

PRODUCT INFORMATION PACKET

Model No: 145THTR16032

Catalog No: Y612

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





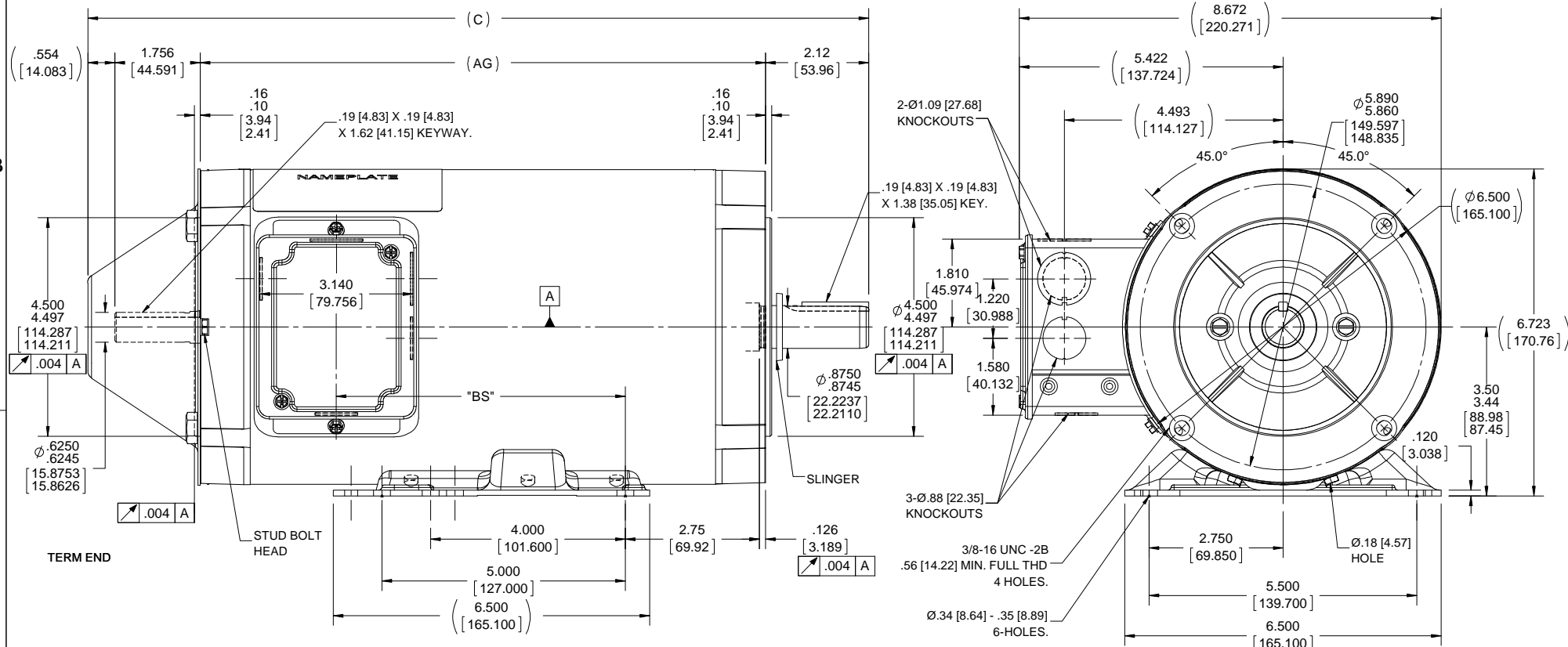
Nameplate Specifications

Output HP	2 Hp	Output KW	1.5 kW
Frequency	60 Hz	Voltage	230/460 V
Current	6.0/3.0 A	Speed	1745 rpm
Service Factor	1	Phase	3
Efficiency	86.5 %	Power Factor	74
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	M
Frame	145TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostats (N/C) Hermetically-sealed	Ambient Temperature	40 °C
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6203
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	6.58 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	16.04 in
Frame Length	9.56 in	Shaft Diameter	0.875 in
Shaft Extension	2.12 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	A-104059-956	Connection Drawing	A-EE7308T

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NOTE:-

- 1) CONDUIT BOX CAN BE ROTATED 180°
- 2) REMOVABLE BASE.
- 3) NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	"C"	"AG"	"BS"
656	13.04 [331.22]	8.61 [218.69]	2.94 [74.68]
706	13.54 [343.92]	9.11 [231.39]	3.44 [87.38]
756	14.04 [356.62]	9.61 [244.09]	3.94 [100.08]
806	14.54 [369.32]	10.11 [256.79]	4.44 [112.78]
856	15.04 [391.12]	10.61 [269.19]	4.94 [125.48]
906	15.54 [394.72]	11.11 [282.19]	5.44 [138.18]
956	16.04 [407.42]	11.61 [294.89]	5.94 [150.88]

DRAWING REVISION H	REVISION BY A SUPPANAVER	DATE 08-22-2018
ECO ECO-0152983	APPROVED BY JD	DATE 09/19/2018
ECO DESCRIPTION OUTLINE CONVERSION PROJECT		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:		
DEC.	INCH	mm
.X	±0.1	[±2.5]
.XX	±0.03	[±0.76]
.XXX	±0.005	[±0.127]
.XXXX	±0.0005	[±0.0127]
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [076/.381] X 45°		
CORNER FILLETS: R.02 [51]		
MACHINED SURFACES: 200 INCH/mm 5.1		
mm SHOWN IN [BRACKETS]		

DRAWN BY DT	DATE 10-20-1995
APPROVED BY EAB	DATE 10-31-1995
REFERENCE 104059	THIRD ANGLE PROJECTION

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
140T FR.-BB-TENV-C* FACE -3Ø

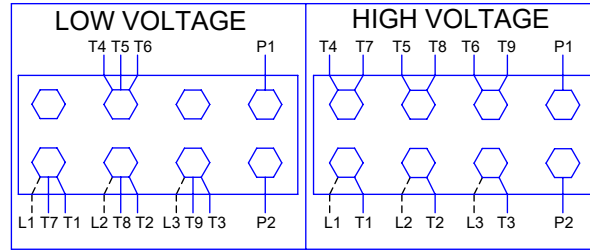
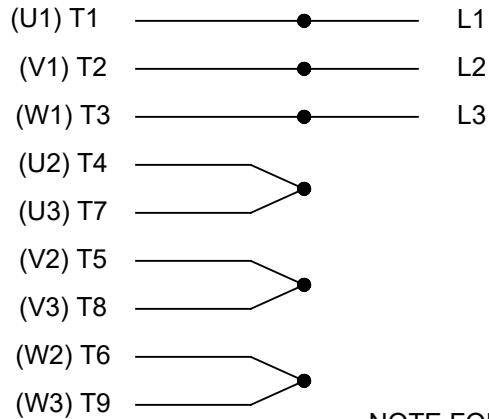
MATERIAL
PROCESS/FINISH

SIZE
B

DRAWING NUMBER
104059

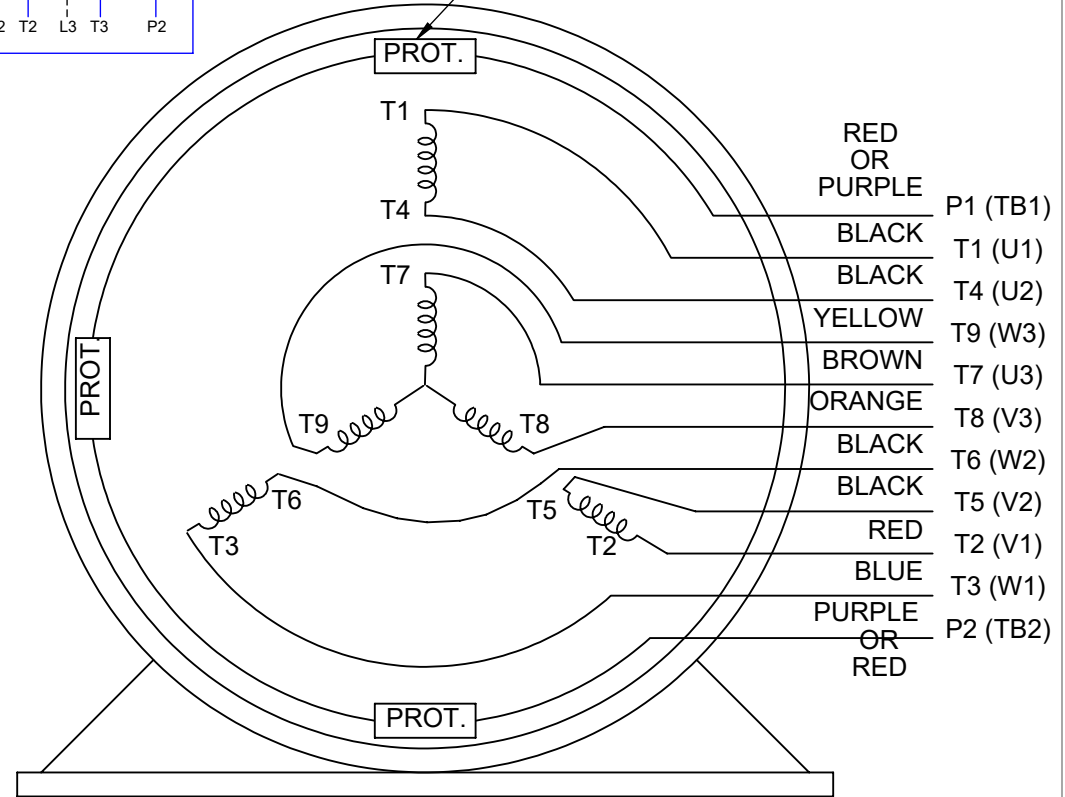
SHEET
1 OF 1

HIGH VOLTAGE



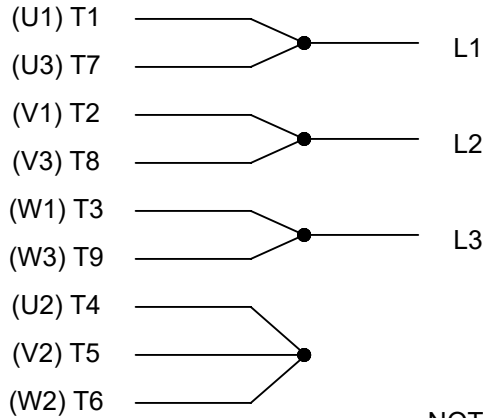
**THREE PHASE
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS
CONNECTED IN SERIES



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

CERTIFICATION DATA SHEET

Model#: 145THTR16032 AA WINDING#: ZT4255 R3 3
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1 ONLY
 OUTLINE: A-104059-956

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
2	1.49	1800	1745	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: 86.5	3/4 LOAD EFF: 86.5	1/2 LOAD EFF: 84	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 74	3/4 LOAD PF: 65	1/2 LOAD PF: 51.5	84	SQ CAGE INV DUTY	3.6 / 1.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
6 LB-FT	56 / 28	24 LB-FT 400	31 LB-FT 517	85

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
60 dBA	70 dBA	0.14 LB-FT^2	0 LB-FT^2	15 SEC.	0	50 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
3.9618	3.0104	5.751	5.9356	160.3464
RM	ZREF	XR	TD	TD0
8406.4	142	1.7	0.006	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						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6205	6203						

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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N
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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 02:03:48 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 20-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



145THTR16032

Submittal

Data @ 460 V

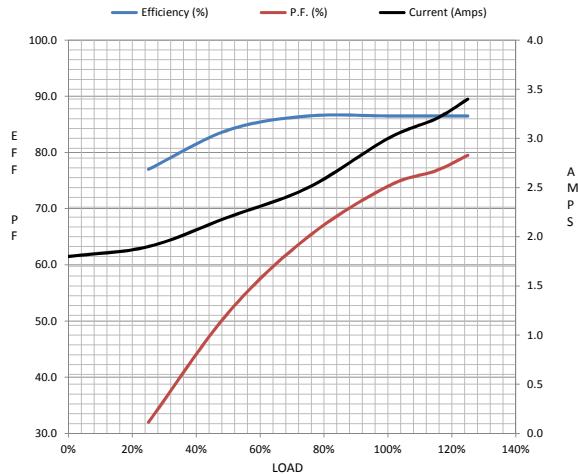
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.80	1.90	2.20	2.50	3.0	3.2	3.4	28.0
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	6.8	7.6	24.0
RPM	1800	1785	1775	1760	1745	1,739	1730	0
Efficiency (%)		77.0	84.0	86.5	86.5	86.5	86.5	
P.F. (%)	6.5	32.0	51.5	65.0	74.0	76.8	79.5	70.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1150	1745	1800
Current (Amps)	28.0	25.2	18.5	3.0	1.80
Torque (ft-lb)	24.0	21.6	31.0	6.0	0.00

Information Block				
HP	2.0			
Sync. RPM	1800			
Frame	145			
Enclosure	TENV			
Construction	TTR			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	M			
Service Factor	1.15			
Temp Rise @ FL	85 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.14 Lb-Ft ²			
Ref Wdg	ZT4255 R3			
Sound Pressure @ 1M	60 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	A-104059-956			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
3.9620	3.0100	5.7510	5.9360	160.3460



Speed -Torque Curve

