

Explosion Proof Motors

Model No: 286TTGN6537

Catalog No: E564

Explosion Proof Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 286T Frame,
EPFC

Product Information Packet: Model No: 286TTGN6537, Catalog No: E564 Explosion Proof Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 286T Frame, EPFC

Nameplate Specifications

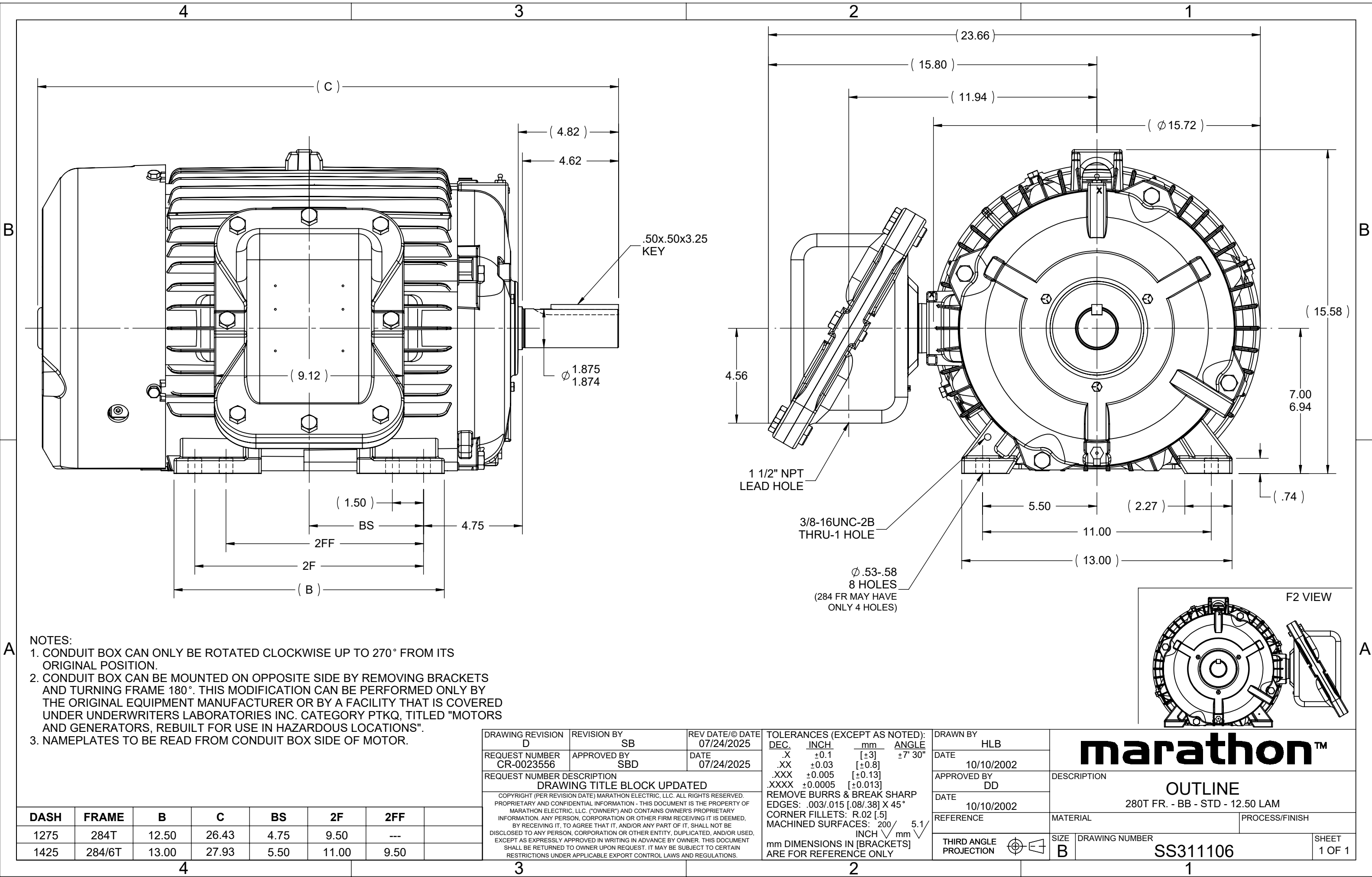
Phase	3	Output HP	30 & 25 Hp
Output KW	22.4 & 18.7 kW	Voltage	230/460 & 190/380 V
Speed	1773 & 1475 r/min	Synchronous RPM	1800 & 1500 r/min
Service Factor	1.15 & 1.15	Frame	286T
Enclosure	Explosion Proof Fan cooled	Thermal Protection	Thermostat
Efficiency	94.1 & 93.6 %	Ambient Temperature	40 °C
Frequency	60 & 50 Hz	Current	73/36.5 & 74/37 A
Power Factor	82	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	G	Drive End Bearing Size	6311
Opp Drive End Bearing Size	6210	UL	UL Listed And CSA Certified
CSA	Y	CE	N
IP Code	54	Number of Speeds	1
Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B		

Technical Specifications

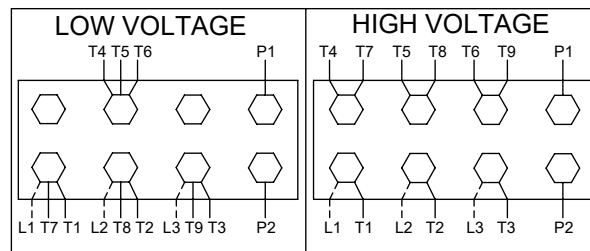
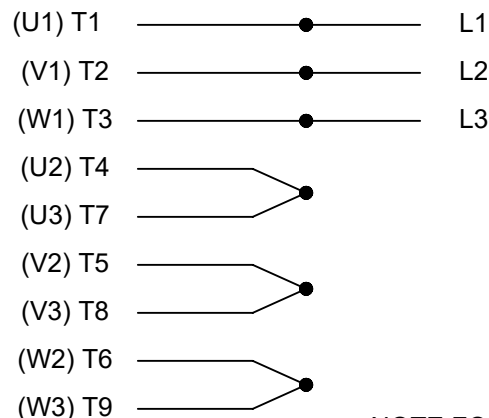
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.205 O	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	27.71 in
Frame Length	14.25 in	Shaft Diameter	1 7/8 in
Shaft Extension	4.82 in	Assembly/Box Mounting	F1 Only
Inverter Load	Constant 10:1		

Drawings

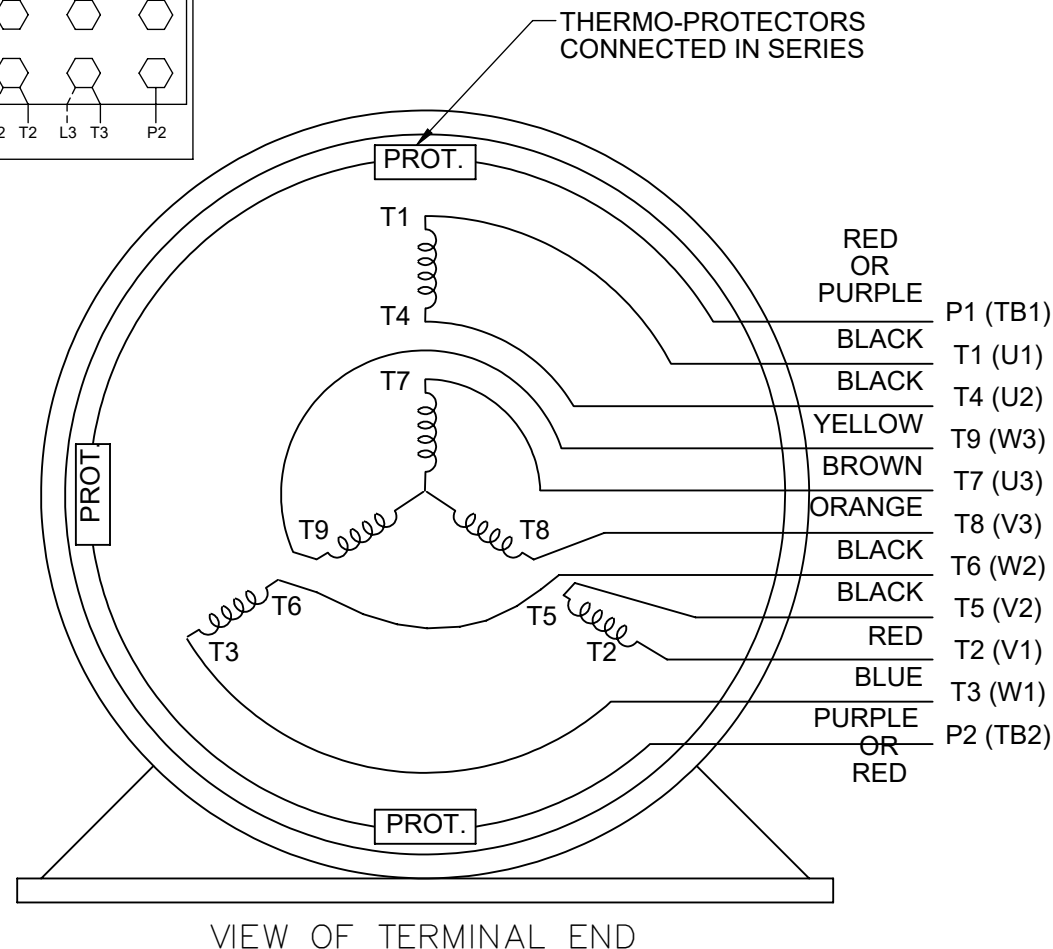
Connection Drawing	A-EE7308T	Outline Drawing	B-SS311106-1425
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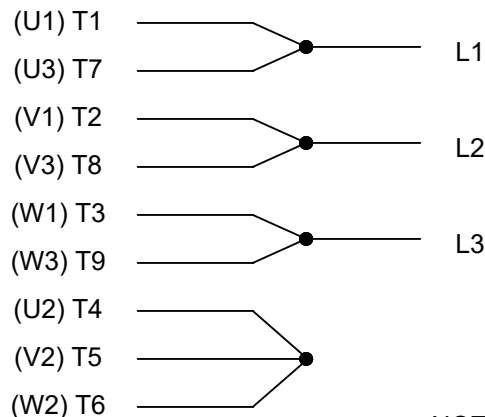
HIGH VOLTAGE



THREE PHASE DUAL VOLTAGE MOTOR



LOW 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

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR IMG PLANT

DRAWING REVISION U	REVISION BY SB	REV DATE/© DATE 08/01/2025
REQUEST NUMBER CR-0023654	APPROVED BY SBD	DATE 08/01/2025
REQUEST NUMBER DESCRIPTION DRAWING TITLE BLOCK UPDATED		
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY SMC	DATE 05-13-1992
APPROVED BY TB	DATE 05-13-1992
REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION

marathon™		
DESCRIPTION CONN DIAGRAM-EXTERNAL 3 PHASE - DUAL VOLTAGE MOTOR		
MATERIAL	PROCESS/FINISH	
SIZE A	DRAWING NUMBER EE7308T	SHEET 1 OF 1

Data Sheet

Date: 6/20/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



286TTGN6537

Submittal

Data @ 460 V

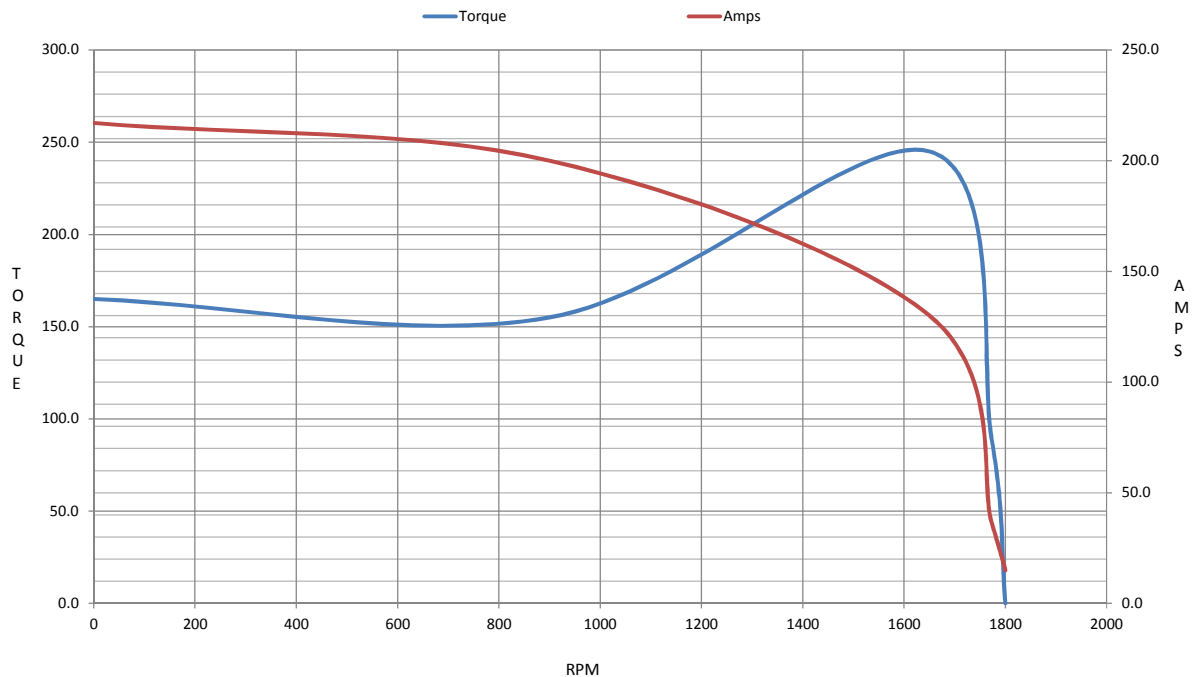
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.0	17.5	22.5	29.0	36.5	40.0	45.5	217	
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	100	112	165	
RPM	1800	1795	1785	1780	1773	1,770	1765	0	
Efficiency (%)		89.5	93.6	94.1	94.1	94.1	93.6		
P.F. (%)	6.0	45.0	67.5	77.0	82.0	82.5	83.0	34.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle															
Speed (RPM)	0	900	1650	1773	1800															
Current (Amps)	217	200	130	36.5	15.0															
Torque (ft-lb)	165	155	245	89.0	0.00															
— Efficiency (%) — P.F. (%) — Current (Amps) EFFICIENCY (%) P.F. (%) CURRENT (AMPS) LOAD <table><tr><th>R1</th><th>R2</th><th>X1</th><th>X2</th><th>Xm</th></tr><tr><td>0.1250</td><td>0.1360</td><td>0.7240</td><td>0.9370</td><td>17.7850</td></tr></table>						R1	R2	X1	X2	Xm	0.1250	0.1360	0.7240	0.9370	17.7850	Information Block				
						R1	R2	X1	X2	Xm										
						0.1250	0.1360	0.7240	0.9370	17.7850										
						HP		30.0												
						Sync. RPM		1800												
						Frame		286												
						Enclosure		TEFC												
						Construction		TFN												
						Voltage		30/460#190/3Ø V												
						Frequency		60 Hz												
						Design		B												
						LR Code letter		G												
						Service Factor		1.15												
						Temp Rise @ FL		60 ° C												
						Duty		CONT												
						Ambient		40 ° C												
						Elevation		1,000 feet												
Rotor/Shaft wk ²		4.6 Lb-Ft ²																		
Ref Wdg		K2864159 NONE																		
Sound Pressure @ 1M		65 dBA																		
VFD Rating		CONSTANT 10:1																		
Outline Dwg		B-SS311106-1425																		
Conn. Diag		A-EE7308T																		
Additional Specifications:																				
0																				
0																				
EQUIV CKT (OHMS / PHASE)																				
R1	R2	X1	X2	Xm																
0.1250	0.1360	0.7240	0.9370	17.7850																

Speed -Torque Curve



CERTIFICATION DATA SHEET

Model#: 286TTGN6537 AB
 CONN. DIAGRAM: A-EE7308T
 OUTLINE: B-SS311106-1425

WINDING#: K2864159 NONE 6
 ASSEMBLY: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30&25	22.4&18.7	1800	1773&1475	286T	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	73/36.5&74/37	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&93.6	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82&81.5	3/4 LOAD PF: 77	1/2 LOAD PF: 67.5	93.6	SQ CAGE INV RATED	30 / 15

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89 LB-FT	434 / 217	165 LB-FT 185	245 LB-FT 275	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	4.6 LB-FT^2	225 LB-FT^2	25 SEC.	2	540 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	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

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

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

If Inverter equals NONE, contact factory for further information

* N O T E S *	INVERTER TORQUE: CONSTANT 10:1
	INV. HP SPEED RANGE: 1.5 X BASE SPEED
	ENCODER: NONE
	NONE NONE NONE NONE PPR
* N O T E S *	BRAKE: NONE NONE
	NONE P/N NONE
	NONE NONE
	NONE FT-LB NONE V NONE Hz

DATE: 06/27/2017 04:10:13 AM
 FORM 3531 REV.3 02/07/99

** Subject to change without notice.