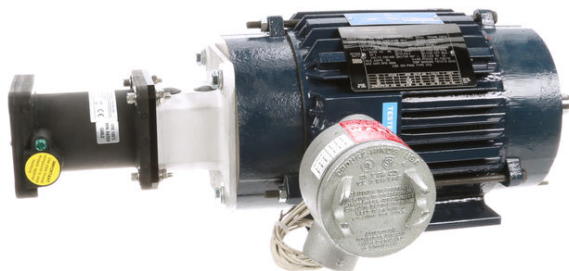


PRODUCT INFORMATION PACKET

Model No: 143THEN8034

Catalog No: Y978

1 HP Variable Speed Motor, 3 phase, 1800 RPM, 230/460 V, 143TC Frame, EPNV
Explosion Proof Motors



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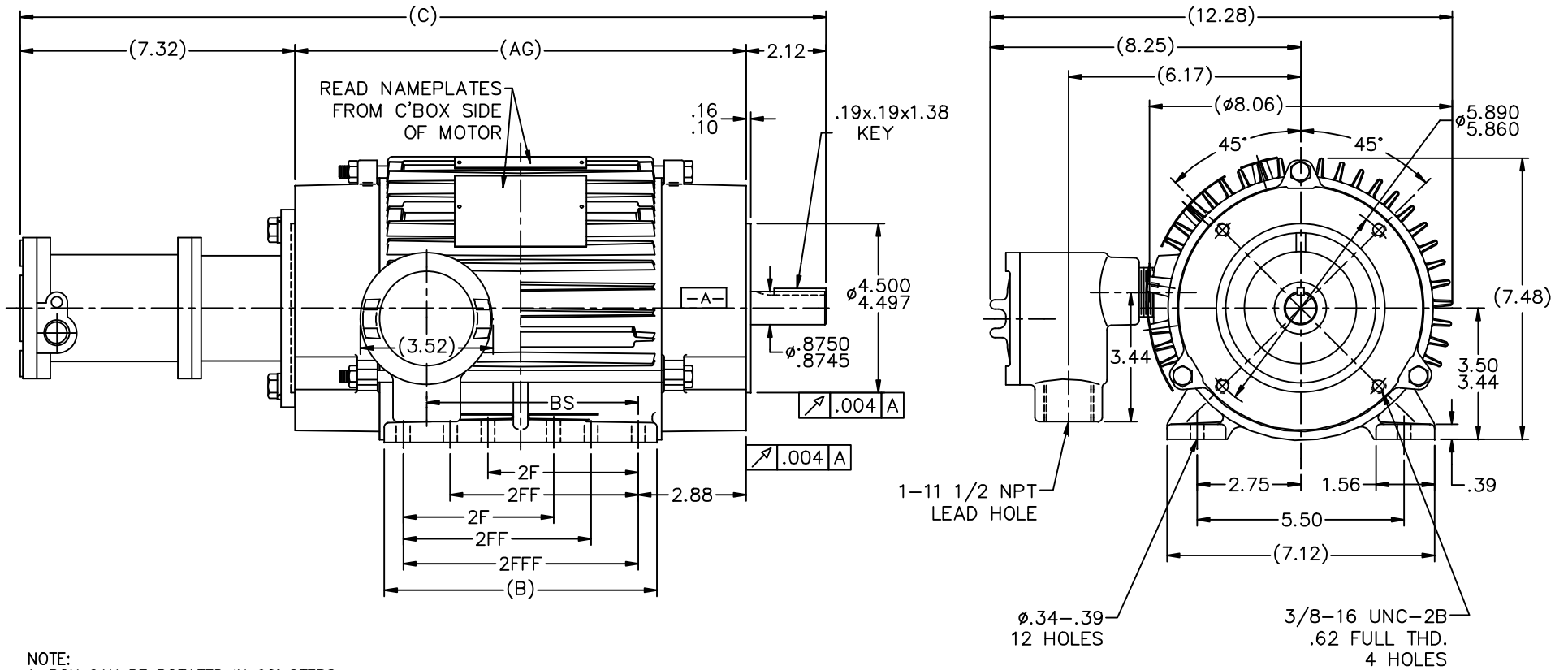
Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	60 Hz	Voltage	230/460 V
Current	3.0/1.5 A	Speed	1756 rpm
Service Factor	1	Phase	3
Efficiency	85.5 %	Power Factor	72
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	M
Frame	143TC	Enclosure	Explosion Proof Non Ventilated
Thermal Protection	Thermostats (N/C)	Ambient Temperature	40 °C
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6205
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	13.8 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	21.44 in
Frame Length	7.50 in	Shaft Diameter	0.875 in
Shaft Extension	2.12 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Outline Drawing	104881-750	Connection Drawing	EE7308T

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NOTE:
 1. BOX CAN BE ROTATED IN 90° STEPS.
 2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS & TURNING FRAME 180°.

		TOLERANCES UNLESS SPECIFIED		DRAWING NO. 01-04-2001	
		DEC.	INCHES	CHK	ML 01-05-2001
3	UPDATED PER ISAAC 11-4672	RFH	01/11/2012	EH	.XX ±.03
2	REVISED BASE DIM. IN TABLE CN29200-3157	TAT	09-04-2003	ML	.XXX ±.005
1	NEW DRAWING MU34881	DRS	01-10-2001	.XXXX	±.0005
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"
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 104881
				DIST	WP
				SIZE	DRAWING NO. PAGE OF REV.
				B	104881 3 3

DASH	FR.	C	AG	B	BS	2F	2FF	FFF
750	143/5	21.44	12.00	7.25	5.62	4.00	5.00	6.25

HIGH VOLTAGE



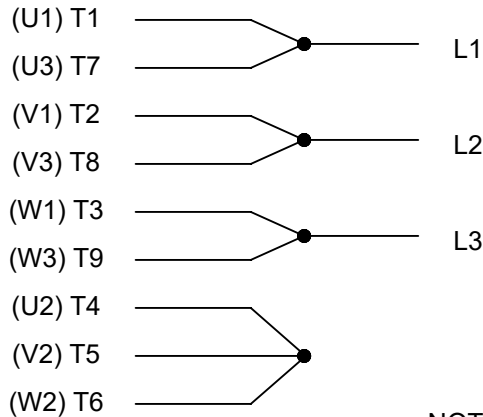
**THREE PHASE
DUAL VOLTAGE MOTOR**

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
<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	MATERIAL
			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T

CERTIFICATION DATA SHEET

Model#: 143THEN8034 CB
CONN. DIAGRAM: A-EE7308T
OUTLINE: B-104881-750

WINDING#: ZT492 F 3
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1	.75	1800	1756	143TC	EPNV	M	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	3/1.5	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 85.5	3/4 LOAD EFF: 86.5	1/2 LOAD EFF: 85.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 72	3/4 LOAD PF: 67	1/2 LOAD PF: 53.5	82.5	SQ CAGE INV DUTY	1.7 / .9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3 LB-FT	27 / 13.5	10.8 LB-FT 360	14 LB-FT 467	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.1 LB-FT^2	0 LB-FT^2	10 SEC.	0	55 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
8.094	5.4812	11.644	10.366	301.04

RM	ZREF	XR	TD	TD0
12070	284	1.7	0.0075	0.15

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	ENCODER	RIGID	HORIZONTAL	TRUE	EXP PROOF CL I GR C&D CL II GR F&G T3C	FALSE	NONE	BLUE (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)	CAST IRON
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

INVERTER TORQUE: CONSTANT 2000:1
 INV. HP SPEED RANGE: 2.0 X BASE SPEED

*
N
O
T
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S

*

ENCODER: REGAL SUPPLIED - REGAL MOUNT			
BEI H38			
NPS HOLE 1024 PPR			
BRAKE: NONE NONE			
NONE P/N NONE			
NONE NONE			
NONE FT-LB		NONE V	NONE Hz

DATE: 06/22/2017 05:26:45 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



143THEN8034

Submittal

Data @ 460 V

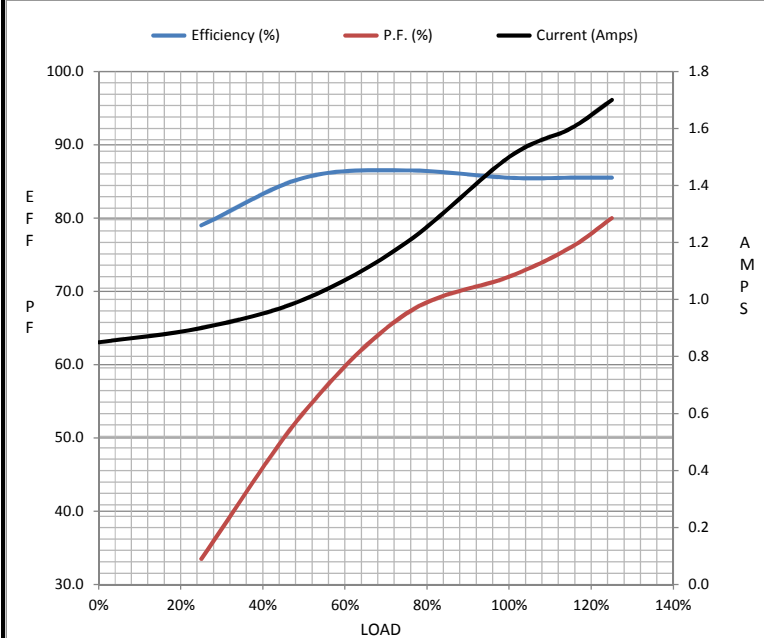
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	0.85	0.90	1.00	1.20	1.50	1.60	1.70	13.5
Torque (ft-lb)	0.00	0.75	1.50	2.20	3.0	3.4	3.8	10.8
RPM	1800	1790	1780	1768	1756	1,752	1745	0
Efficiency (%)		79.0	85.5	86.5	85.5	85.5	85.5	
P.F. (%)	9.5	33.5	53.5	67.0	72.0	76.0	80.0	67.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1300	1756	1800
Current (Amps)	13.5	12.5	9.0	1.50	0.85
Torque (ft-lb)	10.8	11.0	14.0	3.0	0.00

Information Block				
HP	1.0			
Sync. RPM	1800			
Frame	143			
Enclosure	TENV			
Construction	TTN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	M			
Service Factor	1.15			
Temp Rise @ FL	40 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.10 Lb-Ft ²			
Ref Wdg	ZT492 F			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-104881-750			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
8.0940	5.4810	11.6440	10.3660	301.0400



Speed -Torque Curve

