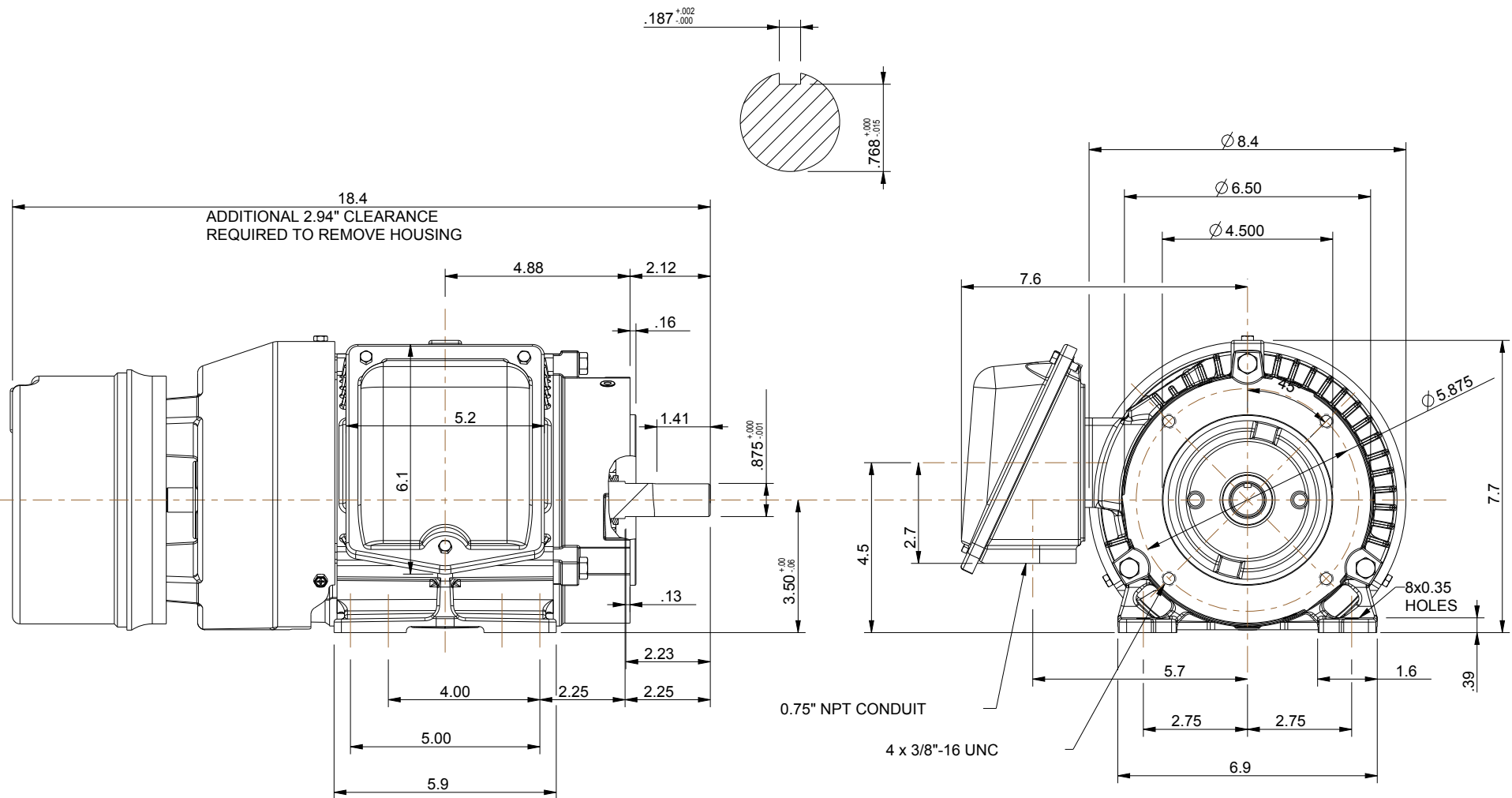




#### NOTES:

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)

0.188" x 0.188" x 1.38"

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.

## 140TC TEFC BRAKE FRAME F1 ASSEMBLY

MDSL133-01

# TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

#### TOLERANCES

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

#### MAXIMUM MOTOR WEIGHT

56 lbs.  
25 kgs.

|    |             |              |           |       |
|----|-------------|--------------|-----------|-------|
| 0  | FIRST ISSUE | MEASTERBROOK | 6/12/2013 | CHECK |
| NO | REVISION    |              |           |       |

**EQP Global SD**  
**XT SERIES**

DRAWN BY: M. EASTERBROOK

CHECK BY:

APPROVED BY:

www.toshiba.com/ind

## TYPICAL MOTOR PERFORMANCE DATA

Model: 3/46SDBA42A-P

| HP        | kW   | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|------|------------|--------|-------|----------------|-------------|----------|--------------|
| 0.75      | 0.55 | 6          | 1170   | 143TC | 230/460        | 60          | 3        | 2.6/1.3      |
| Enclosure | IP   | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55   | F          | 1.15   | CONT  | 80.0           | B           |          | 40 C         |

| Load         | HP   | kW  | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|------|-----|---------|----------------|------------------|
| Full Load    | 0.75 | 0.6 | 1.3     | 79.3           | 69.7             |
| ¾ Load       | 0.56 | 0.4 | 1.1     | 77.7           | 60.8             |
| ½ Load       | 0.38 | 0.3 | 1.0     | 72.9           | 48.2             |
| ¼ Load       | 0.19 | 0.1 | 0.9     | 59.7           | 32.0             |
| No Load      |      |     | 0.8     |                | 10.3             |
| Locked Rotor |      |     | 7.9     |                | 55.5             |

| Torque            |                      |                 |                    | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) |                            |
| 3.37              | 220                  | 175             | 275                | 0.15                       |

| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |          | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|----------|----------------------------|
| Cold               | Hot |                           | DE        | NDE      |                            |
| 35                 | 15  | -                         | 6305ZZC3  | 6305ZZC3 | 67                         |

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

**Motor Options:**  
Product Family:EQP Global Brake  
Mounting:C-Face Footed,Shaft:T Shaft  
Brake Torque (lb-ft): 6.00

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

Tag:

All characteristics are average expected values.

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|             |            |                  |             |             |               |
|-------------|------------|------------------|-------------|-------------|---------------|
| Engineering | BMammen    | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 11/20/2019 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

## TYPICAL MOTOR PERFORMANCE DATA

Model: 3/46SDBA42A-P

| HP        | kW   | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|------|------------|--------|-------|----------------|-------------|----------|--------------|
| 0.75      | 0.55 | 6          | 950    | 143TC | 190/380        | 50          | 3        | 3.0/1.5      |
| Enclosure | IP   | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55   | F          | 1.0    | CONT  | 78.5           | -           |          | 40 C         |

| Load         | HP   | kW  | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|------|-----|---------|----------------|------------------|
| Full Load    | 0.75 | 0.6 | 1.5     | 80.5           | 63.5             |
| ¾ Load       | 0.56 | 0.4 | 1.2     | 79.7           | 55.9             |
| ½ Load       | 0.38 | 0.3 | 1.0     | 76.2           | 44.5             |
| ¼ Load       | 0.19 | 0.1 | 0.9     | 60.9           | 37.5             |
| No Load      |      |     | 0.8     |                | 10.8             |
| Locked Rotor |      |     | 9.2     |                | 65.5             |

| Torque            |                      |                 |                    | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) |                            |
| 4.15              | 175                  | 145             | 225                | 0.15                       |

| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |          | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|----------|----------------------------|
| Cold               | Hot |                           | DE        | NDE      |                            |
| 60                 | 47  | -                         | 6305ZZC3  | 6305ZZC3 | 67                         |

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

### Motor Options:

Product Family:EQP Global Brake  
Mounting:C-Face Footed,Shaft:T Shaft  
Brake Torque (lb-ft): 6.00

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

Tag:

All characteristics are average expected values.

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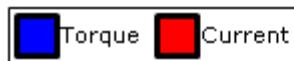
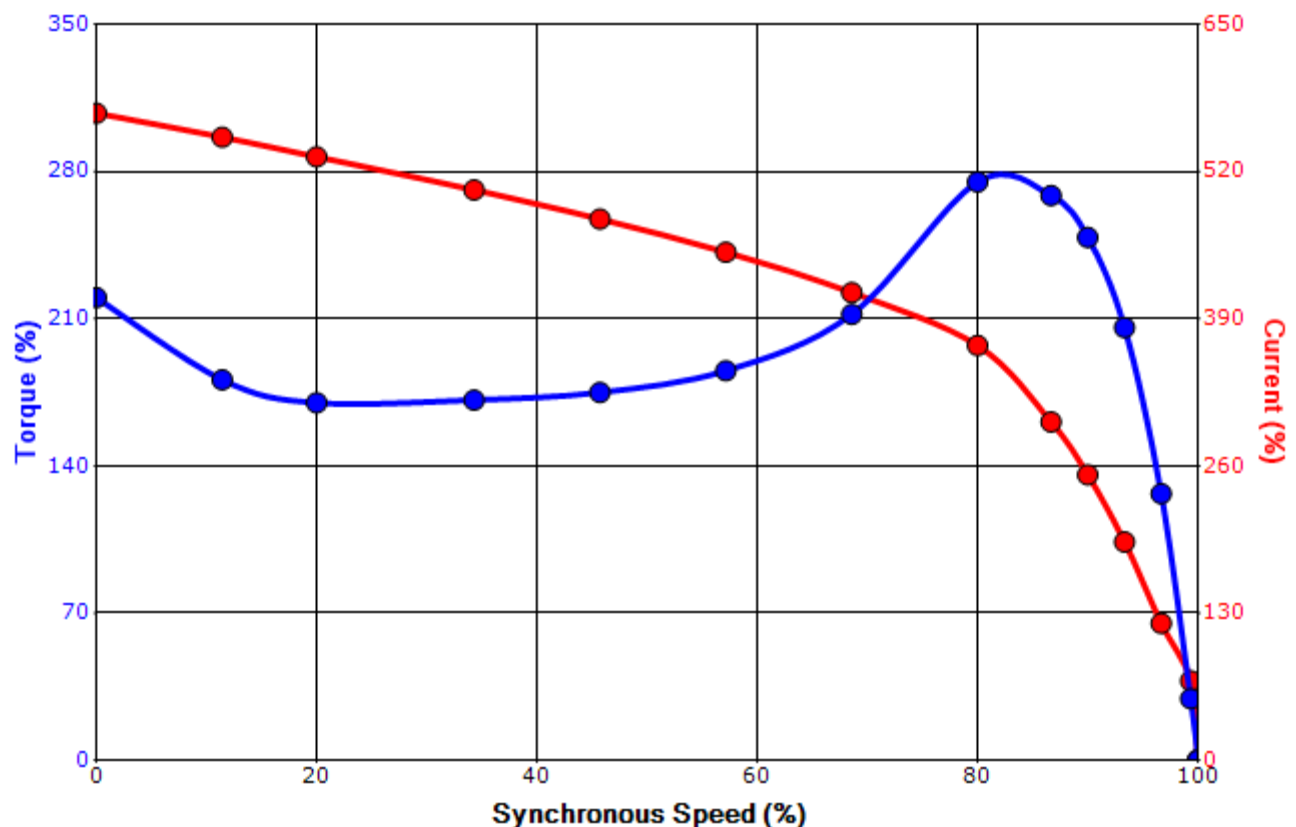
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| Engineering | jhock    | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 4/1/2014 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

## SPEED TORQUE/CURRENT CURVE

Model: 3/46SDBA42A-P

| HP                | kW                                                  | Pole              | FL RPM           | Frame       | Voltage        | Hz             | Phase    | FL Amps      |
|-------------------|-----------------------------------------------------|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 0.75              | 0.55                                                | 6                 | 1170             | 143TC       | 230/460        | 60             | 3        | 2.6/1.3      |
| Enclosure         | IP                                                  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design    | kVA Code | Ambient (°C) |
| TEFC              | 55                                                  | F                 | 1.15             | CONT        | 80.0           | B              |          | 40 C         |
| Locked Rotor Amps | Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> ) | Torque            |                  |             |                |                |          |              |
|                   |                                                     | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) |                | Break Down (%) |          |              |
| 7.9               | 0.15                                                | 3.37              | 220              | 175         |                | 275            |          |              |

### Design Values



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

Tag:

All characteristics are average expected values.

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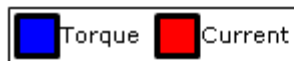
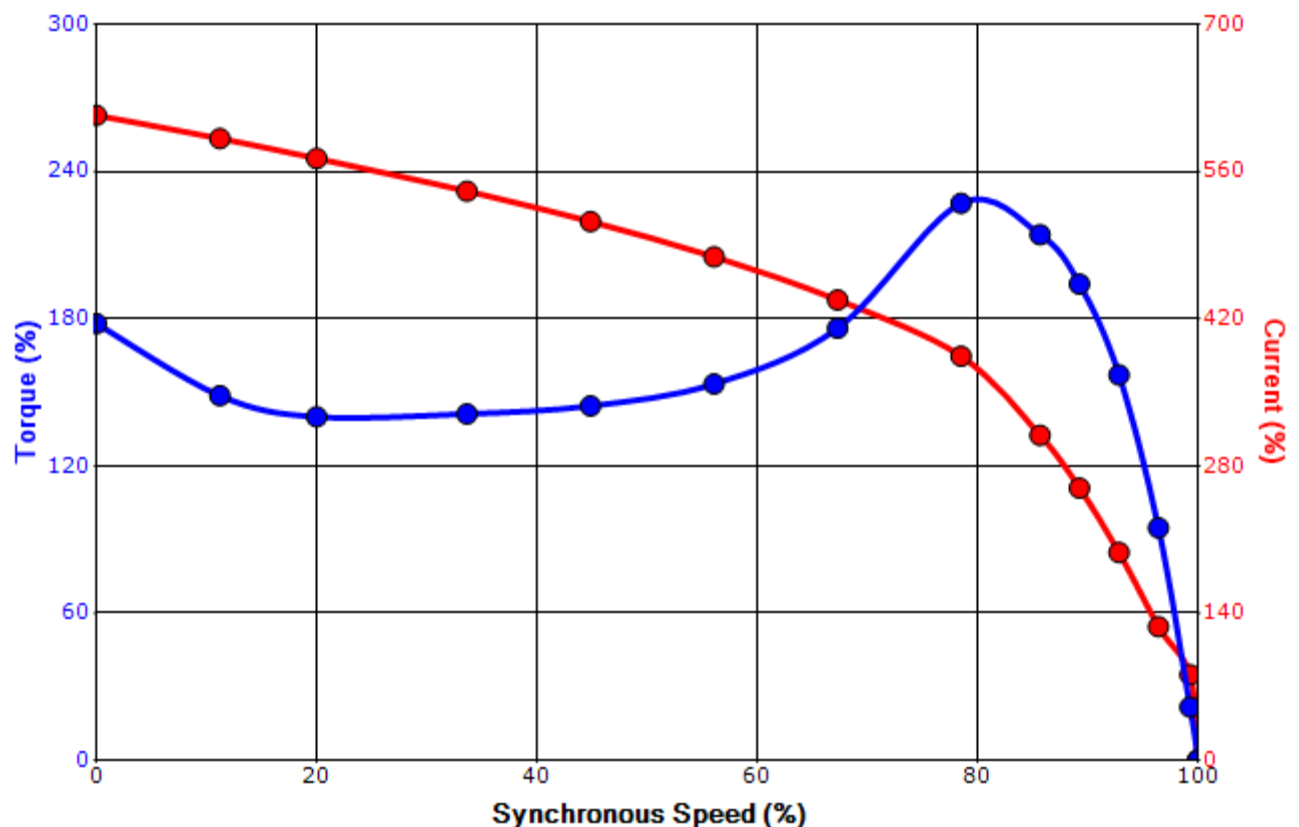
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|-------------|------------|------------------|-------------|-------------|---------------|
| Engineering | BMammen    | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date  | 11/20/2019 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

## SPEED TORQUE/CURRENT CURVE

Model: 3/46SDBA42A-P

| HP                | kW                                                  | Pole              | FL RPM           | Frame       | Voltage        | Hz             | Phase    | FL Amps      |
|-------------------|-----------------------------------------------------|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 0.75              | 0.55                                                | 6                 | 950              | 143TC       | 190/380        | 50             | 3        | 3.0/1.5      |
| Enclosure         | IP                                                  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design    | kVA Code | Ambient (°C) |
| TEFC              | 55                                                  | F                 | 1.0              | CONT        | 78.5           | -              |          | 40 C         |
| Locked Rotor Amps | Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> ) | Torque            |                  |             |                |                |          |              |
|                   |                                                     | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) |                | Break Down (%) |          |              |
| 9.2               | 0.15                                                | 4.15              | 175              | 145         |                | 225            |          |              |

### Design Values



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

Tag:

All characteristics are average expected values.

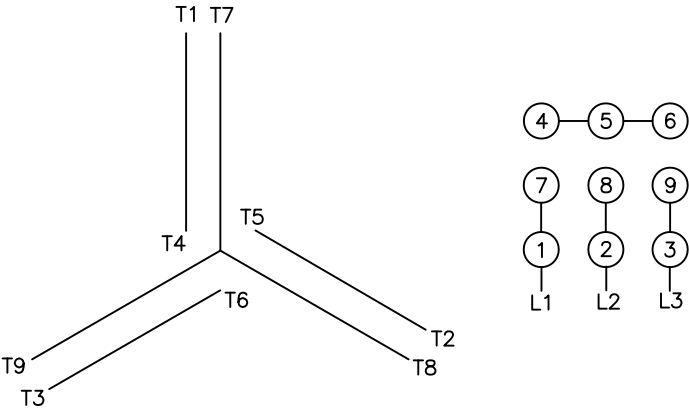
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|             |          |                  |             |             |               |
|-------------|----------|------------------|-------------|-------------|---------------|
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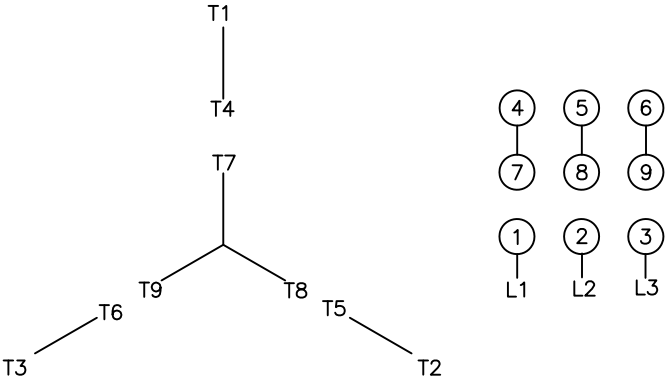
**Motor Connection Diagrams**  
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation