

PRODUCT INFORMATION PACKET

Model No: 825417.00

Catalog No: 825417.00

Explosion Proof Motor, 75 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 405T Frame, EPFC



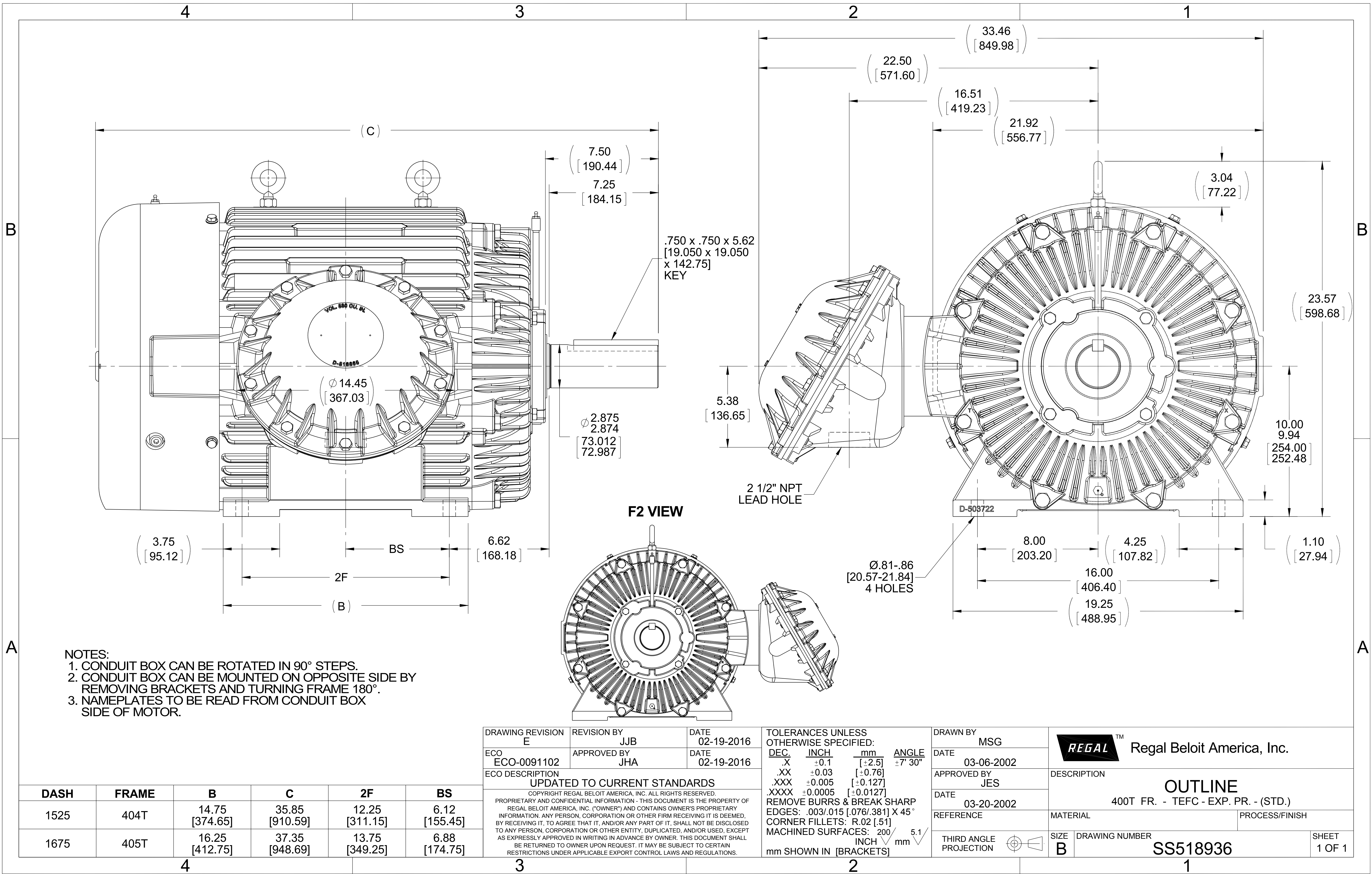
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Nameplate Specifications

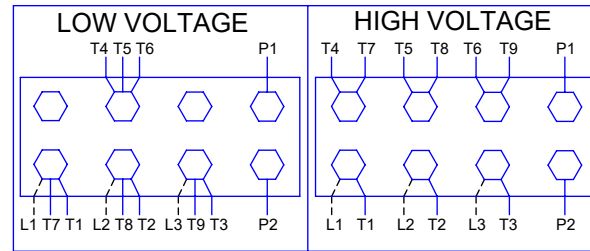
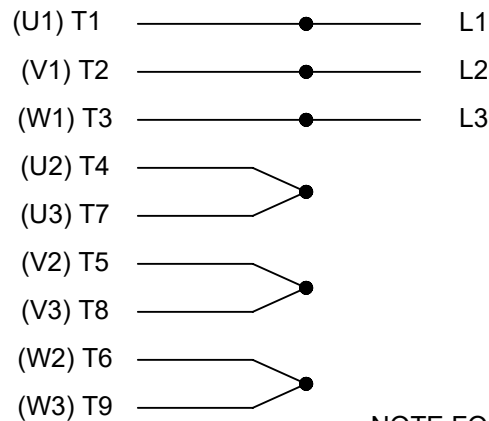
Output HP	75 Hp	Output KW	56.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	180.0/90.0 A	Speed	1185 rpm
Service Factor	1.15	Phase	3
Efficiency	94.5 %	Power Factor	83
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	405T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6316	Opp Drive End Bearing Size	6313
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.092 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	37.35 in
Frame Length	16.75 in	Shaft Diameter	2.875 in
Shaft Extension	7.25 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 2:1		
Connection Drawing	A-EE7308T	Outline Drawing	B-SS518936-1675

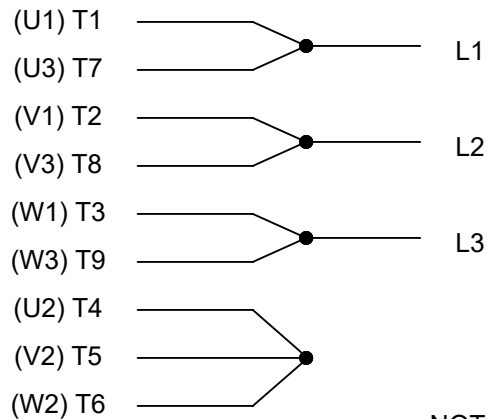
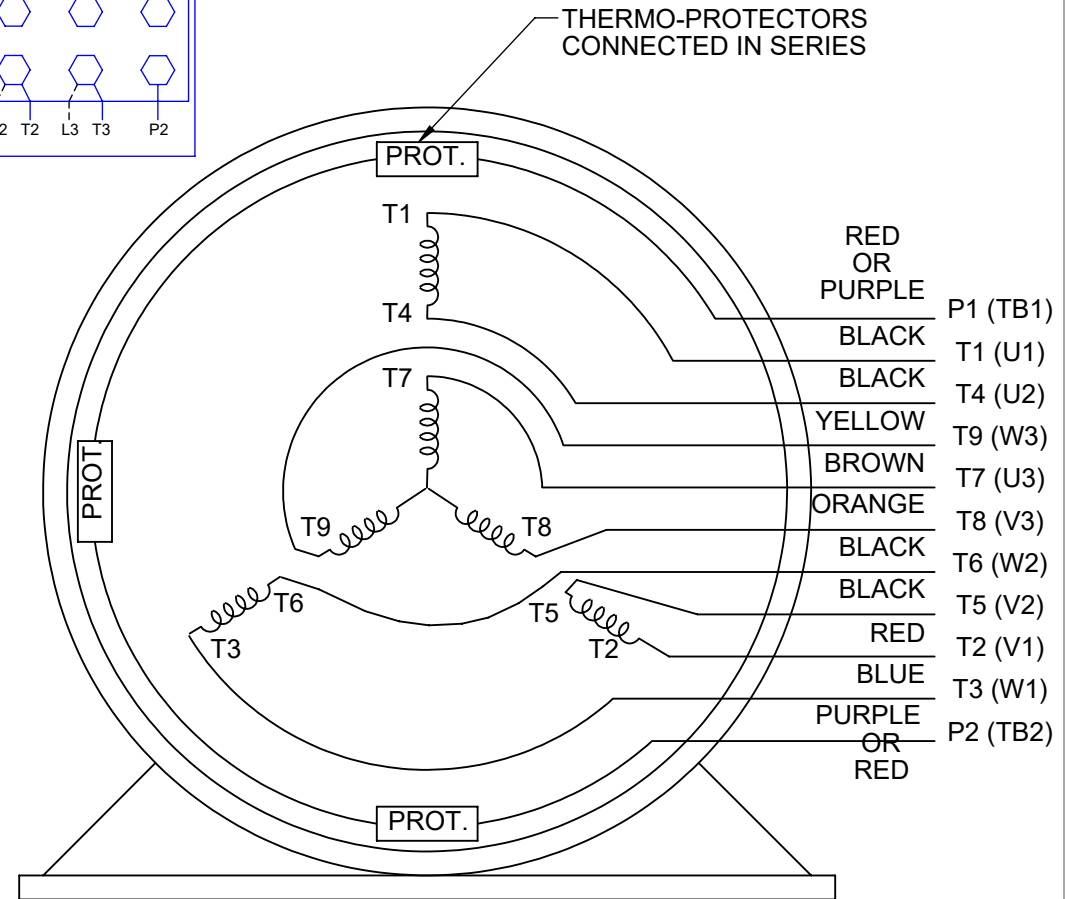


HIGH VOLTAGE



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

LOW VOLTAGE

THREE PHASE
DUAL VOLTAGE MOTOR

VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019

ECO DESCRIPTION
ADDED TERMINAL CONNECTION DIAGRAM

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DRAWN BY
SMC

DATE
05-13-1992

APPROVED BY
TB

DATE
05-13-1992

REFERENCE
EE7308/EE7300

THIRD ANGLE
PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-INTERNAL
 3 PHASE - DUAL VOLTAGE MOTOR

MATERIAL

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

EE7308T

SHEET
1 OF 1



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308T

CAT #: 825417.00

OUTLINE: B-SS518936-1675

WINDING: T405642

NONE 1

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
75	56	1200	1185	405T	TEFC	TFS	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	180/90	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	94.5	3/4 LD EFF	95.0	1/2 LD EFF	94.5	GTD EFF	94.1	ELECT. TYPE	SQ CAGE INV RATED
F.L. PF	83.0	3/4 LD PF	79.0	1/2 LD PF	71.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
333 LB-FT	535	650 LB-FT 195%	750 LB-FT 225%	75

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
68 dBA	77 dBA	38.0 LB-FT²	1200 LB-FT²	25 SEC.	2	1350 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	UM SEVERE	DF CL I GR C&D CL II GF	NO	NONE	BLUE (EPOXY)

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6316 6313						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.068	0.042	0.325	0.507	8.732	0.080	ODE

* N O T E S *		INVERTER TORQUE: CONSTANT 2:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
	ENCODER: NONE NONE NONE	NONE PPR

DATE: 1/19/2018	BRAKE: NONE NONE	NONE
	FT-LB: NA VOLTAGE: NONE	HZ:
	UL: NONE	

Data Sheet

Date: 1/19/2018

825417.00



Data @ 460 V

Motor Load Data

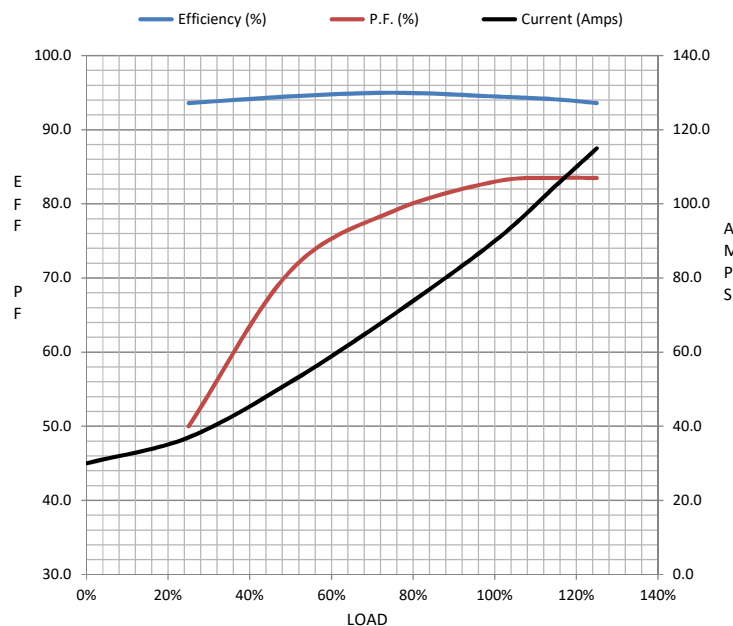
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	30.0	37.0	52.0	70.0	90.0	105	115	535	
Torque (ft-lb)	0.00	82.5	165	248	333	385	417	650	
RPM	1200	1196	1192	1188	1185	1,180	1175	0	
Efficiency (%)		93.6	94.5	95.0	94.5	94.1	93.6		
P.F. (%)	4.0	50.0	71.0	79.0	83.0	83.5	83.5	37.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1050	1185	1200
Current (Amps)	535	475	300	90.0	30.0
Torque (ft-lb)	650	575	750	333	0.00

Information Block

HP	75.0			
Sync. RPM	1200			
Frame	405			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	75 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk²	38.0 Lb-Ft²			
Ref Wdg	T405642 NONE			
Sound Pressure @ 1M	68 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS518936-1675			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0680	0.0420	0.3250	0.5070	8.7320



Speed - Torque Curve

