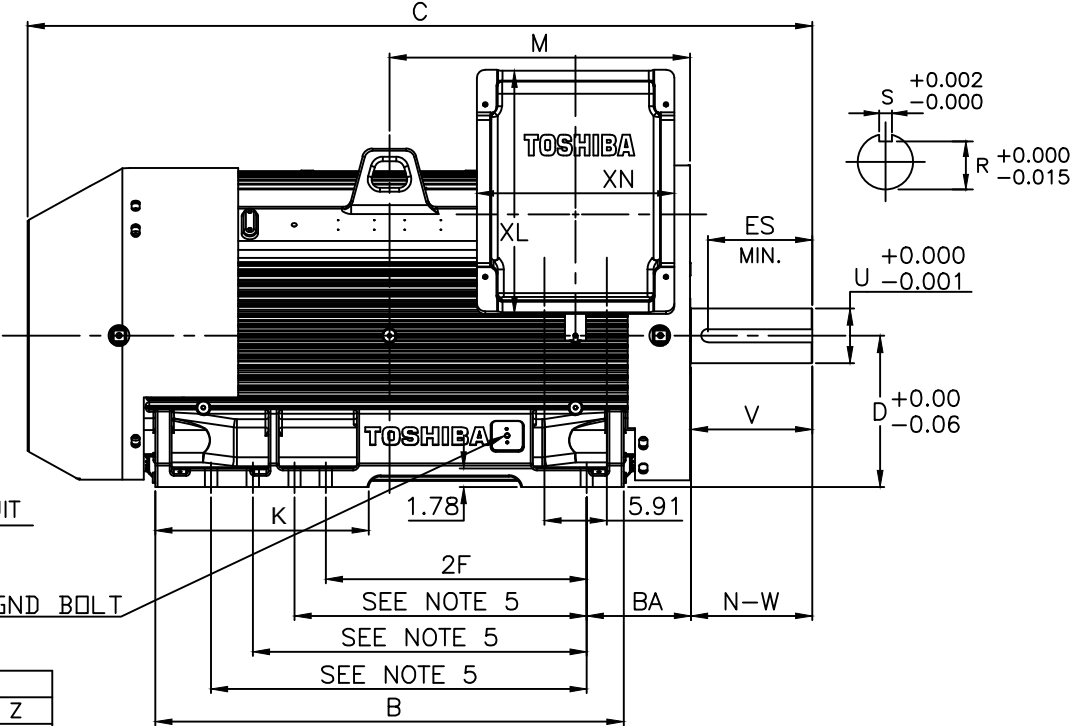
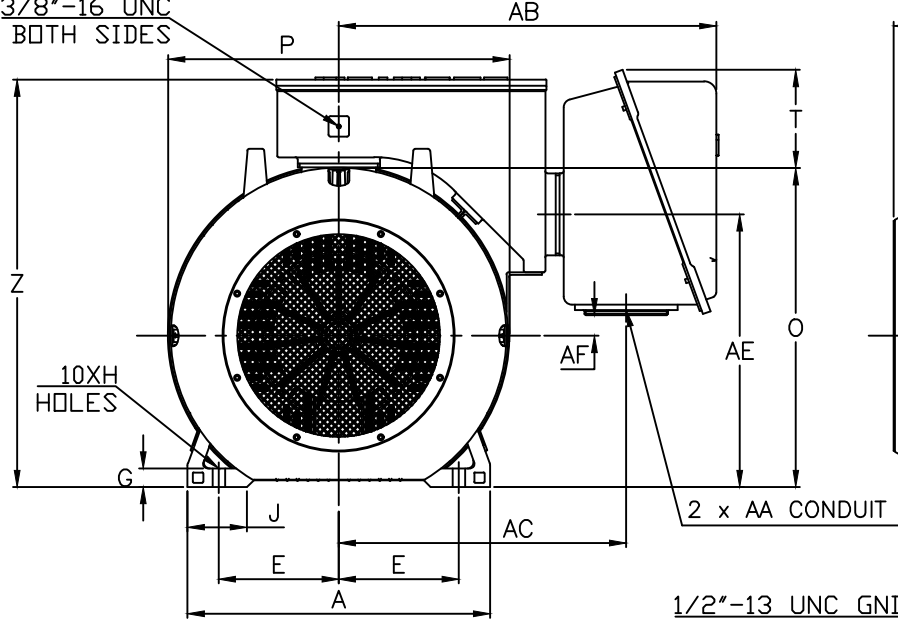


ROTATION

CCW

CW



UNITS: INCHES

| FRAME SIZE    | MOTOR DIMENSIONS |      |      |      |      |     |      |      |      |      |     |      |
|---------------|------------------|------|------|------|------|-----|------|------|------|------|-----|------|
|               | A                | B    | C    | D    | G    | J   | K    | M    | O    | P    | T   | Z    |
| B587/8/9/10LL | 29.0             | 45.0 | 75.2 | 14.5 | 1.78 | 5.7 | 20.4 | 28.8 | 30.6 | 32.7 | 9.3 | 39.2 |
| B587/8/9/10LQ | 29.0             | 45.0 | 75.2 | 14.5 | 1.78 | 5.7 | 20.4 | 28.8 | 30.6 | 32.7 | 9.3 | 39.2 |
| B587/8/9/10LS | 29.0             | 45.0 | 71.8 | 14.5 | 1.78 | 5.7 | 20.4 | 28.8 | 30.6 | 32.7 | 9.3 | 39.2 |

| FRAME SIZE          | CONDUIT BOX |      |      |      |      |      |      |
|---------------------|-------------|------|------|------|------|------|------|
|                     | AA[NPT]     | AB   | AC   | AE   | AF   | XL   | XN   |
| B587/8/9/10LL/LQ/LS | 3.00        | 36.2 | 27.5 | 26.1 | 1.97 | 23.5 | 18.9 |

| FRAME<br>SIZE | MOUNTING |                     |  |      | SHAFT EXTENSION |        |       | KEY SEAT |       |      | BEARINGS |           |         | MAXIMUM<br>WEIGHT |           |
|---------------|----------|---------------------|--|------|-----------------|--------|-------|----------|-------|------|----------|-----------|---------|-------------------|-----------|
|               | E        | 2F                  |  | H    | BA              | N-W    | V     | U        | R     | S    | ES       | LS ROLLER | LS BALL |                   | OS BALL   |
| B587/8/9/10LL | 11.5     | 25.0/28.0/32.0/36.0 |  | 1.19 | 10.0            | 11.625 | 11.56 | 5.25     | 4.550 | 1.00 | 10.00    | NU328C3   | 6328C3  | 6320C3            | 8000 lbs. |
| B587/8/9/10LQ | 11.5     | 25.0/28.0/32.0/36.0 |  | 1.19 | 10.0            | 11.625 | 11.56 | 4.375    | 3.817 | 1.00 | 10.00    | NU324C3   | 6324C3  | 6320C3            | 8000 lbs. |
| B587/8/9/10LS | 11.5     | 25.0/28.0/32.0/36.0 |  | 1.19 | 10.0            | 8.25   | 8.19  | 3.875    | 3.309 | 1.00 | 6.30     | NU322C3   | 6322C3  | 6320C3            | 8000 lbs. |

- NOTES:
- DIMENSION V REPRESENTS LENGTH OF STRAIGHT PART OF SHAFT.
  - MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS.
  - "LL" KEY DIMENSIONS EQUAL S x S x 10.00  
"LQ" KEY DIMENSIONS EQUAL S x S x 10.00  
"LS" KEY DIMENSIONS EQUAL S x S x 6.30  
(MOTOR SUPPLIED WITH KEY)
  - MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME.
  - THIS DIMENSION EQUALS 2F FOR 587/8/9/10 MOUNTING.
  - STANDARD PRODUCT USE BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
  - FRAME GROUND BOLT STANDARD.
  - AIR DEFLECTOR OPTIONAL ON 8P MOTORS

CUSTOMER:

MOTOR MODEL NO.:

P.O. NO.:

HP:

VOLTAGE:

RPM(SYN.):

Hz:

FRAME SIZE: B587/8/9/10

PRODUCT TYPE: TEFC PREMIUM EFFICIENCY QUARRY DUTY

COMMENTS:

PER:

DATE:

TAG NO's.:

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

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT AND THE DATA MAY CHANGE WITHOUT NOTICE

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☐ CERTIFIED

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: 7504QDSB31A-R

| HP        | kW  | Pole       | FL RPM | Frame  | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|-----|------------|--------|--------|----------------|-------------|----------|--------------|
| 750       | 560 | 4          | 1789   | B587LL | 460            | 60          | 3        | 898          |
| Enclosure | IP  | Ins. Class | S.F.   | Duty   | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 54  | F          | 1.0    | CONT   | 96.2           | -           |          | 40 C         |

| Load         | HP     | kW    | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|--------|-------|---------|----------------|------------------|
| Full Load    | 750.00 | 559.3 | 898     | 96.3           | 81.2             |
| ¾ Load       | 562.50 | 419.5 | 702     | 95.7           | 78.4             |
| ½ Load       | 375.00 | 279.6 | 522     | 94.3           | 71.3             |
| ¼ Load       | 187.50 | 139.8 | 377     | 89.9           | 51.8             |
| No Load      |        |       | 325.9   |                |                  |
| Locked Rotor |        |       | 6672    |                |                  |

| Torque            |                      |                 |                    | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) |                            |
| 2202              | 225                  | 185             | 345                | 378.47                     |

| Safe Stall Time(s) |     | Sound Pressure dB(A) @ 1M | Bearings* |        | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|--------|----------------------------|
| Cold               | Hot |                           | DE        | NDE    |                            |
| 18                 | 10  | 85                        | NU328C3   | 6320C3 |                            |

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

**Motor Options:**  
Product Family:Quarry  
Mounting:Footed,Shaft:LL IEC Frame  
Motor Specification:Quarry Duty

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

Tag:

All characteristics are average expected values.

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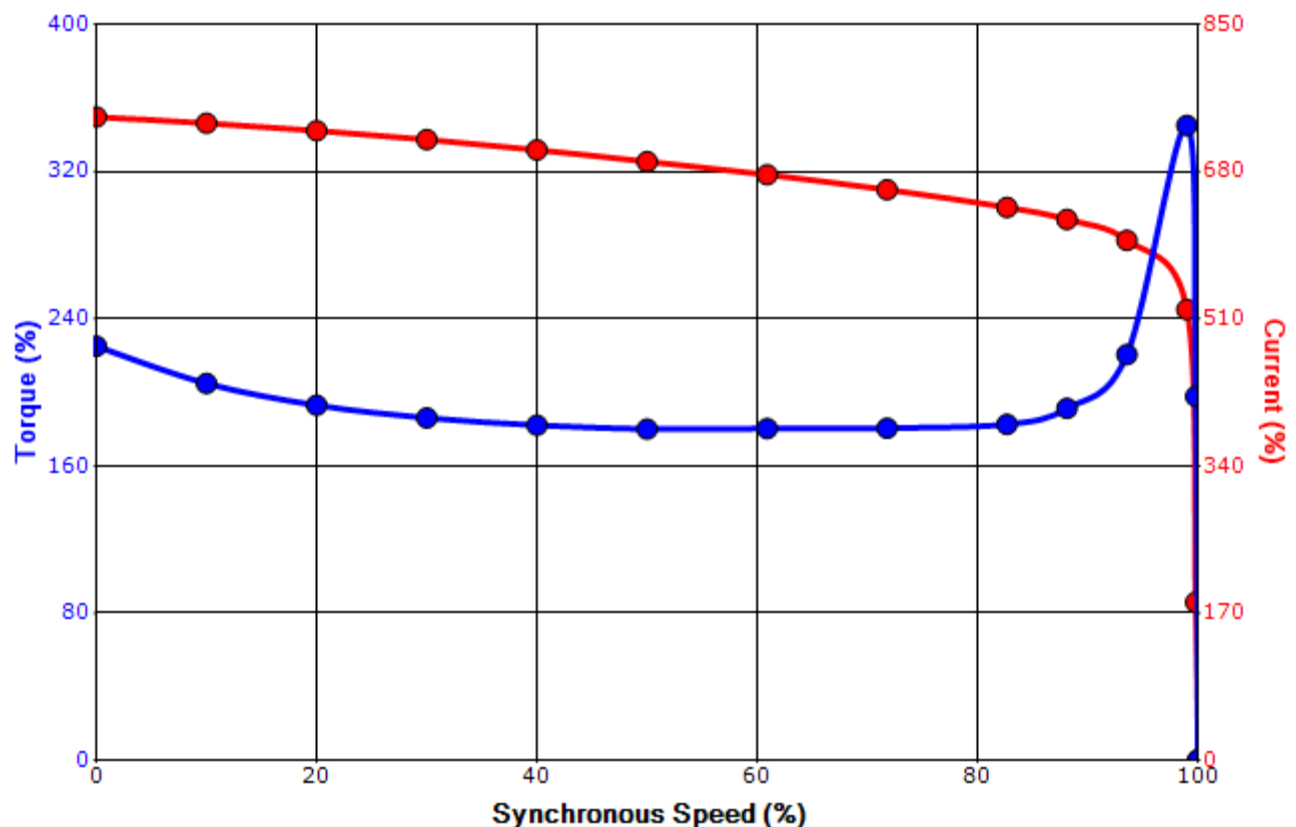
|             |           |                  |             |             |               |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | SSuryani  | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date  | 6/16/2020 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

## SPEED TORQUE/CURRENT CURVE

Model: 7504QDSB31A-R

| HP                | kW                                                  | Pole              | FL RPM           | Frame       | Voltage        | Hz             | Phase    | FL Amps      |
|-------------------|-----------------------------------------------------|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 750               | 560                                                 | 4                 | 1789             | B587LL      | 460            | 60             | 3        | 898          |
| Enclosure         | IP                                                  | Ins. Class        | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design    | kVA Code | Ambient (°C) |
| TEFC              | 54                                                  | F                 | 1.0              | CONT        | 96.2           | -              |          | 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 (%) |          |              |
| 6672              | 378.47                                              | 2202              | 225              | 185         |                | 345            |          |              |

### 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 | SSuryani  | Doc. Written By  | D. Suarez   | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date  | 6/16/2020 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011      |

### Motor Connection Diagram

#### 3 Leads - Delta Connection



Switch L1 and L2 to reverse rotation

Each lead may consist of more than one cable.  
If multiple cables represent a single lead, each one  
of them will be labeled with the appropriate lead number.