

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 284TSTFNA6001

Catalog No: E222

25 HP General Purpose Motor, 3 phase, 3600 RPM, 230/460 V, 284TS Frame, TEFC  
General Purpose Motors



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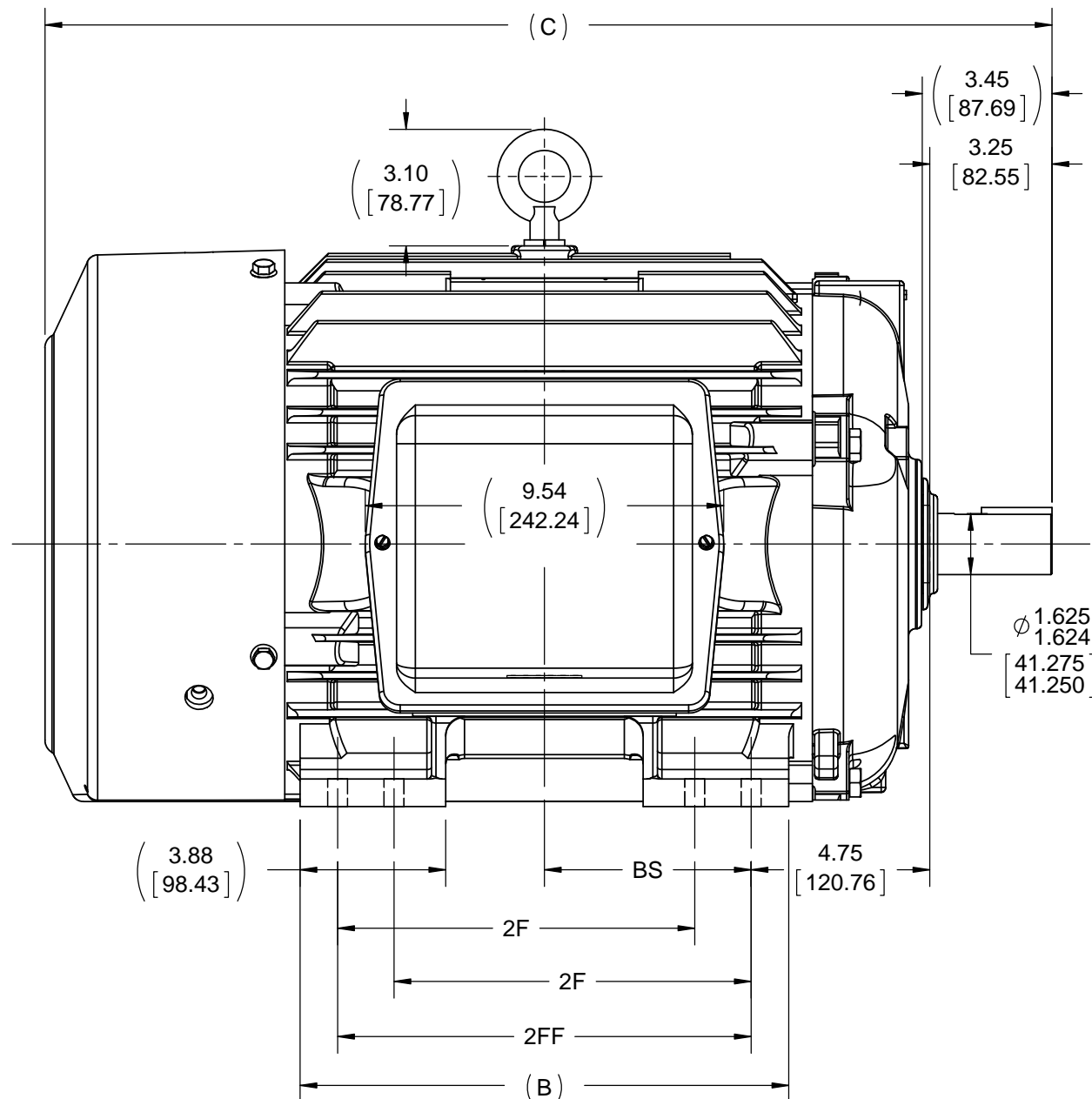
**RegalRexnord**

### Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	57.5/28.8 A	Speed	3558 rpm
Service Factor	1.15	Phase	3
Efficiency	93 %	Power Factor	87.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	284TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.0833 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	25.29 in
Frame Length	12.75 in	Shaft Diameter	1.625 in
Shaft Extension	3.45 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7308K	Outline Drawing	B-SS311134-1275

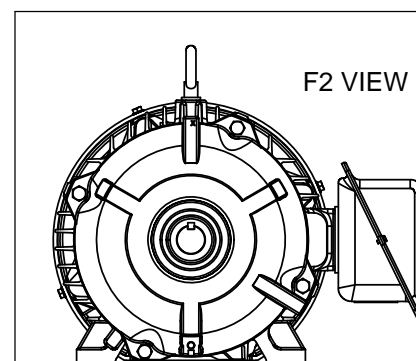
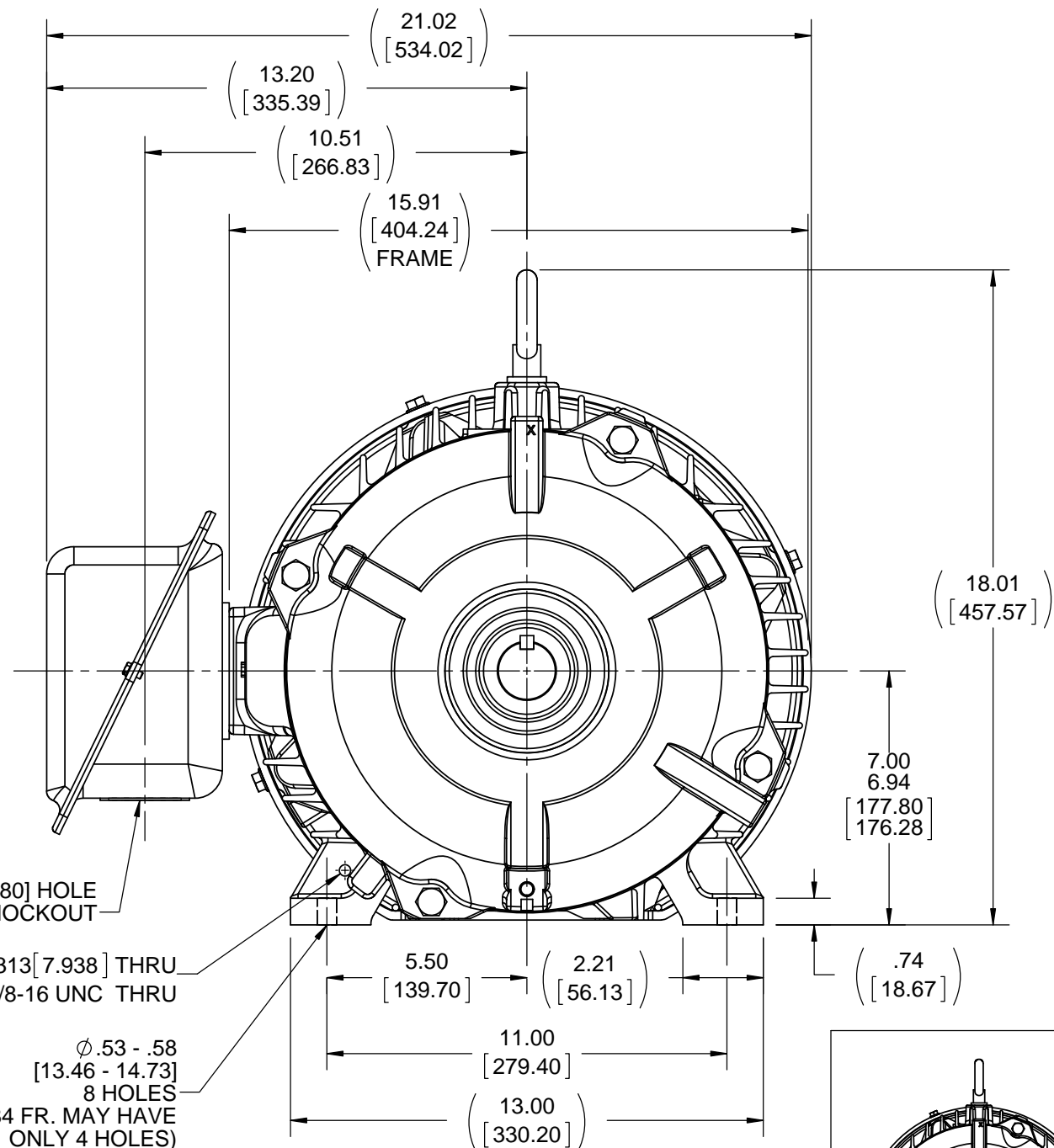


Ø 1.625 [41.275]  
Ø 1.624 [41.250]

Ø 2.00 [50.80] HOLE  
Ø 2.50 [63.50] KNOCKOUT

Ø .313 [7.938] THRU  
3/8-16 UNC THRU

Ø .53 - .58 [13.46 - 14.73]  
8 HOLES  
(284 FR. MAY HAVE ONLY 4 HOLES)





## 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	2FF	BS
1275	284TS	12.50 [317.50]	25.29 [642.37]	-	9.50 [241.30]	4.75 [120.65]
1425	284TS / 286TS	13.00 [330.20]	26.79 [680.47]	9.50 [241.30]	11.00 [279.40]	5.50 [139.70]

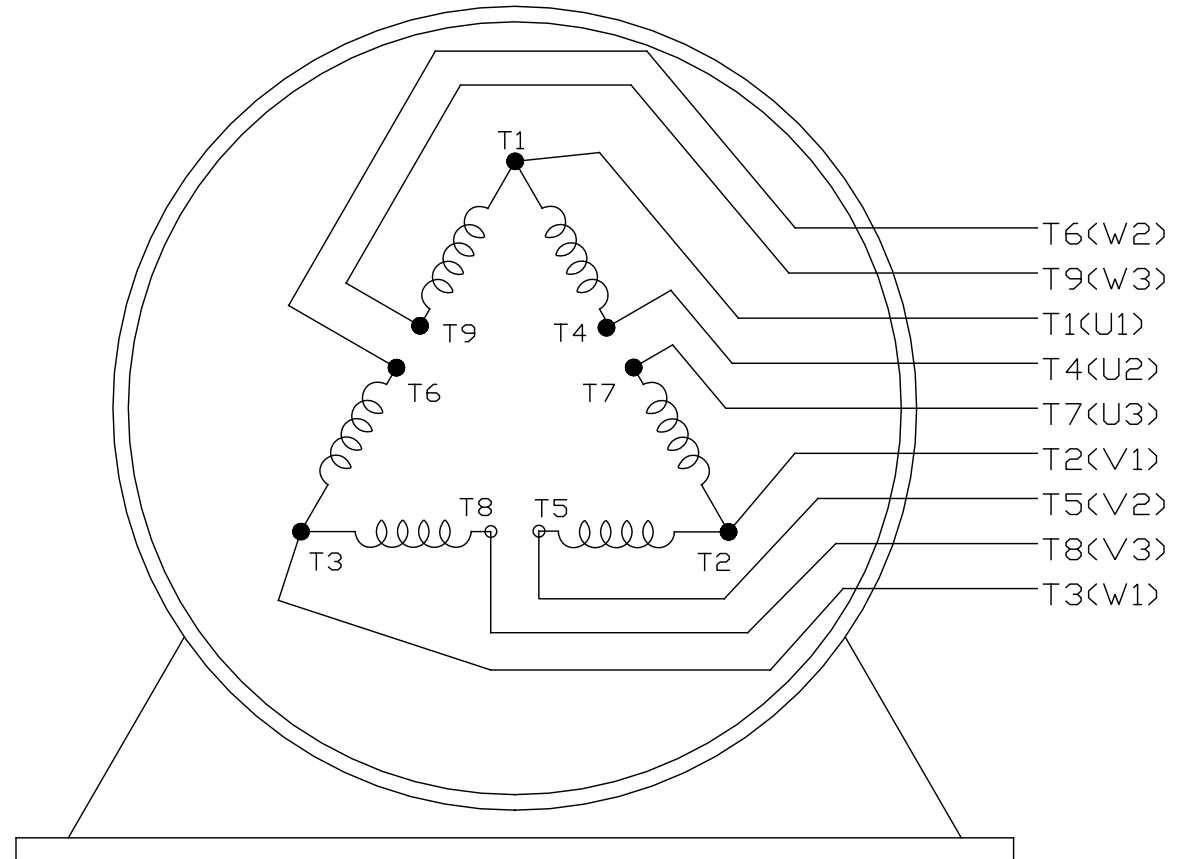
DRAWING REVISION G	REVISION BY T. VUE	DATE 11-11-2016
ECO ECO-0112892	APPROVED BY T. BROWN	DATE 11-11-2016
ECO DESCRIPTION ADDED F2 VIEW		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH mm 5.1			
mm SHOWN IN [BRACKETS]			

DRAWN BY DAH	 Regal Beloit America, Inc.		
DATE 03-28-2001			
APPROVED BY BW	DESCRIPTION OUTLINE		
DATE 03-28-2001	280TS FR. - TEFC - 12.50 LAM.		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION 	SIZE B	DRAWING NUMBER SS311134	SHEET 1 OF 1

LOW VOLTAGE

EE7308K

HIGH VOLTAGE

VIEW OF TERMINAL END

			TOLERANCES UNLESS SPECIFIED			 <b>REGAL - BELOIT CORPORATION</b>	DRAWN PGK 06-04-1997		
NO.	REVISION	BY & DATE	CHK	ANG	± 7'30"		CHK	ML	06-05-1997
E	CORRECTED IEC MARKINGS ECD-0111208	WGJ 01-23-2017	EMH	DEC.	INCHES				
D	RE-DRAWN WITH REGAL LOGO ECD-0110493	WGJ 09-30-2016	EMH	.X	± .1				
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	± .02	TITLE CONNECTION DIAGRAM DELTA CON. - 3Ø - 9 LEADS			
7	REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	± .005				
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	± .0005				
						MAT'L.			
						FINISH			
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						DIST			A
								DRAWING NO.	PAGE OF
								EE7308K	REV.
									E

## CERTIFICATION DATA SHEET

**Model#:** 284TSTFNA6001 CA  
**CONN. DIAGRAM:** A-EE7308K  
**OUTLINE:** B-SS311134-1275

**WINDING#:** K284282 NONE 7  
**ASSEMBLY:** F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25	18.7	3600	3558	284TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	57.5/28.8	ACROSS THE LINE	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 93	3/4 LOAD EFF: 93	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 87.5	3/4 LOAD PF: 84	1/2 LOAD PF: 76	92.4	SQ CAGE IND RUN	20 / 10

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
37 LB-FT	364 / 182	50 LB-FT 135	103 LB-FT 278	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	2.3 LB-FT^2	32 LB-FT^2	20 SEC.	2	400 LBS.

## \*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6311	6210	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

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DATE: 06/23/2017 08:14:07 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 19-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



284TSTFNA6001

Submittal

Data @ 460 V

## Motor Load Data

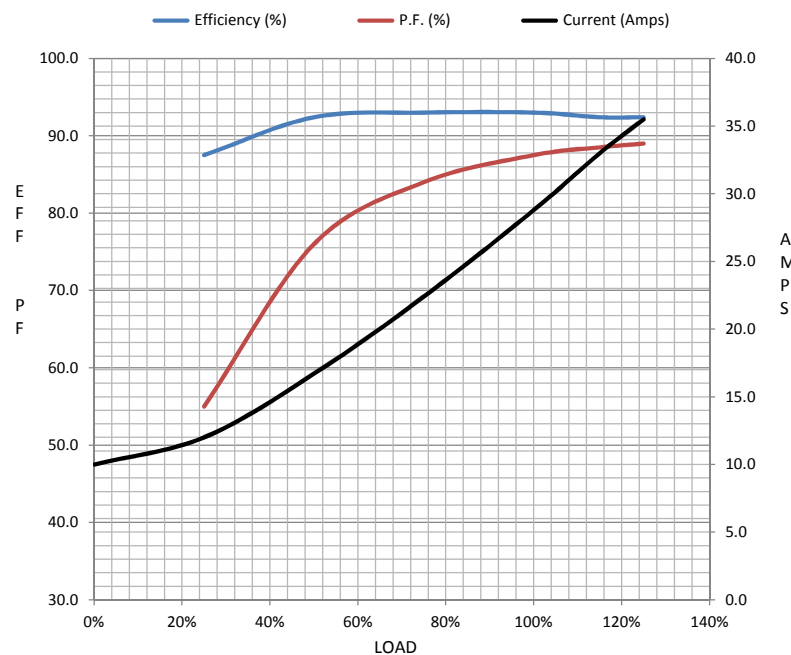
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	10.0	12.0	16.7	22.4	28.8	33.0	35.5	182	
Torque (ft-lb)	0.00	9.0	18.5	27.5	37.0	42.0	46.5	50.0	
RPM	3600	3590	3580	3570	3558	3,550	3545	0	
Efficiency (%)		87.5	92.4	93.0	93.0	92.4	92.4		
P.F. (%)	6.0	55.0	76.0	84.0	87.5	88.5	89.0	31.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3350	3558	3600
Current (Amps)	182	167	118	28.8	10.0
Torque (ft-lb)	50.0	42.5	103	37.0	0.00

## Information Block

HP	25.0			
Sync. RPM	3600			
Frame	284			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.30 Lb-Ft <sup>2</sup>			
Ref Wdg	K284282 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS311134-1275			
Conn. Diag	A-EE7308K			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0600	0.0280	0.2450	0.1600	6.9010



## Speed -Torque Curve

