

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 508UTDS16078

Catalog No: M763

250 HP, Vertical Solid Shaft P-Base Motors, 3 phase, 1200 RPM, 460 V, 508 PV Frame, Drip Proof
Vertical Pump Motors



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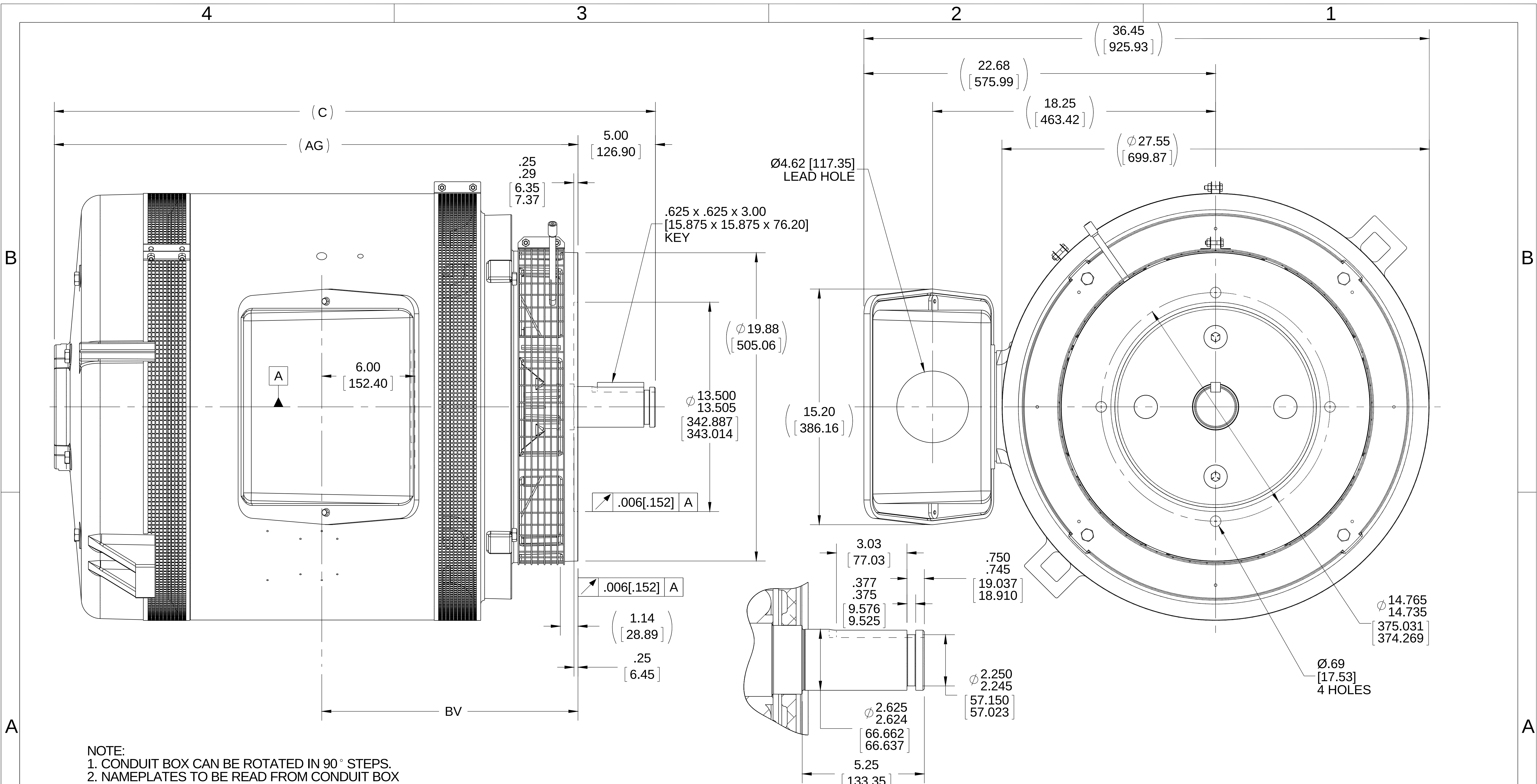
RegalRexnord

Nameplate Specifications

Output HP	250 Hp	Output KW	187.0 kW
Frequency	60 Hz	Voltage	460 V
Current	300.0 A	Speed	1188 rpm
Service Factor	1.15	Phase	3
Efficiency	95.8 %	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	508 PV	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6316	Opp Drive End Bearing Size	7319 2
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

Technical Specifications

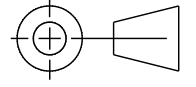
Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Resistance Main	.0175 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	P	Overall Length	45.76 in
Frame Length	8.00 in	Shaft Diameter	2.625 in
Shaft Extension	5.00 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS510025-2800	Connection Drawing	A-EE7300U



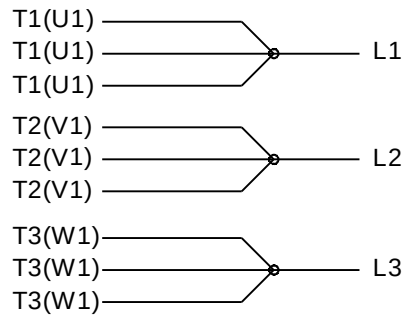
NOTE:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF THE MOTOR.
3. DIMENSIONS IN [] DESIGNATE MILLIMETERS.

DETAIL OF SHAFT EXTENSION

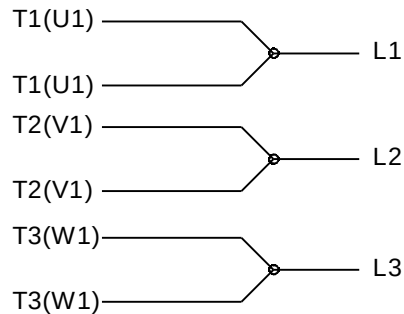
DASH	FRAME	C	AG	BV
2100	505P	38.76 [984.50]	33.77 [857.76]	16.52 [419.61]
2800	508P	45.76 [1162.30]	40.77 [1035.56]	20.02 [508.51]

DRAWING REVISION J	REVISION BY JJB	DATE 09-12-2016	TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH mm ANGLE .X ±0.1 [±2.5] .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: 200 INCH mm mm SHOWN IN [BRACKETS]			DRAWN BY SMC	 Regal Beloit America, Inc.		
ECO ECO-0098323	APPROVED BY DJK	DATE 09-12-2016				DATE 08-01-1991			
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("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.			DATE 08-01-1991			APPROVED BY GK	DESCRIPTION OUTLINE		
			REFERENCE			DATE 08-01-1991	500P FR. - BB - TS - DR. PR. - P'BASE - SCREENS		
			THIRD ANGLE PROJECTION 			MATERIAL	PROCESS/FINISH		
			SIZE B			DRAWING NUMBER SS510025	SHEET 1 OF 1		

IF MOTOR HAS 9 LEADS

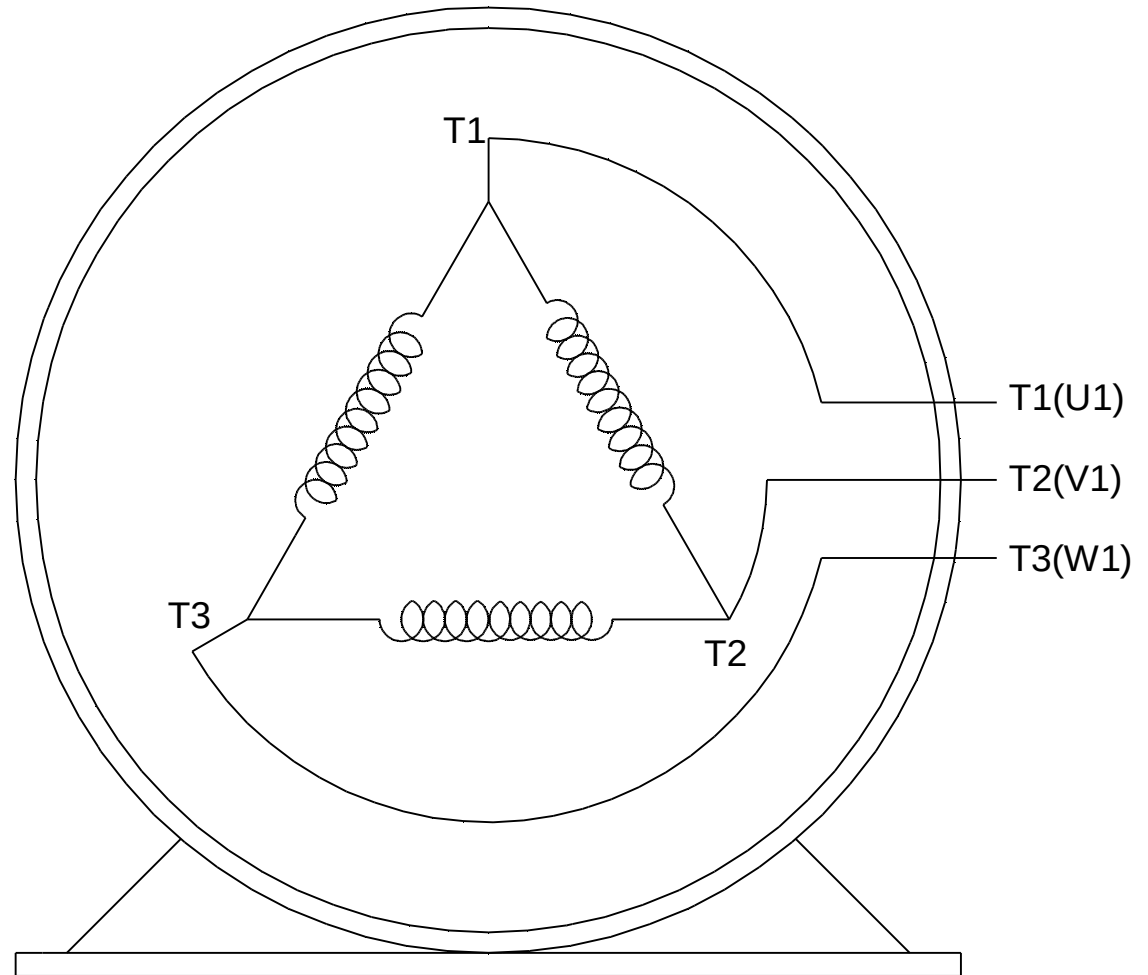
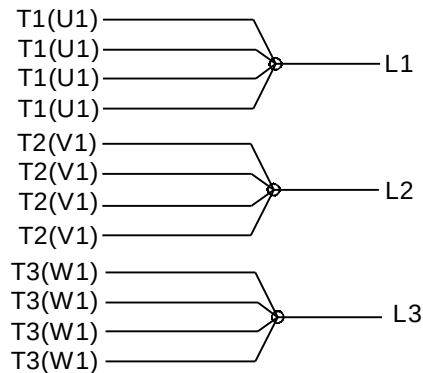


IF MOTOR HAS 6 LEADS



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: DEC. INCH. mm ANGLE .X ±0.1 [±2.5] ±7' 30" .XX ±0.02 [±0.51] XXX ±0.005 [±0.127] .XXXX ±0.0005 [±0.0127] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200^{INCH}5.1^{mm} mm SHOWN IN [BRACKETS]	DRAWN BY DRS	REGAL™ Regal Beloit America, Inc.		
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015		DATE 09-27-1996	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE		
ECO DESCRIPTION UPDATED TO SOLIDWORKS				APPROVED BY GK			
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				REFERENCE			
						THIRD ANGLE PROJECTION	SIZE A



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 #: 508UTDS16078
CONN. DIAGRAM: A-EE7300U CAT #: M763
OUTLINE: B-SS510025-2800 CUSTOMER PART #: _____
WINDING: T508651 NONE 1 MOUNTING: F1/F2 CAPABLE
SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
250	187	1200	1188	508 PV	DP	TDS	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	300	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	95.8	1/2 LD EFF	95.4	GTD EFF	ELECT. TYPE
F.L. PF	81.0	3/4 LD PF	77.0	1/2 LD PF	67.0	95.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
1,105 LB-FT	1,825	2,250 LB-FT 204%	2,700 LB-FT 244%	70

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
78 dBA	87 dBA	172 LB-FT²	0 LB-FT²	15 SEC.	0	2750 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	NO	NONE	YES	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	EM ANGUL	POLYREX EM	P	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6316	7319 2						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	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
0.011	0.01	0.085	0.14	2.215	0.150	DE

* N O T E S *		INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE ENCODER: NONE NONE NONE NONE PPR
PREPARED BY: FAREEDA DUDEKULA DATE: 9/11/2018		BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE HZ: UL: V-INS, CONST UL REC

FORM: 3531 REV_4 2/27/06

Data Sheet

Date: 11/30/2018

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



508UTDS16078

Submittal

Data @ 460 V

Motor Load Data

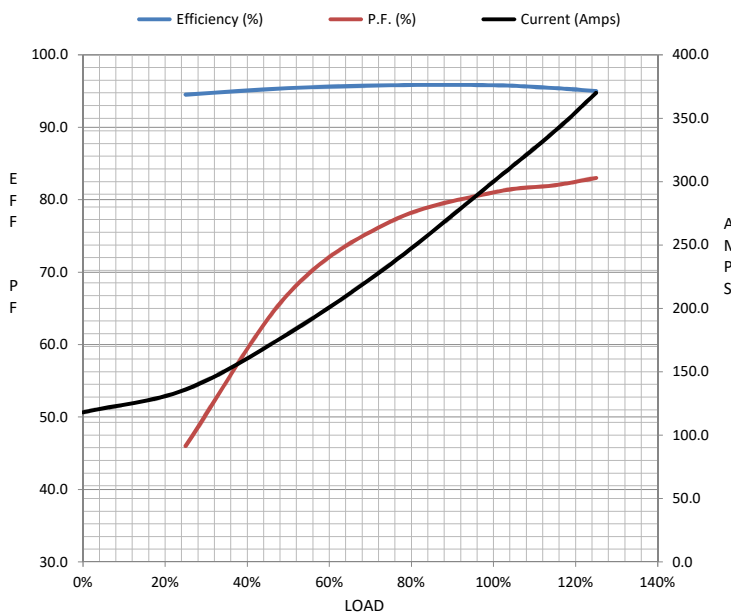
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	118	136	180	235	300	340	370	1,825	
Torque (ft-lb)	0.00	275	550	828	1,105	1,275	1,386	2,250	
RPM	1200	1196	1194	1190	1188	1,186	1184	0	
Efficiency (%)		94.5	95.4	95.8	95.8	95.4	95.0		
P.F. (%)	2.5	46.0	67.0	77.0	81.0	82.0	83.0	34.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1125	1188	1200
Current (Amps)	1,825	1,600	1,100	300	118
Torque (ft-lb)	2,250	2,000	2,700	1,105	0.00

Information Block

HP	250.0			
Sync. RPM	1200			
Frame	508			
Enclosure	DP			
Construction	TDS			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk²	172 Lb-Ft²			
Ref Wdg	T508651 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS510025-2800			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0110	0.0100	0.0850	0.1400	2.2150



Speed -Torque Curve

