

PRODUCT INFORMATION PACKET



Model No: 171508.60

Catalog No: 171508.60

General Purpose Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,
286TC Frame, TEFC



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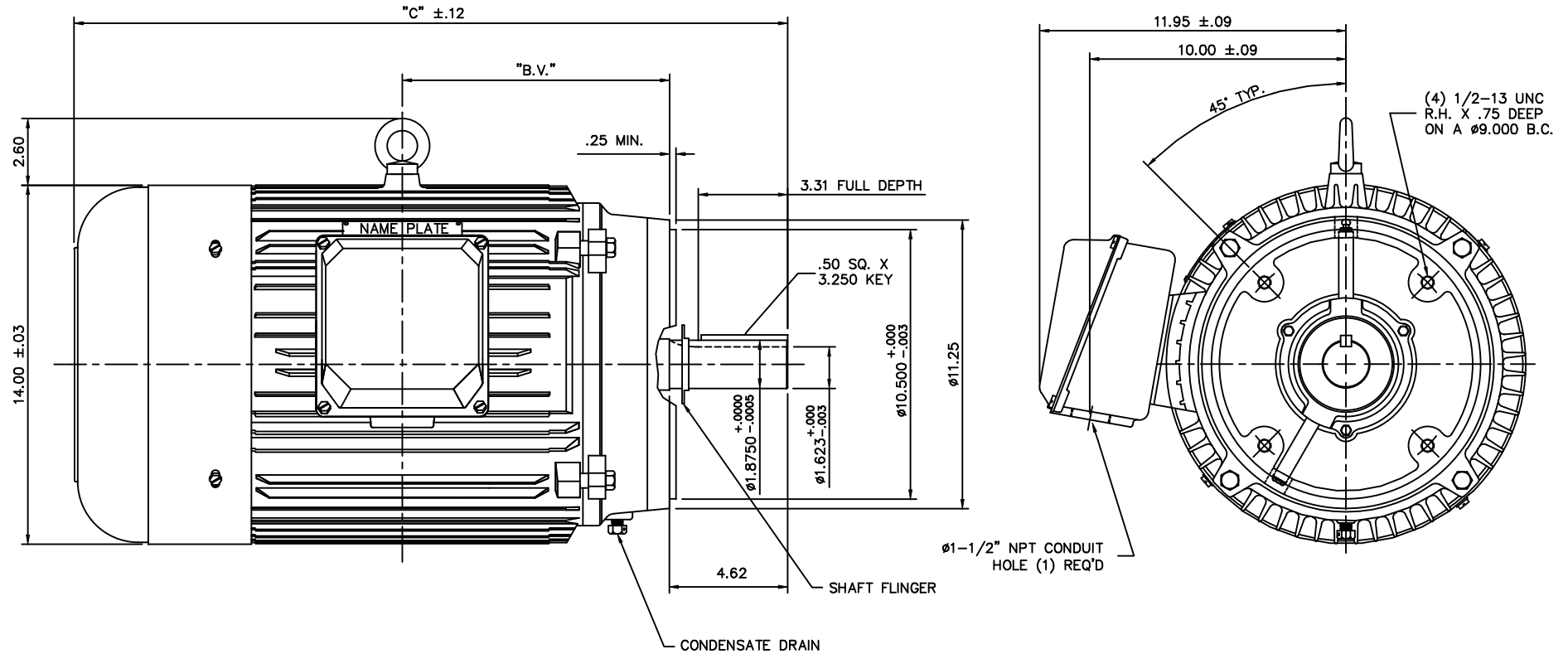


Nameplate Specifications

Phase	3	Output HP	30 & 25 Hp
Output KW	22.4 & 18.7 kW	Voltage	230/460 & 190/380 V
Speed	1770 & 1480 rpm	Service Factor	1.15 & 1.15
Frame	286TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.1 & 93 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	70/35 & 70/35.4 A	Power Factor	85
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	.052 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	16957960	Connection Drawing	00417201



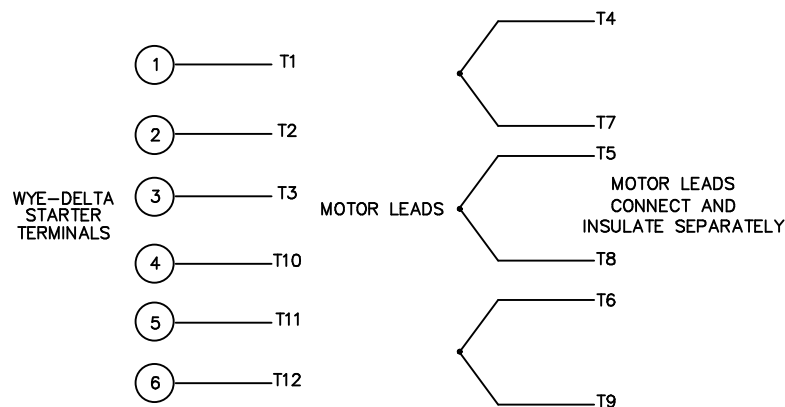
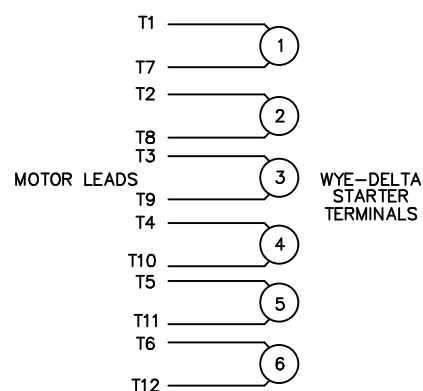
FRAME DESIGN	"C"	"BV"
284T	26.26	9.65
286T	27.83	10.43

				TOLERANCES UNLESS OTHERWISE SPECIFIED			LEESON ELECTRIC CORPORATION				
					DEC.	INCHES	METRIC				
					.X	±1	±2.5	DRAWN LEM 09/28/99	TITLE	OUTLINE 280T FRAME, TEFC "C" FACE	
					.XX	±.03	±.76	APPR.		NEW CONDUIT BOX	
					.XXX	±.005	±.127	R.F.P.	MAT'L	CAST IRON	
01	REDRAWN TO CURRENT CAD STANDARDS		CJK 7/19/01	.XXX	±.005	±.127					
NO.	REVISION		BY & DATE	CHK'D.	.XXXX	±.0005	±.0127	SCALE 1=4			
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								FRACTIONS	±1/64	REF.	FINISH
								ANGLES	±1/2°	FMF	REV. 01
											DRAWING NO. 169579-60

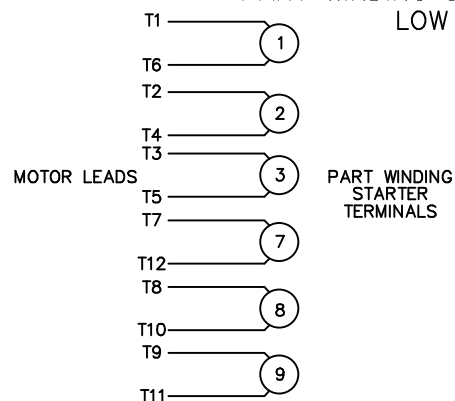
WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



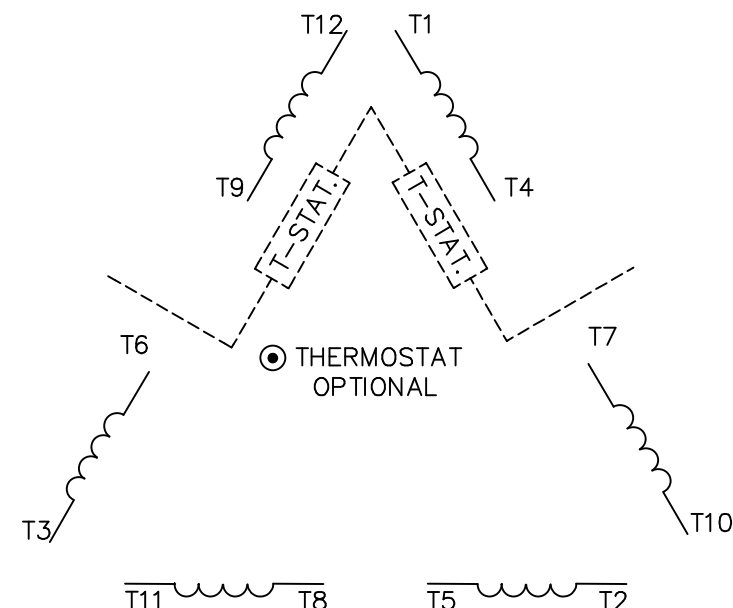
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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: 00417201
OUTLINE: 16957960
WINDING: T14504006

CAT #: 171508.60

NONE 3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	1800	1770	286TC	TEFC	TFC	H	A

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	70/35&71/35.5	Y START D RUN OR INV	CONT	F	1.15	40	3300

F.L. EFF	94.1	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	ELECT. TYPE
F.L. PF	85.0	3/4 LD PF	81.4	1/2 LD PF	71.7	93.0	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
89.0 LB-FT	240	172 LB-FT 193%	247 LB-FT 278%	46

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	4.7 LB-FT²	0 LB-FT²	20 SEC.	2	432 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	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
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 NONE PPR

DATE: 2/1/2018	BRAKE: NONE NONE NONE	
	FT-LB: NA VOLTAGE: NONE UL: Y-(LEESON UL REC)	
	HZ:	

Data Sheet

Date: 2/1/2018

171508.60



Data @ 460 V

Motor Load Data

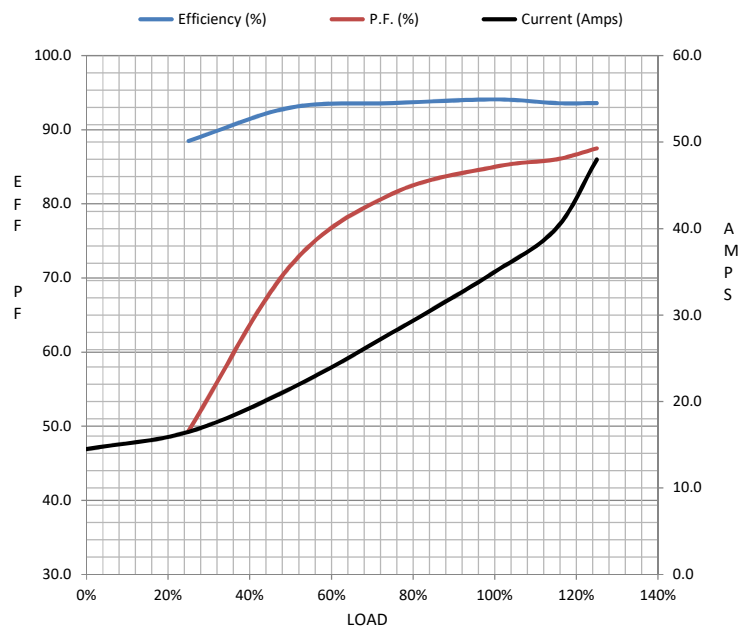
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	14.5	16.5	21.5	28.0	35.0	40.0	48.0	240	
Torque (ft-lb)	0.00	21.9	44.1	66.4	89.0	103	112	172	
RPM	1800	1792	1783	1775	1770	1,767	1762	0	
Efficiency (%)		88.5	93.0	93.6	94.1	93.6	93.6		
P.F. (%)	5.7	49.4	71.7	81.4	85.0	86.0	87.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1770	1800
Current (Amps)	240	215	150	35.0	14.5
Torque (ft-lb)	172	155	247	89.0	0.00

Information Block

HP	30.0			
Sync. RPM	1800			
Frame	286			
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	46	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	4.7	Lb-Ft²		
Ref Wdg	T14504006 NONE			
Sound Pressure @ 1M	75	dBa		
VFD Rating	CONSTANT 10:1			
Outline Dwg	16957960			
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

