

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405TTDS16010

Catalog No: M753

150 HP Vertical Solid Shaft P-Base Motor, 3 phase, 3600 RPM, 460 V, 405HPV Frame, ODP
Vertical Pump Motors



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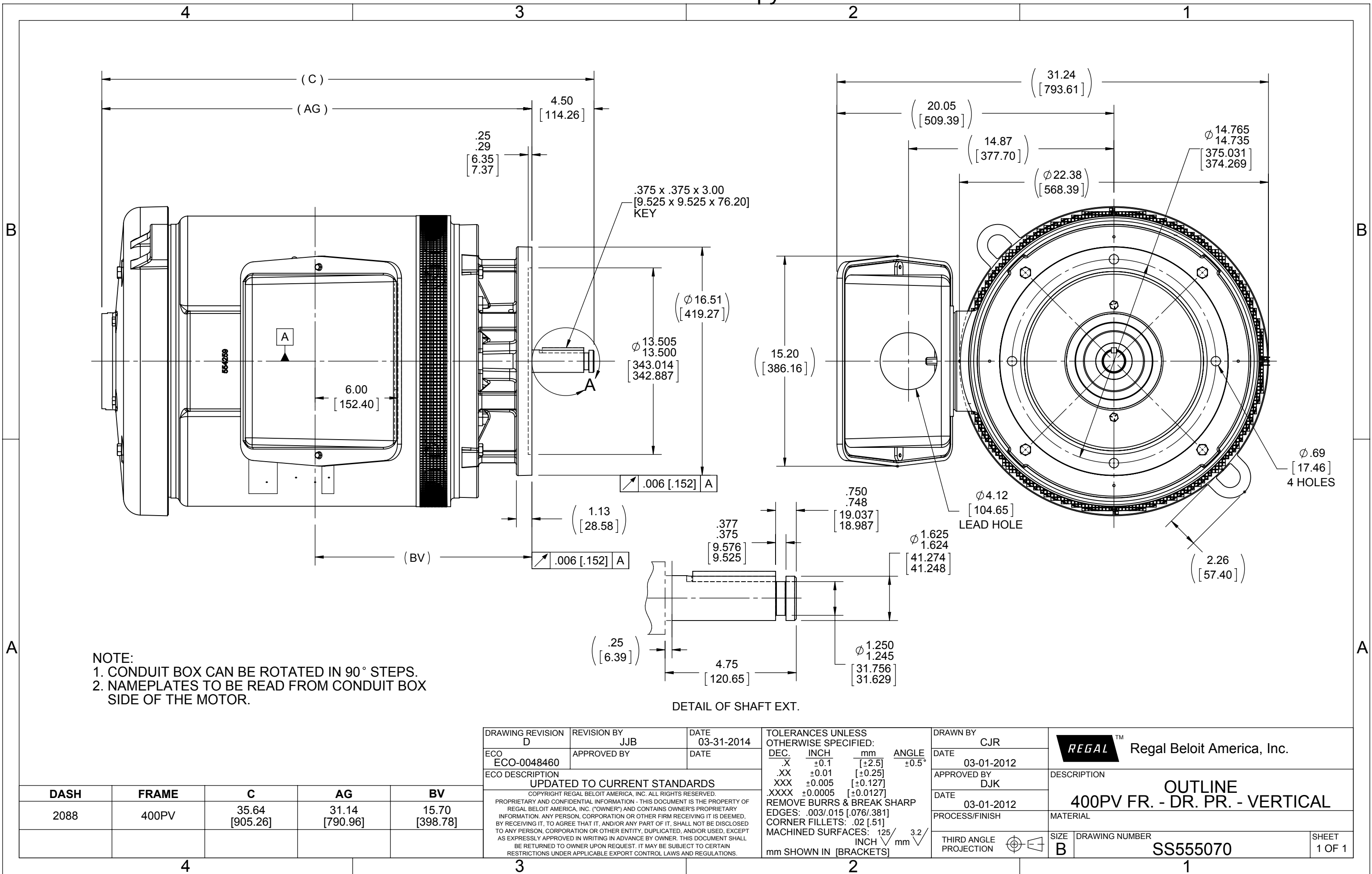
RegalRexnord

Nameplate Specifications

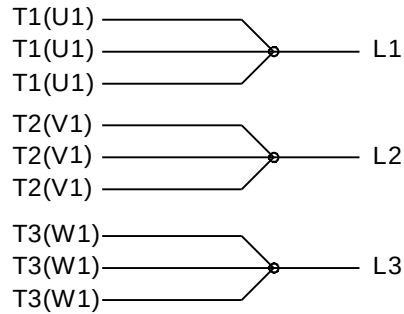
Output HP	150 Hp	Output KW	112.0 kW
Frequency	60 Hz	Voltage	460 V
Current	165.0 A	Speed	3565 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Power Factor	89.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	405HPV	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	7312 2
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

Technical Specifications

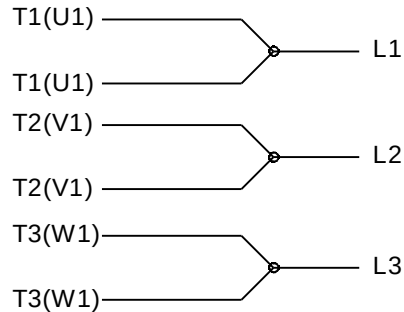
Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.0395 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Duplex Tandem Angular Contact	Frame Material	Cast Iron
Shaft Type	HP	Overall Length	35.64 in
Frame Length	20.88 in	Shaft Diameter	1.625 in
Shaft Extension	4.5 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS555070-2088	Connection Drawing	A-EE7300U



IF MOTOR HAS 9 LEADS

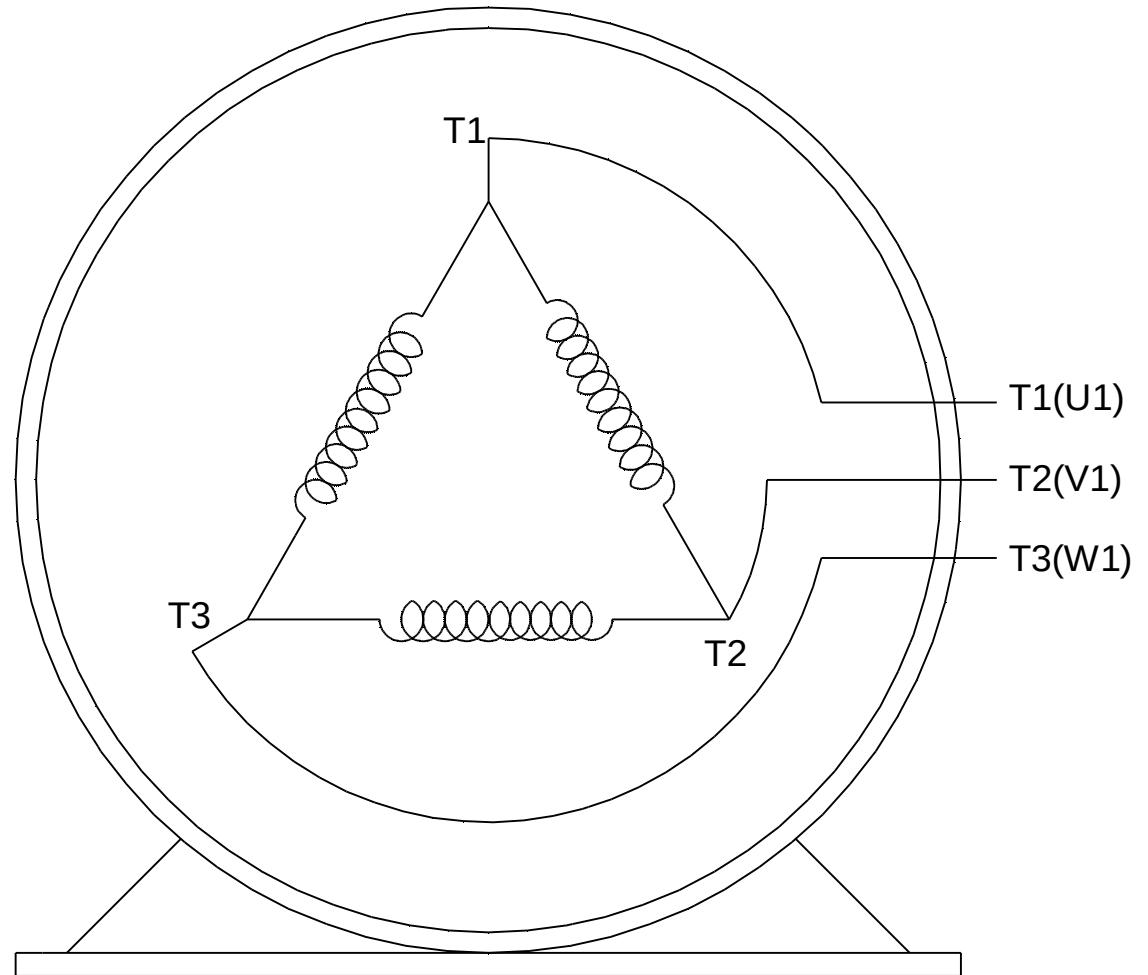
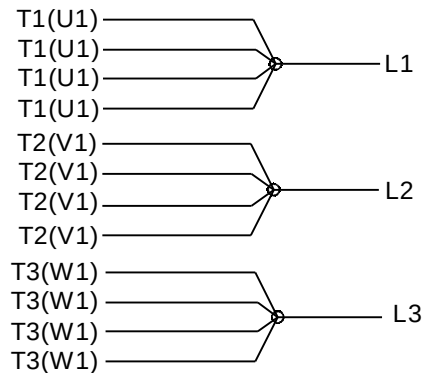


IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH mm ANGLE .X ±0.1 [±2.5] ±7° 30" .XX ±0.02 [±0.51] 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 DRS	REGAL™ Regal Beloit America, Inc.	
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015			DATE 09-27-1996	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE	
ECO DESCRIPTION UPDATED TO SOLIDWORKS COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.			APPROVED BY GK		MATERIAL PROCESS/FINISH 		
			DATE 09-30-1996				
REFERENCE			THIRD ANGLE PROJECTION		SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 405TTDS16010 AN
 CONN. DIAGRAM: A-EE7300U
 OUTLINE: B-SS555070-2088

WINDING#: T405241 NONE 2
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150	112	3600	3565	405HPV	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	165	ACROSS THE LINE	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: 89.5	3/4 LOAD PF: 88.5	1/2 LOAD PF: 84.5	94.5	SQ CAGE IND RUN	38.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
221 LB-FT	1020	290 LB-FT 130	560 LB-FT 253	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
82 dBA	92 dBA	16.5 LB-FT^2	140 LB-FT^2	10 SEC.	2	1100 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	FALSE	NONE	TRUE	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	DUPLEX TANDEM ANGULAR CONTACT	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6312	7312 2						

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: NONE
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: 06/22/2017 12:15:58 AM
 FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 6/19/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



405TTDS16010

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	38.5	55.5	88.0	125	165	191	207	1,020	
Torque (ft-lb)	0.00	55.0	110	165	221	255	276	290	
RPM	3600	3592	3585	3575	3565	3,560	3555	0	
Efficiency (%)		91.7	94.5	95.0	95.0	94.5	94.5		
P.F. (%)	7.5	68.5	84.5	88.5	89.5	90.0	90.0	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block				
Speed (RPM)	0	1800	3400	3565	3600	HP		150.0		
Current (Amps)	1,020	915	610	165	38.5	Sync. RPM		3600		
Torque (ft-lb)	290	240	560	221	0.00	Frame		405		
Efficiency (%) P.F. (%) Current (Amps) EFFICIENCY (%) P.F. (%) CURRENT (AMPS)	Enclosure		DP							
	Construction		TDS							
	Voltage		460 V							
	Frequency		60 Hz							
	Design		B							
	LR Code letter		F							
	Service Factor		1.15							
	Temp Rise @ FL		45 ° C							
	Duty		CONT							
	Ambient		40 ° C							
	Elevation		1,000 feet							
	Rotor/Shaft wk²		16.5 Lb-Ft²							
	Ref Wdg		T405241 NONE							
	Sound Pressure @ 1M		82 dBA							
	VFD Rating		NONE							
	Outline Dwg		B-SS555070-2088							
	Conn. Diag		A-EE7300U							
Additional Specifications:										
0										
0										
					EQUIV CKT (OHMS / PHASE)					
		R1	R2	X1	X2	Xm				
		0.0220	0.0130	0.1870	0.1440	6.0900				

Speed -Torque Curve

