

# PRODUCT INFORMATION PACKET



Model No: 284TTTNA16578AA

Catalog No: 824558.00

..15HP..1200RPM.284T.TEAO.230/460V.3PH.60HZ.CONT.40C.1.15SF.RIGID.....COOLING TOWER.....

Cooling Tower



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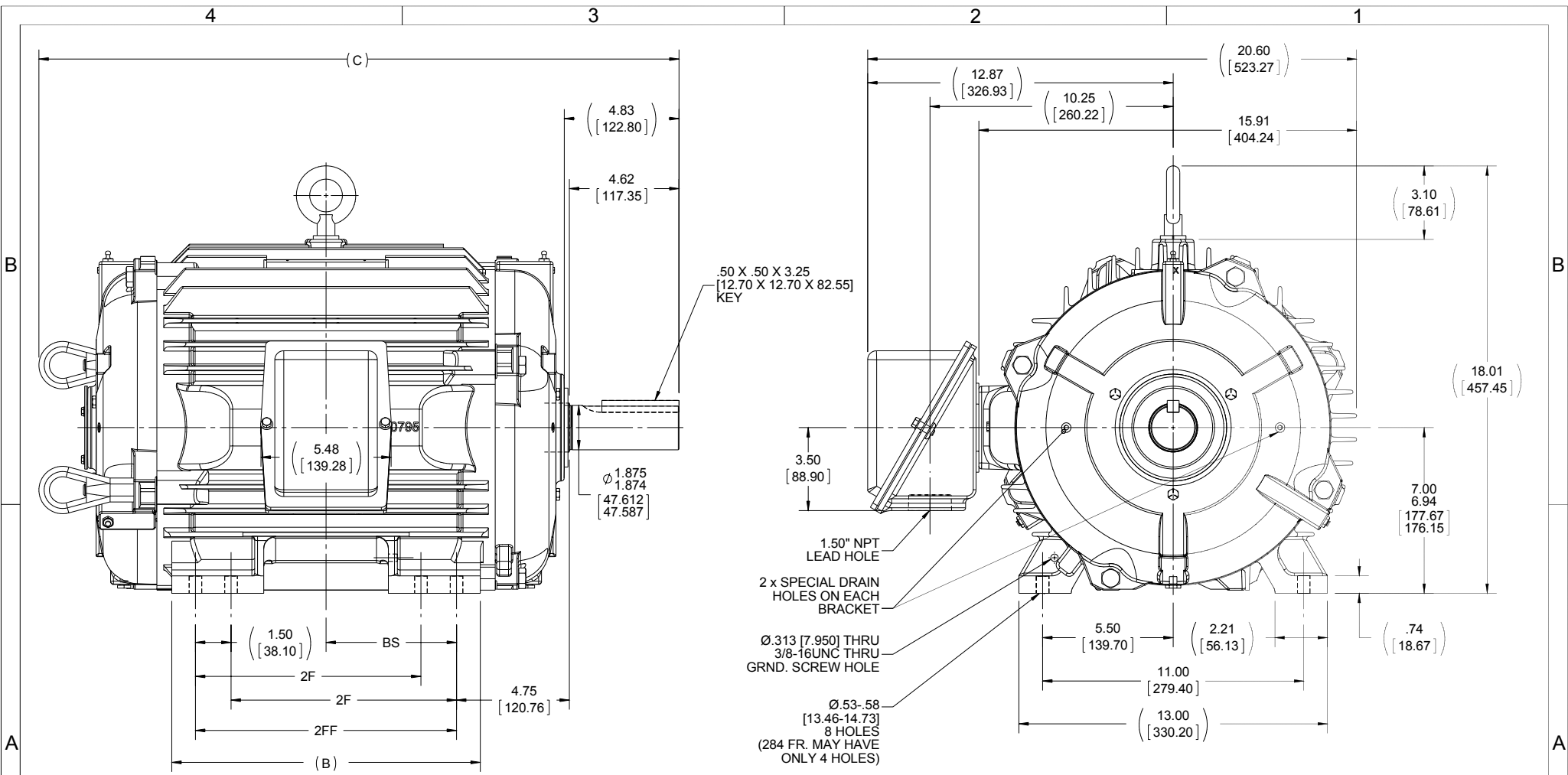


### Nameplate Specifications

Output HP	<b>15 Hp</b>	Output KW	<b>11.2 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>41.0/20.4 A</b>	Speed	<b>1178 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>284TV</b>
Enclosure	<b>Totally Enclosed Air Over</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6311</b>
Opp Drive End Bearing Size	<b>6210</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>56</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>HORIZONTAL OR UP OR DOWN</b>
Drive End Bearing	<b>BALL</b>	Opp Drive End Bearing	<b>BALL</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>T</b>
Overall Length	<b>26.97 in</b>	Frame Length	<b>14.25 in</b>
Shaft Diameter	<b>1.875 in</b>	Shaft Extension	<b>4.62 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>B-SS312689-1425</b>	Connection Diagram	<b>A-EE7308-LE</b>

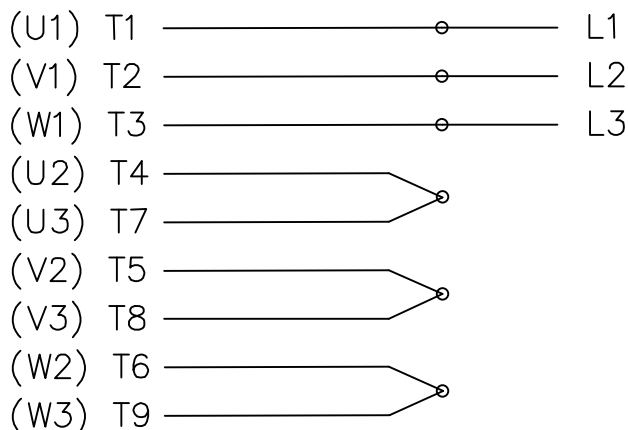


- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.  
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

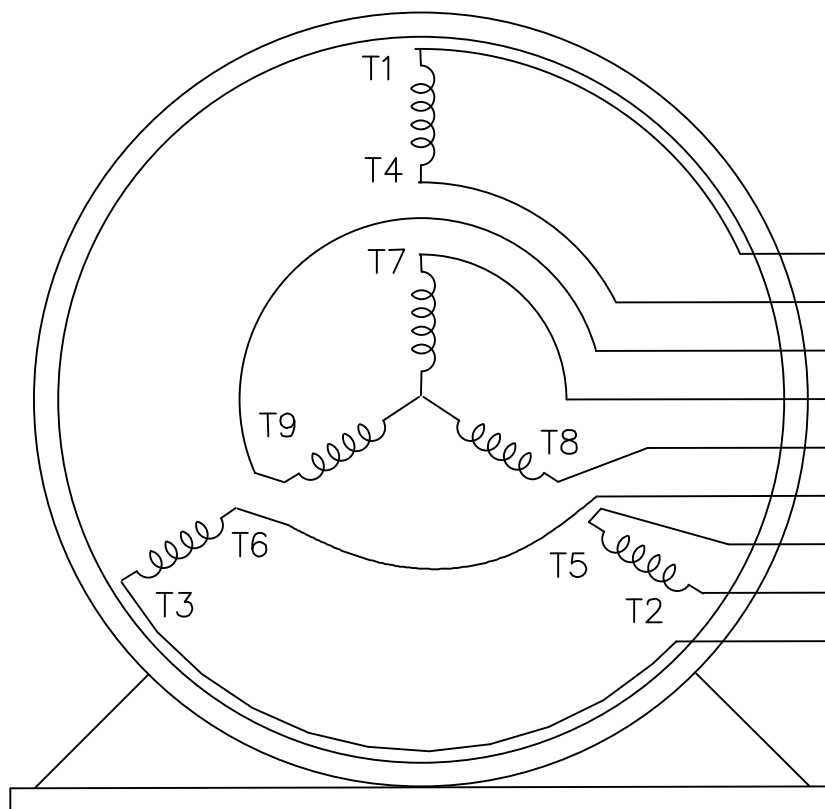
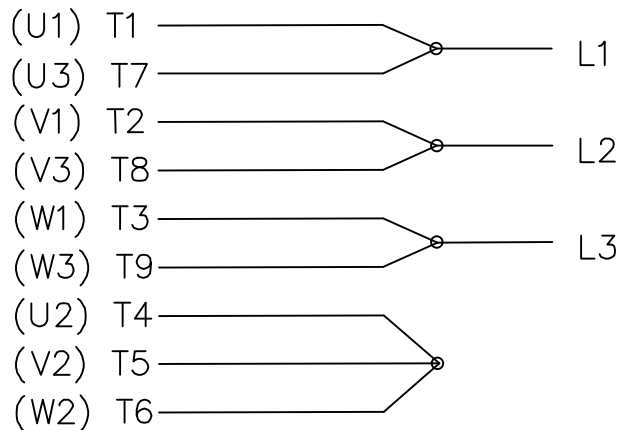
DRAWING REVISION B		REVISION BY JWO		DATE 07-27-2015		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DRAWN BY W. JOERGER		REGAL™ Regal Beloit America, Inc.	
ECO ECO-0081645		APPROVED BY TB		DATE 07-27-2015		DEC. INCH mm ANGLE X ±0.1 [+2.5] ±7°-30° XX ±0.03 [+0.76] XXX ±0.005 [+0.127] XXXX ±0.0005 [+0.0127]		DATE 03-27-2015		DESCRIPTION	
ECO DESCRIPTION NMR-0084175, MU120012						REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] CORNER FILLETS: .02 [.51] MACHINED SURFACES: 200 5.1 mm SHOWN IN [BRACKETS]		DATE 03-27-2015		OUTLINE 280T FR - TEAO / TENV - BB - STD - 12.50" LAM	
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DASH	FRAME	B	C	BS	2F	2FF	SIZE B		DRAWING NUMBER SS312689		SHEET 1 OF 1
1275	284T	12.50 [317.50]	25.47 [646.94]	4.75 [120.65]	---	9.50 [241.30]					
1425	284/286T	13.00 [330.20]	26.97 [685.04]	5.50 [139.70]	9.50 [241.30]	11.00 [279.40]					

THREE PHASE  
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE




- T1 (U1)
- T4 (U2)
- T9 (W3)
- T7 (U3)
- T8 (V3)
- T6 (W2)
- T5 (V2)
- T2 (V1)
- T3 (W1)

VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

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

		TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN HLB 04-29-2002	
		DEC.	INCHES		CHK	ML 05-03-2002
		.X	±.1		APPD GK 05-03-2002	
		.XX	±.01	TITLE CONNECTION DIAGRAM		
2	ADDED IEC NOTATIONS... (U1), (V1) ETC. (MU105786)	REP 01-11-2012	DR .XXX ±.005	3Ø - DUAL VOLTAGE MOTOR		
1	NEW DRAWING	HLB 05-03-2002	ML .XXXX ±.0005	SCALE 1=1		
NO.	REVISION	BY & DATE	CHK ANG ±1/2'	REF		
			RFP	FINISH		
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			DIST LB-WP	CAD FILE EE7308-LE	SIZE A	
				DRAWING NO.	PAGE OF	REV.
				EE7308-LE	2	2



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EET7308-LE  
OUTLINE: B-SS312689-1425  
WINDING: 284658

R12 6

CAT #: 824568.00

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
15	11.2	1200	1178	284TV	TEAO	TTN	G	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	41/20.4/84/20.5	LINE OR INVERTER	CONT	F	1.15	40	3300
F.L. EFF	91.7	3/4 LD EFF	91.7	1/2 LD EFF	91.0	GTD EFF			
F.L. PF	75.0	3/4 LD PF	69.0	1/2 LD PF	57.5	91.0			SO CAGE INVERTED
F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE		B.D. TORQUE		F.L. RISE (°C)			
66.9 LB-FT	116	120 LB-FT	179%	205 LB-FT	306%	0			
PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT			
999 DBA	1008 DBA	4.1 LB-FT²	280 LB-FT²	20 SEC.	2	450 LB.			

\*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	ZONIAL OR UP OR DWN	SEVERE	NONE	NO	NONE	UE - LEESON (EPO)
BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL	
DE BALL 6311	BALL 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
0.358	0.358	1.864	2.043	28.815	0.080	ODE

* N O T E S *		INVERTER TORQUE: VARIABLE 10:1
		INV. HP SPEED RANGE: NONE
		ENCODER: NONE
		NONE
		BRAKE: NONE
		NONE
		FT-LB: NA
		NONE
		VOLTAGE: NONE
		NONE
		UL: Y-(LEESON UL REC)

DATE:	2/13/2018	HZ:
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Motor Load Data

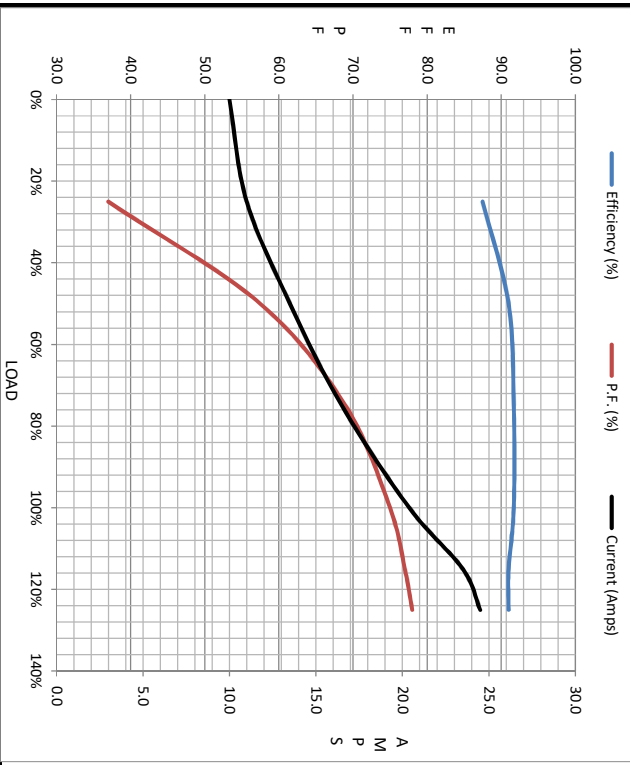
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.0	11.0	13.5	16.5	20.4	23.5	24.5	116
Torque (ft-lb)	0.00	16.5	33.0	59.0	66.9	77.0	84.0	120
RPM	1200	1194	1190	1184	1178	1174	1172	0
Efficiency (%)		87.5	91.0	91.7	91.7	91.0	91.0	
P.F. (%)	5.1	37.0	57.5	69.0	75.0	77.0	78.0	35.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1085	1178	1200
Current (Amps)	116	110	75.0	20.4	10.0
Torque (ft-lb)	120	115	205	66.9	0.00

Information Block

HP	15.0			
Sync. RPM	1200			
Frame	284			
Enclosure	TEAO			
Construction	TTN			
Voltage	230/460#190/380 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 wk <sup>2</sup>	4.1 lb-Ft <sup>2</sup>			
Ref Wdg	284658 R12			
Sound Pressure @ 1M	999 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	B-SS312689-1425			
Conn. Diag	A-EE7308-LE			
Additional Specifications:				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3580	0.3580	1.8640	2.0430	28.8150



Speed - Torque Curve

