

# PRODUCT INFORMATION PACKET

Model No: 445TSTDCD4028

Catalog No: U1437

Fire Pump 200 HP, 3 Phase DP Motors, 1500 RPM, 50HZ 415 V, 445TS Frame, Rigid Base,  
For use on pumps designed for fire pump duty and installed per NFPA-20  
Fire Pump Motors



### Nameplate Specifications

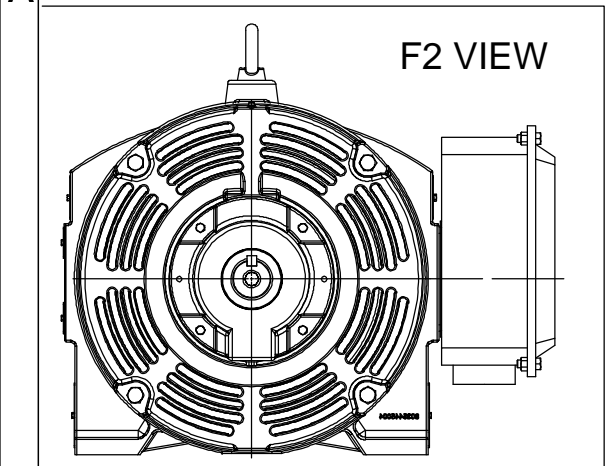
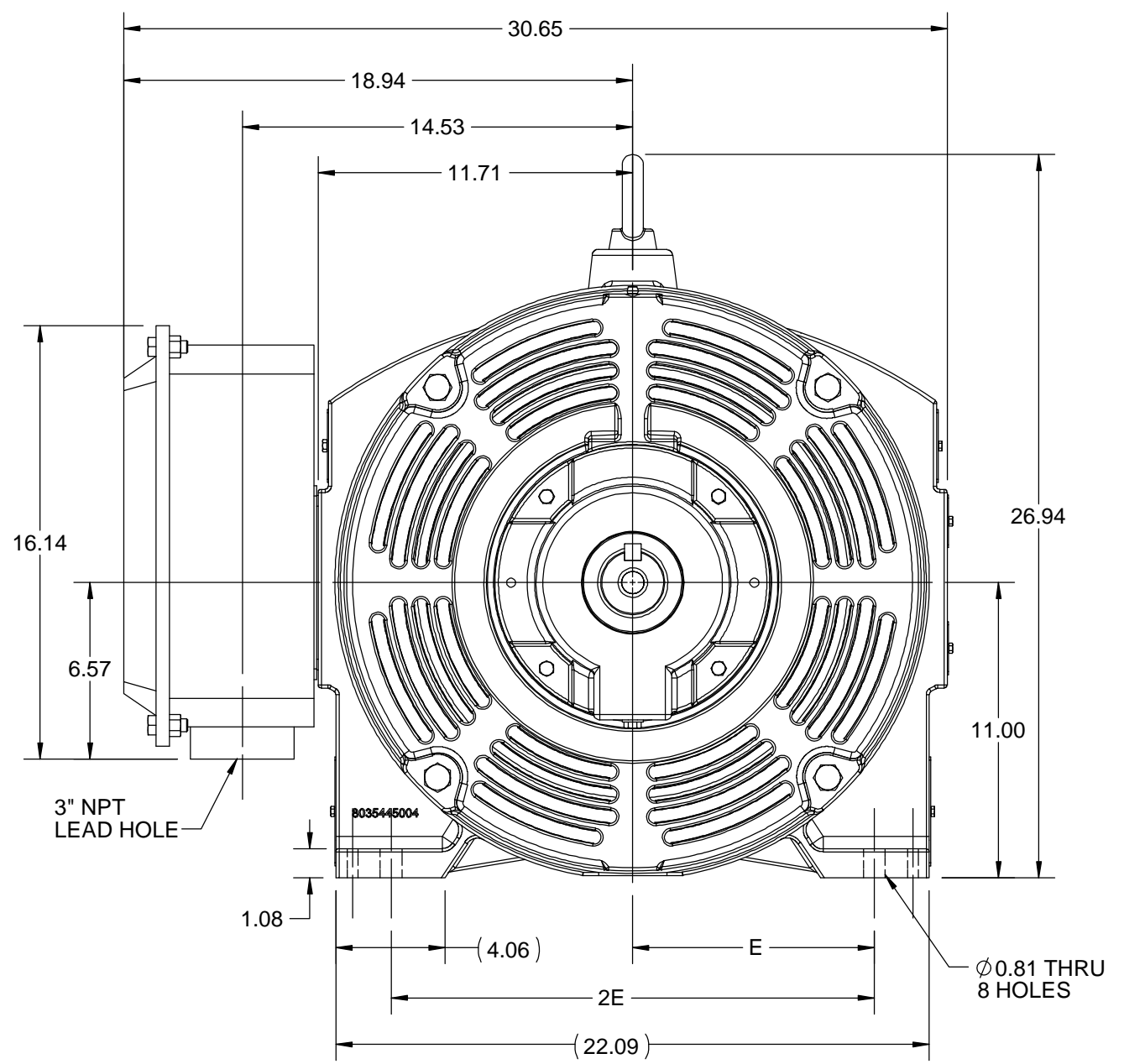
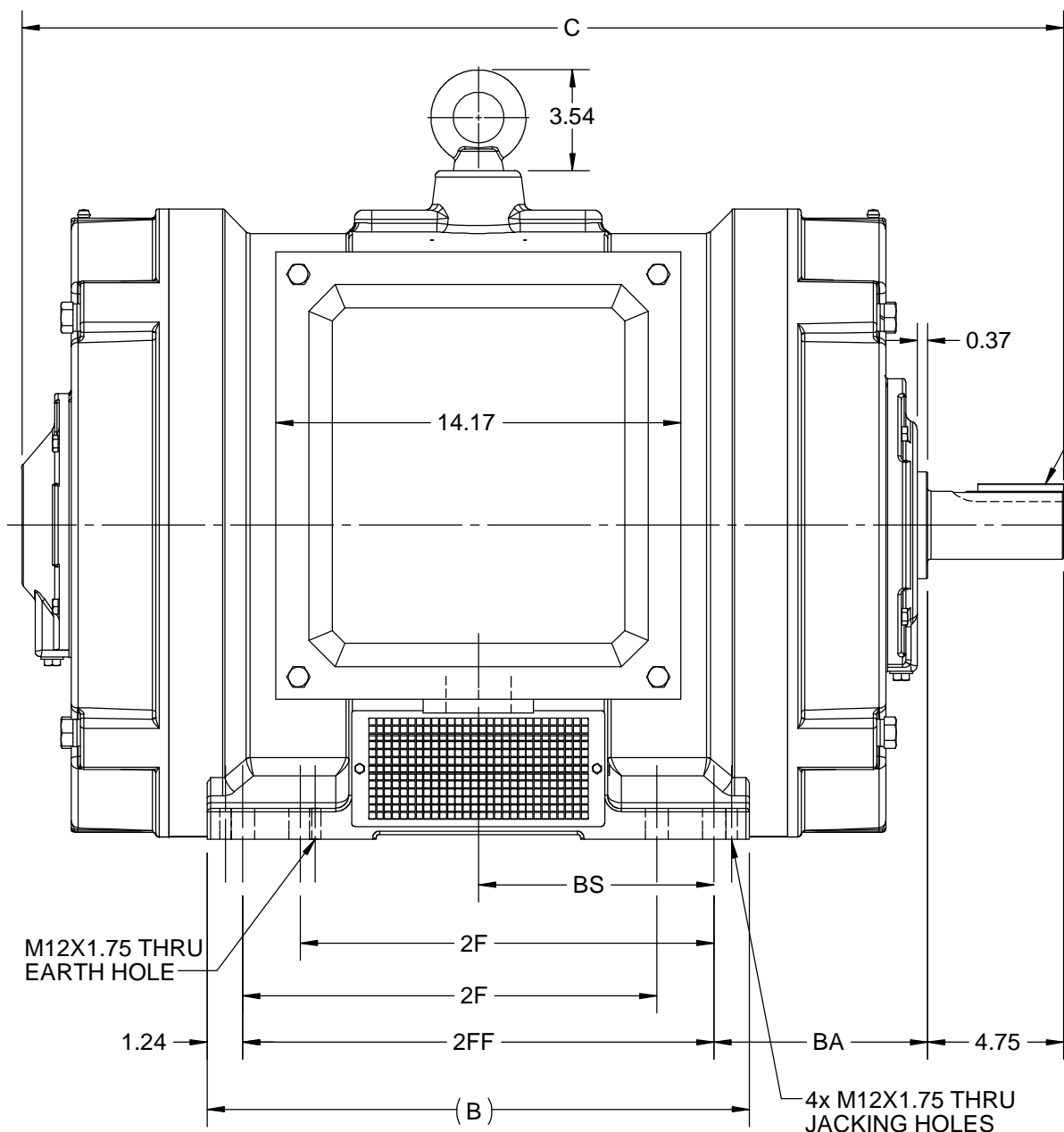
Output HP	<b>200 Hp</b>	Output KW	<b>149.0 kW</b>
Frequency	<b>50 Hz</b>	Voltage	<b>415 V</b>
Current	<b>249.0 A</b>	Speed	<b>1488 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>94.5 %</b>	Power Factor	<b>87.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>445TS</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>50 °C</b>
Drive End Bearing Size	<b>6319</b>	Opp Drive End Bearing Size	<b>6317</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>23</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

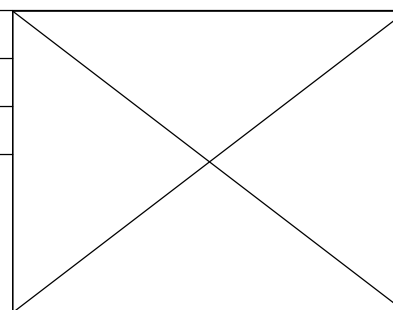
Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Part Wdg Start &amp; Wye Start Delta Run</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.0325 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>TS</b>	Shaft Diameter	<b>2.375 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>SS620991</b>	Connection Drawing	<b>EE7300BH</b>

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	4								
B	C	E	2E	2F	2FF	BA	BS	MOUNTING	
18.98	36.47	9.00	18.00	14.50	16.50	7.50	8.25	F1 OR F2	



DRAWING REVISION B	REVISION BY BISWA	DATE 30/11/2020
ECO ECO-0195277	APPROVED BY SBD	DATE 30/11/2020
ECO DESCRIPTION		
<b>DRAWING UPDATED</b>		
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DRAWN BY VS	<b>REGAL</b> ™ Regal Beloit America, Inc.
DATE 11/01/2019	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 444/445 FR TS-NEMA-ODP
DATE 11/01/2019	
REFERENCE	MATERIAL PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE <b>B</b>
	DRAWING NUMBER <b>SS620991</b>
	SHEET 1 OF 1



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		REGAL REGAL - BELOIT CORPORATION	DRAWN RJW 02-11-2005			
				DEC.	INCHES		CHK	ML	02-11-2005	
				.X	±.1		APPD	GK	02-11-2005	
				.XX	±.02	TITLE CONNECTION DIAGRAM	SCALE			
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX ±.005	12 LEAD- SINGLE VOLTAGE	REF			
1	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	ML	.XXXX ±.0005	MAT'L.	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	02-11-2005	CAD FILE ee7300bh	SIZE	DRAWING NO.	PAGE OF	REV.
				DIST	LB		A	EE7300BH		C



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

DATA VOLTS: 415

**CERTIFICATION DATA SHEET**

CUSTOMER:  
 ORDER #:  
 CONN. DIAGRAM: EE7300BH  
 OUTLINE: SS620991  
 WINDING: HA22804108 NONE 1  
 SPEED: \_\_\_\_\_

CUSTOMER P.O. #:  
 REFERENCE MODEL #: 445TSTDCC4028  
 CAT #: U1437  
 CUSTOMER PART #:  
 MOUNTING: F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
200	149	1500	1488	445TS	DP	TDC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	50	415	249	PWS & YDRUN	CONT	F	1.15	50	3300

F.L. EFF	3/4 LD EFF	1/2 LD EFF	GTD EFF	ELECT. TYPE
95.0	95.4	95.4	93.0	SQ CAGE IND RUN
F.L. PF 87.5	3/4 LD PF 86.0	1/2 LD PF 80.5		

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
706 LB-FT	1,410	1,475 LB-FT	209%	1,400 LB-FT 198%

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
84 dBA	93 dBA		66.26 LB-FT <sup>2</sup>	485 LB-FT <sup>2</sup>	29 SEC.	2	1430	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)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE BALL 6319	ODE BALL 6317	POLYREX EM	TS	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
0.02	0.008	0.08	0.172	3.579	0.150	ODE

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

PREPARED BY:					
DATE:	11/17/2021				
BRAKE: NONE					
NONE					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: \_\_\_\_\_



445TSTDCD4028

Submittal

Data @ 415 V

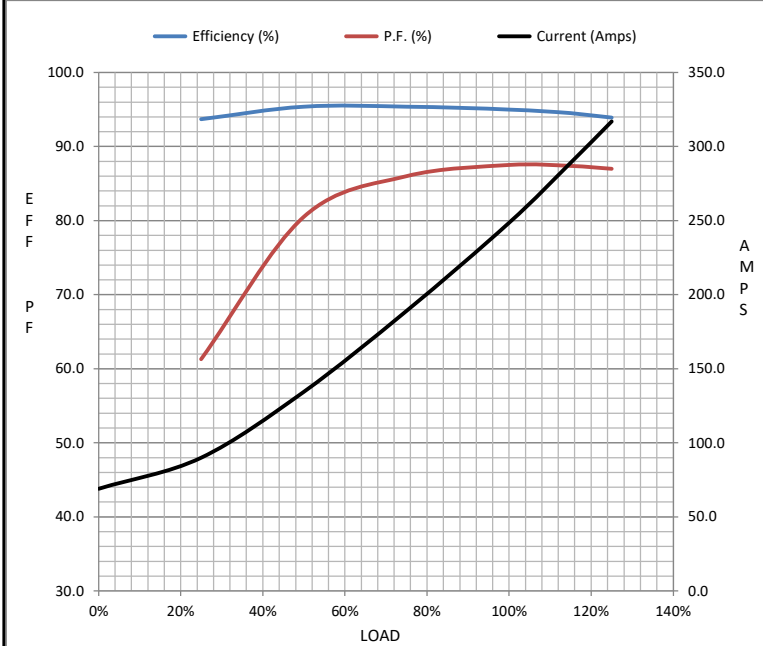
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	69.0	90.0	135	189	249	289	317	1,410
Torque (ft-lb)	0.00	175	351	528	706	813	885	1,475
RPM	1500	1497	1494	1491	1488	1,485	1484	0
Efficiency (%)		93.7	95.4	95.4	95.0	94.5	93.9	
P.F. (%)	4.4	61.3	80.5	86.0	87.5	87.4	87.0	43.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1449	1488	1500
Current (Amps)	1,410	1,140	740	249	69.0
Torque (ft-lb)	1,475	1,170	1,400	706	0.00

Information Block				
HP	200.0			
Sync. RPM	1500			
Frame	445			
Enclosure	DP			
Construction	TDC			
Voltage	415 V			
Frequency	50 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 <sup>2</sup>	66.26 Lb-F <sup>2</sup>			
Ref Wdg	HA22804108 NONE			
Sound Pressure @ 1M	84 dBA			
VFD Rating	NONE			
Outline Dwg	SS620991			
Conn. Diag	EE7300BH			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0200	0.0080	0.0800	0.1720	3.5790



Speed - Torque Curve

