

UNITS: INCHES

| FRAME SIZE | MOTOR DIMENSIONS | | | | | | | | | | CONDUIT BOX | | | | | | | |
|------------|------------------|------|------|-------|-----|-----|-----|------|------|------|-------------|------|------|------|------|-----|------|------|
| | A | B | C | D | G | J | K | M | O | P | T | AA | AB | AC | AE | AF | XL | XN |
| 509USS | 24.9 | 30.9 | 49.6 | 12.50 | 1.4 | 5.6 | 4.8 | 22.3 | 25.6 | 24.9 | 4.4 | 4.00 | 23.8 | 18.7 | 15.7 | 8.7 | 15.7 | 11.5 |
| 509US | 24.9 | 30.9 | 54.9 | 12.50 | 1.4 | 5.6 | 4.8 | 22.3 | 25.6 | 24.9 | 4.4 | 4.00 | 23.8 | 18.7 | 15.7 | 8.7 | 15.7 | 11.5 |

| FRAME SIZE | MOUNTING | | | | SHAFT EXTENSION | | | | KEY SEAT | | | BEARINGS | | | MAXIMUM WEIGHT |
|------------|----------|-------|------|-----|-----------------|------|-------|-------|----------|------|--------|----------|-----------|--|----------------|
| | E | 2F | H | BA | N-W | V | U | R | S | ES | LS | OS | | | |
| 509USS | 10.00 | 28.00 | 0.94 | 8.5 | 4.75 | 4.50 | 2.375 | 2.021 | 0.625 | 3.00 | 6313C3 | 6313C3 | 3200 lbs. | | |
| 509US | 10.00 | 28.00 | 0.94 | 8.5 | 10.13 | 9.88 | 3.375 | 2.880 | 0.875 | 8.50 | 6320C3 | 6320C3 | 3200 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 8.50 FOR US AND S x S x 3.00 FOR USS (MOTOR SUPPLIED WITH KEY)
 4. MOTOR WEIGHT SHOWN IS MAXIMUM HORSEPOWER IN FRAME
 5. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE

CUSTOMER: _____ MOTOR MODEL NO.: _____ TAG NO's.: _____

P.O. NO.: _____ HP: _____ VOLTAGE: _____ RPM(SYN.): _____ HZ: _____

FRAME SIZE: _____ PRODUCT TYPE: ODP EQP III, EPACT, & 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

STANDARD (NO AUX. BOXES)

RTD AUX. BOX

SPACE HEATER AUX. BOX

BEARING RTD's

TOSHIBA

OPEN DRIP-PROOF
HORIZONTAL FOOT-MOUNTED
3 PHASE INDUCTION MOTOR
F1 ASSEMBLY

TOSHIBA INTERNATIONAL CORPORATION

XT SERIES

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www.toshiba.com/ind

TYPICAL MOTOR PERFORMANCE DATA

Model: F4006VLG3BM

| | | | | | | | | |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
| 400 | 298 | 6 | 1180 | 509US | 460 | 60 | 3 | 461 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| ODP | 12 | F | 1.15 | CONT | 95 | - | G | 40 C |

| | | | | | |
|--------------|--------|-------|---------|----------------|------------------|
| Load | HP | kW | Amperes | Efficiency (%) | Power Factor (%) |
| Full Load | 400 | 298.3 | 460.2 | 95.4 | 85.3 |
| ¾ Load | 300.00 | 223.7 | 355.5 | 95.5 | 82.7 |
| ½ Load | 200.00 | 149.1 | 260.9 | 94.9 | 75.6 |
| ¼ Load | 100.00 | 74.6 | 184.7 | 91.9 | 55.1 |
| No Load | | | 141.0 | | 3.0 |
| Locked Rotor | | | 2946.00 | | 35.6 |

| | | | | |
|-------------------|----------------------|-----------------|--------------------|-------------------------------|
| Torque | | | | Rotor wk ² |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | Inertia (lb-ft ²) |
| 1780 | 215 | 165 | 275 | 181.29 |

| | | | | | |
|--------------------|-----|---------------------------|-----------|--------|----------------------------|
| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight (lbs) |
| Cold | Hot | | DE | NDE | |
| 10.8 | 6.7 | - | 6320C3 | 6320C3 | |

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

Motor Options:
Product Family:ODP
Mounting:Footed,Shaft:US Shaft

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

Tag:

All characteristics are average expected values.

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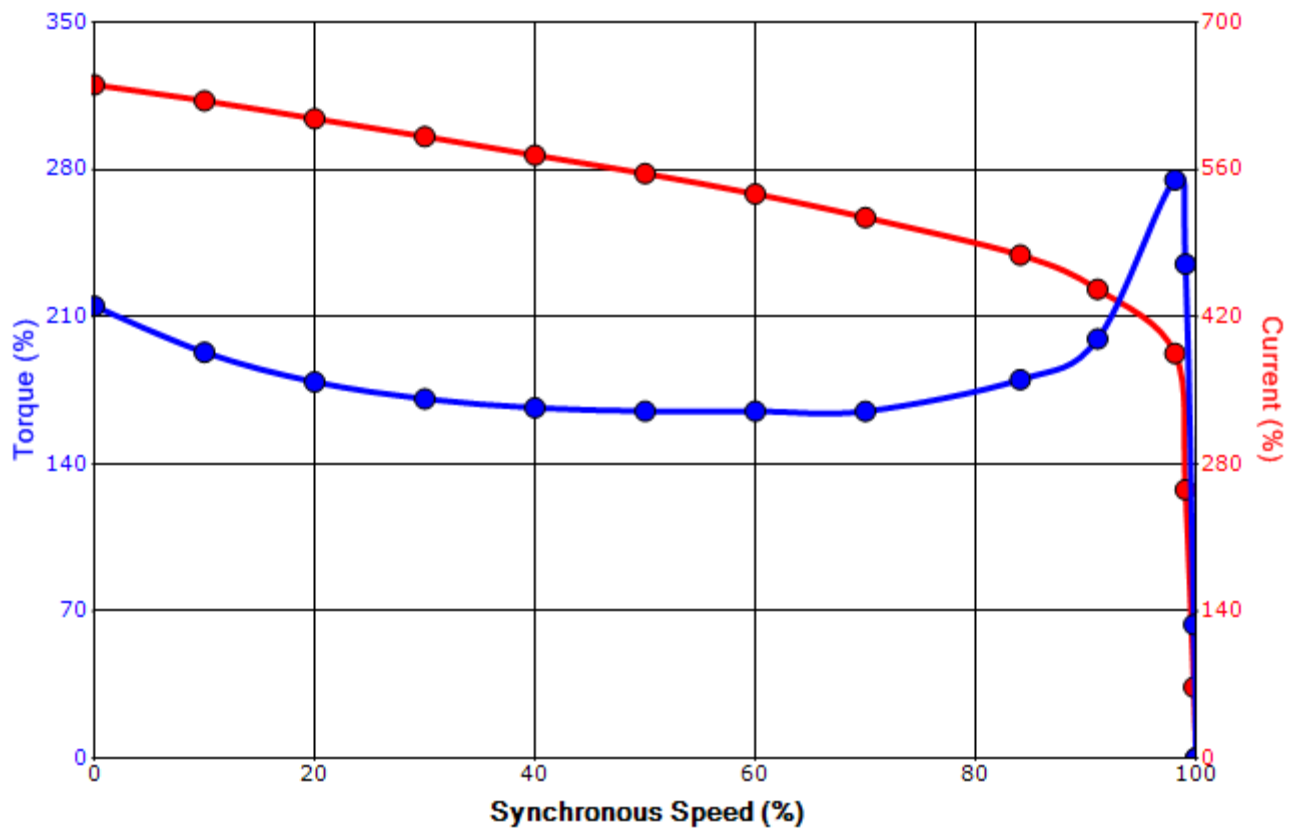
| | | | | | |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | bmmamen | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date | 5/12/2014 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

SPEED TORQUE/CURRENT CURVE

Model: F4006VLG3BM

| | | | | | | | | |
|-------------------|---|-------------------|------------------|-------------|----------------|-------------|----------|--------------|
| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
| 400 | 298 | 6 | 1180 | 509US | 460 | 60 | 3 | 461 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| ODP | 12 | F | 1.15 | CONT | 95 | - | G | 40 C |
| Locked Rotor Amps | Rotor wk ² Inertia (lb-ft ²) | Torque | | | | | | |
| | | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | Break Down (%) | | | |
| 2946.00 | 181.29 | 1780 | 215 | 165 | 275 | | | |

Design Values



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

Tag:

All characteristics are average expected values.

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| | | | | | |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | bmmamen | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date | 5/12/2014 | 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.