

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 284TSTD6001

Catalog No: U772

General Purpose Motor, 30 & 30 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 200/400 V, 3600 & 3000 RPM,  
284TS Frame, DP



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**RegalRexnord**

### Nameplate Specifications


Phase	3	Output HP	30 & 30 Hp
Output KW	22.4 & 22.4 kW	Voltage	208-230/460 & 200/400 V
Speed	3550 & 2940 rpm	Service Factor	1.15 & 1.0
Frame	284TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	92.4 & 91.1 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	75-68.5/34.5 & 78/39 A	Power Factor	89
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6211	Opp Drive End Bearing Size	6211
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.256 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	22.17 in
Shaft Diameter	1.630 in	Shaft Extension	3.5 in
Assembly/Box Mounting	F1 ONLY		
Connection Drawing	004172-01ME	Outline Drawing	16955360ME



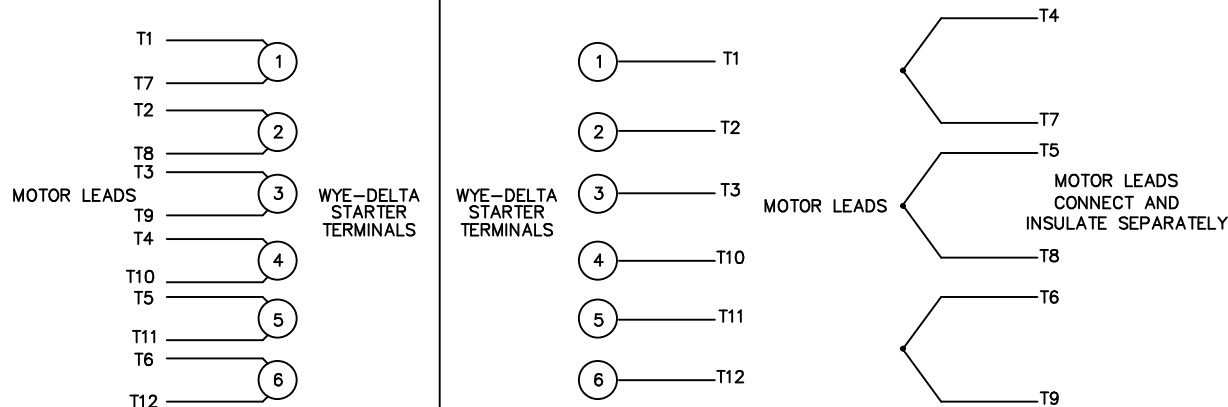
FRAME DESIGN	"C"	"BV"
284TS	22.17	9.11
286TS	23.62	9.83

				TOLERANCES UNLESS SPECIFIED			DRAWN CTO 04-24-2002
				DEC. INCHES			CHK ML 05-20-2002
				.X ±.1			APPD SB 05-21-2002
				.XX ±.03	TITLE OUTLINE 280TS FRAME		SCALE 1=1
2	UPDATED DRAWING	RJW 04-25-07		.XXX ±.005	DRIP PROOF - RIGID NEW CON-BOX		REF
1	NEW DRAWING	CTO 05/21/02		.XXXX ±.0005	MATL.	CAST IRON	FIMF
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  DIST	CAD FILE 16955360me	SIZE B DRAWING NO. 169553-60ME	REV. 2

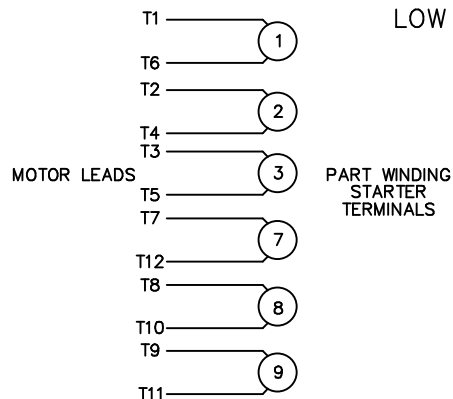
## WYE - DELTA STARTING USEABLE ON 2, 4 AND 6 POLE MOTORS.

## LOW VOLTAGE CONNECTION

## HIGH VOLTAGE CONNECTION



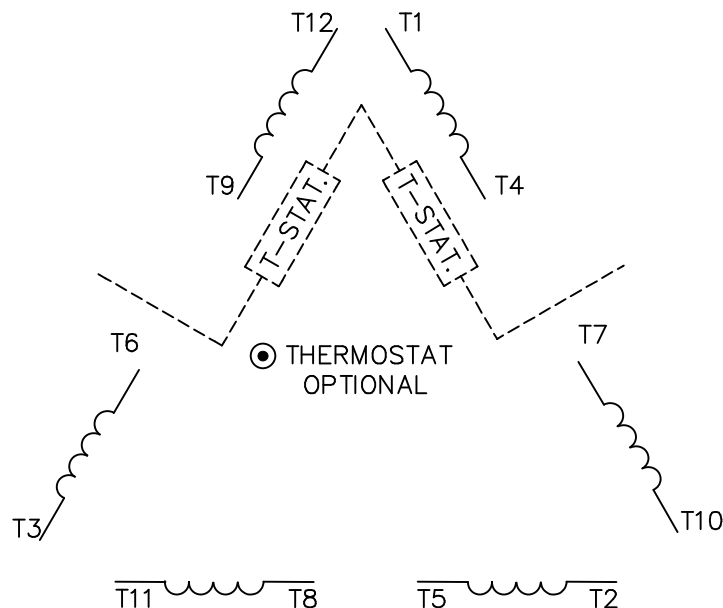
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

PART WINDING START USABLE ON 4 & 6 POLE MOTORS  
LOW VOLTAGE CONNECTION ONLY

REFER TO THE PART WINDING STARTER INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

REFER TO THE CUTLER-HAMMER OR EQUIV. FOR PROPER SELECTION OF OVERLOAD HEATER COILS.

## LINE LEADS



ROTATION CAN BE REVERSED BY INTERCHANGING ANY TWO LINE LEADS  
 ● RED LEADS OR P1, P2, FOR N/C THERMOSTAT

## ACROSS THE LINE START &amp; RUN

	LINE 1	LINE 2	LINE 3	JOIN & INSULATE SEPARATELY
HIGH VOLT	T1,T12	T2,T10	T3,T11	(T4,T7) (T5,T8) (T6,T9)
LOW VOLT	T1,T6 T7,T12	T2,T4 T8,T10	T3,T5 T9,T11	

TOLERANCES  
UNLESS SPECIFIED

DEC. INCHES

.X ±.1

.XX ±.02

.XXX ±.005

.XXXX ±.0005

ANG ±7'30"



TITLE DELTA - WYE CONNECTION DIAGRAM

MAT'L.

FINISH

DRAWN RJW 07-19-2007

CHK ML 07-19-2007

APPD GK 07-19-2007

SCALE 1=1

REF MU61151

FMF

PREV

NO.

REVISION

BY &amp; DATE

CHK

RFP 07-19-2007

DIST LB

CAD FILE 004172-01ME

SIZE

A

DRAWING NO. PAGE 1 OF 1

004172-01ME

REV.

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## CERTIFICATION DATA SHEET

Model#: 284TSTDC6001 AA

WINDING#: T14502007 NONE 3

CONN. DIAGRAM: 004172-01ME

ASSEMBLY: F1 ONLY

OUTLINE: 16955360ME

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30&30	22.4&22.4	3600	3550&2940	284TS	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	208- 230/460#200/ 400	75- 68.5/34.5&78/ 39	ACROSS THE LINE	CONTINUOU S	F5	1.15/1.0	40	3300

FULL LOAD EFF: 92.4&91.1	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89&91	3/4 LOAD PF: 87.5	1/2 LOAD PF: 86.8	92.3	SQ CAGE IND RUN	16.2 / 8.1

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.5 LB-FT	434 / 217	82 LB-FT 184	125 LB-FT 281	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	- LB-FT^2	- LB-FT^2	15 SEC.	-	396 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	D RIP 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
6211	6211						

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
	BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

DATE: 06/23/2017 07:41:02 AM

FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

## Data Sheet

Date: 12/12/2018

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



284TSTDC6001

Submittal

Data @ 460 V

## Motor Load Data

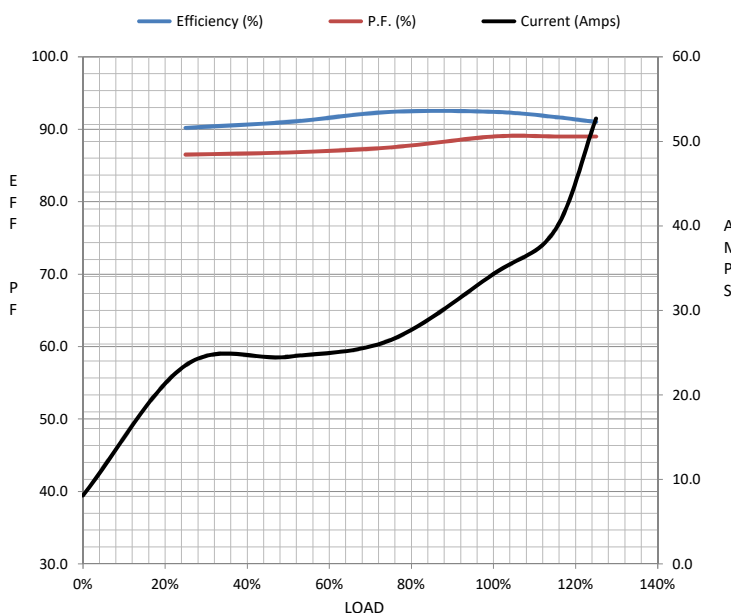
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	8.1	23.5	24.5	26.5	34.3	39.5	52.7	217	
Torque (ft-lb)	0.00	29.5	30.9	33.8	44.5	51.2	56.2	82.0	
RPM	3600	3575	3570	3565	3550	3,540	3535	0	
Efficiency (%)		90.2	91.0	92.4	92.4	91.7	91.0		
P.F. (%)	9.0	86.5	86.8	87.5	89.0	89.0	89.0	36.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3350	3550	3600
Current (Amps)	217	200	142	34.3	8.1
Torque (ft-lb)	82.0	67.0	125	44.5	0.00

## Information Block

HP	30.0			
Sync. RPM	3600			
Frame	284			
Enclosure	DP			
Construction	TDC			
Voltage	208-230/460#200/400 V			
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 wk²	0.00 Lb-Ft²			
Ref Wdg	T14502007 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	NONE			
Outline Dwg	16955360ME			
Conn. Diag	004172-01ME			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



## Speed -Torque Curve

