

PRODUCT INFORMATION PACKET



Model No: 171588.60

Catalog No: 171588.60

General Purpose Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V, 3600 & 3000 RPM,
256TC Frame, TEFC



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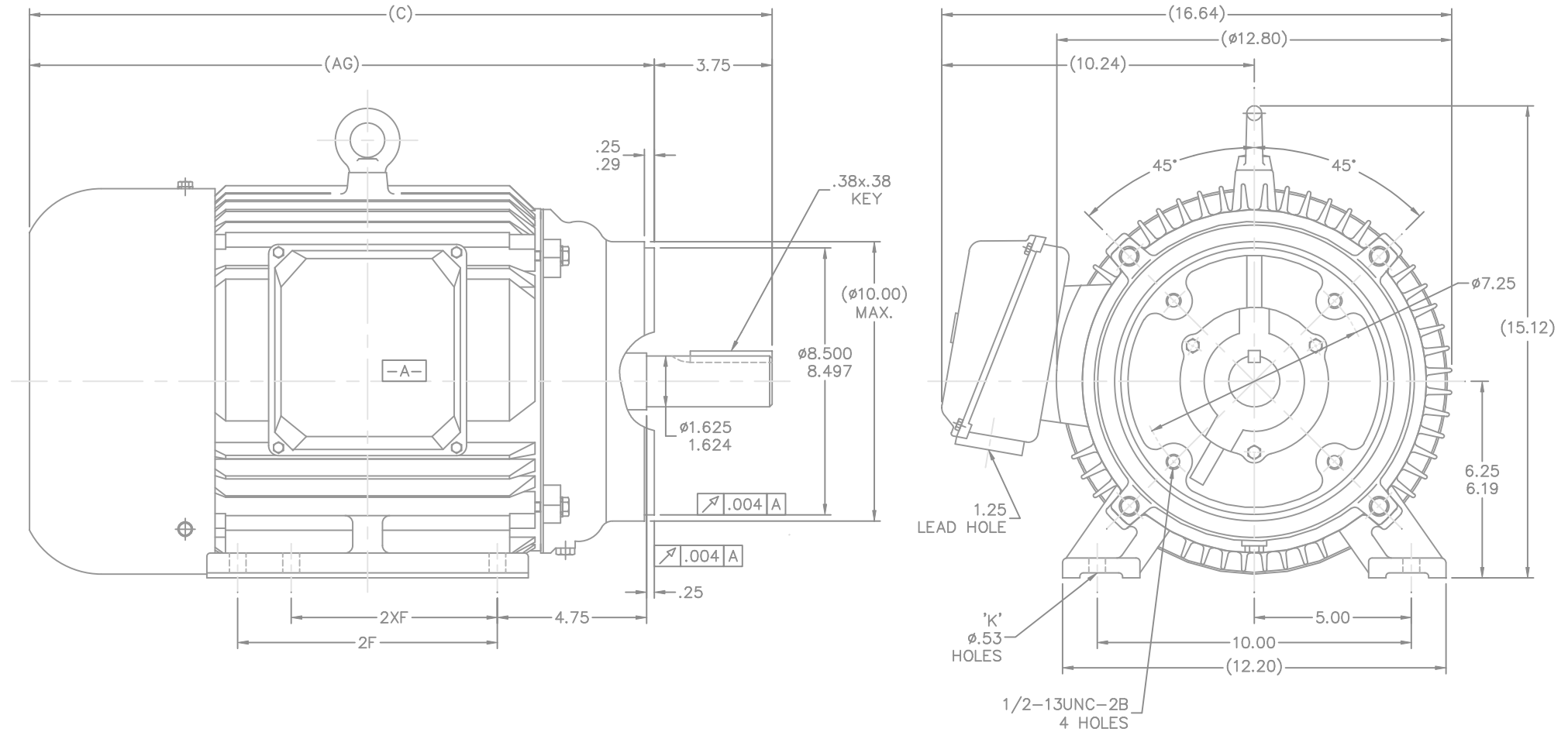


Nameplate Specifications

Phase	3	Output HP	20 & 15 Hp
Output KW	14.9 & 11.2 kW	Voltage	208-230/460 & 190/380 V
Speed	3550 & 2960 rpm	Service Factor	1.15 & 1.15
Frame	256TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostat	Efficiency	92.4 & 92.4 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	50.8-46/23 & 40.4/20.2 A	Power Factor	88.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6308
UL	Recognized	CSA	N
CE	N	IP Code	43
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	.295 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	25.48 in
Shaft Diameter	1.625 in	Shaft Extension	4 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 10:1
Outline Drawing	SS622044LE-N256TC-2	Connection Drawing	004172.01



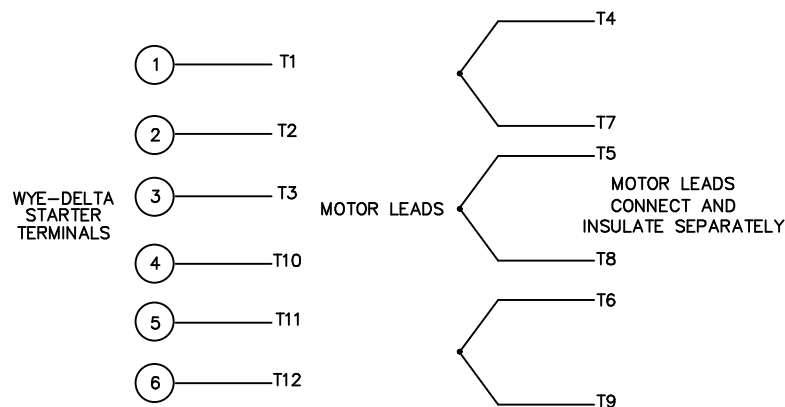
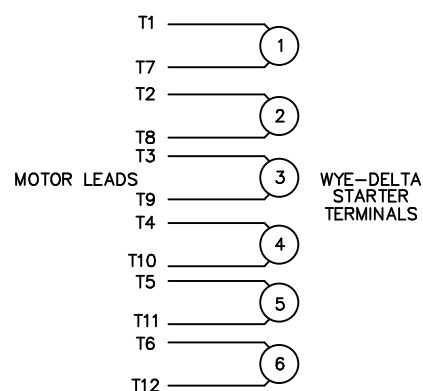
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									TOLERANCES UNLESS SPECIFIED			ELECTRIC MOTORS GEARMOTORS AND DRIVES		DRAWN MSG 08-11-2005	
									DEC.	INCHES				CHK	ML
									.X	$\pm .1$				APPD	LMC
									.XX	$\pm .03$		TITLE OUTLINE		SCALE 3=8	
									.XXX	$\pm .005$		254/6TC FRAME - C'FACE		REF	
									.XXX	$\pm .0005$		MAT'L		FMT	
									CHK	ANG	$\pm 7'30"$	FINISH		PREV 250013670-3700	
NO. REVISION									BY & DATE			CAD FILE ss622044le		SIZE	DRAWING NO.
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									DIST	LB				SS622044LE	

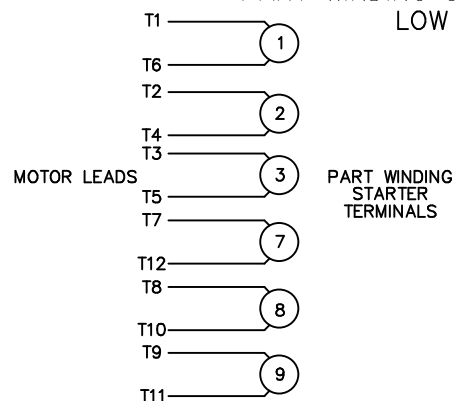
WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



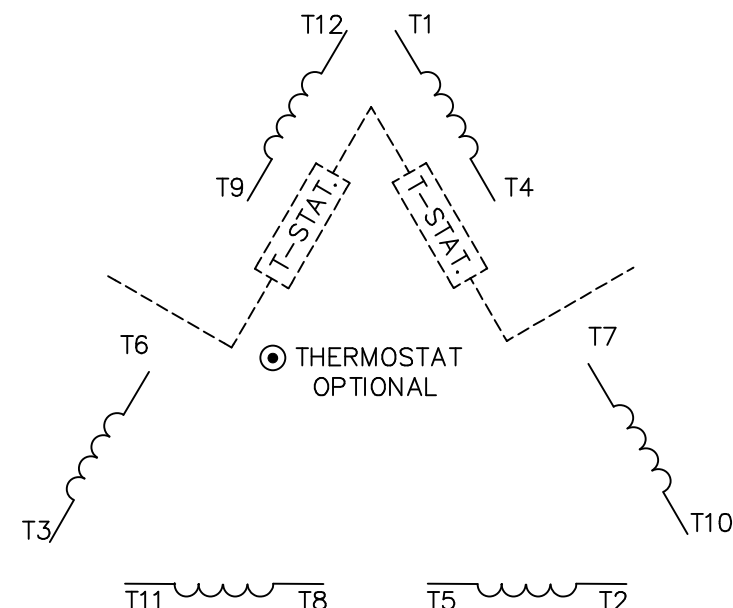
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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



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



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: 004172.01
OUTLINE: SS622044LE
WINDING: T12902023

CAT #: 171588.60

FR 3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	3600	3550	256TC	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	208-230/460#190/380	50.8-46/23&40.4/20.2	START D RUN OR INV	CONT	F	1.15	40	3300

F.L. EFF	92.8	3/4 LD EFF	92.6	1/2 LD EFF	92.0	GTD EFF	0.0	ELECT. TYPE	SQ CAGE INV RATED
F.L. PF	88.5	3/4 LD PF	87.3	1/2 LD PF	81.9				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
30.0 LB-FT	145	75.4 LB-FT 251%	81.4 LB-FT 271%	60

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
69 dBA	78 dBA	2.00 LB-FT²	2 LB-FT²	0 SEC.	3	0 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	N - LEESON WATTS

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	CAST IRON
BALL	BALL						
6309	6308						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0	0	0	0	0	0.150	ODE

* N O T E S *			INVERTER TORQUE: CONSTANT 10:1 INV. HP SPEED RANGE: NONE
* N O T E S *			ENCODER: NONE NONE NONE NONE PPR
DATE: 1/23/2018			BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE UL: V-INS, CONST UL REC

Data Sheet

Date: 1/23/2018

171588.60



Data @ 460 V

Motor Load Data

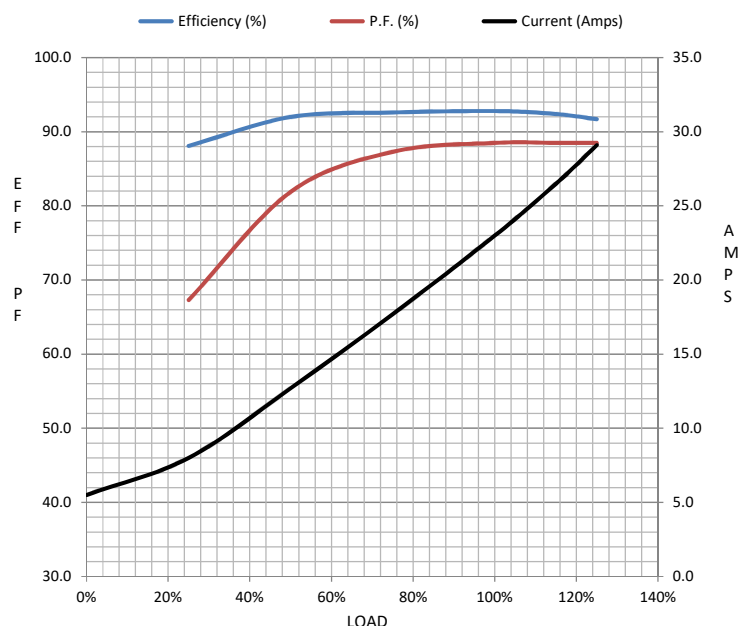
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	5.5	8.0	12.7	17.7	23.0	26.5	29.1	145	
Torque (ft-lb)	0.00	7.5	15.0	22.5	30.0	34.5	37.5	75.4	
RPM	3600	3589	3578	3566	3550	3,545	3539	0	
Efficiency (%)		88.1	92.0	92.6	92.8	92.4	91.7		
P.F. (%)	9.9	67.3	81.9	87.3	88.5	88.5	88.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3312	3550	3600
Current (Amps)	145	133	87.0	23.0	5.5
Torque (ft-lb)	75.4	54.8	81.4	30.0	0.00

Information Block

HP	20.0			
Sync. RPM	3600			
Frame	256			
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	60	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	2.00	Lb-Ft²		
Ref Wdg	T12902023 FR			
Sound Pressure @ 1M	69	dBA		
VFD Rating	CONSTANT 10:1			
Outline Dwg	SS622044LE			
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

