marathon®

Fire Pump Motors

Model No: 324TSTDCD4008
Catalog No: U1109

Fire Pump Motor, 50 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 324TS Frame, DP

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Product Information Packet: Model No: 324TSTDCD4008, Catalog No: U1109 Fire Pump Motor, 50 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 324TS Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**50 Hp**
Output KW	**37.0 kW**	Voltage	**575 V**
Speed	**3565 r/min**	Synchronous RPM	**3600 r/min**
Service Factor	**1.15**	Frame	**324TS**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**92.4 %**	Ambient Temperature	**50 °C**
Frequency	**60 Hz**	Current	**45.5 A**
Power Factor	**88**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6212**
Opp Drive End Bearing Size	**6212**	UL	**Listed**
CSA	**Y**	CE	**Y**
IP Code	**23**	Number of Speeds	**1**

Technical Specifications

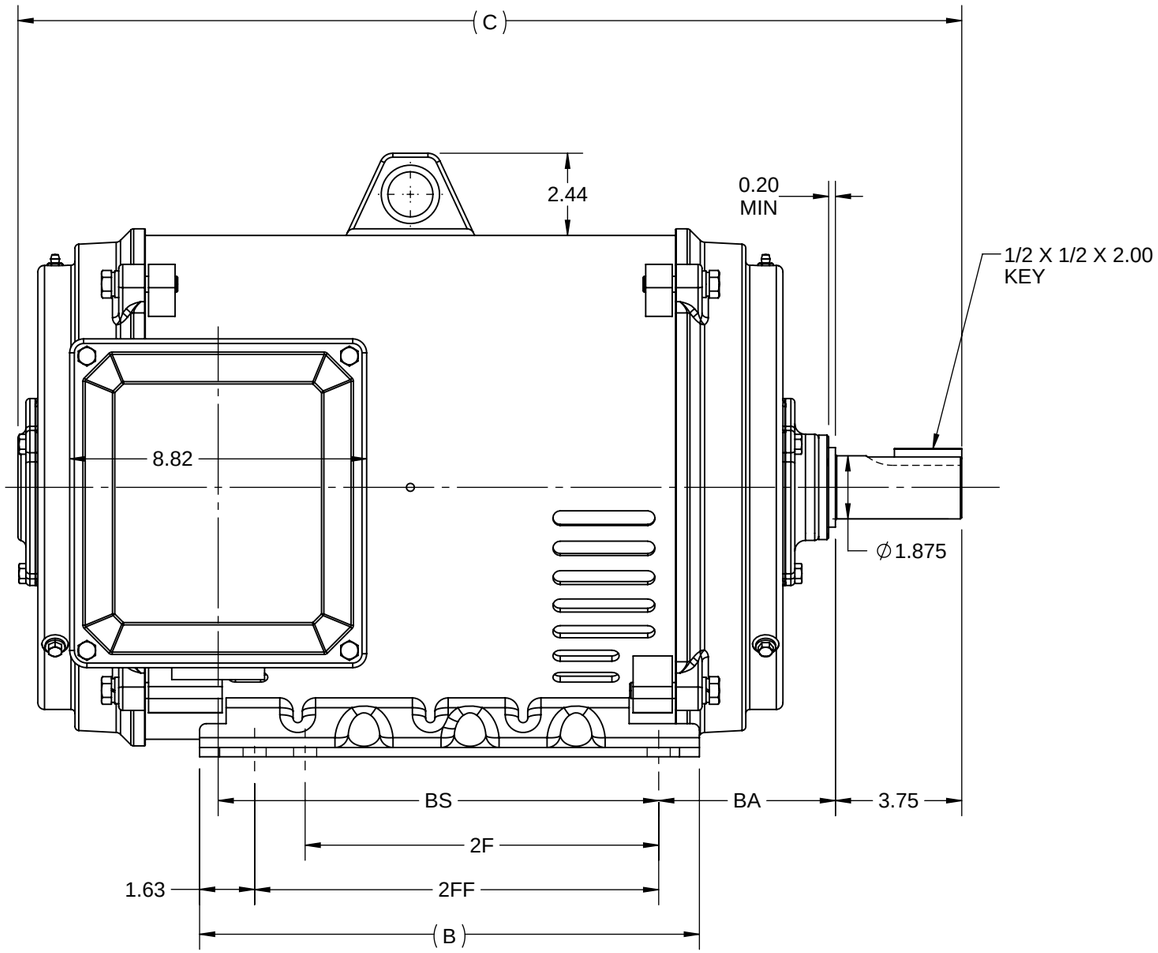
Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Part Wdg Start & Wye Start Delta Run**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**.175 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**TS**	Overall Length	**27.05 in**
Frame Length	**14.56 in**	Shaft Diameter	**1 7/8 in**
Shaft Extension	**3.75 in**	Assembly/Box Mounting	**F1/F2 Capable**

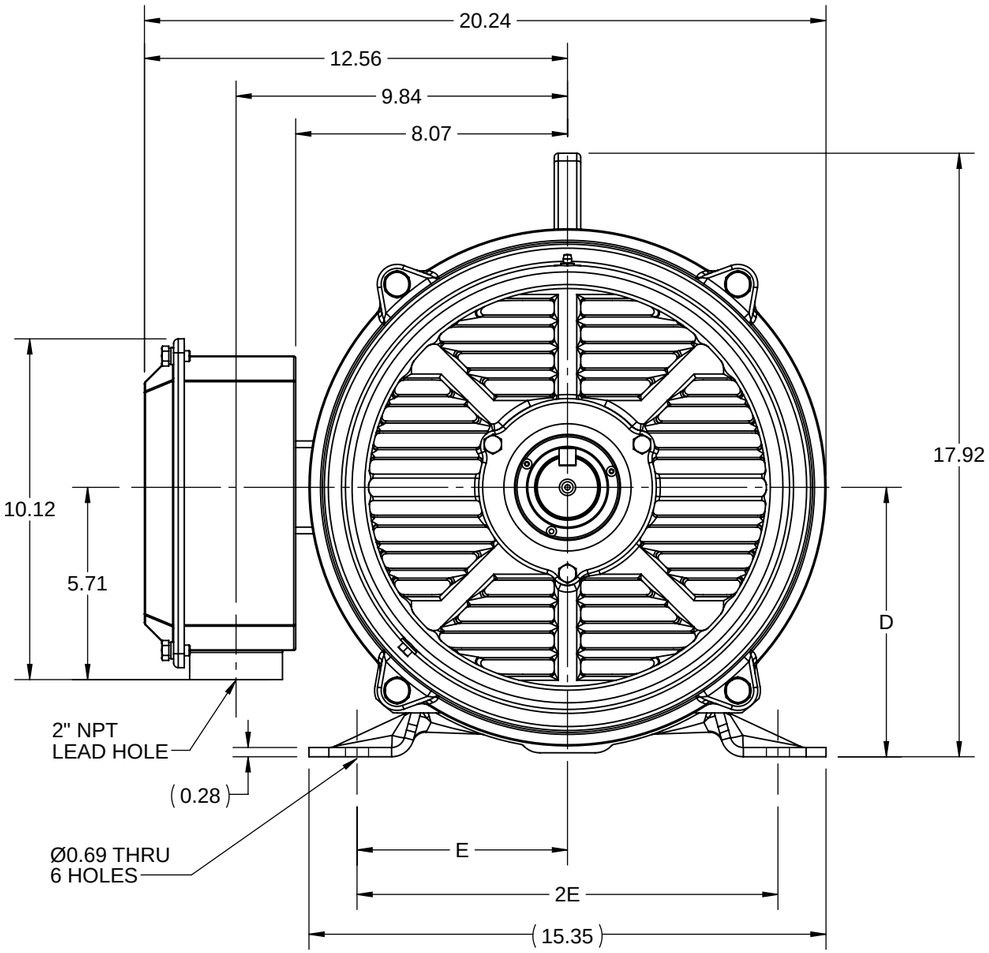
Drawings

Connection Drawing	**EE7300BH**	Outline Drawing	**SS620744-324TS**

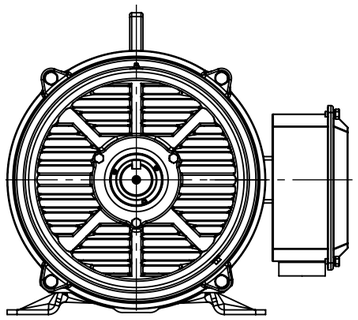
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DASH NO.	B	C	D	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	14.85	26.85	8.00	6.25	12.50	10.50	12.00	5.25	11.90	F1 OR F2	324TS
200		28.03							13.08		326TS





F2 VIEW



DRAWING REVISION	REVISION BY	REV DATE/© DATE
D	SV	05/22/2026
REQUEST NUMBER	APPROVED BY	DATE
CR-0026372	RMS	05/22/2026

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

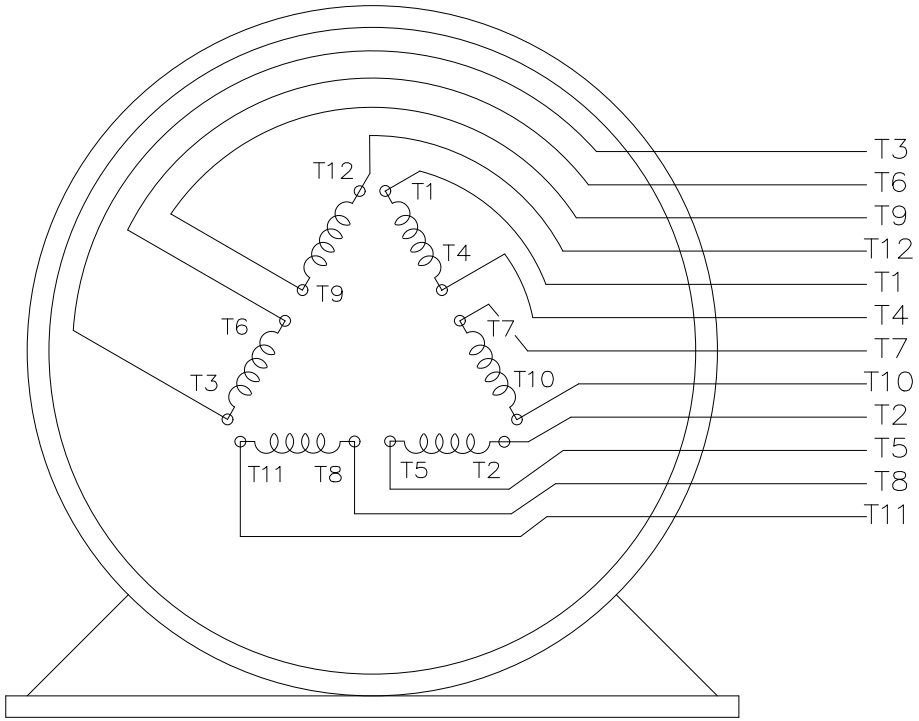
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DRAWN BY	DESCRIPTION
XZ	OUTLINE
DATE: 25/02/2016	324/326TS FR NEMA ODP RS
APPROVED BY	
DATE	
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS620744 / SHEET: 1 OF 1

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VIEW OF TERMINAL END

T12(W4)
T1(U1)
T6(W2)
T7(U3)
LINE 1

T2(V1)
T4(U2)
T8(V3)
T10(U4)
LINE 2

T3(W1)
T5(V2)
T9(W3)
T11(V4)
LINE 3

DRAWING REVISION: E	REVISION BY: SB	REV DATE/ © DATE: 08/04/2025
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/04/2025
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

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DRAWN BY: RJW	marathon™	
DATE: 02/11/2005		
APPROVED BY: GK	DESCRIPTION: CONNECTION DIAGRAM 12 LEAD - SINGLE VOLTAGE	
DATE: 02/11/2005		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7300BH	SHEET: 1 OF 1

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Data Sheet

Date: 12/12/2018
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

324TSTDCD4008

Submittal

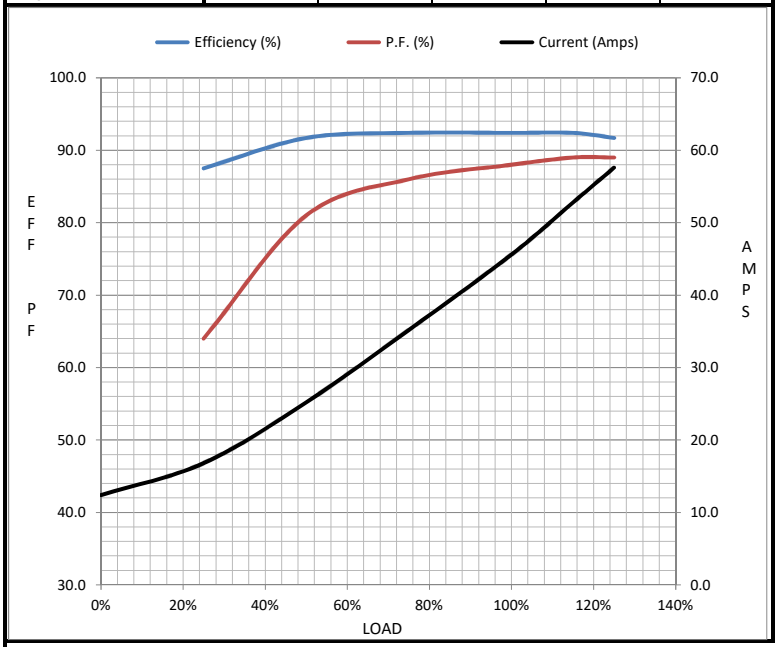
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	12.4	16.8	25.2	35.2	45.6	52.8	57.6	264	
Torque (ft-lb)	0.00	18.5	36.5	55.0	73.5	85.0	92.5	110	
RPM	3600	3592	3585	3575	3565	3,560	3555	0	
Efficiency (%)		87.5	91.7	92.4	92.4	92.4	91.7		
P.F. (%)	8.0	64.0	81.0	86.0	88.0	89.0	89.0	33.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3450	3565	3600
Current (Amps)	264	240	148	45.6	12.4
Torque (ft-lb)	110	90.0	170	73.5	0.00



Information Block

HP	50.0	
Sync. RPM	3600	
Frame	324	
Enclosure	DP	
Construction	TDC	
Voltage	575	V
Frequency	60	Hz
Design	B	
LR Code letter	F	
Service Factor	1.15	
Temp Rise @ FL	45	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.00	Lb-Ft²
Ref Wdg	IE3L2002110 NONE	
Sound Pressure @ 1M	999	dBA
VFD Rating	NONE	
Outline Dwg	SS620744	
Conn. Diag	EE7300BH	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.1640	0.0070	0.7000	0.8330	26.5690

Speed -Torque Curve

