

PRODUCT INFORMATION PACKET

Model No: 145TTGN16036

Catalog No: C321B

1.50 HP Explosion Proof Motor, 3 phase, 1800 RPM, 230/460 V, 145TC Frame, EPFC
Explosion Proof NEMA Motors





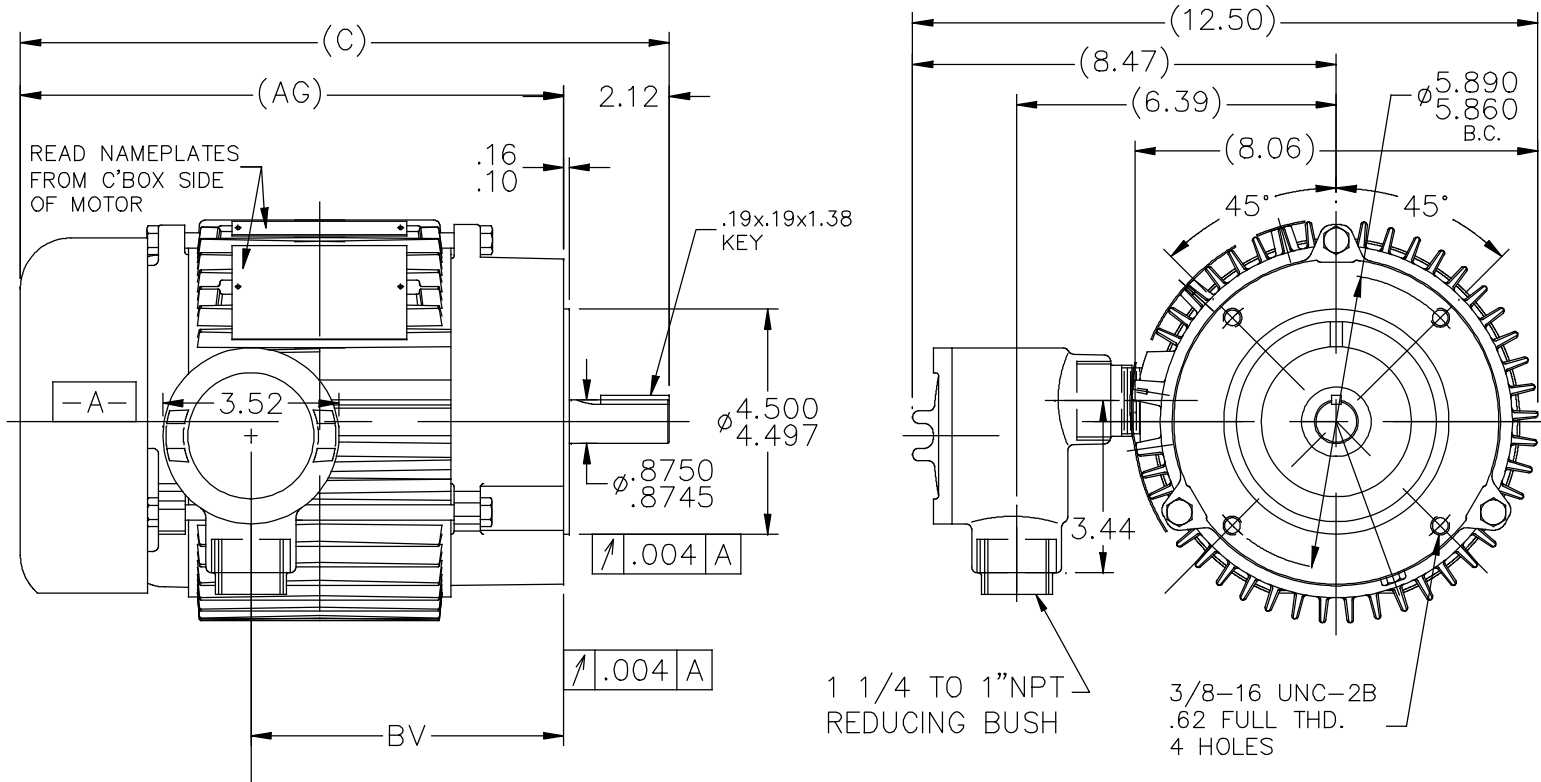
Nameplate Specifications

Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	60 Hz	Voltage	230/460 V
Current	4.6/2.3 A	Speed	1755 rpm
Service Factor	1.15	Phase	3
Efficiency	86.5 %	Power Factor	71
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	P
Frame	145TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostats (N/C)	Ambient Temperature	40 °C
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6203
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Hazardous Location	EXP PROOF CL I GR 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	7.9 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	15.19 in
Frame Length	7.50 in	Shaft Diameter	0.875 in
Shaft Extension	2.13 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	A-108514-750	Connection Drawing	EE7308T

108514



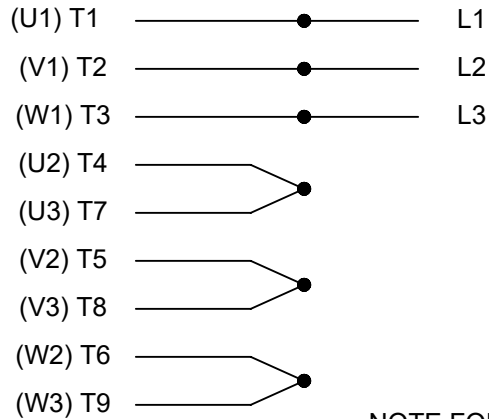
NOTE:

1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.

DASH	FR.	C	AG	BV
525	143	12.98	10.86	6.25
625	145	13.98	11.86	7.25
750	145	15.18	13.06	8.50

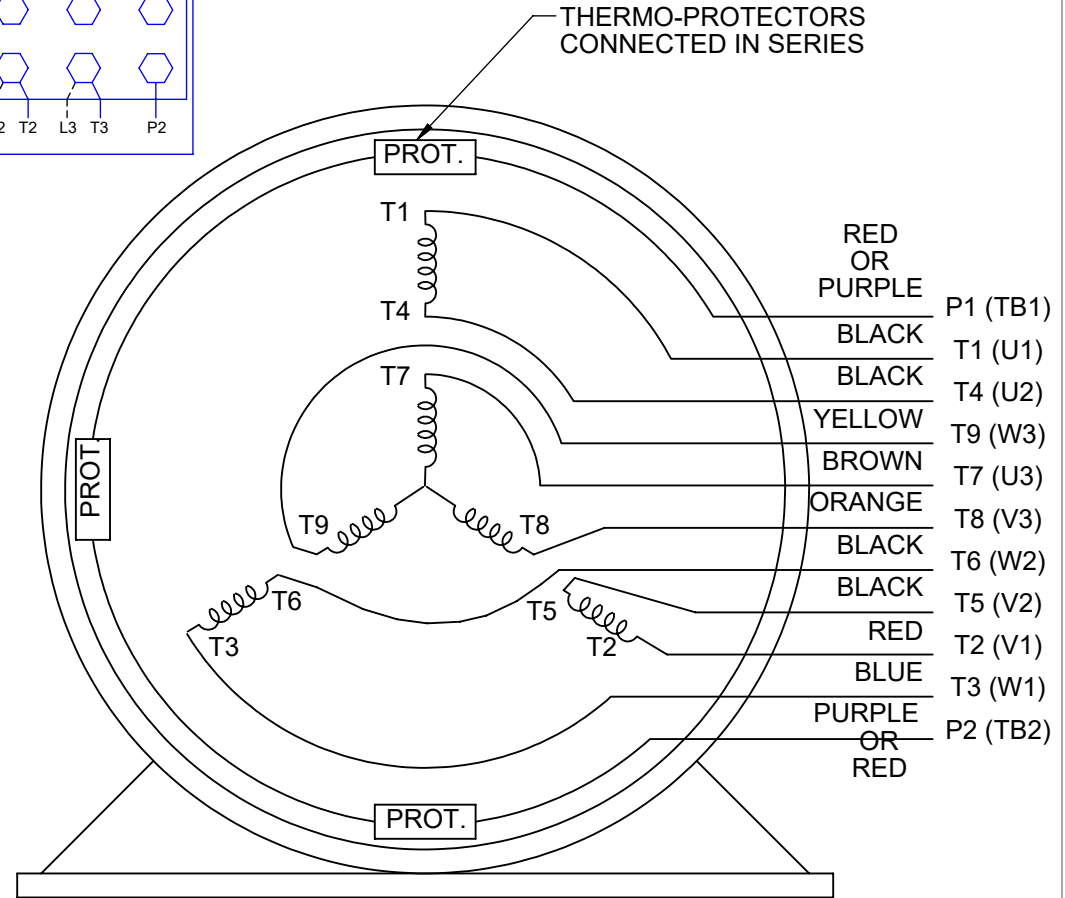
		TOLERANCES UNLESS SPECIFIED		REGAL Regal Beloit America, Inc.		DRAWN AS 01/18/17			
		DEC.	INCHES			CHK SM 01/18/17			
		.X	±.1			APPD SM 01/18/17			
		.XX	±.03	TITLE OUTLINE 140 FR. BB-EXP. PR. -TS-'C'FACE (629 NEW DESIGN)		SCALE 5=16			
B	SHOWN REDUCER IN LEFT SIDE VIEW	SM	06/27/19	.XXX	±.005	REF 100617			
A	NEW DRAWING	SM	01/18/17	.XXXX	±.0005	FMF			
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	PREV			
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 108514	SIZE A	DRAWING NO. 108514	PAGE OF	REV. B
				DIST WP					

HIGH VOLTAGE



**THREE PHASE
DUAL VOLTAGE MOTOR**

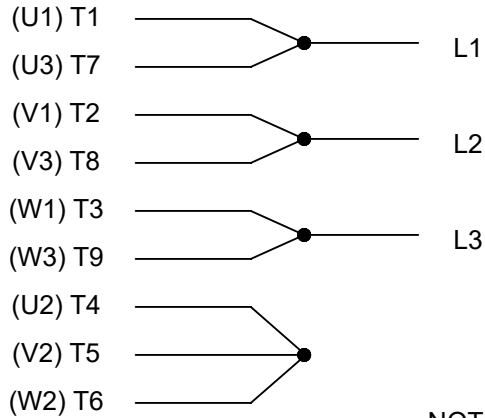
THERMO-PROTECTORS
CONNECTED IN SERIES



- RED OR PURPLE P1 (TB1)
- BLACK T1 (U1)
- BLACK T4 (U2)
- YELLOW T9 (W3)
- BROWN T7 (U3)
- ORANGE T8 (V3)
- BLACK T6 (W2)
- BLACK T5 (V2)
- RED T2 (V1)
- BLUE T3 (W1)
- PURPLE OR RED P2 (TB2)

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



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		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:
 ORDER #: EE7308T
 REFERENCE MODEL #: 145TTGN16036
 CONN. DIAGRAM: A-100617-750
 CAT #: C321B
 OUTLINE: ZT4256
 CUSTOMER PART #:
 WINDING: R1 3
 MOUNTING: F1 ONLY
 SPEED:
 TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
1.5	1.1	1800	1755	145TC	TEFC	TEN	P	A

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	4.6/2.3&4.2/2.1	ACROSS-THE LINE	CONT	B	1.15	40	3300
	F.L. EFF	86.5	3/4 LD EFF	85.5	1/2 LD EFF	82.5	GTD EFF	ELECT. TYPE	
	F.L. PF	71.0	3/4 LD PF	62.5	1/2 LD PF	49.0	84.0	SQ CAGE IND RUN	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
4.5 LB-FT	24.0	21.2 LB-FT	26.0 LB-FT	578%
@ 3 FT.	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME
62 DBA	71 DBA	0.14 LB-FT ²	10 LB-FT ²	20 SEC.
				START/SHOUR
				2
				MOTOR WGT
				50 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	NO	DOF CL I GR D CL II GR	NO	NONE	BLUE (POWDER)

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL
DE BALL 6205	POLYREX EM	T	NONE	NONE	1144	STRESSPROOF (C-223)	CAST IRON

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
4.838	3.78	7.125	7.163	189.605	0.150	ODE

N	INVERTER TORQUE: NONE	
O	INV. HP SPEED RANGE: NONE	
T	ENCODER: NONE	
E	BRAKE: NONE	
S	FT-LB: NONE	
	VOLTAGE: NONE	
	HZ: NONE	

PREPARED BY: FAREEDA DUDEKULA
 DATE: 11/1/2018
 FORM: 3531 REV 4 2/27/06

Data Sheet

145T1GAN16036



Submital

Data @ 460 V

Date: 11/11/2018

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA

Motor Load Data

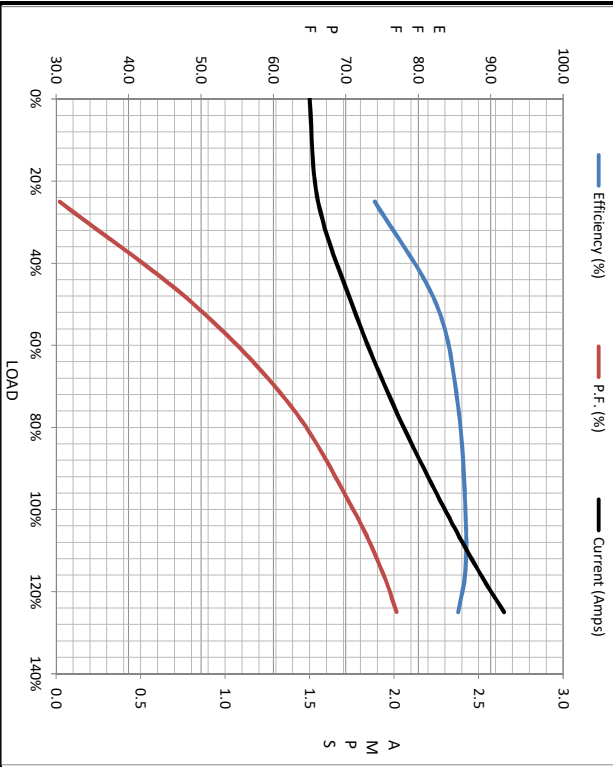
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.50	1.55	1.75	2.00	2.30	2.50	2.65	24.0
Torque (ft-lb)	0.00	1.10	2.20	3.5	4.5	5.2	5.7	21.2
RPM	1800	1790	1780	1765	1755	1,750	1745	0
Efficiency (%)		74.0	82.5	85.5	86.5	86.5	85.5	
P.F. (%)	7.5	30.5	49.0	62.5	71.0	75.0	77.0	69.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	130	1190	1755	1800
Current (Amps)	24.0	23.3	16.0	2.30	1.50
Torque (ft-lb)	21.2	20.2	26.0	4.5	0.00

Information Block

HP	1.5			
Sync. RPM	1800			
Frame	1451B2TFC080			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	P			
Service Factor	1.15			
Temp Rise @ FL	30 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Motor/Shaft wk ^e	0.14 Lb-Ft ^e			
Ret Wdg	ZT4256 R1			
Sound Pressure @ 1M	62 DBA			
VFD Rating	NONE			
Outline Dwg	A-100617-750			
Conn. Diag	EE7308T			
Additional Specifications:				
0				
0				
R1	R2	X1	X2	Xm
4.8380	3.7800	7.1250	7.1630	189.6050



Speed - Torque Curve

