

UNITS: INCHES

ROTATION FROM NDE

<input checked="" type="checkbox"/> CCW	<input type="checkbox"/> CW

NOTES:

- 1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
- 2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
- 3. KEY DIMENSIONS EQUAL 0.500"x 0.500"x 3.25" (MOTOR SUPPLIED WITH KEY)

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

**TOSHIBA**

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TOSHIBA INTERNATIONAL CORPORATION

TOTALLY ENCLOSED FAN COOLED  
FOOTED C-FACED  
3 PHASE INDUCTION MOTOR  
284TC-286TC F1 ASSEMBLY

DRAWING #: MDSL005-05

REV. DATE: 07/05/18 REV. #: 0 PER.: M. O'DOWD

REV. DESCRIP.:



Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### TYPICAL MOTOR PERFORMANCE DATA

Model: 0156SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	1175	284TC	230/460	60	3	40/19.8
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	91.7	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	15	11.2	19.8	91.1	77.8
¾ Load	11.25	8.4	16.1	90.7	71.7
½ Load	7.50	5.6	13.1	88.8	60.1
¼ Load	3.75	2.8	11.1	81.6	38.7
No Load			9.2		5.7
Locked Rotor			116		46.8

Torque				Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
67	240	215	260	4.68

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
30	22	-	6310ZC3	6310ZC3	441

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

**Motor Options:**  
 Product Family:EQP Global SD CFace Footed  
 Mounting:C-Face Footed,Shaft:T Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

Engineering	bmmamen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	10/3/2018	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### TYPICAL MOTOR PERFORMANCE DATA

Model: 0156SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	960	284TC	190/380	50	3	48/24
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	88.5	B	G	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	15	11.2	24.0	91.7	75.5
¾ Load	11.25	8.4	18.5	92.0	71.5
½ Load	7.50	5.6	14.3	91.2	62.6
¼ Load	3.75	2.8	9.7	83.6	52.2
No Load			9.1		5.7
Locked Rotor			130		47.1

Torque				Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
82.1	185	175	230	4.68

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
27	17	-	6310ZC3	6310ZC3	441

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

**Motor Options:**

Product Family:EQP Global SD CFace Footed  
Mounting:C-Face Footed,Shaft:T Shaft

Customer	
Customer PO	
Sales Order	
Project #	

Tag:

All characteristics are average expected values.

**TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.**

Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	4/9/2014	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



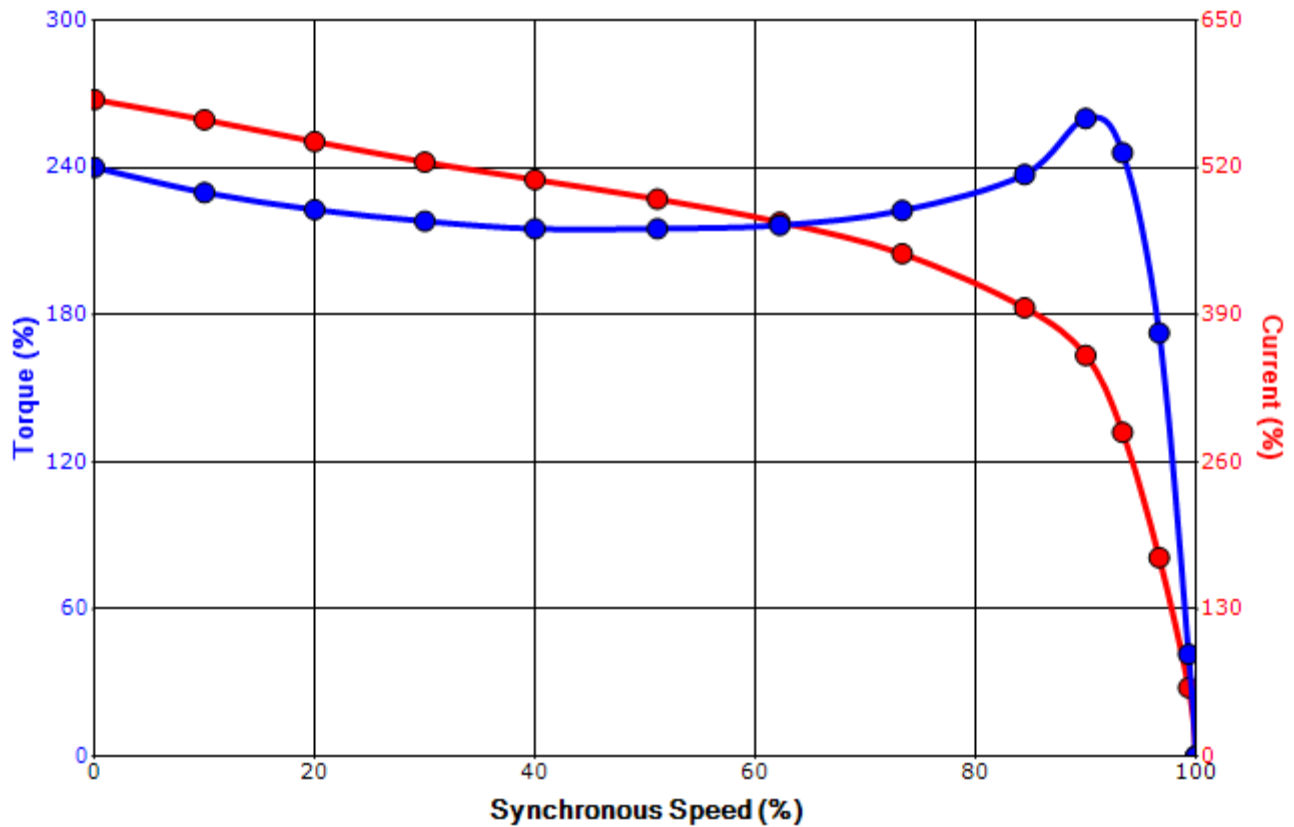
Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### SPEED TORQUE/CURRENT CURVE

Model: 0156SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	1175	284TC	230/460	60	3	40/19.8
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	91.7	B	G	40 C
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
116	4.68	67	240		215	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.

### TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.

Engineering	bmammen	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	10/3/2018	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



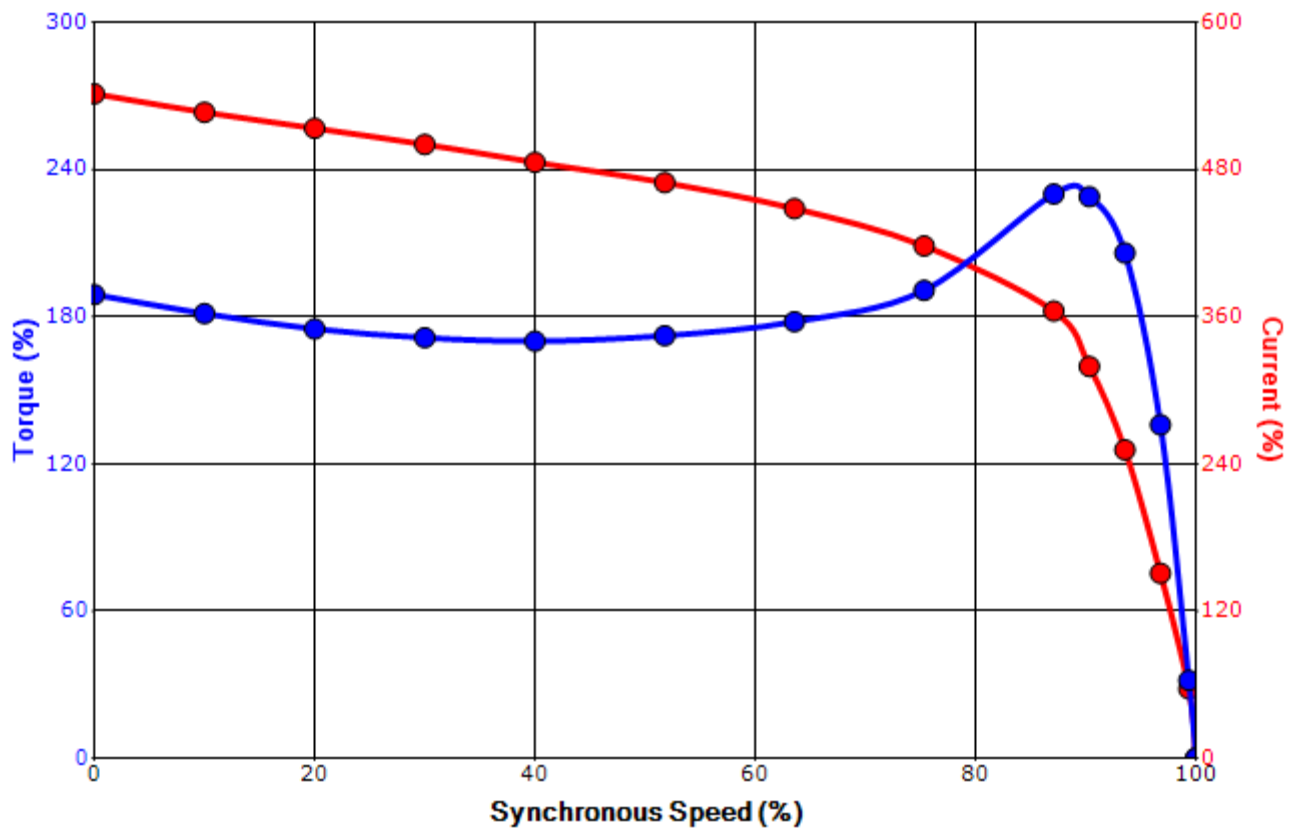
Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

### SPEED TORQUE/CURRENT CURVE

Model: 0156SDSR42A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
15	11	6	960	284TC	190/380	50	3	48/24
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	88.5	B	G	40 C
Locked Rotor Amps	Rotor wk <sup>2</sup> Inertia (lb-ft <sup>2</sup> )	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
130	4.68	82.1	185		175	230		

### 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.

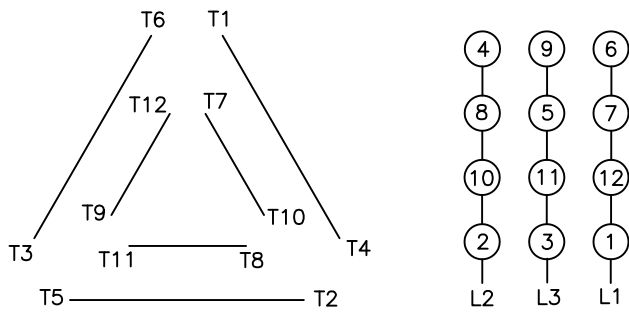
### TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.

Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	4/9/2014	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

**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.