

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 182TTTS6505

Catalog No: E853

3 HP Severe Duty Motor, 3 phase, 3600 RPM, 575 V, 182T Frame, TENV  
Severe Duty Motors



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**RegalRexnord**

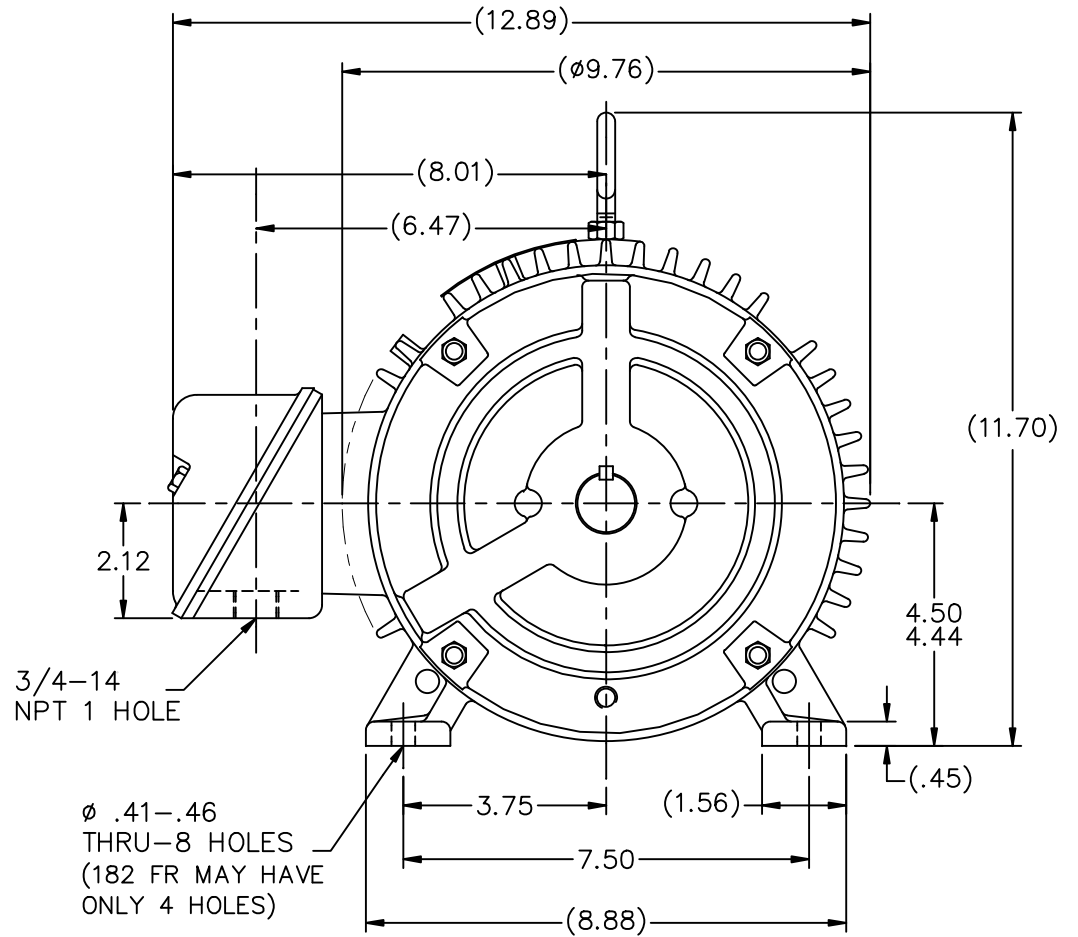
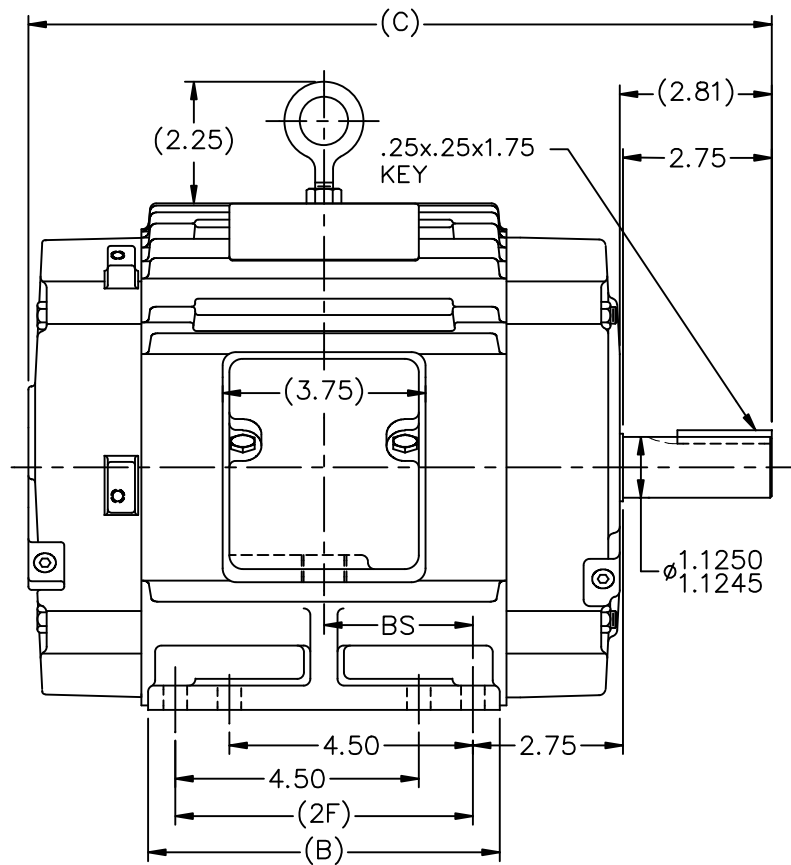
**Nameplate Specifications**

Output HP	3 Hp	Output KW	2.2 kW
Frequency	60 Hz	Voltage	575 V
Current	3.1 A	Speed	3525 rpm
Service Factor	1.15	Phase	3
Efficiency	89.5 %	Power Factor	85
Duty	Continuous	Insulation Class	F
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	Recognized	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		

**Technical Specifications**

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	3.59 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	12.74 in
Frame Length	5.75 in	Shaft Diameter	1.125 in
Shaft Extension	2.81 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	A-SS67889-575	Connection Drawing	A-EE7300

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ø .41-.46  
THRU-8 HOLES  
(182 FR MAY HAVE  
ONLY 4 HOLES)

DASH	FR.	C	B	2F	BS	MOUNTING
575	182T	12.74	5.50	4.50	2.25	F1 OR F2
675	182/4T	13.74	6.50	5.50	2.75	F1 OR F2
800	182/4T	14.99	7.75	5.50	3.38	F1 ONLY

## NOTES:

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

10	REVISED -575 MOUNTING	MU98218	SJW	11/9/2010			
9	SHAFT EXT. WAS 2.72 NOW 2.75	CN46656	RJW	03-15-2007	ML	DEC.	INCHES
8	ADDED 2F DIMENSION TO DASH 575	CN 33528	TAT	04-01-2004	ML	.X	±.1
7	SHOWED PROPER THREAD EXT. LOC.	CN 29200-323	TJB	04-10-2000		.XX	±.03
6	ADDED -675 W/ 182T FRAME & MTGS.	CN 27400-320	CAE	01-17-2000		.XXX	±.005
5	ADDED FOUR MOUNTING HOLES IN BASE	CN 26348	DRS	08-11-1998		.XXXX	±.0005
NO.	REVISION		BY & DATE		CHK	ANG	±7'30"

TOLERANCES UNLESS SPECIFIED
DEC.
INCHES
.X
±.1
.XX
±.03
.XXX
±.005
.XXXX
±.0005
ANG
±7'30"
RFP
DIST LB

<b>MARATHON ELECTRIC</b>	DRAWN SMC 10-01-1992
	CHK MOL 10-01-1992
	APPD GK 10-01-1992
TITLE OUTLINE 180 FR. - BB - TS - TENV	SCALE 9=32
MAT'L.	REF
FINISH	FMF
	PREV
CAD FILE ss67889	SIZE A
DRAWING NO. SS67889	PAGE OF 10
REV. 10	

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# THREE PHASE - SINGLE VOLTAGE MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.

## TERMINAL BLOCK WHEN SPECIFIED



### IF MOTOR HAS 6 LEADS



A-9806 DECAL

### OPTIONAL CORD CONNECTION



### VIEW OF TERMINAL END

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION



Regal Beloit America, Inc.

DESCRIPTION  
**CONNECTION DIAGRAM**  
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1
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## CERTIFICATION DATA SHEET

Model#: 182TTTS6505 BB

WINDING#: 182258 TS 5

CONN. DIAGRAM: A-EE7300

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: A-SS67889-575

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3	2.24	3600	3525	182T	TENV	K	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	3.1	LINE OR INVERTER	CONTINUOU S	F3	1.15	40	3300

FULL LOAD EFF: 89.5	3/4 LOAD EFF: 88.5	1/2 LOAD EFF: 85.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85	3/4 LOAD PF: 77	1/2 LOAD PF: 65.5	87.5	SQ CAGE INV RATED	1.4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
4.5 LB-FT	23.2	9 LB-FT 200	15.8 LB-FT 351	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	0.23 LB-FT^2	4 LB-FT^2	15 SEC.	2	80 LBS.

## \*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6206	6205	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	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

INVERTER TORQUE: CONSTANT 20:1		
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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DATE: 06/27/2017 03:50:25 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



182TTTS6505

Submittal

Data @ 575 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.36	1.52	1.92	2.40	3.0	3.4	3.7	23.2	
Torque (ft-lb)	0.00	1.10	2.20	3.3	4.5	5.2	5.6	9.0	
RPM	3600	3582	3562	3544	3525	3,505	3490	0	
Efficiency (%)		78.0	85.5	88.5	89.5	87.5	87.5		
P.F. (%)	6.5	43.0	65.5	77.0	85.0	85.5	86.5	39.5	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																									
Speed (RPM)	0	1800	3115	3525	3600	Information Block																																								
Current (Amps)	23.2	20.8	14.4	3.0	1.36	HP	3.0																																							
Torque (ft-lb)	9.0	6.8	15.8	4.5	0.00	Sync. RPM	3600																																							
<div><div>Efficiency (%)</div><div>P.F. (%)</div><div>Current (Amps)</div></div> <table><thead><tr><th>LOAD</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>0%</td><td></td><td></td><td>1.36</td></tr><tr><td>20%</td><td>78</td><td>43</td><td>1.5</td></tr><tr><td>40%</td><td>84</td><td>65</td><td>1.8</td></tr><tr><td>60%</td><td>87</td><td>75</td><td>2.2</td></tr><tr><td>80%</td><td>88.5</td><td>82</td><td>2.6</td></tr><tr><td>100%</td><td>89.5</td><td>85</td><td>3.0</td></tr><tr><td>110%</td><td>88.5</td><td>85.5</td><td>3.4</td></tr><tr><td>125%</td><td>87.5</td><td>86.5</td><td>3.7</td></tr></tbody></table>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	0%			1.36	20%	78	43	1.5	40%	84	65	1.8	60%	87	75	2.2	80%	88.5	82	2.6	100%	89.5	85	3.0	110%	88.5	85.5	3.4	125%	87.5	86.5	3.7	Frame	182			
						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)																																					
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						Frequency	60	Hz																																						
						Design	B																																							
						LR Code letter	K																																							
						Service Factor	1.15																																							
Temp Rise @ FL	65	° C																																												
Duty	CONT																																													
Ambient	40	° C																																												
Elevation	1,000	feet																																												
Rotor/Shaft wk²	0.23	Lb-Ft²																																												
Ref Wdg	182258 TS																																													
Sound Pressure @ 1M	65	dBA																																												
VFD Rating	CONSTANT 20:1																																													
Outline Dwg	A-SS67889-575																																													
Conn. Diag	A-EE7300																																													
Additional Specifications:																																														
0																																														
0																																														
EQUIV CKT (OHMS / PHASE)																																														
R1	R2	X1	X2	Xm																																										
2.7790	3.1480	11.4410	3.8280	261.6280																																										

## Speed -Torque Curve

