

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 284TTFC6031

Catalog No: E800A

25 HP General Purpose Motor, 3 phase, 1800 RPM, 575 V, 284T Frame, TEFC  
General Purpose Motors



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**RegalRexnord**

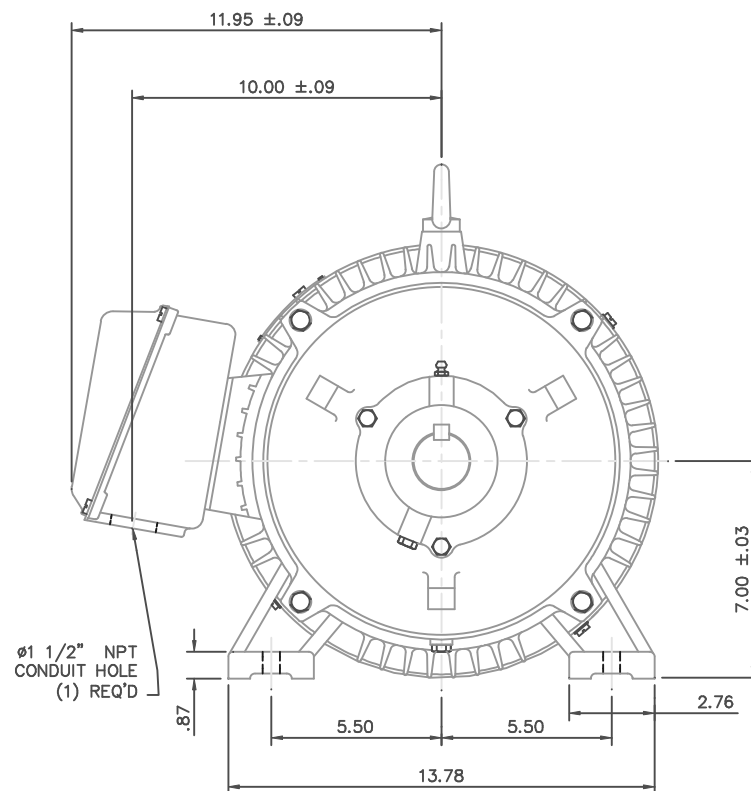
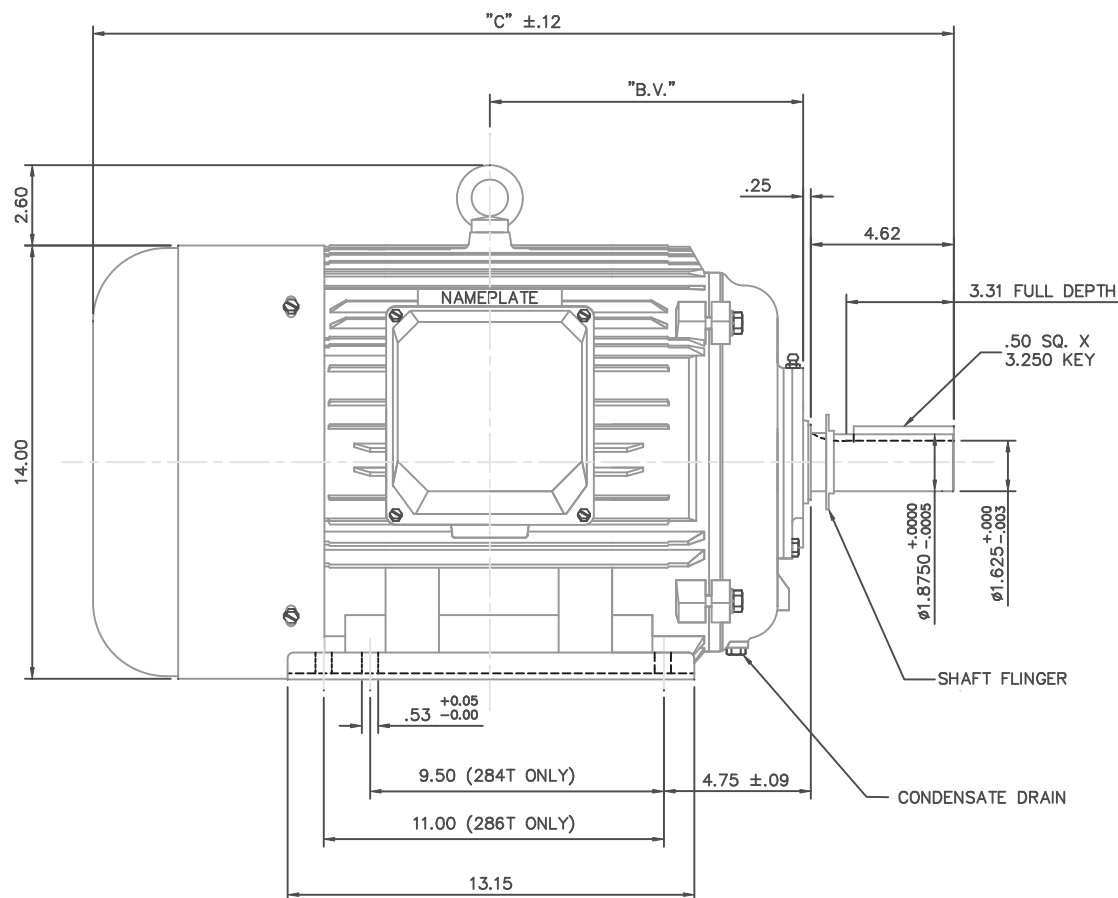
**Nameplate Specifications**

Output HP	<b>25 Hp</b>	Output KW	<b>18.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>23.0 A</b>	Speed	<b>1782 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93.6 %</b>	Power Factor	<b>78</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>H</b>
Frame	<b>284T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6311</b>	Opp Drive End Bearing Size	<b>6309</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

**Technical Specifications**


Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid Base</b>	Motor Orientation	<b>Horizontal</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>26.26 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>16953960LN-284T</b>	Connection Drawing	<b>00519001ME</b>

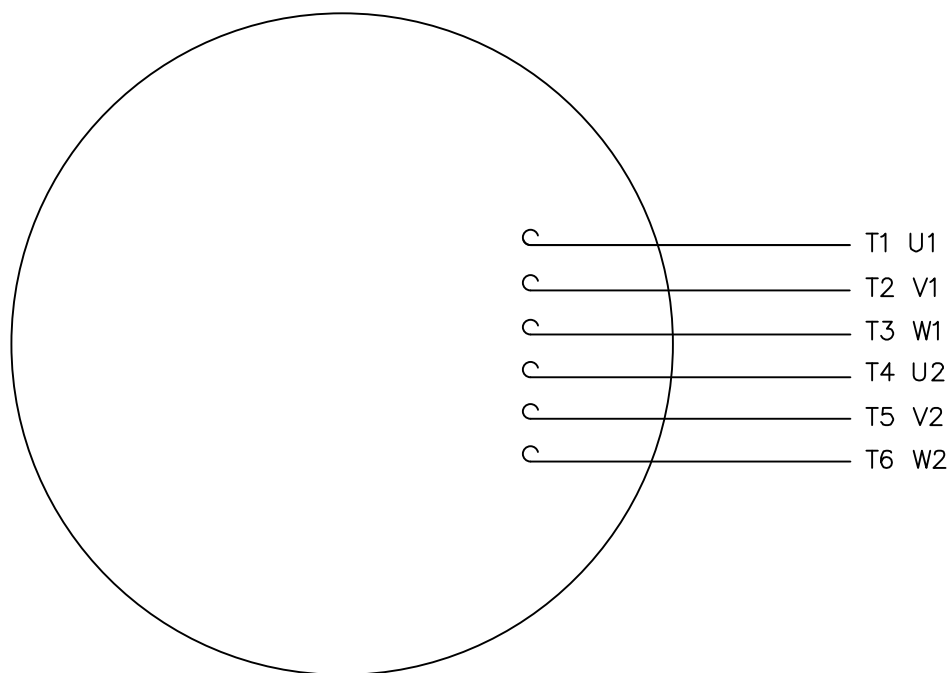
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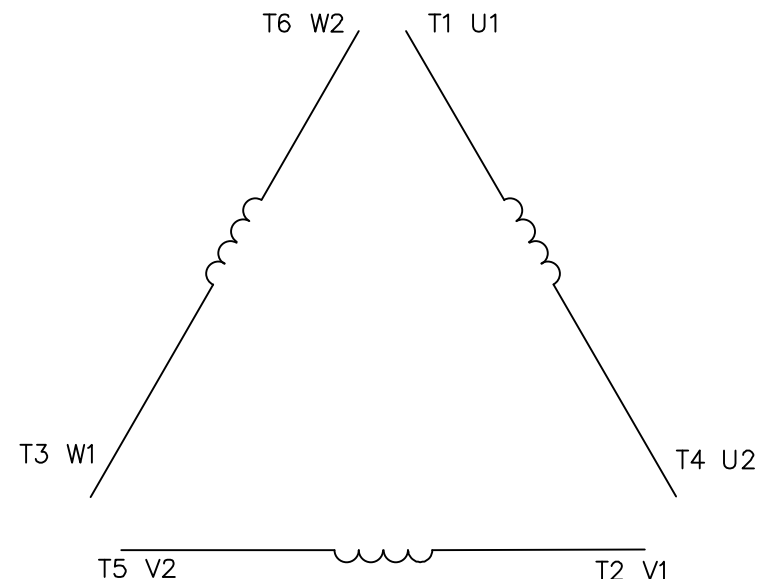
NOTE: 286T HAS 6 MTG. HOLES,  
USING 284T AND 286T LOCATIONS

FRAME DESIGN	<sup>22</sup> C <sup>22</sup>	<sup>22</sup> BV <sup>22</sup>
284T	26.26	9.65
286T	27.83	10.43


				TOLERANCES UNLESS SPECIFIED		DRAWN CJK 07/016/01
			DEC.	INCHES		CHK
			.X	±.1		APPD
			.XX	±.03	TITLE OUTLINE-280T FRAME, TEFC-RIGID NEW CONDUIT BOX	SCALE 1=4
02	REDRAWN TO CURRENT CAD STANDARDS	CJK 11/1/01	.XXX	±.005		REF
01	ADDED HOLE FOR 286T BASE	JJK 07/13/99	.XXXX	±.0005	MAT'L CAST IRON	FMF
NO.	REVISION	BY & DATE	CHK ANG	±1/2"	FINISH	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	16953960LN	SIZE B
			DIST			DRAWING NO. 169539-60LN
						REV. 02



## LINE LEADS



	L1	L2	L3	JOIN
START (WYE)	T1 U1	T2 V1	T3 U2	(T4,T5,T6) (U2,V2,W2)
RUN (DELTA)	(T1,T6) (U1,W2)	(T2,T4) (V1,U2)	(T3,T5) (W1,V2)	

				TOLERANCES UNLESS SPECIFIED			DRAWN PG 05/07/82		
				DEC.	INCHES		CHK		
				.X	±.1		APPD TEM 05/07/82		
03	ADDED IEC DESIGNATIONS	MOL 04/27/12	.XX	±.01	TITLE EXTERNAL WIRING DIAGRAM STAR START – DELTA RUN		SCALE 1=1		
02	REMOVED OBSOLETE STATUS	KJH 06/28/99	.XXX	±.005			REF		
01	REDRAWN ON CAD	DBT 05/30/97	.XXXX	±.0005	MAT'L. Y–CONNECTED START – DELTA CONNECTED RUN		FMF		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH SINGLE VOLTAGE	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 00519001ME		SIZE	DRAWING NO.	REV.
			DIST				A	005190–01ME	03



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

DATA VOLTS: 460

### CERTIFICATION DATA SHEET

CUSTOMER:

ORDER #:

CONN. DIAGRAM: 5190.01ME

OUTLINE: 16953960LN

WINDING: T14504005 NONE 4

SPEED:

CUSTOMER P.O. #:

REFERENCE MODEL #: 284TTC6031

CAT #: E800A

CUSTOMER PART #:

MOUNTING: F1/F2 CAPABLE

### TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	1800	1770	284T	TEFC	TFC	H	A

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	575	9999	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	94.1	1/2 LD EFF	93.6	GTD EFF	ELECT. TYPE
F.L. PF	84.4	3/4 LD PF	80.0	1/2 LD PF	69.0	92.4	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
73.5 LB-FT	160	145 LB-FT 197%	225 LB-FT 306%	44

@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	4.2 LB-FT <sup>2</sup>	0 LB-FT <sup>2</sup>	20 SEC.	2	394 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	BLUE (ENAMEL)

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL
DE ODE BALL BALL 6311 6309	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	0	0	0	0	0.150	ODE

* N O T E S *		INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE
		ENCODER: NONE NONE NONE
		NONE PPR

PREPARED BY: EARL BABBITTS DATE: 13-07-17	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE HZ:
FORM: 3531 REV_4 2/27/06	UL: V-INS, CONST UL REC

## Data Sheet

Date: 20-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



284TTFC6031

Submittal

Data @ 575 V

## Motor Load Data

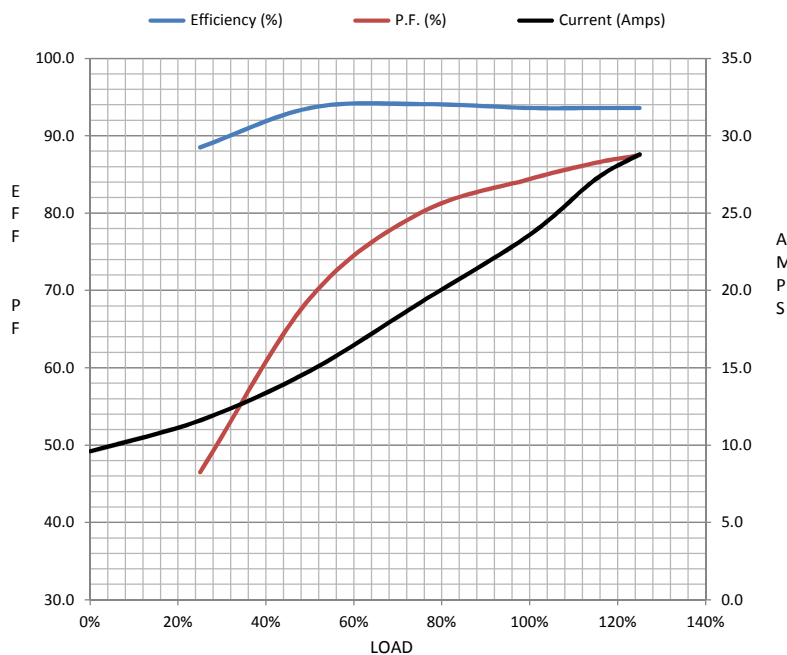
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	9.6	11.6	14.8	19.2	23.6	27.2	28.8	160	
Torque (ft-lb)	0.00	18.6	37.5	56.0	73.5	84.5	93.5	145	
RPM	1800	1792	1783	1775	1770	1,767	1762	0	
Efficiency (%)		88.5	93.6	94.1	93.6	93.6	93.6		
P.F. (%)	5.5	46.5	69.0	80.0	84.4	86.5	87.5	0.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1770	1800
Current (Amps)	160	144	104	23.6	9.6
Torque (ft-lb)	145	130	225	73.5	0.00

## Information Block

HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TEFC			
Construction	TFC			
Voltage	575 V			
Frequency	60 Hz			
Design	A			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	44 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	4.2 Lb-Ft <sup>2</sup>			
Ref Wdg	T14504005 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	NONE			
Outline Dwg	16953960LN			
Conn. Diag	5190.01ME			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



## Speed - Torque Curve

