

# PRODUCT INFORMATION PACKET

Model No: 145TTFR16036  
Catalog No: GT3104  
1 1/2,1800,TEFC,145JM,3/60/230/460  
JM



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### Nameplate Specifications

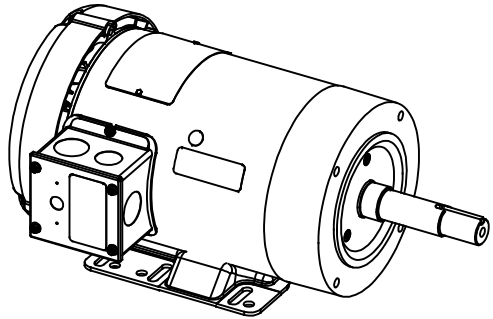
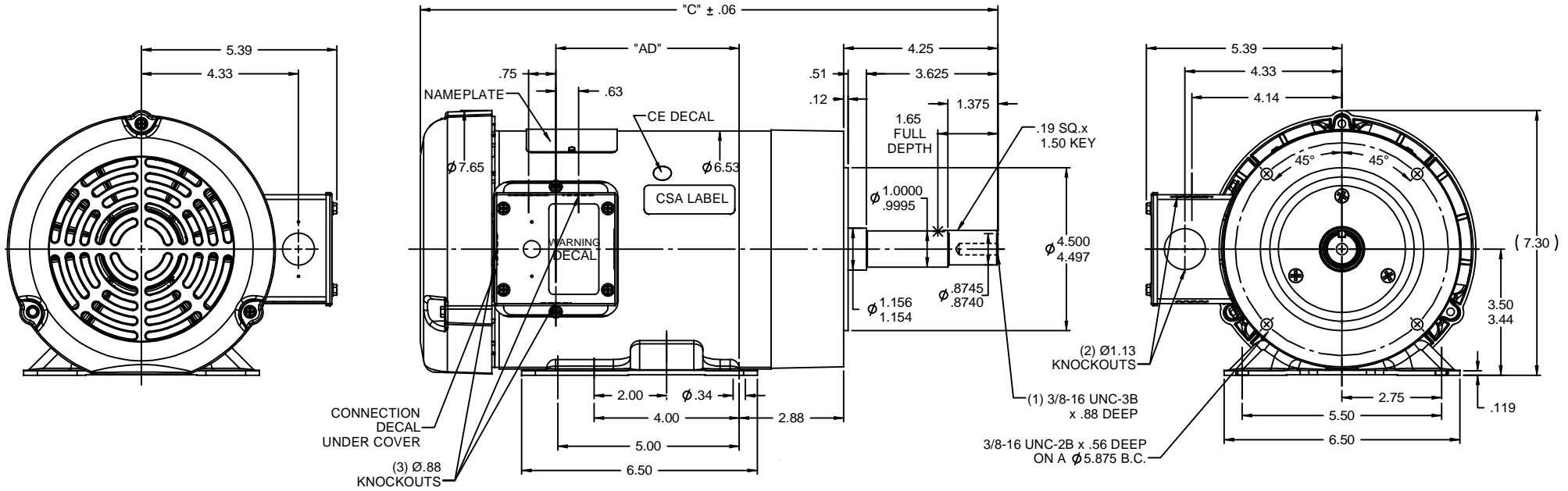
Output HP	<b>1.50 Hp</b>	Output KW	<b>1.1 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>4.8/2.4 A</b>	Speed	<b>1750 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>86.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>L</b>	Frame	<b>145JM</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6206</b>
Opp Drive End Bearing Size	<b>6203</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>43</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>Horizontal</b>
Drive End Bearing	<b>Ball</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Rolled Steel</b>	Shaft Type	<b>JM</b>
Overall Length	<b>15.92 in</b>	Frame Length	<b>7.50 in</b>
Shaft Diameter	<b>0.875 in</b>	Shaft Extension	<b>4.25 in</b>
Assembly/Box Mounting	<b>F1 Only</b>		
Outline Drawing	<b>028958-750</b>	Connection Diagram	<b>005010.01ME</b>

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DASH #	"C"	"AD"
700	15.42	4.55
750	15.92	5.05
800	16.42	5.55

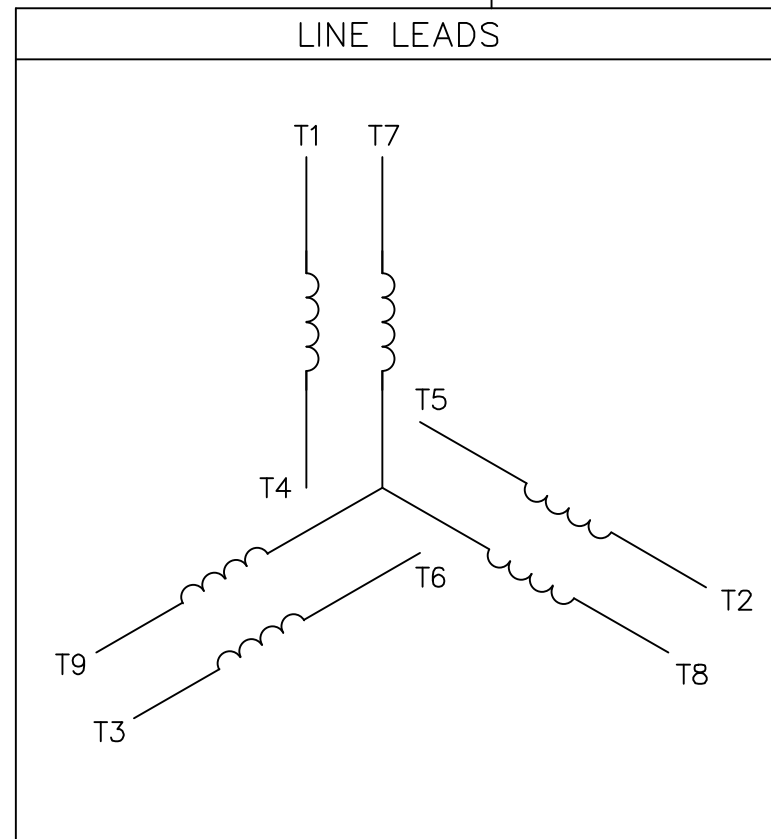
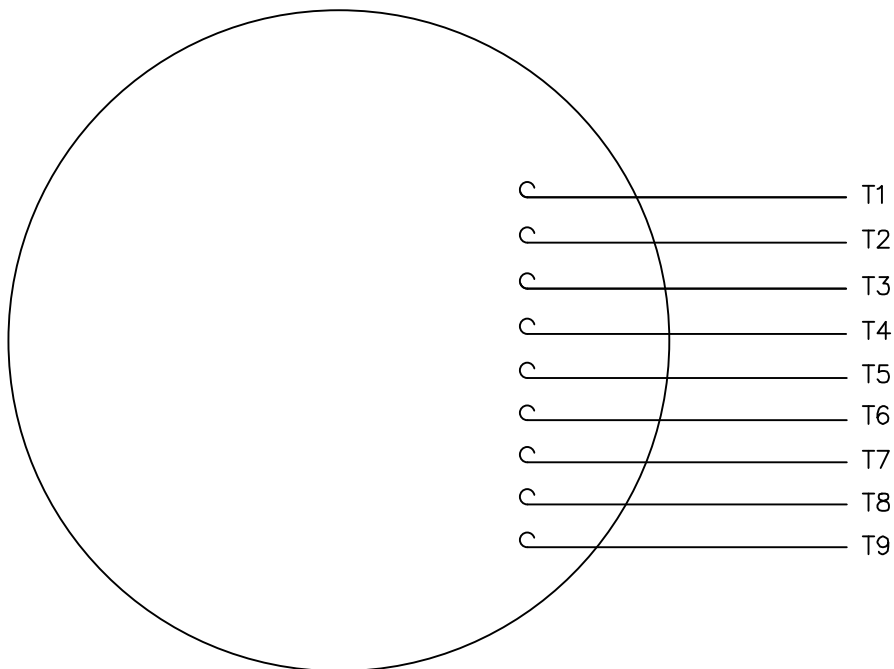
NOTE:  
 1) GASKETS THROUGHOUT  
 MAXIMUM FACE RUNOUT TO BE .004 T.I.R  
 MAXIMUM PILOT ECCENTRICITY .004 T.I.R  
 PERMISSIBLE SHAFT RUNOUT .002 T.I.R

NO		REVISION	BY & DATE	CHK	ANG	FINISH	FINISH	PAGE	OF	
				RFP		PREV				
THIRD ANGLE PROJECTION								SIZE	DRAWING NO	REV
				NETWORK FILE NAME		B		028958		

TOLERANCES UNLESS SPECIFIED		DRAWN VS 08/13/09	
DEC	INCHES	CHK	
x	±.1	APPR VS 08/13/09	
.xx	±.03	SCALE 3:8	
.xxx	±.005	REF 028950	
.xxxx	±.0005	FMF	

MARATHON ELECTRIC		DRAWN VS 08/13/09	
TITLE OUTLINE - 140JM FRAME		CHK	
TEFC - RIGID		APPR VS 08/13/09	
MATL		SCALE 3:8	
		REF 028950	
		FMF	

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



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	TITLE		SCALE 1=1	
		.XXX	±.005	EXTERNAL WIRING DIAGRAM 3 PHASE W/O PROTECTOR		REF FIG.2-51	
		.XXXX	±.0005	MAT'L.		FMF	
				DECAL - 004014		PREV	
NO.	REVISION	BY & DATE	CHK	ANG	±1/2'	FINISH	
			RFP	04/12/02		CAD FILE	00501001ME
			DIST			SIZE	A
						DRAWING NO.	005010-01ME
						REV.	

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**CERTIFICATION DATA SHEET**

Model#: 145TTFR16036 AA      WINDING#: T634341 FR 3  
 CONN. DIAGRAM: 005010.01ME      ASSEMBLY: F1 ONLY  
 OUTLINE: 028958-750

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1 1/2	1.12	1800	1750	145JM	TEFC	L	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	4.8/2.4	ACROSS THE LINE	CONTINUOUS	F4	1.15	40	3300

FULL LOAD EFF: 86.5	3/4 LOAD EFF: 87.2	1/2 LOAD EFF: 84.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 67.7	3/4 LOAD PF: 67.3	1/2 LOAD PF: 55.2	0	SQ CAGE IND RUN	2.5 / 1.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
4.5 LB-FT	37 / 18.5	17.2 LB-FT 382	20.4 LB-FT 453	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
0 dBA	10 dBA	0.14 LB-FT^2	0.1 LB-FT^2	10 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	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	JM	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6206	6203						

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  
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\*

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: 06/23/2017 07:14:30 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

148TFR16036



Submittal  
Data @ 460 V

Date: 6/29/2017

Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Submitted by: FAREEDA DUDEKULA

Load	Motor Load Data							
	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.23	1.33	1.50	1.81	2.15	2.32	2.52	18.5
Torque (ft-lb)	0.00	1.10	2.25	3.4	4.5	5.2	5.6	17.2
RPM	1800	1785	1772	1760	1750	1738	1732	0
Efficiency (%)		74.4	84.0	87.2	86.5	86.0	85.5	
P.F. (%)	9.9	35.5	55.0	63.0	67.7	75.0	80.0	48.0

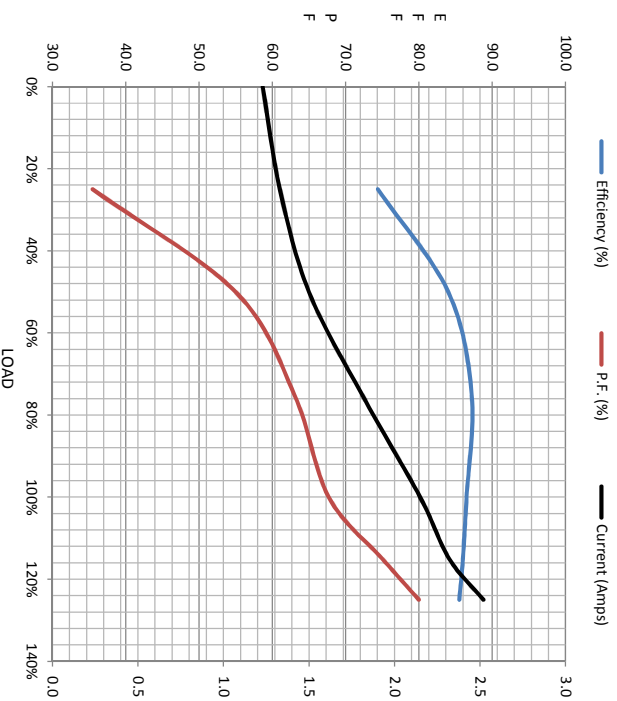
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	900	1600	1750	1800
Current (Amps)	18.5	16.1	12.1	2.15	1.23
Torque (ft-lb)	17.2	16.0	20.4	4.5	0.00

Information Block

HP	1.5
Sync. RPM	1800
Frame	140
Enclosure	TEFC
Construction	TFR
Voltage	230/460 V
Frequency	60 HZ
Design	B
LR Code letter	L
Service Factor	1.15
Temp Rise @ FL	45 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Motor/Shaft wkt	0.14 Lb-Ft
Rel Wdg	T694341 FR
Sound Pressure @ 1M	65 dBA
VFD Rating	NONE
Outline Dwg	028958-750
Conn. Diag	005010.01ME
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed - Torque Curve

