

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284TSTFNA6502

Catalog No: E660

25 HP Severe Duty Motor, 3 phase, 3600 RPM, 575 V, 284TS Frame, TEFC
Severe Duty Motors



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RegalRexnord

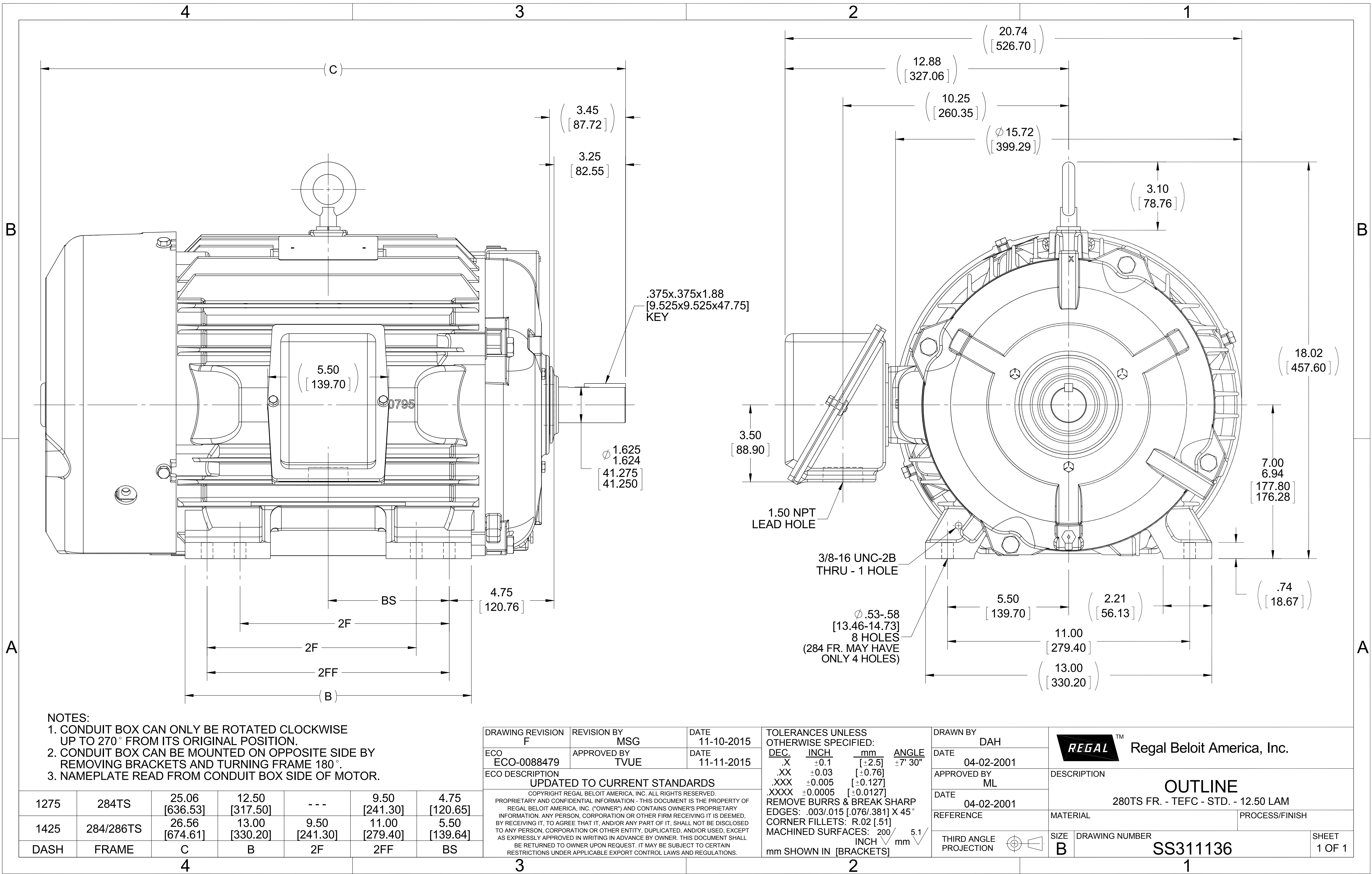
Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	575 V
Current	23.1 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	54
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

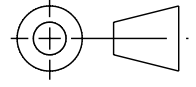
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.0833 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	25.06 in
Frame Length	12.75 in	Shaft Diameter	1.625 in
Shaft Extension	3.43 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7300	Outline Drawing	B-SS311136-1275

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DRAWING REVISION F	REVISION BY MSG	DATE 11-10-2015
ECO ECO-0088479	APPROVED BY TVUE	DATE 11-11-2015
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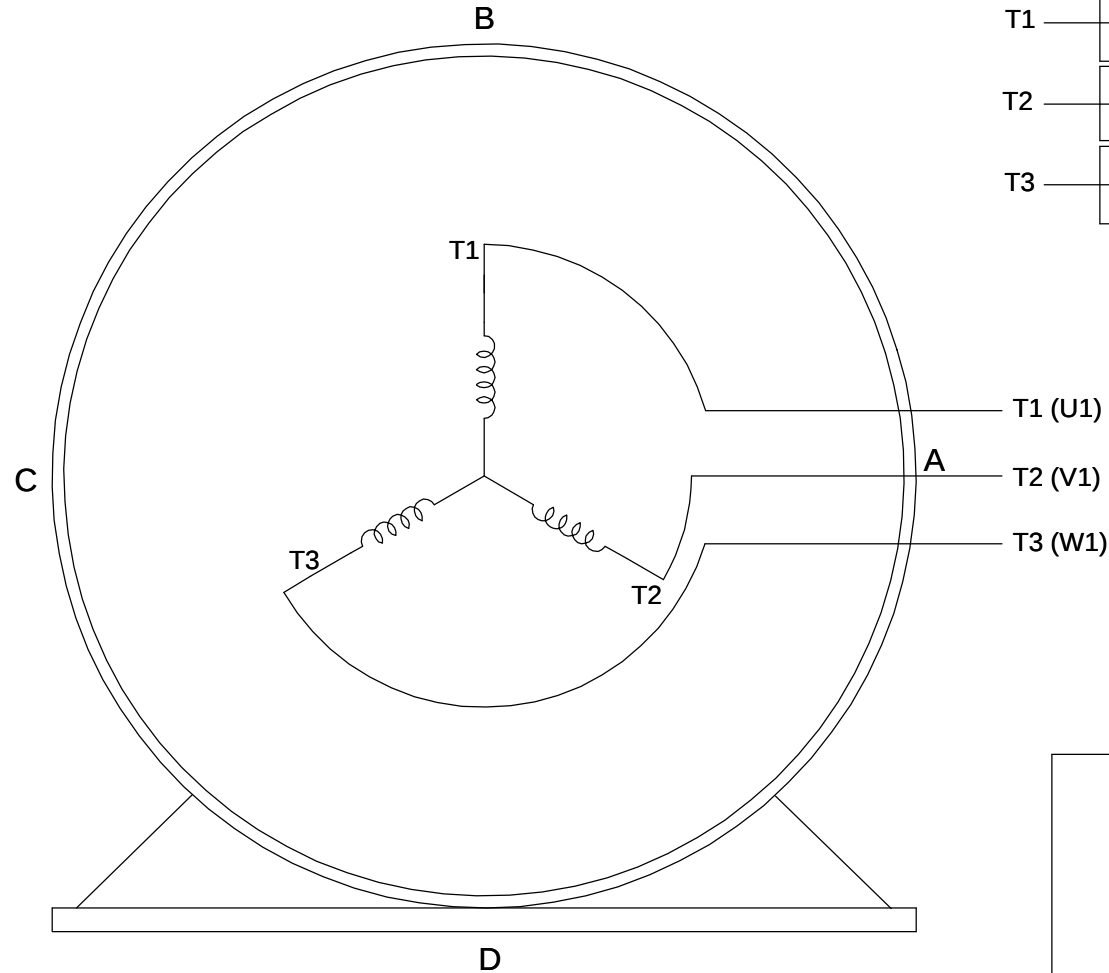
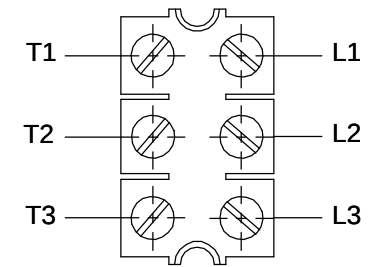
TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	± 0.1	[± 2.5]	$\pm 7^{\circ} 30''$
.XX	± 0.03	[± 0.76]	
.XXX	± 0.005	[± 0.127]	
.XXXX	± 0.0005	[± 0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°			
CORNER FILLETS: R.02 [51]			
MACHINED SURFACES: 200 INCH 5.1 mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY DAH	 Regal Beloit America, Inc.		
DATE 04-02-2001			
APPROVED BY ML	DESCRIPTION OUTLINE		
DATE 04-02-2001	280TS FR. - TEFC - STD. - 12.50 LAM		
REFERENCE	MATERIAL		PROCESS/FINISH
THIRD ANGLE PROJECTION 	SIZE B	DRAWING NUMBER SS311136	SHEET 1 OF 1

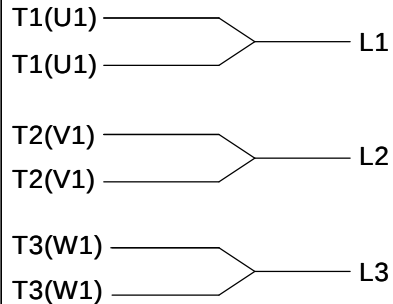
THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.

TERMINAL BLOCK WHEN SPECIFIED

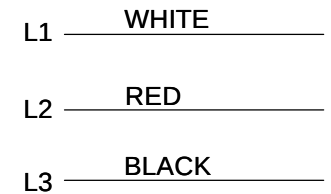


IF MOTOR HAS
6 LEADS



A-9806 DECAL

OPTIONAL CORD
CONNECTION



VIEW OF TERMINAL END

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION



Regal Beloit America, Inc.

DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1
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CERTIFICATION DATA SHEET

Model#: 284TSTFNA6502 CE

WINDING#: K284282 NONE 6

CONN. DIAGRAM: A-EE7300

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: B-SS311136-1275

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	575	23.1	LINE OR INVERTER	CONTINUOU S	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 INV RATED	8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
37 LB-FT	145.6	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	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

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

* N O T E S *	INVERTER TORQUE: CONSTANT 2:1					
	INV. HP SPEED RANGE: 1.5 X BASE SPEED					
	ENCODER: NONE					
	NONE NONE					
	NONE NONE PPR					
	BRAKE: NONE NONE					
	NONE P/N NONE					
	NONE NONE					
	NONE FT-LB		NONE V		NONE Hz	

DATE: 06/23/2017 08:15:19 AM

FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 29-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



284TSTFNA6502

Submittal

Data @ 575 V

Motor Load Data

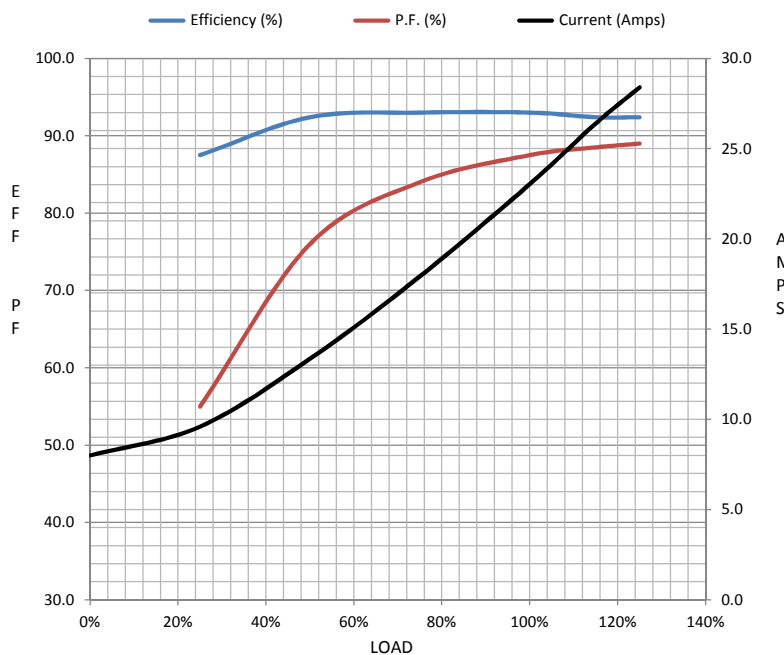
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	8.0	9.6	13.4	17.9	23.0	26.4	28.4	146	
Torque (ft-lb)	0.00	9.0	18.5	27.5	37.0	42.0	46.5	50.0	
RPM	3600	3590	3580	3570	3558	3,550	3545	0	
Efficiency (%)		87.5	92.4	93.0	93.0	92.4	92.4		
P.F. (%)	6.0	55.0	76.0	84.0	87.5	88.5	89.0	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3350	3558	3600
Current (Amps)	146	134	94.4	23.0	8.0
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	575 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 wk²	2.30 Lb-Ft²			
Ref Wdg	K284282 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS311136-1275			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0950	0.0430	0.3830	0.2510	10.7830



Speed -Torque Curve

