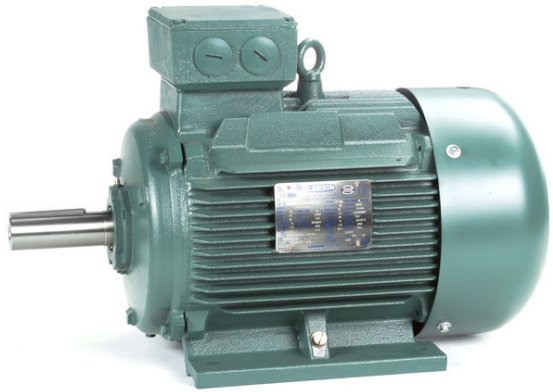
PRODUCT INFORMATION PACKET

Model No: 193321.60
Catalog No: 193321.60
LEESON® PASSPORT 25 HP General Purpose, 3 phase, 3600 RPM, 230/460 V, 160L Frame, TEFC

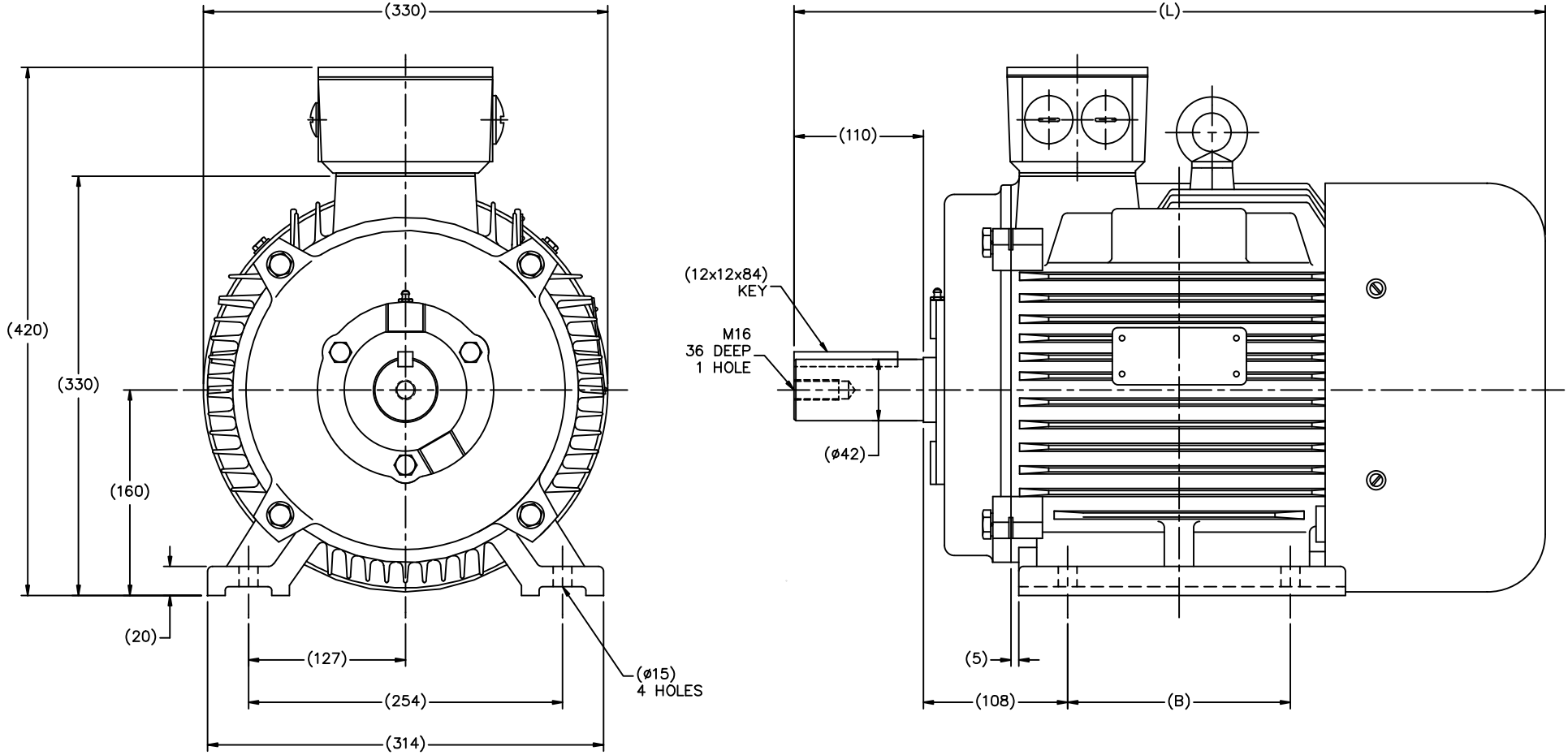


Nameplate Specifications

Phase	3	Output HP	25 & 20 Hp
Output KW	18.7 & 14.9 kW	Voltage	230/460 & 200/400 V
Speed	3530 & 2930 rpm	Service Factor	1.15 & 1.15
Frame	160L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostat	Efficiency	91.7 & 90.3 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	58/29 & 55/27.5 A	Power Factor	87.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6309	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 Inverter Rated	Starting Method	Wye Start Delta Run Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.2933 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	23.62 in
Shaft Diameter	1.625 in	Shaft Extension	4.33 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 10:1
Outline Drawing	SS622239	Connection Drawing	004172.01



FRAME	PART #	L	B
DF160M1–2R	193315.60	600	210
DF160M2–2R	193318.60	600	210
DF160M–4R	193316.60	600	210
DF160L–2R	193321.60	645	254
DF160L–4R	193319.60	645	254
DF160M–6R	193314.60	600	210

(MAY NOT BE DRAWN TO SCALE)

(DIMENSIONS ARE IN MILLIMETERS)

NO.	REVISION	BY & DATE	CHK

TOLERANCES UNLESS SPECIFIED

DEC.	METRIC
.X	±2.5
.XX	±.76
.XXX	±.127
.XXXX	±.0127
ANG	±7'30"

REGAL-BELOIT CORPORATION

DRAWN MSG 11–17–2010
CHK MJS 11–18–2010
APPD SB 11–18–2010
SCALE 5=16
REF
FMF HEBEI
PREV

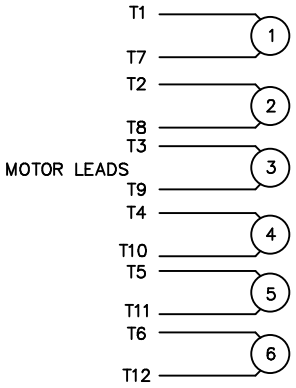
TITLE OUTLINE – IEC PREMIUM DF160–R (II)

MAT'L.
FINISH
CAD FILE ss622239
RFP 11–18–2010
DIST

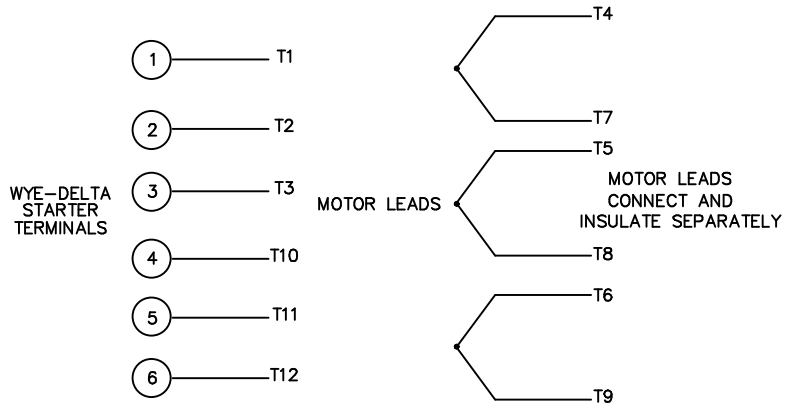
SIZE B | DRAWING NO. SS622239 | PAGE OF | REV.

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

LOW VOLTAGE CONNECTION

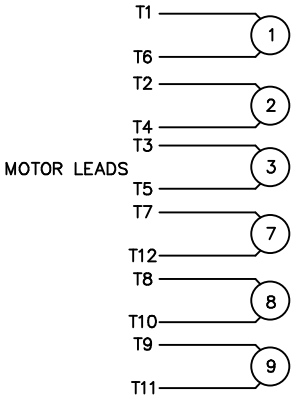


HIGH VOLTAGE CONNECTION



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

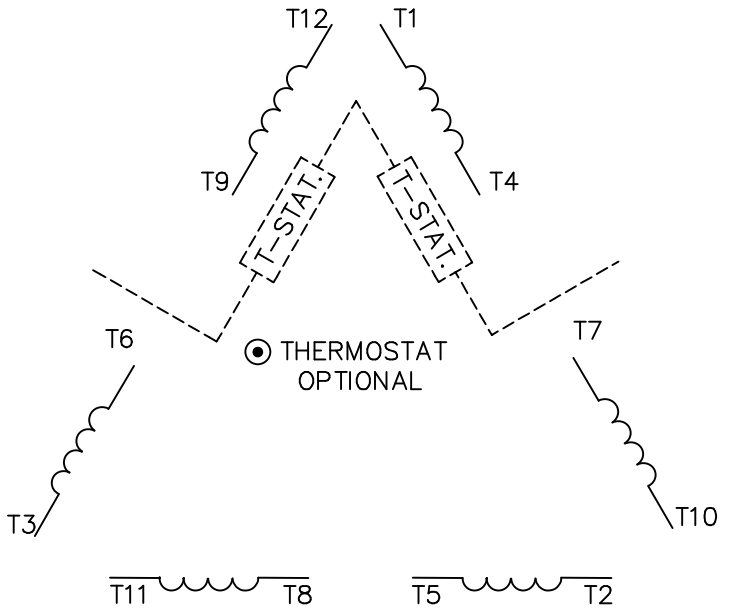
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



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 -

LEESON®

CERTIFICATION DATA SHEET

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

CATALOG #: 193321.60

CONN. DIAGRAM: 004172.01
OUTLINE: SS622239
WINDING #: T12902028 3

MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25&20	18.7&14.9	3600	3530&2930	160L	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&200/400	58/29&55/27.5	Y START D RUN OR INV	CONTINUOUS	F5	1.15/1.15	40

FULL LOAD EFF:	91.7&90.3	**3/4 LOAD EFF:**	92.4	**1/2 LOAD EFF:**	91.7	**GTD. EFF**	**ELEC. TYPE**	
FULL LOAD PF:	87.5&86.5	**3/4 LOAD PF:**	86.5	**1/2 LOAD PF:**	81.5	90.2	SQ CAGE INV RATED	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
37 **LB-FT**	326 / 163	73 **LB-FT** 197 %	90 **LB-FT** 243 %	63

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
69 **dBA**	79 **dBA**	- LB-FT^2	- LB-FT^2	15 **SEC.**	2	305 **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 - LEESON (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	STANDARD IEC	NONE	NONE	AISI 1045 (C-240)	CAST IRON
6309	6209						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE **VOLTS**

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

*** NOTES ***

Data Sheet

Date: 1/23/2018

193321.60

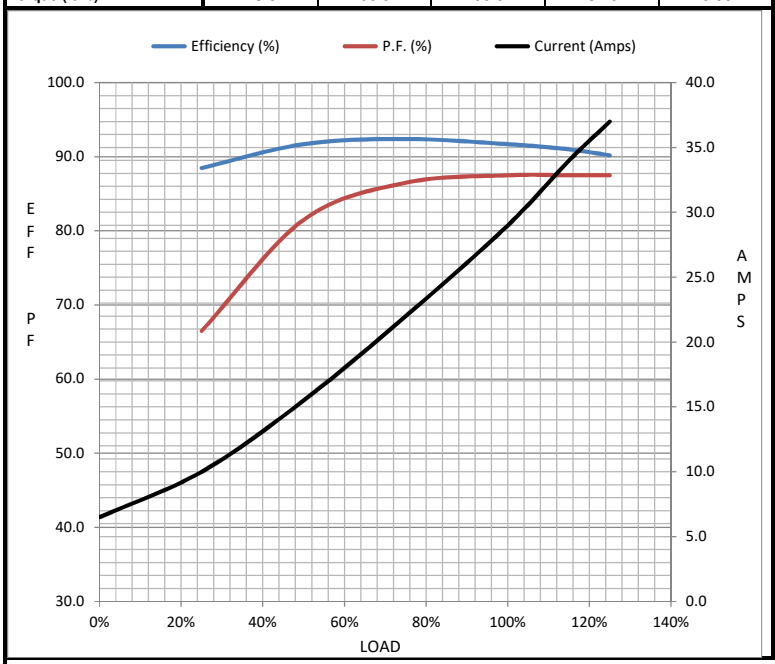
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	6.5	10.0	15.5	22.0	29.0	34.0	37.0	163	
Torque (ft-lb)	0.00	9.2	18.5	27.8	37.0	43.0	47.0	73.0	
RPM	3600	3585	3570	3550	3530	3,520	3510	0	
Efficiency (%)		88.5	91.7	92.4	91.7	91.0	90.2		
P.F. (%)	9.5	66.5	81.5	86.5	87.5	87.5	87.5	41.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1000	3315	3530	3600
Current (Amps)	163	162	99.5	29.0	6.5
Torque (ft-lb)	73.0	66.5	90.0	37.0	0.00



Information Block

HP	25.0	
Sync. RPM	3600	
Frame	160	
Enclosure	TEFC	
Construction	TFC	
Voltage	230/460#200/400	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	65	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.00	Lb-Ft²
Ref Wdg	T12902028 NONE	
Sound Pressure @ 1M	69	dBA
VFD Rating	CONSTANT 10:1	
Outline Dwg	SS622239	
Conn. Diag	004172.01	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000