

PRODUCT INFORMATION PACKET

Model No: 145THTN6046

Catalog No: Y551

2 HP Variable Speed Motor, 3 phase, 1800 RPM, 230/460 V, 145TC Frame, TENV
1000:1 Speed Ratio Motors



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REGAL



Nameplate Specifications

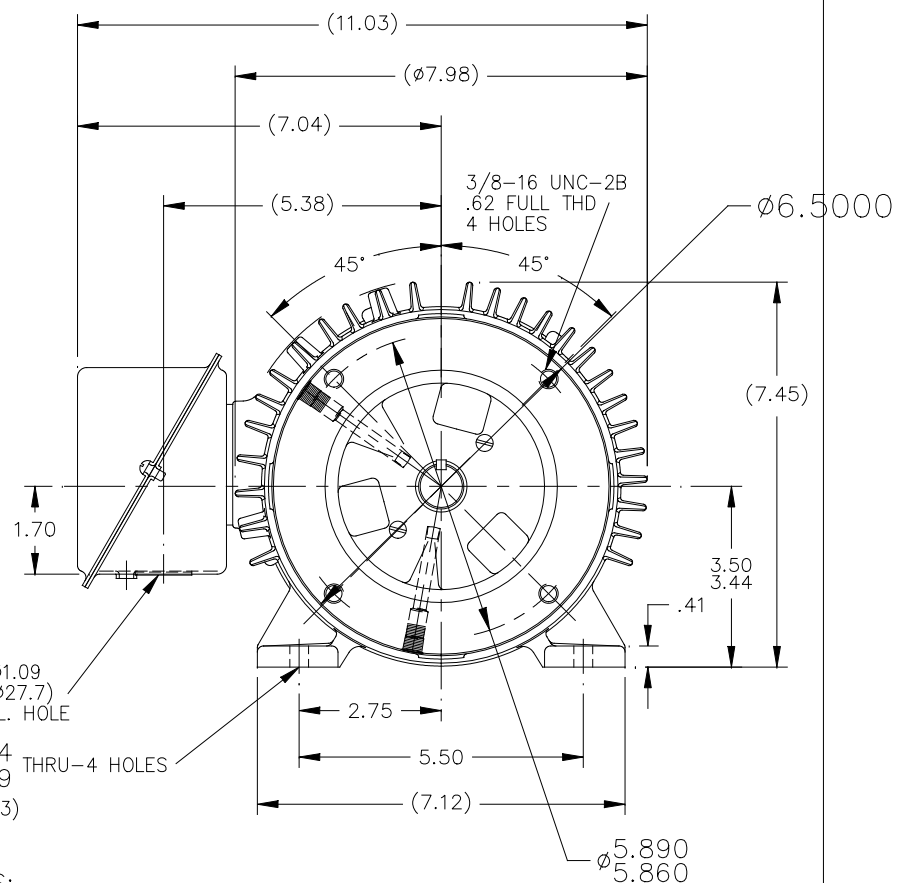
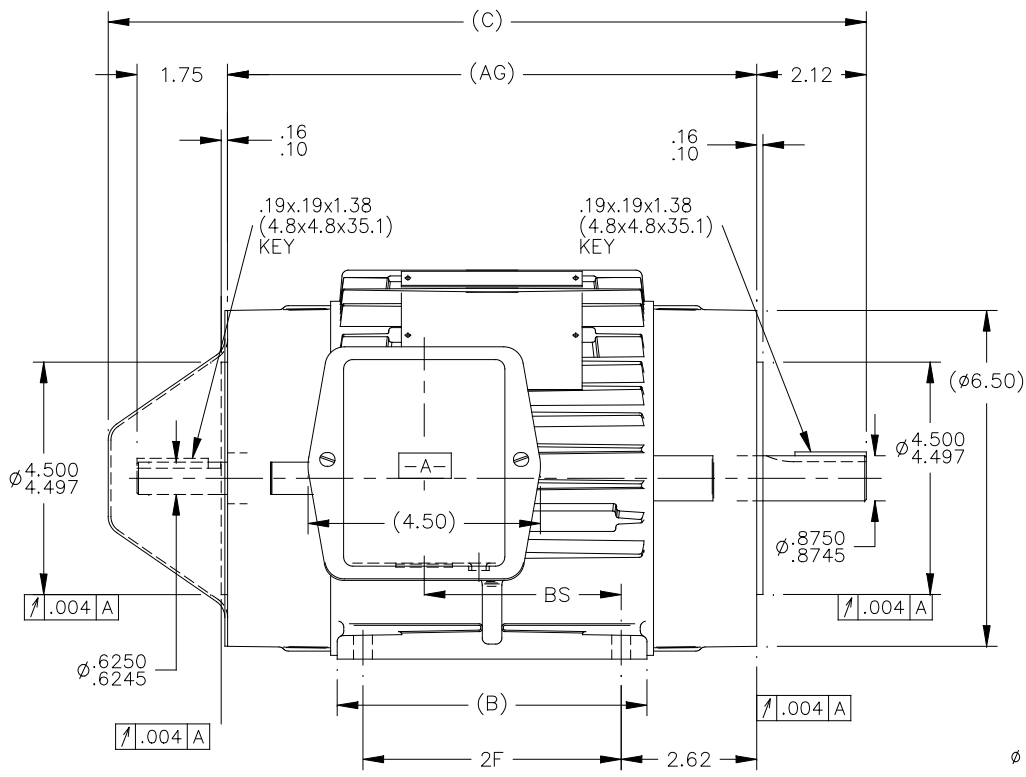
Output HP	2 Hp	Output KW	1.5 kW
Frequency	60 Hz	Voltage	230/460 V
Current	6.0/3.0 A	Speed	1750 rpm
Service Factor	1	Phase	3
Efficiency	85.5 %	Power Factor	78
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	M
Frame	145TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostats (N/C)	Ambient Temperature	40 °C
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6205
UL	Recognized	CSA	Y
CE	Y	IP Code	43

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	6.48 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	14.68 in
Frame Length	6.25 in	Shaft Diameter	0.875 in
Shaft Extension	2.12 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	EE7308T	Outline Drawing	104122-625

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104122



TERM. END

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

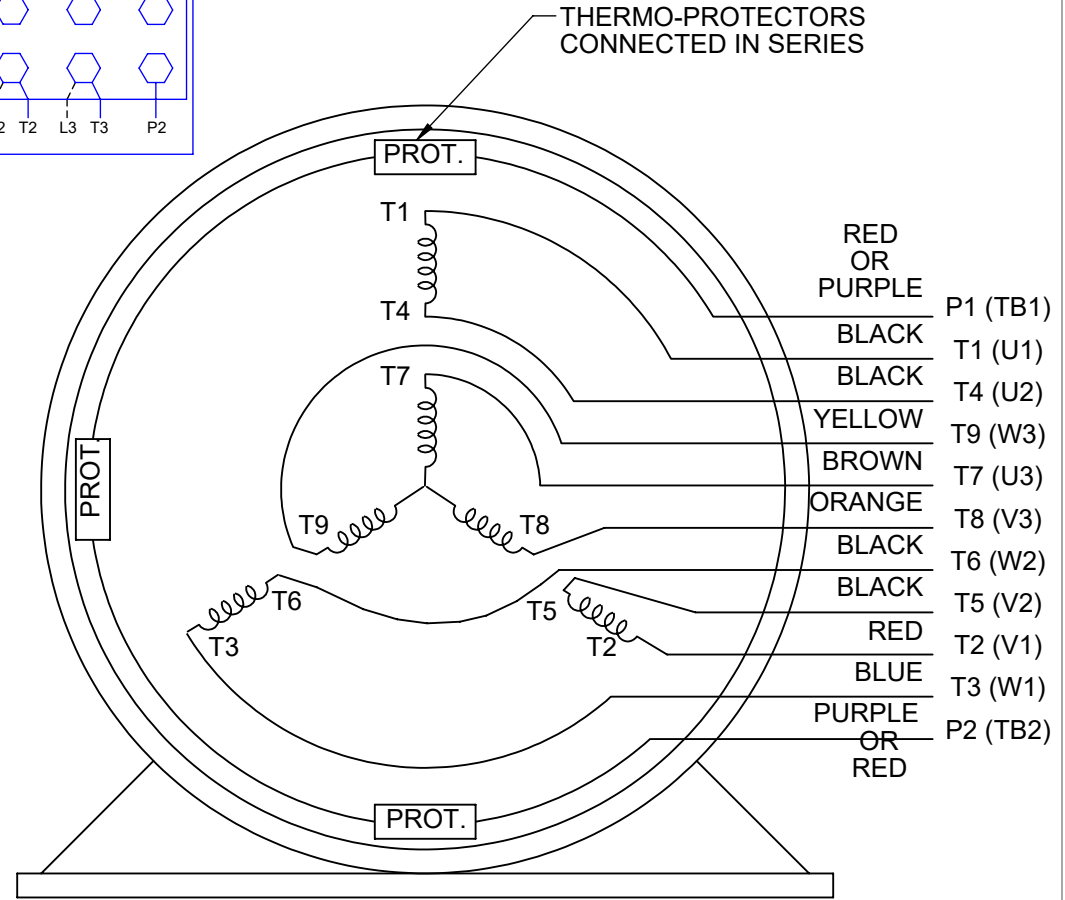
DASH	FR.	B	C	BS	2F	AG
525	143T	5.00 {127.0}	13.68 {347.5}	2.81 {71.4}	4.00 {101.6}	9.25 {235.0}
625	145T	6.00 {152.4}	14.68 {372.9}	3.81 {96.8}	5.00 {127.0}	10.25 {260.4}

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC	DRAWN BLR 05-06-1996				
					DEC.	INCHES						
4	ADDED DRAIN HOLE ON DRAWING	UD 07/04/19						CHK ML 05-07-1996				
3	RELOCATED BRG LOCK SCREWS CN 24300-450	DRS 09-25-2002	ML	.X	±.1			APPD TG 05-09-1996				
2	REVISED TO SHOW REAR BRACKET ROTATED CORRECTLY CN 25600-241	MRB 06-18-1998		.XX	±.03		TITLE OUTLINE 140T FR. - BB - TS - TENV	SCALE 1=3.5				
1	NEW DRAWING 4377719	BLR 05-09-1996		.XXX	±.005		MAT'L.	REF				
				.XXXX	±.0005		FINISH	FMF				
					±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 104122			SIZE A	DRAWING NO. 104122	PAGE OF	REV. 4
					DIST WP							

HIGH VOLTAGE

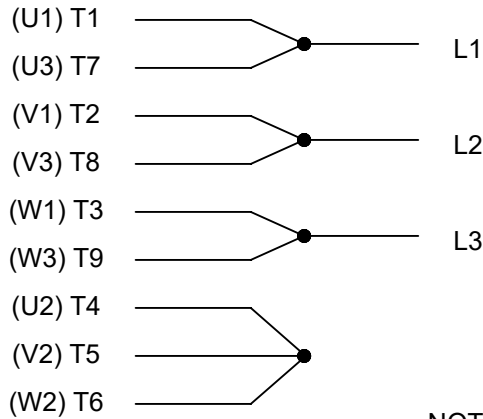


**THREE PHASE
DUAL VOLTAGE MOTOR**



**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	
<small>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.</small>				DATE 05-13-1992	3 PHASE - DUAL VOLTAGE MOTOR	
			REFERENCE EE7308/EE7300	MATERIAL	PROCESS/FINISH	
			THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7308T	SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 145HTN6046 BA WINDING#: ZT490 F 3
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1/F2 CAPABLE
 OUTLINE: A-104122-625

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
2	1.49	1800	1750	145TC	TENV	M	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	6/3	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 85.5	3/4 LOAD EFF: 84	1/2 LOAD EFF: 82	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78	3/4 LOAD PF: 66	1/2 LOAD PF: 53.5	82.5	SQ CAGE INV DUTY	3.4 / 1.7

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
6 LB-FT	50 / 25	21.8 LB-FT 363	28.5 LB-FT 475	85

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.13 LB-FT^2	0 LB-FT^2	0 SEC.	0	68 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
3.834	2.8968	5.9498	5.6374	154.78

RM	ZREF	XR	TD	TD0
6560.4	142	1.6	0.0061	0.147

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE OR ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (POWDER)

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

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

If Inverter equals NONE, contact factory for further information

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INVERTER TORQUE: CONSTANT 1000:1
INV. HP SPEED RANGE: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY
NONE NONE
NONE NONE PPR
BRAKE: PROVISIONS ONLY NONE

NONE	P/N	NONE	
NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/23/2017 01:56:53 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.



Submittal
Data @ 460 V

Date: 6/19/2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.70	1.90	2.10	2.50	3.0	3.3	3.5	25.0
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	6.8	7.5	21.8
RPM	1800	1788	1776	1765	1750	1,746	1740	0
Efficiency (%)		73.5	82.0	84.0	85.5	85.3	85.0	
P.F. (%)	7.8	34.5	53.5	66.0	78.0	79.5	81.0	65.0

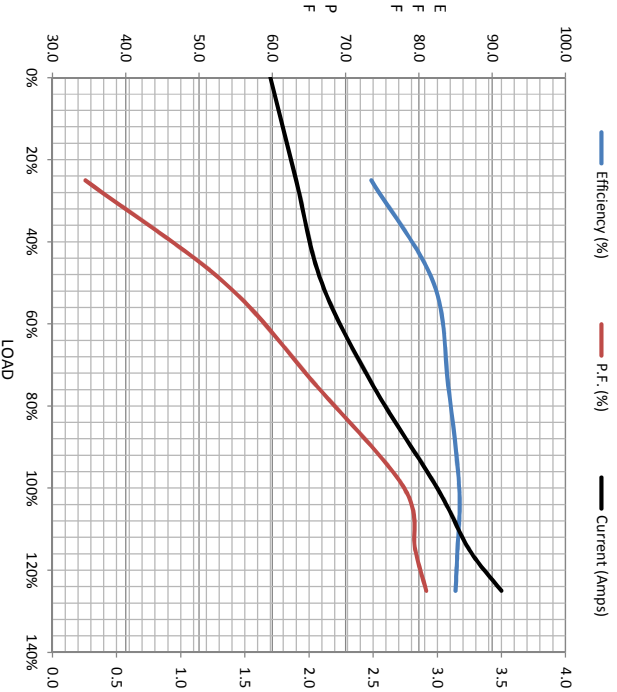
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	900	1500	1750	1800
Current (Amps)	25.0	22.5	18.5	3.0	1.70
Torque (ft-lb)	21.8	19.5	28.5	6.0	0.00

Information Block

HP	2.0
Sync. RPM	1800
Frame	145
Enclosure	TENV
Construction	TTN
Voltage	230/460 V
Frequency	60 HZ
Design	B
LR Code letter	M
Service Factor	1.0
Temp Rise @ FL	90 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wkt	0.13 Lb-Fe
Rel Wdg	Z1490 F
Sound Pressure @ 1M	62 dbA
VFD Rating	CONSTANT 1000-1
Outline Dwg	A-104122-625
Conn. Diag	A-EE7308T
Additional Specifications:	
0	

EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
3.8340	2.8970	5.9500	5.6370	154.7800



Speed - Torque Curve

