

PRODUCT INFORMATION PACKET

Model No: LM21211

Catalog No: LM21211

Speed Ratio Motors, TEFC, 30 HP, 3 Ph, 60 Hz, 230/460 V, 1782 RPM, 286T Frame



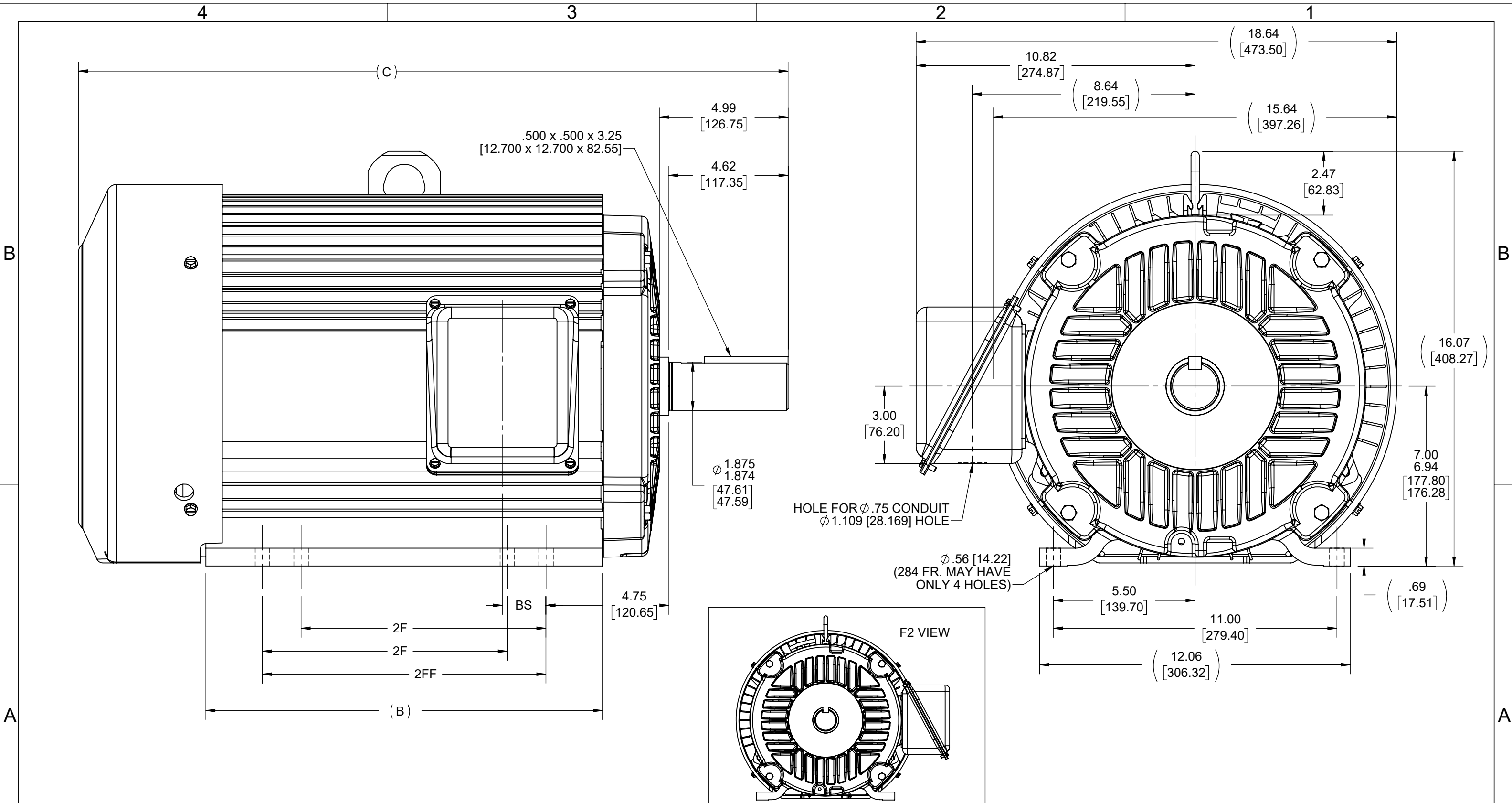
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Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	80.0/40.0 A	Speed	1782 rpm
Service Factor	1.15	Phase	3
Efficiency	93 %	Power Factor	76
Duty	Continuous	Insulation Class	F
Design Code	A	KVA Code	G
Frame	286T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6209
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Wye Start Delta Run Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.265 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	28.12 in
Frame Length	15.25 in	Shaft Diameter	1.875 in
Shaft Extension	4.62 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 4:1		
Outline Drawing	XF5F1SS1-1525	Connection Drawing	A-EE7308BZ-LN



DASH	FRAME	B	C	2F	2FF	BS
1375	284T	13.87 [352.30]	26.02 [660.91]	---	9.50 [241.30]	1.68 [42.70]
1525	286T	15.38 [390.65]	27.52 [699.11]	9.50 [241.30]	11.00 [279.40]	1.68 [42.70]

DRAWING REVISION D	REVISION BY SP	DATE 06/28/2021
ECO CR-0001223	APPROVED BY AS	DATE 06/28/2021
ECO DESCRIPTION 3C223-F3 FAN GUARD REPLACED WITH 310031A		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	± 0.1	[± 2.5]	$\pm 7' 30''$
.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
TJB

DATE
09-05-2001

APPROVED BY
JMM

DATE
09-05-2001

REFERENCE

THIRD ANGLE PROJECTION

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
280T FR. - TEFC - UE

MATERIAL

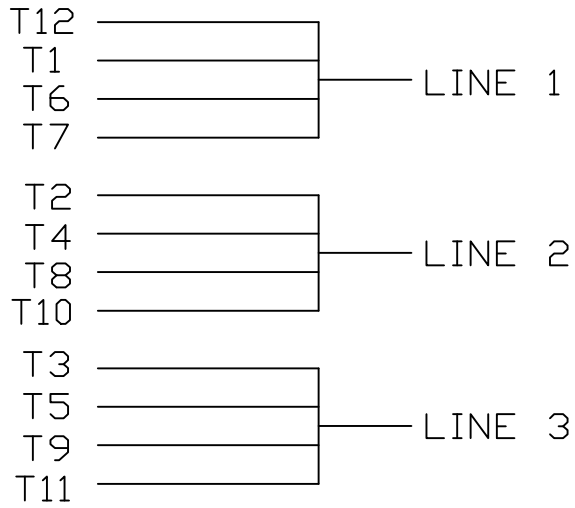
PROCESS/FINISH

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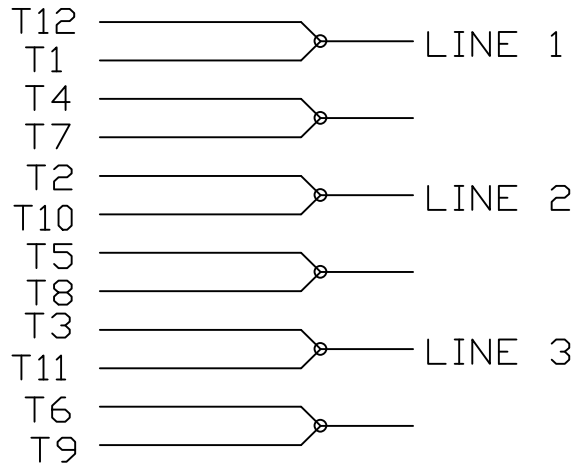
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SHEET
1 OF 1

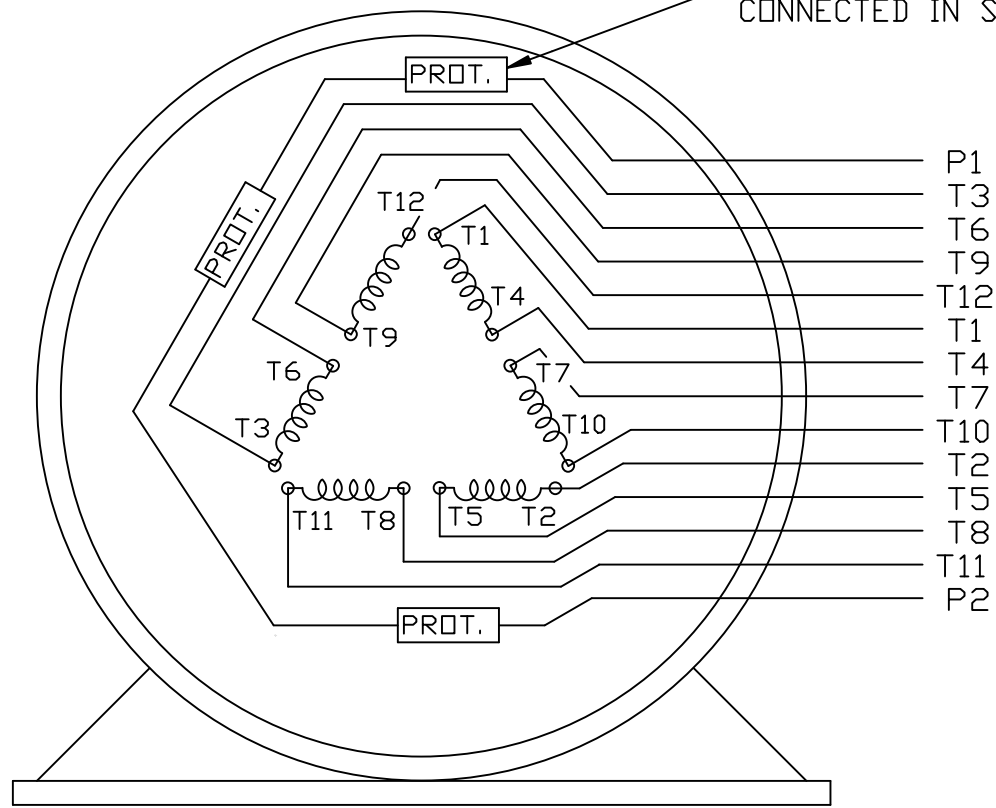
LOW VOLTAGE



HIGH VOLTAGE



THERMO - PROTECTORS
CONNECTED IN SERIES.



VIEW OF TERMINAL END

					✓ UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX± XXX± XXXX± ANGLES±			
2	08/17/2011	REMOVED NOTE '12 LEADS SINGLE VOLTAGE'	MU103768		RFH	MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED		DRAWN BY KL
1	12-11-2000	NEW DRAWING	MU34925	KL	FINISH		CHKD BY DJK	12-11-2000
REV		DATE	CHANGE	NAME	PART NAME			DRWG NO
					EXTERNAL CONNECTION DIAGRAM 3 PHASE - 2/1 DELTA - 12 LEADS			A- EE7308BZ-LN
					PURCHASED	CADD FILE NO.	EE7308BZ-LN	



**2100 WASHINGTON ST.
GRAFTON, WI
PH. 262-277-8810**

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308BZ-LN

OUTLINE: XF5F1SS1-1525

CATALOG #: LM21211

WINDING #: L2864317 1

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30	22.4	1800	1782	286T	TEFC	G	A

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	230/460	80/40	Y START D RUN OR INV	CONTINUOUS	F3	1.15	40

FULL LOAD EFF:	93	3/4 LOAD EFF:	93	1/2 LOAD EFF:	91	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	76	3/4 LOAD PF:	70	1/2 LOAD PF:	58	92.4		SQ CAGE INV DUTY	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
88.5 LB-FT	590 / 295	285 LB-FT 322 %	225 LB-FT 254 %	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
- dBA	- dBA	5.3 LB-FT^2	- LB-FT^2	20 SEC.	-	- 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	GRAY - LINCOLN

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM
6312	6209						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

*
N
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S
*

INVERTER TORQUE: CONSTANT 4:1
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 FT-LB NONE V NONE Hz

Data Sheet

Date: 1/19/2018

LM21211



Data @ 460 V

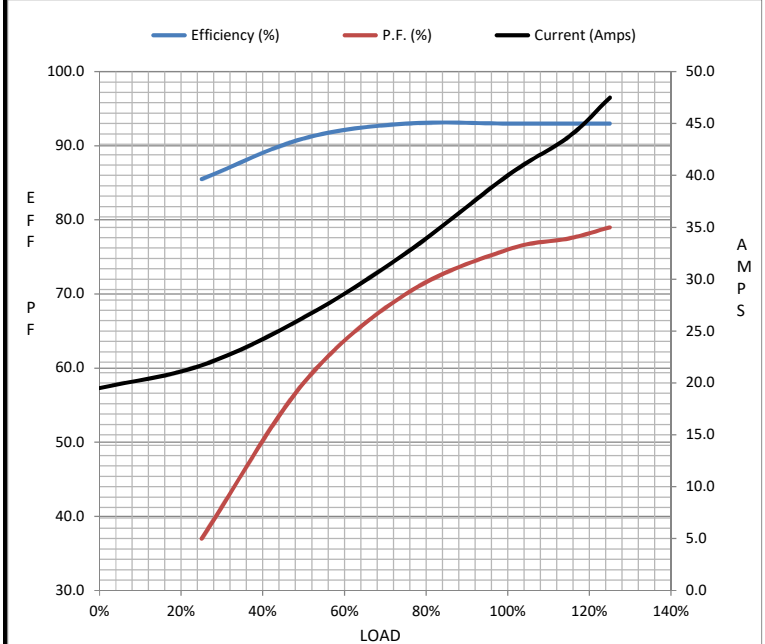
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	19.5	21.7	26.3	32.5	40.0	43.8	47.5	295
Torque (ft-lb)	0.00	22.0	44.0	66.0	88.5	99.8	111	285
RPM	1800	1795	1790	1785	1782	1.780	1777	0
Efficiency (%)		85.5	91.0	93.0	93.0	93.0	93.0	
P.F. (%)	4.0	37.0	58.0	70.0	76.0	77.5	79.0	45.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1710	1782	1800
Current (Amps)	295	265	142	40.0	19.5
Torque (ft-lb)	285	162	225	88.5	0.00

Information Block				
HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	TEFC			
Construction	TFL			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.0			
Temp Rise @ FL	60 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	5.3 Lb-Ft ²			
Ref Wdg	L2864317 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	CONSTANT 4:1			
Outline Dwg	XF5F1SS1-1525			
Conn. Diag	A-EE7308BZ-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1750	0.0870	0.6800	1.3800	17.8610



Speed - Torque Curve

