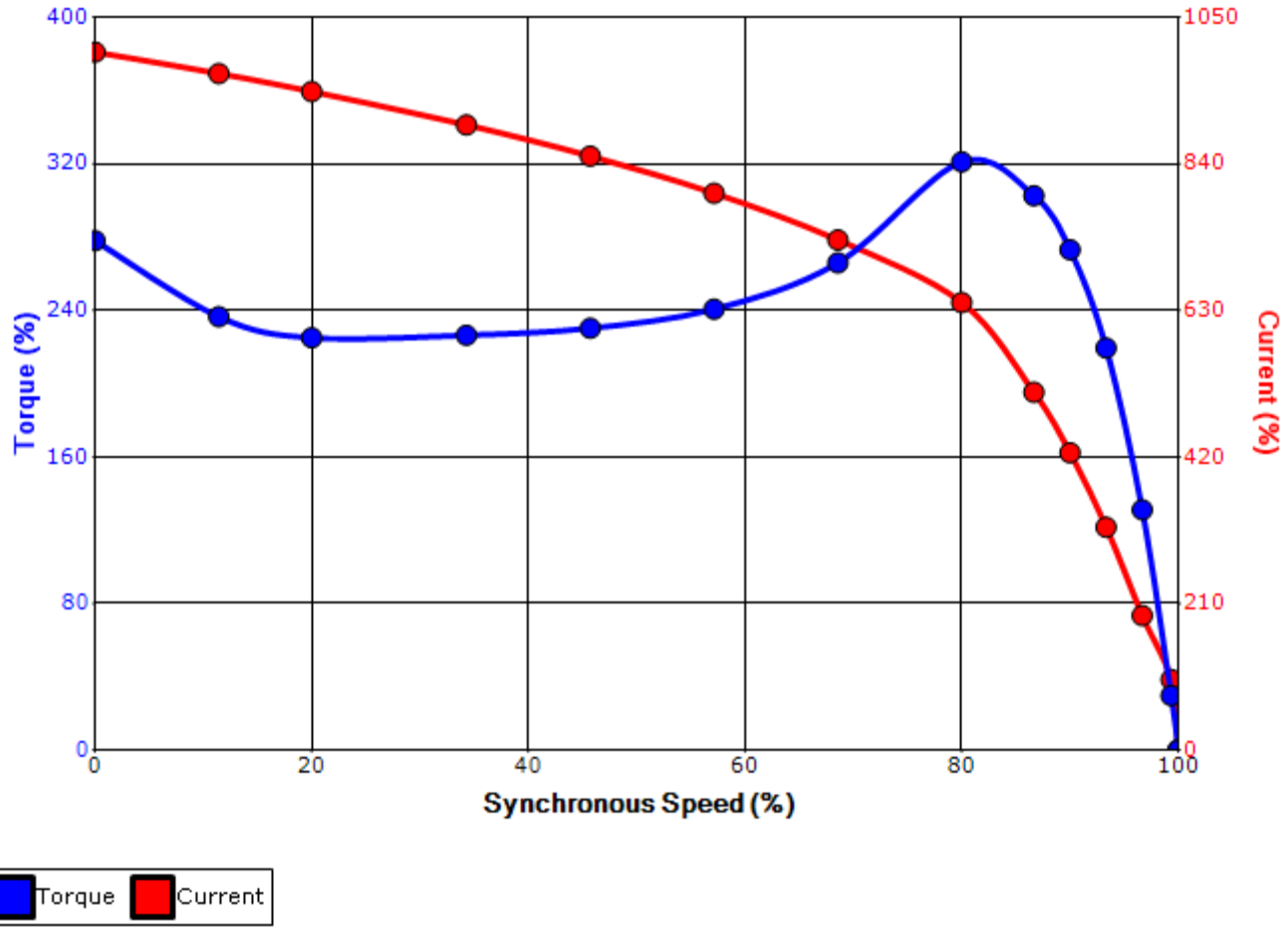
**Model:** 0014SDSR42A-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | 4 | 1450 | 143TC | 190/380 | 50 | 3 | 3.6/1.8 |

| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
|---|---|---|---|---|---|---|---|---|
| TEFC | 55 | F | 1.0 | CONT | 84 | B | N | 40 C |

| Locked Rotor Amps | Rotor wk² Inertia (lb-ft²) | Torque | | | |
|---|---|---|---|---|---|
| | | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | Break Down (%) |
| 18 | 0.11 | 3.62 | 275 | 235 | 320 |

## 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.

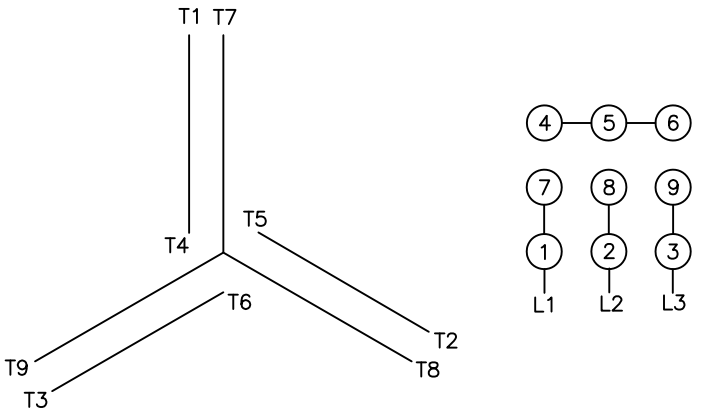
**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

| | | | | | |
|---|---|---|---|---|---|
| Engineering | 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 |

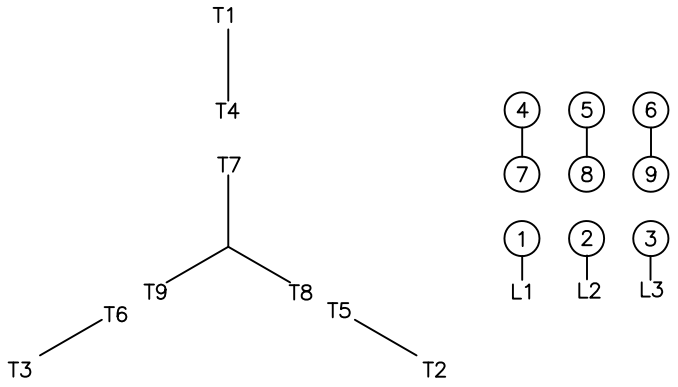
# Motor Connection Diagrams
## 9 Leads

Across-the-Line Starting / Running Connections

### Low Voltage Wye




### High Voltage Wye




Switch L1 and L2 to reverse rotation