

Severe Duty Motors

Model No: 182THFS19101

Catalog No: W504

Severe Duty Motor, 1 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 182T Frame, TEFC

Product Information Packet: Model No: 182THFS19101, Catalog No: W504 Severe Duty Motor, 1 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 182T Frame, TEFC

Nameplate Specifications

Phase	3	Output HP	1 Hp
Output KW	0.75 kW	Voltage	460 V
Speed	870 r/min	Synchronous RPM	900 r/min
Service Factor	1.15	Frame	182T
Enclosure	Totally Enclosed Fan Cooled	Thermal Protection	No Protection
Efficiency	78.5 %	Ambient Temperature	40 °C
Frequency	60 Hz	Current	1.9 A
Power Factor	62	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	G	Drive End Bearing Size	6206
Opp Drive End Bearing Size	6205	UL	Recognized
CSA	Y	CE	Y
IP Code	56	Number of Speeds	1
Hazardous Location	DIVISION 2 T2B		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	8	Rotation	Reversible
Resistance Main	16 O	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	15.19 in
Frame Length	5.75 in	Shaft Diameter	1 1/8 in
Shaft Extension	2.78 in	Assembly/Box Mounting	F1/F2 Capable
Inverter Load	Constant 20:1		

Drawings

Connection Drawing	A-EE7300	Outline Drawing	A-SS68446-575
--------------------	----------	-----------------	---------------

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

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

IF MOTOR HAS 9 LEADS

T1(U1)

T1(U1)

T1(U1)

L1

T2(V1)

T2(V1)

T2(V1)

L2

T3(W1)

T3(W1)

T3(W1)

L3

IF MOTOR HAS 6 LEADS

T1(U1)

T1(U1)

L1

T2(V1)

T2(V1)

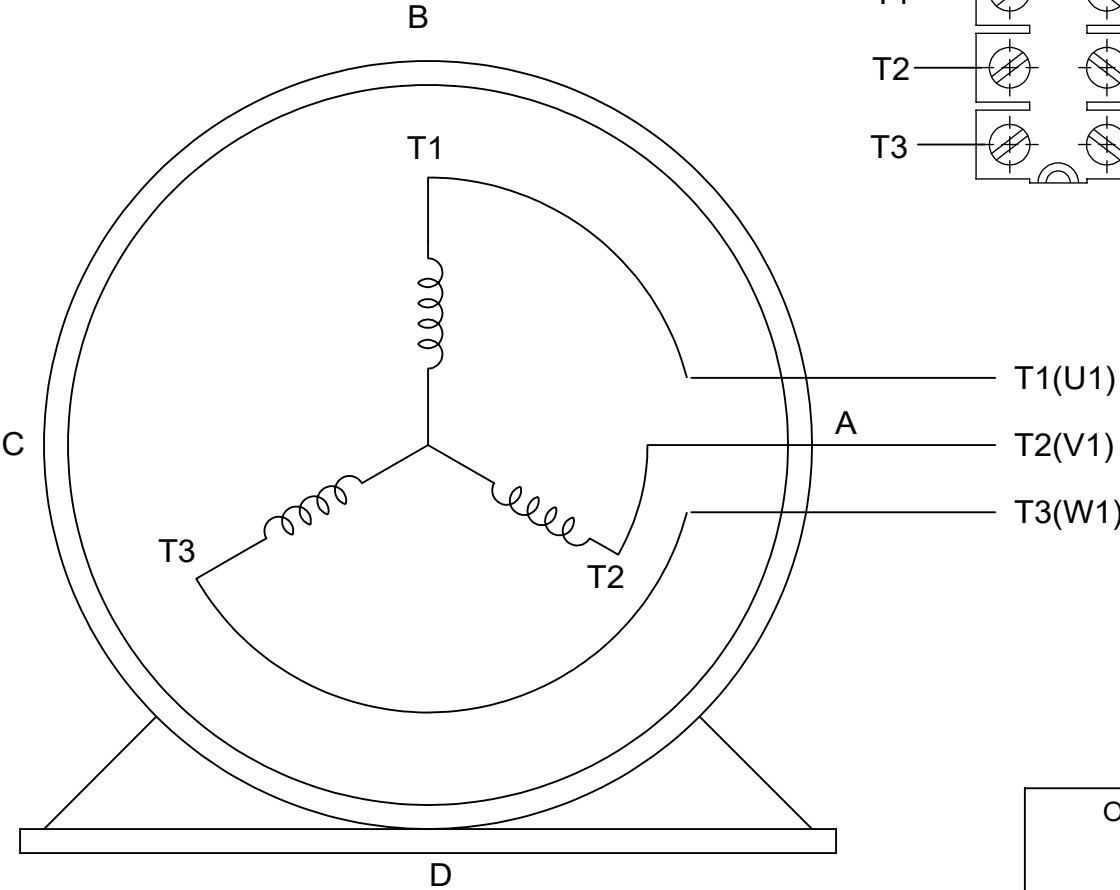
L2

T3(W1)

T3(W1)

L3

A-9806 DECAL



VIEW OF TERMINAL END

OPTIONAL CORD CONNECTION	
L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AD	REVISION BY SB	REV DATE/© DATE 08/01/2025
REQUEST NUMBER CR-0023654	APPROVED BY SBD	DATE 08/01/2025
REQUEST NUMBER DESCRIPTION DRAWING TITLE BLOCK UPDATED		
COPYRIGHT (PER REVISION DATE) MARATHON ELECTRIC, LLC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF MARATHON ELECTRIC, LLC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.		

PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY DA	DATE 03-26-1993
APPROVED BY TB	
DATE 03-26-1993	REFERENCE
THIRD ANGLE PROJECTION	

marathon™		
DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR		
MATERIAL		PROCESS/FINISH
SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1

Data Sheet

Date: 16-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



182THFS19101

Submittal

Data @ 460 V

Motor Load Data

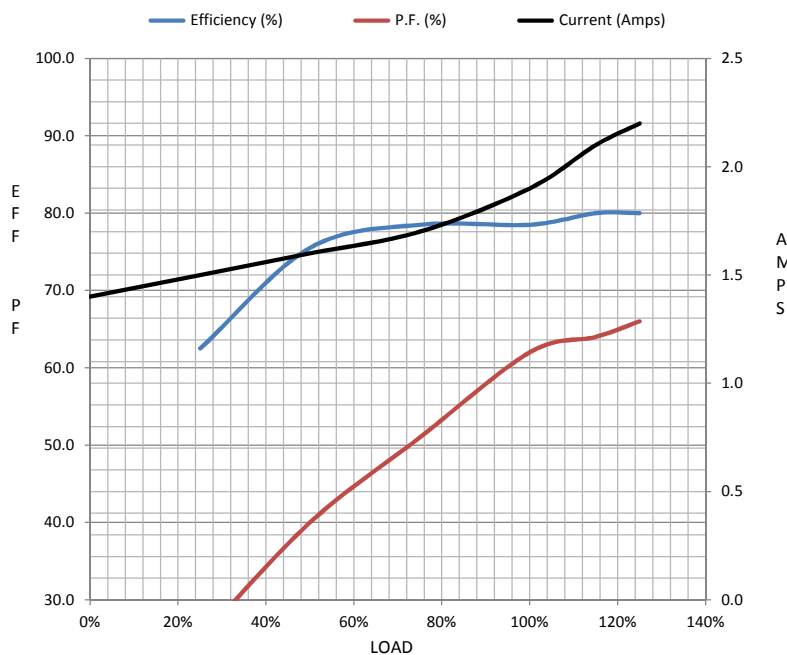
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.40	1.50	1.60	1.70	1.90	2.10	2.20	8.2	
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	7.0	7.8	8.5	
RPM	900	892	885	878	870	865	860	0	
Efficiency (%)		62.5	75.5	78.5	78.5	80.0	80.0		
P.F. (%)	9.5	25.0	40.0	51.0	62.0	64.0	66.0	42.0	

Motor Speed Data

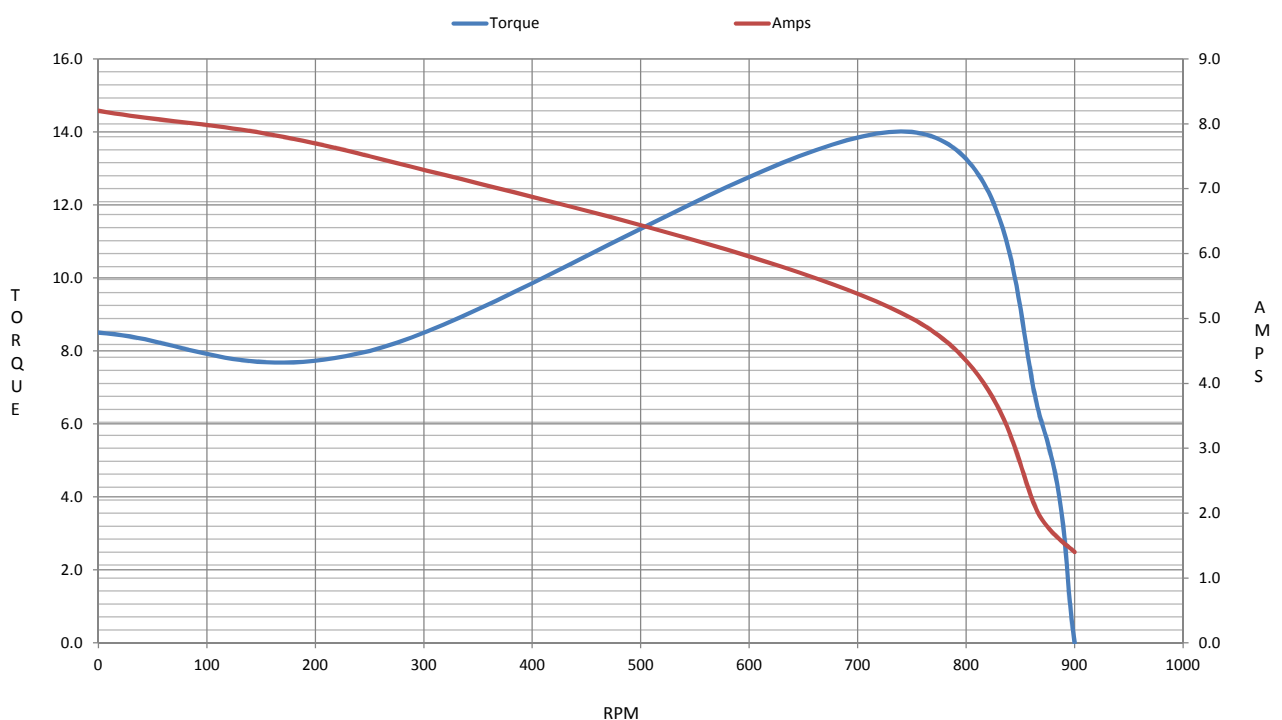
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	250	750	870	900
Current (Amps)	8.2	7.5	5.0	1.90	1.40
Torque (ft-lb)	8.5	8.0	14.0	6.0	0.00

Information Block

HP	1.0			
Sync. RPM	900			
Frame	182			
Enclosure	TEFC			
Construction	TFS			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.32 Lb-Ft ²			
Ref Wdg	182814 NONE			
Sound Pressure @ 1M	52 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	A-SS68446-575			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
10.2240	6.2480	21.0160	24.7080	183.1800



Speed - Torque Curve



CERTIFICATION DATA SHEET

Model#: 182THFS19101 AA
 CONN. DIAGRAM: A-EE7300
 OUTLINE: A-SS68446-575

WINDING#: 182814 NONE 2
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1	0.75	900	870	182T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	1.9	LINE OR INVERTER	CONTINUOU S	F3	1.15	40	3300

FULL LOAD EFF: 78.5	3/4 LOAD EFF: 78.5	1/2 LOAD EFF: 75.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 62	3/4 LOAD PF: 51	1/2 LOAD PF: 40	75.5	SQ CAGE INV RATED	1.4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
6 LB-FT	8.2	8.5 LB-FT 142	14 LB-FT 233	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
52 dBA	62 dBA	0.32 LB-FT^2	- LB-FT^2	20 SEC.	4	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

*
N
O
T
E
S
*

INVERTER TORQUE: CONSTANT 20:1
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 01:13:05 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.