

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286TSTDN16005

Catalog No: U441A

XRI® General Purpose General Purpose Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
3600 & 3000 RPM, 286TSC Frame, DP



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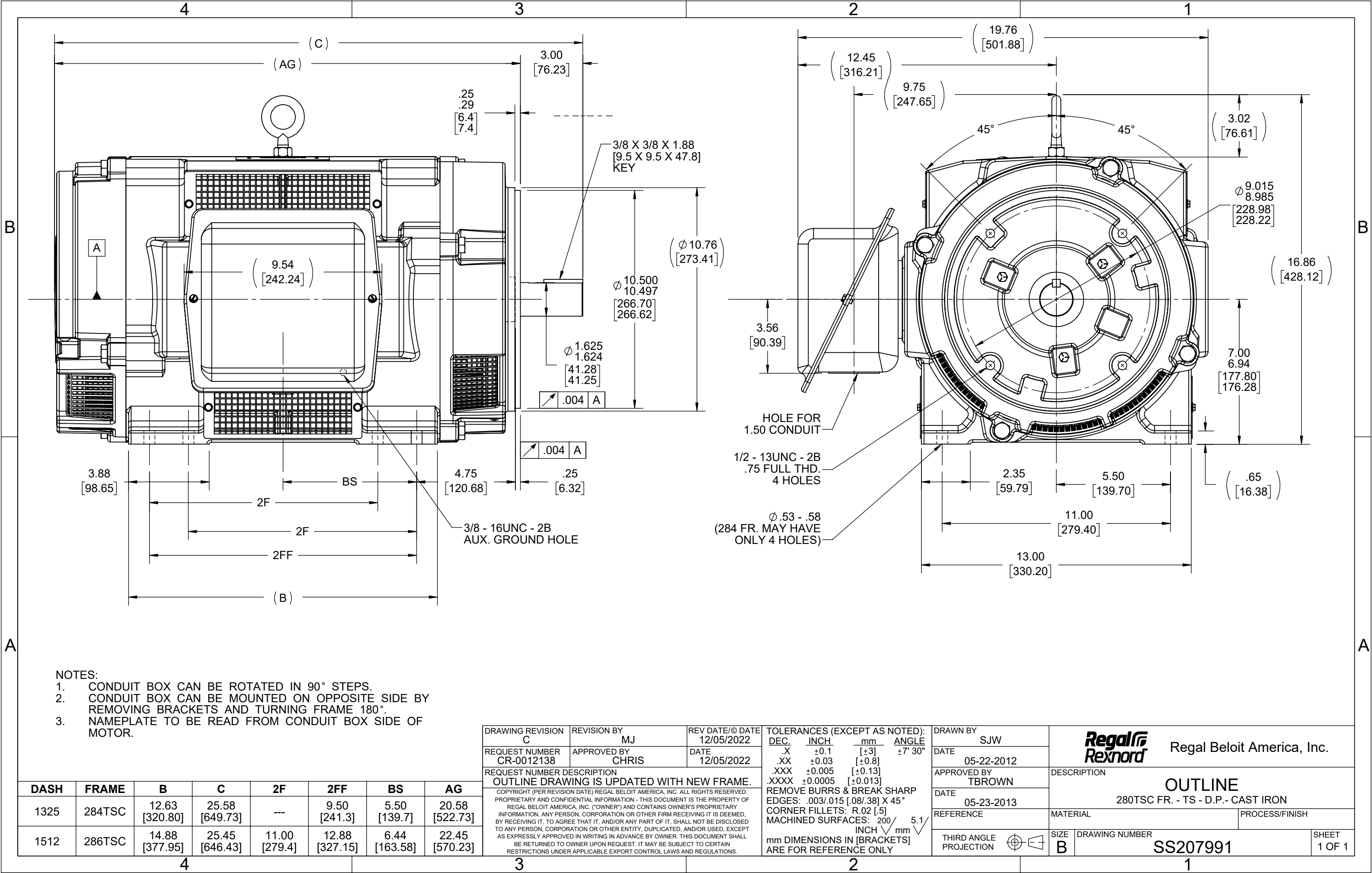
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	30 & 25 Hp
Output KW	22.4 & 18.7 kW	Voltage	230/460 & 190/380 V
Speed	3555 & 2955 rpm	Service Factor	1.15 & 1.15
Frame	286TSC	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	93.6 & 93 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	67.5/34 & 68/34 A	Power Factor	89
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

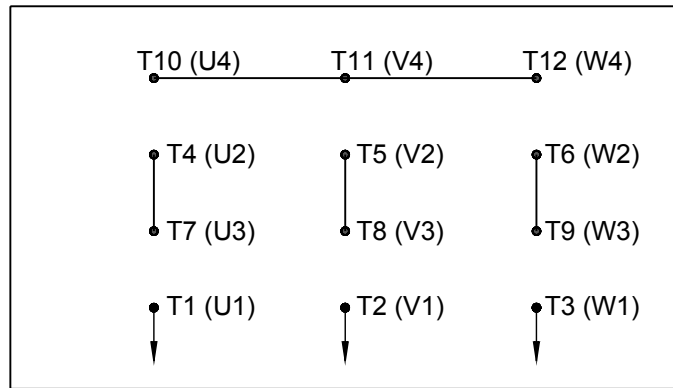
Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.298 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	25.45 in
Frame Length	15.12 in	Shaft Diameter	1.625 in
Shaft Extension	3 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS207991-1512	Connection Drawing	A-EE7358

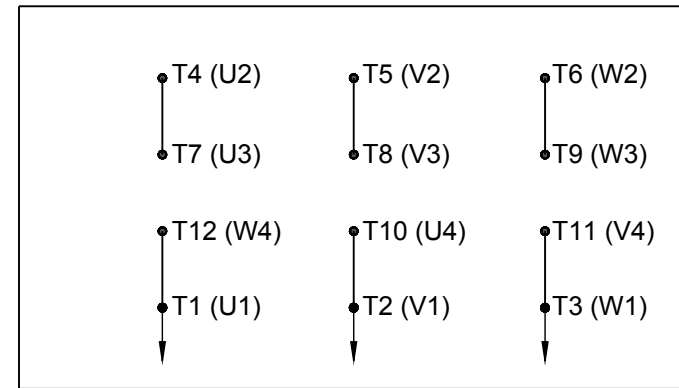


HIGH VOLTAGE

WYE START

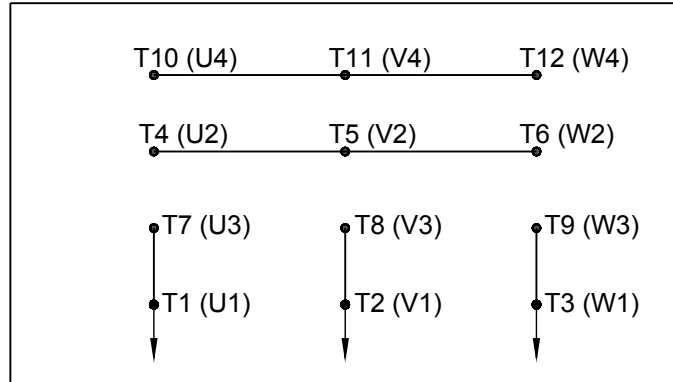


DELTA RUN

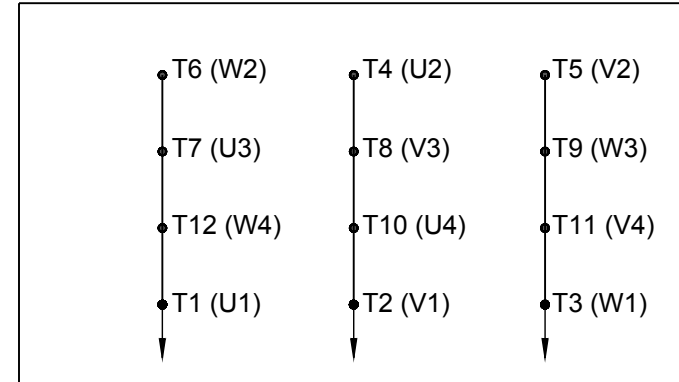


LOW VOLTAGE

WYE START



DELTA RUN

4/2 CKTY $\triangle$

DRAWING REVISION D	REVISION BY JWO	DATE 01-26-2016		DRAWN BY BLR	 Regal Beloit America, Inc.			
ECO ECO-0092547	APPROVED BY TB	DATE 01-26-2016		DATE 03-09-1998	DESCRIPTION CONN DIAGRAM-EXTERNAL 12 LEAD - DUAL VOLT. - WYE START - DELTA RUN			
ECO DESCRIPTION ADDED IEC MARKINGS				APPROVED BY GK				
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				REFERENCE	MATERIAL		PROCESS/FINISH	
				THIRD ANGLE PROJECTION		SIZE A	DRAWING NUMBER EE7358	

CERTIFICATION DATA SHEET

Model#: 286TSTDN16005 AA
 CONN. DIAGRAM: A-EE7358
 OUTLINE: B-SS207991-1512

WINDING#: K2862136 R1 1
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30&25	22.4&18.7	3600	3555&2955	286TSC	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	67.5/34&68/34	PWS(LV ONLY) & YDRUN	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: 89&89	3/4 LOAD PF: 87.5	1/2 LOAD PF: 81.5	93	SQ CAGE IND RUN	18.4 / 9.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.3 LB-FT	434 / 217	65 LB-FT 147	125 LB-FT 282	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	2.8 LB-FT^2	35 LB-FT^2	15 SEC.	2	410 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	D RIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	RODENT	BLUE (ENAMEL)

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

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further
information

* N O T E S *	INVERTER TORQUE: NONE
	INV. HP SPEED RANGE: NONE
	ENCODER: NONE
	NONE NONE NONE NONE PPR
* N O T E S *	BRAKE: NONE NONE
	NONE P/N NONE
	NONE NONE
	NONE FT-LB NONE V NONE Hz

DATE: 07/08/2017 05:30:41 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



286TSTDN16005

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	9.2	12.5	18.5	26.0	33.8	38.5	42.0	217	
Torque (ft-lb)	0.00	11.0	22.0	33.1	44.3	51.1	55.6	65.0	
RPM	3600	3590	3580	3568	3555	3,550	3542	0	
Efficiency (%)		89.5	93.0	93.6	93.6	93.6	93.0		
P.F. (%)	7.0	63.0	81.5	87.5	89.0	90.0	90.0	32.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																									
Speed (RPM)	0	1800	3325	3555	3600																																									
Current (Amps)	217	195	135	33.8	9.2																																									
Torque (ft-lb)	65.0	58.0	125	44.3	0.00																																									
Efficiency (%) P.F. (%) Current (Amps) <table><thead><tr><th>LOAD</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>0%</td><td></td><td></td><td>9.2</td></tr><tr><td>20%</td><td></td><td></td><td>10.5</td></tr><tr><td>40%</td><td>89.0</td><td>75.0</td><td>12.0</td></tr><tr><td>60%</td><td>92.5</td><td>85.0</td><td>14.5</td></tr><tr><td>80%</td><td>93.0</td><td>88.0</td><td>17.5</td></tr><tr><td>100%</td><td>93.0</td><td>89.0</td><td>21.0</td></tr><tr><td>120%</td><td>93.0</td><td>90.0</td><td>25.0</td></tr><tr><td>125%</td><td></td><td></td><td>44.3</td></tr></tbody></table>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	0%			9.2	20%			10.5	40%	89.0	75.0	12.0	60%	92.5	85.0	14.5	80%	93.0	88.0	17.5	100%	93.0	89.0	21.0	120%	93.0	90.0	25.0	125%			44.3					
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						Sync. RPM					3600																																			
						Frame					286																																			
						Enclosure					DP																																			
						Construction					TDN																																			
						Voltage					30/460#190/381V																																			
						Frequency					60 Hz																																			
Design					A																																									
LR Code letter					G																																									
Service Factor					1.15																																									
Temp Rise @ FL					45 ° C																																									
Duty					CONT																																									
Ambient					40 ° C																																									
Elevation					1,000 feet																																									
Rotor/Shaft wk ²					2.80 Lb-Ft ²																																									
Ref Wdg					K2862136 R1																																									
Sound Pressure @ 1M					80 dBA																																									
VFD Rating					NONE																																									
Outline Dwg					B-SS207991-1512																																									
Conn. Diag					A-EE7358																																									
Additional Specifications:																																														
0																																														
0																																														
EQUIV CKT (OHMS / PHASE)																																														
R1		R2		X1		X2		Xm																																						
0.1890		0.1040		0.7810		0.6120		28.5990																																						

Speed -Torque Curve

