

- 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 0.375" x 0.375" x 2.91" (MOTOR SUPPLIED WITH KEY)

UNITS: mm [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.

256T TEFC FRAME  
F2 ASSEMBLY

MDSLE021-05

TOLERANCES  
.X .1  
.XX .03  
.XXX .005  
.XXXX .0005

MAXIMUM  
MOTOR WEIGHT

lbs.  
kgs.

|    |             |          |  |  |  |
|----|-------------|----------|--|--|--|
| 0  | FIRST ISSUE |          |  |  |  |
| NO |             | REVISION |  |  |  |

|                |         |       |  |  |
|----------------|---------|-------|--|--|
| Cai Zhengqiang | 3/18/17 |       |  |  |
| DRAWN BY       | DATE    | CHECK |  |  |

**Tosh-ECO OWP**

DRAWN BY: Cai Zhengqiang  
CHECK BY: Lin Qingliu  
APPROVED BY: Li Zhuoqing

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**TOSHIBA**  
TOSHIBA INTERNATIONAL CORPORATION

# TOSHIBA

Issued Date 2017/3/14

Transmit #

Issued By Cai Zhenqiang

Issued Rev 0

## TYPICAL MOTOR PERFORMANCE DATA

Model: OW15

| HP        | kW  | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| 10        | 7.5 | 6          | 1120   | 256T  | 230/460        | 60          | 3        | 27/13.4      |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55  | F          | 1.15   | CONT  | -              | D           | H        | 40           |

| Load         | HP   | kW   | Amperes(460) | Efficiency (%) | Power Factor (%) |
|--------------|------|------|--------------|----------------|------------------|
| Full Load    | 10   | 7.46 | 13.4         | 88.0           | 79.2             |
| ¾ Load       | 7.50 | 5.59 | 10.7         | 89.3           | 73.2             |
| ½ Load       | 5.00 | 3.73 | 8.59         | 89.4           | 61.0             |
| ¼ Load       | 2.50 | 1.86 | 7.13         | 85.3           | 38.5             |
| No Load      |      |      | 6.41         |                | 5.4              |
| Locked Rotor |      |      | 81           |                | 55.7             |

| Torque               |                         |                    |                       | Rotor wk <sup>2</sup> Inertia<br>(lb-ft <sup>2</sup> ) |
|----------------------|-------------------------|--------------------|-----------------------|--|
| Full Load<br>(lb-ft) | Locked Rotor<br>(% FLT) | Pull Up<br>(% FLT) | Break Down<br>(% FLT) |  |
| 46.9                 | 374                     | 358                | 305                   | 3.63   |

| Safe Stall Time(s) |     | Sound Pressure<br>dB(A) @ 1M | Bearings*  |            | Approx. Motor Weight<br>(lbs) |
|--------------------|-----|------------------------------|------------|------------|-------------------------------|
| Cold               | Hot |                              | DE         | NDE        |                               |
| 32                 | 14  | 66                           | 6309 2Z/C3 | 6308 2Z/C3 | 295                           |

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

**Motor Options:**

|             |  |
|-------------|--|
| 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 |  | Doc. Written By  | P. Anderson | Doc.# / Rev | MDSLE021-05/0 |
| Engr. Date  |  | Doc. Approved By | PAA         | Doc. Issued | 2017/3/14     |



|             |               |            |   |
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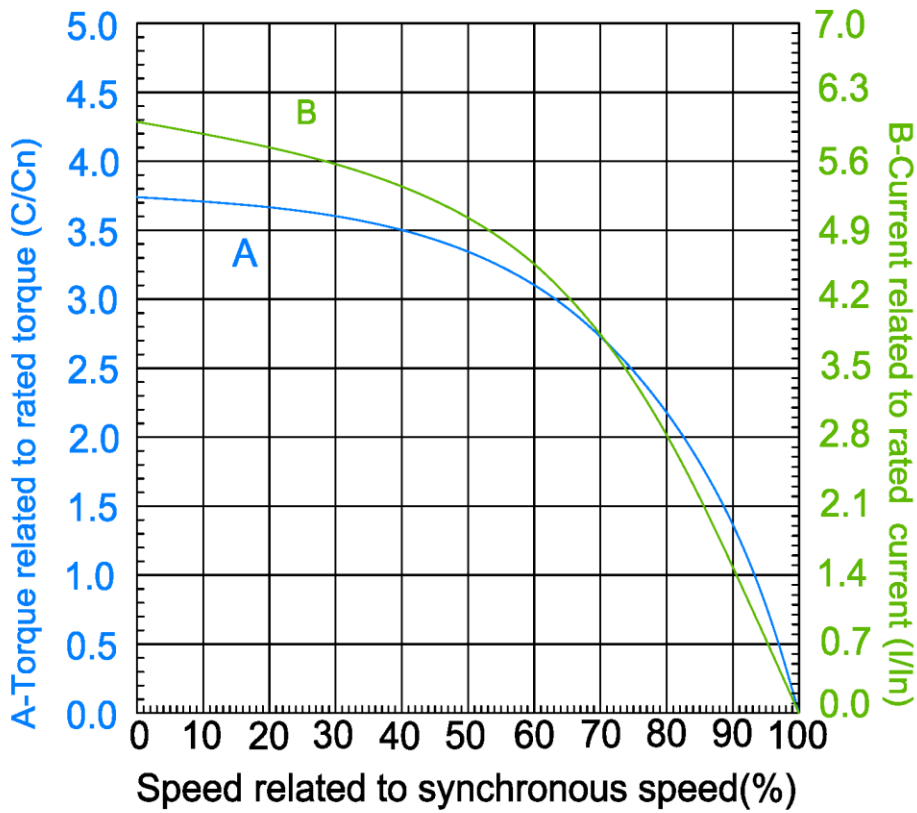
### SPEED TORQUE/CURRENT CURVE

Model: OW15

| HP                | kW  | Pole                    | FL RPM           | Frame       | Voltage        | Hz             | Phase    | FL Amps      |
|-------------------|---|-------------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 10                | 7.5   | 6                       | 1120             | 256T        | 230/460        | 60             | 3        | 27/13.4      |
| Enclosure         | IP  | Ins. Class              | S.F.             | Duty        | NEMA Nom. Eff. | NEMA Design    | kVA Code | Ambient (°C) |
| TEFC              | 55  | F                       | 1.15             | CONT        | -              | D              | H        | 40           |
| Locked Rotor Amps | Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> ) | Torque                  |                  |             |                | Break Down (%) |          |              |
|                   |   | Full Load lb-ft (lb-ft) | Locked Rotor (%) | Pull Up (%) |                |                |          |              |
| 81                | 3.63  | 46.9                    | 374              | 358         | 305            |                |          |              |

### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor-Squirrel cage rotor



|             |  |  |     |
|-------------|--|--|-----|
| 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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**NAMEPLATE DATA**

Model: OW15

| HP        | kW  | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| 10        | 7.5 | 6          | 1120   | 256T  | 230/460        | 60          | 3        | 27/13.4      |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55  | F          | 1.15   | CONT  | -              | D           | H        | 40           |

Type: \_\_\_\_\_  
 Form: \_\_\_\_\_  
 Drive End Bearing: 6309 2Z/C3  
 Non-Drive End Bearing: 6308 2Z/C3  
 Power Factor: 79.0  
 Max Safe RPM: 2640  
 Comments 1: \_\_\_\_\_  
 Comments 2: \_\_\_\_\_  
 Comments 3: \_\_\_\_\_  
 Comments 4: \_\_\_\_\_

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

Tag: \_\_\_\_\_

All characteristics are average expected values.

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|             |  |                  |             |             |               |
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### SPARE PARTS LIST\*

Model: OW15

| HP        | kW  | Pole       | FL RPM | Frame | Voltage        | Hz          | Phase    | FL Amps      |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| 10        | 7.5 | 6          | 1120   | 256T  | 230/460        | 60          | 3        | 27/13.4      |
| Enclosure | IP  | Ins. Class | S.F.   | Duty  | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC      | 55  | F          | 1.15   | CONT  | -              | D           | H        | 40           |

|                     |            |
|---------------------|------------|
| <b>Bearings DE</b>  | 6309 2Z/C3 |
| <b>Bearings NDE</b> | 6308 2Z/C3 |

\*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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|             |                  |             |             |               |
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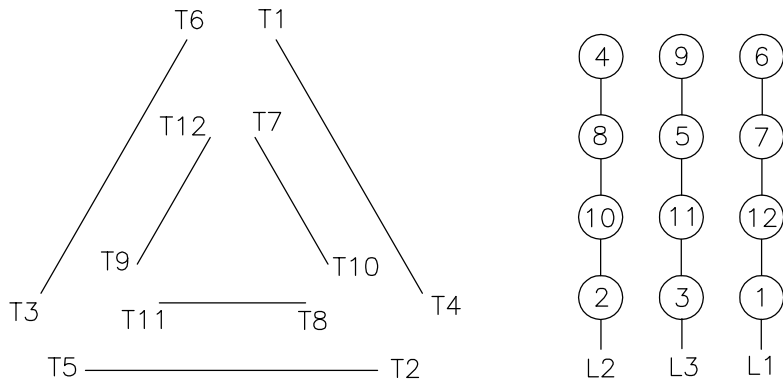
# Motor Connection Diagrams

## 12 Leads

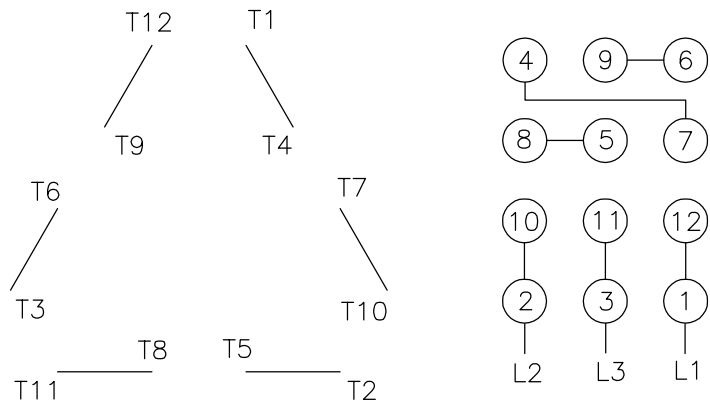
## Dual Voltage

Across-the-Line Starting / Running  
Connections

Low Voltage Delta



High Voltage Delta



Switch L1 and L2 to reverse rotation