

PRODUCT INFORMATION PACKET



Model No: 171507.60

Catalog No: 171507.60

General Purpose Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,
284TC Frame, TEFC



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Nameplate Specifications

Phase	3	Output HP	25 & 20 Hp
Output KW	18.7 & 14.9 kW	Voltage	230/460 & 190/380 V
Speed	1770 & 1480 rpm	Service Factor	1.15 & 1.15
Frame	284TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93.6 & 93 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	59/29.5 & 60/30 A	Power Factor	84.4
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6309
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

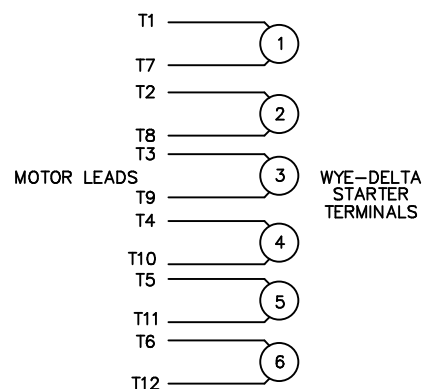
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Wye Start Delta Run Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.058 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	26.26 in
Shaft Diameter	1.875 in	Shaft Extension	4.62 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Outline Drawing	SS622299	Connection Drawing	00417201



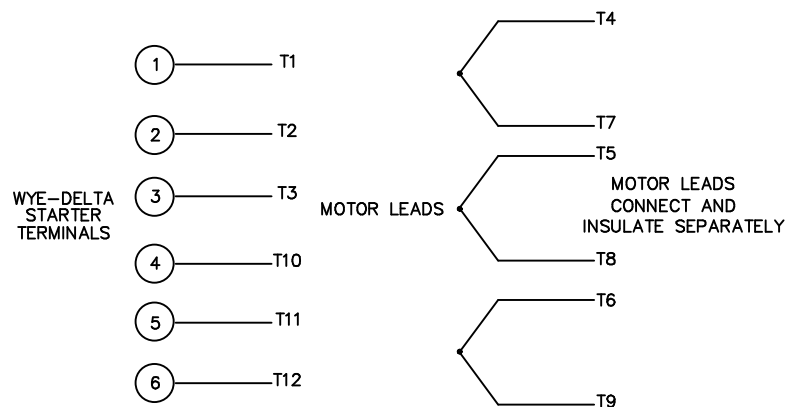
				TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN MOL 03-22-2011				
				DEC.	INCHES		CHK MOL 03-22-2011				
				.X	±.1		APPD SB 03-22-2011				
				.XX	±.03		SCALE 1=4				
				.XXX	±.005		REF CM DWG 169579-60				
C	REV'D PER CM DWG 169579-60 ECO-0117390	WGJ 01-31-17	EMH	.XXXX	±.0005	MAT'L.			FMF		
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	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 SS622299		SIZE	DRAWING NO.	PAGE OF	REV.
			DIST					B	SS622299		C

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

LOW VOLTAGE CONNECTION

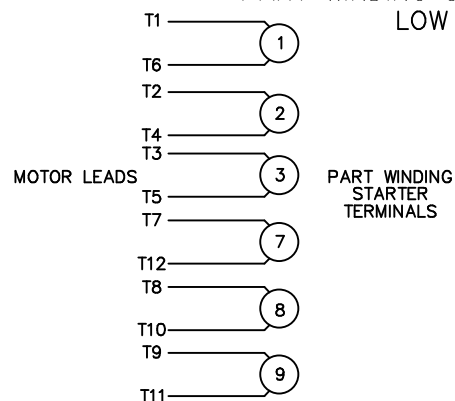


HIGH VOLTAGE CONNECTION



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

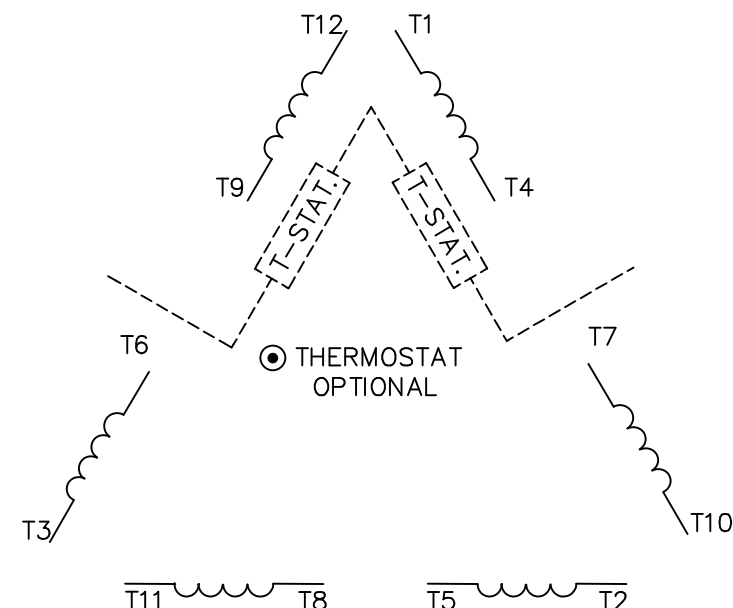
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



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		 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



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: 00417201
OUTLINE: SS622299
WINDING: T14504005

CAT #: 171507.60

NONE 3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	1800	1770	284TC	TEFC	TFC	H	A

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	59/29.5&60/30	Y START D RUN OR INV	CONT	F	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	94.1	1/2 LD EFF	93.6	GTD EFF	92.4	ELECT. TYPE	SQ CAGE INV RATED
F.L. PF	84.4	3/4 LD PF	80.0	1/2 LD PF	69.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
73.5 LB-FT	200	145 LB-FT 197%	225 LB-FT 306%	44

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	4.2 LB-FT²	0 LB-FT²	20 SEC.	2	394 LB.

*** SUPPLEMENTAL INFORMATION ***

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

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
6311	6309						

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	0.080	ODE

* N O T E S *			INVERTER TORQUE: CONSTANT 10:1 INV. HP SPEED RANGE: NONE
			ENCODER: NONE NONE NONE
			BRAKE: NONE NONE NONE
			FT-LB: NA VOLTAGE: NONE UL: Y-(LEESON UL REC)
DATE: 1/19/2018			HZ:

Data Sheet

Date: 1/19/2018

171507.60



Data @ 460 V

Motor Load Data

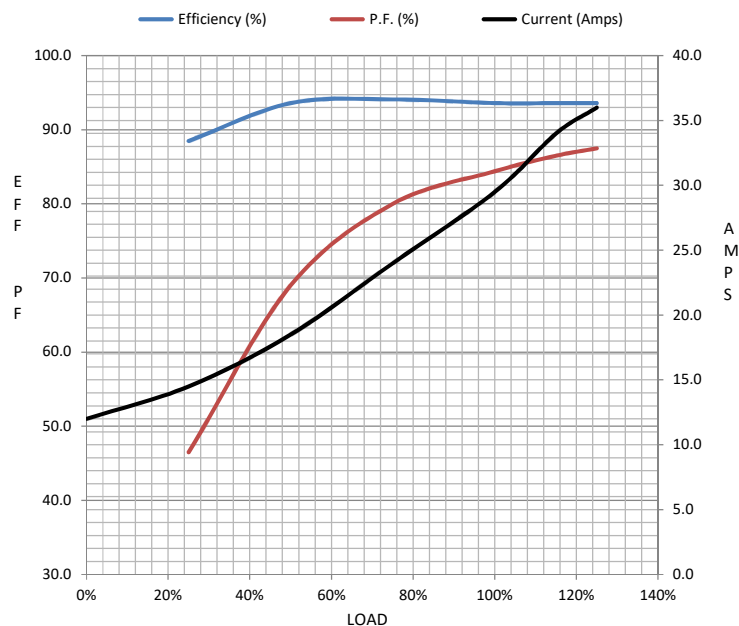
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	12.0	14.5	18.5	24.0	29.5	34.0	36.0	200	
Torque (ft-lb)	0.00	18.6	37.5	56.0	73.5	84.5	93.5	145	
RPM	1800	1792	1783	1775	1770	1,767	1762	0	
Efficiency (%)		88.5	93.6	94.1	93.6	93.6	93.6		
P.F. (%)	5.5	46.5	69.0	80.0	84.4	86.5	87.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1770	1800
Current (Amps)	200	180	130	29.5	12.0
Torque (ft-lb)	145	130	225	73.5	0.00

Information Block

HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460#190/380	V		
Frequency	60	Hz		
Design	A			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	44	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	4.2	Lb-Ft²		
Ref Wdg	T14504005 NONE			
Sound Pressure @ 1M	75	dBA		
VFD Rating	CONSTANT 10:1			
Outline Dwg	SS622299			
Conn. Diag	00417201			
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

