

PRODUCT INFORMATION PACKET



Model No: 825414.00

Catalog No: 825414.00

Explosion Proof Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 & 1000 RPM,
364T Frame, EPFC



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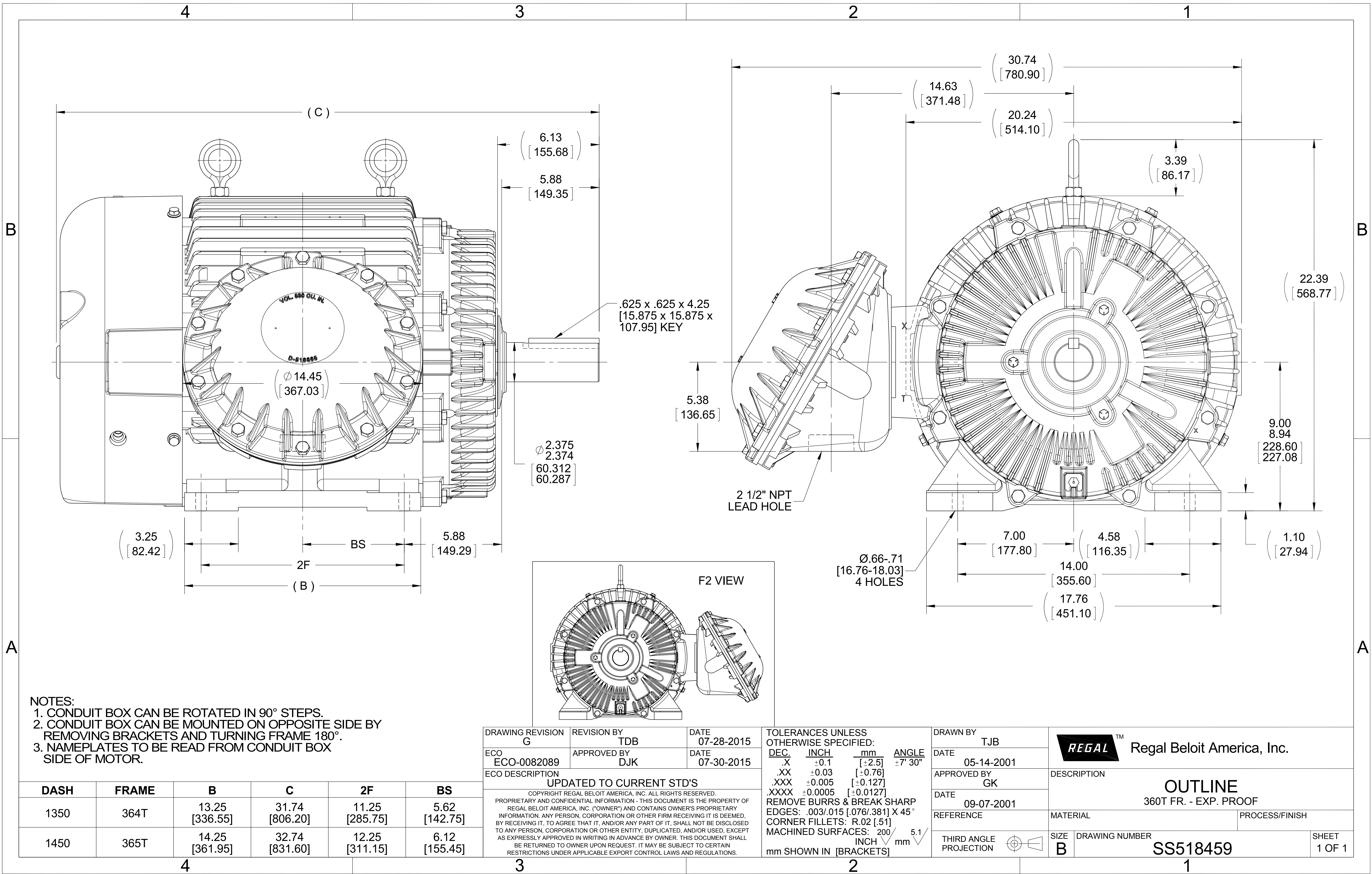


Nameplate Specifications

Phase	3	Output HP	40 & 30 Hp
Output KW	30.0 & 22.4 kW	Voltage	230/460 & 190/380 V
Speed	1185 & 988 rpm	Service Factor	1.15 & 1.15
Frame	364T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	94.1 & 93.6 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	100/50 & 93/46.5 A	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6312
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.16 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	31.74 in
Frame Length	13.50 in	Shaft Diameter	2.375 in
Shaft Extension	5.88 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Connection Drawing	A-EE7308T	Outline Drawing	B-SS518459-1350

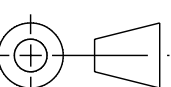


NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

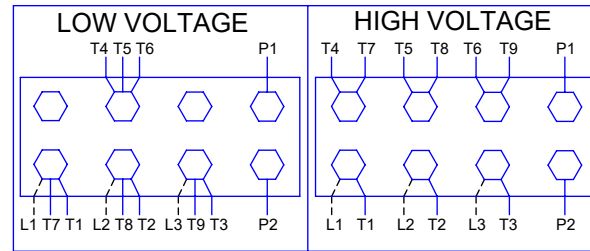
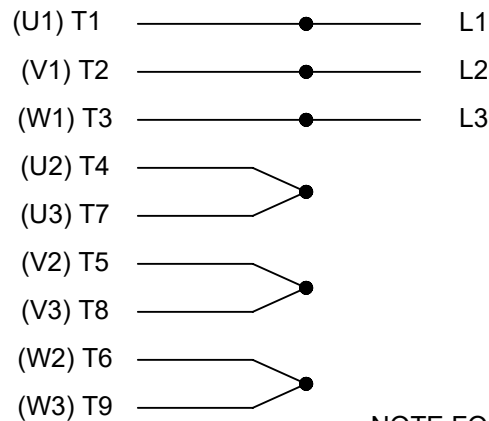
DASH	FRAME	B	C	2F	BS
1350	364T	13.25 [336.55]	31.74 [806.20]	11.25 [285.75]	5.62 [142.75]
1450	365T	14.25 [361.95]	32.74 [831.60]	12.25 [311.15]	6.12 [155.45]

DRAWING REVISION G	REVISION BY TDB	DATE 07-28-2015
ECO ECO-0082089	APPROVED BY DJK	DATE 07-30-2015
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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] X 45°			
CORNER FILLETS: R.02 [51]			
MACHINED SURFACES: 200 INCH 5.1 mm			
mm SHOWN IN [BRACKETS]			

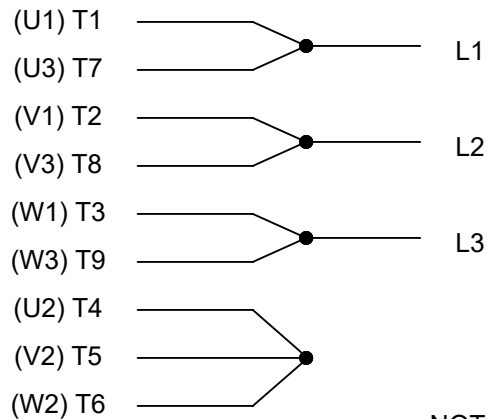
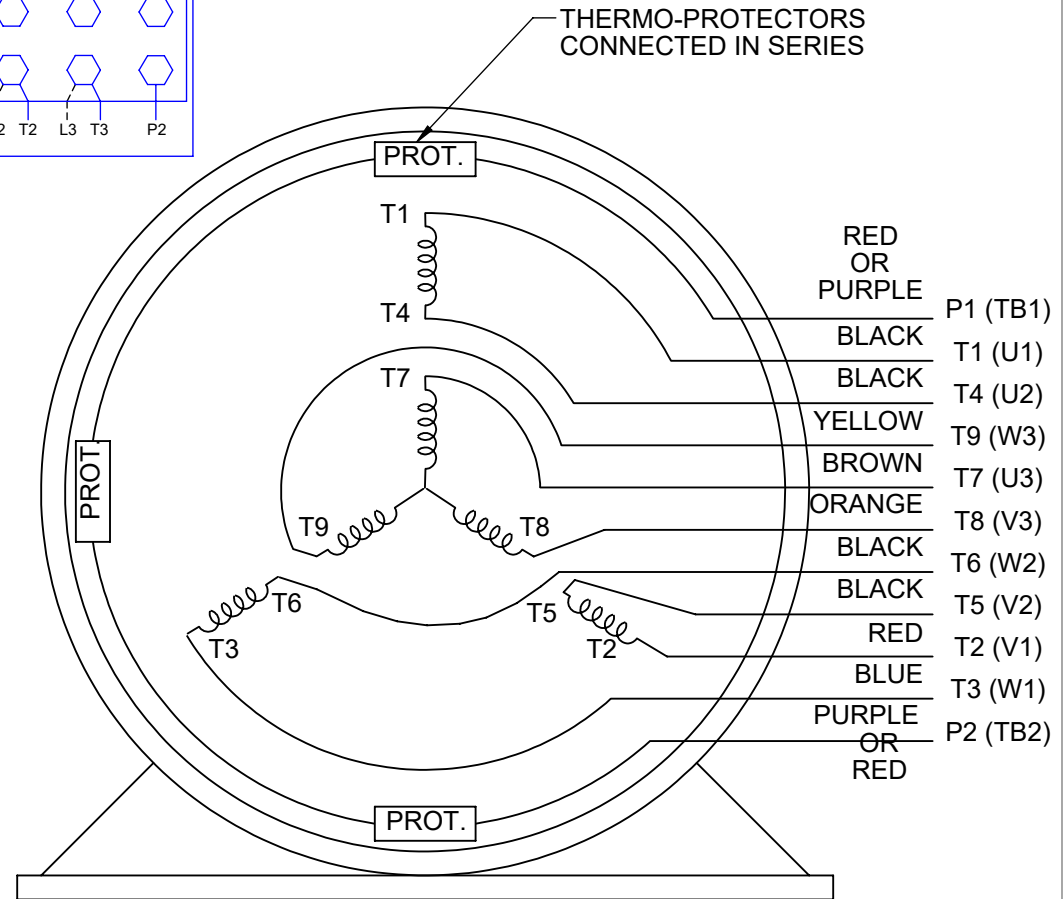
DRAWN BY TJB	 Regal Beloit America, Inc.		
DATE 05-14-2001			
APPROVED BY GK	DESCRIPTION OUTLINE 360T FR. - EXP. PROOF		
DATE 09-07-2001			
REFERENCE	MATERIAL		PROCESS/FINISH
THIRD ANGLE PROJECTION 	SIZE B	DRAWING NUMBER SS518459	SHEET 1 OF 1

HIGH VOLTAGE



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

THREE PHASE
DUAL VOLTAGE MOTOR

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
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019

ECO DESCRIPTION
ADDED TERMINAL CONNECTION DIAGRAM

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DRAWN BY
SMC

DATE
05-13-1992

APPROVED BY
TB

DATE
05-13-1992

REFERENCE
EE7308/EE7300

THIRD ANGLE
PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-INTERNAL
 3 PHASE - DUAL VOLTAGE MOTOR

MATERIAL

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

EE7308T

SHEET
1 OF 1



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308T
OUTLINE: B-SS518459-1350
WINDING: T365671

CAT #: 825414.00

NONE 1

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	1200	1185	364T	TEFC	TFS	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	100/50&93/46.5	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	94.1	3/4 LD EFF	94.1	1/2 LD EFF	93.6	GTD EFF	93.0	ELECT. TYPE	SQ CAGE INV RATED
F.L. PF	80.0	3/4 LD PF	75.0	1/2 LD PF	64.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
177 LB-FT	290	350 LB-FT 198%	450 LB-FT 254%	65

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
58 dBA	67 dBA	15.0 LB-FT²	0 LB-FT²	25 SEC.	0	875 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	UM SEVERE	DF CL I GR C&D CL II GF	NO	NONE	BLUE (EPOXY)

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						
6314	6312						

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
0.113	0.079	0.518	0.81	12.124	0.080	ODE

* N O T E S *			INVERTER TORQUE: CONSTANT 10:1 INV. HP SPEED RANGE: NONE
			ENCODER: NONE NONE NONE
			BRAKE: NONE NONE NONE
			FT-LB: NA VOLTAGE: NONE UL: NONE
DATE: 2/22/2018			HZ:

Data Sheet

Date: 1/22/2018

825414.00



Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	21.5	24.5	31.0	40.0	50.0	56.5	61.0	290	
Torque (ft-lb)	0.00	44.0	88.0	133	177	205	223	350	
RPM	1200	1195	1192	1188	1185	1,180	1178	0	
Efficiency (%)		90.2	93.6	94.1	94.1	93.6	93.0		
P.F. (%)	4.0	42.5	64.0	75.0	80.0	81.5	82.0	32.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																	
Speed (RPM)	0	600	1100	1185	1200	Information Block																																
Current (Amps)	290	250	175	50.0	21.5	HP	40.0																															
Torque (ft-lb)	350	325	450	177	0.00	Sync. RPM	1200																															
— Efficiency (%) — P.F. (%) — Current (Amps) <table><caption>Graph Data</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25</td><td>90</td><td>43</td><td>21.5</td></tr><tr><td>40</td><td>92</td><td>65</td><td>30</td></tr><tr><td>60</td><td>94</td><td>75</td><td>40</td></tr><tr><td>80</td><td>94</td><td>80</td><td>50</td></tr><tr><td>100</td><td>94</td><td>82</td><td>60</td></tr><tr><td>125</td><td>93</td><td>82</td><td>61</td></tr></tbody></table>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	90	43	21.5	40	92	65	30	60	94	75	40	80	94	80	50	100	94	82	60	125	93	82	61	Frame	364			
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																													
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						Construction	TFS																															
						Voltage	230/460#190/380	V																														
						Frequency	60	Hz																														
						Design	B																															
						LR Code letter	G																															
						Service Factor	1.15																															
						Temp Rise @ FL	65	°C																														
						Duty	CONT																															
Ambient	40	°C																																				
Elevation	1,000	feet																																				
Rotor/Shaft wk²	15.0	Lb-Ft²																																				
Ref Wdg	T365671	NONE																																				
Sound Pressure @ 1M	58	dBa																																				
VFD Rating	CONSTANT 10:1																																					
Outline Dwg	B-SS518459-1350																																					
Conn. Diag	A-EE7308T																																					
Additional Specifications:																																						
0																																						
0																																						
EQUIV CKT (OHMS / PHASE)																																						
R1		R2		X1		X2		Xm																														
0.1130		0.0790		0.5180		0.8100		12.1240																														

Speed - Torque Curve

