

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 182TTFW16021

Catalog No: C381B

XRI® General Purpose General Purpose Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
3600 & 3000 RPM, 182TC Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

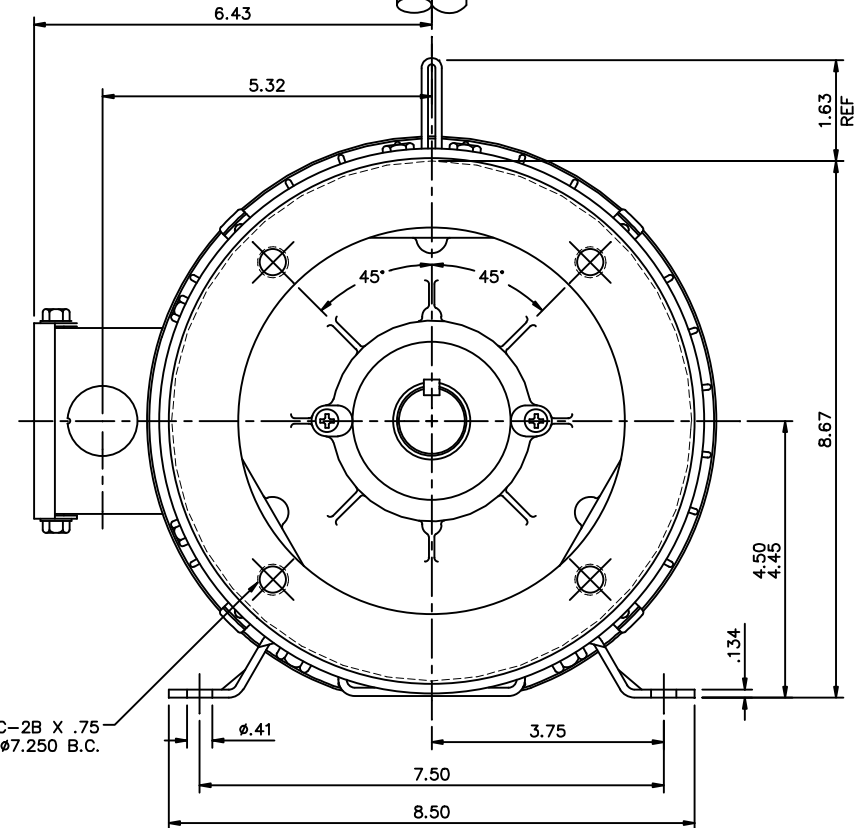
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	3 & 2 Hp
Output KW	2.2 & 1.5 kW	Voltage	230/460 & 190/380 V
Speed	3515 & 2885 rpm	Service Factor	1.15 & 1.15
Frame	182TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	86.5 & 87.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	7.6/3.8 & 6.4/3.2 A	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	K
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6205
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications


Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	3.76 Ohms	Mounting	Bolt-on Base
Motor Orientation	Horizontal Or Up Or Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	14.47 in
Frame Length	9.00 in	Shaft Diameter	1.125 in
Shaft Extension	2.88 in	Assembly/Box Mounting	F1 ONLY
Connection Drawing	005010.01ME	Outline Drawing	035770-900



(4) 1/2-13 UNC-2B X .75
DEEP ON A Ø7.250 B.C.

DASH NO.	"C"	"AD"
850	13.97	4.37
900	14.47	4.87
950	14.97	5.37
1000	15.47	5.87
1050	15.97	6.37
1100	16.47	6.87
1150	16.97	7.37

MAXIMUM FACE RUNOUT TO BE .004 T.I.R.
MAXIMUM PILOT ECCENTRICITY TO BE .004 T.I.R.
PERMISSIBLE SHAFT RUNOUT TO BE .002 T.I.R.

				TOLERANCES UNLESS SPECIFIED			DRAWN ST 12/22/2010
			DEC.	INCHES			CHK AK 12/22/2010
			.X	±.1			APPD
			.XX	±.03	TITLE	OUTLINE - 180TC FRAME	SCALE 1=2
			.XXX	±.005		TEFC - RIGID "C"	REF 035548
			.XXXX	±.0005	MAT'L	BOLT-ON BASE	FMF
NO.	REVISION	BY & DATE	CHK	ANG ±1/2"	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	CAD FILE 035770	SIZE B
			DIST NLV				DRAWING NO. 035770
							REV.

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



LINE LEADS



VOLTAGE	L1	L2	L3	JOIN & INSULATE
HIGH	T1	T2	T3	(T4,T7) (T5,T8) (T6,T9)
LOW	T1,T7	T2,T8	T3,T9	T4,T5,T6

				TOLERANCES UNLESS SPECIFIED		 MARATHON ELECTRIC	DRAWN RDW 04/12/02		
				DEC.	INCHES		CHK		
				.X	±.1		APPD		
				.XX	±.01		SCALE 1=1		
				.XXX	±.005		REF FIG.2-51		
				.XXXX	±.0005		FMF		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	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	04/12/02	CAD FILE 00501001ME		SIZE	DRAWING NO.	REV.
			DIST				A	005010-01ME	

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

CERTIFICATION DATA SHEET

Model#: 182TTFW16021 AA

WINDING#: T8290 FR 3

CONN. DIAGRAM: 005010.01ME

ASSEMBLY: F1 ONLY

OUTLINE: 035548-900

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3&2	2.24&1.49	3600	3515&2885	182TC	TEFC	K	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	7.6/3.8&6.4/3. 2	ACROSS THE LINE	CONTINUOU S	F4	1.15/1.15	40	3300

FULL LOAD EFF: 86.5&87.7	3/4 LOAD EFF: 86.1	1/2 LOAD EFF: 85.8	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88&85.7	3/4 LOAD PF: 86.3	1/2 LOAD PF: 76.4	0	SQ CAGE IND RUN	2.8 / 1.4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
4.5 LB-FT	68 / 34	12 LB-FT 267	16.5 LB-FT 367	37

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
0 dBA	10 dBA	0.33 LB-FT^2	0 LB-FT^2	0 SEC.	0	0 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	BOLT-ON	HORIZONTAL OR UP OR DOWN	FALSE	NONE	PROVISIONS ONLY	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL
6206	6205						

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

* N O T E S *	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: 06/27/2017 03:28:39 AM
FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 16-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



182TTFW16021

Submittal

Data @ 460 V

Motor Load Data

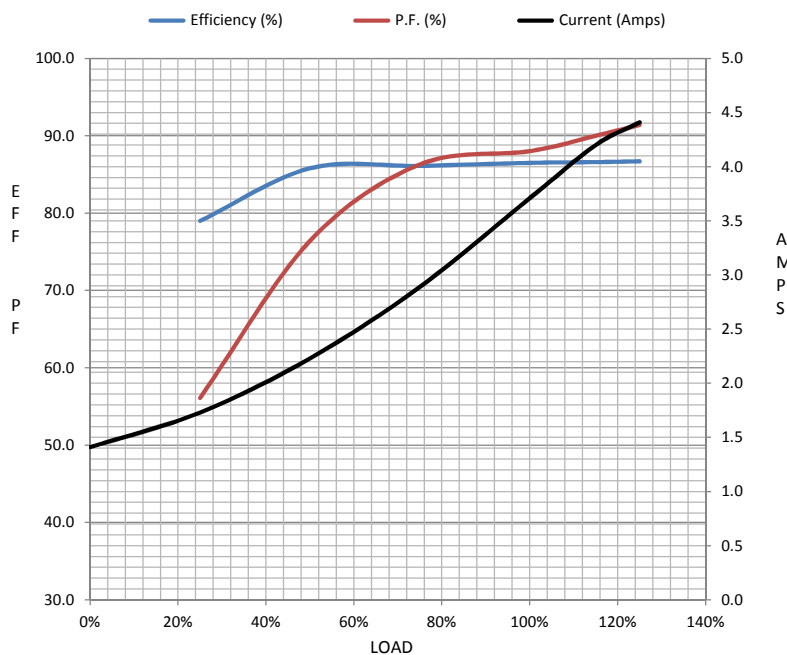
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.41	1.73	2.23	2.89	3.7	4.2	4.4	34.0	
Torque (ft-lb)	0.00	1.20	2.30	3.4	4.5	5.2	5.6	12.0	
RPM	3600	3580	3562	3542	3521	3,510	3498	0	
Efficiency (%)		79.0	85.8	86.1	86.5	86.6	86.7		
P.F. (%)	17.3	56.1	76.4	86.3	88.0	90.0	91.4	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	2700	3521	3600
Current (Amps)	34.0	31.3	20.4	3.7	1.41
Torque (ft-lb)	12.0	11.5	16.5	4.5	0.00

Information Block

HP	3.0			
Sync. RPM	3600			
Frame	180			
Enclosure	TEFC			
Construction	TFW			
Voltage	230/460#190/38(V			
Frequency	60 Hz			
Design	A			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.33 Lb-Ft²			
Ref Wdg	T8290 FR			
Sound Pressure @ 1M	79 dBA			
VFD Rating	NONE			
Outline Dwg	035548-900			
Conn. Diag	005010.01ME			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed -Torque Curve

