

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 182TTTCD6538

Catalog No: E470A

3 HP, Severe Duty Motor, 3 phase, 1800 RPM, 230/460 V, 182T Frame, TENV
Other Severe Duty Motors



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REGAL

Nameplate Specifications

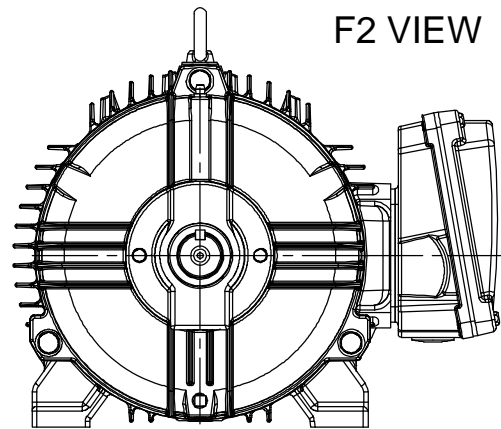
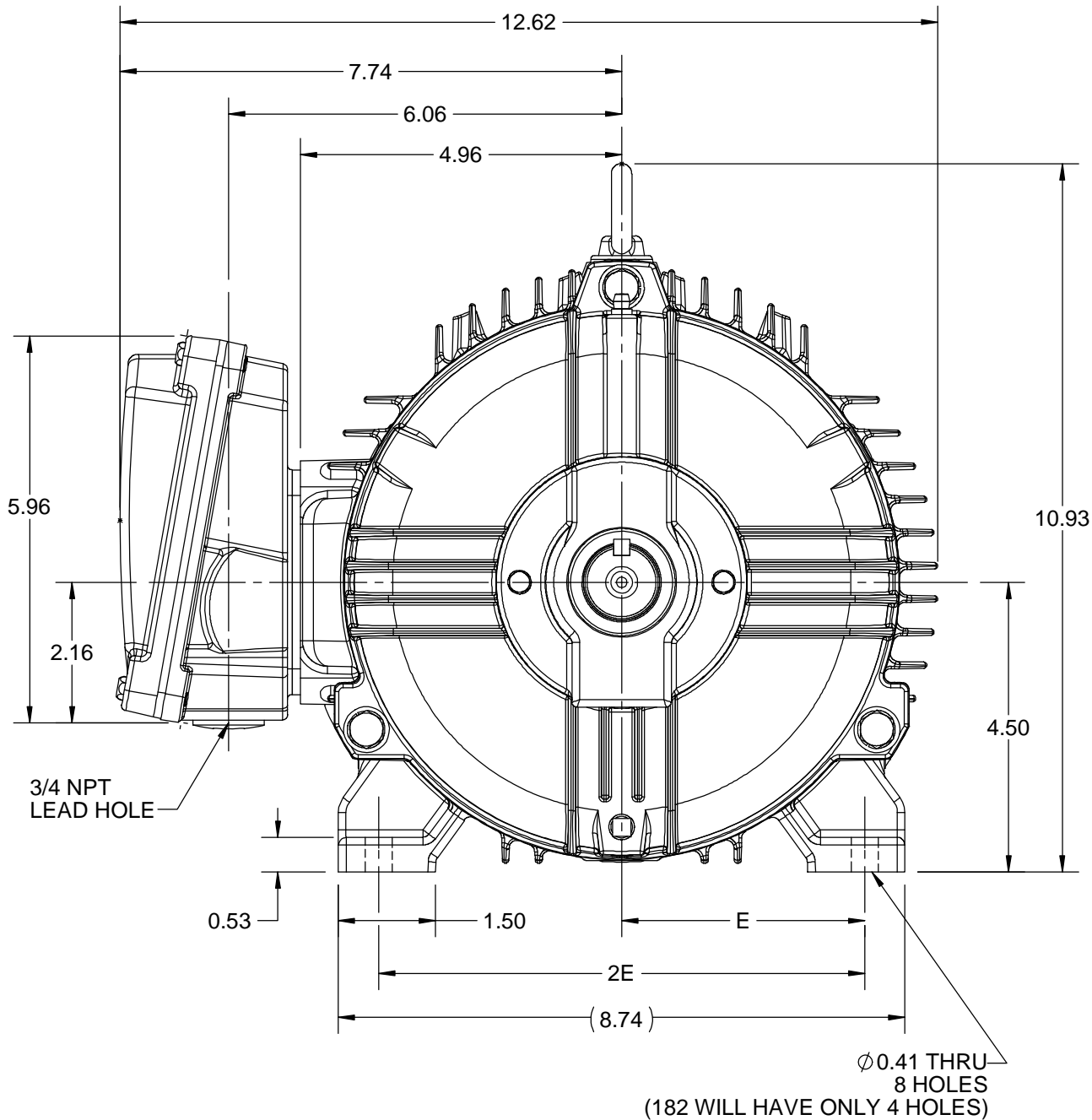
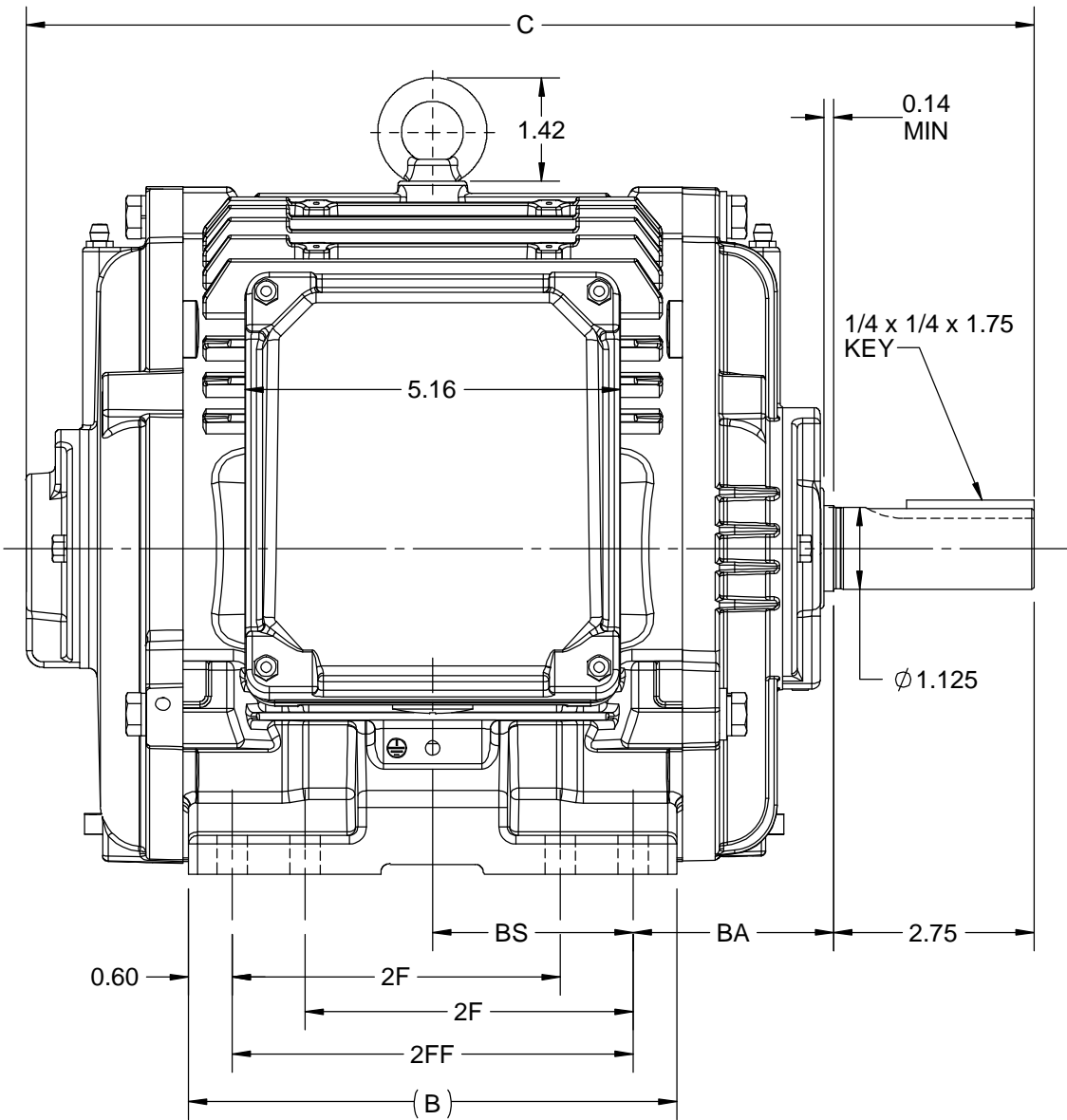
Output HP	3 Hp	Output KW	2.2 kW
Frequency	60 Hz	Voltage	230/460 V
Current	7.8/3.9 A	Speed	1770 rpm
Service Factor	1.15	Phase	3
Efficiency	89.5 %	Power Factor	80
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	K
Frame	182T	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6205
UL	Listed	CSA	Y
CE	Y	IP Code	55
Hazardous Location	DIVISION 2 T2B		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	3.53 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	1.125 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Outline Drawing	SS600211-200	Connection Drawing	EE7308


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4					3					
DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	5.67	12.82	3.75	7.50	-	4.50	2.75	2.35	F1 OR F2	182T
200	6.69	13.82			4.50	5.50		2.75	F1 OR F2	182/184T



DRAWING REVISION B	REVISION BY BISWA	REV DATE/© DATE 06/10/2020
ECO ECO-0194180	APPROVED BY GNK	DATE 06/10/2020
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DRAWN BY BISWA	 Regal Beloit America, Inc.		
DATE 06/10/2020			
APPROVED BY SBD	DESCRIPTION OUTLINE 182/184T FR-NEMA-TEAO/TENV		
DATE 06/10/2020			
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS600211	SHEET 1 OF 1



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		DRAWN RM	11/20/1990
					DEC.	INCHES		
5	CHG TO REGAL LOGO	SL 09/10/2015	AB				CHK	ML 11/21/1990
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		APPD	SAS 04/24/2003
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		SCALE	1=1
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		FMF	
					±7'30"		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 ee7308	SIZE A	DRAWING NO. EE7308
					DIST WP			PAGE OF 5



Regal Beloit America, Inc.

TITLE CONNECTION DIAGRAM
3Ø – DUAL VOLTAGE MOTOR



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7308
 REFERENCE MODEL #: 182TTTCD6538
 OUTLINE: SS600211
 CAT #: E470A
 WINDING: HA31124025 NONE 2
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
3	2.2	1800	1770	182T	TENV	TTC	K	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	230/460	7.8/3.9	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	89.5	3/4 LD EFF	89.5	1/2 LD EFF	88.0	GTD EFF	ELECT. TYPE
F.L. PF	80.0	3/4 LD PF	73.0	1/2 LD PF	60.5	88.5	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
8.9 LB-FT	32.0	19.5 LB-FT 219%	30.3 LB-FT 340%	60

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
62 dBA	71 dBA	0.40 LB-FT²	40 LB-FT²	2 SEC.	20	112 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6206 6205						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)
2.004	1.314	5.087	5.503	127.64	0.080

* N O T E S *	If Inverter equals NONE, contact factory for further information	
	INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE PPR	

PREPARED BY:	BRAKE: NONE
DATE: 5/15/2020	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:

FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.

Data Sheet

Date: 5/6/2020
 Customer: _____
 Attention: _____
 Submitted by: _____

marathon
 Motors

182TTTCD6538

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	2.00	2.20	2.60	3.2	3.9	4.3	4.7	32.0	
Torque (ft-lb)	0.00	2.20	4.4	6.7	8.9	10.3	11.3	19.5	
RPM	1800	1790	1785	1776	1770	1,762	1760	0	
Efficiency (%)		81.5	88.0	89.5	89.5	89.5	89.5		
P.F. (%)	7.0	38.5	60.5	73.0	80.0	82.5	83.5	45.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																													
Speed (RPM)	0	900	1540	1770	1800	Information Block																												
Current (Amps)	32.0	25.5	19.0	3.9	2.00	HP	3.0																											
Torque (ft-lb)	19.5	16.8	30.3	8.9	0.00	Sync. RPM	1800																											
<div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div><table border="1"><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>81</td><td>0.7</td><td>2.0</td></tr><tr><td>50</td><td>88</td><td>1.8</td><td>2.5</td></tr><tr><td>75</td><td>89</td><td>3.0</td><td>3.2</td></tr><tr><td>100</td><td>90</td><td>3.8</td><td>4.0</td></tr><tr><td>125</td><td>90</td><td>4.3</td><td>4.7</td></tr></tbody></table></div>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	81	0.7	2.0	50	88	1.8	2.5	75	89	3.0	3.2	100	90	3.8	4.0	125	90	4.3	4.7	Frame	182			
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																									
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						Enclosure	TENV																											
						Construction	TTC																											
						Voltage	230/460	V																										
						Frequency	60	Hz																										
						Design	B																											
						LR Code letter	K																											
						Service Factor	1.15																											
						Temp Rise @ FL	60	° C																										
						Duty	CONT																											
						Ambient	40	° C																										
Elevation	3,300	feet																																
Rotor/Shaft wk²	0.40	Lb-Ft²																																
Ref Wdg	HA31124025 NONE																																	
Sound Pressure @ 1M	62	dBA																																
VFD Rating	CONSTANT 10:1/VARIABLE 10:1																																	
Outline Dwg	SS600211																																	
Conn. Diag	EE7308																																	
Additional Specifications:																																		
0																																		
0																																		
EQUIV CKT (OHMS / PHASE)																																		
R1		R2		X1		X2		Xm																										
2.0040		1.3140		5.0870		5.5030		127.6400																										

Speed -Torque Curve

