

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 213TTGN16027

Catalog No: C325B

Hazardous Duty® Explosion Proof Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 213TC Frame, EPFC



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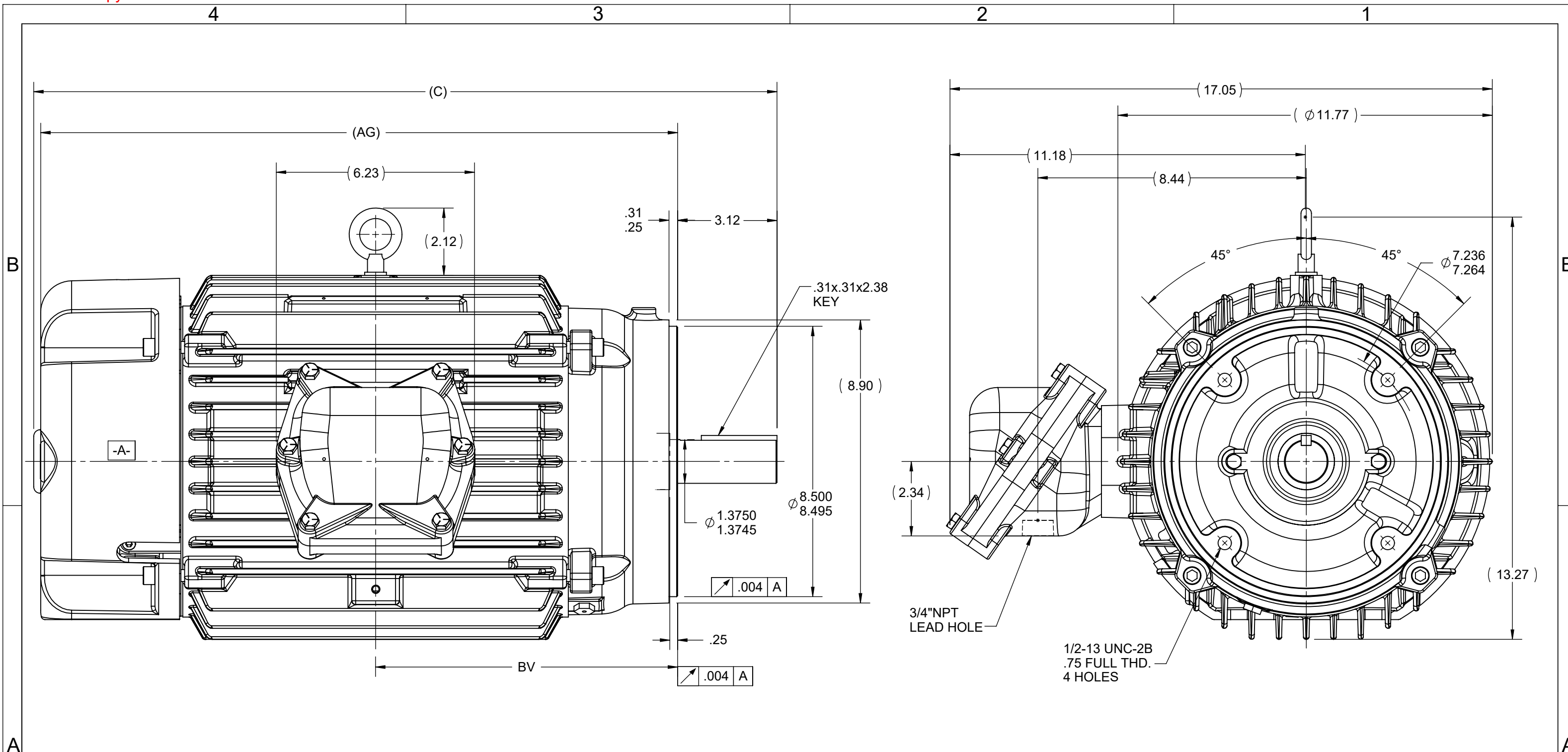
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	230/460 & 190/380 V
Speed	1765 & 1475 rpm	Service Factor	1.0 & 1.0
Frame	213TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	91.7 & 91 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	19.2/9.6 & 17.4/8.7 A	Power Factor	79.2
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	H
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6208
UL	UL Listed; also, UL Certified for Canada	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR D CL II GR F&G T3B

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	1.18 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	23.45 in
Frame Length	12.12 in	Shaft Diameter	1.375 in
Shaft Extension	3.12 in	Assembly/Box Mounting	F1 Only
Outline Drawing	037703-1212	Connection Drawing	EE7308T



NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED IN OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. THIS MODIFICATION CAN BE PERFORMED ONLY BY THE ORIGINAL EQUIPMENT MANUFACTURER, OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. CATEGORY PTKQ, TITLED "MOTOR AND ENERATORS,.REBUILT FOR USE IN HAZARDOUS LOCATION".
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DRAWING REVISION D	REVISION BY PB	REV DATE/© DATE 05/30/2022
REQUEST NUMBER NMR-0214266	APPROVED BY PB	DATE 05/30/2022
REQUEST NUMBER DESCRIPTION UPDATE THE DRAWING TEMPLATE		
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TOLERANCES (EXCEPT AS NOTED):			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7' 30"
.XX	±0.03	[±0.8]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°			
CORNER FILLETS: R.02 [.5]			
MACHINED SURFACES: 200/5.1 INCH/mm			
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY			

DRAWN BY VV
DATE 06/05/08
APPROVED BY
DATE
REFERENCE
THIRD ANGLE PROJECTION

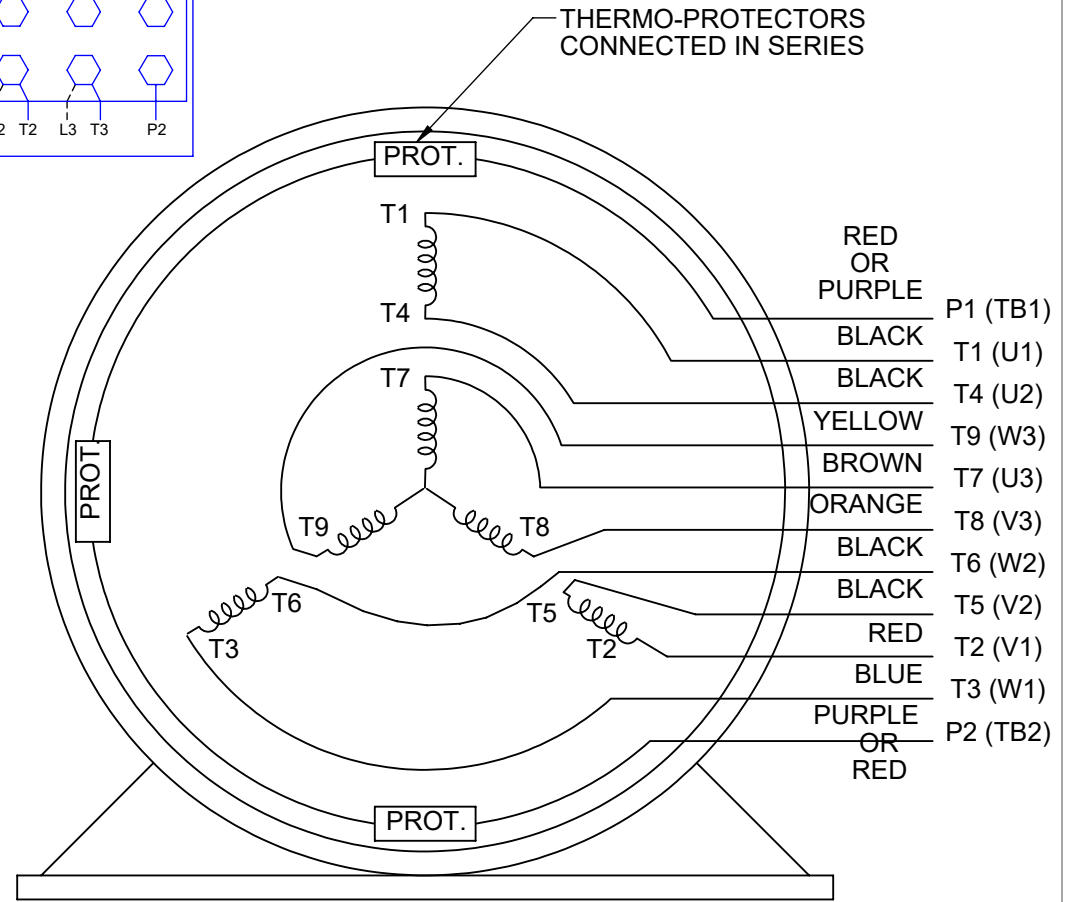
		Regal Beloit America, Inc.	
DESCRIPTION			
OUTLINE			
213T/215T FRAME- EPFC - C-FACE			
MATERIAL		PROCESS/FINISH	
STANDARD WITH BASE			
SIZE	DRAWING NUMBER	SHEET	
B	037703	1 OF 1	

1212	213/215	23.45	20.11	9.5
DASH	FRAME	C	AG	BV

HIGH VOLTAGE

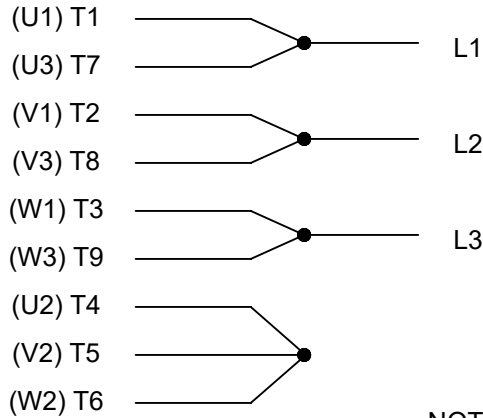


**THREE PHASE
DUAL VOLTAGE MOTOR**



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE



VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
 ORDER #: _____ REFERENCE MODEL #: 213TTGN16027
 CONN. DIAGRAM: EE7308T CAT #: C325B
 OUTLINE: 037703-1212 CUSTOMER PART #: _____
 WINDING: K2134279 NONE 2 MOUNTING: F1 ONLY
 SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	1800	1765	213TC	TEFC	TFN	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	19.2/9.6&17.4/8.7	ACROSS THE LINE	CONT	B	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	92.2	1/2 LD EFF	91.6	GTD EFF	ELECT. TYPE
F.L. PF	79.2	3/4 LD PF	72.9	1/2 LD PF	61.1	91.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
22.3 LB-FT	67.5	52.9 LB-FT 237%	75.0 LB-FT 336%	50

@ 3 FT.	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
62 dBA	71 dBA	0.85 LB-FT ²	45 LB-FT ²	25 SEC.	2	140 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	NO	DOF CL I GR D CL II GR	NO	NONE	GRAY (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6309	6208						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.76	1.108	2.458	3.173	50.414	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE					
	INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE					
	NONE NONE PPR					

PREPARED BY: FAREEDA DUDEKULA	BRAKE: NONE
DATE: 11/2/2018	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
	UL: NONE

FORM: 3531 REV_4 2/27/06

Data Sheet

Date: 11/2/2018
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



213TTGN16027

Submittal

Data @ 460 V

Motor Load Data

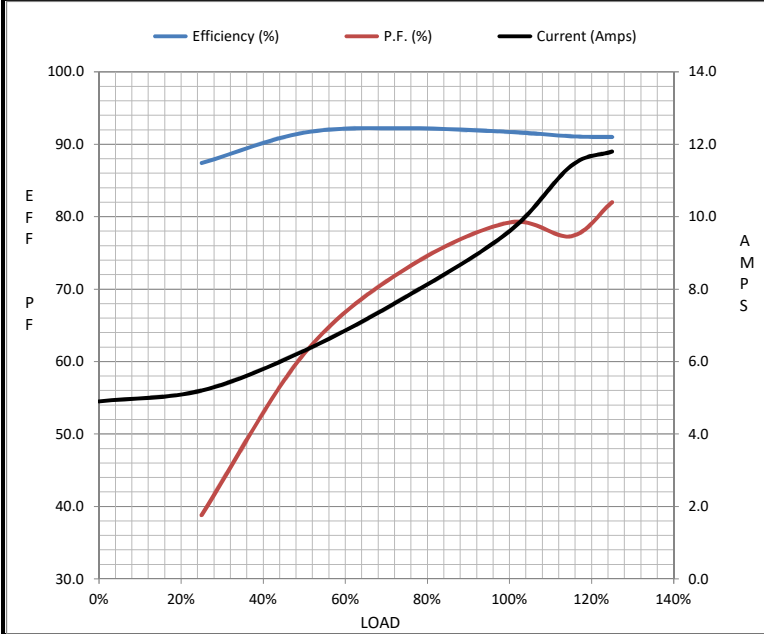
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.9	5.2	6.3	7.8	9.6	11.4	11.8	67.5
Torque (ft-lb)	0.00	5.5	11.0	16.6	22.3	25.5	28.0	52.9
RPM	1800	1792	1784	1775	1765	1,765	1756	0
Efficiency (%)		87.4	91.6	92.2	91.7	91.1	91.0	
P.F. (%)	4.7	38.8	61.1	72.9	79.2	77.3	82.0	42.6

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1765	1800
Current (Amps)	67.5	57.0	41.0	9.6	4.9
Torque (ft-lb)	52.9	49.0	75.0	22.3	0.00

Information Block

HP	7.5			
Sync. RPM	1800			
Frame	213182TFC6080			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	50 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.85 Lb-Ft ²			
Ref Wdg	K2134279 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	037703-1212			
Conn. Diag	EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7600	1.1080	2.4580	3.1730	50.4140



Speed - Torque Curve

