

PRODUCT INFORMATION PACKET

Model No: 404TSTDCD4040

Catalog No: U1028

Fire Pump 100 HP, 3 Phase DP Motors, 1800 RPM, 60HZ 200/400 V, 404TS Frame, Rigid Base,
For use on pumps designed for fire pump duty and installed per NFPA-20
Fire Pump Motors



Nameplate Specifications

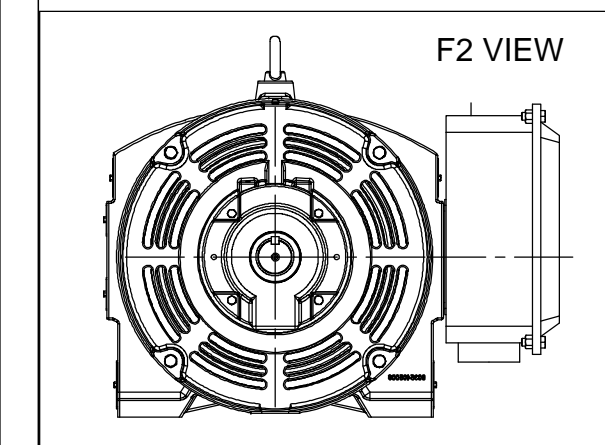
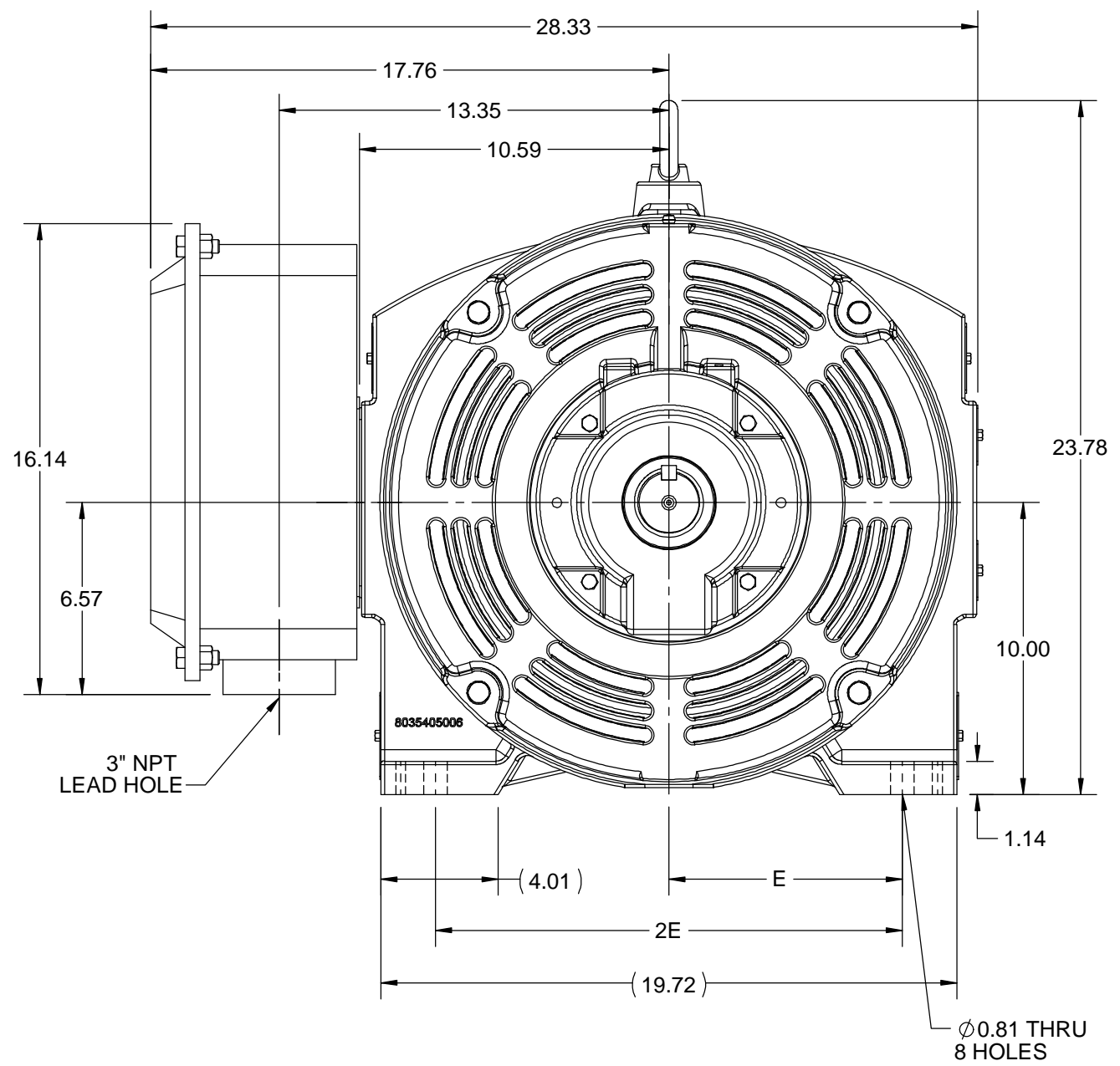
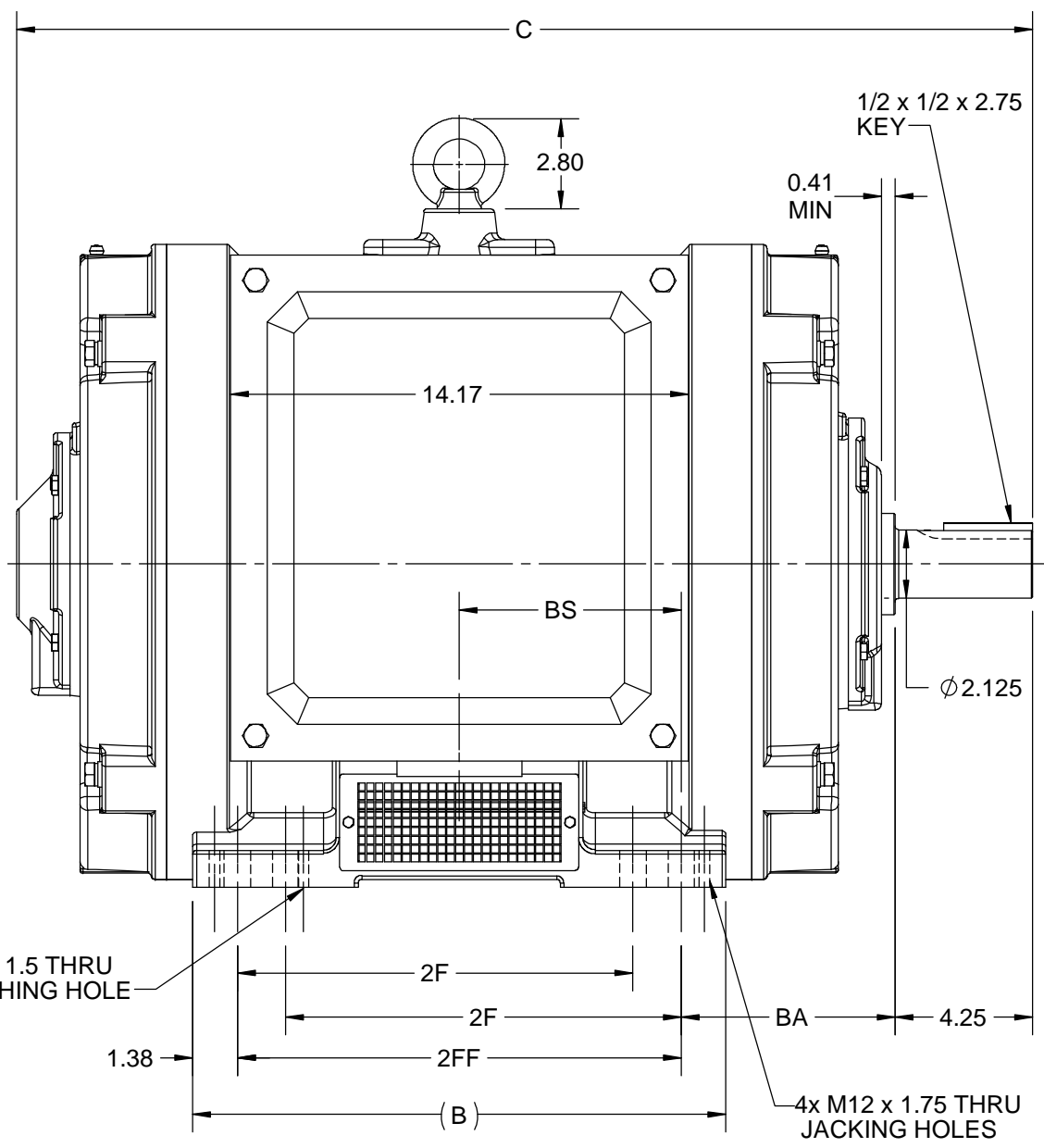
Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	200/400 V
Current	260.0/130.0 A	Speed	1783 rpm
Service Factor	1.15	Phase	3
Efficiency	94.1 %	Power Factor	87.7
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	404TS	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	50 °C
Drive End Bearing Size	6316	Opp Drive End Bearing Size	6314
UL	Listed	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.089 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Shaft Diameter	2.125 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Outline Drawing	SS620989	Connection Drawing	EE7308AA

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4			3			2			1		
B	C	E	2E	2F	2FF	BA	BS	MOUNTING			
16.85	31.44	8.00	16.00	12.25	13.75	6.62	6.87	F1 OR F2			



DRAWING REVISION B	REVISION BY VS	REV DATE/© DATE 25-11-2020
ECO ECO-0195088	APPROVED BY GNK	DATE 25-11-2020
ECO DESCRIPTION DRAWING UPDATED		
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DRAWN BY VS	
DATE 11/01/2019	
APPROVED BY SBD	
DATE 11/01/2019	
REFERENCE	

Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 404/405TS FR NEMA ODP	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS620989
SHEET 1 OF 1	

4

3

2

1



LOW VOLTAGE



HIGH VOLTAGE



DRAWING REVISION K	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 01-12-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-2/1 DELTA-12 LEADS	
DATE 01-14-1994		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7308AA
		SHEET 1 OF 1



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

DATA VOLTS: 400

CERTIFICATION DATA SHEET

CUSTOMER:
 ORDER #:
 CONN. DIAGRAM: EE7308AA
 OUTLINE: SS620989
 WINDING: HA22504104 NONE 5
 SPEED: _____

CUSTOMER P.O. #:
 REFERENCE MODEL #: 404TSTDCC4040
 CAT #: U1028
 CUSTOMER PART #:
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
100	75	1800	1783	404TS	DP	TDC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	200/400	260/130	PWS & YDRUN	CONT	F	1.15	50	3300

F.L. EFF	3/4 LD EFF	1/2 LD EFF	GTD EFF	ELECT. TYPE
94.1	94.5	94.4	93.6	SQ CAGE IND RUN
F.L. PF	3/4 LD PF	1/2 LD PF		
87.7	85.4	78.5		

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
294 LB-FT	805	530 LB-FT	735 LB-FT	70

SOUND PRESSURE @ 3 FT.	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
78 dBA	87 dBA	31.30 LB-FT ²	170 LB-FT ²	22 SEC.	2	1075	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	YES	RODENT	RED (ENAMEL)

DE	ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6316	6314						

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
0.031758034	0.012854442	0.111909263	0.18147448	4.288090737	0.150	ODE

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

PREPARED BY:	DATE: 11/17/2021				
BRAKE: NONE					
FT-LB: NA					
VOLTAGE: NONE					HZ:
UL: NO LETTER - ALL BRANDS-UL LISTED FIRE PUMP MOTORS					

FORM: 3531 REV. 4 2/27/06

Data Sheet

Date: 11/17/2021
 Customer: _____
 Attention: _____
 Submitted by: _____



404TSTDCD4040

Submittal

Data @ 400 V

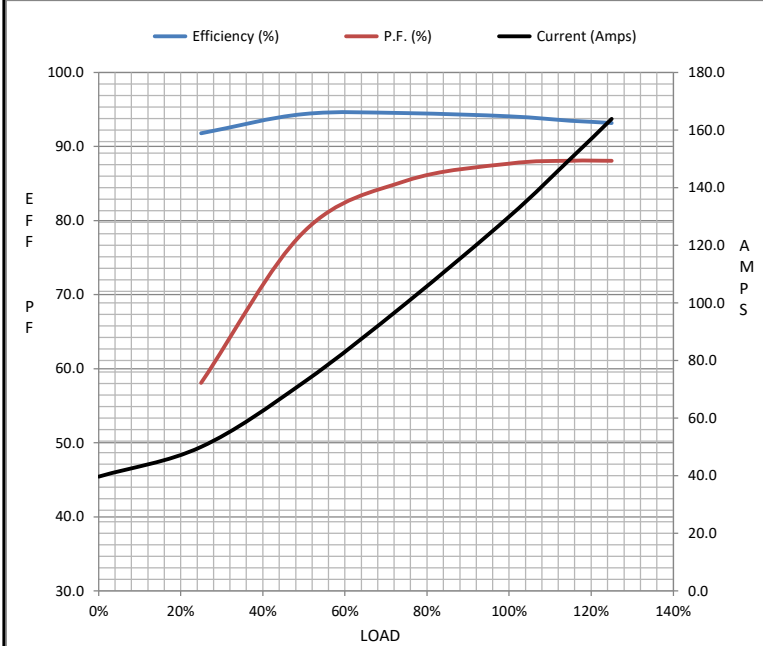
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	39.7	50.0	72.5	100	130	150	164	805
Torque (ft-lb)	0.00	73.0	147	220	294	339	369	530
RPM	1800	1796	1792	1787	1783	1,780	1777	0
Efficiency (%)		91.8	94.4	94.5	94.1	93.5	93.2	
P.F. (%)	5.3	58.1	78.5	85.4	87.7	88.1	88.1	38.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1709	1783	1800
Current (Amps)	805	656	453	130	39.7
Torque (ft-lb)	530	470	735	294	0.00

Information Block				
HP	100.0			
Sync. RPM	1800			
Frame	404			
Enclosure	DP			
Construction	TDC			
Voltage	200/400 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	31.30 Lb-F ²			
Ref Wdg	HA22504104 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	NONE			
Outline Dwg	SS620989			
Conn. Diag	EE7308AA			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0420	0.0170	0.1480	0.2400	5.6710



Speed - Torque Curve

