

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 284TSTFC6002

Catalog No: E975A

25 HP General Purpose Motor, 3 phase, 3600 RPM, 230/460 V, 284TS Frame, TEFC  
General Purpose Motors



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**RegalRexnord**

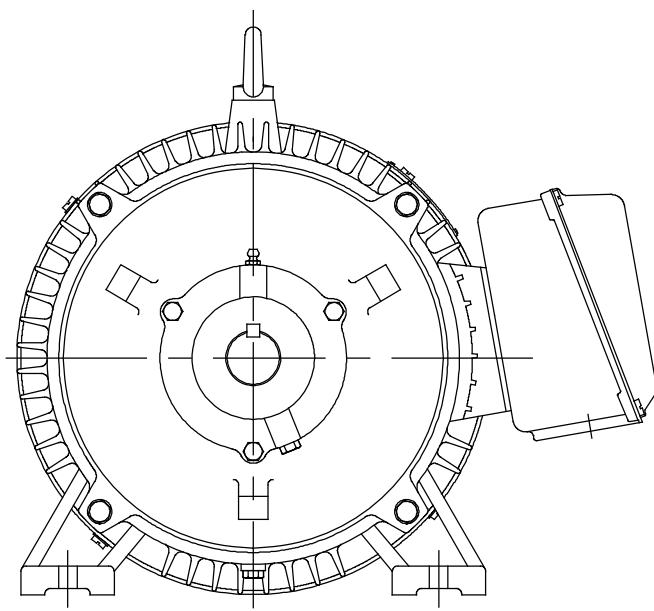
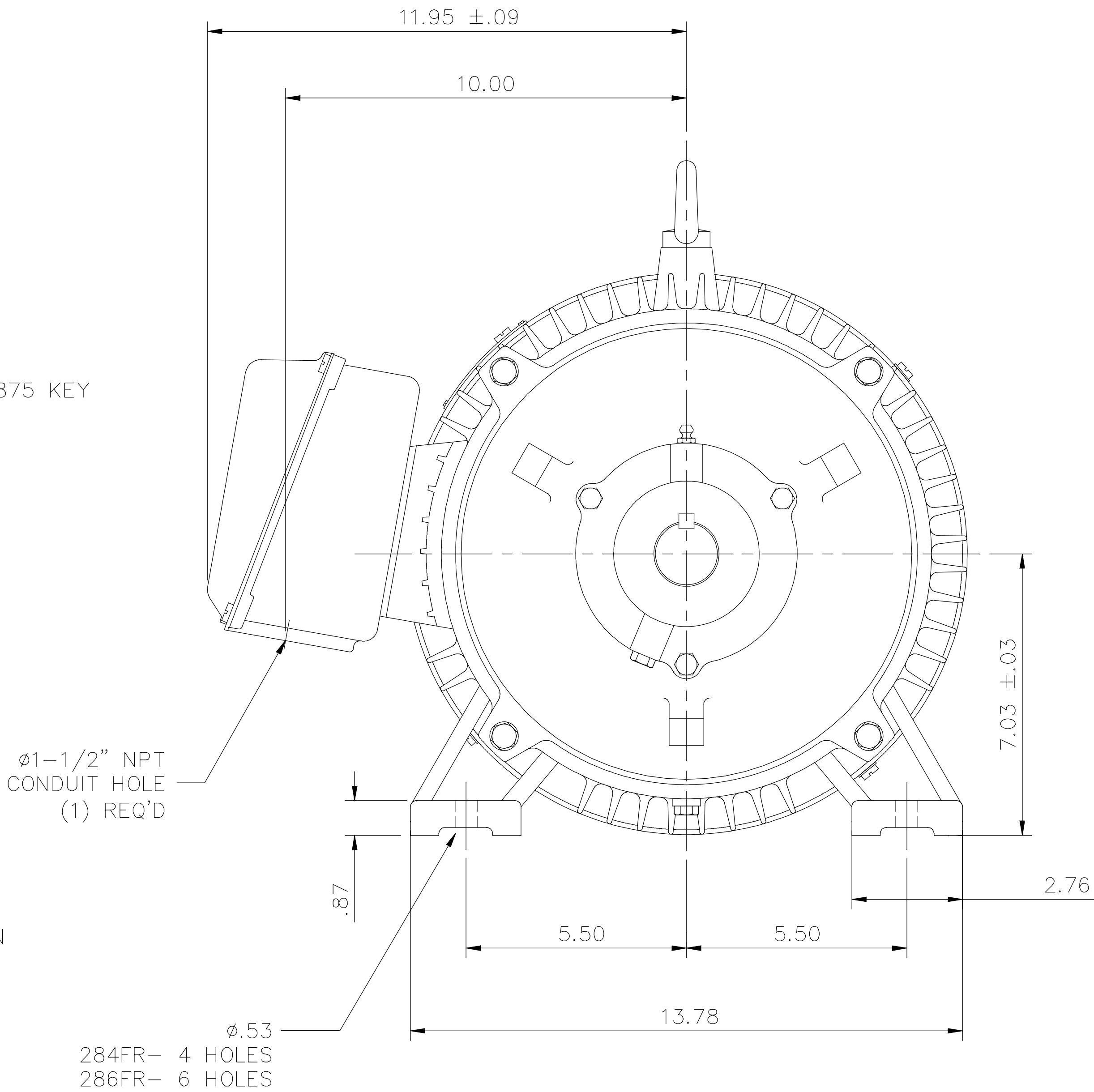
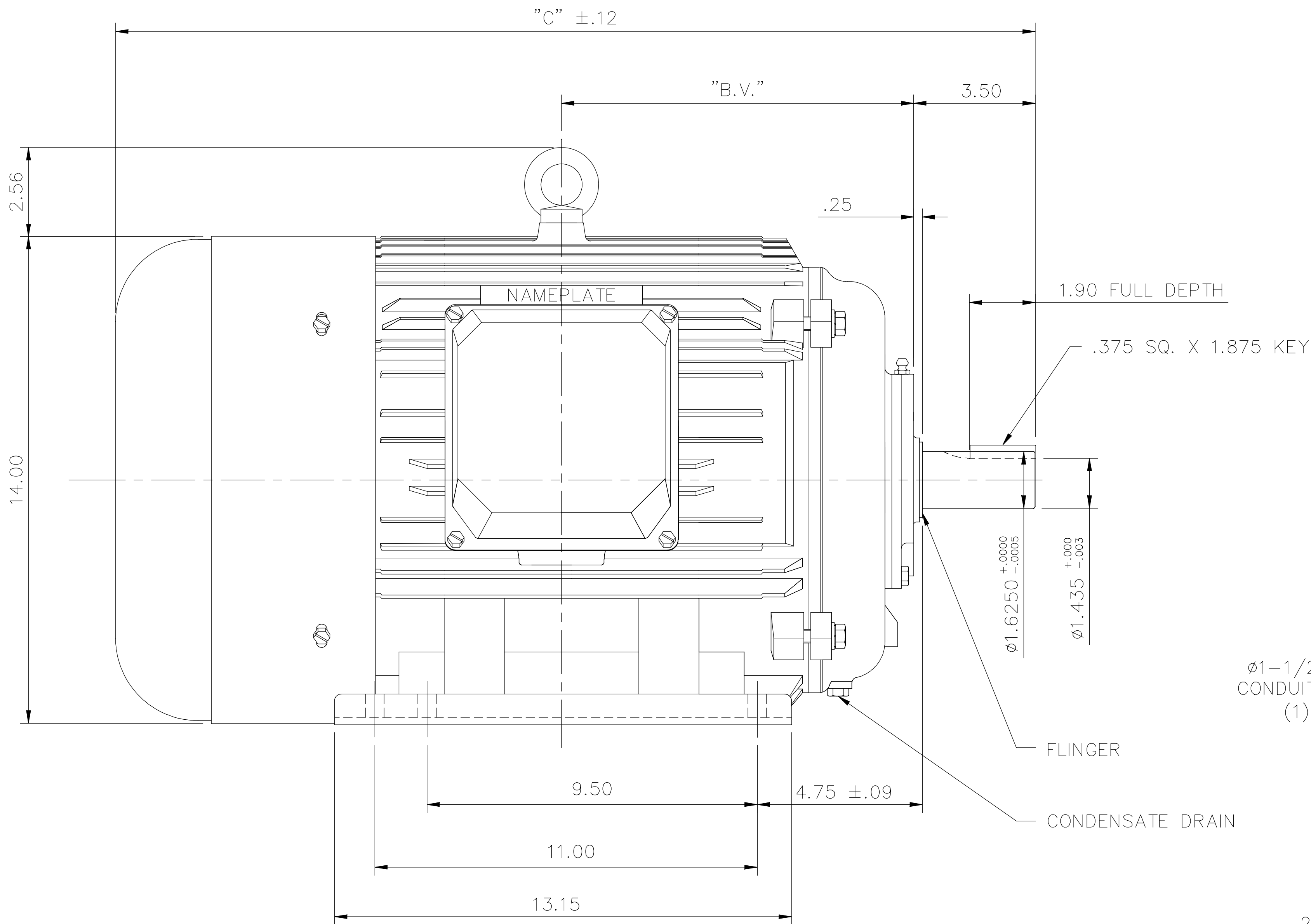
### Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	56.5/28.3 A	Speed	3555 rpm
Service Factor	1.15	Phase	3
Efficiency	93 %	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	284TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6309
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.225 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	24.88 in
Shaft Diameter	1.630 in	Shaft Extension	3.5 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Connection Drawing	004172.03ME	Outline Drawing	16954060-284TS

169540-60



F2 VIEW

FRAME DESIGN	"C"	"BV"
284TS	24.88	4.72
286TS	26.46	3.97

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	CAD FILE 16954060	SIZE B	DRAWING NO. 169540-60	PAGE OF	REV. H
					DEC.	INCHES						
H	ADDED F2 VIEW ECO-0134445	WGJ 11/10/2017	EMH	.X	±.1							
03	REMOVED REFERENCE TO 250 FRAME	MOL 08/15/2012		.XX	±.03							
02	REDRAWN TO CURRENT CAD STANDARDS	CJK 11/1/01		.XXX	±.005							
01	ADDED HOLES 286TS BASE	JKK 07/13/99		.XXXX	±.0005							
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DRAWN JJK 03/29/99

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APPD PG 03/31/99

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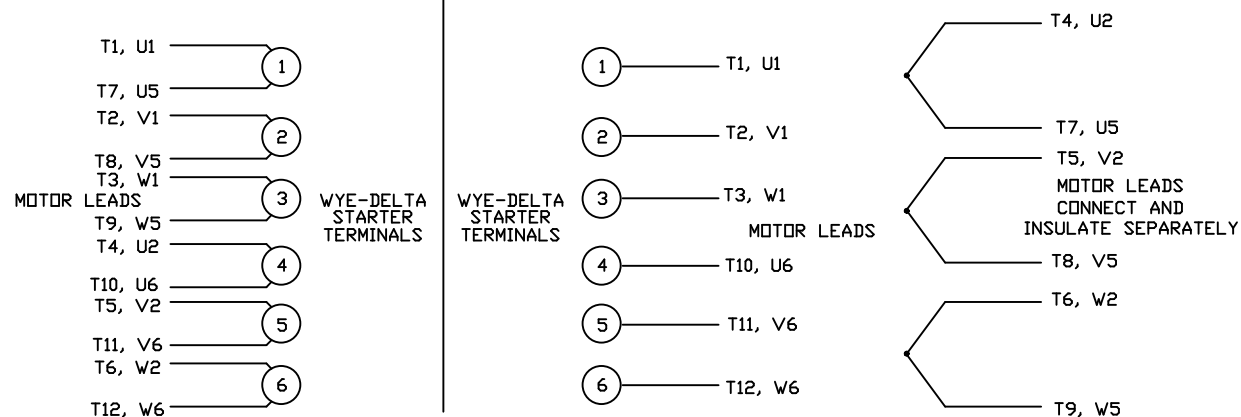
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PREV

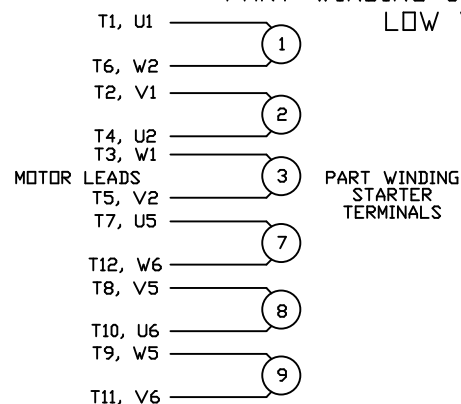
## WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

## LOW VOLTAGE CONNECTION

## HIGH VOLTAGE CONNECTION



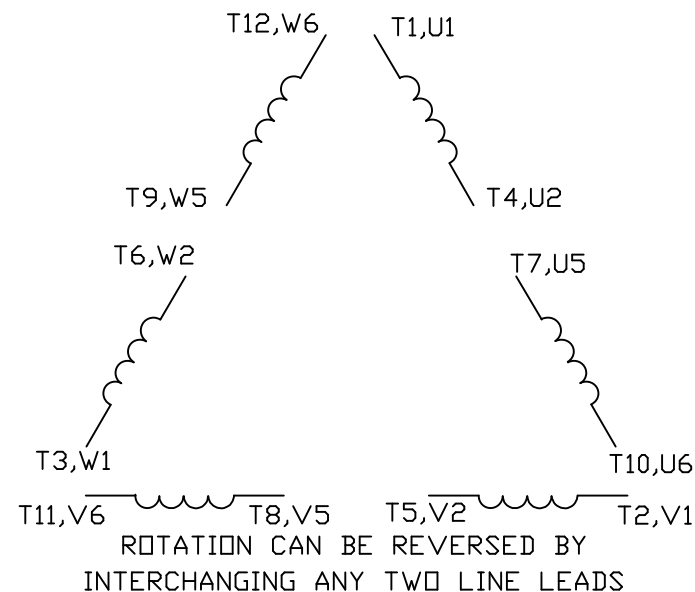
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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.

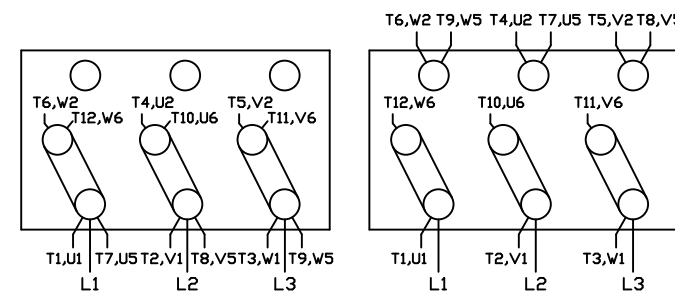
## LINE LEADS



12 LEAD DELTA CONNECTION ACROSS THE LINE START  
(FOR Y START DELTA RUN, REMOVE THE JUMPERS)

LOW VOLTAGE  
(MUST BE REWIRED  
AS SHOWN)

HIGH VOLTAGE  
(FACTORY WIRED FOR HIGH  
VOLTAGE AS SHOWN)



TOLERANCES  
UNLESS SPECIFIED

DEC. INCHES

.X ±.1

.XX ±.01

.XXX ±.005

.XXXX ±.0005

ANG ±1/2°



TITLE DELTA - WYE CONNECTION DIAGRAM  
IEC CAST IRON MOTORS

MAT'L.

FINISH

DRAWN CJW 08/28/02

CHK

APPD

SCALE 1=1

REF

FMF

PREV

NO. REVISION

BY & DATE

CHK

DIST

CAD FILE 00417203ME

SIZE A

DRAWING NO.  
004172-03ME

REV.

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## CERTIFICATION DATA SHEET

Model#: 284TSTFC6002 AA

WINDING#: T14502016 NONE 3

CONN. DIAGRAM: 004172.03ME

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: 16954060

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25&20	18.7&14.9	3600	3555&2955	284TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	56.5/28.3&53. 5/26.8	ACROSS THE LINE	CONTINUOU S	F2	1.15/1.15	40	3300

FULL LOAD EFF: 93&93	3/4 LOAD EFF: 93	1/2 LOAD EFF: 91.7	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88&91	3/4 LOAD PF: 86.5	1/2 LOAD PF: 81	91.7	SQ CAGE IND RUN	16 / 8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
37 LB-FT	364 / 182	72 LB-FT 195	102 LB-FT 276	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
- dBA	- dBA	1.9 LB-FT^2	- LB-FT^2	20 SEC.	-	400 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	6309						

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 08:10:16 AM

FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

## Data Sheet

Date: 12/13/2018

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

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

Submitted by: FAREEDA DUDEKULA



284TSTFC6002

Submittal

Data @ 460 V

## Motor Load Data

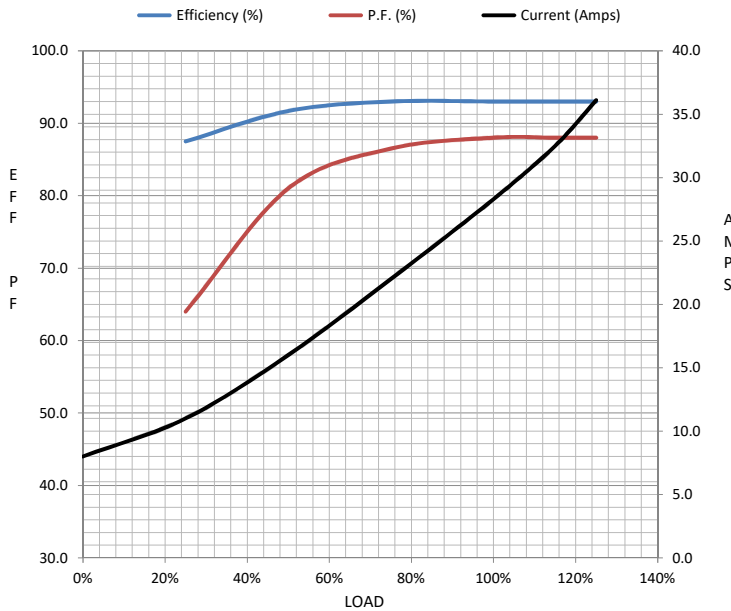
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	8.0	11.0	16.0	22.0	28.3	32.5	36.1	182	
Torque (ft-lb)	0.00	9.2	18.5	27.6	37.0	42.5	46.5	72.0	
RPM	3600	3583	3576	3568	3555	3550	3540	0	
Efficiency (%)		87.5	91.7	93.0	93.0	93.0	93.0		
P.F. (%)	7.5	64.0	81.0	86.5	88.0	88.0	88.0	0.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3350	3555	3600
Current (Amps)	182	165	125	28.3	8.0
Torque (ft-lb)	72.0	65.0	102	37.0	0.00

## Information Block

HP	25.0			
Sync. RPM	3600			
Frame	284			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/380		V	
Frequency	60		Hz	
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	60		° C	
Duty	CONT			
Ambient	40		° C	
Elevation	1,000		feet	
Rotor/Shaft wk²	1.90		Lb-Ft²	
Ref Wdg	T14502016 NONE			
Sound Pressure @ 1M	999		dBA	
VFD Rating	NONE			
Outline Dwg	16954060			
Conn. Diag	004172.03ME			
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

