

PRODUCT INFORMATION PACKET



Model No: 825125.00

Catalog No: 825125.00

Explosion Proof Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM,
182TC Frame, EPFC



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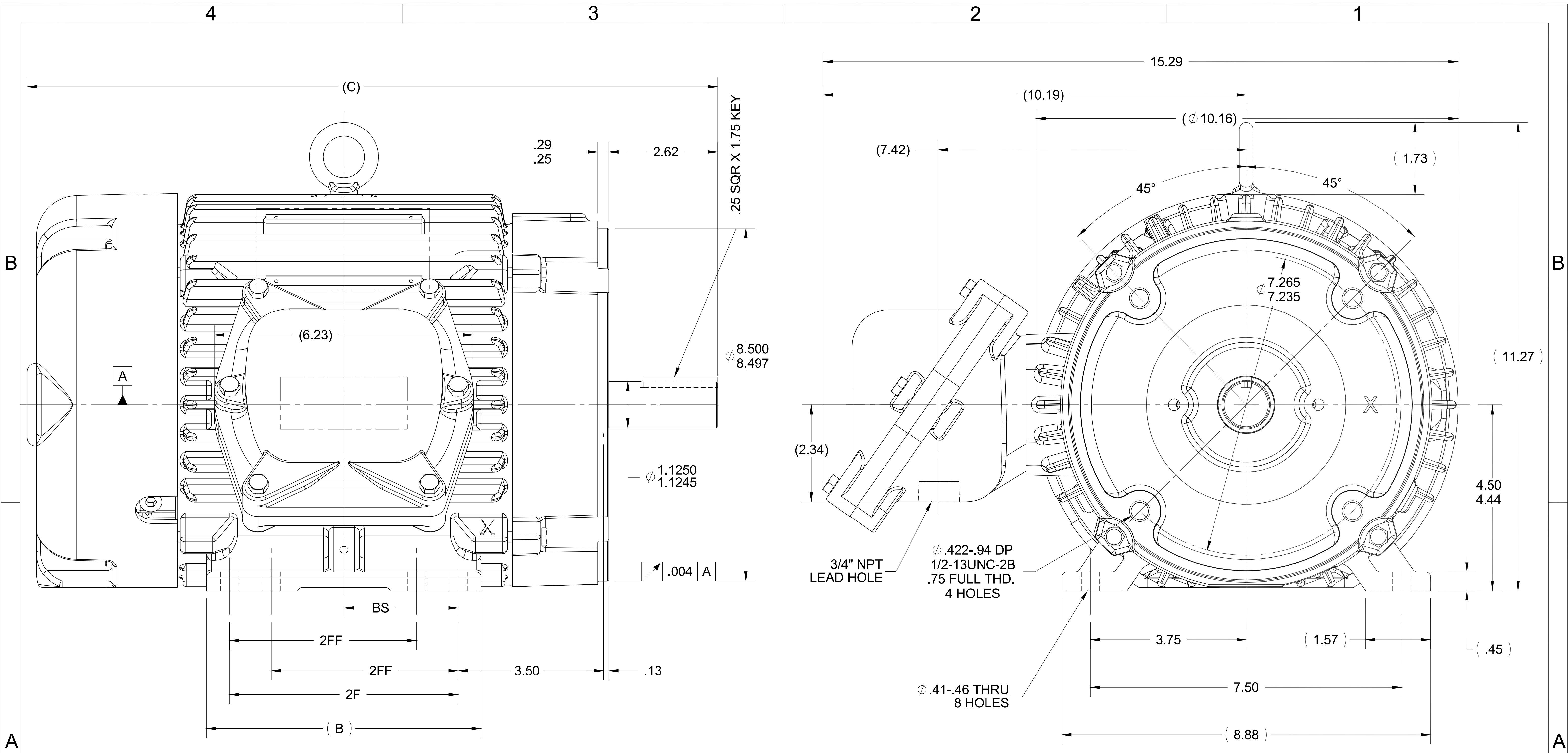


Nameplate Specifications

Phase	3	Output HP	3 & 2 Hp
Output KW	2.2 & 1.5 kW	Voltage	230/460 & 190/380 V
Speed	3525 & 2935 rpm	Service Factor	1.15 & 1.15
Frame	182TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	87.5 & 85.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	7.6/3.8 & 6.4/3.2 A	Power Factor	85
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	K
Drive End Bearing Size	207	Opp Drive End Bearing Size	206
UL	UL Listed; also, UL Certified for Canada	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	3.56 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	16.62 in
Frame Length	8.00 in	Shaft Diameter	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Outline Drawing	035673-800	Connection Drawing	A-EE7308T-LE



- NOTES:
 1. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
 2. CONDUIT BOX CAN ROTATED IN 90° STEPS.
 3. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°

1000	182/184	18.62	8.61	7.50	5.50	3.75
800	182/184	16.62	6.61	5.50	4.50	2.75
DASH	FRAME	C	B	2F	2FF	BS

DRAWING REVISION B	REVISION BY KIR	DATE 01/21/16
ECO ECO-0092270	APPROVED BY GR	DATE 01/21/16
ECO DESCRIPTION TITLE BLOCK UPDATED		
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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] X 45°
 CORNER FILLETS: R.02 [51]
 MACHINED SURFACES: 200 INCH/mm 5.1

mm SHOWN IN [BRACKETS]

DRAWN BY TJW 3/25/2008
DATE
APPROVED BY SW 3/26/2008
DATE
REFERENCE
THIRD ANGLE PROJECTION

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
180 FR. EPFC - C FACE - CAST C'BOX

MATERIAL PROCESS/FINISH

SIZE **B** DRAWING NUMBER **035673** SHEET 1 OF 1

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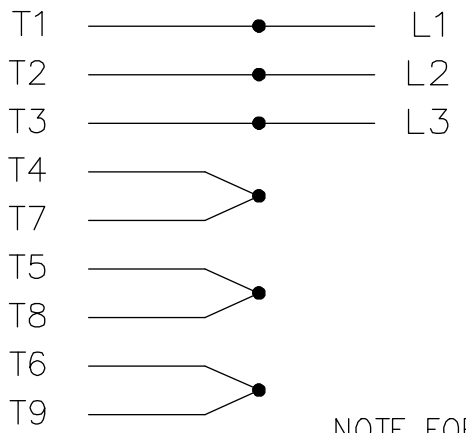
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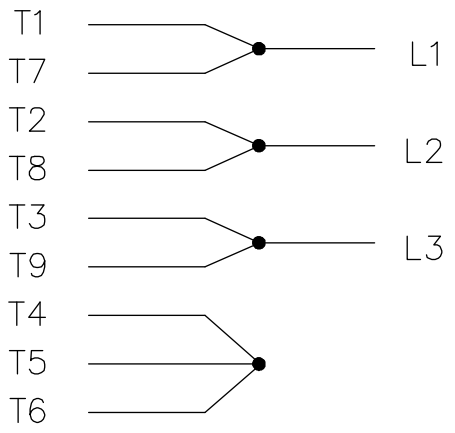
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

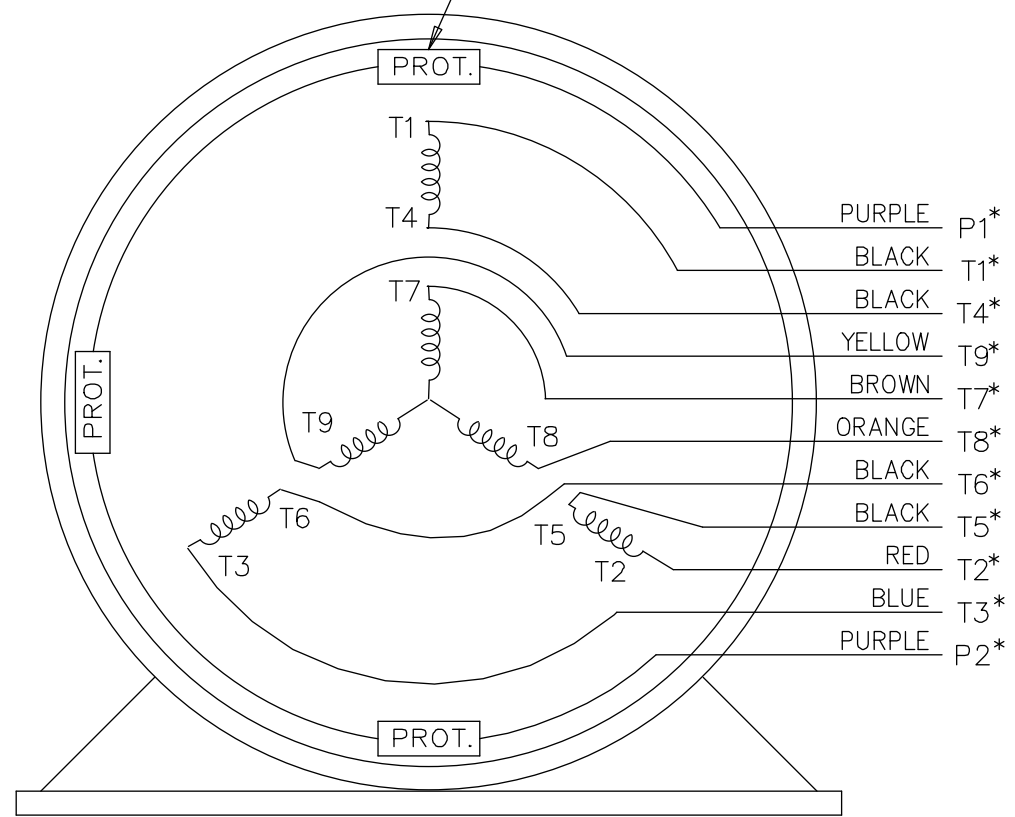


NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1

LOW VOLTAGE



THREMO-PROTECTORS
CONNECTED IN SERIES.



VIEW OF TERMINAL END

* USE LEADS AS PER PLANT STANDARD IRRWSPECTIVE OF THEIR COLOUR.

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWING NO.	PAGE	OF	REV.
					DEC.	INCHES					
05	ADDED * NOTE PER ECN # 26921	UD 01-30-2013	JD	DEC.	INCHES						
04	ADDED COLORS TO "T & P" LEADS CN 40494	MSG 08-08-2006	ML	.X	±.1						
03	RE-ISSUE	NJS 04-21-2004	JET	.XX	±.02						
02	REDRAWN	TAT 04-20-2004	ML	.XXX	±.005						
01	NEW DRAWING CN 34708	TJB 05-08-2002	ML	.XXXX	±.0005						
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							DIST LB-WP-LE				



ELECTRIC MOTORS
GEARMOTORS
AND DRIVES

TITLE CONNECTION DIAGRAM
3 PHASE - DUAL VOLTAGE MOTOR

DRAWN	TJB	05-07-2002
CHK	ML	05-08-2002
APPD	TB	05-08-2002
SCALE	1=1	
REF		
FMF		
PREV		



CERTIFICATION DATA SHEET

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

CONN. DIAGRAM: A-EE7308T-LE

CATALOG #: 825125.00

OUTLINE: 035673-800

MOUNTING: F1 ONLY

WINDING #: 1822101 FN 1

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3&2	2.24&1.49	3600	3525&2935	182TC	EPFC	K	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	7.6/3.8&6.4/3.2	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	87.5&86.5	3/4 LOAD EFF:	86.5	1/2 LOAD EFF:	84	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	85&82	3/4 LOAD PF:	79	1/2 LOAD PF:	70	85.5	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L,R. TORQUE	B,D. TORQUE	F.L. RISE°C
4.5 LB-FT	58 / 29	9 LB-FT 200 %	16 LB-FT 356 %	32

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.23 LB-FT^2	4 LB-FT^2	15 SEC.	2	85 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	TRUE	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE - LEESON (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
207	206						

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

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
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: 1/24/2018

825125.00



Data @ **460 V**

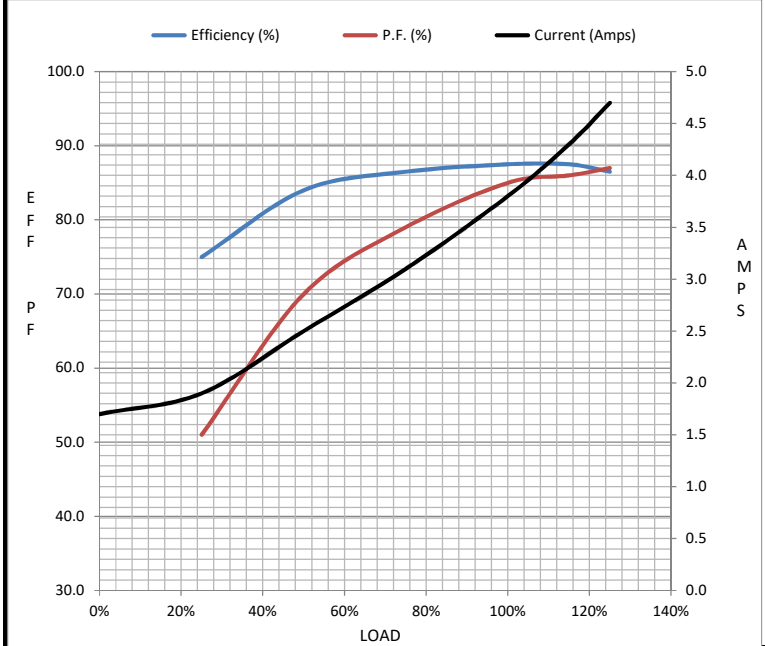
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.70	1.90	2.50	3.1	3.8	4.3	4.7	29.0
Torque (ft-lb)	0.00	1.10	2.20	3.3	4.5	5.2	5.6	9.0
RPM	3600	3582	3565	3545	3525	3,515	3505	0
Efficiency (%)		75.0	84.0	86.5	87.5	87.5	86.5	
P.F. (%)	11.0	51.0	70.0	79.0	85.0	86.0	87.0	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1100	2985	3525	3600
Current (Amps)	29.0	29.5	18.0	3.8	1.70
Torque (ft-lb)	9.0	10.5	16.0	4.5	0.00

Information Block				
HP	3.0			
Sync. RPM	3600			
Frame	182			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	25 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.23 Lb-Ft ²			
Ref Wdg	1822101 FN			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	035673-800			
Conn. Diag	A-EE7308T-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.7780	2.0150	7.3220	2.4500	167.4420



Speed - Torque Curve

