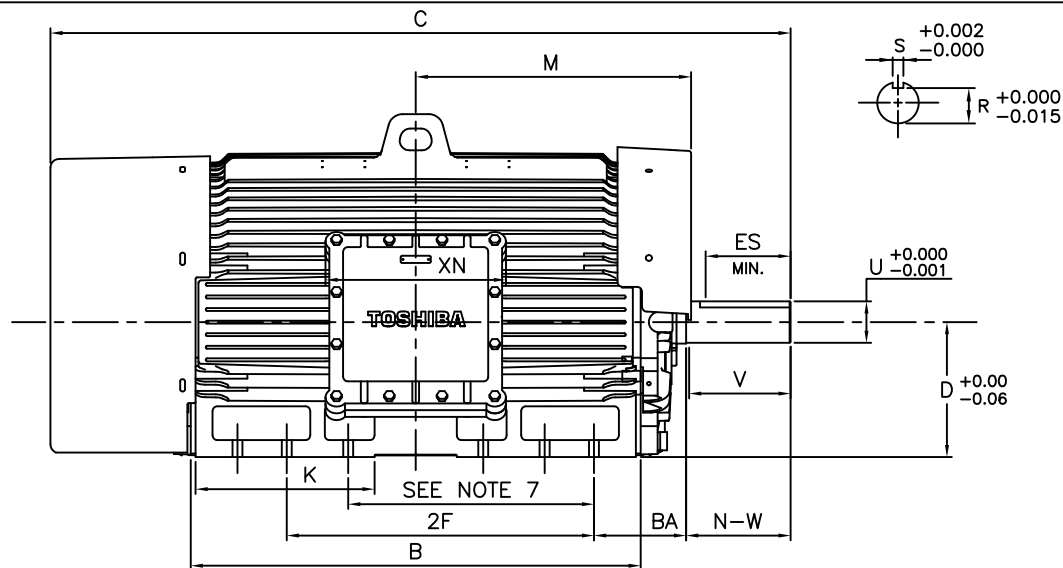
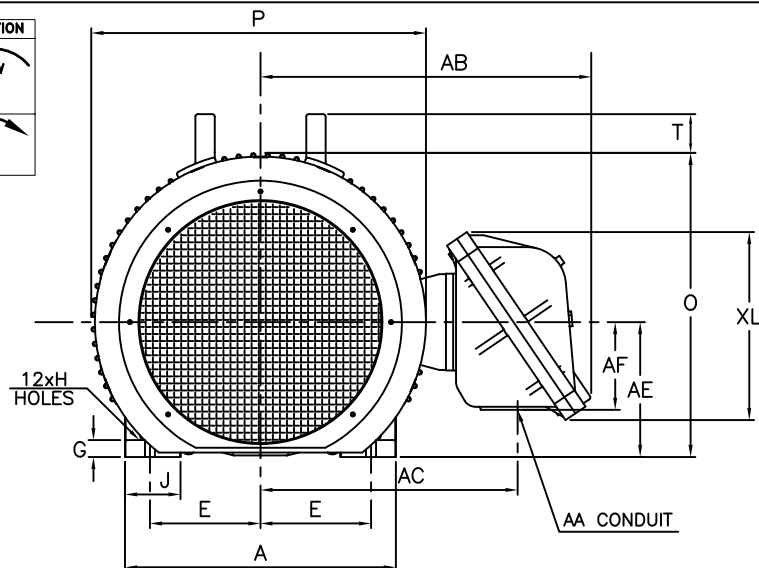
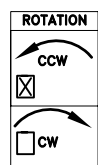




UNITS: INCHES

| FRAME SIZE    | MOTOR DIMENSIONS |      |      |       |     |     |      |      |      |      |     | CONDUIT BOX DIMENSIONS |      |    |       |     |      |      |
|---------------|------------------|------|------|-------|-----|-----|------|------|------|------|-----|------------------------|------|----|-------|-----|------|------|
|               | A                | B    | C    | D     | G   | J   | K    | M    | O    | P    | T   | AA(NPT)                | AB   | AC | AE    | AF  | XL   | XN   |
| N447TS/N449TS | 22.0             | 36.6 | 56.5 | 11.00 | 1.4 | 4.5 | 14.6 | 22.4 | 24.8 | 27.3 | 3.2 | 3.00                   | 27.0 | 21 | 11.00 | 7.2 | 15.3 | 14.7 |
| N447T/N449T   | 22.0             | 36.6 | 60.3 | 11.00 | 1.4 | 4.5 | 14.6 | 22.4 | 24.8 | 27.3 | 3.2 | 3.00                   | 27.0 | 21 | 11.00 | 7.2 | 15.3 | 14.7 |

| FRAME<br>SIZE | MOUNTING |             |      |      | SHAFT EXTENSION |      |       | KEY SEAT |       |      | BEARINGS |        |                |              |         | MAXIMUM<br>WEIGHT |
|---------------|----------|-------------|------|------|-----------------|------|-------|----------|-------|------|----------|--------|----------------|--------------|---------|-------------------|
|               | E        | 2F          | H    | BA   | N-W             | V    | U     | R        | S     | ES   | LS 2P    | OS 2P  | LS ROLLER 4~8P | LS BALL 4~8P | OS 4~8P |                   |
| N447TS/N449TS | 9.00     | 20.00/25.00 | 0.81 | 7.50 | 4.75            | 4.50 | 2.375 | 2.021    | 0.625 | 3.03 | 6313C3   | 6313C3 | —              | 6318C3       | 6318C3  | 4200 lbs          |
| N447T/N449T   | 9.00     | 20.00/25.00 | 0.81 | 7.50 | 8.50            | 8.25 | 3.375 | 2.88     | 0.875 | 6.91 | —        | —      | NU318C3        | 6318C3       | 6318C3  | 4200 lbs          |

NOTES:

1. DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT.
2. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS.
3. KEY DIMENSIONS EQUAL S x S x 6.88 FOR 'T' AND S x S x 3.00 FOR 'TS' (MOTOR SUPPLIED WITH KEY).
4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME.
5. STANDARD 2 POLE PRODUCT USE UNI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY FAN AND CONNECTION CHANGE.
6. STANDARD 4~8 POLE PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
7. THIS DIMENSION EQUALS 2F FOR N447 MOUNTING

CUSTOMER: \_\_\_\_\_ MOTOR MODEL NO.: \_\_\_\_\_

P.O. NO.: \_\_\_\_\_ HP: \_\_\_\_\_ VOLTAGE: \_\_\_\_\_ RPM(SYN.): \_\_\_\_\_ Hz: \_\_\_\_\_

FRAME SIZE: \_\_\_\_\_ PRODUCT TYPE: TEFC EXPLOSION PROOF; CLASS I GROUP D; CLASS II GROUPS E, F, G

COMMENTS: \_\_\_\_\_

PER: \_\_\_\_\_ DATE: \_\_\_\_\_

TAG NO's.: \_\_\_\_\_

- ☒ STANDARD (NO AUX. BOXES)
- ☐ RTD AUX. BOX
- ☐ SPACE HEATER AUX. BOX
- ☐ BEARING RTD's

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**TOSHIBA**

TOSHIBA INTERNATIONAL CORPORATION

TOTALLY-ENCLOSED FAN-COOLED  
HORIZONTAL FOOT-MOUNTED  
3 PHASE INDUCTION MOTOR  
F1 ASSEMBLY

**XT SERIES**

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# TYPICAL MOTOR PERFORMANCE DATA

Model: 3503XPEC41B

| HP        | kW  | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| 350       | 261 | 2          | 3580   | N449T | 575            | 60          | 3        | 311          |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55  | F          | 1.15   | CONT  | 95.8           | A           | H        | 40 C         |

| Load         | HP     | kW    | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|--------|-------|---------|----------------|------------------|
| Full Load    | 350    | 261.0 | 310.7   | 95.9           | 88.0             |
| ¾ Load       | 262.50 | 195.7 | 240.2   | 94.9           | 86.2             |
| ½ Load       | 175.00 | 130.5 | 173.9   | 92.8           | 81.2             |
| ¼ Load       | 87.50  | 65.2  | 116.8   | 86.7           | 64.7             |
| No Load      |        |       | 78.5    |                |                  |
| Locked Rotor |        |       | 2319.00 |                |                  |

| Torque            |                      |                 |                    | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) |                            |
| 513               | 215                  | 140             | 260                | 116.14                     |

| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |        | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|--------|----------------------------|
| Cold               | Hot |                           | DE        | NDE    |                            |
| 17                 | 6   | -                         | 6313C3    | 6313C3 |                            |

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

**Motor Options:**  
Product Family:EQPIII Explosion Proof  
Mounting:Footed,Shaft:T Shaft

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

Tag:

All characteristics are average expected values.

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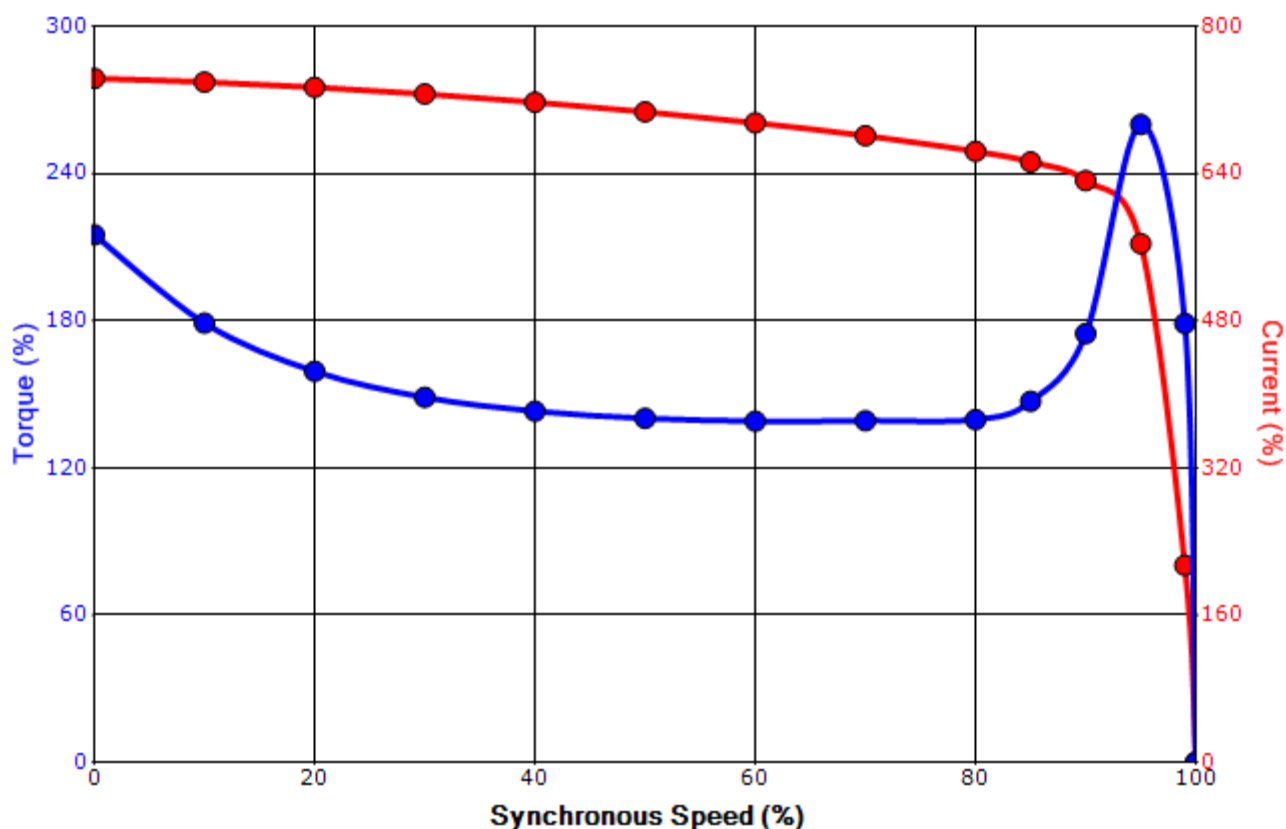
|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | aacosta   | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 5/16/2013 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

## SPEED TORQUE/CURRENT CURVE

Model: 3503XPEC41B

| HP                | kW                                                  | Pole              | FL RPM           | Frame       | Voltage        | Hz             | Phase    | FL Amps      |
|-------------------|-----------------------------------------------------|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 350               | 261                                                 | 2                 | 3580             | N449T       | 575            | 60             | 3        | 311          |
| Enclosure         | IP                                                  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design    | kVA Code | Ambient (°C) |
| TEFC              | 55                                                  | F                 | 1.15             | CONT        | 95.8           | A              | H        | 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 (%) |          |              |
| 2319.00           | 116.14                                              | 513               | 215              | 140         |                | 260            |          |              |

### 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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|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | aacosta   | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date  | 5/16/2013 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

**Motor Connection Diagrams**  
6 Leads

Across the Line Starting / Run - Delta:



Alternate Starting Connection - Wye:



Switch L1 and L2 to reverse rotation