PRODUCT INFORMATION PACKET

Model No: 286TSTFNA6804
Catalog No: E490
30 HP Severe Duty Motor, 3 phase, 3600 RPM, 230/460 V, 286TS Frame, TEFC
Severe Duty Motors

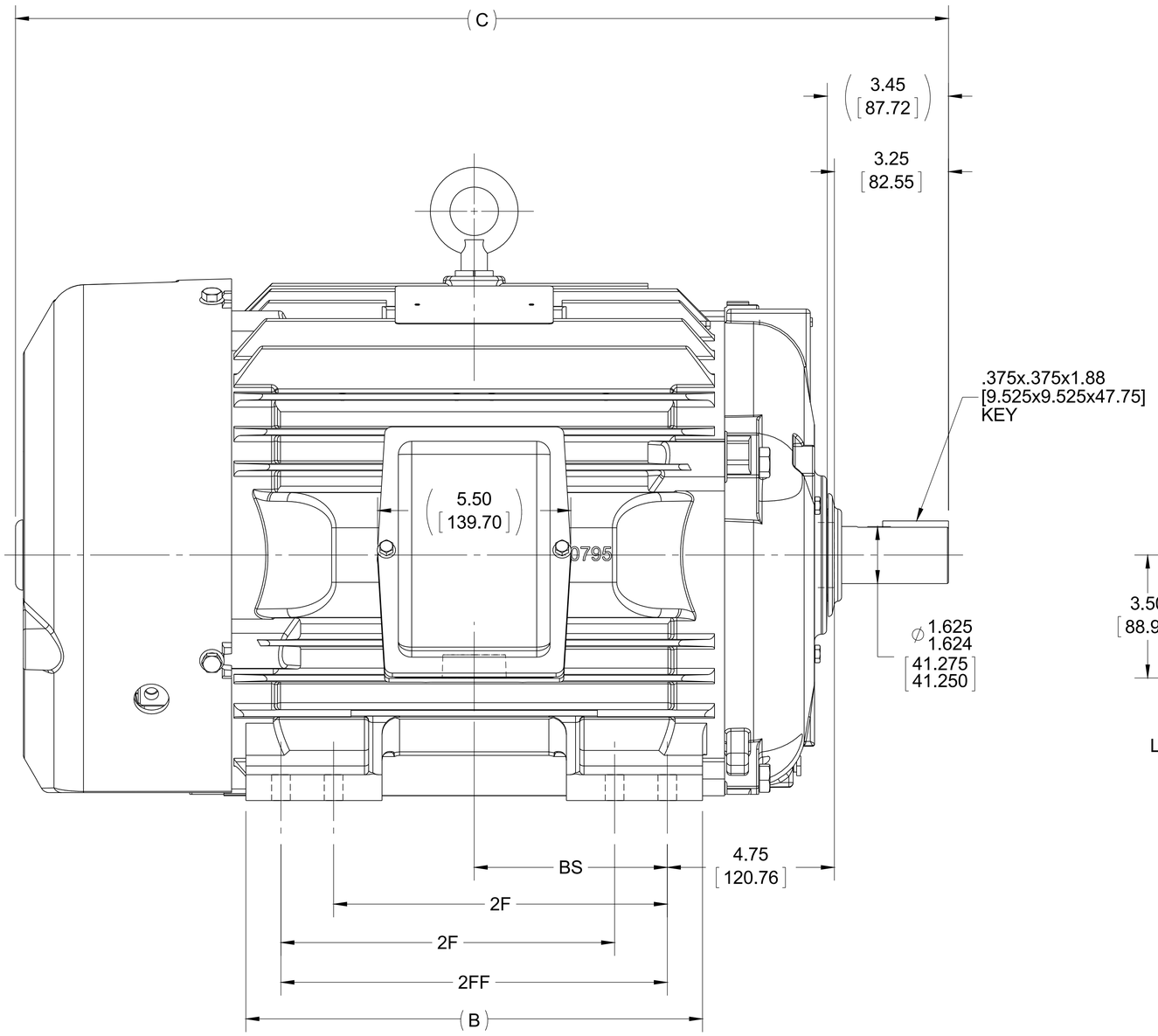
marathon® Motors

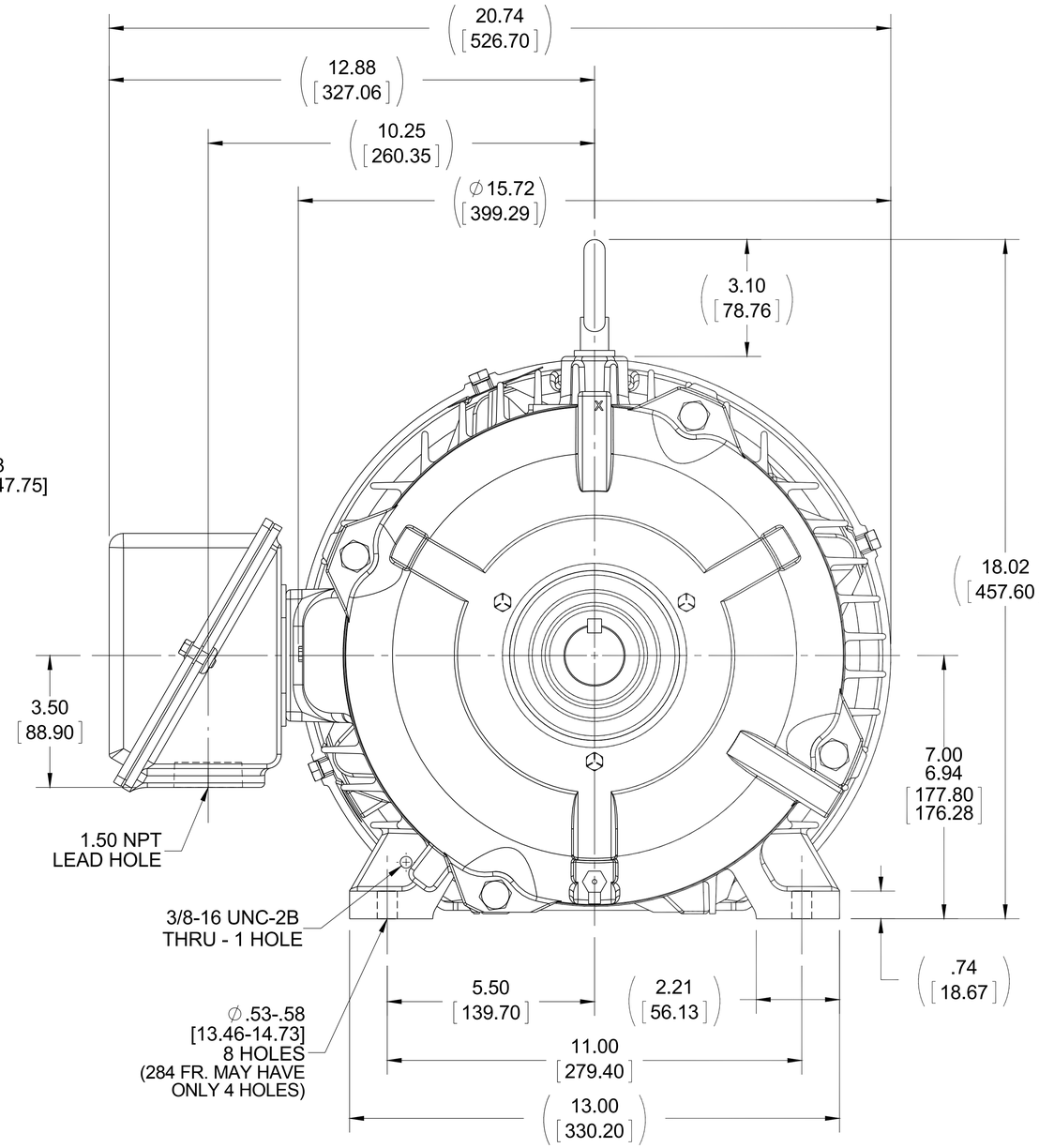
Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	67.0/33.5 A	Speed	3555 rpm
Service Factor	1.15	Phase	3
Efficiency	93 %	Power Factor	89.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	286TS	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	.3 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	26.56 in
Frame Length	14.25 in	Shaft Diameter	1.625 in
Shaft Extension	3.45 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308K	Outline Drawing	B-SS311136-1425





NOTES:
1. CONDUIT BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	C	B	2F	2FF	BS
1275	284TS	25.06 [636.53]	12.50 [317.50]	- - -	9.50 [241.30]	4.75 [120.65]
1425	284/286TS	26.56 [674.61]	13.00 [330.20]	9.50 [241.30]	11.00 [279.40]	5.50 [139.64]

DRAWING REVISION	REVISION BY	DATE
F	MSG	11-10-2015
ECO	APPROVED BY	DATE
ECO-0088479	TVUE	11-11-2015

ECO DESCRIPTION
UPDATED TO CURRENT STANDARDS

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 [.076/.381] X 45°
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

DRAWN BY	DAH
DATE	04-02-2001
APPROVED BY	ML
DATE	04-02-2001
REFERENCE	
THIRD ANGLE PROJECTION	

Regal Beloit America, Inc.

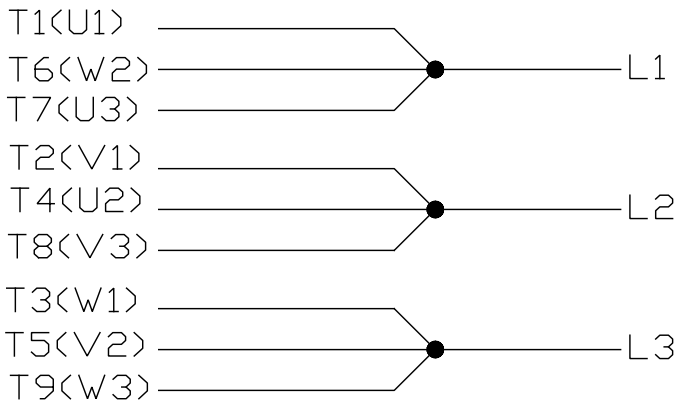
DESCRIPTION
OUTLINE
280TS FR. - TEFC - STD. - 12.50 LAM

MATERIAL | PROCESS/FINISH

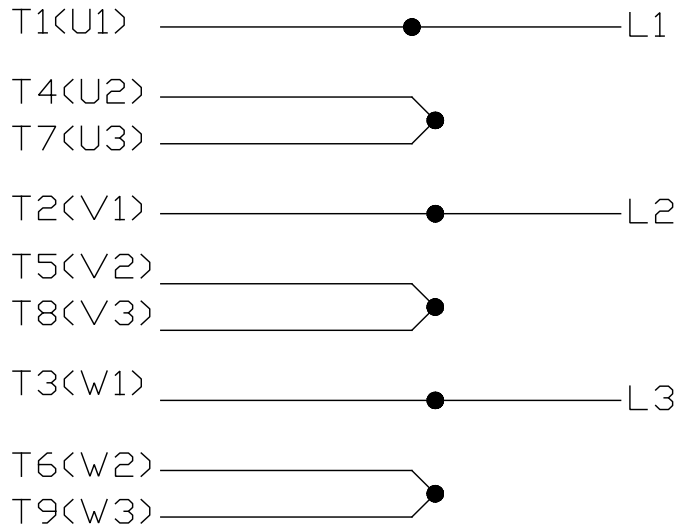
SIZE	DRAWING NUMBER	SHEET
B	SS311136	1 OF 1

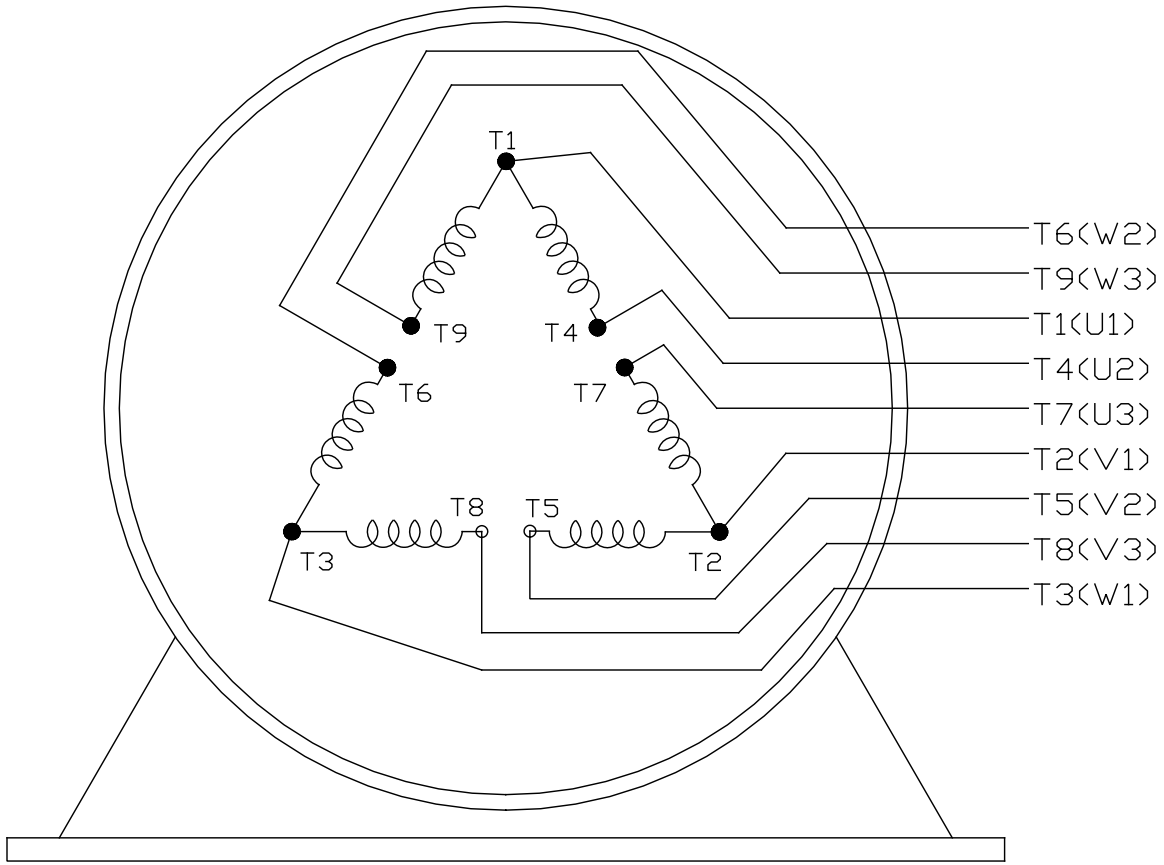
EE7308K

LOW VOLTAGE



HIGH VOLTAGE





VIEW OF TERMINAL END

NO.	REVISION	BY & DATE	CHK
E	CORRECTED IEC MARKINGS ECO-0111208	WGJ 01-23-2017	EMH
D	RE-DRAWN WITH REGAL LOGO ECO-0110493	WGJ 09-30-2016	EMH
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS
7	REVISD HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998	
6	REDRAWN ON CADD	PGK 06-05-1997	

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.02
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

REGAL - BELOIT CORPORATION

TITLE: CONNECTION DIAGRAM
DELTA CON. - 3Ø - 9 LEADS

MAT'L.

FINISH

CAD FILE EE7308K

RFP

DIST

DRAWN PGK 06-04-1997
CHK ML 06-05-1997
APPD GK 06-15-1997
SCALE
REF
FMF
PREV

SIZE	DRAWING NO.	PAGE OF	REV.
A	EE7308K		E

CERTIFICATION DATA SHEET

Model#:	286TSTFNA6804 BA	**WINDING#:**	K2862155 NONE 1
CONN. DIAGRAM:	A-EE7308K	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS311136-1425		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30	22.4	3600	3555	286TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	67/33.5	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 93	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89.5	3/4 LOAD PF: 87	1/2 LOAD PF: 81	92.4	SQ CAGE INV RATED	19 / 9.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.5 LB-FT	434 / 217	63 LB-FT 142	123 LB-FT 275	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	2.7 LB-FT^2	35 LB-FT^2	20 SEC.	2	450 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 6311	BALL 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: CONSTANT 20:1
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

* NOTES *

DATE: 06/27/2017 02:29:26 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

286TSTFNA6804

Submittal

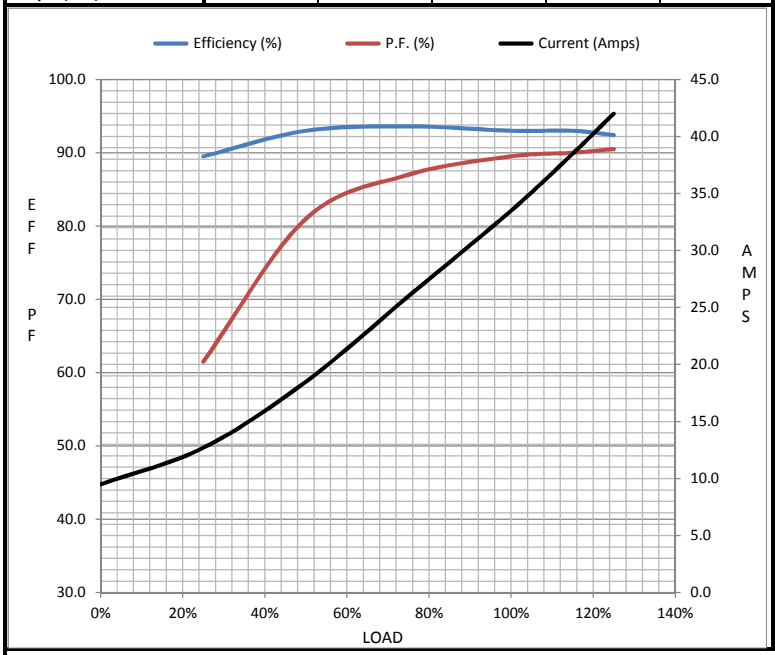
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	9.5	12.7	18.5	26.0	33.5	38.5	42.0	217	
Torque (ft-lb)	0.00	11.0	22.0	33.0	44.5	51.0	56.0	63.0	
RPM	3600	3590	3578	3565	3555	3,547	3542	0	
Efficiency (%)		89.5	93.0	93.6	93.0	93.0	92.4		
P.F. (%)	6.5	61.5	81.0	87.0	89.5	90.0	90.5	32.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3400	3555	3600
Current (Amps)	217	195	138	33.5	9.5
Torque (ft-lb)	63.0	56.0	123	44.5	0.00



Information Block

HP	30.0
Sync. RPM	3600
Frame	286
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 wk²	2.70 Lb-Ft²
Ref Wdg	K2862155 NONE
Sound Pressure @ 1M	72 dBA
VFD Rating	CONSTANT 20:1
Outline Dwg	B-SS311136-1425
Conn. Diag	A-EE7308K
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.1970	0.1040	0.7940	0.6050	#######

Speed -Torque Curve