PRODUCT INFORMATION PACKET

Model No: 170146.60
Catalog No: 170146.60
WATTSAVER® General Purpose Motor, 10 & 7.50 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V, 1200 & 1000 RPM, 256T Frame, DP

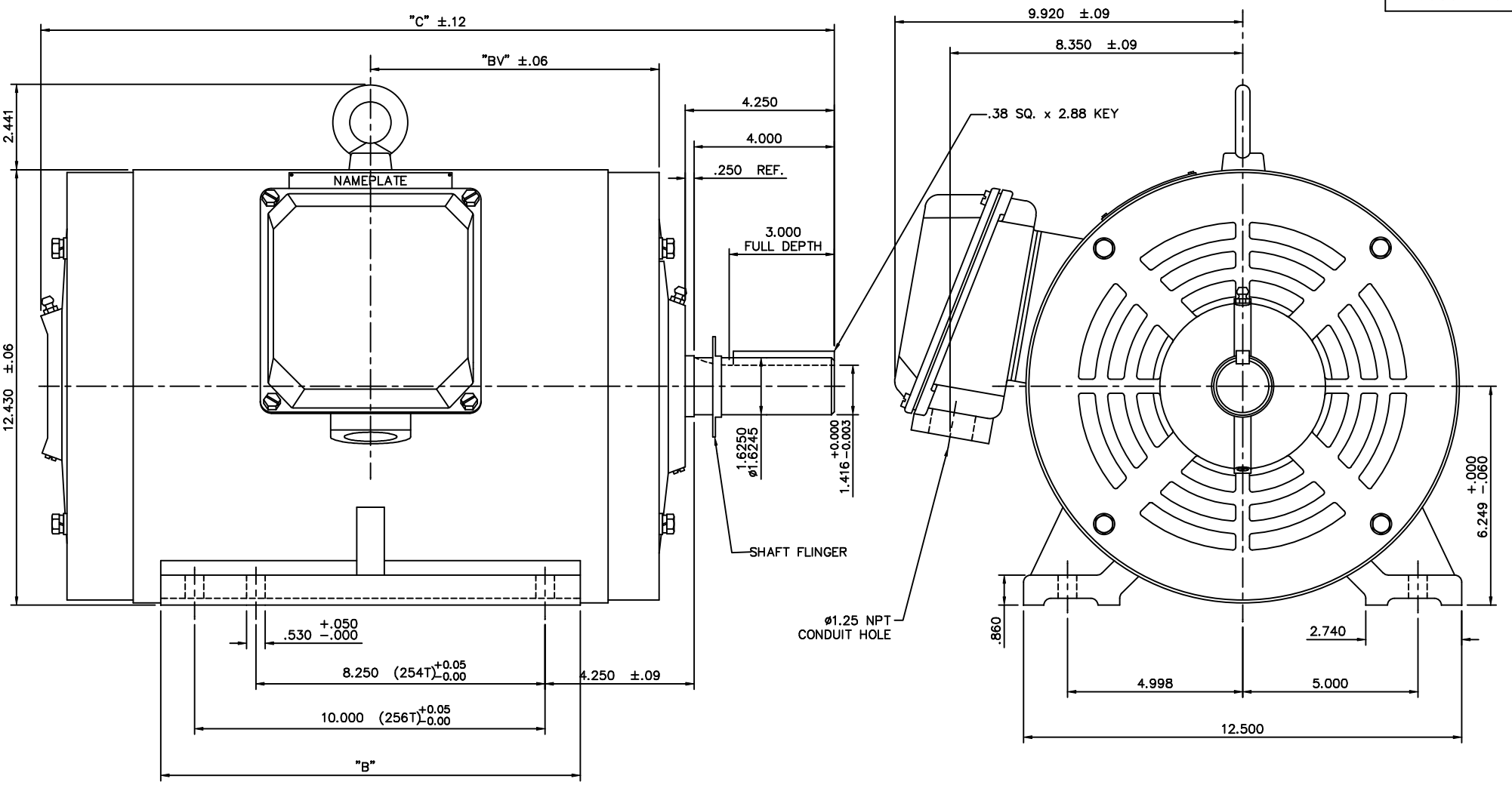
Nameplate Specifications

Phase	3	Output HP	10 & 7.50 Hp
Output KW	7.5 & 5.6 kW	Voltage	208-230/460 & 190/380 V
Speed	1185 & 985 rpm	Service Factor	1.15 & 1.15
Frame	256T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	91.7 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	31-29.6/14.8 & 27.6/13.8 A	Power Factor	68.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Wye Start Delta Run Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.7605 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	22.60 in
Shaft Diameter	1.625 in	Shaft Extension	4 in
Assembly/Box Mounting	F1 ONLY		
Outline Drawing	16955160-256T	Connection Drawing	004172.01

169551-60



NOTE: 256T HAS 6 MTG. HOLES, USING BOTH 254T AND 256T "2F" LOCATIONS.

FRAME	"C"	"BV"	"B"
254T	20.94	8.23	10.25
256T	22.60	9.06	12.00

NO.	REVISION	BY & DATE	CHK
A	REVISED TO NEW BORDER FORMAT	DWF 12/14/01	

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.03
.XXX	±.005
.XXXX	±.0005
ANG	±1/2°

LEESON — ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE: OUTLINE 250T FRAME ODP, RIGID MOUNT, NEW CON-BOX

MAT'L. CAST IRON

FINISH

CAD FILE Drawing8

RFP

DIST

DRAWN DRZ 05/23/01

CHK

APPD

SCALE 3=8

REF

FMF

PREV

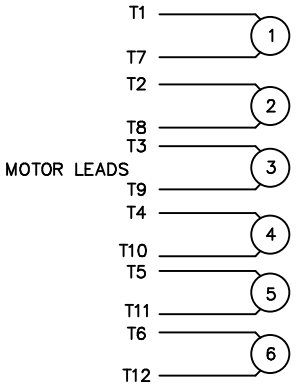
SIZE B | DRAWING NO. 169551-60 | REV. A

```
ERROR: undefined
OFFENDING COMMAND: fora

STACK:

{dup type /operatortype eq {[ exch ] cvx def }{pop pop }ifelse }
-dictionary-
-dictionary-
/Pscript_WinNT_Compat
-dictionary-
```

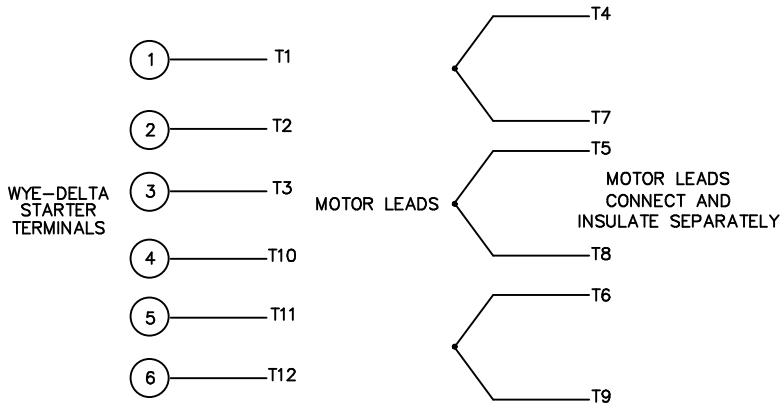
004172-01

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

LOW VOLTAGE CONNECTION

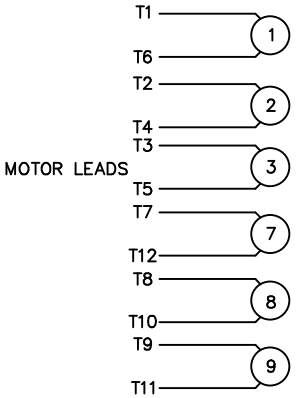


HIGH VOLTAGE CONNECTION



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

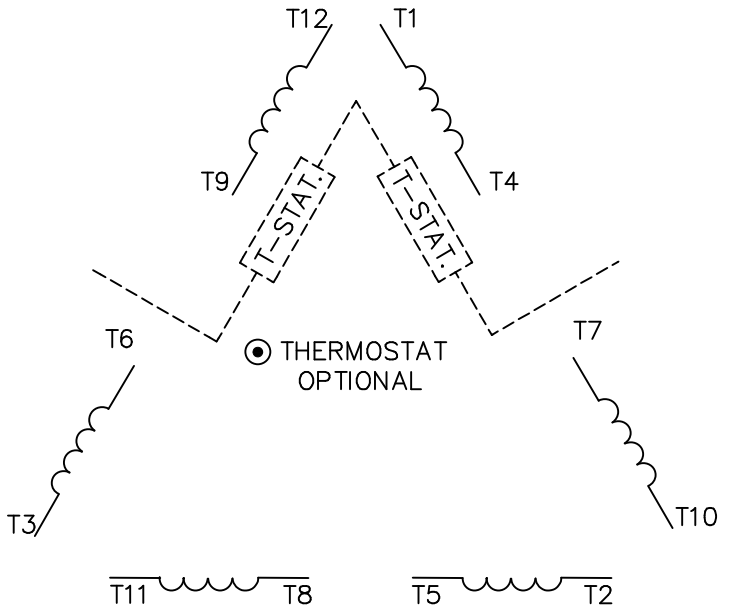
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



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

CONN. DIAGRAM: 004172.01

CATALOG #: 170146.60

OUTLINE: 16955160-256T

MOUNTING: F1 ONLY

WINDING #: T12906017 DR 3

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10&7 1/2	7.50&5.60	1200	1185&985	256T	DP	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB° C
3	60/50	208-230/460&190/380	31-29.6/14.8&27.6/13.8	Y START D RUN OR INV	CONTINUOUS	F5	1.15/1.15	40

FULL LOAD EFF:	91.7&91.7	**3/4 LOAD EFF:**	91.7	**1/2 LOAD EFF:**	90.2	**GTD. EFF**	**ELEC. TYPE**
FULL LOAD PF:	68.5&67	**3/4 LOAD PF:**	62.5	**1/2 LOAD PF:**	51.5	-	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.4 **LB-FT**	154 / 77	75.5 **LB-FT** 170 %	136 **LB-FT** 306 %	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
65 **dBA**	75 **dBA**	- **LB-FT^2**	- **LB-FT^2**	15 **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	FALSE	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	1045 HOT ROLLED (C-204)	CAST IRON
6309	6208						

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

*****

N

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E

INVERTER TORQUE: CONSTANT 4:1
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

Data Sheet

Date: 2/1/2018

LEESON

170146.60

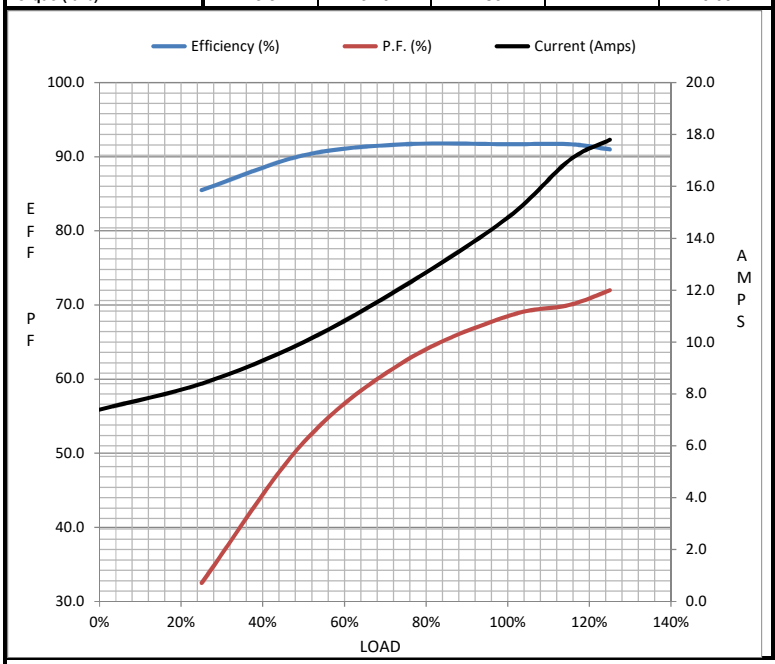
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	7.4	8.4	10.0	12.2	14.8	17.0	17.8	77.0	
Torque (ft-lb)	0.00	11.0	22.0	33.2	44.4	51.0	55.6	75.5	
RPM	1200	1196	1192	1189	1185	1,182	1180	0	
Efficiency (%)		85.5	90.2	91.7	91.7	91.7	91.0		
P.F. (%)	4.5	32.5	51.5	62.5	68.5	70.0	72.0	35.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1115	1185	1200
Current (Amps)	77.0	73.0	50.0	14.8	7.4
Torque (ft-lb)	75.5	64.0	136	44.4	0.00



Information Block

HP	10.0	
Sync. RPM	1200	
Frame	256	
Enclosure	DP	
Construction	TDC	
Voltage	208-230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	35	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.00	Lb-Ft²
Ref Wdg	T12906017 DR	
Sound Pressure @ 1M	65	dBA
VFD Rating	CONSTANT 4:1	
Outline Dwg	16955160	
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

Speed -Torque Curve