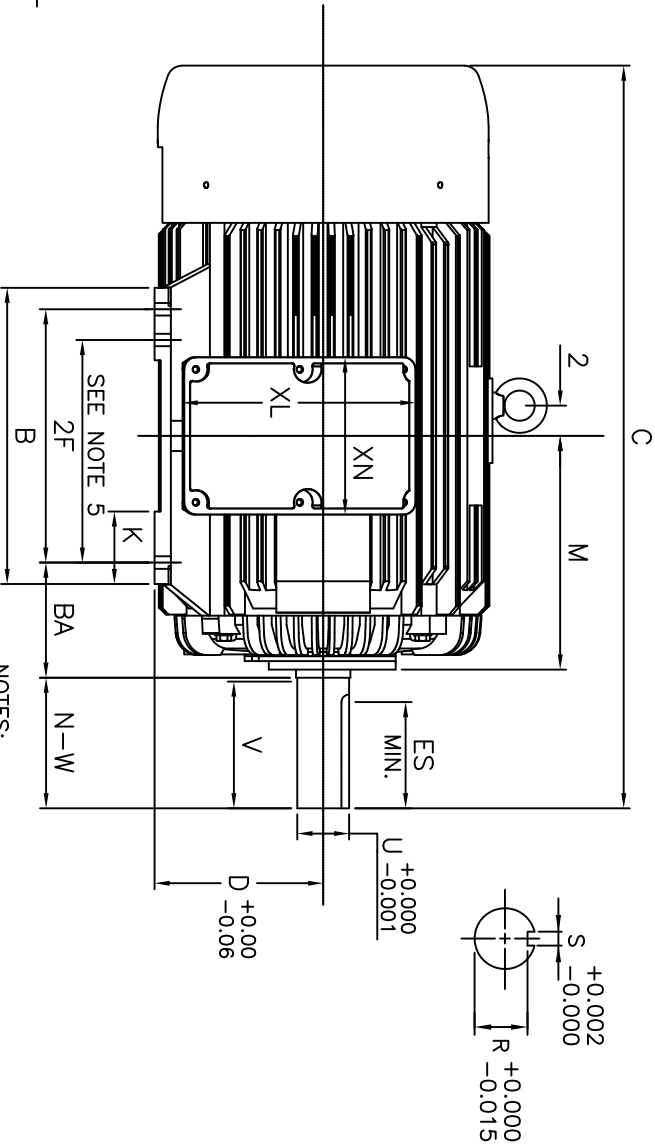
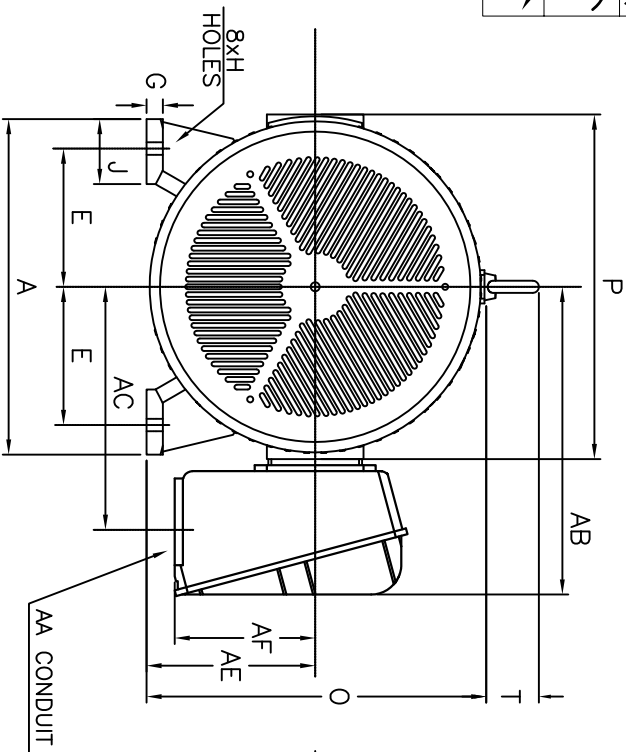
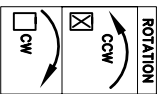




UNITS: INCHES

| FRAME<br>SIZE | MOTOR DIMENSIONS |      |      |       |     |     |     |      |      |      |     | CONDUIT BOX |      |      |       |     |      |      |
|---------------|------------------|------|------|-------|-----|-----|-----|------|------|------|-----|-------------|------|------|-------|-----|------|------|
|               | A                | B    | C    | D     | G   | J   | K   | M    | O    | P    | T   | AA[NPT]     | AB   | AC   | AE    | AF  | XL   | XN   |
| 444T/445T     | 21.9             | 19.3 | 48.4 | 11.00 | 1.1 | 4.3 | 4.8 | 15.8 | 22.0 | 22.4 | 3.6 | 3.00        | 21.5 | 16.4 | 11.00 | 8.7 | 15.7 | 11.5 |

| FRAME<br>SIZE | MOUNTING |             |      |      | SHAFT EXTENSION |      |       |       | KEY SEAT |      |         | BEARINGS |           | MAXIMUM<br>WEIGHT |
|---------------|----------|-------------|------|------|-----------------|------|-------|-------|----------|------|---------|----------|-----------|-------------------|
|               | E        | 2F          | H    | BA   | N-W             | V    | U     | R     | S        | ES   | LS      | OS       |           |                   |
| 444T/445T     | 9.00     | 14.50/16.50 | 0.81 | 7.50 | 8.50            | 8.25 | 3.375 | 2.880 | 0.875    | 6.88 | NU318C3 | 6318C3   | 2000 lbs. |                   |

CUSTOMER: \_\_\_\_\_ MOTOR MODEL NO.: \_\_\_\_\_ TAG NO's: \_\_\_\_\_

P.O. NO.: \_\_\_\_\_ HP: \_\_\_\_\_ VOLTAGE: \_\_\_\_\_ RPM(SYN.): \_\_\_\_\_ HZ: \_\_\_\_\_  
FRAME SIZE: \_\_\_\_\_ PRODUCT TYPE: IIEFC EGP III 840 EFF & HIGH EFFICIENCY  
COMMENTS: \_\_\_\_\_

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

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT AND THE DATA MAY CHANGE WITHOUT NOTICE ☒ PRELIMINARY  
DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS MARKED AS CERTIFIED ☐ CERTIFIED

- NOTES:
- DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT
  - MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
  - KEY DIMENSIONS EQUAL S x S x 6.88 (MOTOR SUPPLIED WITH KEY)
  - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
  - THIS DIMENSION EQUALS 2F FOR 444T MOUNTING
  - STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE

☒ STANDARD (NO AUX. BOXES)

☐ RTD AUX. BOX

☐ SPACE HEATER AUX. BOX

☐ BEARING RTD's

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

**XT SERIES**  
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www.toshiba.com/ind

## TYPICAL MOTOR PERFORMANCE DATA

Model: B1504FLF4USH01

| HP        | kW  | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| 150       | 110 | 4          | 1785   | 445T  | 230/460        | 60          | 3        | 352/176      |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 54  | F          | 1.15   | CONT  | 95.4           | B           | G        | 40 C         |

| Load         | HP     | kW    | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|--------|-------|---------|----------------|------------------|
| Full Load    | 150    | 111.9 | 176.0   | 95.7           | 83.6             |
| ¾ Load       | 112.50 | 83.9  | 138.0   | 95.5           | 80.7             |
| ½ Load       | 75.00  | 55.9  | 104.4   | 94.8           | 72.9             |
| ¼ Load       | 37.50  | 28.0  | 78.2    | 90.0           | 49.9             |
| No Load      |        |       | 60.1    |                |                  |
| Locked Rotor |        |       | 1085.00 |                |                  |

| Torque            |                      |                 |                    | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) |                            |
| 441               | 220                  | 145             | 260                | 51.01                      |

| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |        | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|--------|----------------------------|
| Cold               | Hot |                           | DE        | NDE    |                            |
| 14                 | 7   | -                         | NU318C3   | 6318C3 |                            |

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

### Motor Options:

Product Family:EQPIII

Mounting:Footed,Shaft:T Shaft

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

Tag:

All characteristics are average expected values. The declared locked rotor current has a tolerance of 20%.

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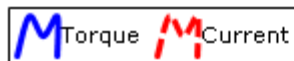
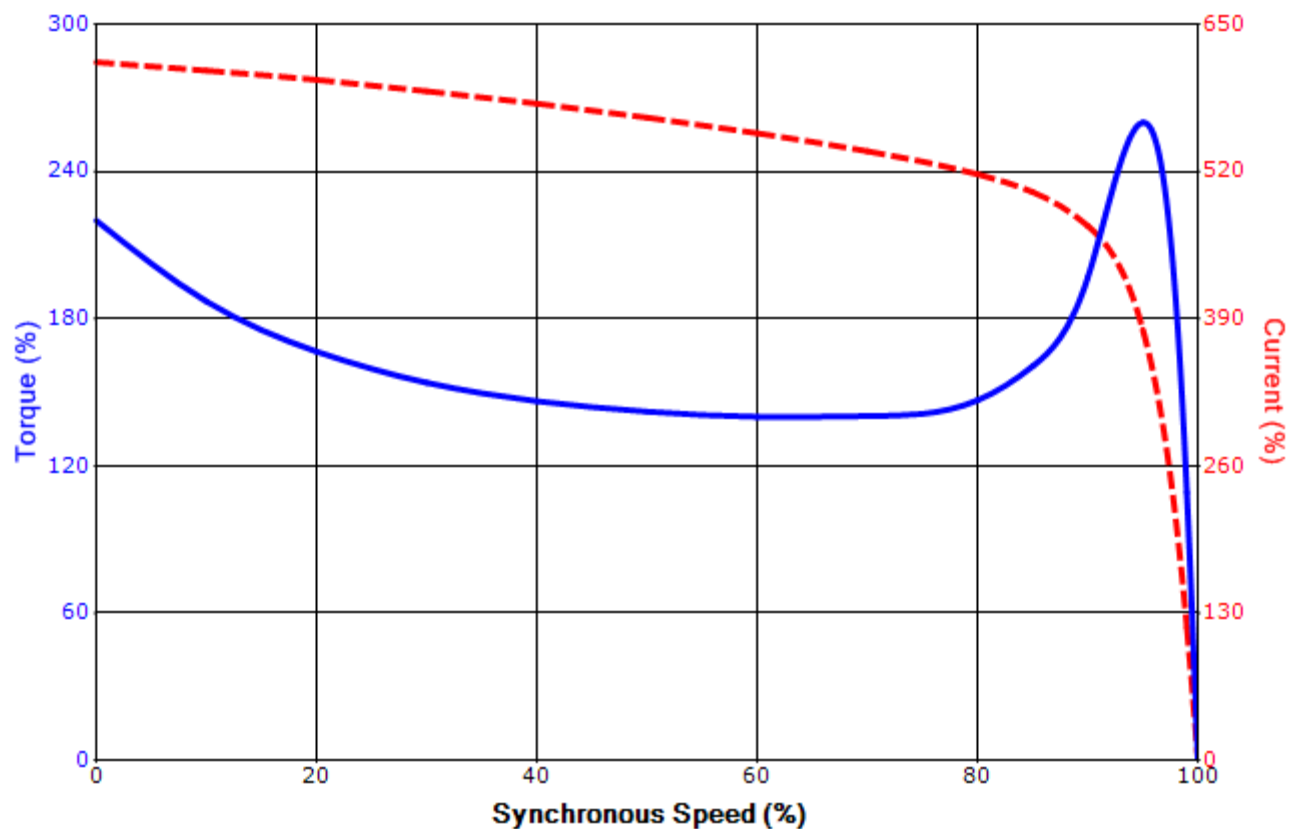
|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | mcampbell | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 1 |
| Engr. Date  | 1/17/2012 | Doc. Approved By | M. Campbell | Doc. Issued | 7/31/2013     |

## SPEED TORQUE/CURRENT CURVE

Model: B1504FLF4USH01

| HP                | kW                                                  | Pole              | FL RPM           | Frame       | Voltage        | Hz             | Phase    | FL Amps      |
|-------------------|-----------------------------------------------------|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 150               | 110                                                 | 4                 | 1785             | 445T        | 230/460        | 60             | 3        | 352/176      |
| Enclosure         | IP                                                  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design    | kVA Code | Ambient (°C) |
| TEFC              | 54                                                  | F                 | 1.15             | CONT        | 95.4           | B              | G        | 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 (%) |          |              |
| 1085.00           | 51.01                                               | 441               | 220              | 145         |                | 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 | mcampbell | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date  | 1/17/2012 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

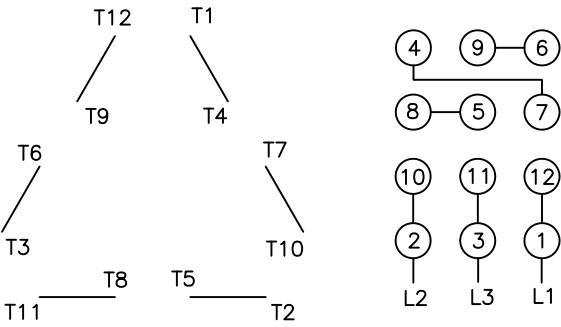
**Motor Connection Diagrams**  
12 Leads

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.

**SPARE PARTS LIST\***

Model: B1504FLF4USH01

| HP        | kW  | Pole       | FL RPM | Frame | Voltage           | Hz             | Phase    | FL Amps         |
|-----------|-----|------------|--------|-------|-------------------|----------------|----------|-----------------|
| 150       | 110 | 4          | 1785   | 445T  | 230/460           | 60             | 3        | 352/176         |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA<br>Nom. Eff. | NEMA<br>Design | kVA Code | Ambient<br>(°C) |
| TEFC      | 54  | F          | 1.15   | CONT  | 95.4              | B              | G        | 40 C            |

**Bearings DE** NU318C3 / 90RU03M3OX

**Bearings NDE** 6318C3 / 90BC03J3OX

\*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.

|                    |  |
|--------------------|--|
| <b>Customer</b>    |  |
| <b>Customer PO</b> |  |
| <b>Sales Order</b> |  |
| <b>Project #</b>   |  |

Tag:

All characteristics are average expected values.

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|                    |           |                         |             |                    |               |
|--------------------|-----------|-------------------------|-------------|--------------------|---------------|
| <b>Engineering</b> | mcampbell | <b>Doc. Written By</b>  | D. Suarez   | <b>Doc.# / Rev</b> | MPCF-1125 / 0 |
| <b>Engr. Date</b>  | 1/17/2012 | <b>Doc. Approved By</b> | M. Campbell | <b>Doc. Issued</b> | 6/8/2011      |