

# PRODUCT INFORMATION PACKET



Model No: 824530.00  
Catalog No: 824530.00  
7.50 HP Severe Duty Motor, 3 phase, 1800 RPM, 230/460 V, 213T Frame, TEAO  
Severe Duty Motors



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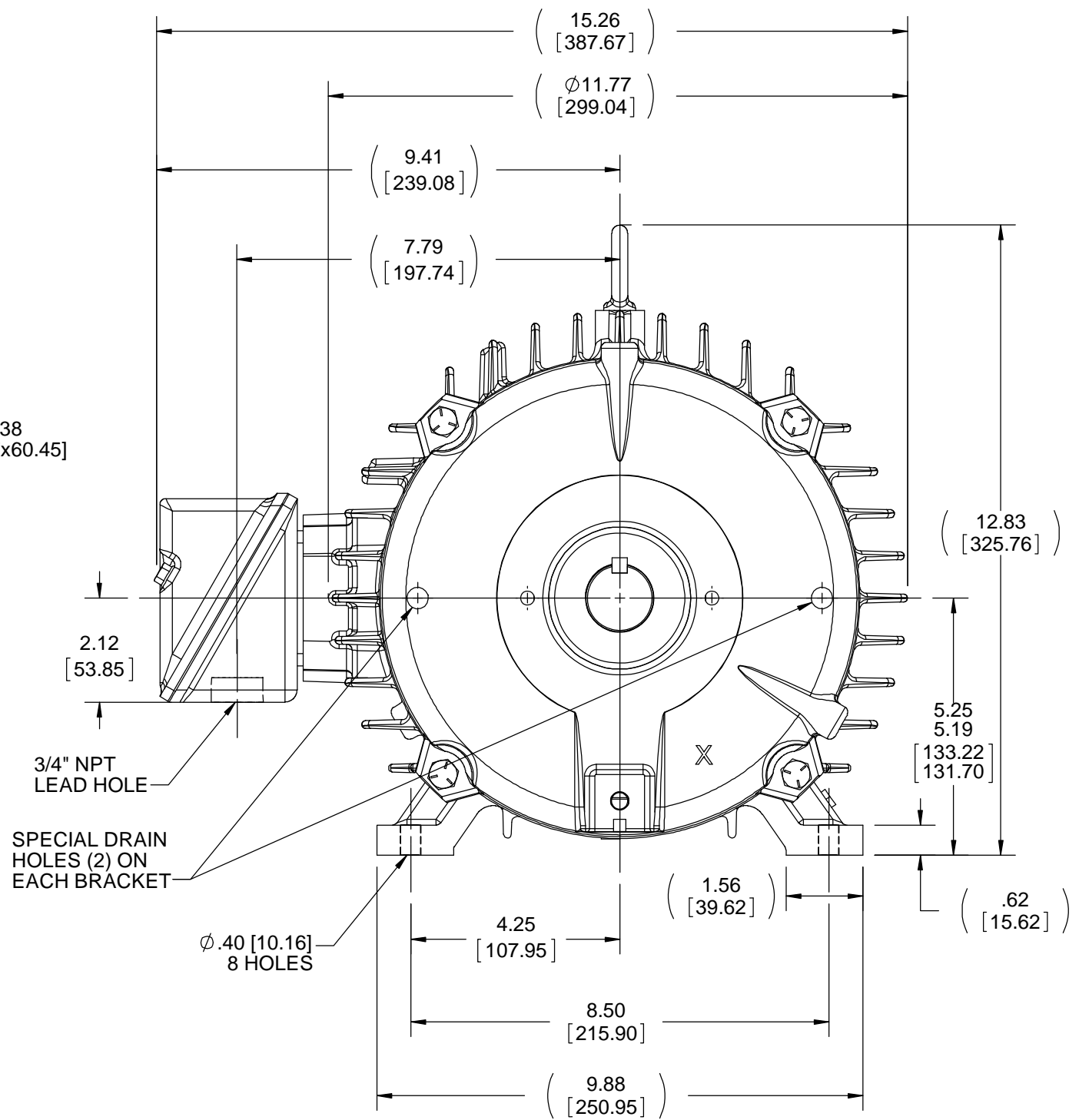
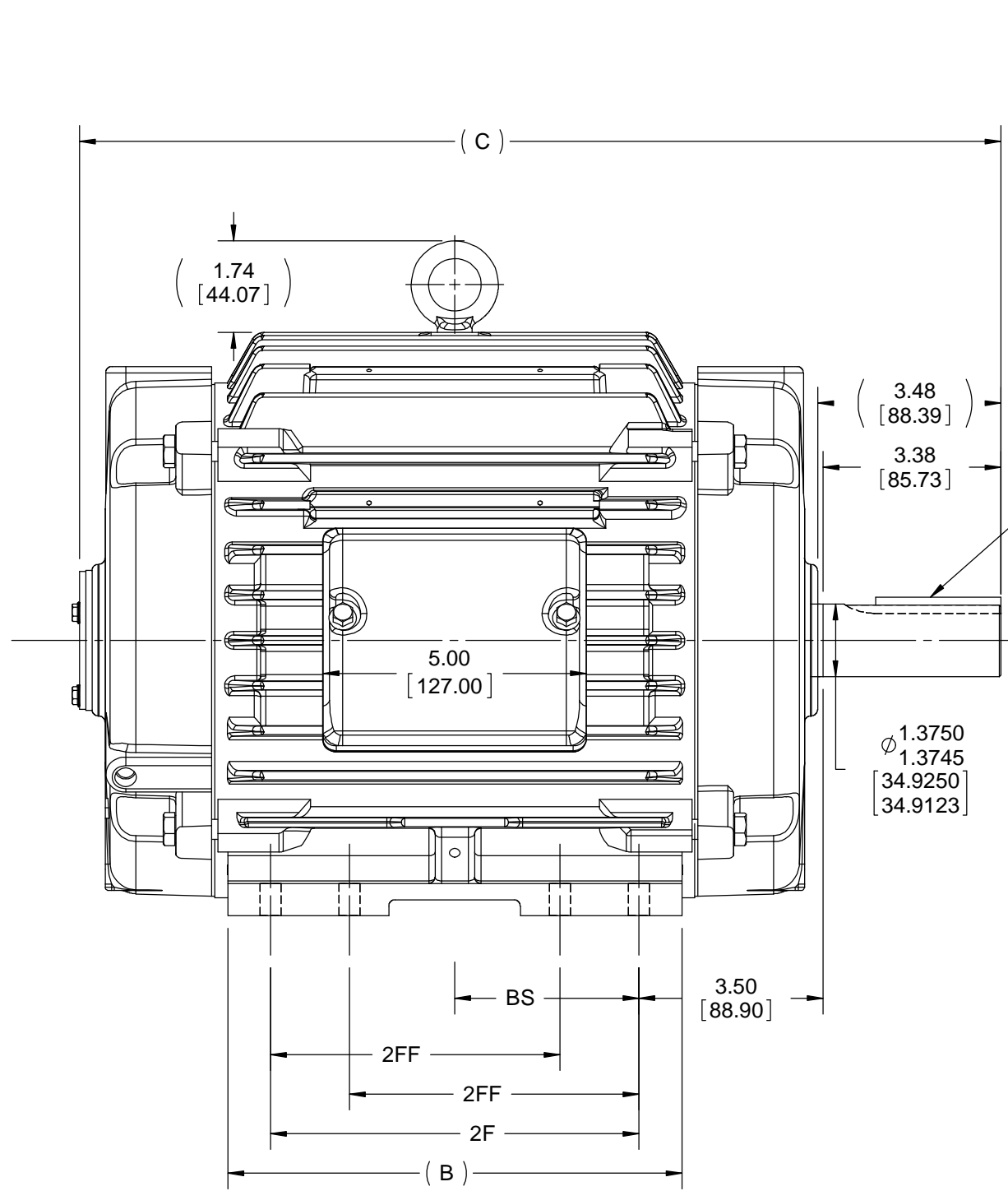
### Nameplate Specifications

Output HP	<b>7.50 Hp</b>	Output KW	<b>5.6 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>19.2/9.6 A</b>	Speed	<b>1770 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Power Factor	<b>80</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>H</b>
Frame	<b>213T</b>	Enclosure	<b>Totally Enclosed Air Over</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6307</b>	Opp Drive End Bearing Size	<b>6208</b>
UL	<b>No</b>	CSA	<b>N</b>
CE	<b>N</b>	IP Code	<b>55</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>1.17 Ohms</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>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>17.47 in</b>
Frame Length	<b>9.12 in</b>	Shaft Diameter	<b>1.375 in</b>
Shaft Extension	<b>3.38 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Outline Drawing	<b>038188-912</b>	Connection Drawing	<b>A-EE7308-LE</b>

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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°.
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

1212	215	20.51 [520.95]	11.76 [298.70]	10.00 [254.00]	7.00 [177.80]	5.00 [127.00]
912	213/215	17.51 [444.75]	8.63 [219.20]	7.00 [177.80]	5.50 [139.70]	3.50 [88.90]
DASH	FRAME	C	B	2F	2FF	BS

DRAWING REVISION A	REVISION BY MVG	DATE 10/10/2017
ECO ECO-0128141	APPROVED BY ST	DATE 10/10/2017
ECO DESCRIPTION <b>NEW DRAWING</b>		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

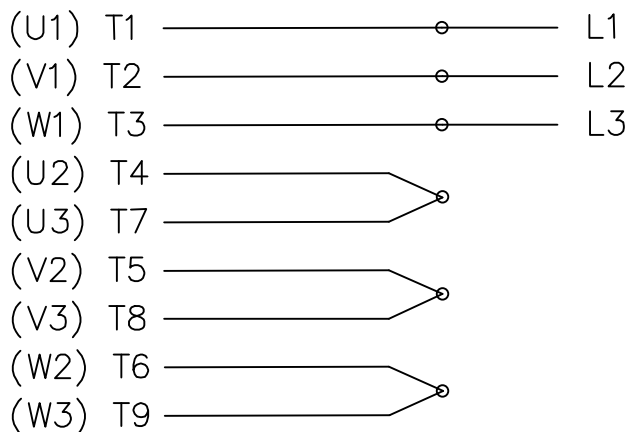
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45° CORNER FILLETS: R.02 [0.51] MACHINED SURFACES: 125 INCH 3.2 mm SHOWN IN [BRACKETS]

DRAWN BY MVG	DATE 10/10/2017
APPROVED BY ST	DATE 10/10/2017
REFERENCE 013907	THIRD ANGLE PROJECTION

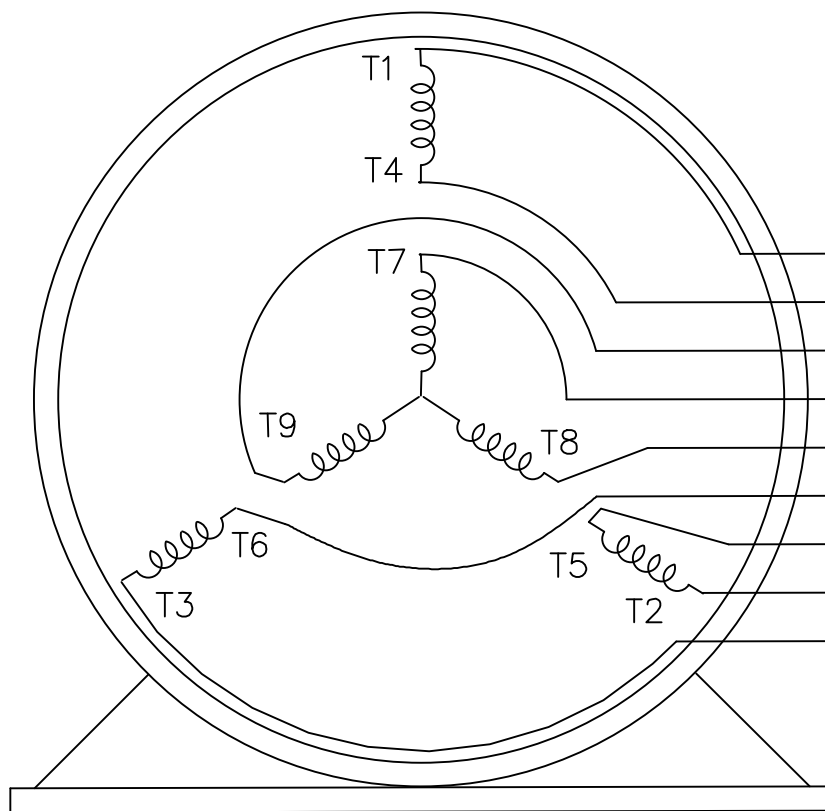
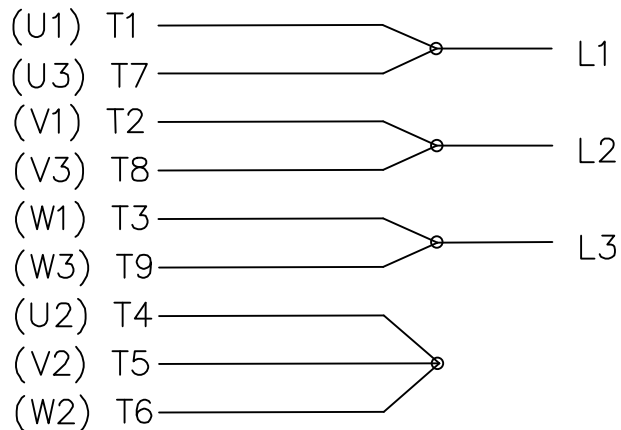
<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 210 FR-STD-STD-T-TENV	PROCESS/FINISH
MATERIAL	SIZE <b>B</b>
DRAWING NUMBER <b>038188</b>	SHEET 1 OF 1

### THREE PHASE DUAL VOLTAGE MOTOR

#### HIGH VOLTAGE



#### LOW VOLTAGE




- T1 (U1)
- T4 (U2)
- T9 (W3)
- T7 (U3)
- T8 (V3)
- T6 (W2)
- T5 (V2)
- T2 (V1)
- T3 (W1)

VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G  
T6BZ, T2B, T6BL, T4AV, T6B, T4B

				TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN HLB 04-29-2002					
				DEC.	INCHES		CHK	ML 05-03-2002				
				.X	±.1		APPD	GK 05-03-2002				
				.XX	±.01		SCALE	1=1				
2	ADDED IEC NOTATIONS... (U1), (V1) ETC. (MU105786)	REP 01-11-2012	DR	.XXX	±.005	TITLE CONNECTION DIAGRAM 3Ø - DUAL VOLTAGE MOTOR		REF				
1	NEW DRAWING	HLB 05-03-2002	ML	.XXXX	±.0005	MAT'L.		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 EE7308-LE		SIZE	DRAWING NO.	PAGE	OF	REV.
				DIST	LB-WP			A	EE7308-LE			2



**1051 CHEYENNE AVE.  
GRAFTON, WI 53024  
PH. 262-377-8810**

CATALOG #: 824530.00

CONN. DIAGRAM: A-EE7308-LE

OUTLINE: 038188-912

MOUNTING: F1/F2 CAPABLE

WINDING #: K2134158 R23 6

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.60	1800	1770	213T	TEAO	H	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	230/460	19.2/9.6	LINE OR INVERTER	CONTINUOUS	F3	1.15	40

FULL LOAD EFF:	91.7	3/4 LOAD EFF:	91	1/2 LOAD EFF:	90.2	GTD. EFF	91	ELEC. TYPE	SQ CAGE INV RATED
FULL LOAD PF:	80	3/4 LOAD PF:	74	1/2 LOAD PF:	63				

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.3 LB-FT	127 / 63.5	52 LB-FT 233 %	72 LB-FT 323 %	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
- dBA	- dBA	0.95 LB-FT^2	- LB-FT^2	25 SEC.	-	165 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	NONE	FALSE	NONE	BLACK (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6307	6208						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

\*  
N  
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E

<b>INVERTER TORQUE:</b> VARIABLE 10:1
<b>INV. HP SPEED RANGE:</b> NONE
<b>ENCODER:</b> NONE NONE NONE NONE NONE PPR
<b>BRAKE:</b> NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

Data Sheet

Date: 1/19/2018

824530.00



Data @ 460 V

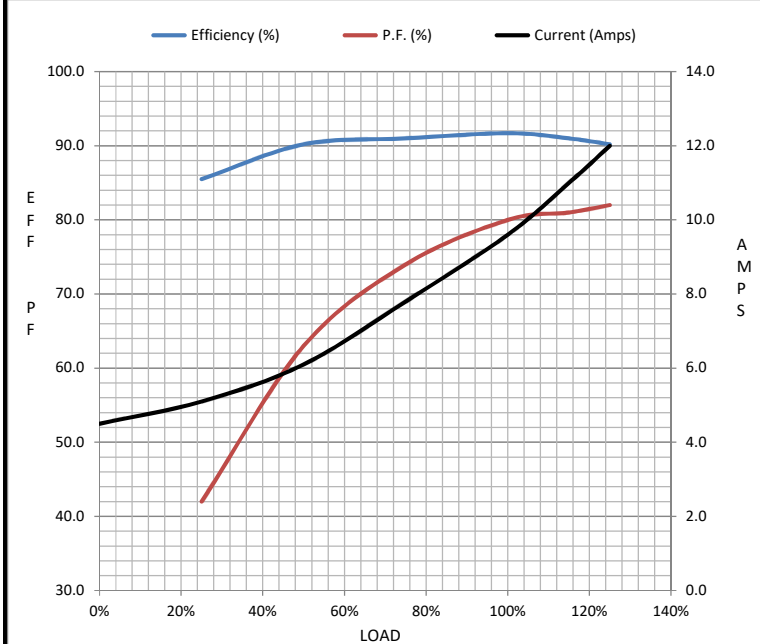
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.5	5.1	6.1	7.8	9.6	11.0	12.0	63.5
Torque (ft-lb)	0.00	5.5	11.0	16.5	22.3	25.5	28.0	52.0
RPM	1800	1790	1785	1775	1770	1.765	1760	0
Efficiency (%)		85.5	90.2	91.0	91.7	91.0	90.2	
P.F. (%)	5.5	42.0	63.0	74.0	80.0	81.0	82.0	45.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1770	1800
Current (Amps)	63.5	57.0	45.0	9.6	4.5
Torque (ft-lb)	52.0	49.0	72.0	22.3	0.00

Information Block				
HP	7.5			
Sync. RPM	1800			
Frame	213			
Enclosure	TEAO			
Construction	TTS			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	0 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.95 Lb-Ft <sup>2</sup>			
Ref Wdg	K2134158 R23			
Sound Pressure @ 1M	999 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	037875LE-912			
Conn. Diag	A-EE7308-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.5970	0.4540	2.3440	3.5000	52.1640



Speed - Torque Curve

