

**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 0.5"x0.5"x3.28" (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.

280T TEFC FRAME  
F2 ASSEMBLY

MDSLE021-06

**TOLERANCES**

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

**MAXIMUM MOTOR WEIGHT**

lbs.  
kgs.

0	FIRST ISSUE	Lin Qingliu	03/12/17		
NO	REVISION	DRAWN BY	DATE	CHECK	

**Tosh-ECO OWP**

DRAWN BY: Lin Qingliu  
CHECK BY: Cai Zhengqiang  
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**TOSHIBA**

TOSHIBA INTERNATIONAL CORPORATION



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Issued By	Huang Zhenxiong	Issued Rev	0

### TYPICAL MOTOR PERFORMANCE DATA

Model: OW16

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	1110	284T	230/460	60	3	42/21
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	-	D	G	40

Load	HP	kW	Amperes(460)	Efficiency (%)	Power Factor (%)
Full Load	15	11.19	20.9	85.1	79.1
¾ Load	11.25	8.39	16.8	86.0	73.0
½ Load	7.50	5.59	13.4	86.0	61.0
¼ Load	3.75	2.80	11.0	80.0	40.0
No Load			9.33		1.6
Locked Rotor			114		44.6

Torque				Rotor wk <sup>2</sup> Inertia
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	(lb-ft <sup>2</sup> )
69.8	284	292	295	5.23

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
26	12	70	6311/C3	6309/C3	386

\*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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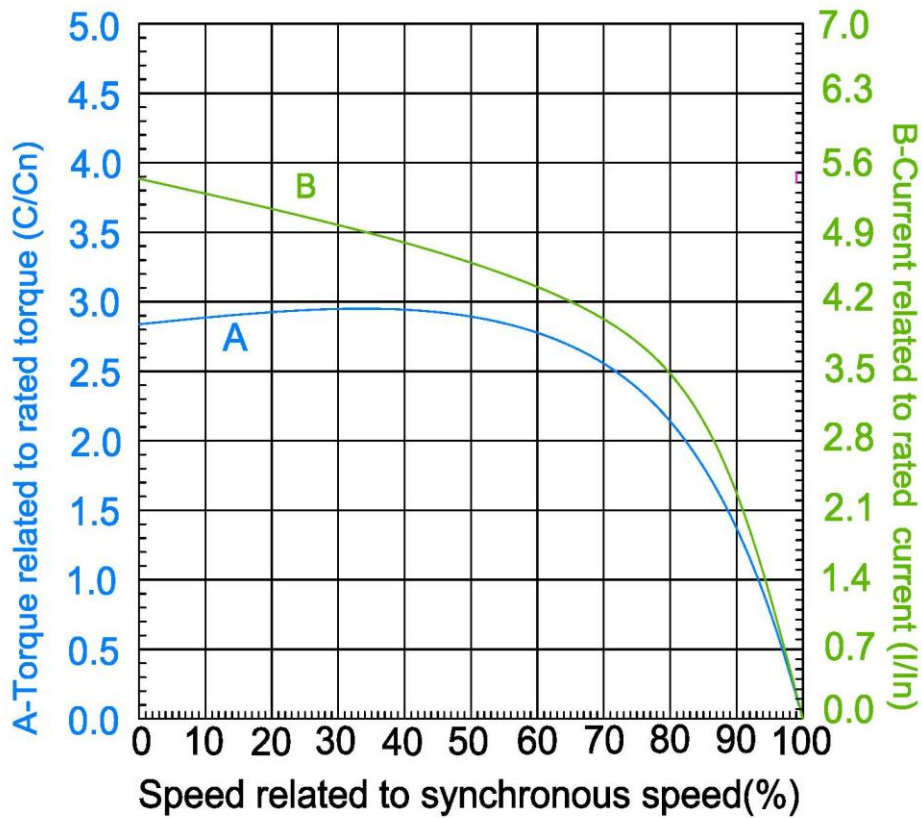
### SPEED TORQUE/CURRENT CURVE

Model: OW16

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	1110	284T	230/460	60	3	42/21
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	-	D	G	40
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque				Pull Up (%)	Break Down (%)	
		Full Load lb-ft (lb-ft)	Locked Rotor (%)					
114	5.23	69.8	284		292	295		

### 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%)	100
Project #		Accel. Time	-

Tag:

All characteristics are average expected values.

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**NAMEPLATE DATA**

Model: OW16

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	1110	284T	230/460	60	3	42/21
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	-	D	G	40

Type: \_\_\_\_\_  
 Form: \_\_\_\_\_  
 Drive End Bearing: 6311/C3  
 Non-Drive End Bearing: 6309/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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**SPARE PARTS LIST\***

**Model:** OW16

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	1110	284T	230/460	60	3	42/21
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	-	D	G	40

<b>Bearings DE</b>	6311/C3
<b>Bearings NDE</b>	6309/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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<b>Engineering</b>		<b>Doc. Written By</b>	P. Anderson	<b>Doc.# / Rev</b>	MDSLE021-06/0
<b>Engr. Date</b>		<b>Doc. Approved By</b>	PAA	<b>Doc. Issued</b>	10/31/2016

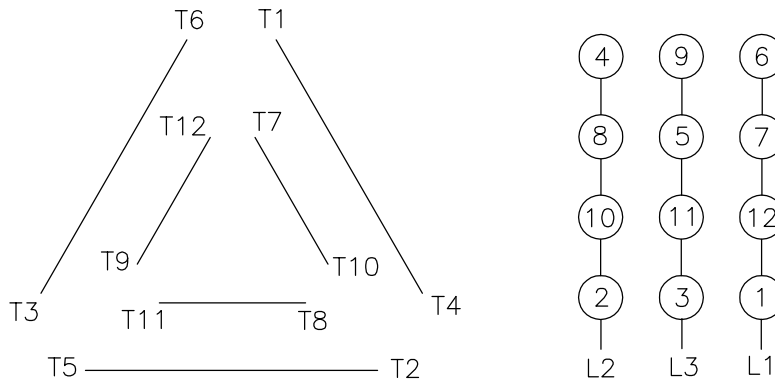
# Motor Connection Diagrams

## 12 Leads

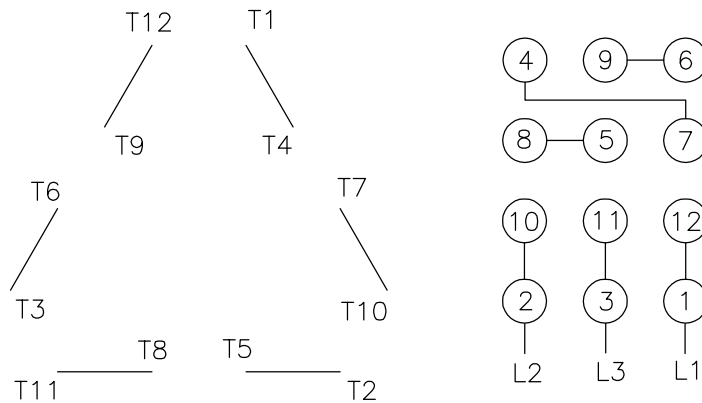
## Dual Voltage

Across-the-Line Starting / Running  
Connections

Low Voltage Delta



High Voltage Delta



Switch L1 and L2 to reverse rotation