

PRODUCT INFORMATION PACKET



Model No: 170122.60

Catalog No: 170122.60

WATTSAYER® General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V,
1200 & 1000 RPM, 254T Frame, TEFC



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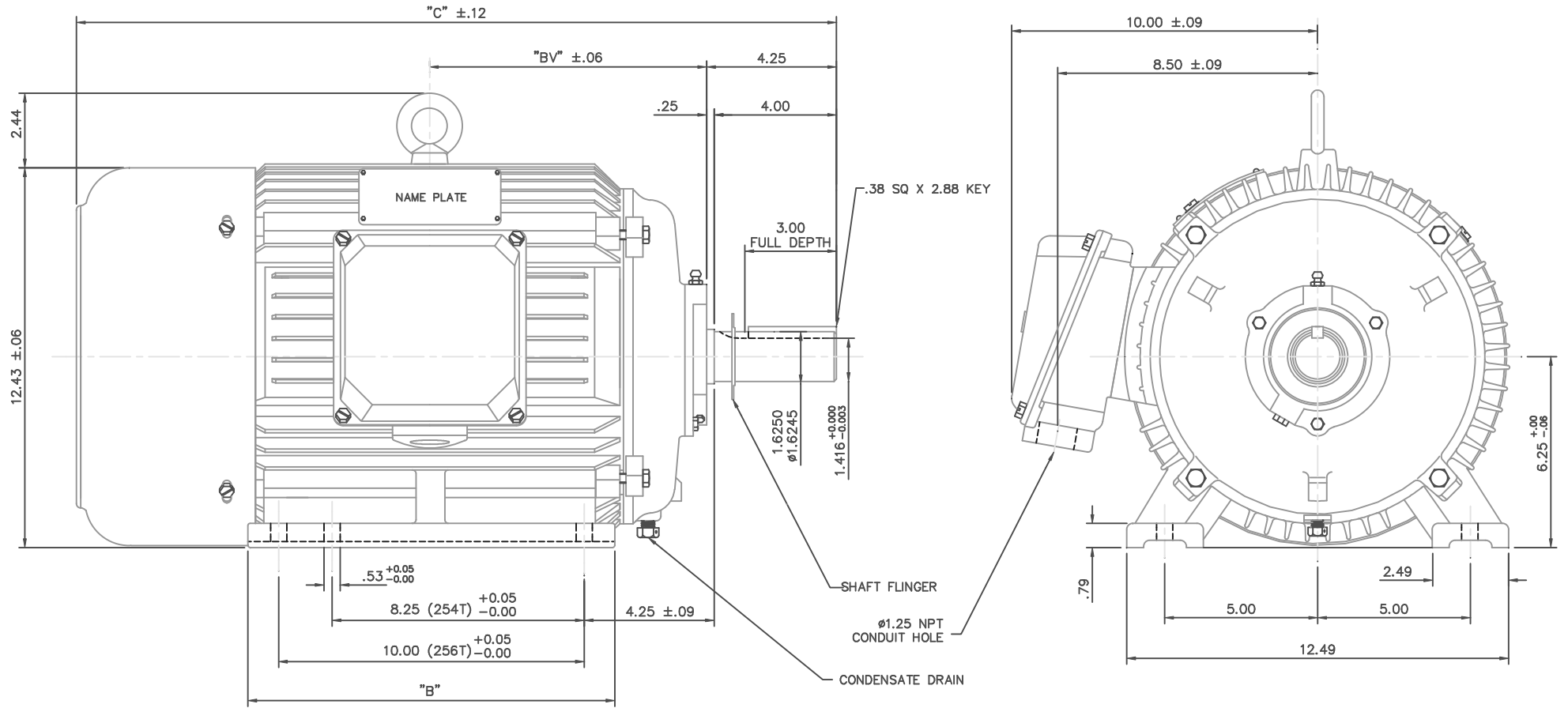
Nameplate Specifications

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	1.15 & 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	6309	Opp Drive End Bearing Size	6308
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	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	23.19 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1 ONLY
Connection Drawing	004172.01	Outline Drawing	16953860-254T

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

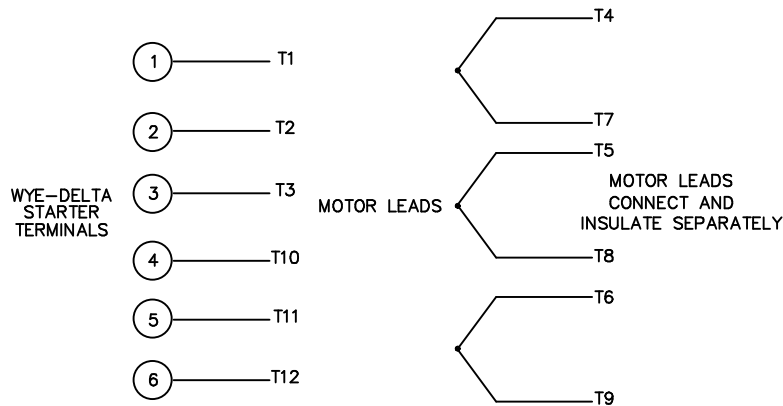
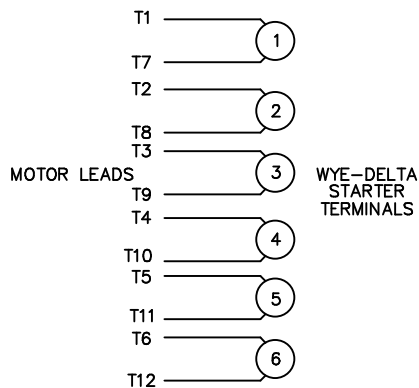
FRAME	"C"	"B"	"BV"
254T	23.19	10.25	8.19
256T	24.92	12.00	9.06

				TOLERANCES UNLESS OTHERWISE SPECIFIED		LEESON ELECTRIC CORPORATION	
				DEC.	INCHES	METRIC	
				.X	±.1	±2.5	DRAWN DRZ 05/22/01
				.XX	±.03	±.76	APPR.
				.XXX	±.005	±.127	R.F.P.
				.XXXX	±.0005	±.0127	SCALE 5=16
				FRACTIONS	±1/64	REF.	FINISH
				ANGLES	±1/2°	FMF	REV. 01
				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.		DRAWING NO. 169538-60	
				TITLE OUTLINE - 250 FRAME TEFC - RIGID, NEW CON-BOX		MATERIAL CAST IRON	
				REVISION		BY & DATE CH'KD.	
				O1 REDRAWN TO CURRENT CAD STANDARDS		CJK 8/3/01	

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

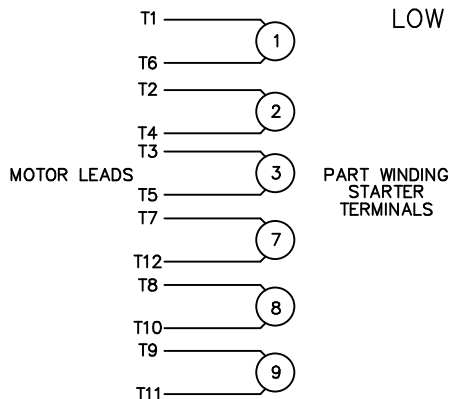
LOW VOLTAGE CONNECTION

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.



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	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			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	00417201	SIZE	DRAWING NO.	REV.
				DIST			A	004172-01	03



CERTIFICATION DATA SHEET

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

CATALOG #: 170122.60

CONN. DIAGRAM: 004172.01
OUTLINE: 16953860-254T
WINDING #: T12906018 1

MOUNTING: F1 ONLY

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	1.15/1.15	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	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	6308						

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

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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

Data Sheet

Date: 1/23/2018

170122.60



Data @ **460 V**

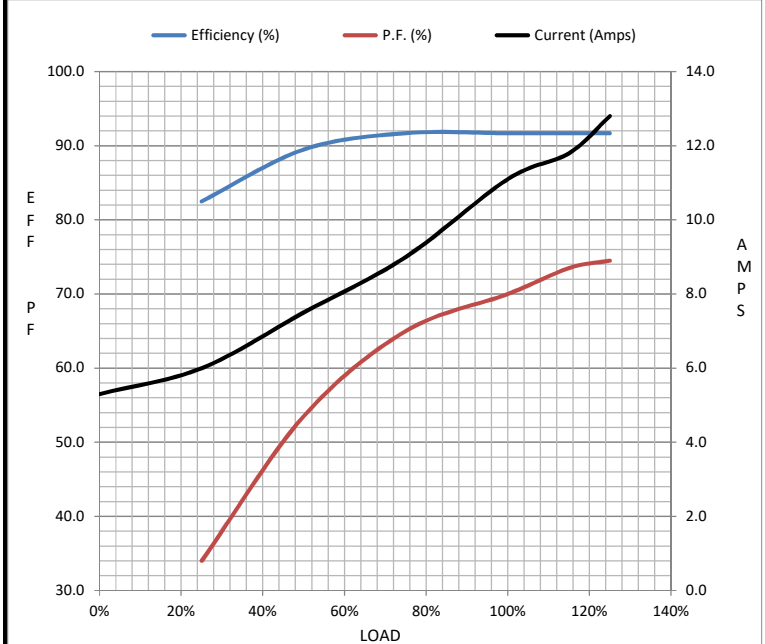
Motor Load Data

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 wk ²	2.47 Lb-Ft ²			
Ref Wdg	T12906018 NONE			
Sound Pressure @ 1M	52 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	16953860			
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

