

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 449TSTDN16041
Catalog No: U499
500,1800,DP,449TS,3/60/460PWS&YD
Open Drip Proof (ODP)



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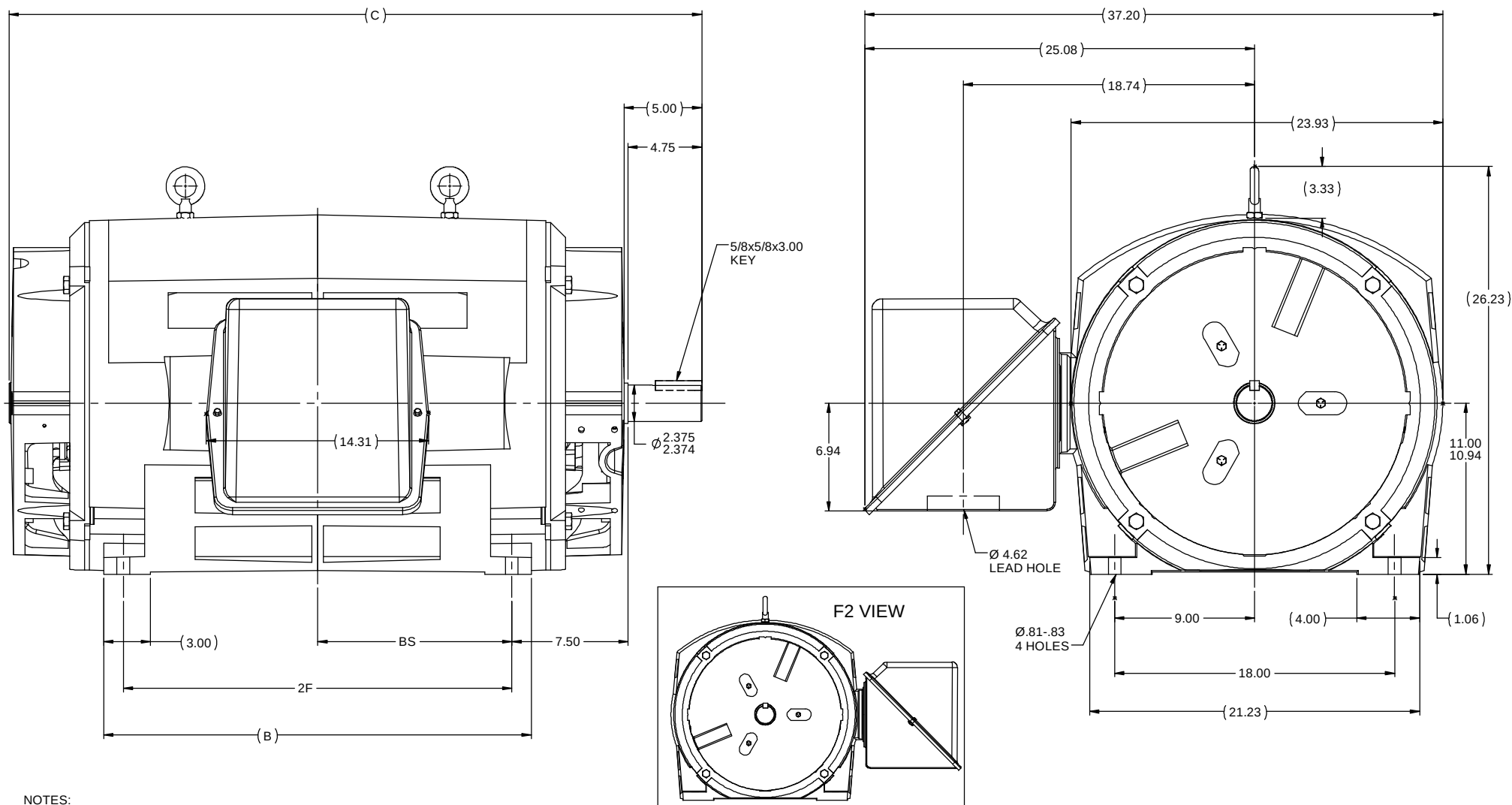
REGAL

Nameplate Specifications

Output HP	500 Hp	Output KW	370 kW
Frequency	60 Hz	Voltage	460 V
Current	570 A	Speed	1780 rpm
Service Factor	1	Phase	3
Efficiency	96.2 %	Duty	CONTINUOUS
Insulation Class	F	Design Code	B
KVA Code	E	Frame	449TS
Enclosure	DP	Overload Protector	NOT
Ambient Temperature	50 °C	Drive End Bearing Size	6314
Opp Drive End Bearing Size	6314	UL	No
CSA	Y	CE	Y
IP Code	12		

Technical Specifications

Electrical Type	SQ CAGE IND RUN	Starting Method	PWS & YDRUN
Poles	4	Rotation	REV
Mounting	RIGID	Motor Orientation	HORIZONTAL
Drive End Bearing	BALL	Opp Drive End Bearing	BALL
Frame Material	CAST IRON	Shaft Type	TS
Overall Length	44.5 in	Frame Length	29.38 in
Shaft Diameter	2.38 in	Shaft Extension	5 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Outline Drawing	B-SS514570-2938	Connection Diagram	A-EE7300BH

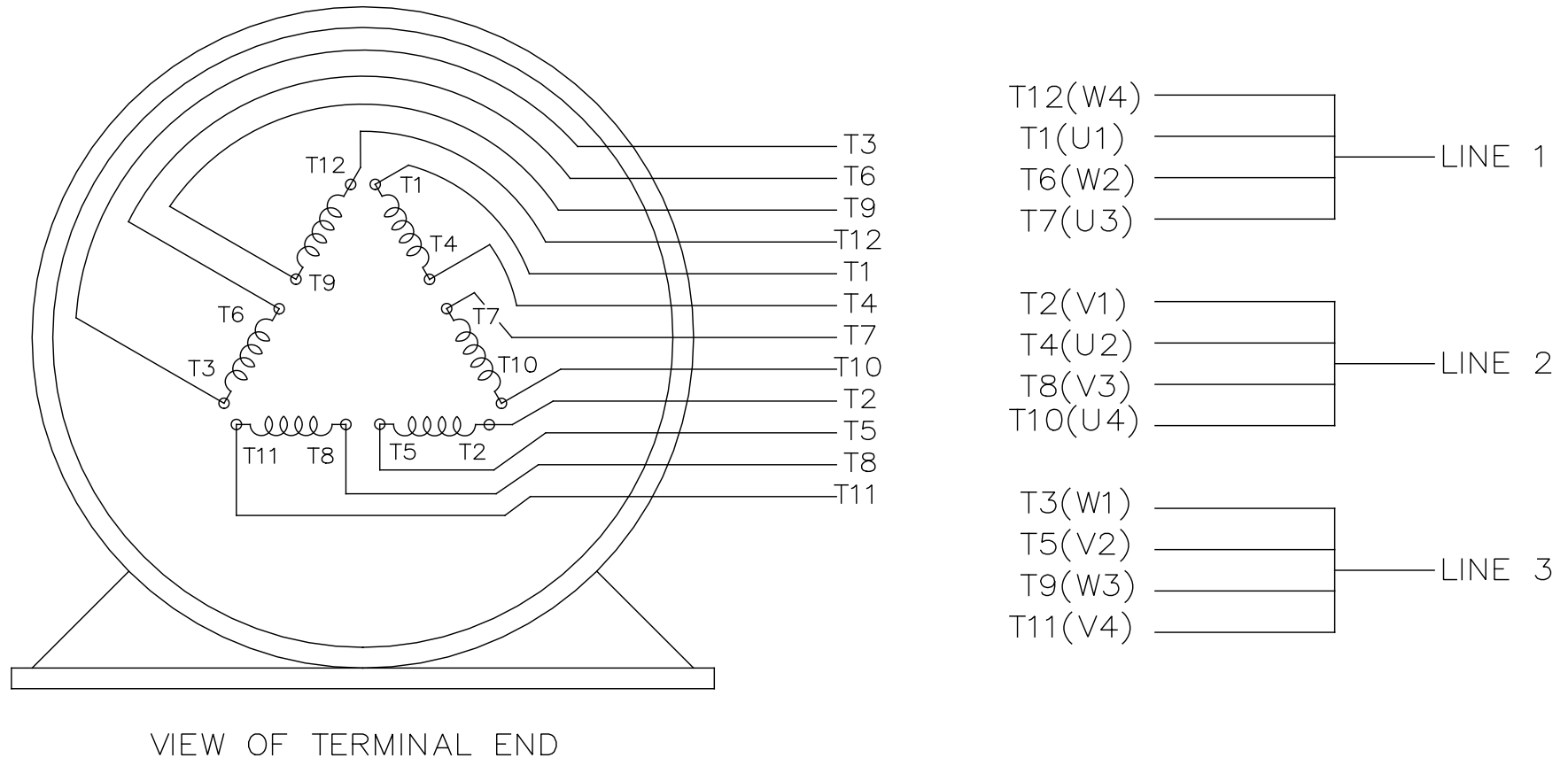


NOTES:

1. C.BOX CAN BE ROTATED IN 90° STEPS.
2. C.BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS & TURNING FRAME 180°.
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	C	B	2F	BS
2438	447TS	39.50	22.50	20.00	10.00
2938	449TS	44.50	27.50	25.00	12.50

REVISION		TOLERANCES UNLESS SPECIFIED		DRAWN	
NO	DESCRIPTION	BY & DATE	CHK	ANG	OF
5	UPDATED TO SOLIDWORKS	CJR 12/13/2011	DEC	INCHES	KL 06-19-1993
4	UPDATED DE BRACKET GEOMETRY CN 35521	DRS	X	±.1	CHK 06-20-1993
3	REVISED TO NEC CONDUIT BOX CN 28405	BJW 02-17-2000	XX	±.03	APPR JL 06-20-1993
2	ADDED OVERALL DIMENSIONS	BJW 11-06-1999	XXX	±.005	SCALE 1:6
1	NEW DRAWING 4060856	KL 06-24-1993	XXXX	±.0005	REF
		FINISH	MATL		
		PREV	PAGE		
		NETWORK FILE NAME	SS514570		
		SIZE	B		
		DRAWING NO	SS514570		
		REV	5		



				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			

CERTIFICATION DATA SHEET

Model#: 449TSTDN16041 AA **WINDING#:** T4494165 NONE 1
CONN. DIAGRAM: A-EE7300BH **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS514570-2938

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
500&400	370&300	1800	1780&1478	449TS	DP	E	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	570&550	PWS & YDRUN	CONTINUOU S	F1	1.0/1.0	50	3300

FULL LOAD EFF: 96.2&95.4	3/4 LOAD EFF: 96.2	1/2 LOAD EFF: 95.8	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86&86	3/4 LOAD PF: 85	1/2 LOAD PF: 78	95.4	SQ CAGE IND RUN	160

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
1475 LB-FT	3175	2675 LB-FT 180	3300 LB-FT 222	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
82 dBA	92 dBA	92 LB-FT^2	1900 LB-FT^2	15 SEC.	1	2850 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	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6314	6314						

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
NONE FT-LB NONE V NONE Hz

DATE: 06/21/2017 06:48:35 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/20/2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



449TSDN16041

Submital

Data @ 460 V

Submitted by:

FAREEDA DUDEKULA

Motor Load Data

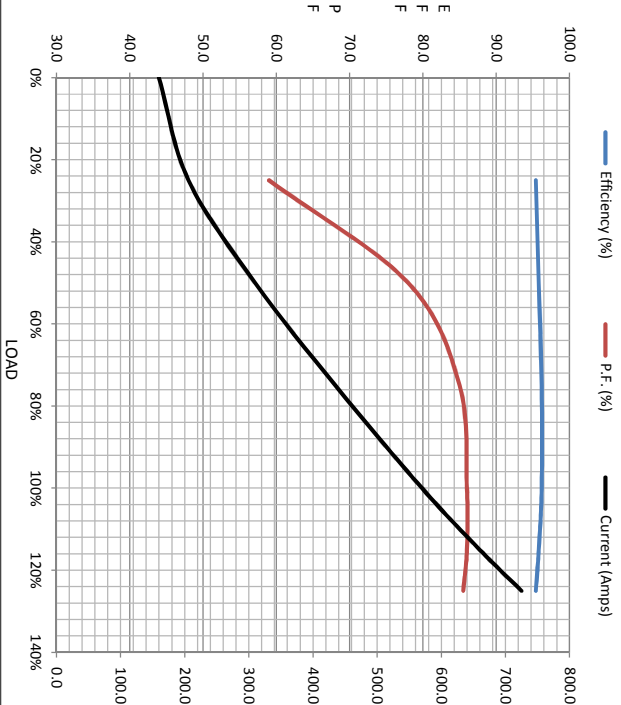
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	160	206	310	435	570	660	725	3,175
Torque (ft-lb)	0.00	366	733	1,103	1,475	1,699	1,850	2,675
RPM	1800	1795	1790	1785	1780	1,778	1775	0
Efficiency (%)		95.4	95.8	96.2	96.2	95.8	95.4	
P.F. (%)	2.5	59.0	78.0	85.0	86.0	86.0	85.5	32.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1710	1780	1800
Current (Amps)	3,175	2,800	1,800	570	160
Torque (ft-lb)	2,675	2,000	3,300	1,475	0.00

Information Block

HP	500.0
Sync. RPM	1800
Frame	449
Enclosure	DP
Construction	TDN
Voltage	460#380 V
Frequency	60 Hz
Design	B
LR Code letter	F
Service Factor	1.15
Temp Rise @ FL	75 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wkt	92.0 Lb-Fe
Ref Wdg	T4494165 NONE
Sound Pressure @ 1M	82 dBA
VFD Rating	NONE
Outline Dwg	B-SS514570-2938
Conn. Diag	A-E7300BH
Additional Specifications:	
0	
EQUIV CKT (OHMS / PHASE)	
R1	R2
X1	X2
Xm	
0.0070 0.0050 0.0520 0.0860 1.7010	



Speed-Torque Curve

