# **PRODUCT INFORMATION PACKET**

Model No: LM13960 Catalog No: LM13960 General Purpose Motor, 25 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 284TS Frame, TEFC



Regal and Leeson are trademarks of Regal Rexnord Corporation or one of its affiliated companies.  $\hat{A}$ ©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E





Product Information Packet: Model No: LM13960, Catalog No:LM13960 General Purpose Motor, 25 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 284TS Frame, TEFC

# LEESON

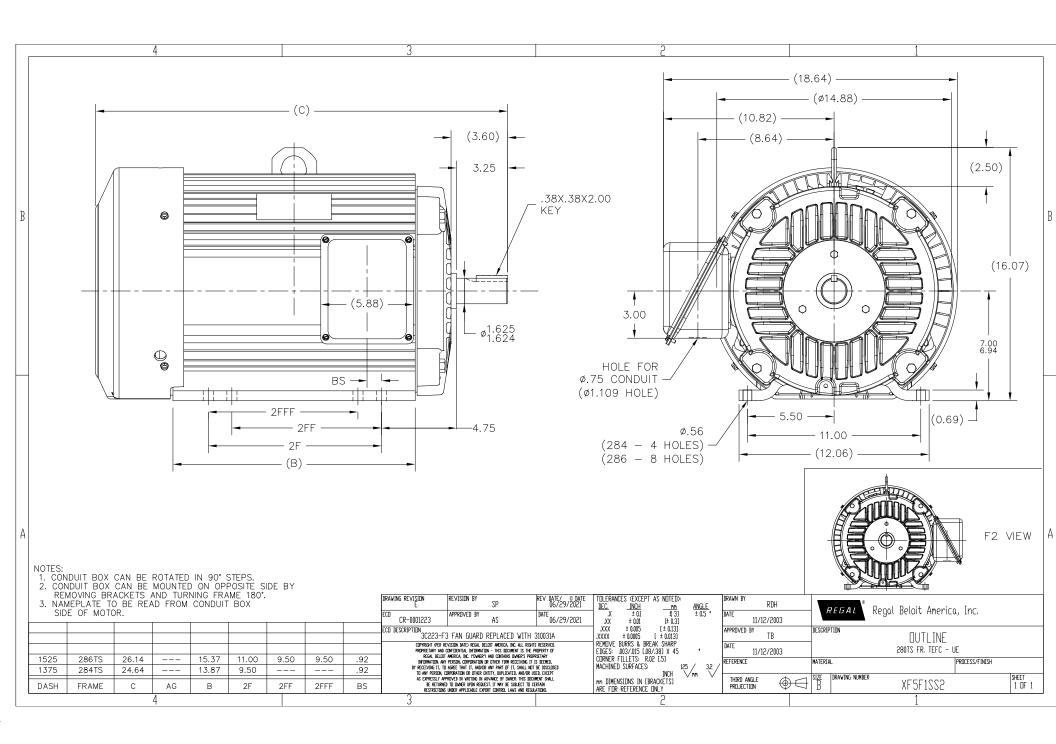
### Nameplate Specifications

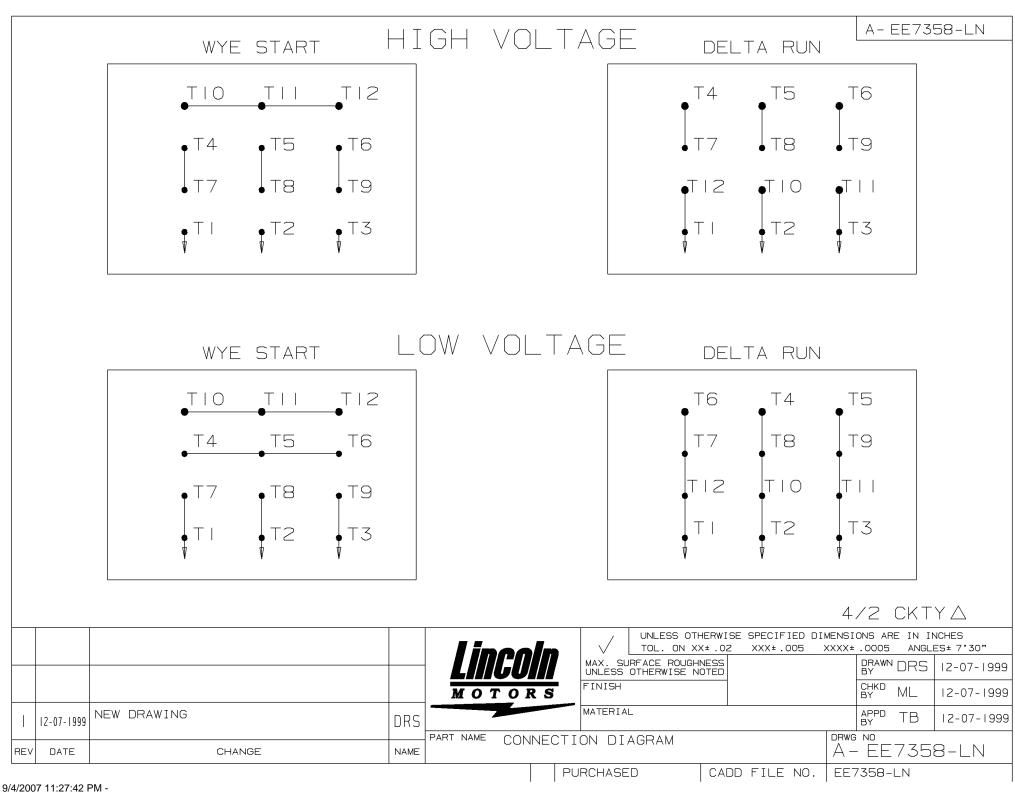
Phase	3	Output HP	25 & 25 Hp
Output KW	18.7 & 18.7 kW	Voltage	230/460 & 190/380 V
Speed	3535 & 2935 rpm	Service Factor	1.25 & 1.15
Frame	284TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	92.4 & 92.4 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	56/28 & 54/27 A	Power Factor	90.5
Duty	Continuous	Insulation Class	F
Design Code	В	KVA Code	G
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6209
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

# **Technical Specifications**

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	0 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	тѕ	Overall Length	25.25 in
Frame Length	13.75 in	Shaft Diameter	1.625 in
Shaft Extension	3.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	XF5F1SS2-1375	Connection Drawing	A-EE7358-LN

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:06/22/2023





4 of 7



2100 WASHINGTON ST. GRAFTON, WI PH. 262-277-8810

#### **CERTIFICATION DATA SHEET**

#### CONN. DIAGRAM: A-EE7358-LN

**OUTLINE:** XF5F1SS2-1375

**WINDING #:** L2842009 1

## CATALOG #: LM13960

**MOUNTING:** F1/F2 CAPABLE

НР	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25&25	18.7&18.7	3600	3535&2935	284TS	TEFC	G	В

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	56/28&54/27	WYE START DELTA RUN	CONTINUOUS	F3	1.25/1.15	40

FULL LO	AD EFF:	92.4&92.4	3/4 LOAD EFF:	93	1/2 LOAD EFF:	92.3	GTD. EFF	ELEC. TYPE
FULL LO	OAD PF:	90.5&90	3/4 LOAD PF:	89.7	1/2 LOAD PF:	84.2	90.9	SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQ	QUE	F.L. RISE°C
37.2 <b>0z-FT</b>	364 / 182	82	<b>OZ-FT</b> 220 %	115	OZ-FT	309 %	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
- dBA	– dBA	0 LB-FT^2	- LB-FT^2	- SEC.	-	0 <b>lbs.</b>

**\*\*\* 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	GRAY (ENAMEL)

BEAR	INGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	FRAME
DE	ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	MATERIAL	MATERIAL
BALL	BALL	POLYREX EM	TS	NONE	NONE		ALUMINUM
6312	6209	POLIKEX EM	15	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM

	THERMO-PROTE	CTORS		TUERMACTORS	CONTROL	SPACE HEATERS	
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs	- THERMISTORS	CONTROL	SPACE HE	ATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NONE	VOLTS
*				INVERTER TORQUE: INV. HP SPEED RAN			
Ν				ENCODER: NONE			
0				NONE NONE NONE	PPR		
т				BRAKE: NONE	NONE		
E				NONE P/N NC NONE NONE FT-LB V	NE NONE HZ		
S							

\*

## Uncontrolled Copy

Date	e: 1/24	/2018		Data S	sneet			LM13960		
Dut				L I I I	SON					-
				Moto	r Load Data	®		Data	a @ 460	v
oad	0%	25%	50%	75%	100%	115%	125%	LR		
urrent (Amps)	7.3	10.0	15.1	21.1	28.0	31.8	34.7	182		
rque (ft-lb)	0.00	9.2	18.4	27.7	37.2	42.9	46.7	82.0		_
PM	3600	3585	3567	3552	3535	3,523	3516	0		-
ficiency (%) F. (%)	11.5	88.2 66.7	92.3 84.2	93.0 89.7	92.4 90.5	92.4 91.9	92.1 92.0	40.0		-
. (/0)		Motor Speed D		00.1	00.0	01.0	02.0	40.0		1
	LR	Pull-Up	BD	Rated	ldle					
beed (RPM)	0	1768	3100	3535	3600			nformation Block		
rrent (Amps) rque (ft-lb)	182 82.0	164 69.7	126 115	28.0 37.2	7.3 0.00	HP Sync. RPM		25.0 3600		
que (It-ib)	02.0	09.7	115	57.2	0.00	Frame		284		
	Efficiency (%)	— P.F. (%)	(	Current (Amps)		Enclosure		TEFC		
						Construction		TFL		
100.0					40.0	Voltage		230/460#190/380	V	
						Frequency		60	Hz	
90.0					35.0	Design		A		
						LR Code letter		G		
					30.0	Service Factor		1.15		
80.0						Temp Rise @ F	FL.	55	°C	
					A	Duty	-	CONT	0	
					25.0 M	Ambient		40	°C	
70.0		/			P	Elevation		1,000	feet	
					20.0	Rotor/Shaft wk	2	0.00	Lb-Ft <sup>2</sup>	
co.o.						Ref Wdg		L2842009 NONE		
60.0					15.0	Sound Pressur	≏ @ 1M	999	dBA	
					15.0	Cound 1 ressuit			UDA	
50.0						VFD Rating		NONE		
					10.0	Outline Dwg		XF5F1S	S2-1375	
					_	Conn. Diag		A-EE73		
40.0					5.0	Additional Spec	ifications:	•		
					_	0				
						0	EOU	V CKT (OHMS / PHASE)		
30.0 0% 20		60% 80%	6 100%	120%	— 0.0 140%	R1	R2	X1	X2	X
	0% 40%									0.0
0% 20	0% 40%	LOAD				0.0000	0.0000	0.0000	0.0000	
0/0 20	0% 40%	LOAD		Speed '	Torque C	<u> </u>	0.0000	0.0000		
0/8 20	% 40%	LOAD			Torque C	urve	0.0000	0.0000		
140.0	% 40%		1	Speed -	Torque C	<u> </u>	0.0000	0.0000		·
	% 40%	LOAD	1		Torque C	urve	0.0000	0.0000	200.0	
140.0	9% 40%	LOAD	1		Torque C	urve	0.0000	0.0000	0.0000	
	9% 40%	LOAD	1		Torque C	urve	0.0000	0.0000	200.0	I
140.0	9% 40%	LOAD	]		Torque C	urve	0.0000	0.0000	200.0	I
140.0	9% 40%	LOAD	1		Torque C	urve	0.0000	0.0000	200.0 180.0 160.0	1
140.0	9% 40%	LOAD	1		Torque C	urve	0.0000	0.0000	200.0	1
140.0	9% 40%				Torque C	urve	0.0000	0.0000	200.0 180.0 160.0 140.0	1
140.0 120.0 100.0	9% 40%	LOAD			Torque C	urve	0.0000	0.0000	200.0 180.0 160.0	1
140.0 120.0 100.0	9% 40%	LOAD			Torque C	urve	0.0000	0.0000	0.0000 200.0 180.0 160.0 140.0 120.0	A
140.0 120.0 100.0 T 80.0 R Q	9% 40%	LOAD			Torque C	urve	0.0000	0.0000	200.0 180.0 160.0 140.0	A M P
140.0 120.0 100.0 T 80.0 R Q U 60.0					Torque C	urve	0.0000	0.0000	0.0000 200.0 180.0 160.0 140.0 120.0 100.0	A
140.0 120.0 100.0 T 80.0 R Q					Torque C	urve	0.0000	0.0000	0.0000 200.0 180.0 160.0 140.0 120.0	A M P
140.0 120.0 100.0 T 80.0 R Q U 60.0 E					Torque C	urve	0.0000	0.0000	0.0000 200.0 180.0 160.0 140.0 120.0 100.0 80.0	A M P
140.0 120.0 100.0 T 80.0 R Q U 60.0					Torque C	urve	0.0000	0.0000	0.0000 200.0 180.0 160.0 140.0 120.0 100.0	A M P
140.0 120.0 100.0 T 80.0 R Q U 60.0 E					Torque C	urve	0.0000	0.0000	0.0000 200.0 180.0 160.0 140.0 120.0 100.0 80.0 60.0	A M P
140.0 120.0 100.0 T 80.0 R Q U 60.0 E 40.0					Torque C	urve		0.0000	0.0000 200.0 180.0 160.0 140.0 120.0 100.0 80.0	A M P
140.0 120.0 100.0 T 80.0 R Q U 60.0 E					Torque C	urve		0.0000	0.0000 200.0 180.0 160.0 140.0 100.0 80.0 60.0 40.0	A M P
140.0 120.0 100.0 T 80.0 R Q U 60.0 E 40.0					Torque C	urve		0.0000	0.0000 200.0 180.0 160.0 140.0 120.0 100.0 80.0 60.0	A M P
140.0 120.0 100.0 R Q U 60.0 E 40.0 20.0					Torque C	urve		0.0000	0.0000 200.0 180.0 160.0 140.0 120.0 80.0 60.0 40.0 20.0	A M P
140.0 120.0 100.0 T 80.0 R Q U 60.0 E 40.0	9% 40%	LOAD			Torque C	urve	0.0000	0.0000	0.0000 200.0 180.0 160.0 140.0 100.0 80.0 60.0 40.0	A M P



# **EC Declaration of Conformity**

The undersigned representing the manufacturer:

Regal Beloit America 100 East Randolph St. Wausau, WI 54401 and the authorized representative established within the Community:

Marathon Electric UK 6F Thistleton Road Ind. Estate Market Overton Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : LM13960

(Model No. may contain prefix and/or suffix characters)

Catalog No : LM13960

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010) EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:

Michael A Logsdon

Michael A. Logsdon Vice President, Technology

Created on 09/01/2022

(€ 22

Authorized Representative in the Community:

Julian Clark Marketing Engineer