

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 324TSTDC6003

Catalog No: U294

50 HP General Purpose Motor, 3 phase, 3600 RPM, 575 V, 324TS Frame, ODP
General Purpose Motors



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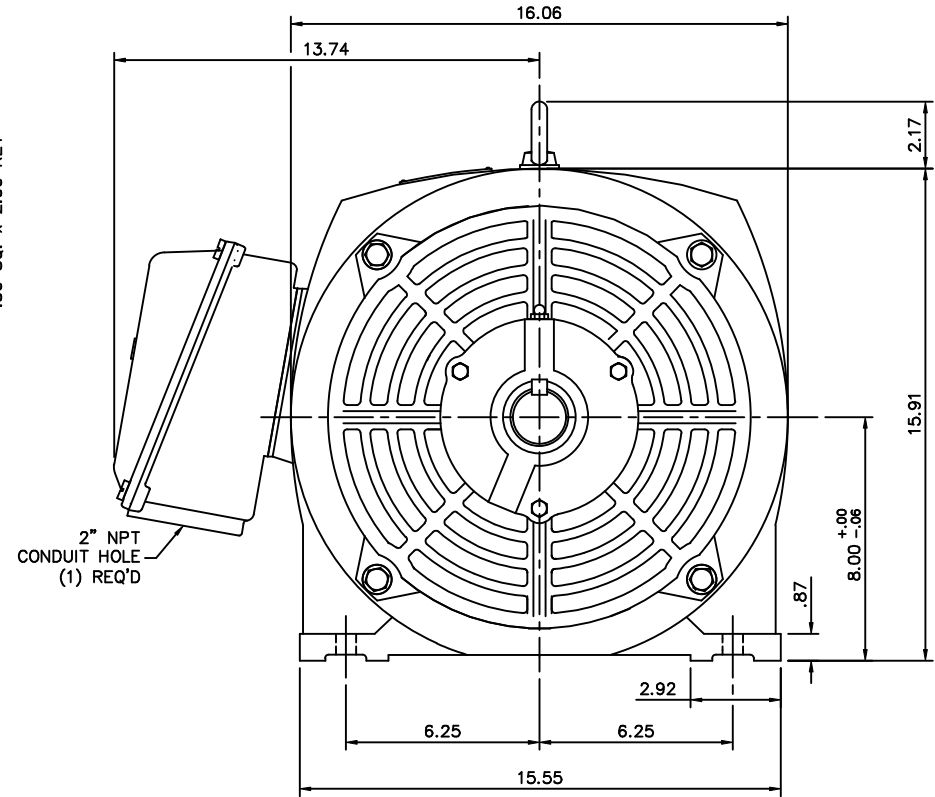
Nameplate Specifications

Output HP	50 Hp	Output KW	37.0 kW
Frequency	60 Hz	Voltage	575 V
Current	45.0 A	Speed	3560 rpm
Service Factor	1.15	Phase	3
Efficiency	94.1 %	Power Factor	88.6
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	324TS	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6312
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.137 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	24.53 in
Shaft Diameter	1.875 in	Shaft Extension	3.75 in
Assembly/Box Mounting	F1 ONLY		
Outline Drawing	16955560ME	Connection Drawing	005109001

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FRAME DESIGN	"C"
324TS	24.53
326TS	26.02

				TOLERANCES UNLESS SPECIFIED			DRAWN CTO 04-24-2002
				DEC. INCHES			CHK ML 05-20-2002
				.X ±.1			APPD SB 05-21-2002
				.XX ±.03	TITLE OUTLINE 320TS		SCALE 1=4
				.XXX ±.005	DRIP PROOF - RIGID		REF
1	NEW DRAWING		CTO 05/21/02	.XXXX ±.0005	MAT'L CAST IRON		FMF
NO.	REVISION	BY & DATE	CHK ANG ±1/2"	FINISH			PREV
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP	CAD FILE 16955560ME	SIZE B	DRAWING NO. 169555-60ME
				DIST			REV. 1

CERTIFICATION DATA SHEET

Model#: 324TSTDC6003 AA
 CONN. DIAGRAM: 005109001
 OUTLINE: 16955560ME

WINDING#: T16102007 NONE 4
 ASSEMBLY: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
50	37	3600	3560	324TS	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	45	LINE OR INVERTER	CONTINUOU S	F2	1.15/1.0	40	3300

FULL LOAD EFF: 94.1	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88.6	3/4 LOAD PF: 86.5	1/2 LOAD PF: 80	93.6	SQ CAGE INV RATED	12.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74.9 LB-FT	289.6	143 LB-FT 191	207.1 LB-FT 276	38

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
85 dBA	95 dBA	- LB-FT^2	- LB-FT^2	- SEC.	-	548 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6312	6312	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

* N O T E S *	INVERTER TORQUE: CONSTANT 10:1					
	INV. HP SPEED RANGE: 1.5 X BASE SPEED					
	ENCODER: NONE					
	NONE NONE					
	NONE NONE PPR					
	BRAKE: NONE NONE					
	NONE P/N NONE					
	NONE NONE					
	NONE FT-LB		NONE V		NONE Hz	

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 FORM 3531 REV.3 02/07/99
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Data Sheet

Date: 20-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



324TSTD6003

Submittal

Data @ 575 V

Motor Load Data

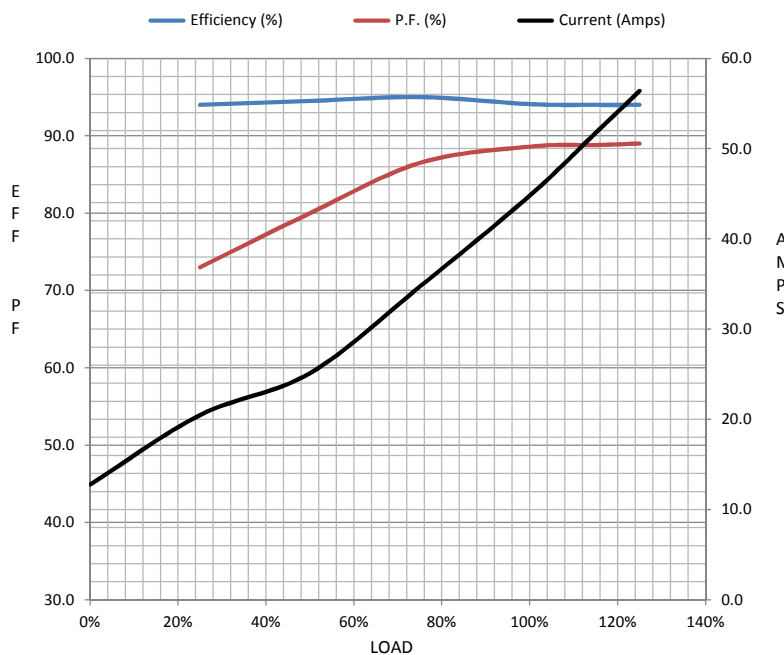
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	12.8	20.5	25.1	34.7	44.8	51.8	56.4	290	
Torque (ft-lb)	0.00	27.5	37.4	56.0	74.9	86.1	93.4	143	
RPM	3600	3585	3580	3570	3560	3550	3545	0	
Efficiency (%)		94.0	94.5	95.0	94.1	94.0	94.0		
P.F. (%)	5.3	73.0	80.0	86.5	88.6	88.8	89.0	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3330	3560	3600
Current (Amps)	290	266	192	44.8	12.8
Torque (ft-lb)	143	124	207	74.9	0.00

Information Block

HP	50.0			
Sync. RPM	3600			
Frame	324			
Enclosure	DP			
Construction	TDC			
Voltage	575 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	38 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.00 Lb-Ft²			
Ref Wdg	T16102007 NONE			
Sound Pressure @ 1M	85 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	16955560ME			
Conn. Diag	51090.01			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed -Torque Curve

