

PRODUCT INFORMATION PACKET



Model No: 170154.60

Catalog No: 170154.60

WATTSaver® General Purpose Motor, 125 & 100 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
3600 & 3000 RPM, 404TS Frame, DP



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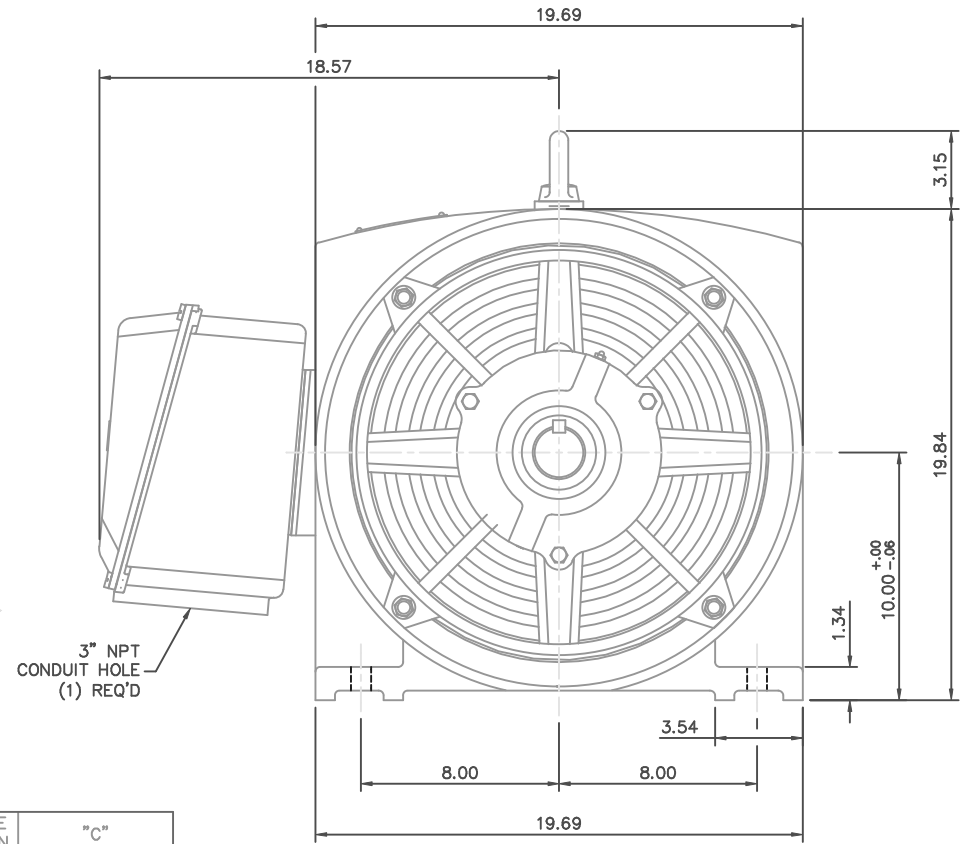
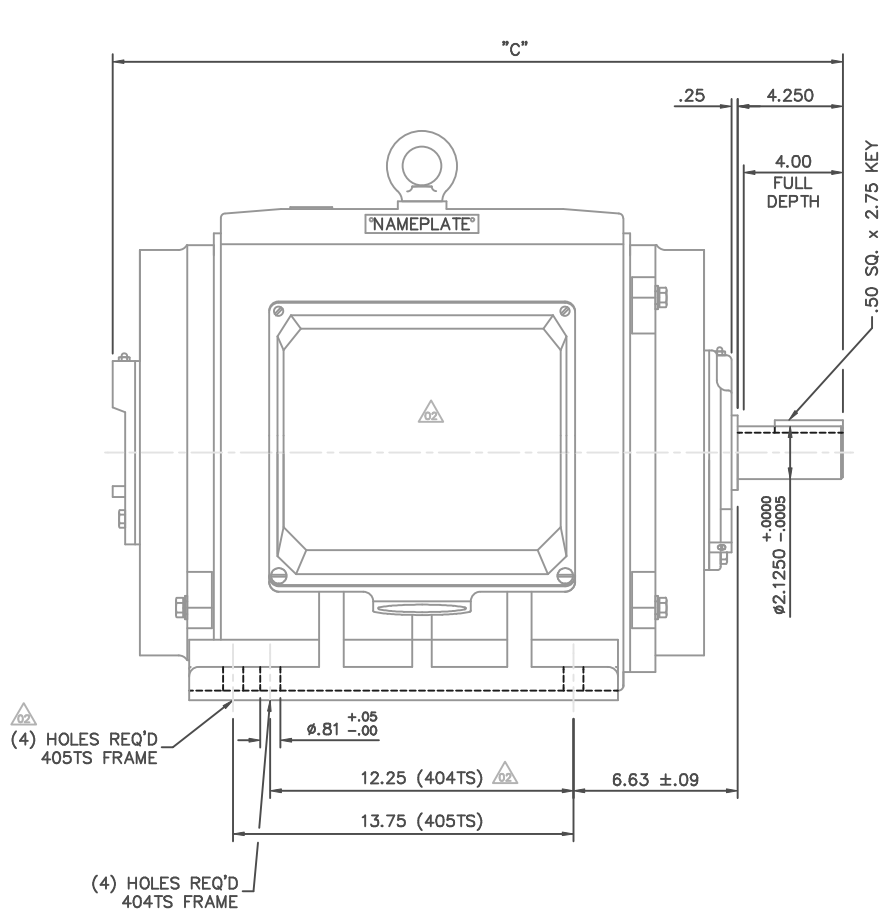


Nameplate Specifications


Phase	3	Output HP	125 & 100 Hp
Output KW	93.0 & 75.0 kW	Voltage	230/460 & 190/380 V
Speed	3560 & 2960 rpm	Service Factor	1.15 & 1.15
Frame	404TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	94.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	284/142 & 274/137 A	Power Factor	87
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6316	Opp Drive End Bearing Size	6314
UL	Recognized	CSA	Y
CE	N	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	.0366 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	29.76 in
Shaft Diameter	2.125 in	Shaft Extension	4.25 in
Assembly/Box Mounting	F1 ONLY	Inverter Load	CONSTANT 10:1
Connection Drawing	004172.01	Outline Drawing	16955960



FRAME DESIGN	"C"
404TS	29.76
405TS	31.26

			TOLERANCES UNLESS SPECIFIED			ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN JJK 04/06/99	
			DEC.	INCHES			CHK JK 04/06/99	
			.X	±.1	TITLE	OUTLINE-400TS FRAME DRIP PROOF- RIGID	APPD PG 04/07/99	
			.XX	±.01			SCALE	
02	405TS FRAME WAS 6 HOLES & REMOVE LEESON LOGO	LST 10/2/02	.XXX	±.005	MAT'L	CAST IRON	REF 169520	
01	ADDED HOLES FOR 405TS BASE	JK 07/16/99	.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 16955960			SIZE B	DRAWING NO. 169559-60
			DIST					REV. 02

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

LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



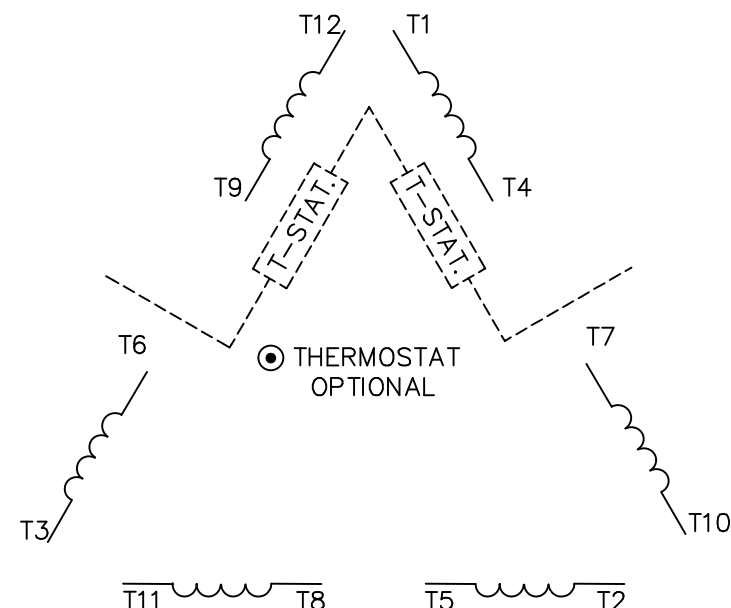
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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	

TOLERANCES
UNLESS SPECIFIED

DEC. INCHES

.X ±.1

.XX ±.01

.XXX ±.005

.XXXX ±.0005

ANG ±1/2"



ELECTRIC MOTORS
GEARMOTORS
AND DRIVES

DRAWN WLW 09/08/77

CHK RPB 09/12/77

APPD JCW 09/12/77

SCALE 1=1

REF

FMF

PREV

NO.	REVISION	BY & DATE	CHK	ANG
03	REV'D LOW VOLTAGE CONN. LEADS PER ELEC.	BJB 06/07/00	.XX	±.01
02	ADDED T-STAT. NOTES PER ELECTRICAL	KMM 06/02/98	.XXX	±.005
01	REDRAWN TO CAD	DBT 06/02/97	.XXXX	±.0005

TITLE DELTA - WYE CONNECTION DIAGRAM

MAT'L.

FINISH

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RFP

DIST

CAD FILE 00417201

SIZE

A

DRAWING NO.

004172-01

REV.

03



CERTIFICATION DATA SHEET

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

CATALOG #: 170154.60

CONN. DIAGRAM: 004172.01

OUTLINE: 16955960

MOUNTING: F1 ONLY

WINDING #: T19602010 DR 3 A

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
125&100	93.0&75.0	3600	3560&2960	404TS	DP	F	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	284/142&274/137	Y START D RUN OR INV	CONTINUOUS	F5	1.15/1.15	40

FULL LOAD EFF:	94.5	3/4 LOAD EFF:	94.5	1/2 LOAD EFF:	94.1	GTD. EFF		ELEC. TYPE
FULL LOAD PF:	87	3/4 LOAD PF:	86	1/2 LOAD PF:	81.5	93.6		SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
184.5 LB-FT	1630 / 815	274 LB-FT 149 %	501 LB-FT 272 %	-

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
- dBA	- dBA	- LB-FT^2	- LB-FT^2	15 SEC.	2	1015 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	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6316	6314						

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: 1/19/2018

170154.60



Data @ 460 V

Motor Load Data

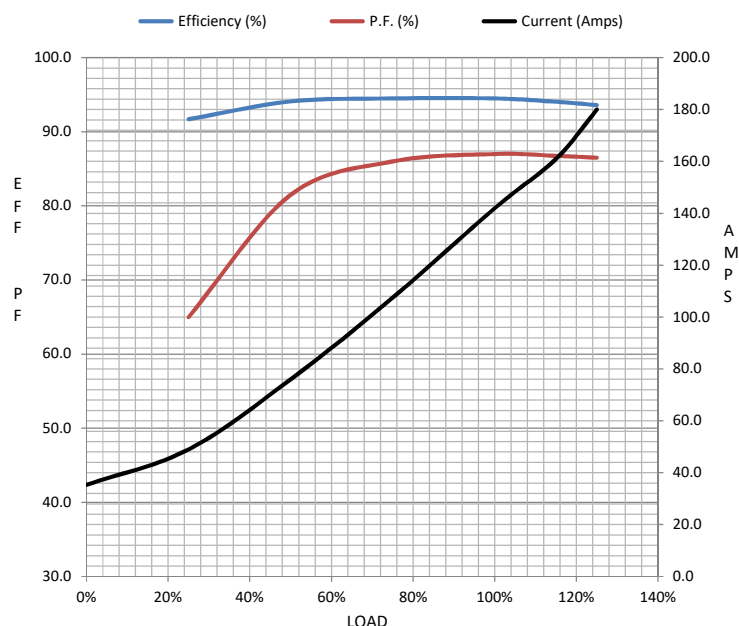
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	35.3	49.0	76.0	108	142	161	180	815	
Torque (ft-lb)	0.00	45.5	91.5	138	185	208	232	274	
RPM	3600	3590	3580	3570	3560	3,554	3545	0	
Efficiency (%)		91.7	94.1	94.5	94.5	94.1	93.6		
P.F. (%)	6.5	65.0	81.5	86.0	87.0	86.8	86.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1155	3385	3560	3600
Current (Amps)	815	768	500	142	35.3
Torque (ft-lb)	274	224	501	185	0.00

Information Block

HP	125.0			
Sync. RPM	3600			
Frame	404			
Enclosure	DP			
Construction	TDC			
Voltage	230/460#190/380	V		
Frequency	60	Hz		
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	63	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	0.00	Lb-Ft²		
Ref Wdg	T19602010 DR			
Sound Pressure @ 1M	999	dBA		
VFD Rating	CONSTANT 10:1			
Outline Dwg	16955960			
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

