

PRODUCT INFORMATION PACKET

Model No: 284TSTGN16531
Catalog No: U076A
25,1800,EPFC,284TS,3/60/230/460
Explosion Proof



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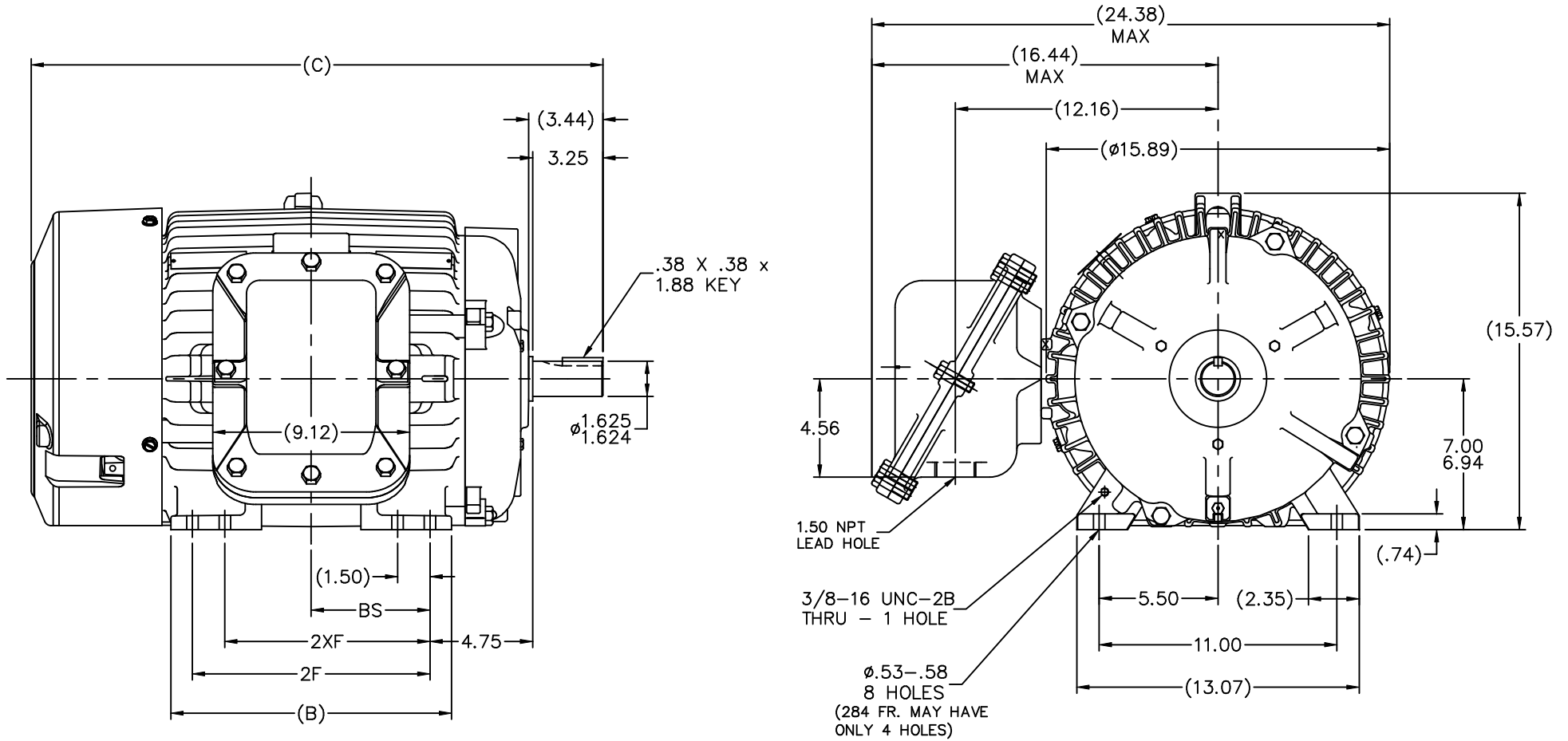
Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	62.0/31.0 A	Speed	1774 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	G	Frame	284TS
Enclosure	Explosion Proof Fan cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6311
Opp Drive End Bearing Size	6210	UL	No
CSA	N	CE	N
IP Code	54		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Mounting	Rigid base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	TS
Overall Length	24.97 in	Frame Length	12.75 in
Shaft Diameter	1.625 in	Shaft Extension	3.44 in
Assembly/Box Mounting	F1 Only		
Outline Drawing	B-SS311004-1275	Connection Diagram	A-EE7308T

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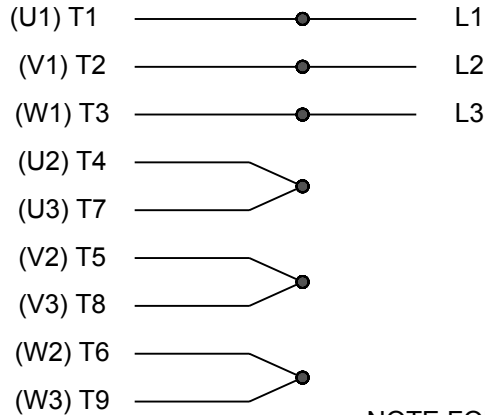


- NOTES:
 1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2XF	BS
1275	284TS	12.50	24.97	9.50		4.75
1425	286TS	13.00	26.47	11.00	9.50	5.50

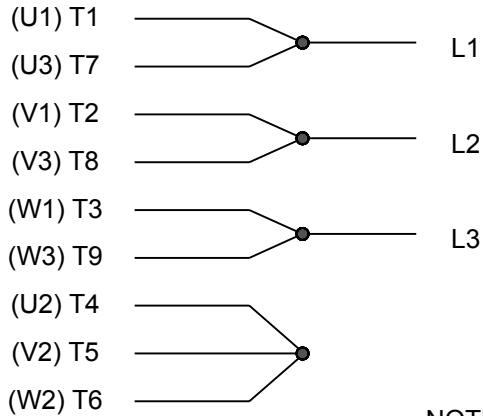
				TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN DA 03-12-1999						
4	REDRAWN IN AUTOCAD	TAT	07-06-2004	ML	DEC.	INCHES		CHK	ML 04-14-1999					
3	REV'D 'C' BOX GEOMETRY PER CAST. CHANGE CN 29010	DRS	01-31-2000		.X	±.1		APPD	SW 04-14-1999					
2	REVISED 'C' DIMENSION FOR C.I. FAN GUARD	DA	07-12-1999		.XX	±.03	TITLE	SCALE	7-32					
	REVISED CONDUIT BOX CN 2400-235				.XXX	±.005	OUTLINE - EXP.PR. - TGN	REF						
1	NEW DRAWING - DES/DEV	DA	04-14-1999		.XXXX	±.0005	280TS FR. - BB - STD - 12.50 LAM.	FMF						
NO.	REVISION	BY & DATE		CHK	ANG	±7'30"	MATL	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	ss311004	SIZE	DRAWING NO.	PAGE	OF	REV.
							DIST	LB-BR		B	SS311004	4		4

HIGH VOLTAGE



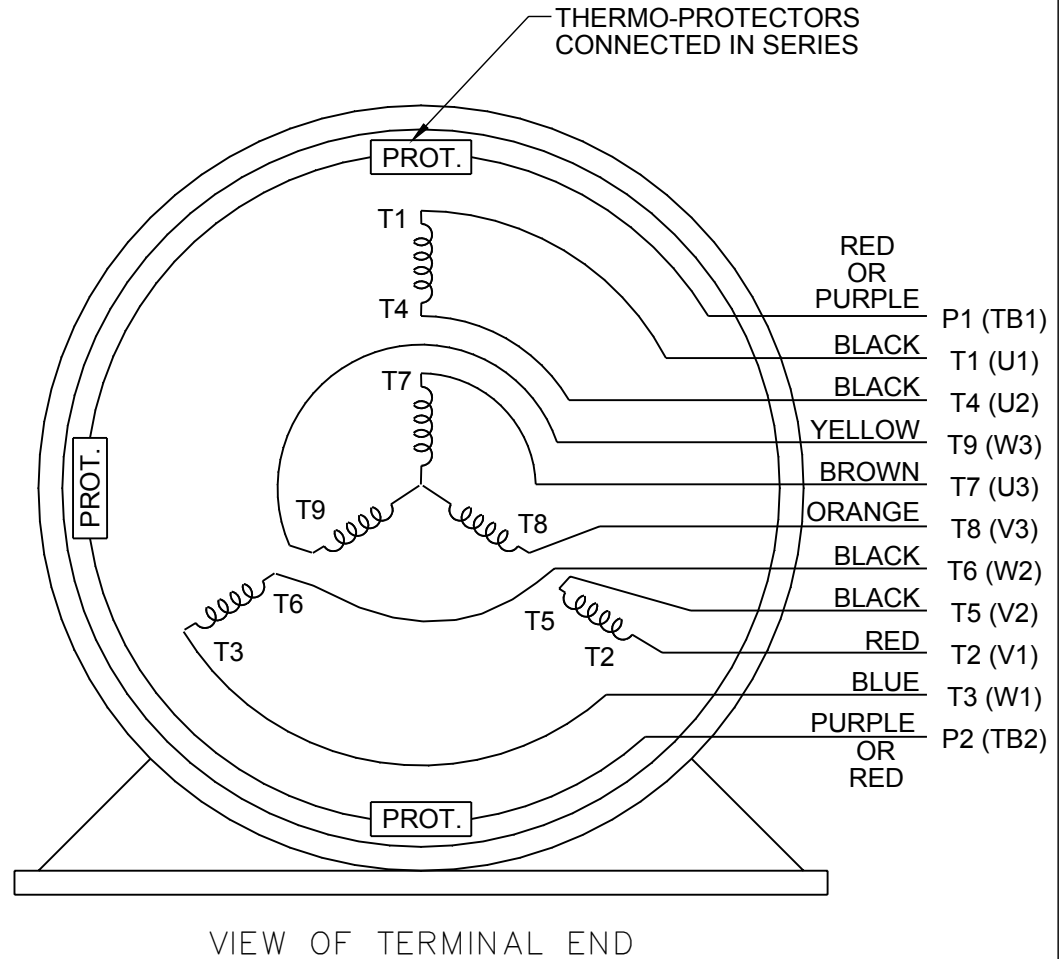
**NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1**

LOW VOLTAGE



NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

THREE PHASE DUAL VOLTAGE MOTOR



DRAWING REVISION R	REVISION BY AJW	DATE 07-17-2015		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0081632	APPROVED BY T. VUE	DATE 07-17-2015		DATE 05-13-1992	
ECO DESCRIPTION REV'D IEC NOTATIONS PER IEC 60034-8				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

CERTIFICATION DATA SHEET

Model#: 284TSTGN16531 AA **WINDING#:** K2844120 NONE 6
CONN. DIAGRAM: A-EE7308T **ASSEMBLY:** F1 ONLY
OUTLINE: B-SS311004-1275

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25&20	18.7&14.9	1800	1774&1470	284TS	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	62/31&60/30	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 93.6&93	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81&81	3/4 LOAD PF: 75	1/2 LOAD PF: 65	92.4	SQ CAGE INV RATED	27 / 13.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74 LB-FT	362 / 181	140 LB-FT 189	215 LB-FT 291	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	4.2 LB-FT^2	175 LB-FT^2	25 SEC.	2	475 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

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

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 10:1
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

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DATE: 06/23/2017 08:15:48 AM
FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 19-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



284TSTGN16531

Submittal

Data @ 460 V

Motor Load Data

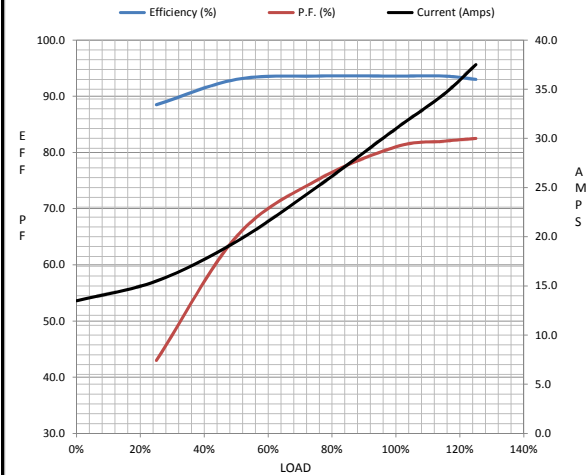
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	13.5	15.5	19.5	25.0	31.0	34.5	37.5	181
Torque (ft-lb)	0.00	18.5	37.0	55.5	74.0	85.5	93.0	140
RPM	1800	1795	1785	1780	1774	1,765	1760	0
Efficiency (%)		88.5	93.0	93.6	93.6	93.6	93.0	
P.F. (%)	5.5	43.0	65.0	75.0	81.0	82.0	82.5	33.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1774	1800
Current (Amps)	181	165	125	31.0	13.5
Torque (ft-lb)	140	130	215	74.0	0.00

Information Block

HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TEFC			
Construction	TFN			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	4.2 Lb-Ft ²			
Ref Wdg	K2844120 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS311004-1275			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1500	0.1540	0.8520	1.0660	20.0640



Speed -Torque Curve

