

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 324TSTDP16009

Catalog No: U909A

50 HP General Purpose Motor, 3 phase, 3600 RPM, 200 V, 324TS Frame, ODP
General Purpose Motors



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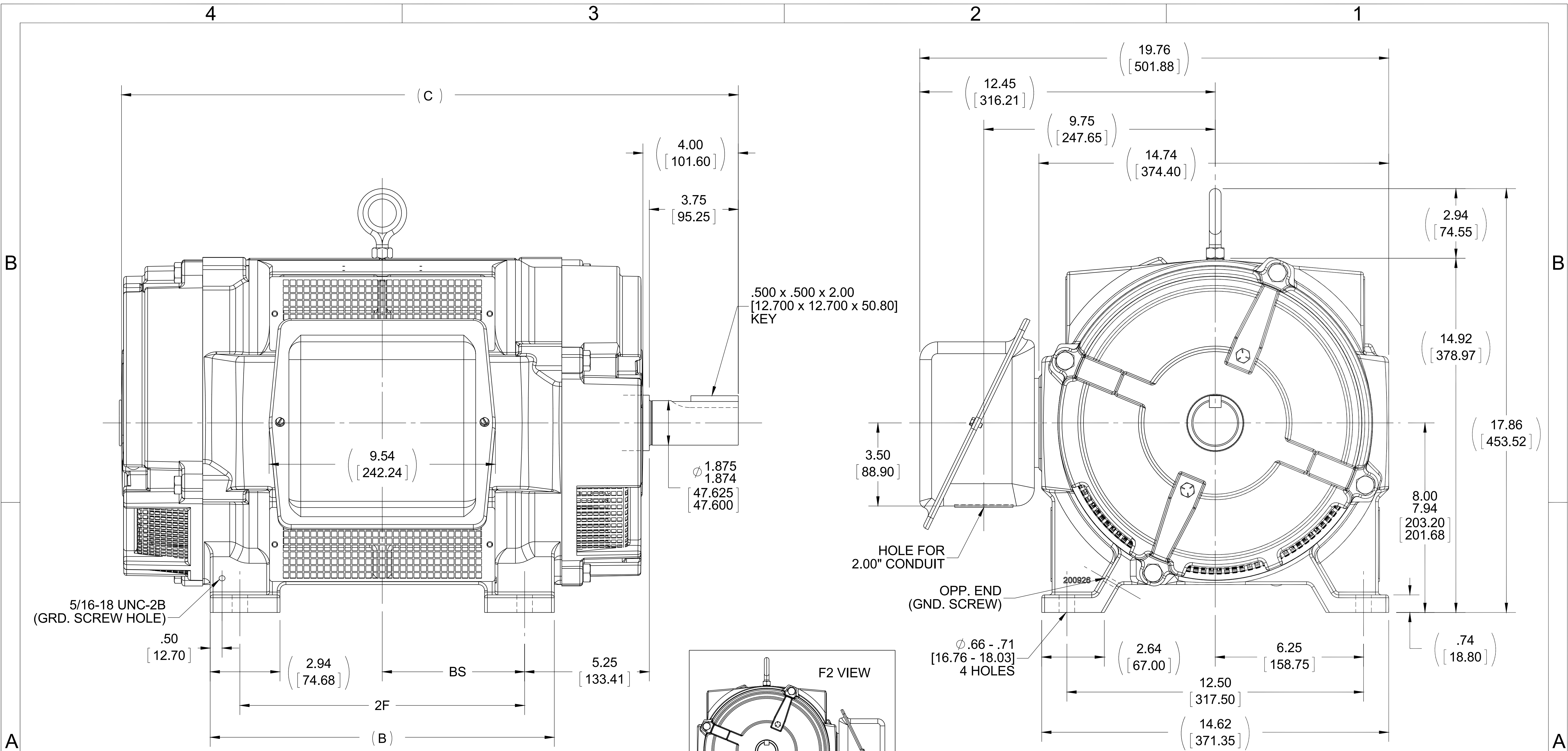
RegalRexnord

Nameplate Specifications

Output HP	50 Hp	Output KW	37.0 kW
Frequency	60 Hz	Voltage	200 V
Current	129.0 A	Speed	3550 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	324TS	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.15 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	26.00 in
Frame Length	14.50 in	Shaft Diameter	1.875 in
Shaft Extension	4.00 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS207989-1512	Connection Drawing	A-EE7300U



- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

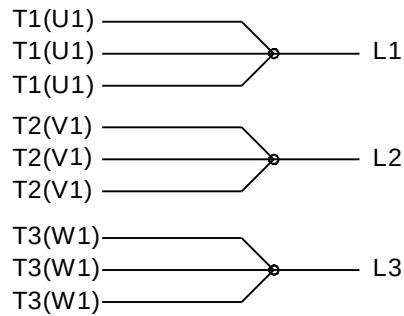
DASH	FRAME	B	C	2F	BS
1362	324TS	13.00 [330.20]	24.50 [622.30]	10.50 [266.70]	5.25 [133.35]
1512	326TS	14.50 [368.30]	26.00 [660.40]	12.00 [304.80]	6.00 [152.40]

DRAWING REVISION F	REVISION BY MSG	DATE 10-01-2015
ECO ECO-0085987	APPROVED BY TVUE	DATE 10-05-2015
ECO DESCRIPTION ADDED F2 VIEW		
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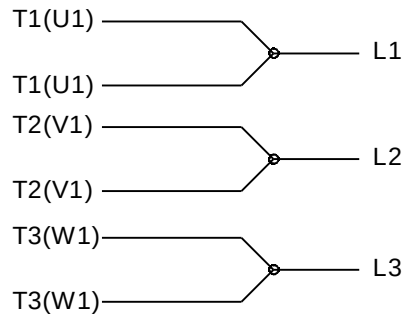
TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP			
EDGES: .003/.015 [0.076/.381]			
CORNER FILLETS: .02 [.51]			
MACHINED SURFACES: 200 INCH 5.1 mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY REP	 Regal Beloit America, Inc.		
DATE 03-16-2012			
APPROVED BY TB	DESCRIPTION OUTLINE		
DATE 03-15-12	320TS FR. - DRIP PROOF		
REFERENCE SS200079	MATERIAL		PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS207989	SHEET 1 OF 1

IF MOTOR HAS 9 LEADS

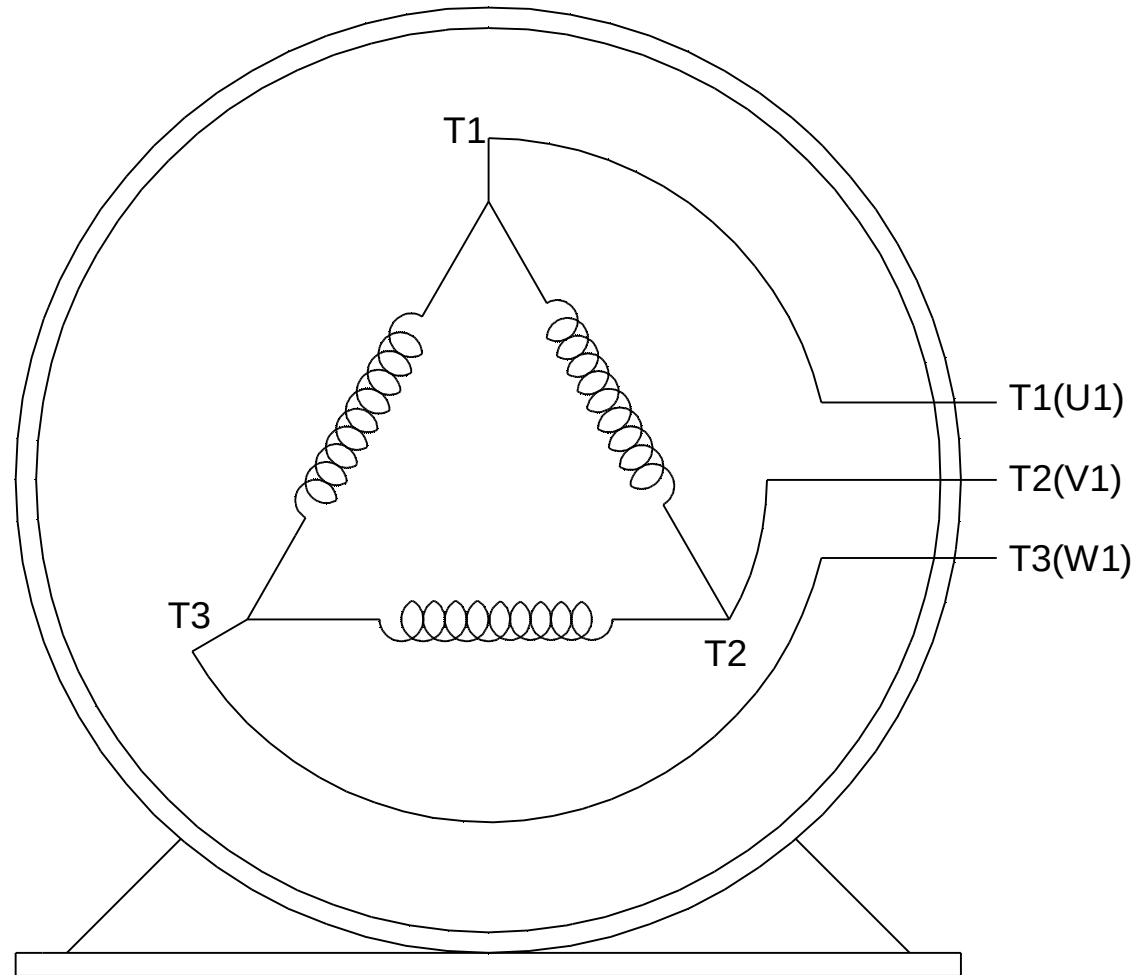
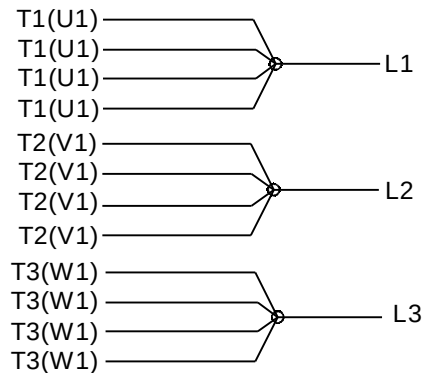


IF MOTOR HAS 6 LEADS



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: 200/5.1 INCH √ 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		
ECO DESCRIPTION UPDATED TO SOLIDWORKS				APPROVED BY GK		
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				REFERENCE	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE	
					MATERIAL	PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300U
						SHEET 1 OF 1



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 #: 324TSTD16009
CONN. DIAGRAM: A-EE7300U CAT #: U909A
OUTLINE: B-SS207989-1512 CUSTOMER PART #: _____
WINDING: K2862135 NONE 8 MOUNTING: F1/F2 CAPABLE
SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
50	37	3600	3550	324TS	DP	TDP	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	200	129	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	94.1	1/2 LD EFF	94.1	GTD EFF	ELECT. TYPE
F.L. PF	88.0	3/4 LD PF	86.0	1/2 LD PF	81.0	92.4	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
74.0 LB-FT	794	115 LB-FT 155%	210 LB-FT 284%	35

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
82 dBA	91 dBA	3.1 LB-FT²	0 LB-FT²	15 SEC.	0	450 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6312	6311						

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
0.019	0.012	0.092	0.07	3.302	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 DATE: 9/10/2018			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: 11/29/2018

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



324TSTD16009

Submittal

Data @ 200 V

Motor Load Data

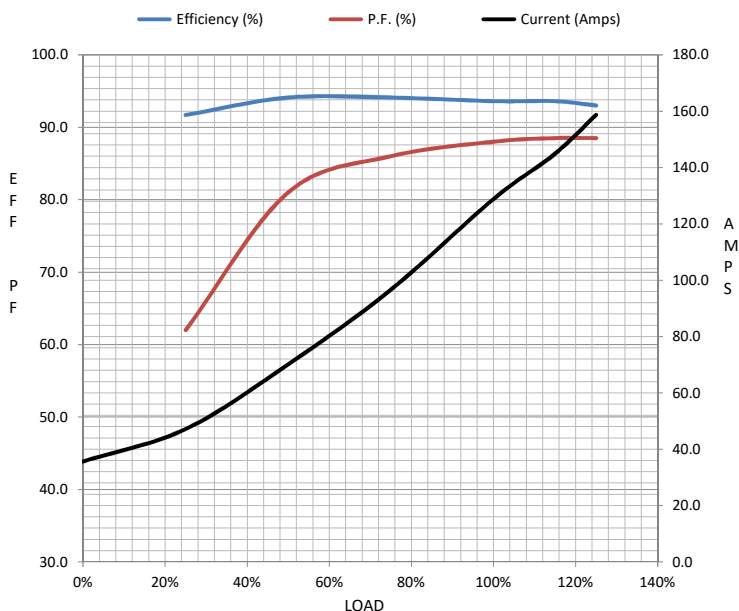
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	35.7	47.2	70.2	96.6	129	145	159	794	
Torque (ft-lb)	0.00	18.5	36.5	55.5	74.0	85.5	93.0	115	
RPM	3600	3590	3575	3565	3550	3,545	3540	0	
Efficiency (%)		91.7	94.1	94.1	93.6	93.6	93.0		
P.F. (%)	5.5	62.0	81.0	86.0	88.0	88.5	88.5	32.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3325	3550	3600
Current (Amps)	794	690	506	129	35.7
Torque (ft-lb)	115	100	210	74.0	0.00

Information Block

HP	50.0			
Sync. RPM	3600			
Frame	324			
Enclosure	DP			
Construction	TDS			
Voltage	200 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	35 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	3.1 Lb-Ft ²			
Ref Wdg	K2862135 NONE			
Sound Pressure @ 1M	82 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS207989-1512			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0190	0.0120	0.0920	0.0700	3.3020



Speed -Torque Curve

