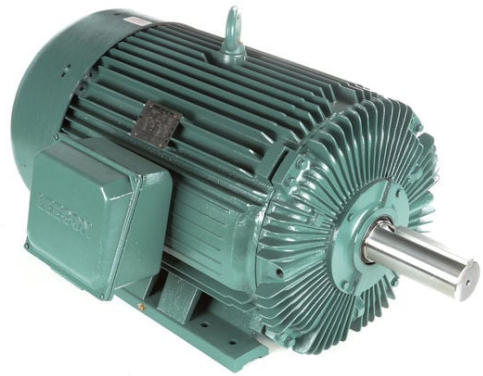
PRODUCT INFORMATION PACKET

Model No: 171807.60
Catalog No: 171807.60
Severe Duty Motor, 200 & 150 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1200 & 1000 RPM, 447/449T Frame, TEFC



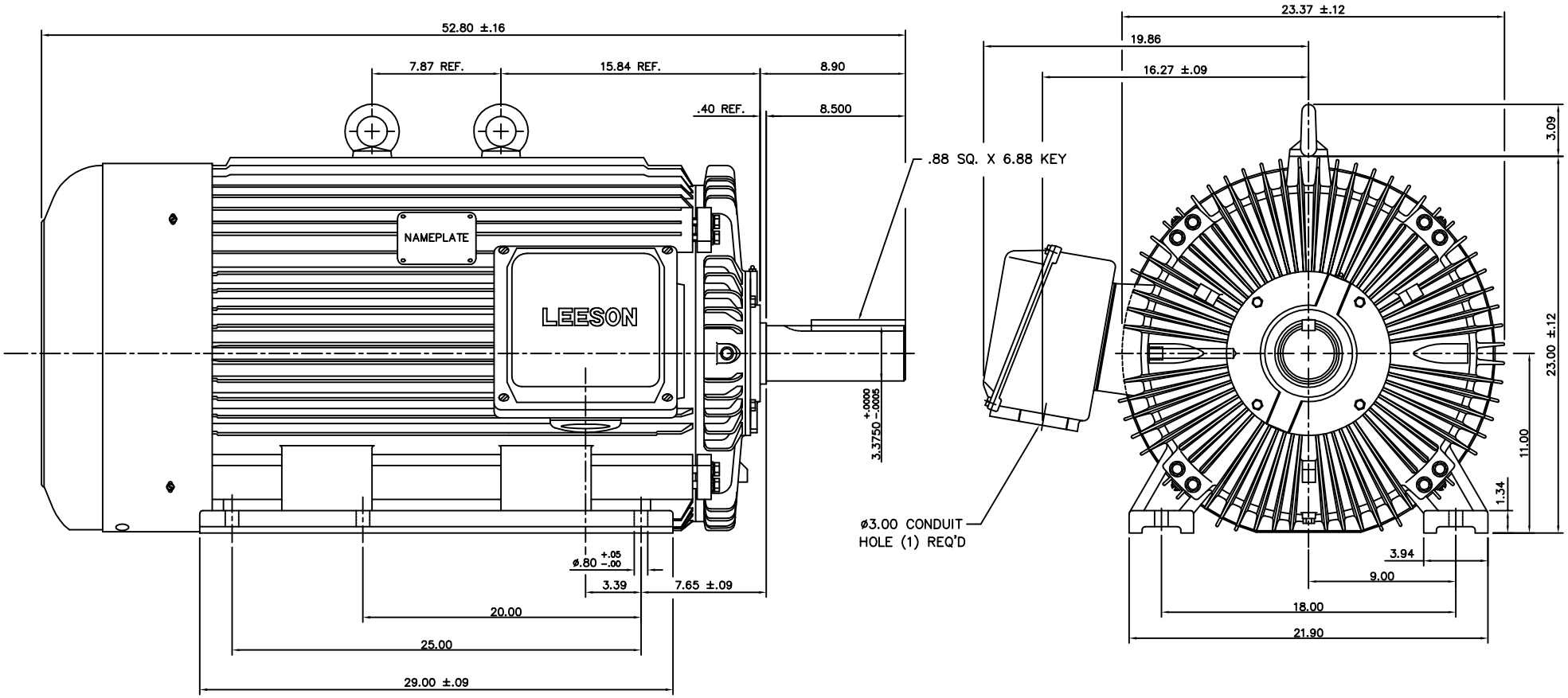
Nameplate Specifications

Phase	3	Output HP	200 & 150 Hp
Output KW	149.0 & 112.0 kW	Voltage	460 & 380 V
Speed	1193 & 995 rpm	Service Factor	1.15 & 1.15
Frame	447/449T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	96.2 & 96.2 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	241 & 220 A	Power Factor	80.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6317
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

Technical Specifications

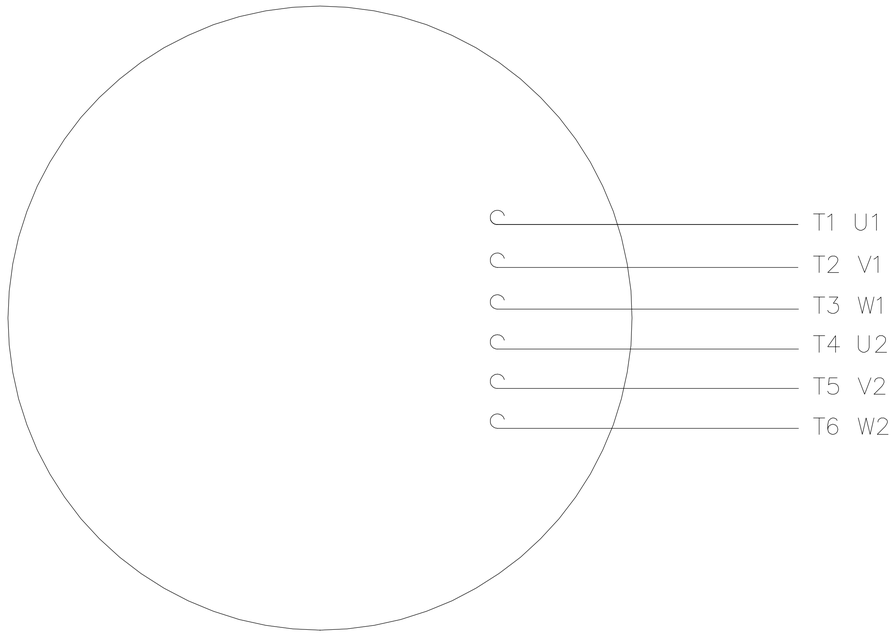
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Wye Start Delta Run Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.014 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	52.80 in
Shaft Diameter	3.375 in	Shaft Extension	8.5 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Connection Drawing	00519001	Outline Drawing	16958360

169583-60

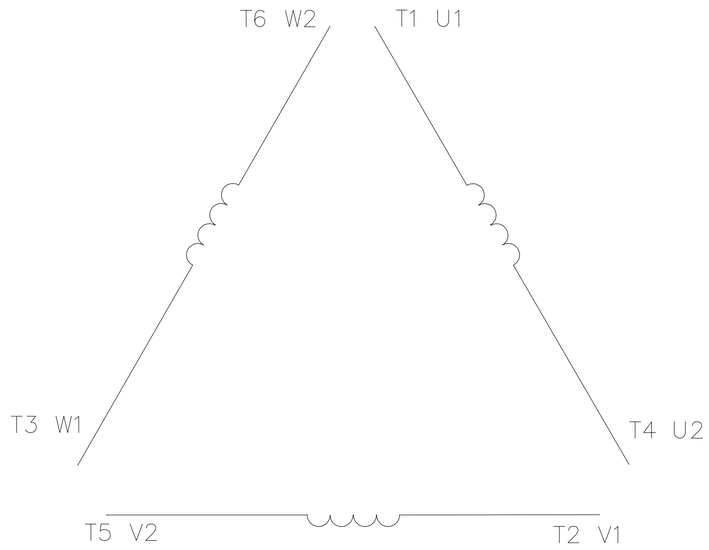


				TOLERANCES UNLESS OTHERWISE SPECIFIED		LEESON ELECTRIC CORPORATION	
				DECIMALS			
				.00	± .03	DRAWN LEM 10/04/99	TITLE OUTLINE – 449T FRAME TEFC – RIGID MOUNT MEETS NEC/UL REQ. CON-BOX VOL. = 9750
				.000	± .005	CH'K'D. ADS 11/08/99	
01	REDRAWN TO CURRENT CAD STANDARDS	CJK	09/17/01	.0000	± .0005	APPR. ADS 11/08/99	MAT'L. CAST IRON
NO.	REVISION	BY	DATE	FRACTIONS	± 1/64	SCALE 1=6	
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				ANGLES	± 1/2°	REF.	FINISH / SIZE B / DRAWING NO. 169583-60
				INCH/MM		FMF	

005190-01



LINE LEADS



	L1	L2	L3	JOIN
START (WYE)	T1 U1	T2 V1	T3 U2	(T4,T5,T6) (U2,V2,W2)
RUN (DELTA)	(T1,T6) (U1,W2)	(T2,T4) (V1,U2)	(T3,T5) (W1,V2)	

NO.	REVISION	BY	DATE
04	ADDED MAT'L (CWLE) PER ECO-0168542	DS	6/10/2019
03	ADDED IEC DESIGNATIONS	MOL	4/27/2012
02	REMOVED OBSOLETE STATUS	KJH	6/28/99
01	REDRAWN ON CAD	DBT	05/30/97

TOLERANCES UNLESS OTHERWISE SPECIFIED	
DECIMALS	
.00	± .01
.000	± .005
.0000	± .0005
FRACTIONS	± 1/64
ANGLES	± 1/2°
INCH/MM	

LEESON ELECTRIC CORPORATION

DRAWN PG 05/07/82	TITLE: EXT. WIRING DIAGRAM STAR START – DELTA RUN
CH'K'D. TEM	
APPR. 05/07/82	MAT'L. Y-CONNECTED START (CWLE) DELTA CONNECTED RUN – SINGLE VOLTAGE
SCALE 1=1	
REF. T2E	FINISH
FMF ELECTRO POWER	SIZE A; DRAWING NO. 005190-01

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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: 00519001 **CAT #:** 171807.60
OUTLINE: 16958360
WINDING: T22806011 NONE 1

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
200	149	1200	1193	447/449T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	460#380	241&220	Y START D RUN OR INV	CONT	F	1.15	40	3300

F.L. EFF	96.2	3/4 LD EFF	96.2	1/2 LD EFF	95.4	GTD EFF	ELECT. TYPE
F.L. PF	80.5	3/4 LD PF	77.0	1/2 LD PF	68.5	95.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
880 LB-FT	1,450	1,225 LB-FT 139%	2,100 LB-FT 239%	65	

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
63 dBA	72 dBA	0.00 LB-FT²	0 LB-FT²	20 SEC.	2	2647 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	UM SEVERE	DIVISION 2	NO	NONE	GREEN (EPOXY)

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6319	BALL 6317	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	CAST IRON

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	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

NOTES
*
*
*

INVERTER TORQUE: VARIABLE 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE **PPR**

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE **HZ:**
UL: Y-(LEESON UL REC)

DATE: 2/20/2018

Data Sheet

Date: 2/20/2018

LEESON

171807.60

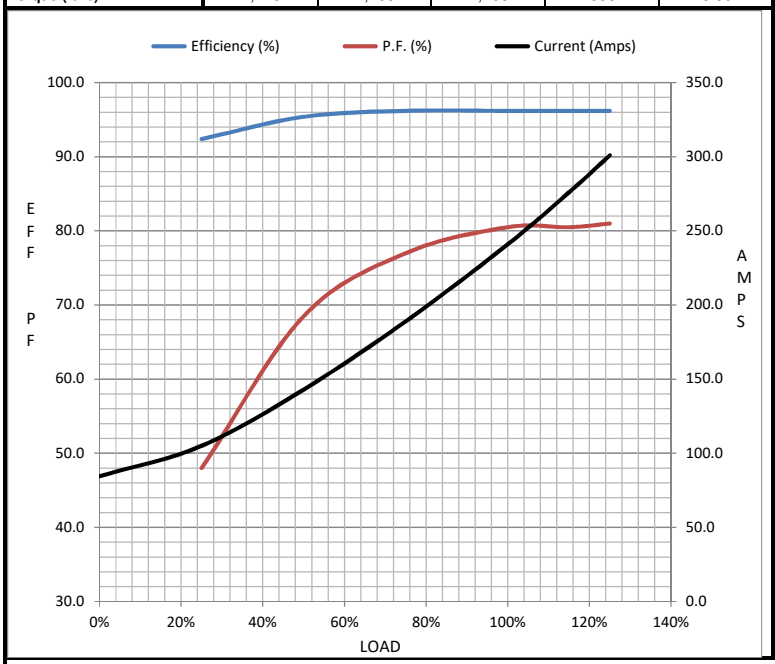
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	84.5	105	143	189	241	276	301	1,450	
Torque (ft-lb)	0.00	219	439	659	880	1,013	1,102	1,225	
RPM	1200	1198	1197	1196	1193	1,192	1191	0	
Efficiency (%)		92.4	95.4	96.2	96.2	96.2	96.2		
P.F. (%)	4.0	48.0	68.5	77.0	80.5	80.5	81.0	24.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1193	1200
Current (Amps)	1,450	1,000	850	241	84.5
Torque (ft-lb)	1,225	1,100	2,100	880	0.00



Information Block

HP	200.0	
Sync. RPM	1200	
Frame	449	
Enclosure	TEFC	
Construction	TFC	
Voltage	460#380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	65	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.00	Lb-Ft²
Ref Wdg	T22806011 NONE	
Sound Pressure @ 1M	63	dBA
VFD Rating	VARIABLE 10:1	
Outline Dwg	16958360	
Conn. Diag	00519001	

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