

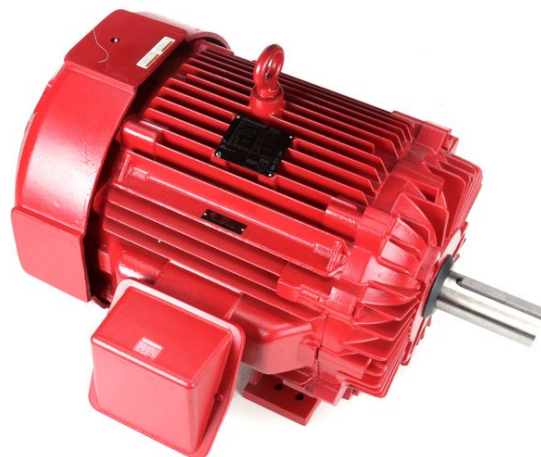
PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 449TSTFS14040

Catalog No: Y1641

250 HP, Fire Pump Motors, 3 phase, 1800 RPM, 460 V, 449TS Frame, TEFC
Fire Pump Motors



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RegalRexnord

Nameplate Specifications

Output HP	250 Hp	Output KW	187.0 kW
Frequency	60 Hz	Voltage	460 V
Current	285.0 A	Speed	1785 rpm
Service Factor	1.15	Phase	3
Efficiency	95.4 %	Power Factor	86
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	449TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
UL	No	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		



Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.0107 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	48.11 in
Frame Length	28.75 in	Shaft Diameter	2.375 in
Shaft Extension	5 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS515643-2875	Connection Drawing	A-EE7300BH

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DASH	FRAME	B	C	2F	2FF
2875	447TS	28.25 [717.55]	48.11 [1221.99]	20.00 [508.00]	25.00 [635.00]
2875	449TS	28.25 [717.55]	48.11 [1221.99]	20.00 [508.00]	25.00 [635.00]

DRAWING REVISION C		REVISION BY CM	DATE 3-10-2014	TOLERANCES UNLESS OTHERWISE SPECIFIED:		DRAWN BY KL		<div>Regal Beloit America, Inc.</div>			
ECO ECO-0047108		APPROVED BY DJK	DATE 3-10-2014	DEC. .X .XX XXX XXXX	INCH ±0.1 ±0.03 ±0.005 ±0.0005	mm [±2.5] [±0.76] [±0.127] [±0.0127]	ANGLE ±0.5°	DATE 06-12-1996	DESCRIPTION		
ECO DESCRIPTION UPDATED DRAWING - NMR-0053354				REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] CORNER FILLETS: .02 [1.51] MACHINED SURFACES: 125 INCH 3.2 mm SHOWN IN [BRACKETS]			DATE 06-12-1996	OUTLINE 447-449TS FR. - STD.			
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				THIRD ANGLE PROJECTION							



				TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION	DRAWN RJW 02-11-2005							
				DEC.	INCHES		CHK	ML	02-11-2005					
				.X	±.1		APPD	GK	02-11-2005					
				.XX	±.02		SCALE							
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX	±.005	TITLE CONNECTION DIAGRAM 12 LEAD- SINGLE VOLTAGE				REF			
1	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	ML	.XXXX	±.0005	MAT'L.				FMF			
NO.	REVISION		BY & DATE	CHK	ANG	±7'30"	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		02-11-2005	CAD FILE		ee7300bh	SIZE	DRAWING NO.	PAGE	OF	REV.
				DIST		LB			A	EE7300BH				C

CERTIFICATION DATA SHEET

Model#: 449TSTFS14040 AA
CONN. DIAGRAM: A-EE7300BH
OUTLINE: B-SS515643-2875

WINDING#: T4494121 NONE 1
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
250	187	1800	1785	447/449TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	285	PWS & YDRUN	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95.4	3/4 LOAD EFF: 95	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86	3/4 LOAD PF: 84	1/2 LOAD PF: 77.5	94.5	SQ CAGE IND RUN	85

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
735 LB-FT	1825	1500 LB-FT 204	1775 LB-FT 241	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
85 dBA	95 dBA	81 LB-FT^2	1500 LB-FT^2	25 SEC.	1	2700 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	RED (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6318	6316	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

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INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

DATE: 06/21/2017 06:51:10 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



449TSTFS14040

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	85.0	110	160	218	285	325	355	1,825	
Torque (ft-lb)	0.00	183	366	550	735	846	920	1,500	
RPM	1800	1795	1792	1790	1785	1,782	1780	0	
Efficiency (%)		89.5	93.6	95.0	95.4	95.4	95.0		
P.F. (%)	7.0	59.0	77.5	84.0	86.0	86.5	86.5	29.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																													
Speed (RPM)	0	900	1725	1785	1800	Information Block																												
Current (Amps)	1,825	1,750	975	285	85.0	HP	250.0																											
Torque (ft-lb)	1,500	1,300	1,775	735	0.00	Sync. RPM	1800																											
<div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</div><table><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25</td><td>89</td><td>59</td><td>100</td></tr><tr><td>50</td><td>92</td><td>78</td><td>150</td></tr><tr><td>75</td><td>94</td><td>84</td><td>210</td></tr><tr><td>100</td><td>95</td><td>86</td><td>270</td></tr><tr><td>125</td><td>95</td><td>86</td><td>320</td></tr></tbody></table></div>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	89	59	100	50	92	78	150	75	94	84	210	100	95	86	270	125	95	86	320	Frame	449			
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																									
						25	89	59	100																									
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						75	94	84	210																									
						100	95	86	270																									
						125	95	86	320																									
						Enclosure	TEFC																											
						Construction	TFN																											
						Voltage	460	V																										
						Frequency	60	Hz																										
						Design	A																											
						LR Code letter	G																											
						Service Factor	1.15																											
						Temp Rise @ FL	70	° C																										
						Duty	CONT																											
						Ambient	40	° C																										
Elevation	1,000	feet																																
Rotor/Shaft wk²	81.0	Lb-Ft²																																
Ref Wdg	T4494121	NONE																																
Sound Pressure @ 1M	85	dBA																																
VFD Rating	NONE																																	
Outline Dwg	B-SS515643-2875																																	
Conn. Diag	A-EE7300BH																																	
Additional Specifications:																																		
0																																		
0																																		
EQUIV CKT (OHMS / PHASE)																																		
R1	R2	X1	X2	Xm																														
0.0090	0.0070	0.0920	0.1300	3.0740																														

Speed -Torque Curve

