

UNITS: INCHES

ROTATION FROM NDE



CCW 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 0.188"x 0.188"x 1.38" (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

www.toshiba.com/tic

TOSHIBA INTERNATIONAL CORPORATION

TOTALLY ENCLOSED FAN COOLED
FOOTED C-FACED (NEMA BA)
3 PHASE INDUCTION MOTOR
143TC-145TC F1 ASSEMBLY

DRAWING #: MDSL005-01

REV. DATE: 06/20/18 REV. #: 4 PER.: M. O'DOWD

REV. DESCRIP.:



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

TYPICAL MOTOR PERFORMANCE DATA

Model: Y152SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	2	3490	143TC	230/460	60	3	4.0/2.0
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	84	B	L	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	1.50	1.1	2.0	84.3	83.2
¾ Load	1.13	0.8	1.5	83.5	78.6
½ Load	0.75	0.6	1.2	80.4	68.1
¼ Load	0.38	0.3	1.0	69.2	47.8
No Load			1.0		10.5
Locked Rotor			18		75.8

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
2.26	265	225	360	0.05

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
28	15	-	6305ZZC3	6305ZZC3	0

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

Motor Options:

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	mcampbell	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1119 / 1
Engr. Date	2/27/2012	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: Y152SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	2	2855	143TC	190/380	50	3	5.0/2.5
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	80	B	L	40 C

Load	HP	kW	Amperes	Efficiency (%)	Power Factor (%)
Full Load	1.50	1.1	2.5	84.2	81.0
¾ Load	1.13	0.8	1.8	84.6	76.0
½ Load	0.75	0.6	1.4	82.8	65.8
¼ Load	0.38	0.3	1.1	69.9	54.5
No Load			0.8		12.3
Locked Rotor			22		95.2

Torque				Rotor wk ² Inertia (lb-ft ²)
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	
2.76	180	170	250	0.05

Safe Stall Time(s)		Sound Pressure dB(A) @ 1M	Bearings*		Approx. Motor Weight (lbs)
Cold	Hot		DE	NDE	
32	8	-	6305ZZC3	6305ZZC3	0

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

Motor Options:
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	4/3/2014	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



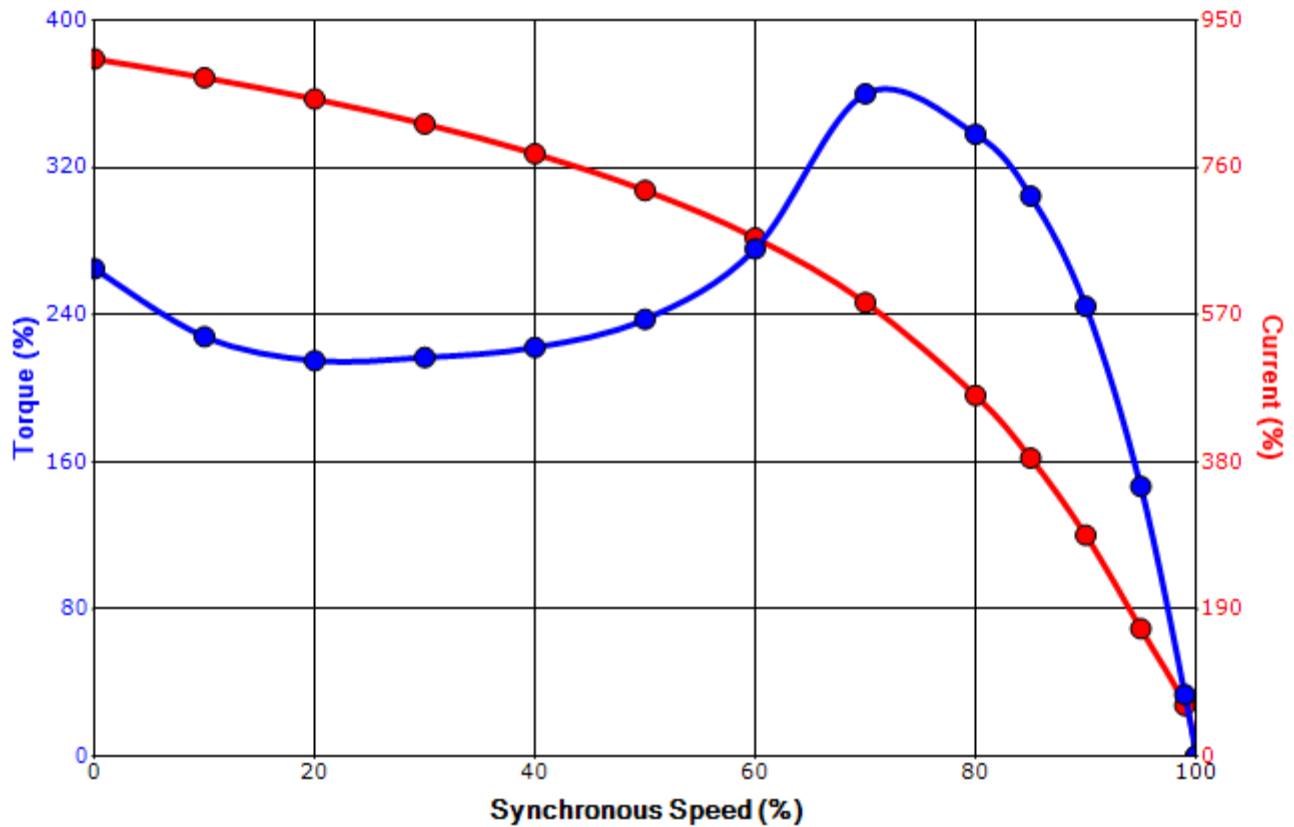
Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: Y152SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	2	3490	143TC	230/460	60	3	4.0/2.0
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.15	CONT	84	B	L	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
18	0.05	2.26	265		225	360		

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.

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

Engineering	mcampbell	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	2/27/2012	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019



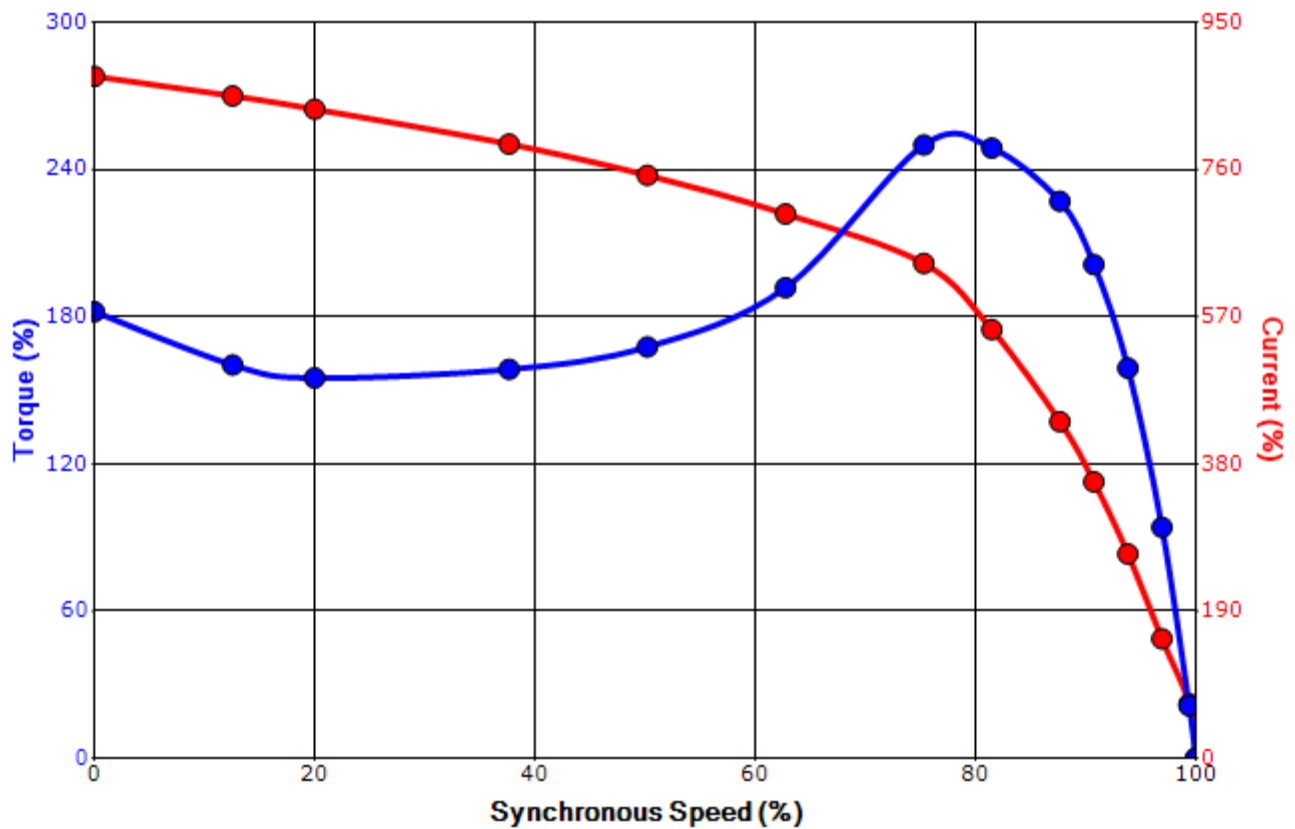
Issued Date	12/18/2019	Transmit #	
Issued By	dschoeck	Issued Rev	

SPEED TORQUE/CURRENT CURVE

Model: Y152SDSR47A-P

HP	kW	Pole	FL RPM	Frame	Voltage	Hz	Phase	FL Amps
1.50	1.1	2	2855	143TC	190/380	50	3	5.0/2.5
Enclosure	IP	Ins. Class	S.F.	Duty	NEMA Nom. Eff.	NEMA Design	kVA Code	Ambient (°C)
TEFC	55	F	1.0	CONT	80	B	L	40 C
Locked Rotor Amps	Rotor wk ² Inertia (lb-ft ²)	Torque				Pull Up (%)	Break Down (%)	
		Full Load (lb-ft)	Locked Rotor (%)					
22	0.05	2.76	180		170	250		

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.

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

Engineering	jhock	Doc. Written By	D. Suarez	Doc.# / Rev	MPCF-1121/1
Engr. Date	4/3/2014	Doc. Approved By	M. Campbell	Doc. Issued	9/20/2019

Motor Connection Diagrams
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation