

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405THFS9086

Catalog No: W596

75 HP Severe Duty Motor, 3 phase, 1200 RPM, 460 V, 405T Frame, TEFC
Severe Duty Motors



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RegalRexnord

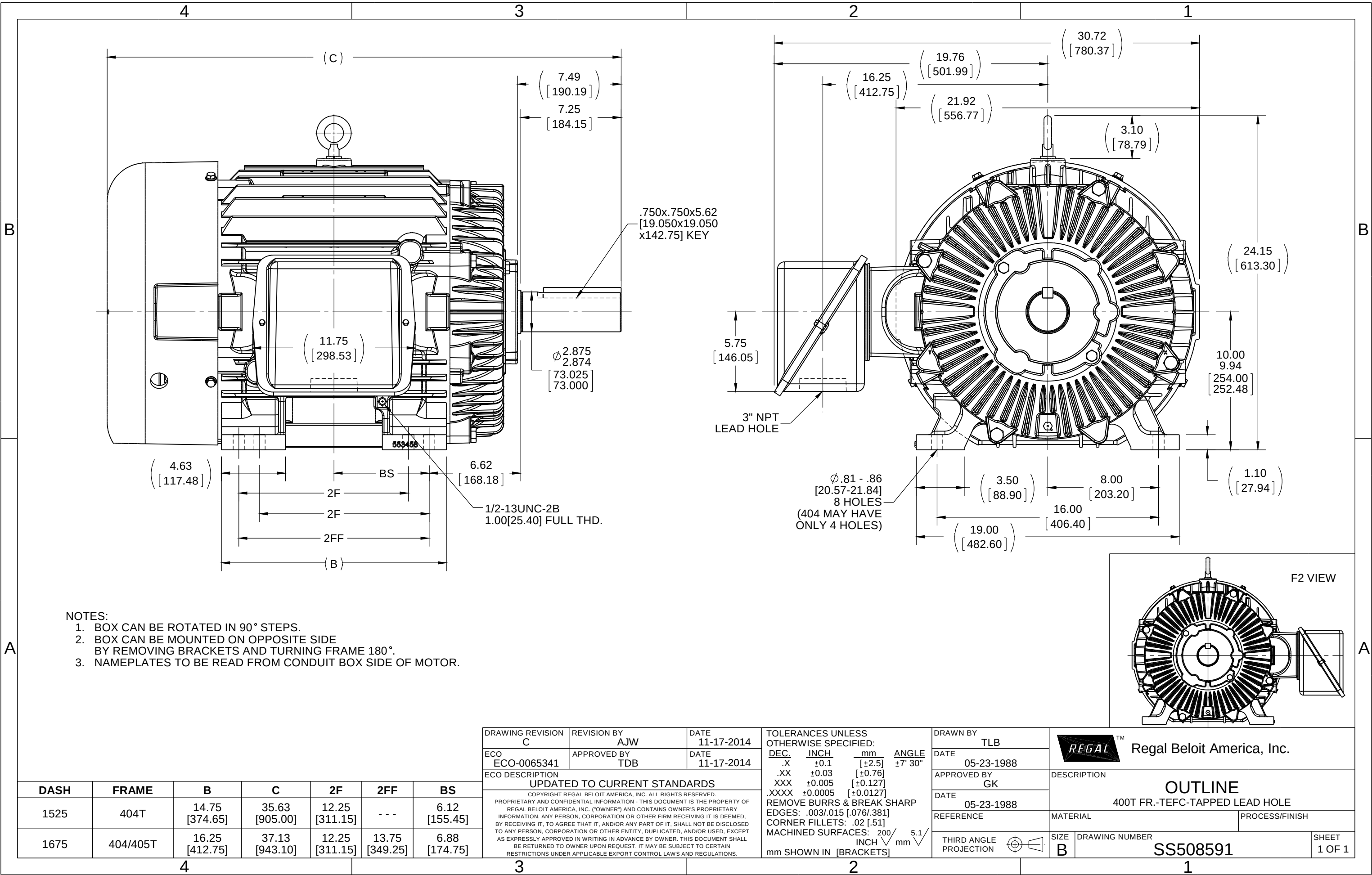
Nameplate Specifications

Output HP	75 Hp	Output KW	56.0 kW
Frequency	60 Hz	Voltage	460 V
Current	89.5 A	Speed	1185 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Power Factor	83
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	405T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6316	Opp Drive End Bearing Size	6313
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	6	Rotation	Reversible
Resistance Main	.09 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	37.14 in
Frame Length	16.75 in	Shaft Diameter	2.875 in
Shaft Extension	7.25 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300	Outline Drawing	B-SS508591-1675

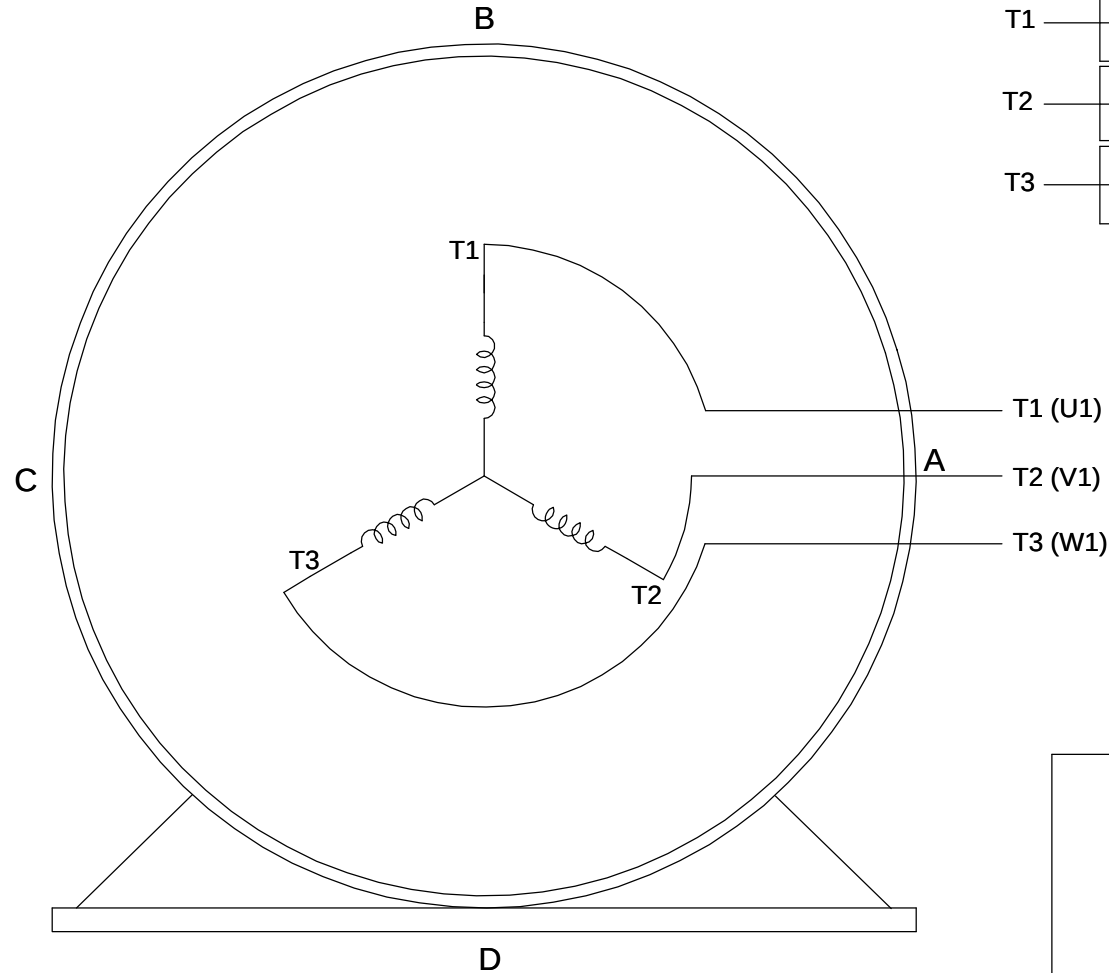
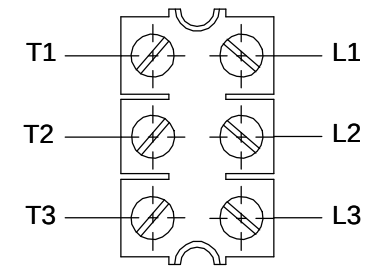
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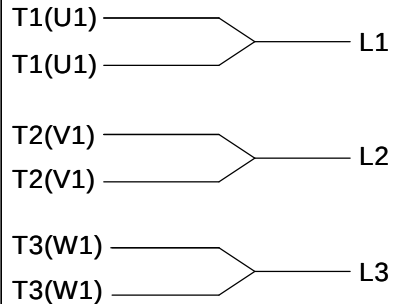
THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.

TERMINAL BLOCK WHEN SPECIFIED

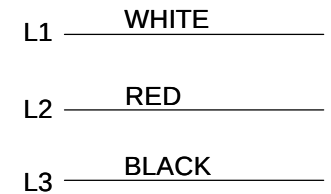


IF MOTOR HAS
6 LEADS



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#: 405THFS9086 BT
 CONN. DIAGRAM: A-EE7300
 OUTLINE: B-SS508591-1675

WINDING#: T405671 NONE 1
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
75	56	1200	1185	405T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	89.5	LINE OR INVERTER	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 83	3/4 LOAD PF: 80	1/2 LOAD PF: 70.5	94.5	SQ CAGE INV RATED	33

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
332 LB-FT	542	700 LB-FT 211	800 LB-FT 241	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
68 dBA	78 dBA	42 LB-FT^2	1100 LB-FT^2	25 SEC.	2	1450 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						
6316	6313	POLYREX EM	T	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 10:1					
	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		

DATE: 06/21/2017 08:17:34 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 19-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



405THFS9086

Submittal

Data @ 460 V

Motor Load Data

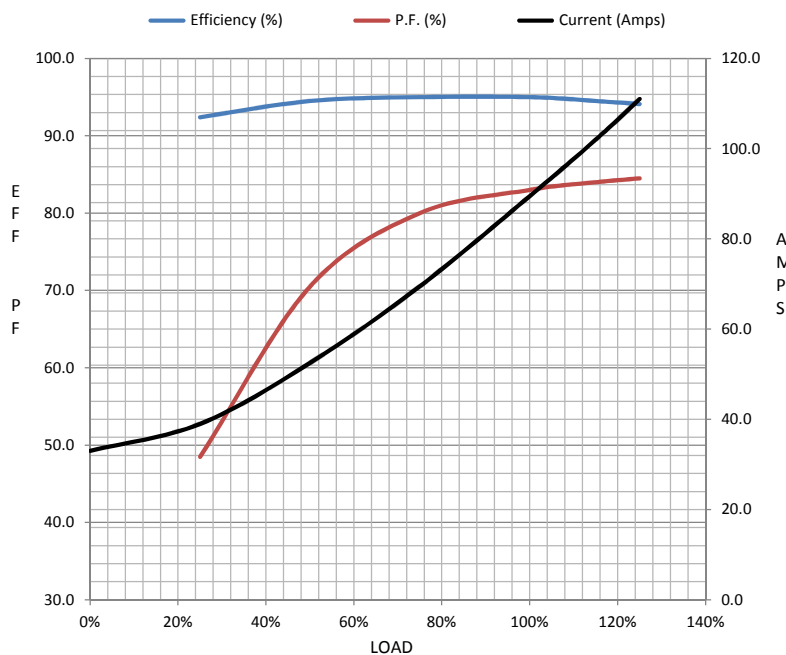
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	33.0	39.0	52.5	69.5	89.5	102	111	542	
Torque (ft-lb)	0.00	82.5	165	248	332	382	416	700	
RPM	1200	1195	1192	1190	1185	1,182	1180	0	
Efficiency (%)		92.4	94.5	95.0	95.0	94.5	94.1		
P.F. (%)	3.5	48.5	70.5	80.0	83.0	84.0	84.5	35.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1125	1185	1200
Current (Amps)	542	475	300	89.5	33.0
Torque (ft-lb)	700	625	800	332	0.00

Information Block

HP	75.0			
Sync. RPM	1200			
Frame	405			
Enclosure	TEFC			
Construction	TFS			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	42.0 Lb-Ft ²			
Ref Wdg	T405671 NONE			
Sound Pressure @ 1M	68 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS508591-1675			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0590	0.0360	0.2990	0.4330	7.8810



Speed -Torque Curve

