

PRODUCT INFORMATION PACKET



Model No: 170031.60

Catalog No: 170031.60

WATTSaver® General Purpose Motor, 75 & 60 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V,
1800 & 1500 RPM, 365T Frame, TEFC



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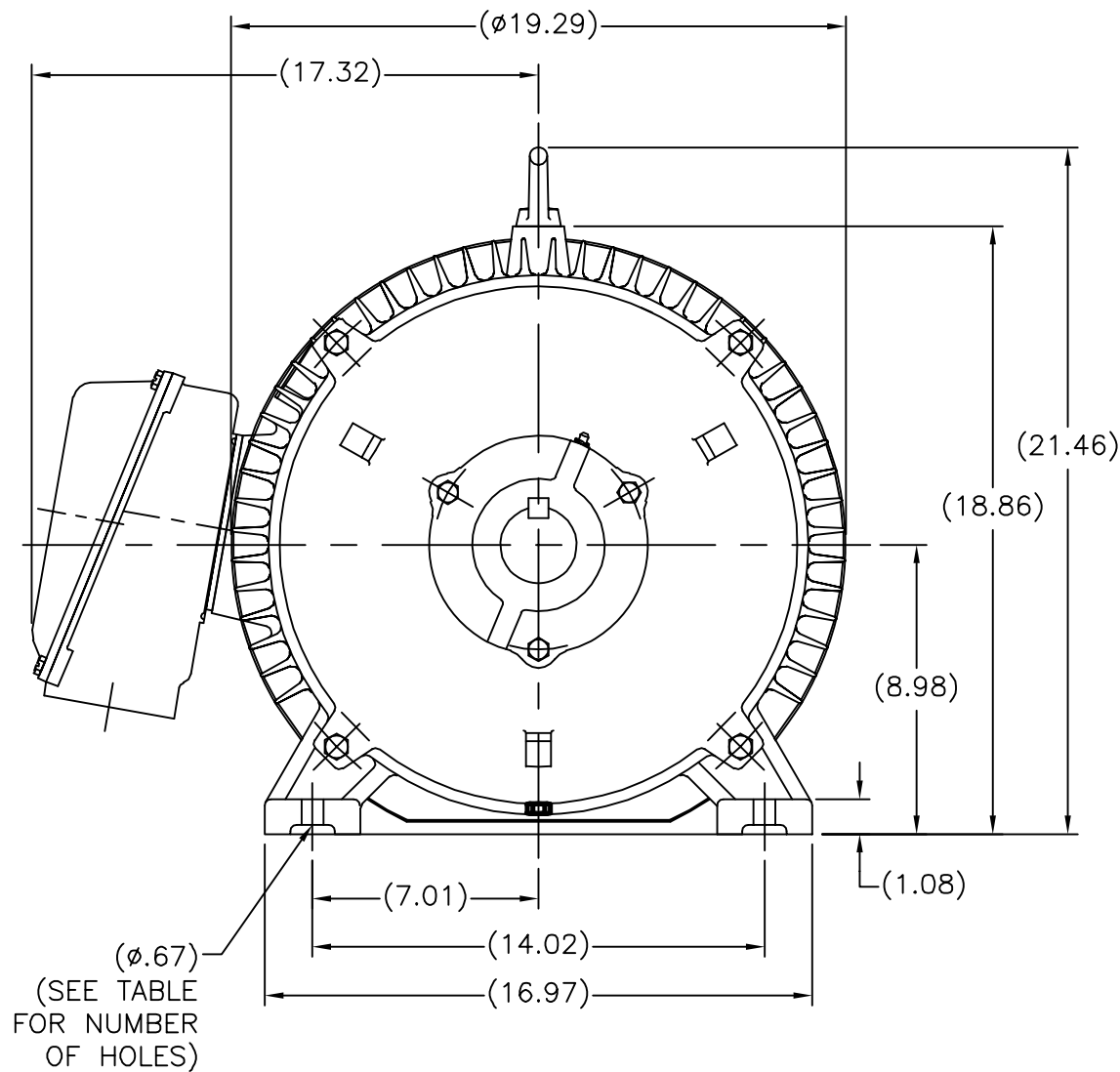
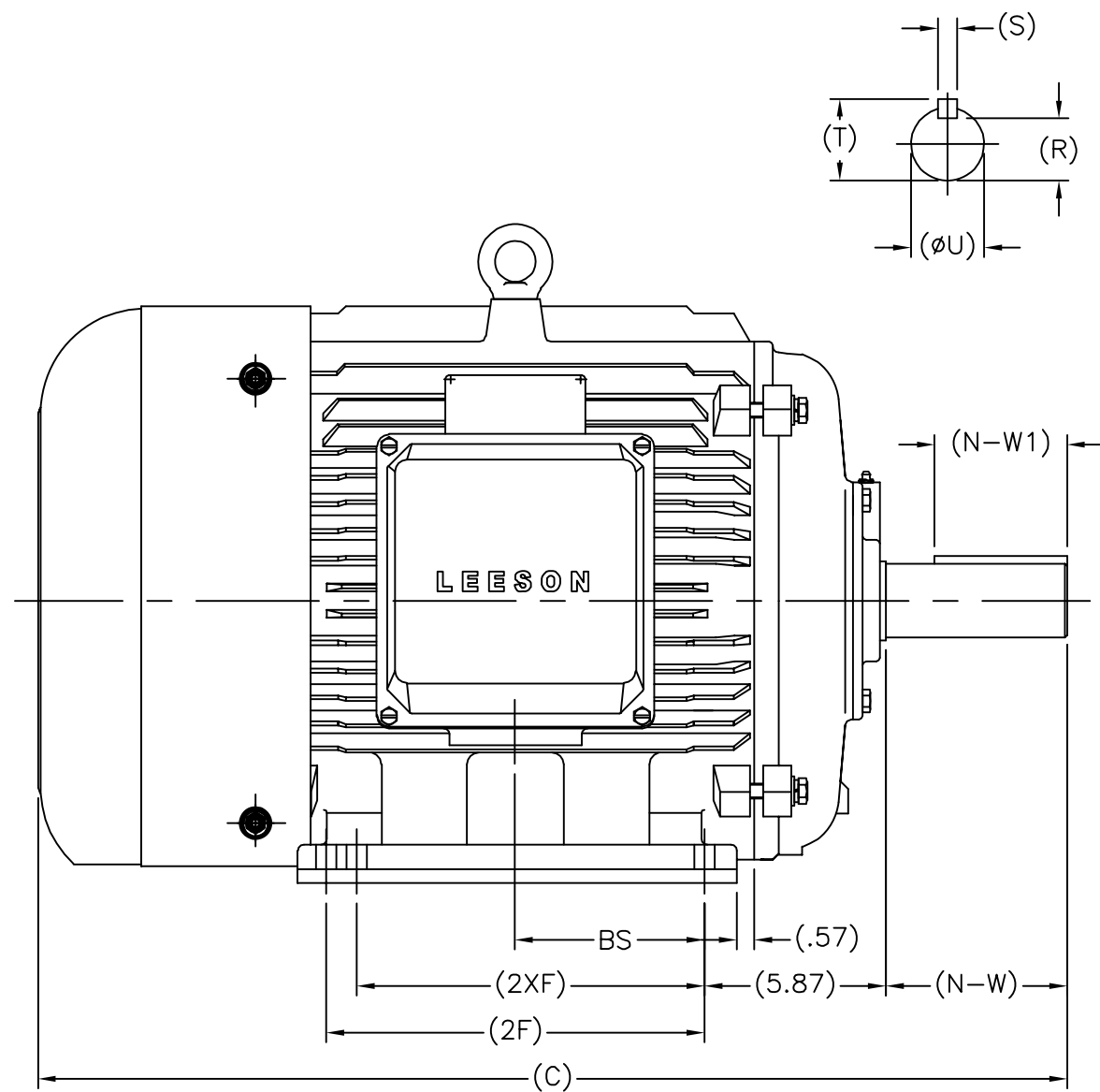
Nameplate Specifications


Phase	3	Output HP	75 & 60 Hp
Output KW	56.0 & 45.0 kW	Voltage	208-230/460 & 190/380 V
Speed	1785 & 1485 rpm	Service Factor	1.15 & 1.15
Frame	365T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostat	Efficiency	95.8 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	187-171/85.5 & 166/83 A	Power Factor	85.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
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	4	Rotation	Reversible
Resistance Main	.0509 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	33.31 in
Shaft Diameter	2.375 in	Shaft Extension	5.88 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Outline Drawing	SS622180LE	Connection Drawing	004172.01

SS622180LE

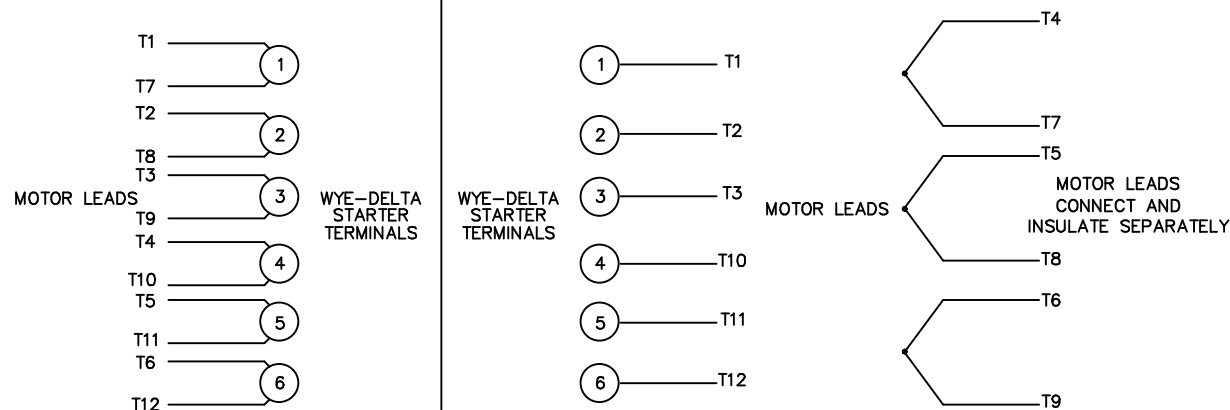


												TOLERANCES UNLESS SPECIFIED		 REGAL-BELOIT CORPORATION		DRAWN MSG 02/13/2007								
												DEC.	INCHES			CHK	ML 02/16/2007							
												.X	±.1			APPD	SB 02/23/2007							
NT364TS-2	30.20	11.26	---	4	3.74	2.05	1.87	1.59	0.50	2.09	---		.XX	±.03	TITLE OUTLINE 360 FR. - TEFC - (REDESIGNED)	SCALE	N/A							
NT365TS-2	31.18	12.24	11.26	6									.XXX	±.005				REF						
NT364T-4, 6	32.32	11.26	---	4	5.87	4.29	2.37	2.01	0.63	2.64	5.60 6.10	1	.XXXX	±.0005	MAT'L.	FMF	HEBEI							
NT365T-4, 6	33.31	12.24	11.26	6								NO.	ANG	±7°30"				PREV						
												REVISION		BY & DATE	CHK	ANG	±7°30"							
												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 SS622180LE		SIZE	DRAWING NO.	PAGE 1 OF 1	REV.				
FRAME	C	2F	2XF	HOLES	N-W	N-W1	øU	R	S	T	BS			DIST			A	SS622180LE		1				

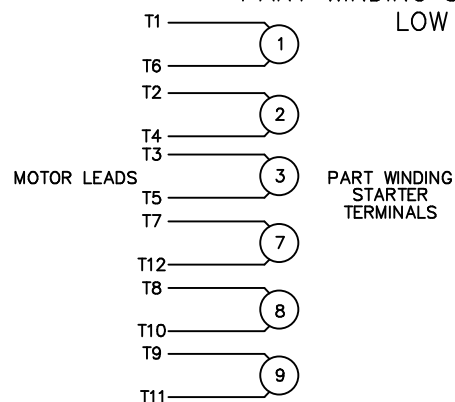
WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



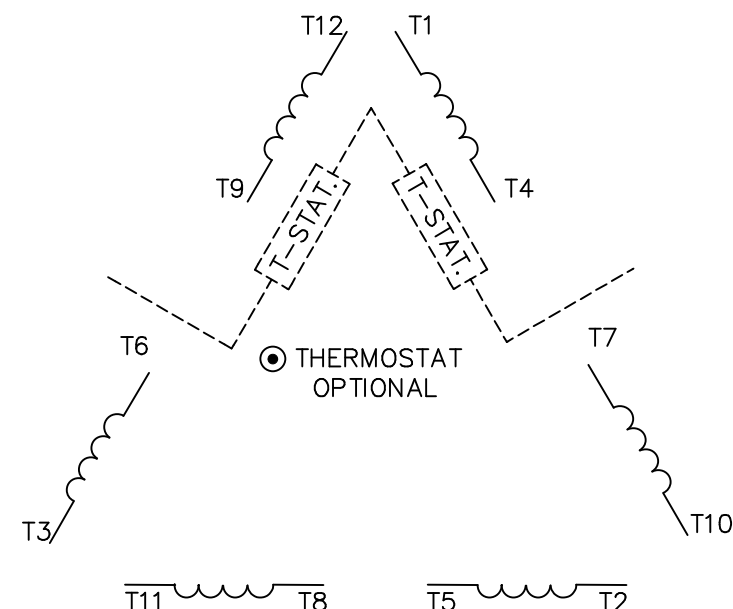
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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

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

CATALOG #: 170031.60

CONN. DIAGRAM: 004172.01

OUTLINE: SS622180LE

MOUNTING: F1/F2 CAPABLE

WINDING #: T18304018 FR 3 A

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
75&60	56.0&45.0	1800	1785&1485	365T	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	208-230/460&190/380	187-171/85.5&166/83	Y START D RUN OR INV	CONTINUOUS	F5	1.15/1.15	40

FULL LOAD EFF:	95.8	3/4 LOAD EFF:	95.8	1/2 LOAD EFF:	95.4	GTD. EFF		ELEC. TYPE
FULL LOAD PF:	85.5	3/4 LOAD PF:	83	1/2 LOAD PF:	75.5	95		SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
221 LB-FT	1120 / 560	393 LB-FT 178 %	586 LB-FT 266 %	62.5

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	20 SEC.	2	- 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
6313	6313						

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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S

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

*

PREPARED BY: Radha Saikrishna Tanikella

DATE: 08/06/2018 12:08:29 AM

FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 1/22/2018

170031.60



Data @ 460 V

Motor Load Data

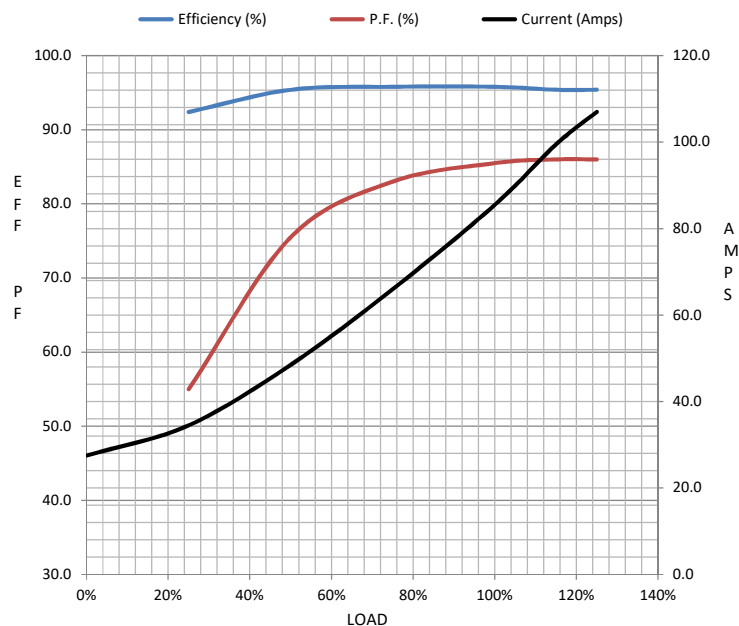
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	27.5	34.5	48.5	66.0	85.5	99.5	107	560	
Torque (ft-lb)	0.00	5.5	110	165	221	254	277	393	
RPM	1800	1797	1795	1790	1785	1,780	1777	0	
Efficiency (%)		92.4	95.4	95.8	95.8	95.4	95.4		
P.F. (%)	4.5	55.0	75.5	83.0	85.5	86.0	86.0	29.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1300	1745	1785	1800
Current (Amps)	560	459	287	85.5	27.5
Torque (ft-lb)	393	310	586	221	0.00

Information Block

HP	75.0			
Sync. RPM	1800			
Frame	365			
Enclosure	TEFC			
Construction	TFC			
Voltage	208-230/460#190/380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.00 Lb-Ft²			
Ref Wdg	T18304018 FR			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	SS622180LE			
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

