PRODUCT INFORMATION PACKET

Model No: 286TTTPA14531AA

Catalog No: 824535.00

..30HP..1800RPM.286T.TEAO.230/460V.3PH.60HZ.AIR OVER.40C.1.15SF.RIGID BASE.....COOLING TOWER

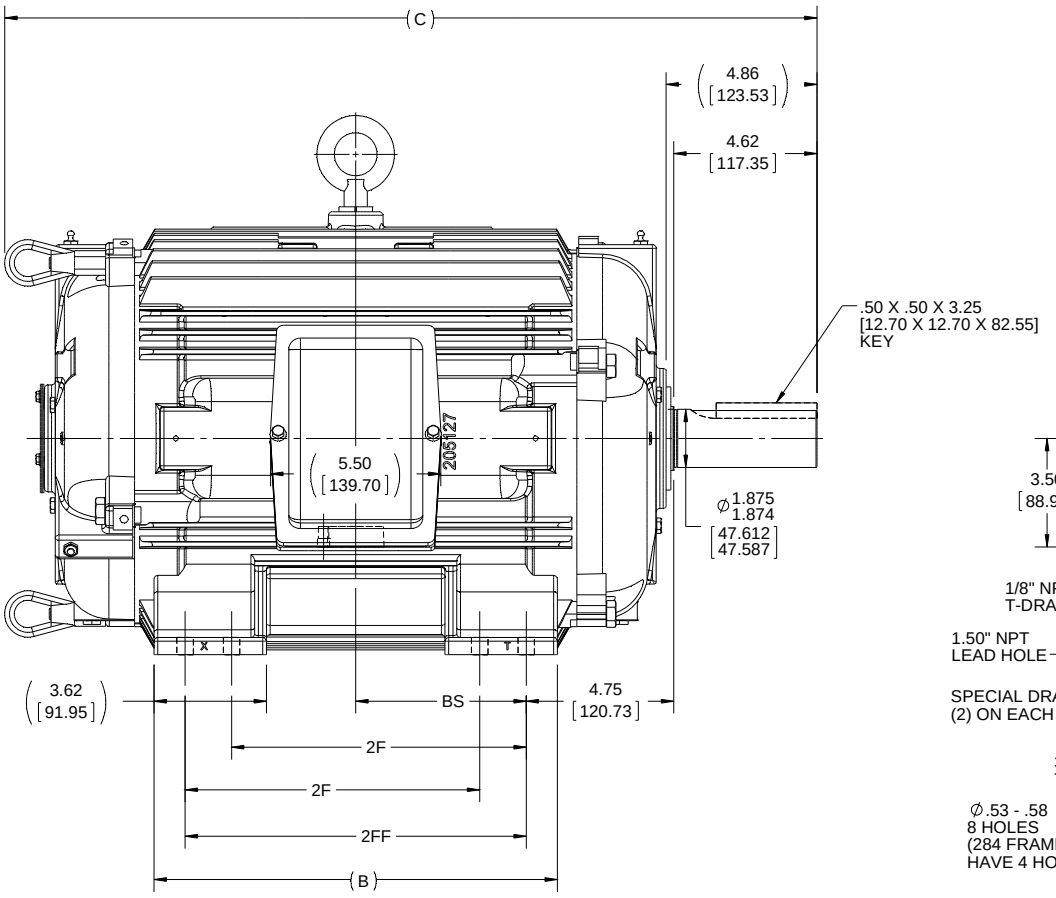
Cooling Tower

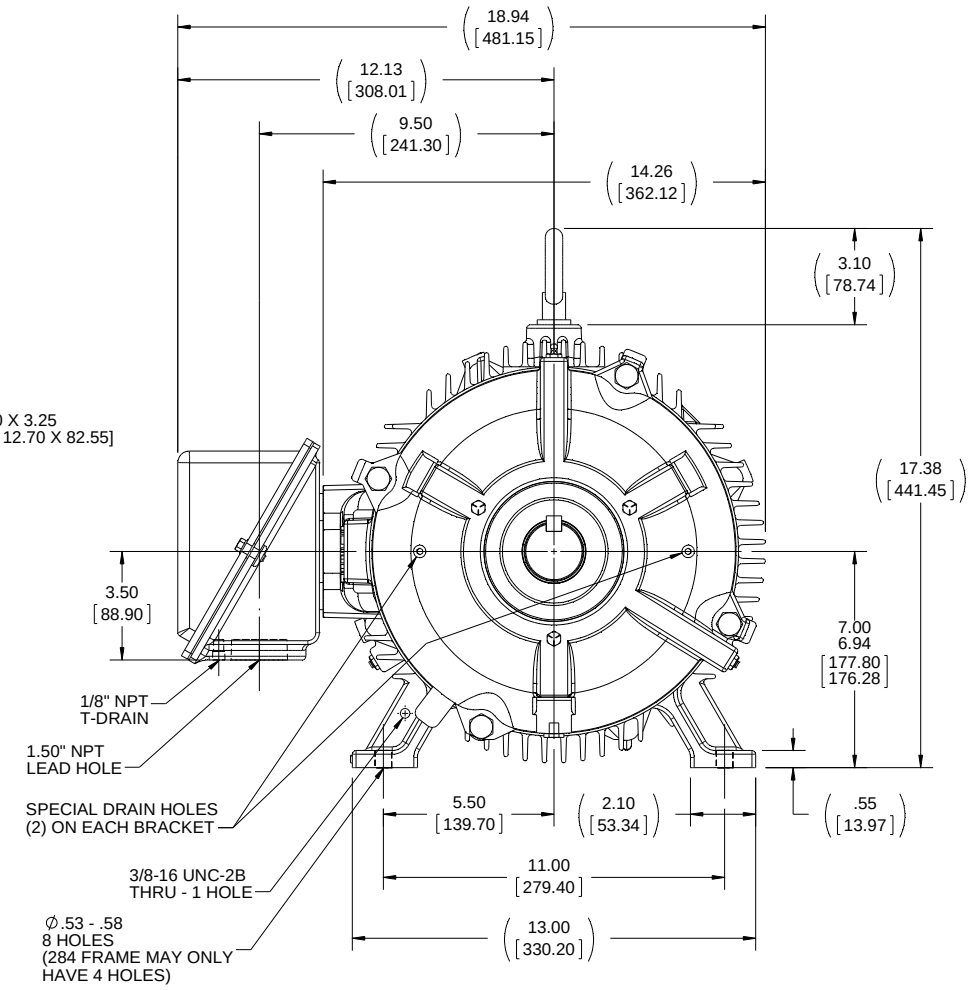
Nameplate Specifications

Output HP	**30 Hp**	Output KW	**22.4 kW**
Frequency	**60 Hz**	Voltage	**230/460 V**
Current	**74.0/37.0 A**	Speed	**1768 rpm**
Service Factor	**1.15**	Phase	**3**
Efficiency	**92.4 %**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Frame	**286TV**
Enclosure	**Totally Enclosed Air Over**	Overload Protector	**No**
Ambient Temperature	**40 °C**	Drive End Bearing Size	**6311**
Opp Drive End Bearing Size	**6210**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**56**		

Technical Specifications

Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**4**	Rotation	**Reversible**
Mounting	**Rigid base**	Motor Orientation	**HORIZONTAL OR UP OR DOWN**
Drive End Bearing	**BALL**	Opp Drive End Bearing	**BALL**
Frame Material	**Cast Iron**	Shaft Type	**T**
Overall Length	**26.19 in**	Frame Length	**14.25 in**
Shaft Diameter	**1.875 in**	Shaft Extension	**4.62 in**
Assembly/Box Mounting	**F1/F2 CAPABLE**		
Outline Drawing	**B-SS312693-1425**	Connection Diagram	**A-EE7308-LE**





DASH	FRAME	B	C	2F	2FF	BS
1275	284T	11.50 [292.10]	24.69 [627.13]	9.50 [241.30]	---------	4.75 [120.65]
1425	286T	13.00 [330.20]	26.19 [665.23]	9.50 [241.30]	11.00 [279.40]	5.50 [139.70]

DRAWING REVISION: A	REVISION BY: W. JOERGER	DATE: 03-21-2015
ECO: ECO-0052212	APPROVED BY: E. HEIL	DATE: 03-31-2015
ECO DESCRIPTION: RELEASED FOR PRODUCTION		

TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7' 30"
.XX	±0.02	[±0.51]	
XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

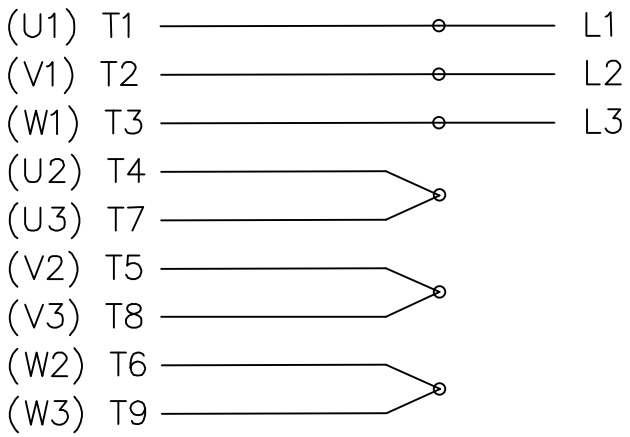
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200/ INCH 5.1/ mm
mm SHOWN IN [BRACKETS]

DRAWN BY: W. JOERGER	Regal Beloit America, Inc.
DATE: 03-31-2015	
APPROVED BY: E. HEIL	DESCRIPTION: OUTLINE
DATE: 03-31-2015	TEAO - HORIZ OR SHAFT UP/DOWN - 280T FR - 11.00 LAM
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS312693 / SHEET: 1 OF 1

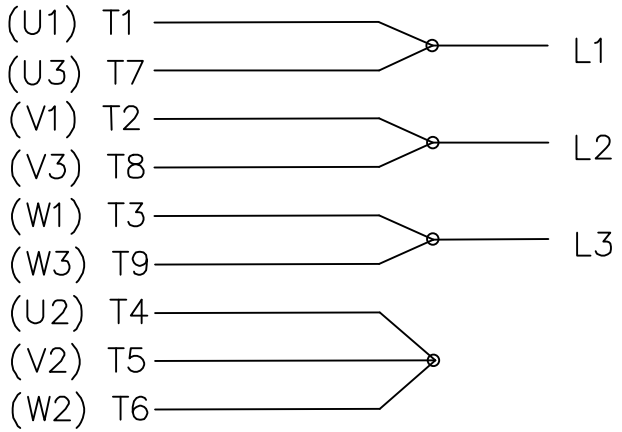
EE7308-LE

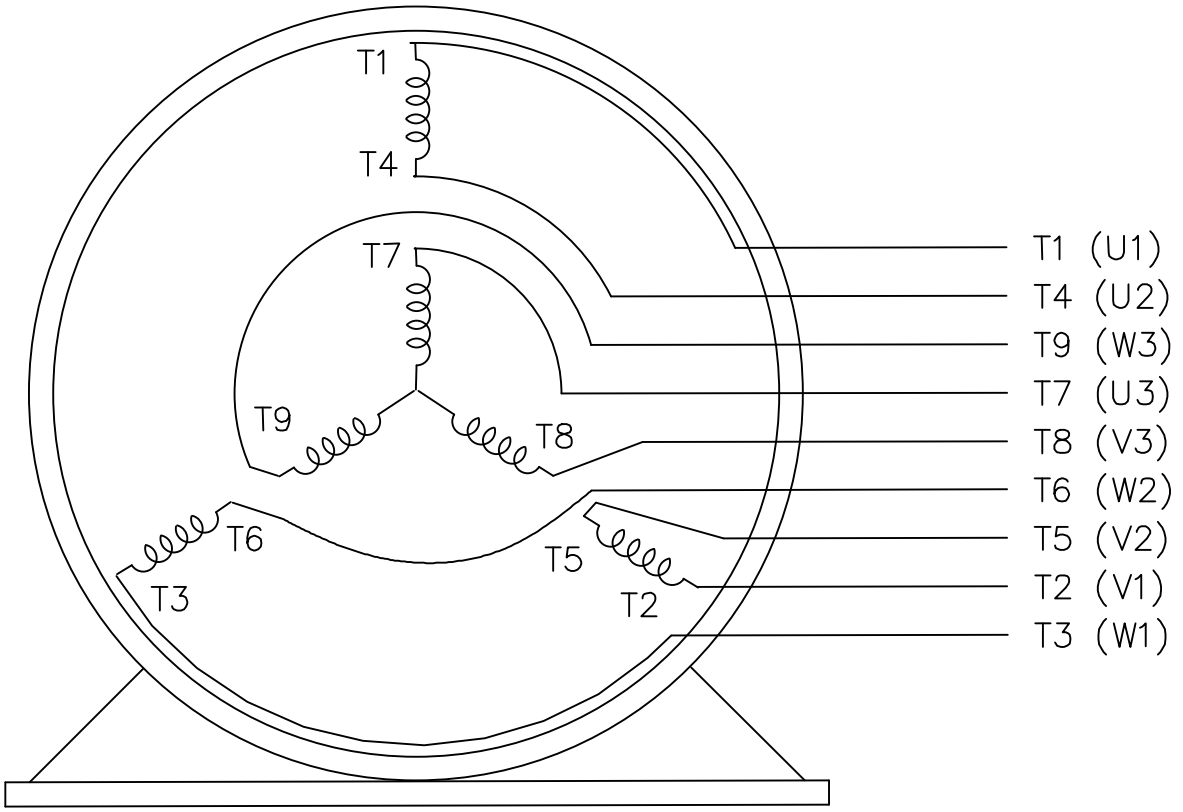
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE





VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

NO.	REVISION	BY & DATE	CHK
2	ADDED IEC NOTATIONS... (U1), (V1) ETC. (MU105786)	REP 01-11-2012	DR
1	NEW DRAWING	HLB 05-03-2002	ML

TOLERANCES UNLESS SPECIFIED	
DEC.	INCHES
.X	±.1
.XX	±.01
.XXX	±.005
.XXXX	±.0005
ANG	±1/2°

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE CONNECTION DIAGRAM
3Ø – DUAL VOLTAGE MOTOR

MAT'L.

FINISH

CAD FILE EE7308-LE

RFP

DIST LB-WP

DRAWN HLB 04-29-2002
CHK ML 05-03-2002
APPD GK 05-03-2002
SCALE 1=1
REF
FMF
PREV

SIZE	DRAWING NO. PAGE OF	REV.
A	EE7308-LE	2

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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308-LE **CAT #:** 824535.00
OUTLINE: B-SS312693-1425
WINDING: K2564247 R4 1

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	1800	1768	286TV	TEAO	TTP	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	74/37	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	92.4	3/4 LD EFF	93.0	1/2 LD EFF	92.4	GTD EFF	ELECT. TYPE
F.L. PF	82.0	3/4 LD PF	77.0	1/2 LD PF	67.0	91.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
89.0 LB-FT	217	175 LB-FT 197%	225 LB-FT 253%	0	

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
999 dBA	1008 dBA	3.3 LB-FT²	0 LB-FT²	20 SEC.	2	490 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	ZONTAL OR UP OR D	UM SEVERE	NONE	NO	NONE	BLUE (EPOXY)

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6311	BALL 6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	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
0.199	0.137	0.672	0.933	15.512	0.080	ODE

NOTES
*
*
*

INVERTER TORQUE: VARIABLE 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE **PPR**

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE **HZ:**
UL: Y-(LEESON UL REC)

DATE: 2/1/2018

Data Sheet

Date: 2/1/2018

824535.00

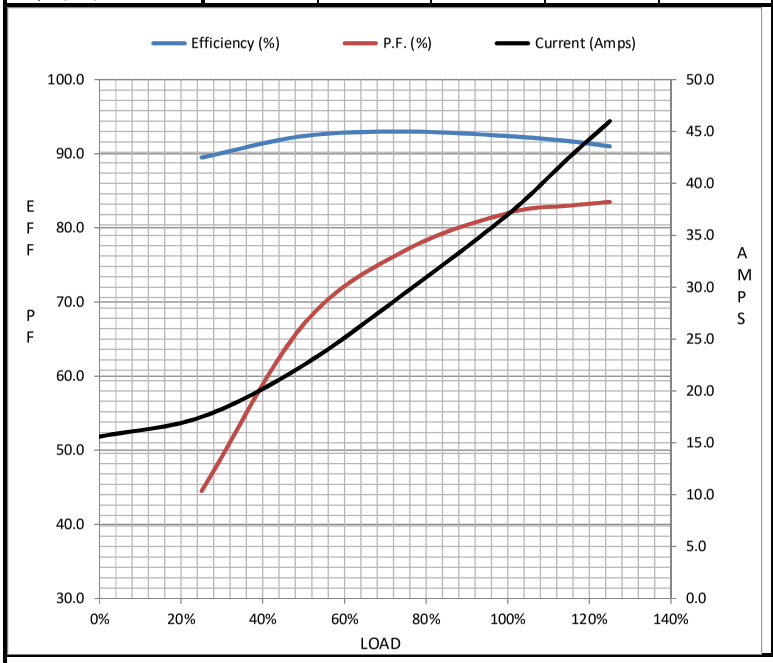
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.6	17.5	22.5	29.5	37.0	42.5	46.0	217	
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	103	112	175	
RPM	1800	1792	1785	1778	1768	1,760	1755	0	
Efficiency (%)		89.5	92.4	93.0	92.4	91.7	91.0		
P.F. (%)	4.5	44.5	67.0	77.0	82.0	83.0	83.5	40.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1625	1768	1800
Current (Amps)	217	175	125	37.0	15.6
Torque (ft-lb)	175	155	225	89.0	0.00



Information Block

HP	30.0	
Sync. RPM	1800	
Frame	286	
Enclosure	TEAO	
Construction	TTP	
Voltage	230/460	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	0	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	3.3	Lb-Ft²
Ref Wdg	K2564247 R4	
Sound Pressure @ 1M	999	dBA
VFD Rating	VARIABLE 10:1	
Outline Dwg	B-SS312693-1425	
Conn. Diag	A-EE7308-LE	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.1990	0.1370	0.6720	0.9330	15.5120

Speed -Torque Curve