

PRODUCT INFORMATION PACKET

Model No: 5011LSTFS16031

Catalog No: E364

Severe Duty Motors, TEFC, 500 HP, 3 Ph, 60 Hz, 460 V, 1788 RPM, 5011LS Frame



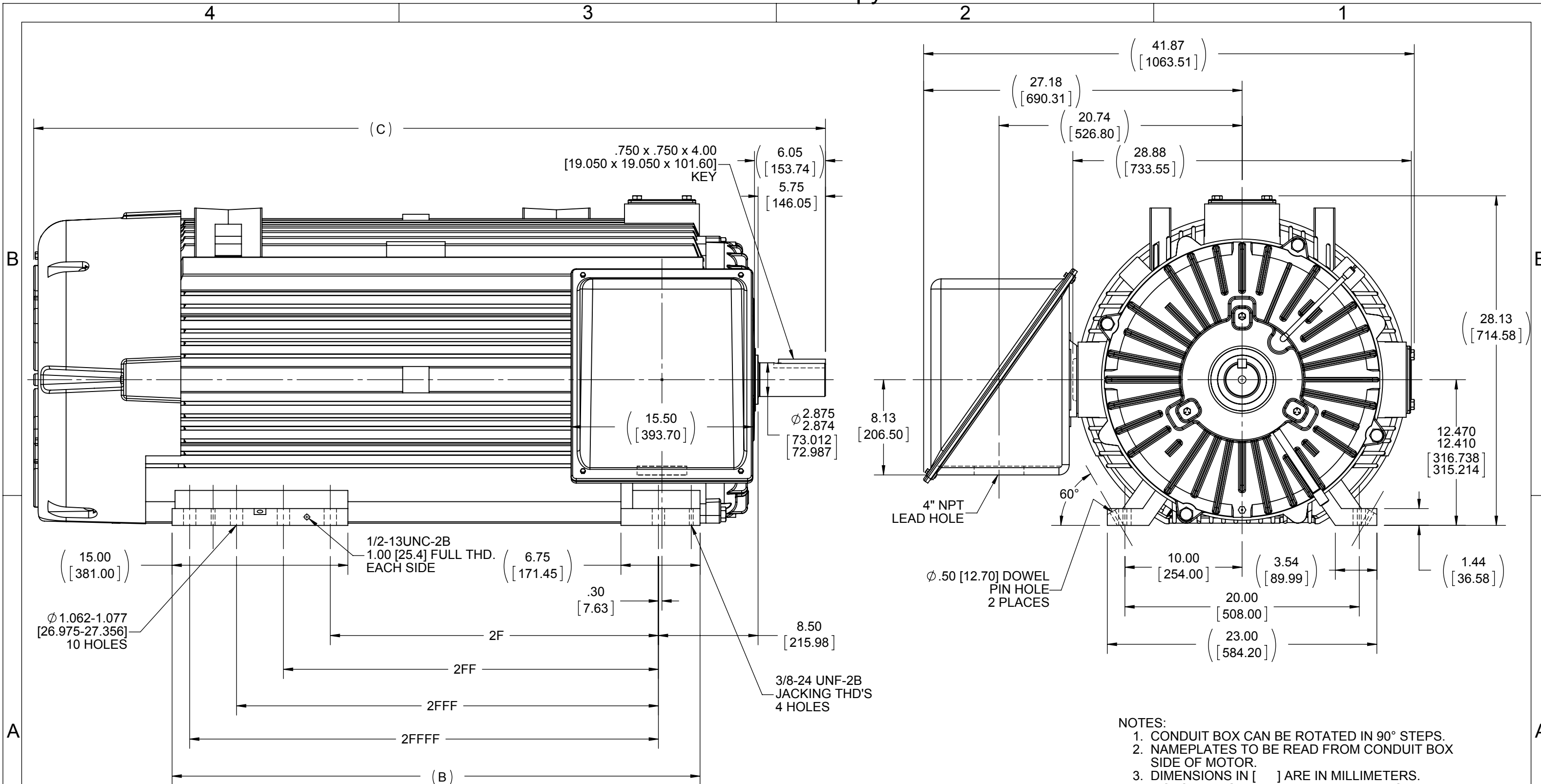
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Nameplate Specifications

Output HP	500 Hp	Output KW	370.0 kW
Frequency	60 Hz	Voltage	460 V
Current	555.0 A	Speed	1788 rpm
Service Factor	1.15	Phase	3
Efficiency	96.2 %	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	5011LS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6322	Opp Drive End Bearing Size	6318
UL	No	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	4	Rotation	Reversible
Resistance Main	.004 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	LS	Overall Length	67.56 in
Frame Length	49.50 in	Shaft Diameter	2.625 in
Shaft Extension	6.05 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300U	Outline Drawing	B-SS518503-4950



- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
 3. DIMENSIONS IN [] ARE IN MILLIMETERS.
 4. MOTOR WEIGHT (MAXIMUM) = 5,500 LBS. (2,495 Kg)

DASH	FRAME	B	C	2F	2FF	2FFF	2FFFF
4950	5009LS	45.05 [1144.27]	67.56 [1716.02]	28.00 [711.20]	---	---	---
4950	5010LS	45.05 [1144.27]	67.56 [1716.02]	---	32.00 [812.80]	---	---
4950	5011LS	45.05 [1144.27]	67.56 [1716.02]	---	---	36.00 [914.40]	---
4950	5012LS	45.05 [1144.27]	67.56 [1716.02]	---	---	---	40.00 [1016.00]

DRAWING REVISION	REVISION BY	DATE
C	JJB	09-11-2014
ECO-0059657	TDB	09-11-2014

ECO DESCRIPTION

UPDATED TO CURRENT STANDARDS

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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381]

CORNER FILLETS: .02 [0.51]

MACHINED SURFACES: 200 INCH $\sqrt{\text{mm}}$ 5.1

mm SHOWN IN [BRACKETS]

DRAWN BY	DATE
KL	05-25-2001
APPROVED BY	DATE
JES	05-25-2001
REFERENCE	THIRD ANGLE PROJECTION

REGAL™ Regal Beloit America, Inc.

DESCRIPTION: **OUTLINE**

5009-12LS FR-TEFC-F1/F2/F3 MOUNT-TAPPED LEAD HOLE

MATERIAL: _____ PROCESS/FINISH: _____

SIZE: **B** DRAWING NUMBER: **SS518503** SHEET: **1 OF 1**

IF MOTOR HAS 9 LEADS



IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY DRS	Regal Beloit America, Inc.																					
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7° 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7° 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE 09-27-1996
<u>DEC.</u>	<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>																							
.X	±0.1	[±2.5]	±7° 30"																							
.XX	±0.02	[±0.51]																								
.XXX	±0.005	[±0.127]																								
.XXXX	±0.0005	[±0.0127]																								
ECO DESCRIPTION UPDATED TO SOLIDWORKS			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH $\sqrt{\text{mm}}$ 5.1	APPROVED BY GK	MATERIAL	PROCESS/FINISH																				
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			THIRD ANGLE PROJECTION	REFERENCE																						

CERTIFICATION DATA SHEET

Model#: 5011LSTFS16031 AN **WINDING#:** T511428 NONE 1
CONN. DIAGRAM: A-EE7300U **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS518503-4950

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
500	370	1800	1788	5011LS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	555	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 96.2	3/4 LOAD EFF: 96.2	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88	3/4 LOAD PF: 85.5	1/2 LOAD PF: 79	95.8	SQ CAGE IND RUN	155

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
1469 LB-FT	3625	2650 LB-FT 180	4100 LB-FT 279	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
85 dBA	95 dBA	220 LB-FT^2	- LB-FT^2	25 SEC.	1	5500 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 (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	LS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6322	6318						

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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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: 06/28/2017 05:29:00 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 29-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



5011LSTFS16031

Submittal

Data @ 460 V

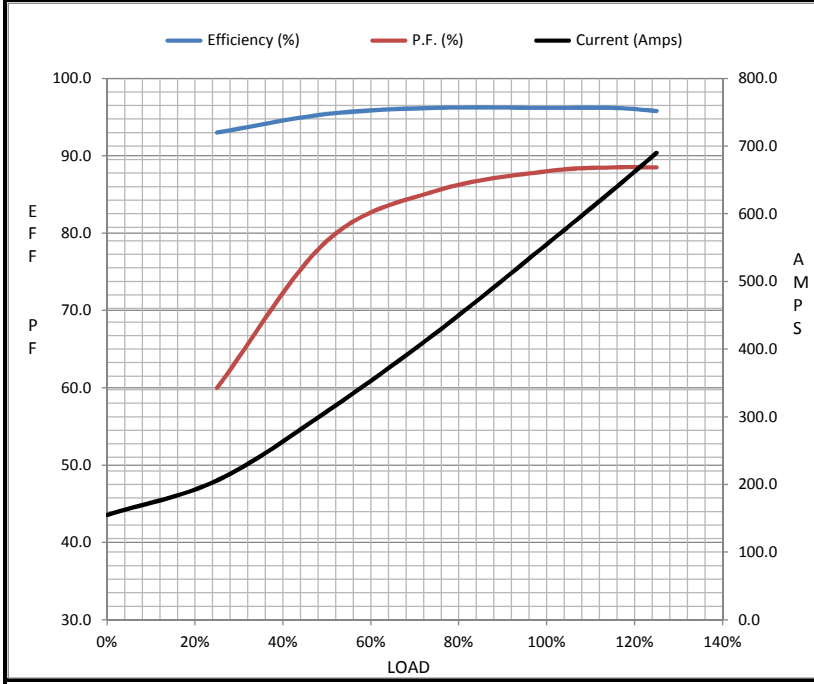
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	155	206	308	425	555	635	690	3,625
Torque (ft-lb)	0.00	366	732	1,100	1,469	1,692	1,840	2,650
RPM	1800	1796	1794	1790	1788	1,785	1782	0
Efficiency (%)		93.0	95.4	96.2	96.2	96.2	95.8	
P.F. (%)	4.0	60.0	79.0	85.5	88.0	88.5	88.5	26.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1788	1800
Current (Amps)	3,625	3,300	2,250	555	155
Torque (ft-lb)	2,650	2,300	4,100	1,469	0.00

Information Block				
HP	500.0			
Sync. RPM	1800			
Frame	5011			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	75 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	220 Lb-Ft ²			
Ref Wdg	T511428 NONE			
Sound Pressure @ 1M	85 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS518503-4950			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0040	0.0030	0.0350	0.0700	1.6920



Speed - Torque Curve

