

PRODUCT INFORMATION PACKET



Model No: 171788.60

Catalog No: 171788.60

Severe Duty Motor, 50 & 40 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V, 1800 & 1500 RPM,
326T Frame, TEFC



Regal and Leeson are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E





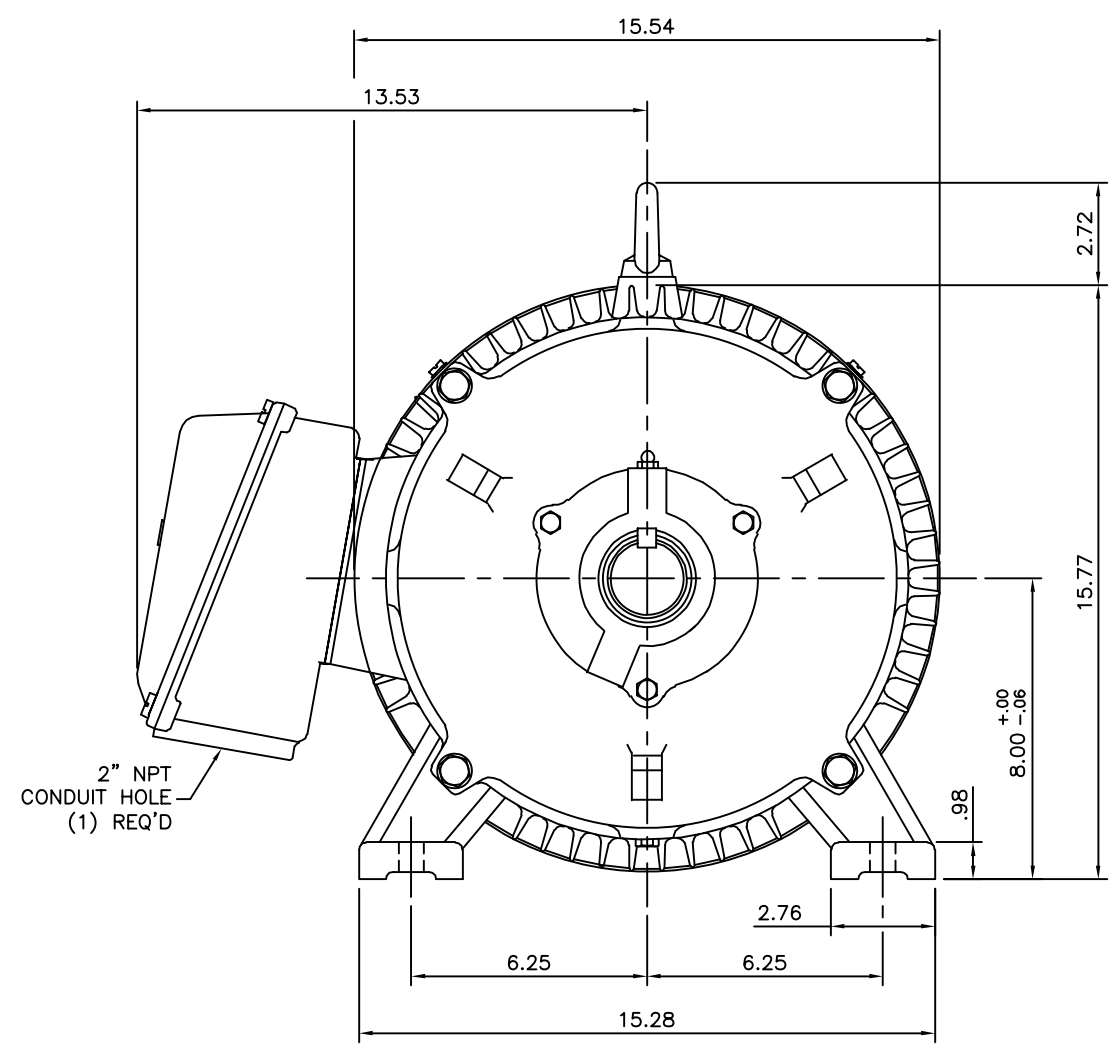
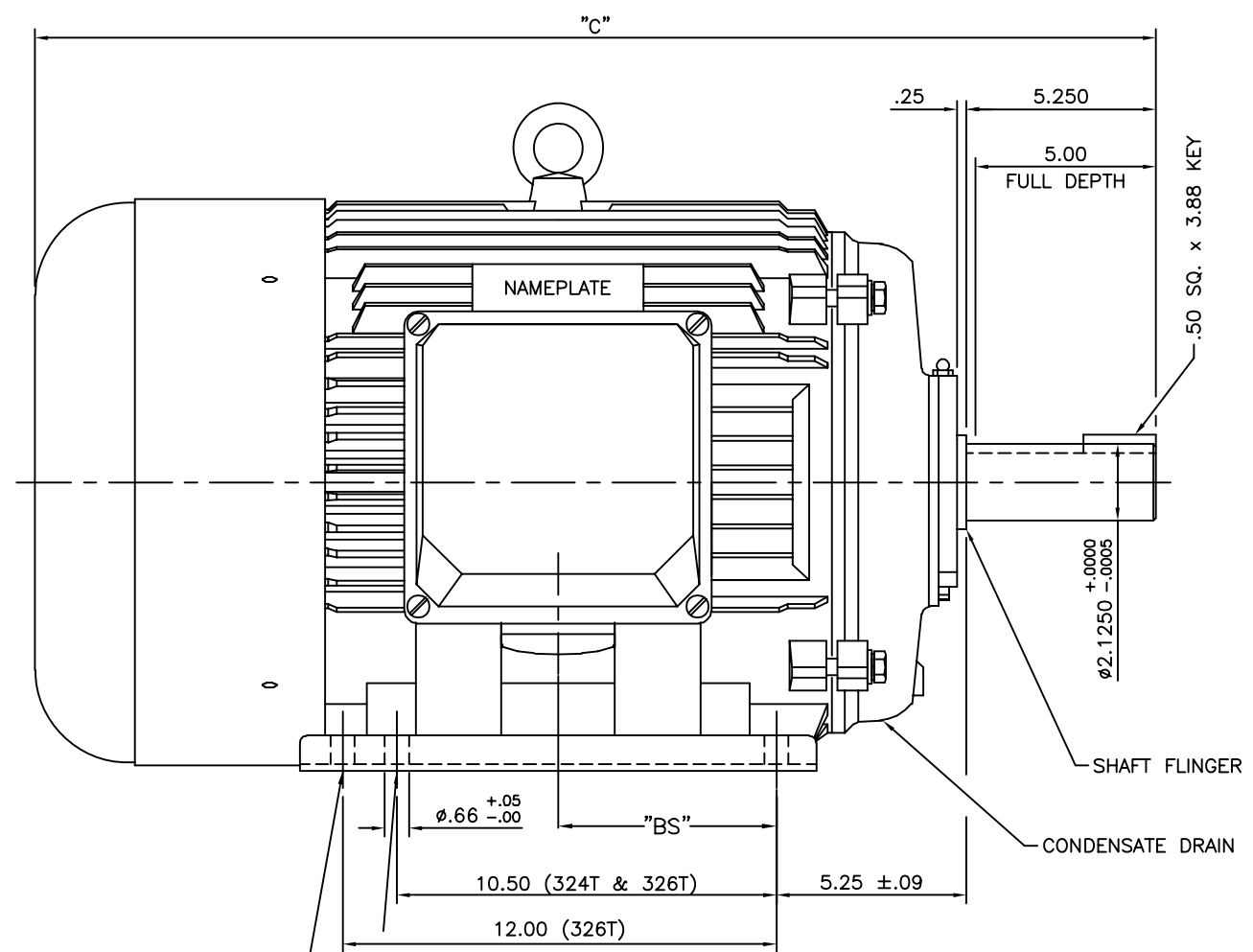
Nameplate Specifications

| | | | |
|------------------------|------------------------------------|----------------------------|------------------------------------|
| Phase | 3 | Output HP | 50 & 40 Hp |
| Output KW | 37.0 & 30.0 kW | Voltage | 208-230/460 & 190/380 V |
| Speed | 1780 & 1480 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 326T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Efficiency | 94.5 & 94.1 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 125-117/58.5 & 112/56 A | Power Factor | 84 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Drive End Bearing Size | 6312 | Opp Drive End Bearing Size | 6312 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 55 |
| Number of Speeds | 1 | Hazardous Location | DIVISION 2 |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|-------------------|--|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Wye Start Delta Run Or Inverter |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | .135 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 | 31.02 in |
| Shaft Diameter | 2.125 in | Shaft Extension | 5.25 in |
| Assembly/Box Mounting | F1/F2 CAPABLE | | |
| Connection Drawing | 00417203 | Outline Drawing | 16954160LE |

169541-60LE



(6) HOLES REQ'D
326T FRAME

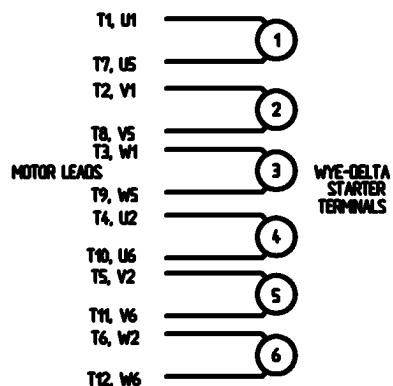
(4) HOLES REQ'D
324T FRAME

| FRAME DESIGN | "C" | "BS" |
|--------------|-------|------|
| 324T | 29.53 | 5.30 |
| 326T | 31.02 | 6.00 |

| | | TOLERANCES UNLESS SPECIFIED | | REGAL REGAL-BELOIT CORPORATION | | DRAWN JJK 03/29/99 | |
|--|--|-----------------------------|------------|--------------------------------|---------------------|--------------------|------------------------------|
| | | DEC. | INCHES | | | CHK | |
| | | .X | ±.1 | | | APPD PG 03/31/99 | |
| | | .XX | ±.03 | TITLE OUTLINE - 320T FRAME | | SCALE N/A | |
| | | .XXX | ±.005 | TEFC - RIDIG | | REF 169504 | |
| 1 | ADDED "BS" DIM. AND UPDATED TITLE BLOCK ECO-00 | RFH | 04/07/2014 | EH | .XXXX | ±.0005 | MAT'L. CAST IRON |
| NO. | REVISION | BY & DATE | CHK | ANG | ±1/2' | 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 16954160LE | | SIZE |
| | | | | DIST | | | DRAWING NO. PAGE 1 OF 1 REV. |
| | | | | | | A 169541-60LE 1 | |

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

LOW VOLTAGE CONNECTION

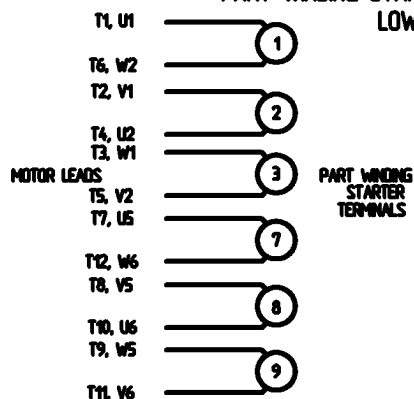


HIGH VOLTAGE CONNECTION



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

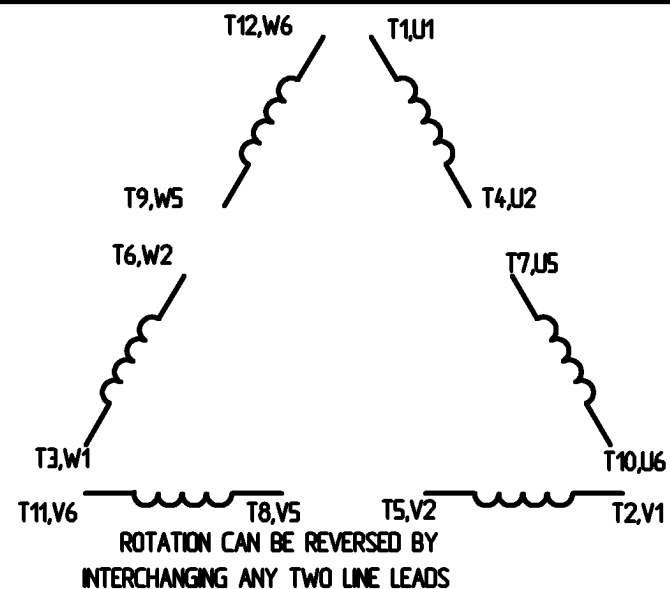
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



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.

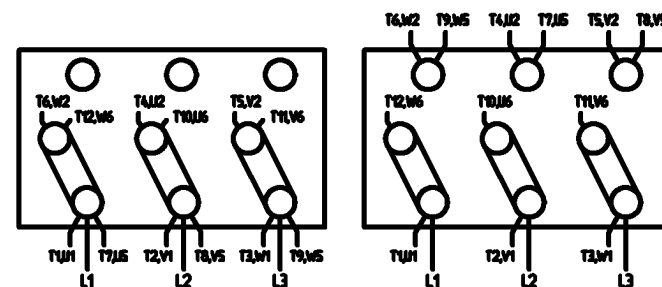
LINE LEADS



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 | | ELECTRIC MOTORS GEARMOTORS AND DRIVES | DRAWN | CW 08/28/02 | |
| | | | | DEC. | INCHES | | CHK | | |
| | | | | X | + .1 | APPO | | | |
| | | | | XX | + .01 | SCALE | 1:1 | | |
| | | | | XXX | + .005 | REF | | | |
| | | | | XXXX | + .0005 | FMF | | | |
| NO. | REVISION | BY & DATE | CHK | ANG | + 1/2° | 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 | 00417203 | SIZE | DRAWING NO. | REV. |
| | | | | DST | | | A | 004172-03 | |

ERROR: syntaxerror
OFFENDING COMMAND: --nostringval--

STACK:

/CB
-dictionary-
/Pscript_WinNT_Compat
-dictionary-

Data Sheet

Date: 1/31/2018

171788.60



Data @ **460 V**

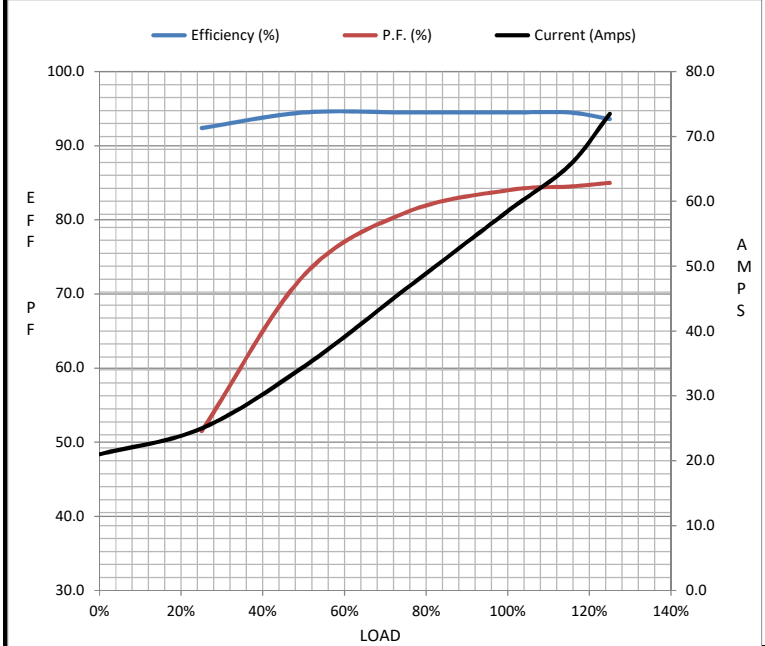
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|-----|
| Current (Amps) | 21.0 | 25.0 | 34.5 | 46.5 | 58.5 | 65.5 | 73.5 | 362 |
| Torque (ft-lb) | 0.00 | 37.5 | 75.0 | 113 | 148 | 170 | 186 | 325 |
| RPM | 1800 | 1795 | 1790 | 1785 | 1780 | 1.772 | 1770 | 0 |
| Efficiency (%) | | 92.4 | 94.5 | 94.5 | 94.5 | 94.5 | 93.6 | |
| P.F. (%) | 4.0 | 51.5 | 72.5 | 81.0 | 84.0 | 84.5 | 85.0 | 0.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 900 | 1700 | 1780 | 1800 |
| Current (Amps) | 362 | 325 | 185 | 58.5 | 21.0 |
| Torque (ft-lb) | 325 | 300 | 375 | 148 | 0.00 |

| Information Block | | | | |
|-----------------------------|------------------------|--------|--------|--------|
| HP | 50.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 326 | | | |
| Enclosure | TEFC | | | |
| Construction | TFC | | | |
| Voltage | 208-230/460#190/380 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 wk ² | 7.4 Lb-Ft ² | | | |
| Ref Wdg | T16104020 NONE | | | |
| Sound Pressure @ 1M | 999 dBA | | | |
| VFD Rating | VARIABLE 10:1 | | | |
| Outline Dwg | 16954160LE | | | |
| 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

