PRODUCT INFORMATION PACKET

Model No: 213TTFW16020
Catalog No: E2140
7.50 HP General Purpose Motor, 3 phase, 3600 RPM, 575 V, 213T Frame, TEFC
General Purpose Motors

marathon® Motors

Nameplate Specifications

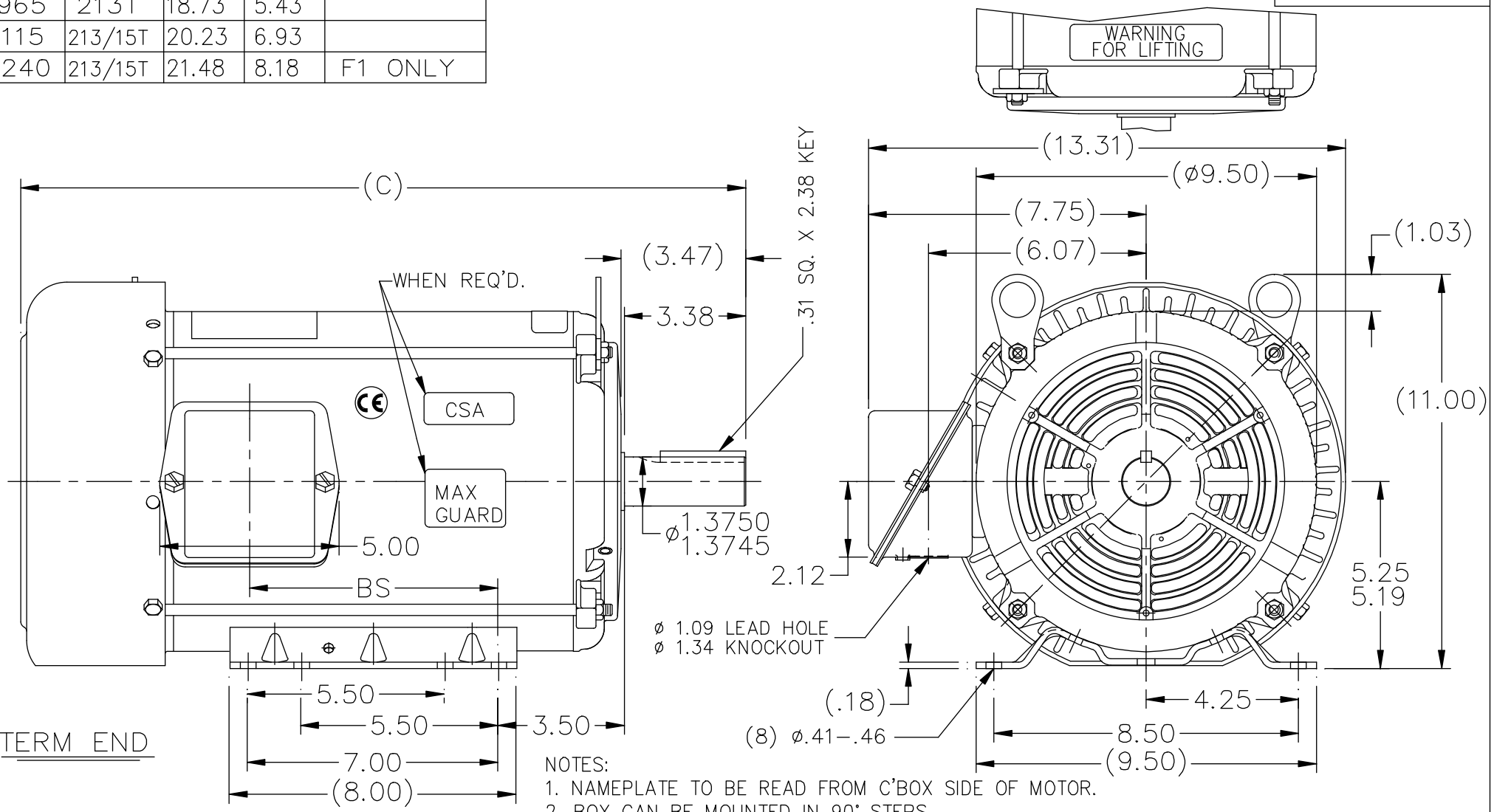
Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	575 V
Current	7.1 A	Speed	3540 rpm
Service Factor	1.15	Phase	3
Efficiency	90.2 %	Power Factor	87
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Frame	213T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6307	Opp Drive End Bearing Size	6206
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	1.163 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	20.23 in
Frame Length	11.15 in	Shaft Diameter	1.375 in
Shaft Extension	3.47 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	A-SS89166-1115	Connection Drawing	A-EE7300U

DASH	FR.	C	BS	MOUNTING
965	213T	18.73	5.43	
1115	213/15T	20.23	6.93	
1240	213/15T	21.48	8.18	F1 ONLY

SS89166



NOTES:
1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.
3. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. (EXCEPT AS NOTED)

NO.	REVISION	BY & DATE	CHK

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.03
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

MARATHON ELECTRIC

TITLE OUTLINE
210T FR. – BB – TS – TEFC – R/S

MAT'L.

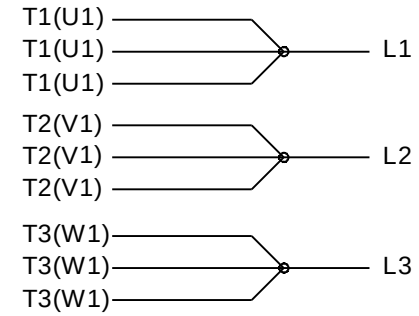
FINISH

DRAWN RJW 02–09–2005
CHK ML 02–09–2005
APPD LC 02–09–2005
SCALE 1=4
REF MU64658
FMF
PREV SS88286

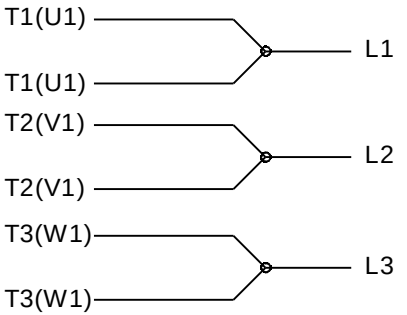
RFP 02–09–2005
DIST LB
CAD FILE SS89166

SIZE	DRAWING NO.	PAGE	OF	REV.
A	SS89166			

IF MOTOR HAS 9 LEADS

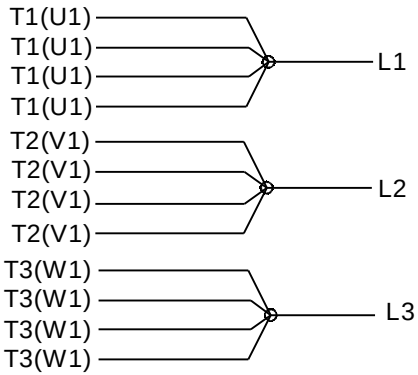


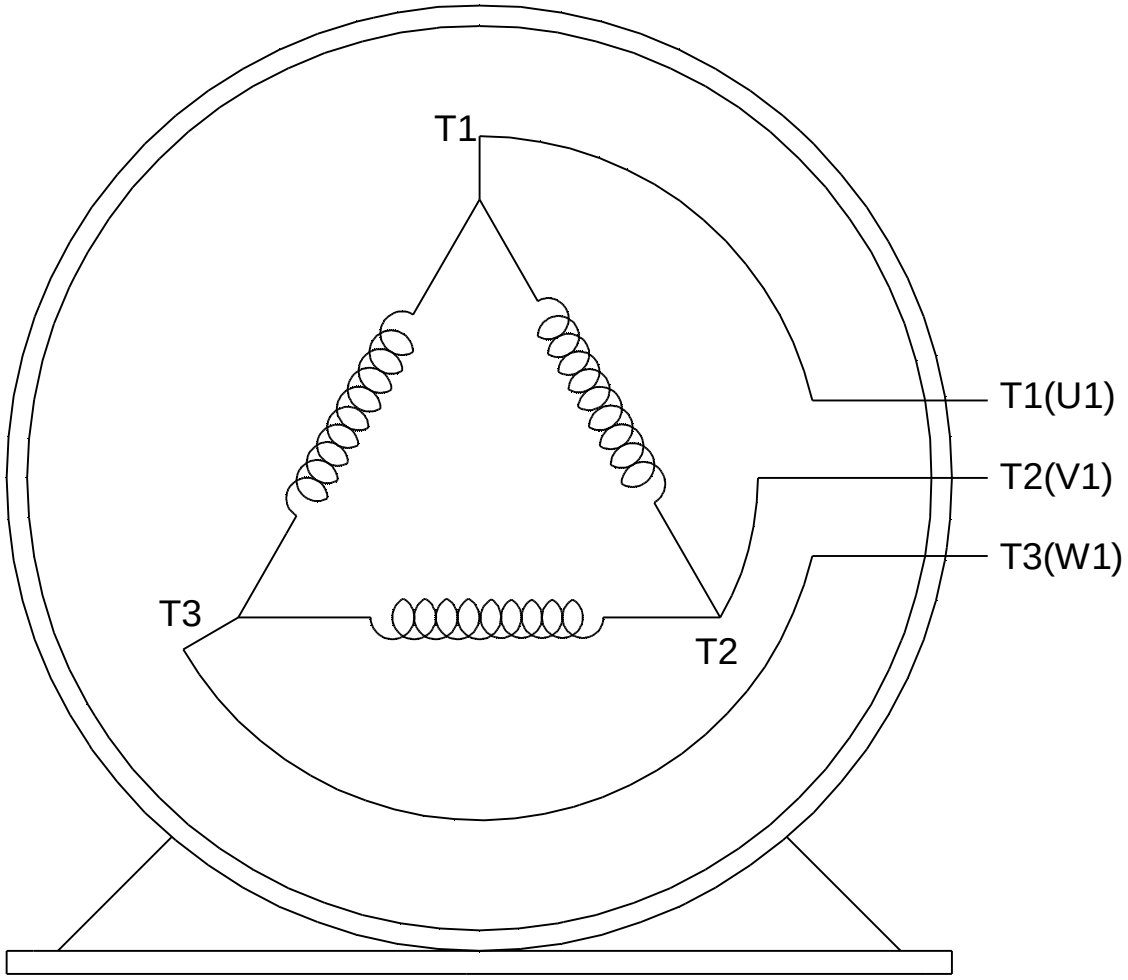
IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS





VIEW OF TERMINAL END

DRAWING REVISION: L	REVISION BY: AJW	DATE: 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY: DRS	Regal Beloit America, Inc.
ECO: ECO-0077067	APPROVED BY: EWH	DATE: 05-05-2015	DEC. .X ±0.1 [±2.5] ±7' 30"	DATE: 09-27-1996	
ECO DESCRIPTION: UPDATED TO SOLIDWORKS			INCH .XX ±0.02 [±0.51]	APPROVED BY: GK	DESCRIPTION: CONN DIAGRAM-EXTERNAL
			XXX ±0.005 [±0.127]	DATE: 09-30-1996	3Ø SINDLE VOLTAGE
			.XXXX ±0.0005 [±0.0127]	REFERENCE	MATERIAL / PROCESS/FINISH
			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°	THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7300U / SHEET: 1 OF 1
			CORNER FILLETS: R.02 [.51]		
			MACHINED SURFACES: 200 INCH / 5.1 mm		
			mm SHOWN IN [BRACKETS]		

CERTIFICATION DATA SHEET

Model#:	213TTFW16020 AA	**WINDING#:**	K213269 R3 3
CONN. DIAGRAM:	A-EE7300U	**ASSEMBLY:**	F1 ONLY
OUTLINE:	A-SS89166-1115		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.6	3600	3540	213T	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	7.1	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 90.2	3/4 LOAD EFF: 89.5	1/2 LOAD EFF: 86.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 87	3/4 LOAD PF: 83	1/2 LOAD PF: 74.5	89.5	SQ CAGE INV RATED	2.4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
11.1 LB-FT	50.8	24 LB-FT 216	38 LB-FT 342	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.55 LB-FT^2	12 LB-FT^2	15 SEC.	2	140 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	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6307	BALL 6206	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL

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 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

*
NOTES
*

DATE: 06/22/2017 05:49:51 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 29-06-2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

213TTFW16020

Submittal

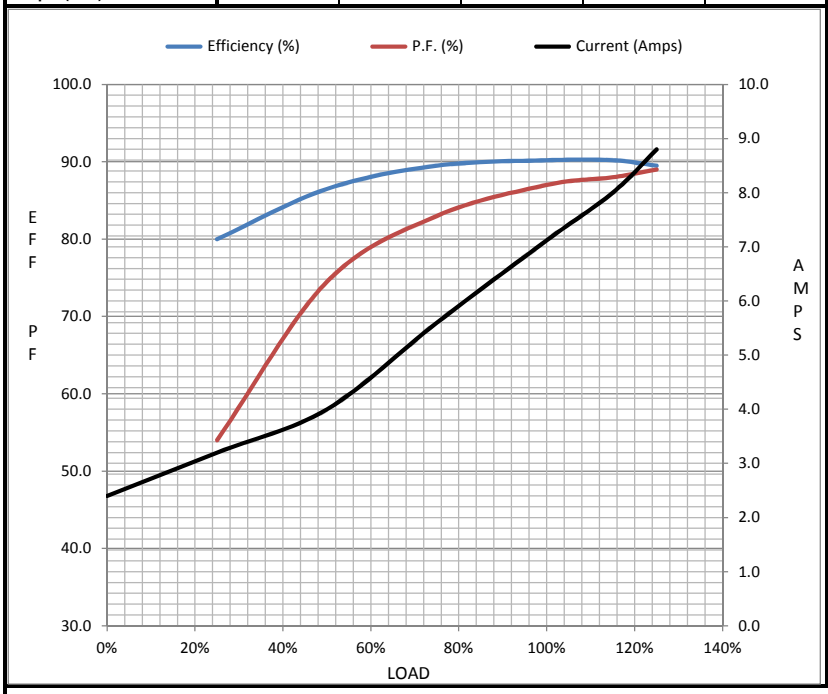
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	2.40	3.2	4.0	5.6	7.1	8.0	8.8	50.8	
Torque (ft-lb)	0.00	2.50	5.5	8.5	11.1	12.5	14.0	24.0	
RPM	3600	3585	3575	3560	3540	3,535	3530	0	
Efficiency (%)		80.0	86.5	89.5	90.2	90.2	89.5		
P.F. (%)	9.0	54.0	74.5	83.0	87.0	88.0	89.0	40.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3250	3540	3600
Current (Amps)	50.8	45.6	32.0	7.1	2.40
Torque (ft-lb)	24.0	22.0	38.0	11.1	0.00



Information Block

HP	7.5	
Sync. RPM	3600	
Frame	213	
Enclosure	TEFC	
Construction	TFW	
Voltage	575	V
Frequency	60	Hz
Design	A	
LR Code letter	H	
Service Factor	1.15	
Temp Rise @ FL	40	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.55	Lb-Ft²
Ref Wdg	K213269 R3	
Sound Pressure @ 1M	72	dBA
VFD Rating	CONSTANT 10:1	
Outline Dwg	A-SS89166-1115	
Conn. Diag	A-EE7300U	

Additional Specifications:

0

365THFS8036

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
1.0750	0.7320	3.5910	3.7390	126.3940

Speed -Torque Curve