

PRODUCT INFORMATION PACKET



Model No: 170099.60

Catalog No: 170099.60

WATTSaver® General Purpose Motor, 75 & 60 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V,
1200 & 1000 RPM, 405T Frame, TEFC



Regal and Leeson are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E



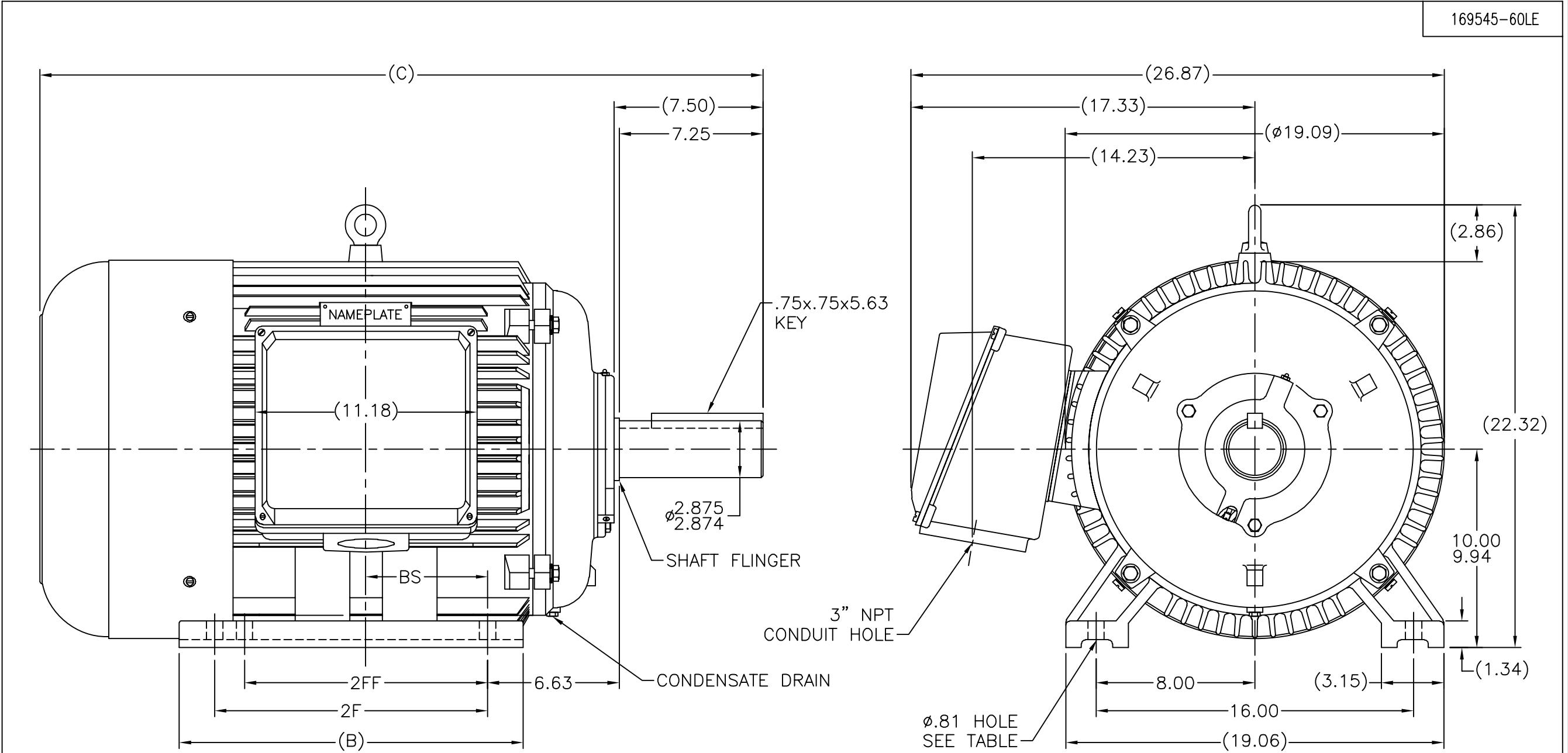


Nameplate Specifications

Phase	3	Output HP	75 & 60 Hp
Output KW	56.0 & 45.0 kW	Voltage	208-230/460 & 190/380 V
Speed	1190 & 990 rpm	Service Factor	1.15 & 1.15
Frame	405T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	95 & 94.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	197-176/88 & 168/84 A	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6316	Opp Drive End Bearing Size	6314
UL	Recognized	CSA	Y
CE	N	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Wye Start Delta Run Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.0696 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	37.91 in
Shaft Diameter	2.875 in	Shaft Extension	7.25 in
Assembly/Box Mounting	F1 ONLY		
Connection Drawing	004172.01	Outline Drawing	16954560LE

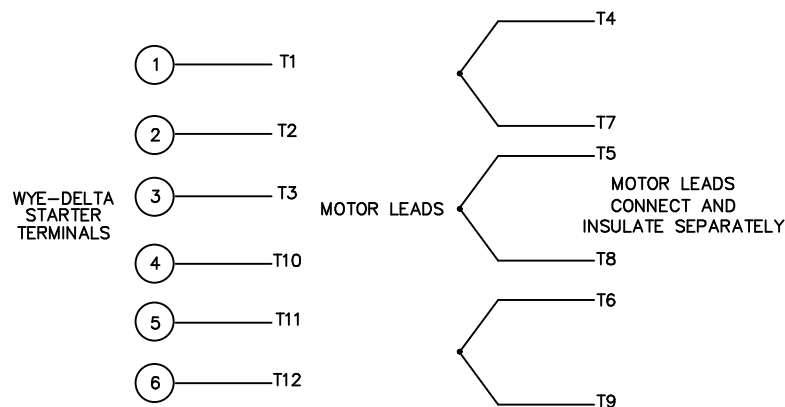
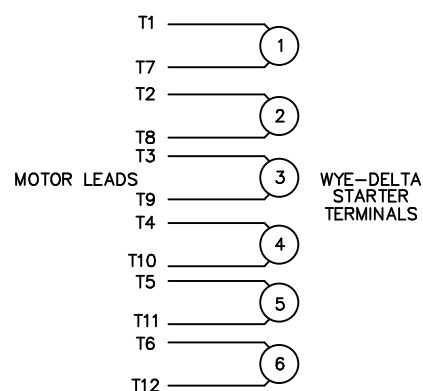


											TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION			DRAWN CTO 08/21/2002							
											DEC.	INCHES				CHK	ML 08/29/2002						
													.X	±.1	APPD	SB 08/30/2002							
								3	REVISED BS DIM. UPDATED TITLE BLOCK ECO--0048910							RFH 04/07/2014	EH	.XX	±.03	TITLE OUTLINE -- RIGID			SCALE
2	CORRECTED FOOT MOUNTING HOLES DISCRIPTION							MOL 10/21/2011		.XXX	±.005	400T RF. -- TEFC			REF								
1	NEW DRAWING							CTO 06/30/2002	SB	.XXXX	±.0005	MAT'L.			FMF								
	1681	404T	36.42	15.83	12.25	--	5.39	4	NO.	REVISION			BY & DATE	CHK	ANG	±7'30"	FINISH	PREV					
	1831	405T	37.91	17.32	13.75	12.25	6.90	6	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 169545601e		SIZE	DRAWING NO. PAGE 1 OF 1	REV.	
																DIST		A	169545--60LE		3		
	DASH	FRAME	C	B	2F	2FF	BS	HOLE QTY															

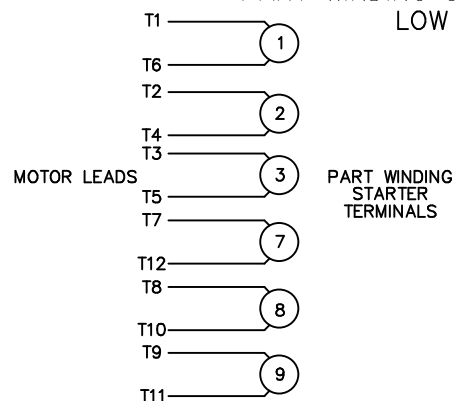
WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



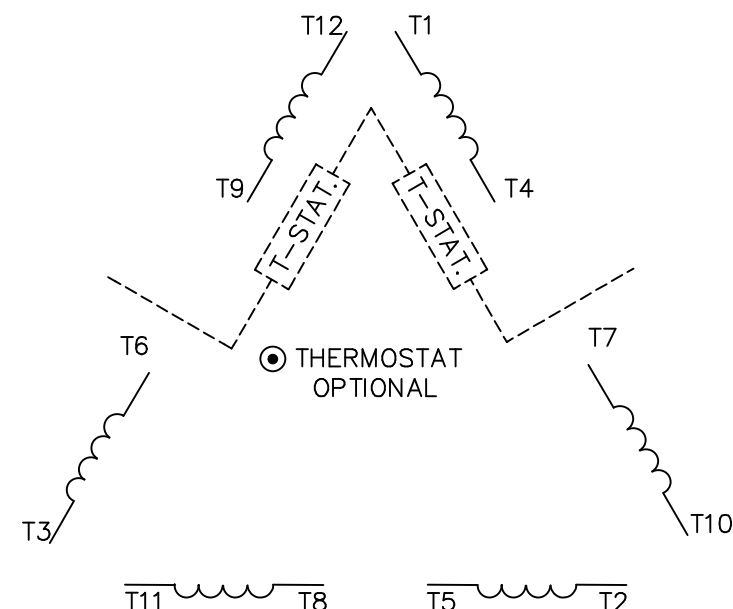
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY

REFER TO THE PART WINDING STARTER INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

REFER TO THE CUTLER - HAMMER OR EQUIV. FOR PROPER SELECTION OF OVERLOAD HEATER COILS.

LINE LEADS



ROTATION CAN BE REVERSED BY INTERCHANGING ANY TWO LINE LEADS
 ● RED LEADS OR P1, P2, FOR N/C THERMOSTAT

ACROSS THE LINE START & RUN

	LINE 1	LINE 2	LINE 3	JOIN & INSULATE SEPARATELY
HIGH VOLT	T1,T12	T2,T10	T3,T11	(T4,T7) (T5,T8) (T6,T9)
LOW VOLT	T1,T6 T7,T12	T2,T4 T8,T10	T3,T5 T9,T11	

TOLERANCES
UNLESS SPECIFIED

DEC. INCHES

.X ±.1

.XX ±.01

.XXX ±.005

.XXXX ±.0005

ANG ±1/2"



ELECTRIC MOTORS
GEARMOTORS
AND DRIVES

DRAWN WLW 09/08/77

CHK RPB 09/12/77

APPD JCW 09/12/77

SCALE 1=1

REF

FMF

PREV

NO.	REVISION	BY & DATE	CHK	ANG
03	REV'D LOW VOLTAGE CONN. LEADS PER ELEC.	BJB 06/07/00	.XX	±.01
02	ADDED T-STAT. NOTES PER ELECTRICAL	KMM 06/02/98	.XXX	±.005
01	REDRAWN TO CAD	DBT 06/02/97	.XXXX	±.0005

TITLE DELTA - WYE CONNECTION DIAGRAM

MAT'L.

FINISH

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

DIST

CAD FILE 00417201

SIZE

A

DRAWING NO.

004172-01

REV.

03



CERTIFICATION DATA SHEET

**1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-377-8810**

CONN. DIAGRAM: 004172.01

CATALOG #: 170099.60

OUTLINE: 16954560LE

MOUNTING: F1 ONLY

WINDING #: T19606013 FR 3

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
75&60	56.0&45.0	1200	1190&990	405T	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	208-230/460&190/380	197-176/88&168/84	Y START D RUN OR INV	CONTINUOUS	F5	1.15/1.15	40

FULL LOAD EFF:	95&94.5	3/4 LOAD EFF:	95	1/2 LOAD EFF:	94.5	GTD. EFF		ELEC. TYPE
FULL LOAD PF:	84&85.8	3/4 LOAD PF:	81.5	1/2 LOAD PF:	74	93.6		SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B,D. TORQUE	F.L. RISE°C
331 LB-FT	1084 / 542	621 LB-FT 187 %	735 LB-FT 221 %	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
57 dBA	67 dBA	39.2 LB-FT^2	- LB-FT^2	15 SEC.	2	1125 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

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	6314						

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

*

N

O

T

E

S

INVERTER TORQUE: CONSTANT 2:1

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

Data Sheet

Date: 2/1/2018

170099.60



Data @ 460 V

Motor Load Data

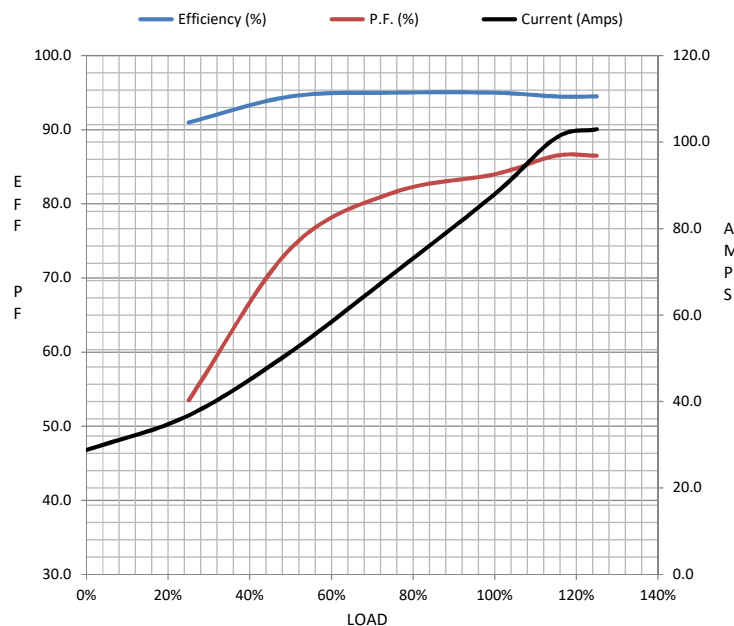
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	28.8	36.8	51.5	69.5	88.0	101	103	542	
Torque (ft-lb)	0.00	84.2	169	253	331	382	388	621	
RPM	1200	1198	1195	1193	1190	1,188	1187	0	
Efficiency (%)		91.0	94.5	95.0	95.0	94.5	94.5		
P.F. (%)	5.5	53.5	74.0	81.5	84.0	86.5	86.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	500	1050	1190	1200
Current (Amps)	542	525	350	88.0	28.8
Torque (ft-lb)	621	500	735	331	0.00

Information Block

HP	75.0			
Sync. RPM	1200			
Frame	405			
Enclosure	TEFC			
Construction	TFC			
Voltage	208-230/460#190/380	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 wk²	39.2	Lb-Ft²		
Ref Wdg	T19606013 FR			
Sound Pressure @ 1M	57	dBA		
VFD Rating	CONSTANT 2:1			
Outline Dwg	16954560			
Conn. Diag	004172.01			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed - Torque Curve

