

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286TSTDN16036

Catalog No: E794A

XRI® General Purpose General Purpose Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 286TS Frame, DP



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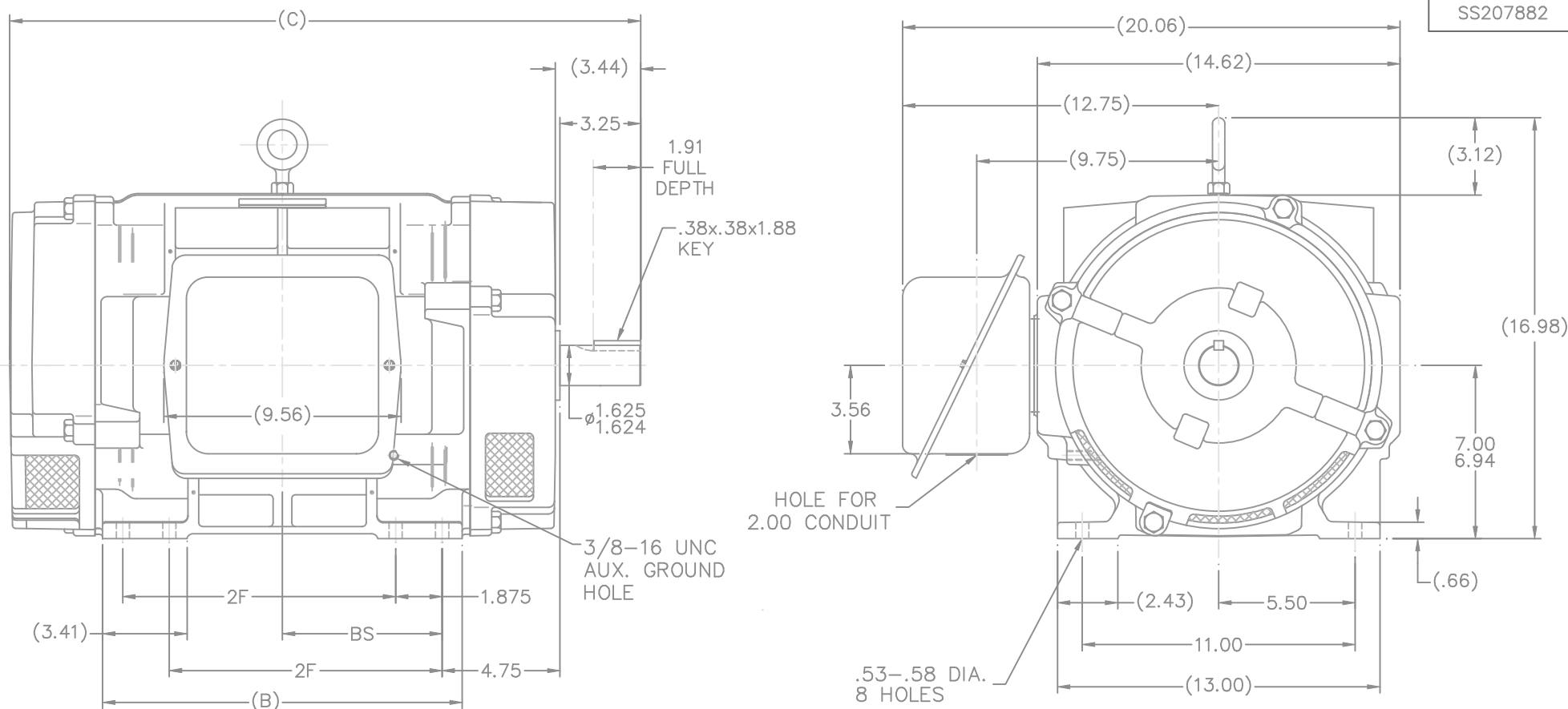
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	30 & 25 Hp
Output KW	22.4 & 18.7 kW	Voltage	230/460 & 190/380 V
Speed	1775 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	286TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	94.1 & 93 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	74/37 & 75/37.5 A	Power Factor	81
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	12
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.22 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	25.44 in
Frame Length	15.12 in	Shaft Diameter	1.625 in
Shaft Extension	3.44 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS207882-1512	Connection Drawing	A-EE7308K



NOTES:

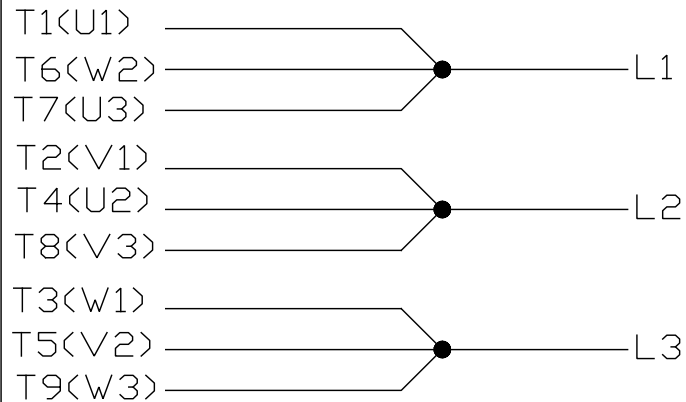
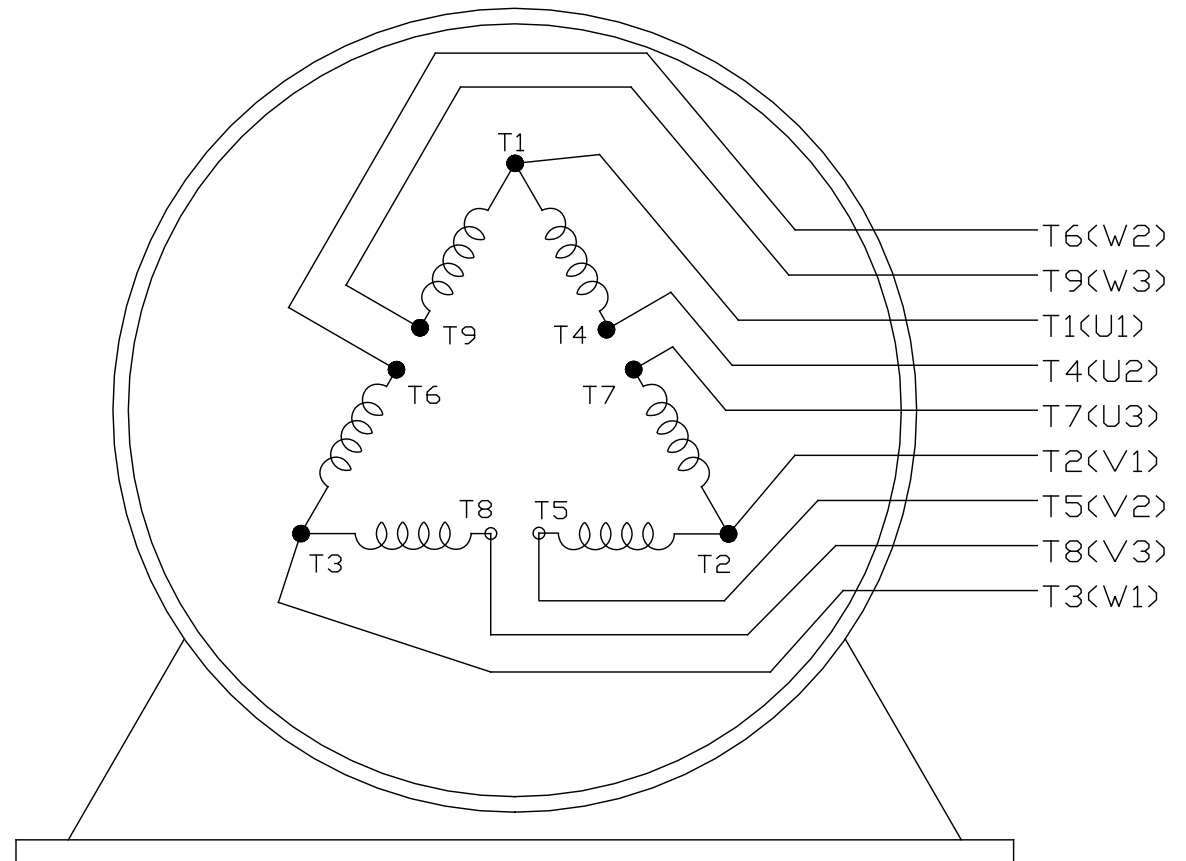
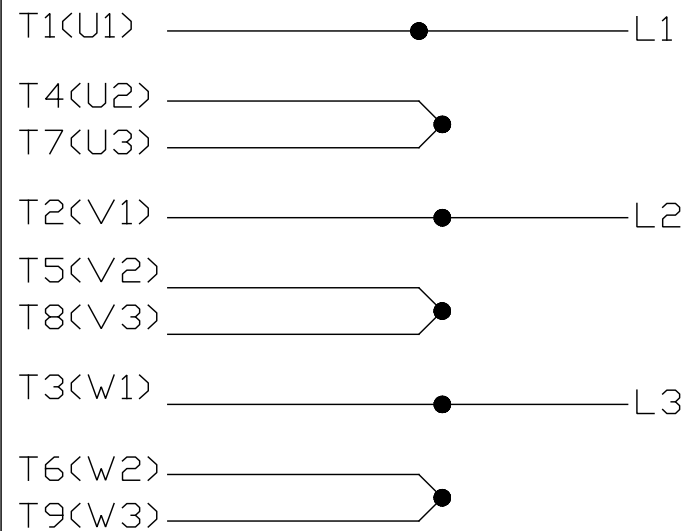
1. CONDUIT BOX CAN BE ROTATED IN 90. STEPS.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180..
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	BS		
1325	284TS	12.63	23.57	9.50	5.50		
1512	286TS	14.50	25.44	11.00	6.44		

TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN TJB 05-04-2004	
DEC.	INCHES	CHK	ML	05-10-2004	
.X	±.1	APPD	BW	05-11-2004	
.XX	±.03	SCALE	1=4		
.XXX	±.005	REF	U-03030025		
.XXX	±.0005	FMF	MU50708		
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	05-11-2004	CAD FILE	SS207882	SIZE	DRAWING NO. PAGE OF REV.
DIST	LB			B	SS207882

LOW VOLTAGE

EE7308K

HIGH VOLTAGE

VIEW OF TERMINAL END

			TOLERANCES UNLESS SPECIFIED			 REGAL - BELOIT CORPORATION	DRAWN PGK 06-04-1997		
NO.	REVISION	BY & DATE	CHK	ANG	± 7'30"		CHK	ML	06-05-1997
E	CORRECTED IEC MARKINGS ECD-0111208	WGJ 01-23-2017	EMH	DEC.	INCHES				
D	RE-DRAWN WITH REGAL LOGO ECD-0110493	WGJ 09-30-2016	EMH	.X	± .1				
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	± .02	TITLE			
7	REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	± .005	CONNECTION DIAGRAM			
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	± .0005	DELTA CON. - 3Ø - 9 LEADS			
						MAT'L.			
						FINISH			
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							A	EE7308K	REV.
									E

CERTIFICATION DATA SHEET

Model#: 286TSTDN16036 AA
 CONN. DIAGRAM: A-EE7308K
 OUTLINE: B-SS207882-1512

WINDING#: K2864304 NONE 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	1800	1775&1475	286TS	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	74/37&75/37.5	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&93	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81&81.5	3/4 LOAD PF: 76.5	1/2 LOAD PF: 66	93.6	SQ CAGE INV RATED	31 / 15.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89 LB-FT	416 / 208	160 LB-FT 180	220 LB-FT 247	25

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	4.7 LB-FT^2	- LB-FT^2	20 SEC.	-	460 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	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: CONSTANT 10:1
	INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE NONE NONE PPR
	BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

DATE: 06/27/2017 01:57:11 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/19/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



286TSTDN16036

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.5	17.6	22.6	29.3	37.0	42.0	45.5	208	
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	102	112	160	
RPM	1800	1792	1788	1782	1772	1,770	1768	0	
Efficiency (%)		91.0	93.6	94.1	94.1	93.6	93.0		
P.F. (%)	3.0	43.5	66.0	76.5	81.0	82.5	83.0	35.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	900	1678	1772	1800					
Current (Amps)	208	187	129	37.0	15.5					
Torque (ft-lb)	160	136	220	89.0	0.00					
— Efficiency (%) — P.F. (%) — Current (Amps) EFFICIENCY (%) P.F. (%) CURRENT (AMPS) LOAD						Information Block				
						HP		30.0		
						Sync. RPM		1800		
						Frame		286		
						Enclosure		DP		
						Construction		TDN		
						Voltage		30/460#190/3Ø V		
						Frequency		60 Hz		
						Design		B		
						LR Code letter		G		
						Service Factor		1.15		
						Temp Rise @ FL		45 ° C		
						Duty		CONT		
						Ambient		40 ° C		
						Elevation		1,000 feet		
						Rotor/Shaft wk²		4.7 Lb-Ft²		
						Ref Wdg		K2864304 NONE		
Sound Pressure @ 1M		72 dBA								
VFD Rating		CONSTANT 10:1								
Outline Dwg		B-SS207882-1512								
Conn. Diag		A-EE7308K								
Additional Specifications:										
0										
0										
EQUIV CKT (OHMS / PHASE)										
R1		R2		X1		X2		Xm		
0.1320		0.1090		0.7090		0.8690		16.8210		

Speed -Torque Curve

