

PRODUCT INFORMATION PACKET



Model No: 170034.60

Catalog No: 170034.60

WATTSAYER® General Purpose Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V,
3600 & 3000 RPM, 256T Frame, DP



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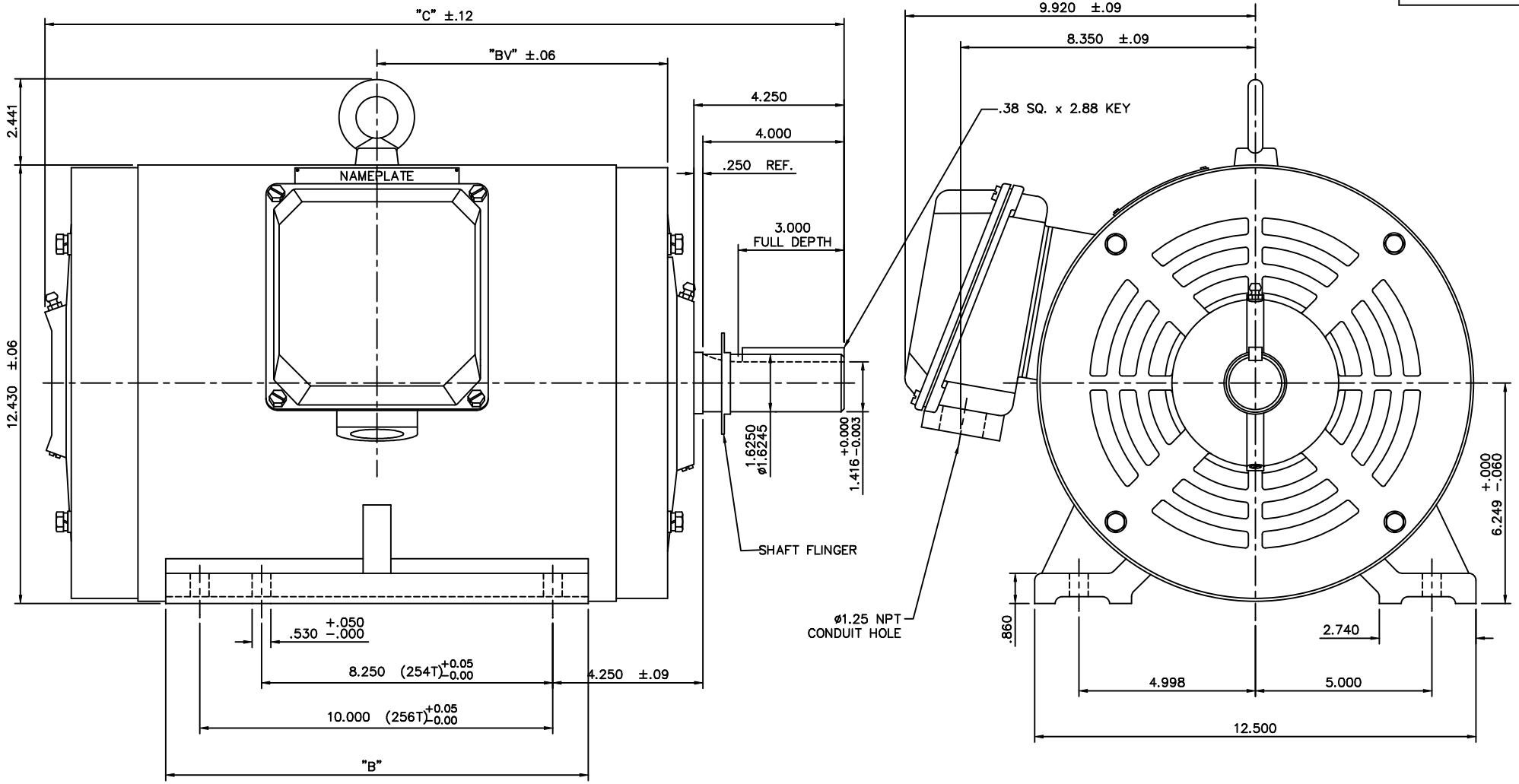


Nameplate Specifications

Phase	3	Output HP	25 & 20 Hp
Output KW	18.7 & 14.9 kW	Voltage	208-230/460 & 190/380 V
Speed	3545 & 2945 rpm	Service Factor	1.15 & 1.15
Frame	256T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	93 & 92.4 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	64-57/28.6 & 53/26.6 A	Power Factor	89
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	2	Rotation	Reversible
Resistance Main	.326 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/F2 CAPABLE		
Outline Drawing	16955160-256T	Connection Drawing	004172.01



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

		TOLERANCES UNLESS SPECIFIED		LEESON	ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN	DRZ 05/23/01		
		DEC.	INCHES			CHK	APPD		
		.XX	±.03	TITLE		SCALE	3-8		
		.XXX	±.005	OUTLINE 250T FRAME ODP, RIGID MOUNT, NEW CON-BOX		REF			
A	REVISED TO NEW BORDER FORMAT	DWF	12/14/01	MAT'L		FMF			
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH	PREV		
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP	CAD FILE	Drawing8	SIZE	DRAWING NO.	REV.
				DIST			B	169551-60	A

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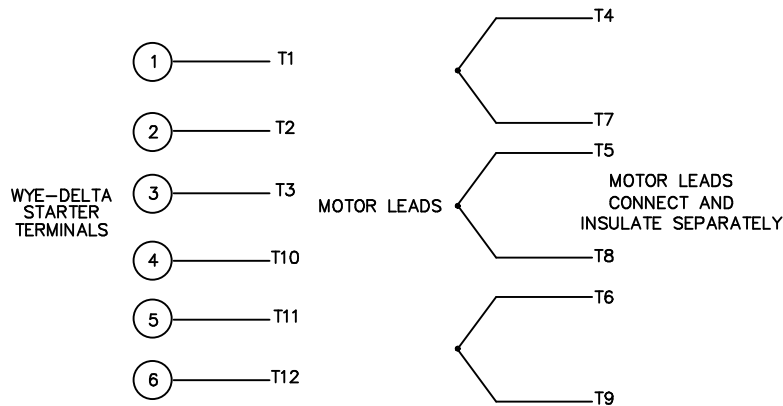
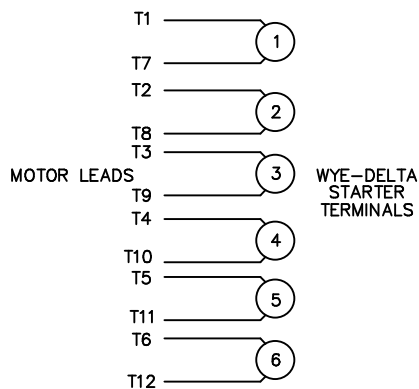
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WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

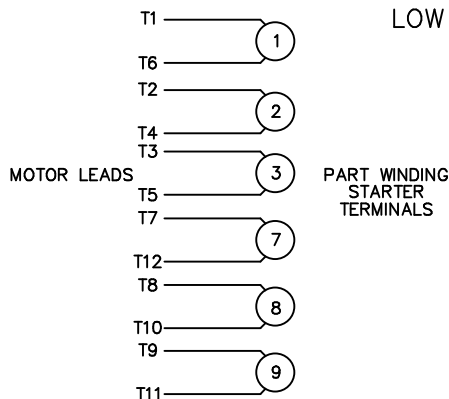
LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



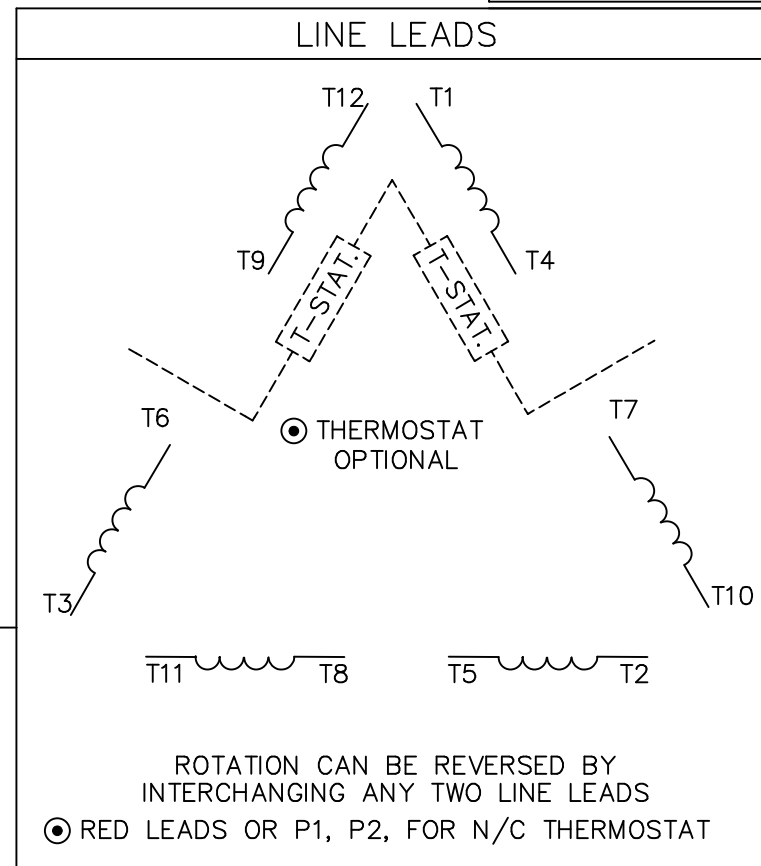
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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.



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	

				TOLERANCES UNLESS SPECIFIED		ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN WLW 09/08/77		
				DEC.	INCHES		CHK RPB 09/12/77		
				.X	±.1		APPD JCW 09/12/77		
03	REV'D LOW VOLTAGE CONN. LEADS PER ELEC.	BJB 06/07/00	.XX	±.01	TITLE DELTA - WYE CONNECTION DIAGRAM	SCALE 1=1			
02	ADDED T-STAT. NOTES PER ELECTRICAL	KMM 06/02/98	.XXX	±.005		REF			
01	REDRAWN TO CAD	DBT 06/02/97	.XXXX	±.0005		MAT'L.	FMF		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH	PREV		
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				DIST			A	004172-01	03



CERTIFICATION DATA SHEET

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

CATALOG #: 170034.60

CONN. DIAGRAM: 004172.01
OUTLINE: 16955160-256T
WINDING #: T12902024 3

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25&20	18.7&14.9	3600	3545&2945	256T	DP	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	208-230/460&190/380	64-57/28.6&53/26.6	Y START D RUN OR INV	CONTINUOUS	F5	1.15/1.15	40

FULL LOAD EFF:	93&92.4	3/4 LOAD EFF:	92.5	1/2 LOAD EFF:	92	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	89&92.3	3/4 LOAD PF:	89	1/2 LOAD PF:	84.5	92.4		SQ CAGE INV RATED	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
37.5 LB-FT	364 / 182	70.3 LB-FT 187 %	105 LB-FT 0 %	47

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	- LB-FT^2	- LB-FT^2	15 SEC.	-	315 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 O T E S *	INVERTER TORQUE: CONSTANT 2:1 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: 1/23/2018

170034.60



Data @ **460 V**

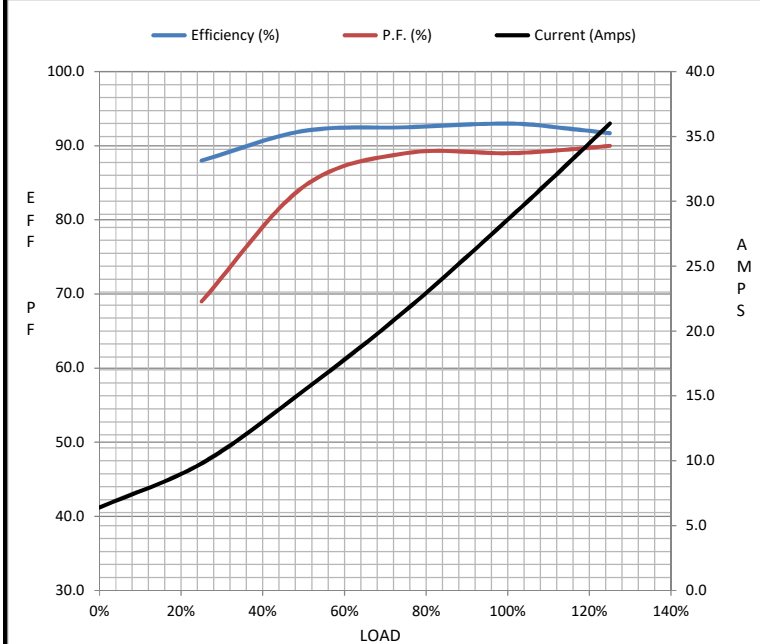
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	6.4	9.8	15.4	21.6	28.6	33.0	36.0	182
Torque (ft-lb)	0.00	9.4	18.8	28.0	37.5	43.1	47.0	70.3
RPM	3600	3585	3575	3560	3545	3,535	3525	0
Efficiency (%)		88.0	92.0	92.5	93.0	92.3	91.7	
P.F. (%)	10.0	69.0	84.5	89.0	89.0	89.5	90.0	0.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3312	3545	3600
Current (Amps)	182	167	109	28.6	6.4
Torque (ft-lb)	70.3	58.7	105	37.5	0.00

Information Block				
HP	25.0			
Sync. RPM	3600			
Frame	256			
Enclosure	DP			
Construction	TDC			
Voltage	208-230/460#190/380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	47 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.00 Lb-Ft ²			
Ref Wdg	T12902024 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2:1			
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

