PRODUCT INFORMATION PACKET

Model No: 171636.60
Catalog No: 171636.60
Severe Duty Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V, 1200 & 1000 RPM, 254T Frame, TEFC

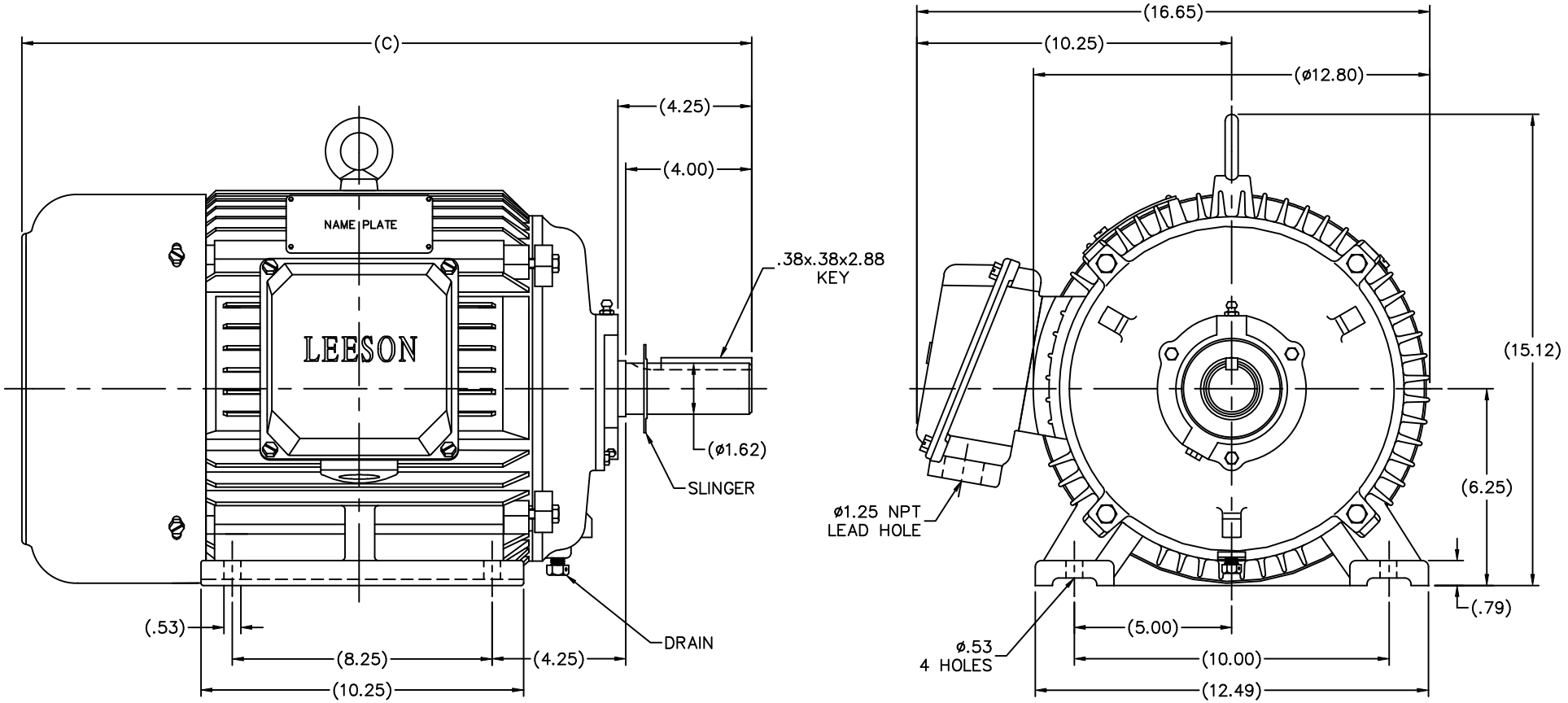
Nameplate Specifications

Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	208-230/460 & 190/380 V
Speed	1185 & 990 rpm	Service Factor	1.25 & 1.15
Frame	254T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	91.7 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	23-22.2/11.1 & 19/9.5 A	Power Factor	70
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	NONE	Opp Drive End Bearing Size	NONE
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Wye Start Delta Run Or Inverter
Poles	6	Rotation	Reversible
Mounting	Rigid Base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	T
Overall Length	23.90 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	00417201	Outline Drawing	SS622139LE

SS622139LE



(MAY NOT BE DRAWN TO SCALE)

254T	23.90
FRAME	C

NO.	REVISION	BY & DATE	CHK

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.03
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE OUTLINE
254T FR. – TEFC

MAT'L.

FINISH 171620.60, 171632.30, 171636.60

CAD FILE ss622139le

RFP

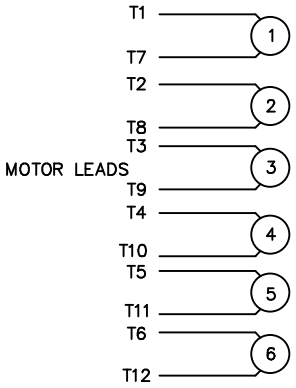
DIST WA

DRAWN MSG	06-02-2006
CHK ML	06-04-2006
APPD SB	06-08-2006
SCALE	5=16
REF	
FMF	HEBEI
PREV	

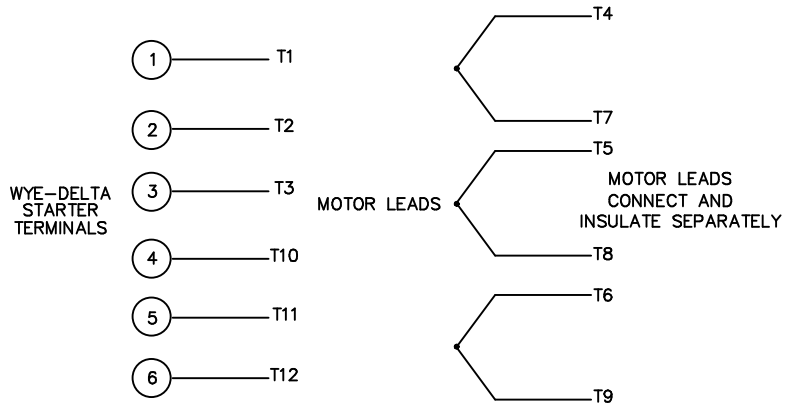
SIZE B | DRAWING NO. SS622139LE | PAGE OF | REV.

WYE – DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

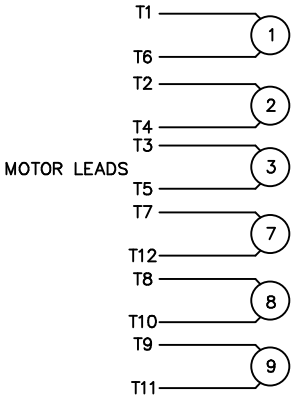


HIGH VOLTAGE CONNECTION



REFER TO THE WYE–DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

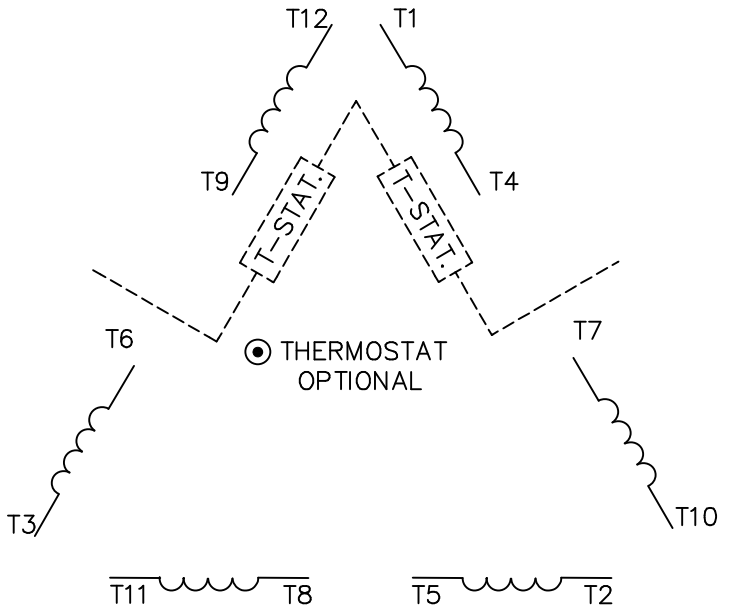
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



REFER TO THE PART WINDING STARTER INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

REFER TO THE CUTLER – HAMMER OR EQUIV. FOR PROPER SELECTION OF OVERLOAD HEATER COILS.

LINE LEADS



ROTATION CAN BE REVERSED BY INTERCHANGING ANY TWO LINE LEADS

⦿ RED LEADS OR P1, P2, FOR N/C THERMOSTAT

ACROSS THE LINE START & RUN

	LINE 1	LINE 2	LINE 3	JOIN & INSULATE SEPARATELY
HIGH VOLT	T1,T12	T2,T10	T3,T11	(T4,T7) (T5,T8) (T6,T9)
LOW VOLT	T1,T6 T7,T12	T2,T4 T8,T10	T3,T5 T9,T11	

NO.	REVISION	BY & DATE	CHK
03	REV'D LOW VOLTAGE CONN. LEADS PER ELEC.	BJB 06/07/00	
02	ADDED T–STAT. NOTES PER ELECTRICAL	KMM 06/02/98	
01	REDRAWN TO CAD	DBT 06/02/97	

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.01
.XXX	±.005
.XXXX	±.0005
ANG	±1/2°

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE DELTA – WYE CONNECTION DIAGRAM

MAT'L.

FINISH

CAD FILE 00417201

RFP

DIST

DRAWN	WLW 09/08/77
CHK	RPB 09/12/77
APPD	JCW 09/12/77
SCALE	1=1
REF	
FMF	
PREV	

SIZE A | DRAWING NO. 004172–01 | REV. 03

6/28/2007 3:22:15 PM -

1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-377-8810

CERTIFICATION DATA SHEET

CONN. DIAGRAM: 00417201

CATALOG #: 171636.60

OUTLINE: SS622139LE

MOUNTING: F1/F2 CAPABLE

WINDING #: T12906018 3

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.60&3.70	1200	1185&990	254T	TEFC	H	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	208-230/460&190/380	23-22.2/11.1&19/9.5	Y START D RUN OR INV	CONTINUOUS	F5	1.25/1.15	40

FULL LOAD EFF:	91.7&91.7	**3/4 LOAD EFF:**	91.7	**1/2 LOAD EFF:**	89.5	**GTD. EFF**	**ELEC. TYPE**		
FULL LOAD PF:	70&65	**3/4 LOAD PF:**	65	**1/2 LOAD PF:**	53.5	90.2	SQ CAGE INV RATED		

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
33.2 **LB-FT**	134 / 67	65 **LB-FT** 195 %	112.5 **LB-FT** 338 %	26

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
52 **dBA**	62 **dBA**	2.472 **LB-FT^2**	2.5 **LB-FT^2**	- **SEC.**	-	- **LBS.**

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	TRUE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	CAST IRON
NONE	NONE						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE **VOLTS**

NOTES

*

INVERTER TORQUE: CONSTANT 10:1
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

8/6/2018

Data Sheet

Date: 1/31/2018

LEESON

171636.60

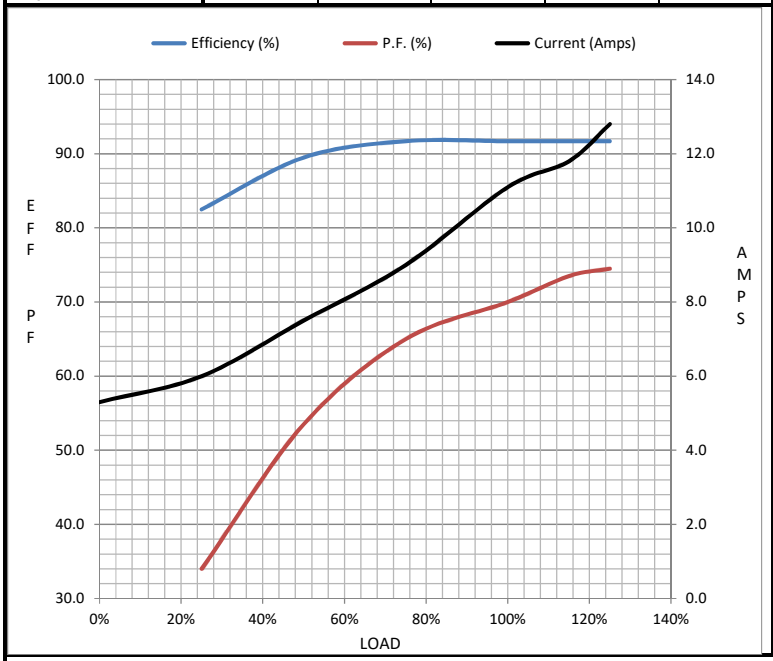
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	5.3	6.0	7.5	9.0	11.1	11.8	12.8	67.0	
Torque (ft-lb)	0.00	8.2	16.5	24.8	33.2	38.2	41.6	65.0	
RPM	1200	1197	1194	1190	1185	1,184	1180	0	
Efficiency (%)		82.5	89.5	91.7	91.7	91.7	91.7		
P.F. (%)	6.0	34.0	53.5	65.0	70.0	73.5	74.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	400	1135	1185	1200
Current (Amps)	67.0	64.0	42.0	11.1	5.3
Torque (ft-lb)	65.0	55.0	113	33.2	0.00



Information Block

HP	7.5	
Sync. RPM	1200	
Frame	254	
Enclosure	TEFC	
Construction	TFC	
Voltage	208-230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	H	
Service Factor	1.15	
Temp Rise @ FL	31	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	2.47	Lb-Ft²
Ref Wdg	T12906018 NONE	
Sound Pressure @ 1M	52	dBA
VFD Rating	CONSTANT 10:1	
Outline Dwg	SS622139LE	
Conn. Diag	00417201	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000

Speed -Torque Curve