

# PRODUCT INFORMATION PACKET



Model No: 171797.60

Catalog No: 171797.60

Severe Duty Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V, 1800 & 1500 RPM,  
405T Frame, TEFC



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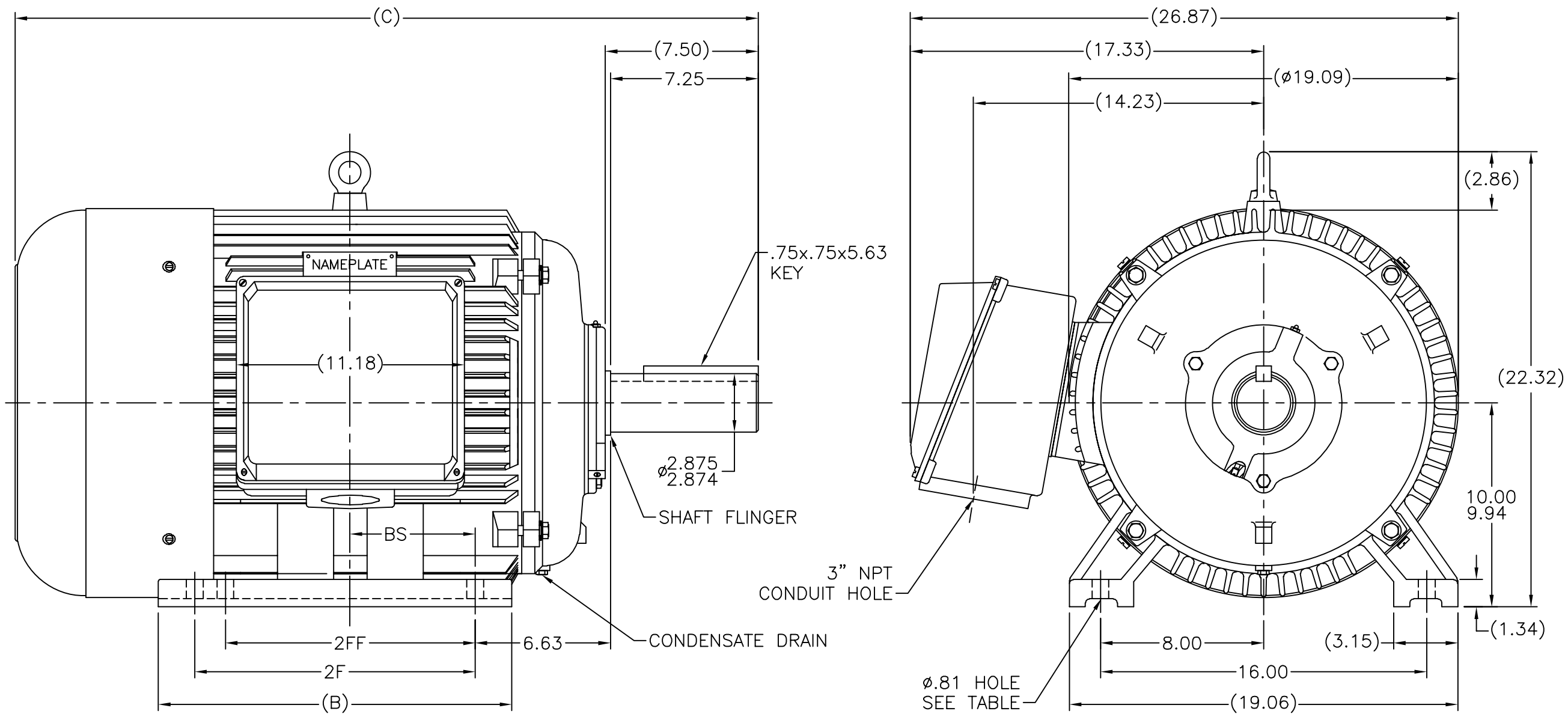
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>100 &amp; 75 Hp</b>
Output KW	<b>75.0 &amp; 56.0 kW</b>	Voltage	<b>208-230/460 &amp; 190/380 V</b>
Speed	<b>1785 &amp; 1486 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>405T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>95.4 &amp; 95.4 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>250-226/113 &amp; 200/100 A</b>	Power Factor	<b>87</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6316</b>	Opp Drive End Bearing Size	<b>6314</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>55</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>DIVISION 2</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Wye Start Delta Run Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.045 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>37.91 in</b>
Frame Length	<b>18.31 in</b>	Shaft Diameter	<b>2.875 in</b>
Shaft Extension	<b>7.25 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Outline Drawing	<b>16954560LE</b>	Connection Drawing	<b>00417203</b>

169545-60LE

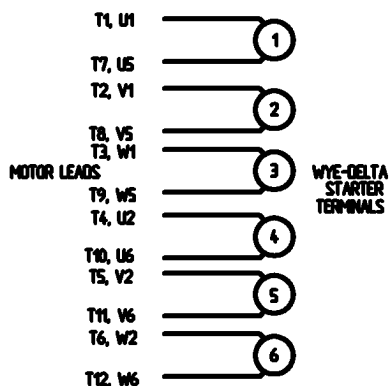


		TOLERANCES UNLESS SPECIFIED		REGAL REGAL - BELOIT CORPORATION		DRAWN CTO 08/21/2002	
		DEC.	INCHES			CHK	ML 08/29/2002
		.X	±.1			APPD	SB 08/30/2002
3	REVISED BS DIM. UPDATED TITLE BLOCK ECO-0048910	RFH	04/07/2014	EH	.XX ±.03	TITLE OUTLINE - RIGID	
2	CORRECTED FOOT MOUNTING HOLES DISCRPTION	MOL	10/21/2011		.XXX ±.005	400T RF. - TEFC	
1	NEW DRAWING	CTO	06/30/2002	SB	.XXXX ±.0005	MAT'L.	
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	
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 16954560le		SIZE
				DIST			DRAWING NO. PAGE 1 OF 1 REV.
						A	169545-60LE 3

1681	404T	36.42	15.83	12.25	-	5.39	4
1831	405T	37.91	17.32	13.75	12.25	6.90	6
DASH	FRAME	C	B	2F	2FF	BS	HOLE QTY

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

LOW VOLTAGE CONNECTION

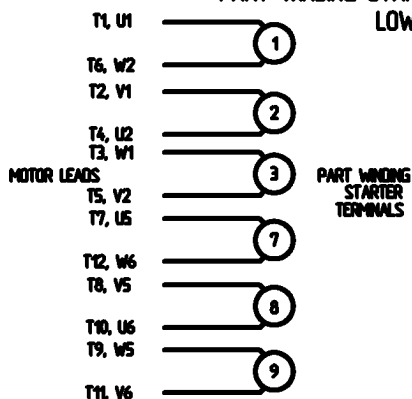


HIGH VOLTAGE CONNECTION



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

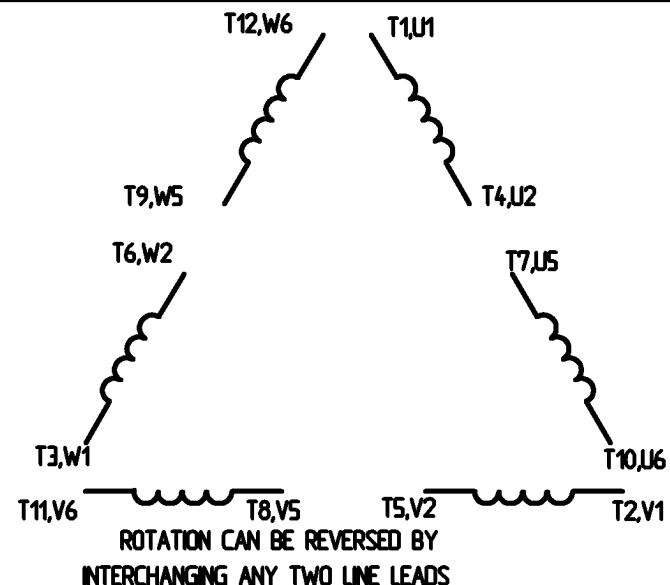
PART WINDING START USABLE ON 4 & 6 POLE MOTORS  
LOW VOLTAGE CONNECTION ONLY



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.

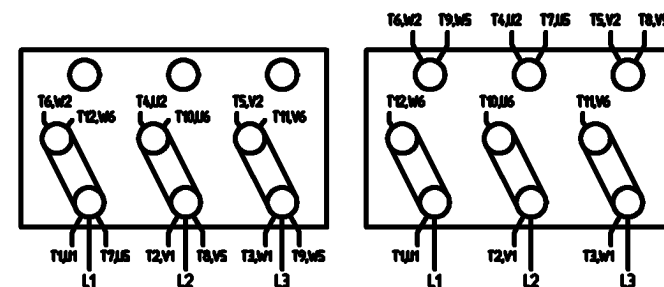
LINE LEADS




12 LEAD DELTA CONNECTION ACROSS THE LINE START  
(FOR Y START DELTA RUN, REMOVE THE JUMPERS)

LOW VOLTAGE  
MUST BE REWIRED  
AS SHOWN

HIGH VOLTAGE  
FACTORY WIRED FOR HIGH  
VOLTAGE AS SHOWN



				TOLERANCES UNLESS SPECIFIED		 <b>ELECTRIC MOTORS GEARMOTORS AND DRIVES</b>	DRAWN <b>CW 08/28/02</b> CHK APPD SCALE <b>1:1</b> REF FMF PREV
				DEC.	INCHES		TITLE <b>DELTA - WYE CONNECTION DIAGRAM IEC CAST IRON MOTORS</b>
				X	+ .1		
				XX	+ .01		
				XXX	+ .005		
				XXXX	+ .0005	MAT'L	
NO.	REVISION	BY & DATE	CHK	ANG	+ 1/2°	FINISH	PREV
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				DST			DRAWING NO. <b>004172-03</b>
							REV.

ERROR: syntaxerror  
OFFENDING COMMAND: --nostringval--

STACK:

/CB  
-dictionary-  
/Pscript\_WinNT\_Compat  
-dictionary-



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

CATALOG #: 171797.60

CONN. DIAGRAM: 00417203

OUTLINE: 16954560LE

MOUNTING: F1/F2 CAPABLE

WINDING #: T19604010 1

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100&75	75.0&56.0	1800	1785&1486	405T	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB° C
3	60/50	208- 230/460&190/380	250- 226/113&200/100	Y START D RUN OR INV	CONTINUOUS	F5	1.15/1.15	40

FULL LOAD EFF:	95.4&95.4	3/4 LOAD EFF:	95.4	1/2 LOAD EFF:	95	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	87&88.5	3/4 LOAD PF:	85.5	1/2 LOAD PF:	80	94.5		SQ CAGE INV RATED	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
294 LB-FT	1450 / 725	600 LB-FT 204 %	840 LB-FT 285 %	63

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
76 dBA	86 dBA	- LB-FT^2	- LB-FT^2	20 SEC.	-	1114 LBS.

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2	FALSE	NONE	GREEN (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	CAST IRON
6316	6314						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

\*  
N  
O  
T  
E

<b>INVERTER TORQUE:</b> VARIABLE 10:1
<b>INV. HP SPEED RANGE:</b> NONE
<b>ENCODER:</b> NONE
NONE NONE
NONE NONE PPR
<b>BRAKE:</b> NONE NONE
NONE P/N NONE

Data Sheet

Date: 1/22/2018

171797.60



Data @ **460 V**

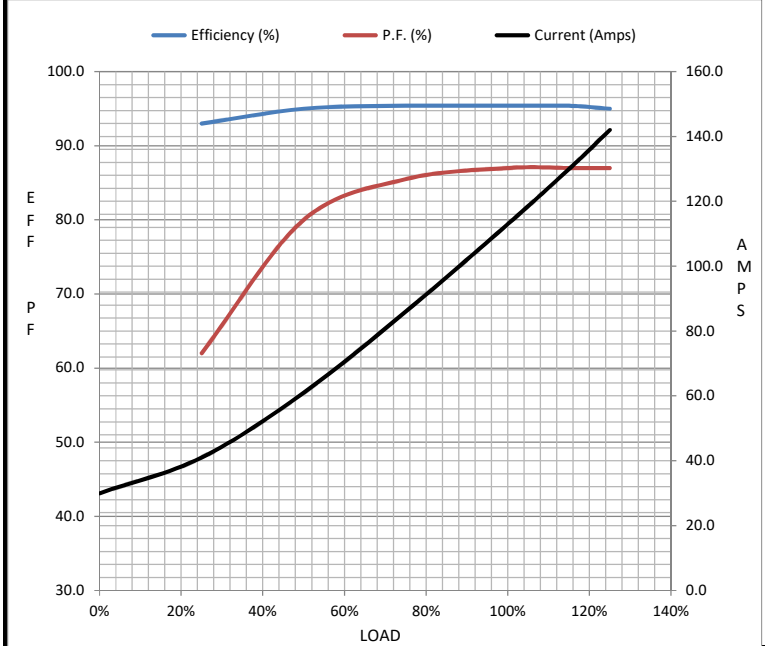
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	30.0	41.0	61.0	86.0	113	130	142	725
Torque (ft-lb)	0.00	75.0	150	225	294	340	375	600
RPM	1800	1796	1794	1790	1785	1.782	1778	0
Efficiency (%)		93.0	95.0	95.4	95.4	95.4	95.0	
P.F. (%)	5.5	62.0	80.0	85.5	87.0	87.0	87.0	34.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1785	1800
Current (Amps)	725	650	475	113	30.0
Torque (ft-lb)	600	600	840	294	0.00

Information Block				
HP	100.0			
Sync. RPM	1800			
Frame	405			
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	63 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.00 Lb-Ft <sup>2</sup>			
Ref Wdg	T19604010 NONE			
Sound Pressure @ 1M	76 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	16954560LE			
Conn. Diag	00417203			
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

