

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284TTTNA16540

Catalog No: U1873

XRI®-SD Severe Duty Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,
284TV Frame, TEAO



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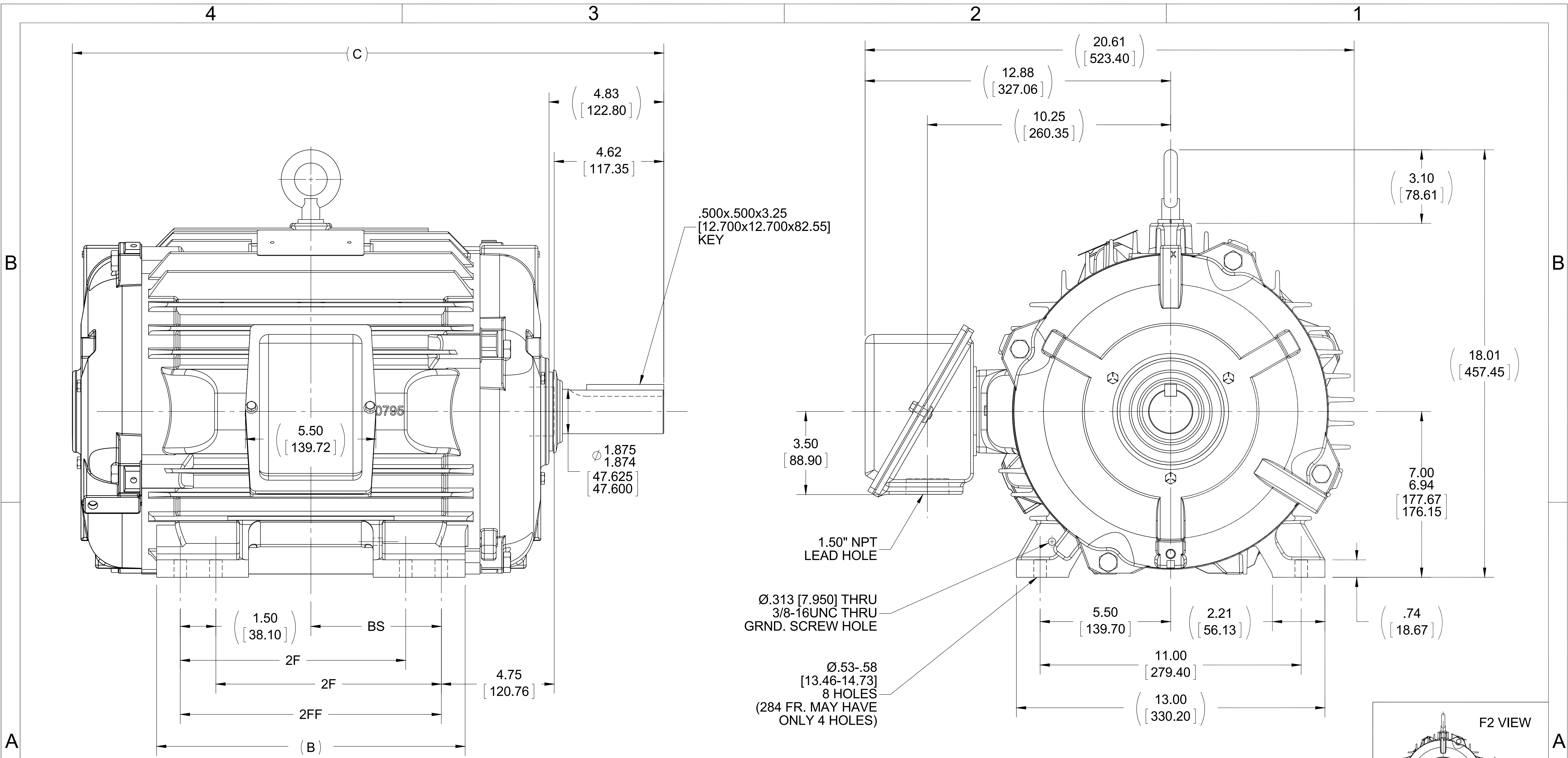
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	25 & 20 Hp
Output KW	18.7 & 14.9 kW	Voltage	230/460 & 190/380 V
Speed	1775 & 1470 rpm	Service Factor	1.15 & 1.15
Frame	284TV	Enclosure	Totally Enclosed Air Over
Thermal Protection	No Protection	Efficiency	93.6 & 93 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	62/31 & 60/30 A	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.251 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal Or Up Or Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	23.42 in
Frame Length	12.75 in	Shaft Diameter	1.875 in
Shaft Extension	4.83 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS311239-1275	Connection Drawing	A-EE7308



- 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	BS	2F	2FF
1275	284T	12.50 [317.50]	23.42 [594.87]	4.75 [120.65]	---	9.50 [241.30]
1425	284/286T	13.00 [330.20]	24.92 [632.97]	5.50 [139.70]	9.50 [241.30]	11.00 [279.40]

DRAWING REVISION E	REVISION BY W. JOERGER	DATE 07-01-2015
ECO ECO-0080734	APPROVED BY E. HEIL	DATE 07-01-2015
ECO DESCRIPTION REMOVED COVER PLATE AND SEAL FROM O.D.E.		
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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]
 CORNER FILLETS: .02 [.51]
 MACHINED SURFACES: 200 INCH 5.1 mm
 mm SHOWN IN [BRACKETS]

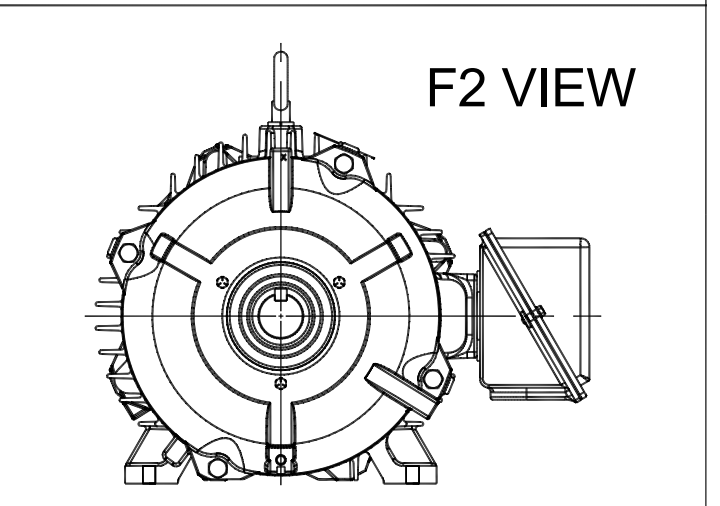
DRAWN BY NJS
DATE 10-03-2001
APPROVED BY BW
DATE 10-05-2001
REFERENCE
THIRD ANGLE PROJECTION

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
280T FR. - TEAO / TENV - BB - STD - 12.50" LAM

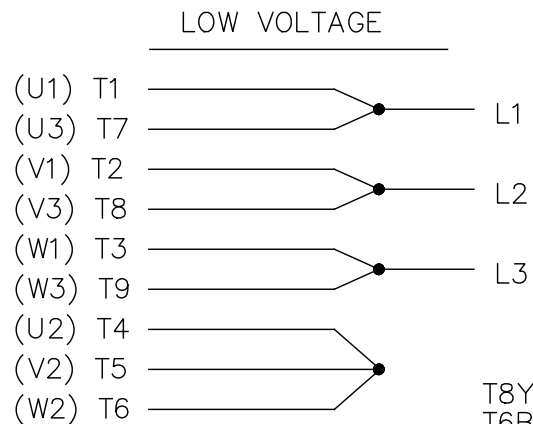
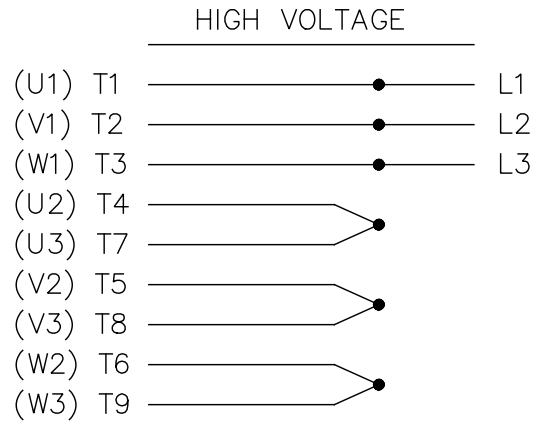
MATERIAL PROCESS/FINISH

SIZE **B** DRAWING NUMBER **SS311239** SHEET 1 OF 1



EE7308

THREE PHASE
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD
CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					CHK ML 11/21/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1			APPD SAS 04/24/2003				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		TITLE CONNECTION DIAGRAM	SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			PREV				
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT							RFP	CAD FILE ee7308	SIZE A	DRAWING NO. EE7308	PAGE OF 5	REV. 5
							DIST WP					



Regal Beloit America, Inc.

CERTIFICATION DATA SHEET

Model#: 284TTTNA16540 AA
CONN. DIAGRAM: A-EE7308
OUTLINE: B-SS311239-1275

WINDING#: K2844120 R9 6
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25&20	18.7&14.9	1800	1775&1470	284TV	TEAO	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	62/31&60/30	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 93.6&93	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81&81	3/4 LOAD PF: 75	1/2 LOAD PF: 65	93	SQ CAGE INV RATED	27 / 13.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74 LB-FT	362 / 181	140 LB-FT 189	215 LB-FT 291	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
- dBA	- dBA	4.2 LB-FT^2	175 LB-FT^2	25 SEC.	2	460 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL OR UP OR DOWN	PREMIUM SEVERE DUTY	NONE	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			
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: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

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DATE: 06/27/2017 01:34:24 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 20-06-2017
Customer: _____
Attention: _____
Submitted by: FAREEDA DUDEKULA



284TTNA16540

Submittal

Data @ **460 V**

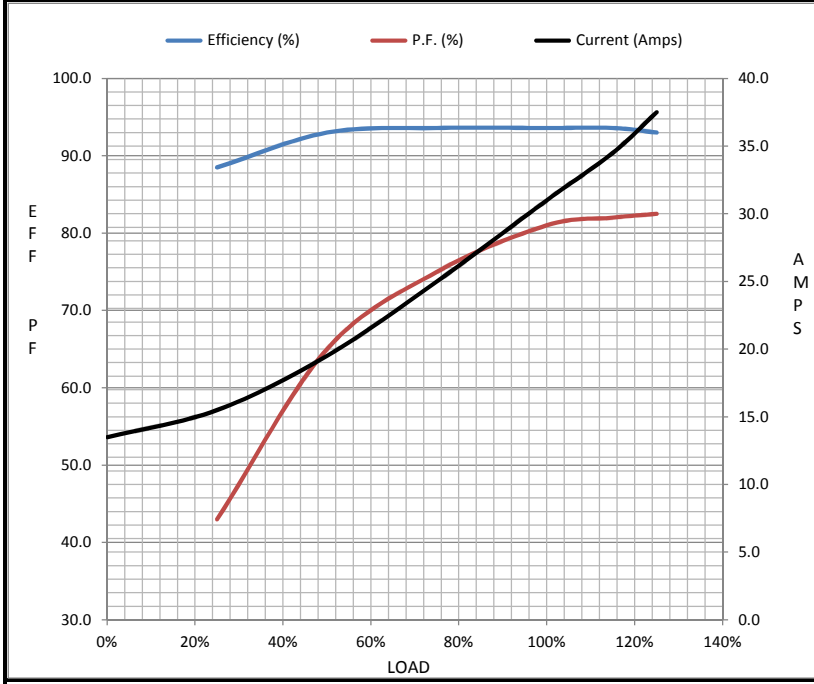
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	13.5	15.5	19.5	25.0	31.0	34.5	37.5	181
Torque (ft-lb)	0.00	18.5	37.0	55.5	74.0	85.5	93.0	140
RPM	1800	1795	1785	1780	1775	1,765	1760	0
Efficiency (%)		88.5	93.0	93.6	93.6	93.6	93.0	
P.F. (%)	5.5	43.0	65.0	75.0	81.0	82.0	82.5	33.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1775	1800
Current (Amps)	181	165	125	31.0	13.5
Torque (ft-lb)	140	130	215	74.0	0.00

Information Block				
HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TEAO			
Construction	TTN			
Voltage	230/460#190/38(V)			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	0 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	4.2 Lb-Ft ²			
Ref Wdg	K2844120 R9			
Sound Pressure @ 1M	999 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS311239-1275			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1500	0.1540	0.8520	1.0660	20.0640



Speed - Torque Curve

