

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286TTTNA18602

Catalog No: S520

Kiln Duty Motor, 15 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 286T Frame, TEAO



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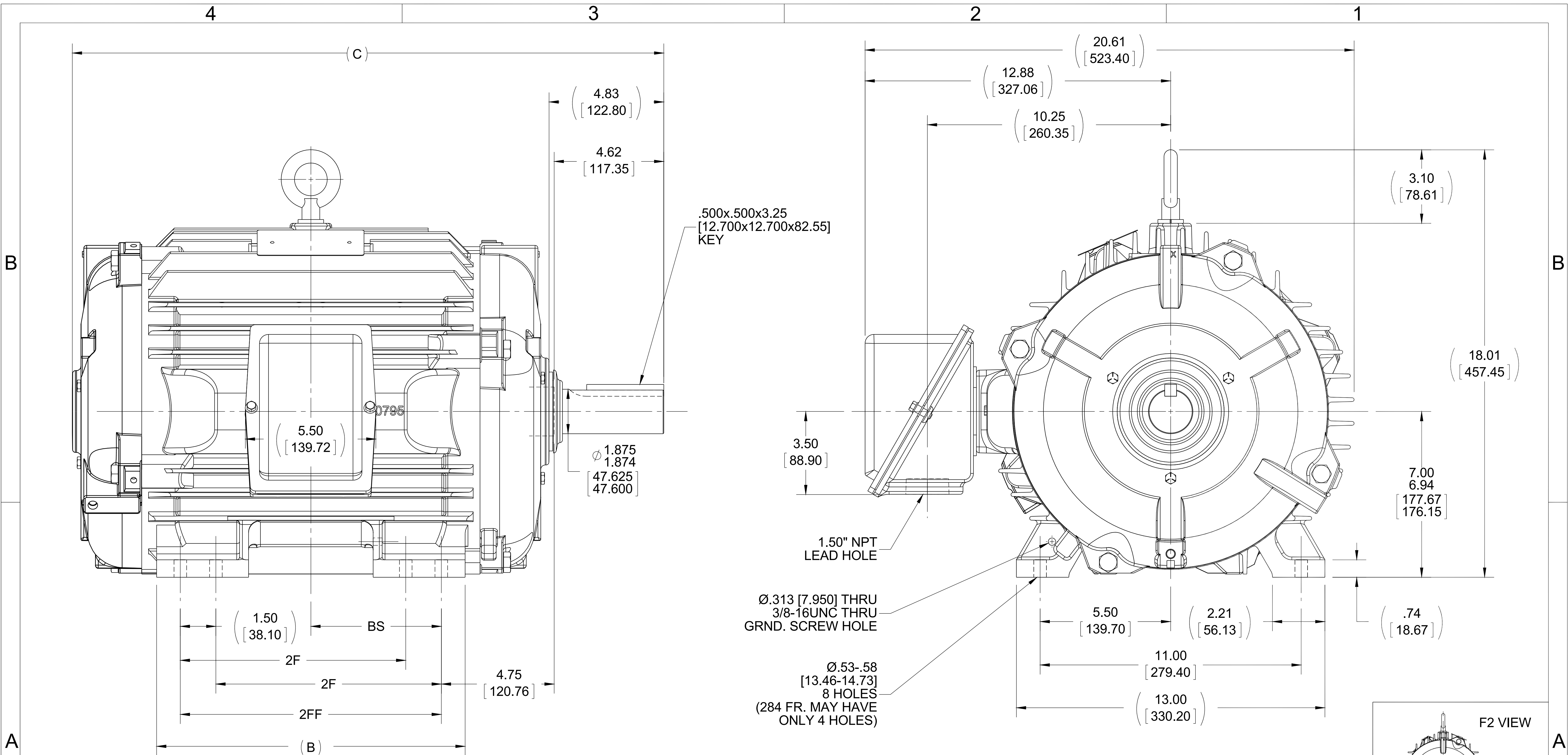
RegalRexnord

Nameplate Specifications

Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	460 V
Current	23.0 A	Speed	875 rpm
Service Factor	1.15	Phase	3
Efficiency	88.5 %	Power Factor	69
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	F
Frame	286T	Enclosure	Totally Enclosed Air Over
Thermal Protection	No Protection	Ambient Temperature	90 °C
Drive End Bearing Size	311	Opp Drive End Bearing Size	210
UL	Recognized	CSA	Y
CE	N	IP Code	54
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	8	Rotation	Reversible
Resistance Main	.515 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball / Heat Stabilized
Opp Drive End Bearing	Ball / Heat Stabilized	Frame Material	Cast Iron
Shaft Type	T	Overall Length	24.92 in
Frame Length	14.25 in	Shaft Diameter	1.875 in
Shaft Extension	4.83 in	Assembly/Box Mounting	F1/F2 Capable
Inverter Load	VARIABLE 20:1		
Outline Drawing	B-SS311239-1425	Connection Drawing	A-EE7300T



DASH	FRAME	B	C	BS	2F	2FF
1275	284T	12.50 [317.50]	23.42 [594.87]	4.75 [120.65]	---	9.50 [241.30]
1425	284/286T	13.00 [330.20]	24.92 [632.97]	5.50 [139.70]	9.50 [241.30]	11.00 [279.40]

DRAWING REVISION	REVISION BY	DATE
E	W. JOERGER	07-01-2015
ECO	APPROVED BY	DATE
ECO-0080734	E. HEIL	07-01-2015
ECO DESCRIPTION		
REMOVED COVER PLATE AND SEAL FROM O.D.E.		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
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]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381]			
CORNER FILLETS: .02 [0.51]			
MACHINED SURFACES: 200 INCH 5.1 mm			
mm SHOWN IN [BRACKETS]			

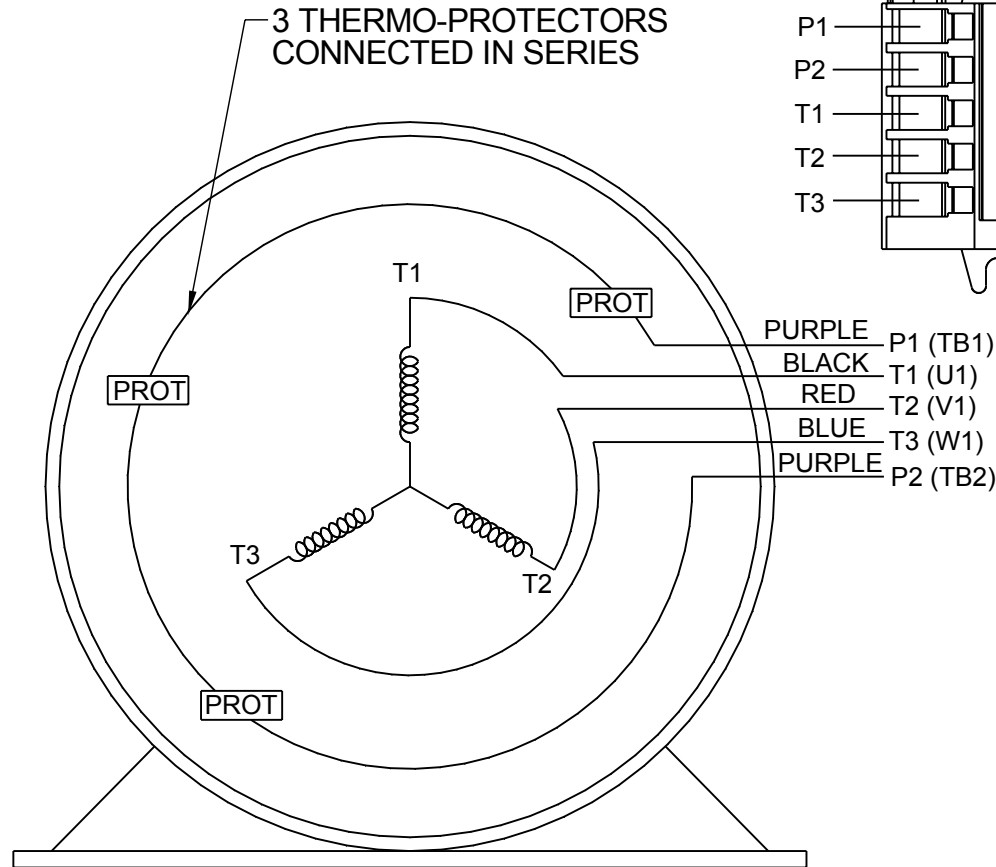
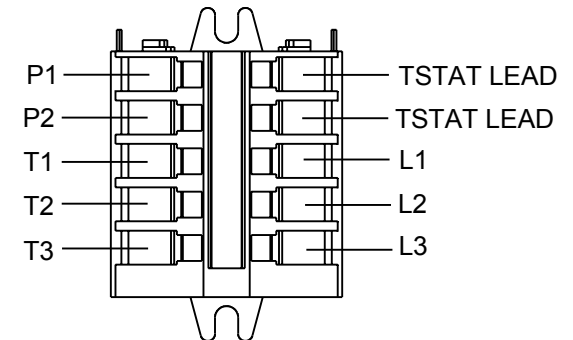
DRAWN BY	NJS		
DATE	10-03-2001		
APPROVED BY	BW		
DATE	10-05-2001		
REFERENCE			
THIRD ANGLE PROJECTION			
SIZE	B		
DRAWING NUMBER	SS311239		
SHEET	1 OF 1		

THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1

TERMINAL BLOCK WHEN SPECIFIED



VIEW OF TERMINAL END

IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S



A-9806 DECAL

T2BM
T6AW
T6AL
T6Z
T4EG
T4BF
T8A
T6H
T6A
T4AX
T4A
T2A
T2F

DRAWING REVISION AB	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T.VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC-60034-8		
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DRAWN BY LZ	 Regal Beloit America, Inc.	
DATE 01-04-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR	
DATE 01-20-1994		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300T
		SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 286TTTNA18602 BA
 CONN. DIAGRAM: A-EE7300T
 OUTLINE: B-SS311239-1425

WINDING#: K286860 R1 7
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15	11.2	900	875	286T	TEAO	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	23	LINE OR INVERTER	CONTINUOU S	H4	1.15	90	3300

FULL LOAD EFF: 88.5	3/4 LOAD EFF: 88.5	1/2 LOAD EFF: 87.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 69	3/4 LOAD PF: 63	1/2 LOAD PF: 52	86.5	SQ CAGE INV RATED	12

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
90 LB-FT	105	145 LB-FT 160	190 LB-FT 210	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
- dBA	- dBA	4.8 LB-FT^2	- LB-FT^2	20 SEC.	-	540 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	NONE	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL / HEAT STABILIZED	BALL / HEAT STABILIZED	DC 44M	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
311	210						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS CLH (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further
information

INVERTER TORQUE: VARIABLE 20:1
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

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DATE: 06/27/2017 04:12:30 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



286TTTNA18602

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	12.0	13.0	15.5	19.0	23.0	26.0	28.0	105	
Torque (ft-lb)	0.00	22.0	44.5	67.0	90.0	105	114	145	
RPM	900	895	888	882	875	870	862	0	
Efficiency (%)		81.5	87.5	88.5	88.5	88.5	87.5		
P.F. (%)	6.0	33.0	52.0	63.0	69.0	71.0	72.0	32.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																													
Speed (RPM)	0	450	800	875	900	Information Block																												
Current (Amps)	105	90.0	65.0	23.0	12.0	HP15.0																												
Torque (ft-lb)	145	125	190	90.0	0.00	Sync. RPM900																												
Efficiency (%) P.F. (%) Current (Amps) <table><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25</td><td>82</td><td>33</td><td>11.5</td></tr><tr><td>50</td><td>87</td><td>55</td><td>15.0</td></tr><tr><td>75</td><td>88</td><td>65</td><td>19.0</td></tr><tr><td>100</td><td>88</td><td>70</td><td>23.0</td></tr><tr><td>125</td><td>87</td><td>72</td><td>27.5</td></tr></tbody></table>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	82	33	11.5	50	87	55	15.0	75	88	65	19.0	100	88	70	23.0	125	87	72	27.5	Frame286				
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																									
						25	82	33	11.5																									
						50	87	55	15.0																									
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						100	88	70	23.0																									
						125	87	72	27.5																									
						EnclosureTEAO																												
						ConstructionTTN																												
						Voltage460V																												
						Frequency60Hz																												
						DesignB																												
						LR Code letterF																												
						Service Factor1.15																												
						Temp Rise @ FL0°C																												
						DutyCONT																												
						Ambient40°C																												
Elevation1,000feet																																		
Rotor/Shaft wk ² 4.8Lb-Ft ²																																		
Ref WdgK286860 R1																																		
Sound Pressure @ 1M999dBA																																		
VFD RatingVARIABLE 20:1																																		
Outline DwgB-SS311239-1425																																		
Conn. DiagA-EE7300T																																		
Additional Specifications:																																		
0																																		
0																																		
EQUIV CKT (OHMS / PHASE)																																		
R1		R2		X1		X2		Xm																										
0.3410		0.3690		1.8540		2.3650		20.9070																										

Speed -Torque Curve

