

PRODUCT INFORMATION PACKET



Model No: 825116.00

Catalog No: 825116.00

Explosion Proof Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,
182TC Frame, EPFC



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

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E





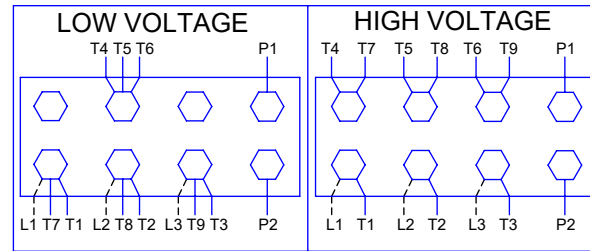
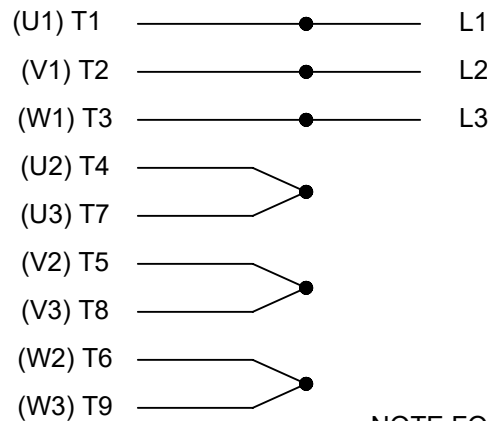
Nameplate Specifications

Phase	3	Output HP	3 & 2 Hp
Output KW	2.2 & 1.5 kW	Voltage	230/460 & 190/380 V
Speed	1760 & 1470 rpm	Service Factor	1.0 & 1.0
Frame	182TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	90.2 & 88.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	8/4 & 6.8/3.4 A	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	K
Drive End Bearing Size	6207	Opp Drive End Bearing Size	6206
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

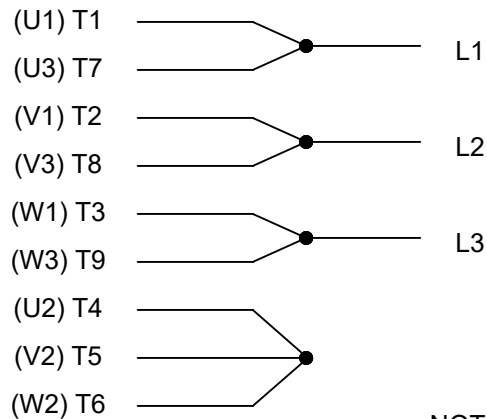
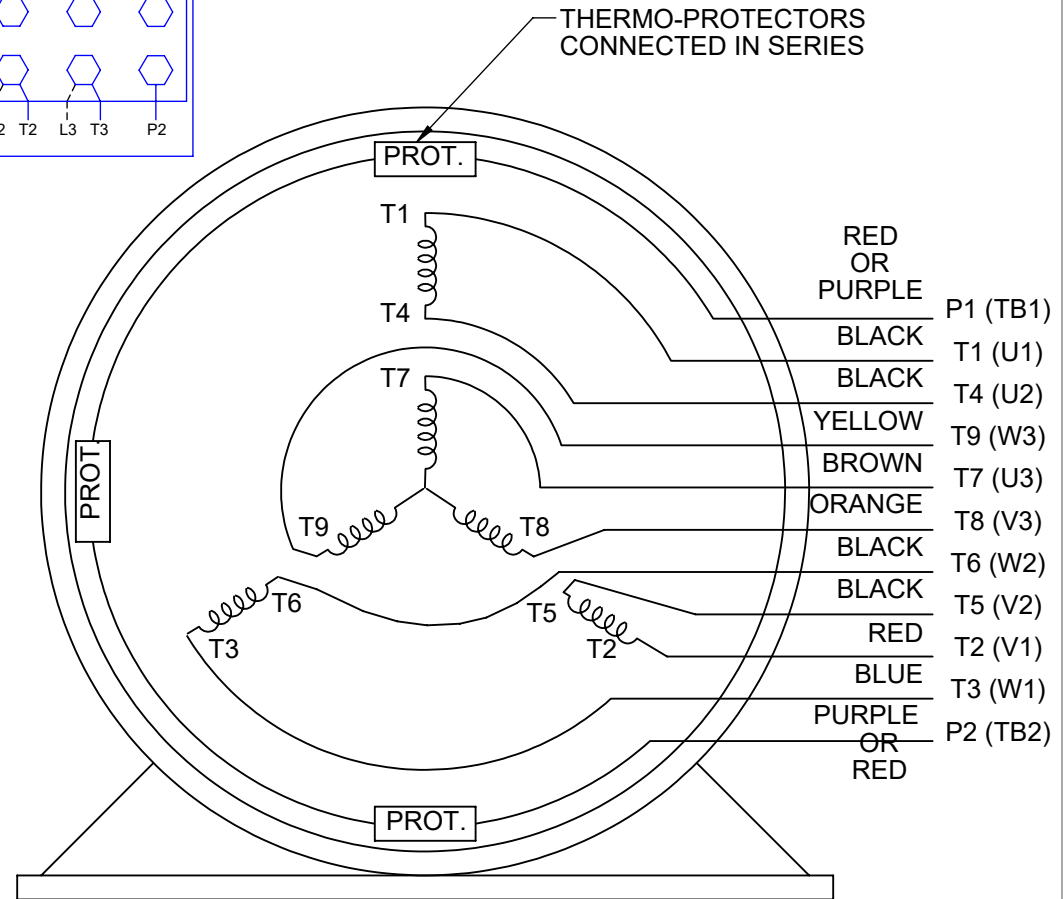
Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	3.76 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	18.62 in
Frame Length	10.00 in	Shaft Diameter	1.125 in
Shaft Extension	2.62 in	Assembly/Box Mounting	F1 Only
Connection Drawing	EE7308T	Outline Drawing	035694-1000

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

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.

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



CERTIFICATION DATA SHEET

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

CATALOG #: 825116.00

CONN. DIAGRAM: EE7308T

OUTLINE: 035694-1000

MOUNTING: F1 ONLY

WINDING #: K1824116 1

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3&2	2.24&1.49	1800	1760&1470	182TC	EPFC	K	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	8/4&6.8/3.4	ACROSS THE LINE	CONTINUOUS	F3	1.0/1.0	40

FULL LOAD EFF:	90.2&88.5	3/4 LOAD EFF:	89.5	1/2 LOAD EFF:	88.5	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	80&76	3/4 LOAD PF:	75	1/2 LOAD PF:	63	88.5	SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
9 LB-FT	64 / 32	22.5 LB-FT 250 %	35 LB-FT 389 %	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.4 LB-FT^2	40 LB-FT^2	25 SEC.	2	90 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	FALSE	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
6207	6206						

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: 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

Data Sheet

Date: 1/18/2018

825116.00



Data @ 460 V

Motor Load Data

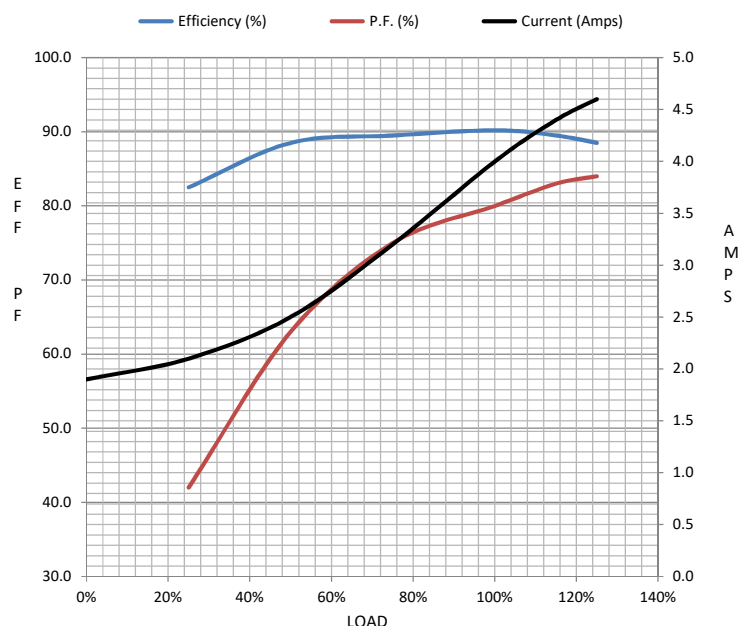
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.90	2.10	2.50	3.2	4.0	4.4	4.6	32.0	
Torque (ft-lb)	0.00	2.20	4.4	6.7	9.0	10.4	11.2	22.5	
RPM	1800	1790	1780	1770	1760	1,755	1750	0	
Efficiency (%)		82.5	88.5	89.5	90.2	89.5	88.5		
P.F. (%)	6.5	42.0	63.0	75.0	80.0	83.0	84.0	47.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1500	1760	1800
Current (Amps)	32.0	30.0	23.0	4.0	1.90
Torque (ft-lb)	22.5	20.0	35.0	9.0	0.00

Information Block

HP	3.0			
Sync. RPM	1800			
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	60 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.40 Lb-Ft²			
Ref Wdg	K1824116 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	035694.00			
Conn. Diag	EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
2.3530	1.6160	5.0840	7.9000	130.4100



Speed - Torque Curve

