

# PRODUCT INFORMATION PACKET

Model No: 284TSTDP14007

Catalog No: U505

30 HP Fire Pump Motor, 3 phase, 3600 RPM, 200/400 V, 284TS Frame, ODP  
Fire Pump Motors



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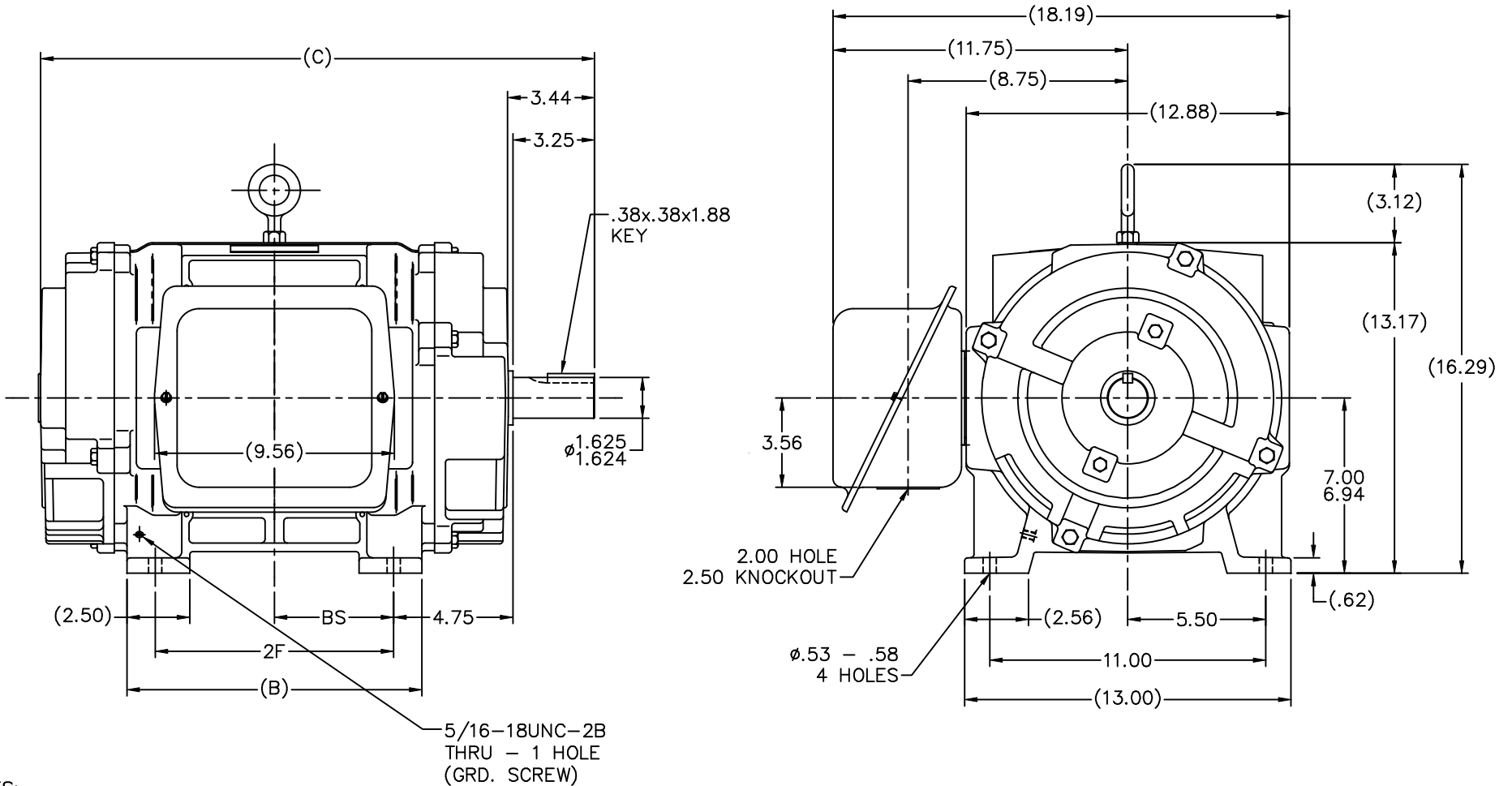
### Nameplate Specifications

Output HP	<b>30 Hp</b>	Output KW	<b>22.4 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>200/400 V</b>
Current	<b>83.0/41.5 A</b>	Speed	<b>3530 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91 %</b>	Power Factor	<b>85.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>B</b>
Design Code	<b>B</b>	KVA Code	<b>F</b>
Frame	<b>284TS</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>311</b>	Opp Drive End Bearing Size	<b>210</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>12</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Wye Start Delta Run</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.364 Ohms</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>TS</b>	Overall Length	<b>22.06 in</b>
Frame Length	<b>12.75 in</b>	Shaft Diameter	<b>1.625 in</b>
Shaft Extension	<b>3.44 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Outline Drawing	<b>B-SS200031-1275</b>	Connection Drawing	<b>A-EE7358</b>

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NOTES:

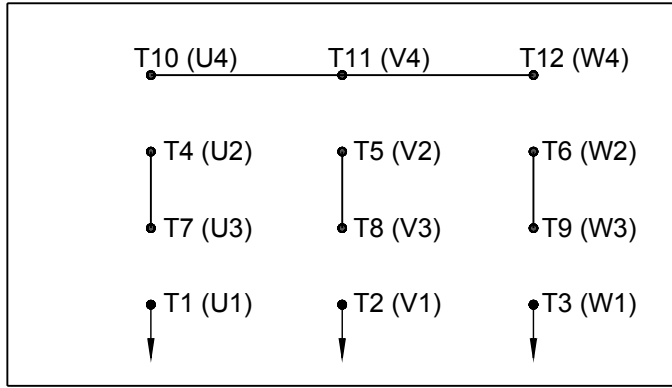
1. BOX CAN BE ROTATED IN 90° STEPS
2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

DASH	FRAME	B	C	2F	BS
1275	284TS	11.75	22.06	9.50	4.75
1425	286TS	13.25	23.56	11.00	5.50

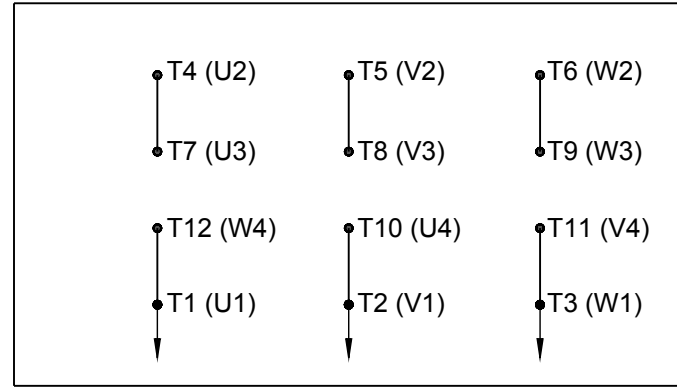
6	REVISED CONDUIT HOLE CALL OUT CN46008	RJW 03-07-2005	TOLERANCES UNLESS SPECIFIED	MARATHON ELECTRIC		DRAWN JL 02-23-1988
5	REVISED TO NEC CONDUIT BOX CN28428	NJS	DEC. INCHES	TITLE OUTLINE - DR.PR. - CAST IRON		CHK JPN 03-08-1988
4	SHOW GROUND SCREW HOLE IN FOOT CN22833	PGK	.X ±.1	280TS FR -BB -TS -DOUBLE. END VENT		APPD LS 03-21-1988
3	UPDATED SHAFT HEIGHT CN16763	DRS 08-13-1996	.XX ±.03	SCALE 1=4		
2	FOOT RELIEF ADD CN10468 REM AIR OPPEN CN10462	JL 04-21-1992	.XXX ±.005	REF		
1	NEW DRAWING	JL 03-23-1988	.XXXX ±.0005	MATL		FMF
NO.	REVISION	BY & DATE	CHK ANG ±7'30"	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 SS200031	SIZE B	DRAWING NO. PAGE OF SS200031 6
			DIST LB			

# HIGH VOLTAGE

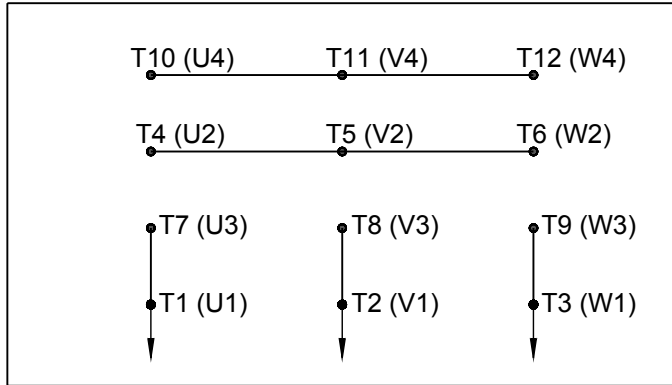
WYE START



DELTA RUN

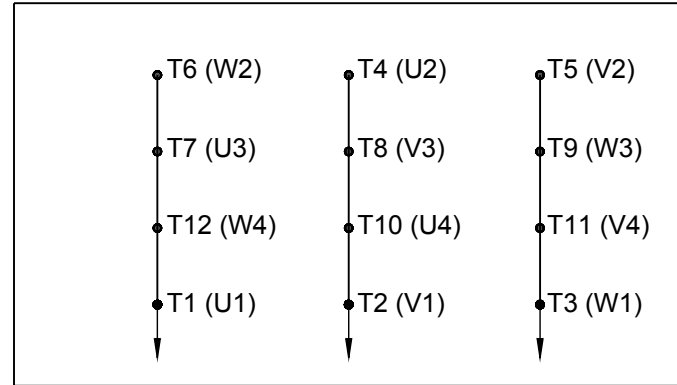


WYE START



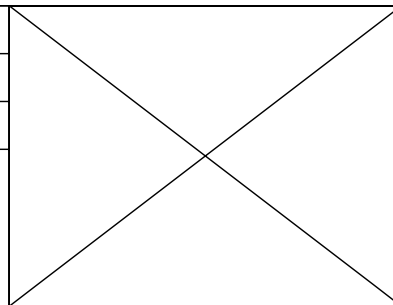
# LOW VOLTAGE

DELTA RUN



4/2 CKTY  $\triangle$

DRAWING REVISION D	REVISION BY JWO	DATE 01-26-2016
ECO ECO-0092547	APPROVED BY TB	DATE 01-26-2016
ECO DESCRIPTION ADDED IEC MARKINGS		



DRAWN BY BLR
DATE 03-09-1998
APPROVED BY GK
DATE 03-23-1998
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
DESCRIPTION <b>CONN DIAGRAM-EXTERNAL</b> 12 LEAD - DUAL VOLT. - WYE START - DELTA RUN	
MATERIAL	PROCESS/FINISH
SIZE A	DRAWING NUMBER EE7358
SHEET 1 OF 1	

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**CERTIFICATION DATA SHEET**

**Model#:** 284TSTDP14007 AA  
**CONN. DIAGRAM:** A-EE7358  
**OUTLINE:** B-SS200031-1275

**WINDING#:** K256294 NONE 4  
**ASSEMBLY:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30	22.4	3600	3530	284TS	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	200/400	83/41.5	WYE START DELTA RUN	CONTINUOUS	B3	1.15	40	3300

FULL LOAD EFF: 91	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 91.7	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85.5	3/4 LOAD PF: 84	1/2 LOAD PF: 76.5	89.5	SQ CAGE IND RUN	24.2 / 12.1

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.5 LB-FT	460 / 230	67 LB-FT 151	110 LB-FT 247	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	1.25 LB-FT^2	20 LB-FT^2	15 SEC.	2	325 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	RED (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
311	210						

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

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N  
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\*

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

DATE: 06/23/2017 07:46:06 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

Date: 19-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



284TSTDP14007

Submittal

Data @ 400 V

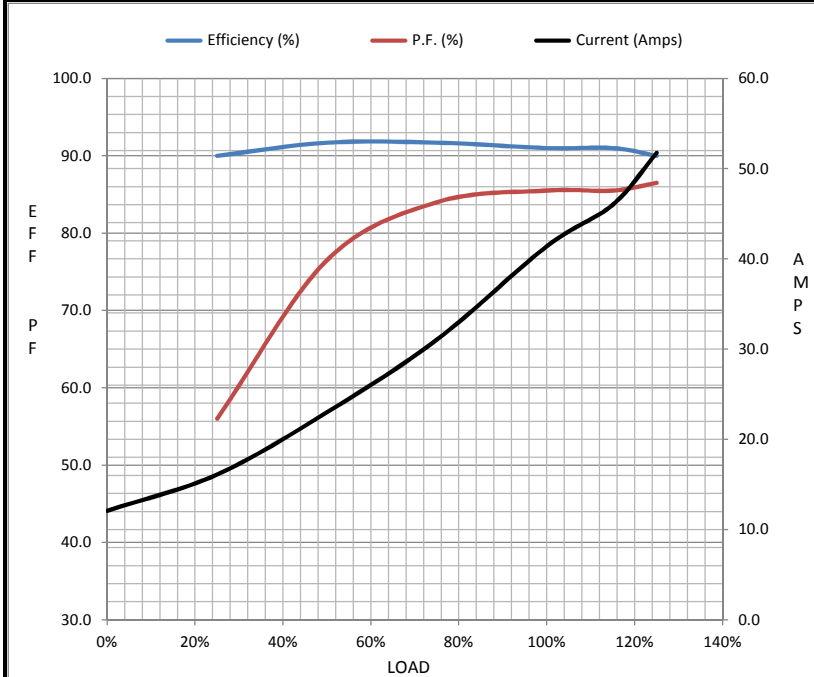
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.1	16.1	23.0	31.1	41.4	46.0	51.8	230
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.5	50.0	56.0	67.0
RPM	3600	3585	3570	3550	3530	3,520	3505	0
Efficiency (%)		90.0	91.7	91.7	91.0	91.0	90.0	
P.F. (%)	11.0	56.0	76.5	84.0	85.5	85.5	86.5	38.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1930	3200	3530	3600
Current (Amps)	230	209	145	41.4	12.1
Torque (ft-lb)	67.0	72.0	110	44.5	0.00

Information Block				
HP	30.0			
Sync. RPM	3600			
Frame	284			
Enclosure	DP			
Construction	TDP			
Voltage	200/400 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	1.25 Lb-Ft <sup>2</sup>			
Ref Wdg	K256294 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS200031-1275			
Conn. Diag	A-EE7358			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1620	0.1140	0.6150	0.5840	18.4550



Speed - Torque Curve

