# PRODUCT INFORMATION PACKET

Model No: B199011.00
Catalog No: B199011.00
Ultimate e™ General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 & 1000 RPM, 254T Frame, TEFC

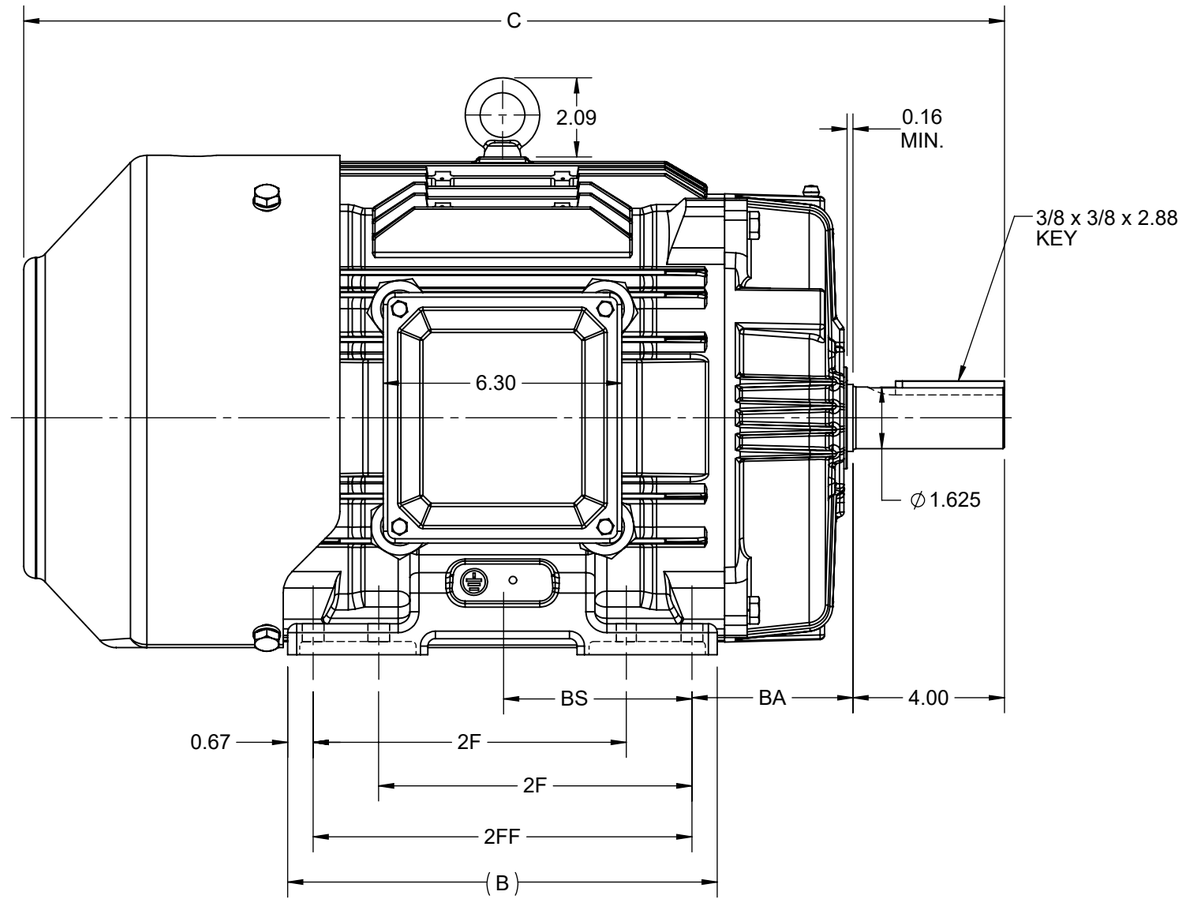
## Nameplate Specifications

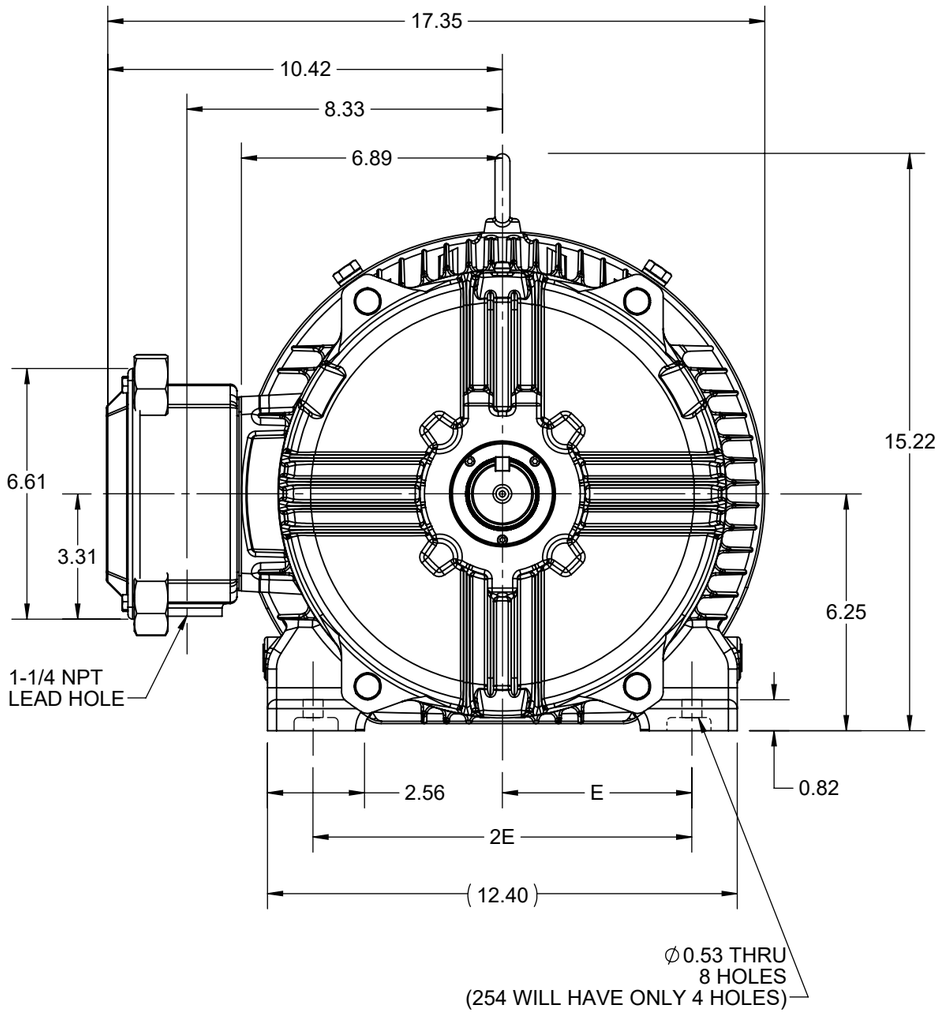
| | | | |
|---|---|---|---|
| Phase | 3 | Output HP | 7.50 & 5 Hp |
| Output KW | 5.6 & 3.7 kW | Voltage | 230/460 & 190/380 V |
| Speed | 1182 & 985 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 254T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Efficiency | 91 & 90.2 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 19.8/9.9 & 17/8.5 A | Power Factor | 78.5 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | H |
| Drive End Bearing Size | 6309 | Opp Drive End Bearing Size | 6209 |
| UL | Listed | CSA | Y |
| CE | Y | IP Code | 55 |
| Number of Speeds | 1 | | |

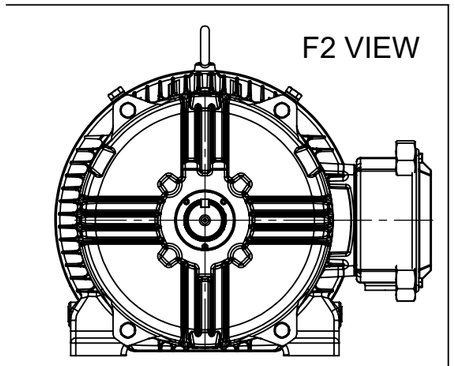
## Technical Specifications

| | | | |
|---|---|---|---|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | 1.366 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 | 24.15 in |
| Frame Length | 10.00 in | Shaft Diameter | 1.625 in |
| Shaft Extension | 4 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Outline Drawing | SS620703-254T | Connection Drawing | EE7308K |

| DASH NO. | B | C | E | 2E | 2F | 2FF | BA | BS | MOUNTING | FRAME |
|---|---|---|---|---|---|---|---|---|---|---|
| 100 | 9.60 | 24.15 | 5.00 | 10.00 | - | 8.25 | 4.25 | 4.13 | F1 OR F2 | 254T |
| 200 | 11.34 | 25.89 | | | 8.25 | 10.00 | | 5.00 | | 254/256T |




| DRAWING REVISION | REVISION BY | REV DATE/© DATE |
|---|---|---|
| D | SVP | 04/06/2021 |
| ECO | APPROVED BY | DATE |
| CR-0001991 | AK | 04/06/2021 |

ECO DESCRIPTION
DXF FILE RELEASED TO IDS



PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

| | |
|---|---|
| DRAWN BY | MR |
| DATE | 4/5/2015 |
| APPROVED BY | KRK |
| DATE | 4/5/2015 |
| REFERENCE | |

THIRD ANGLE PROJECTION

REGAL® Regal Beloit America, Inc.

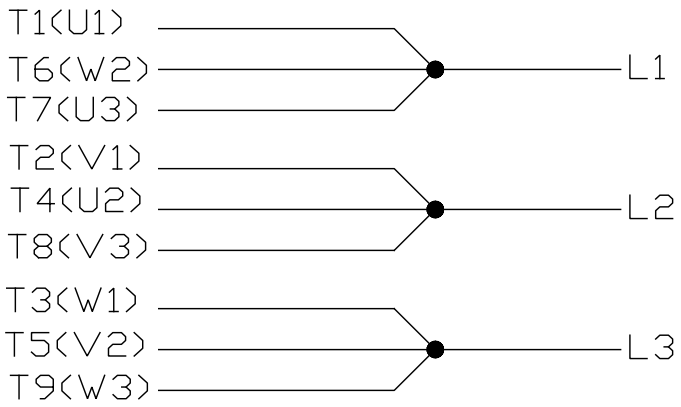
DESCRIPTION
# OUTLINE
254/256T FR-TEFC-CAST IRON

MATERIAL | PROCESS/FINISH

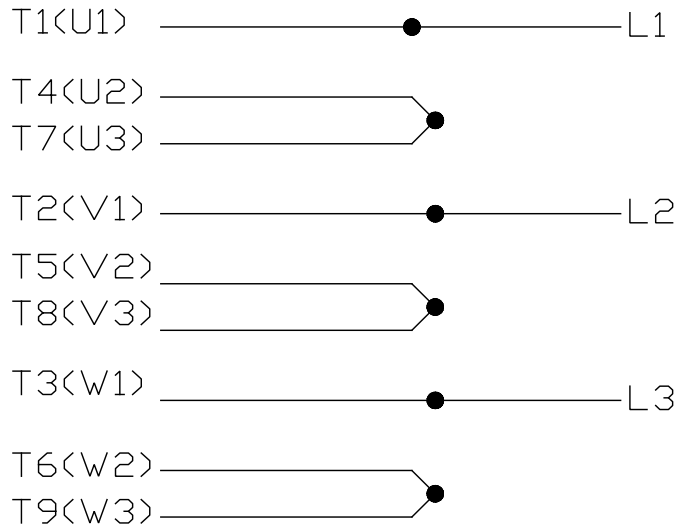
SIZE B | DRAWING NUMBER SS620703 | SHEET 1 OF 1

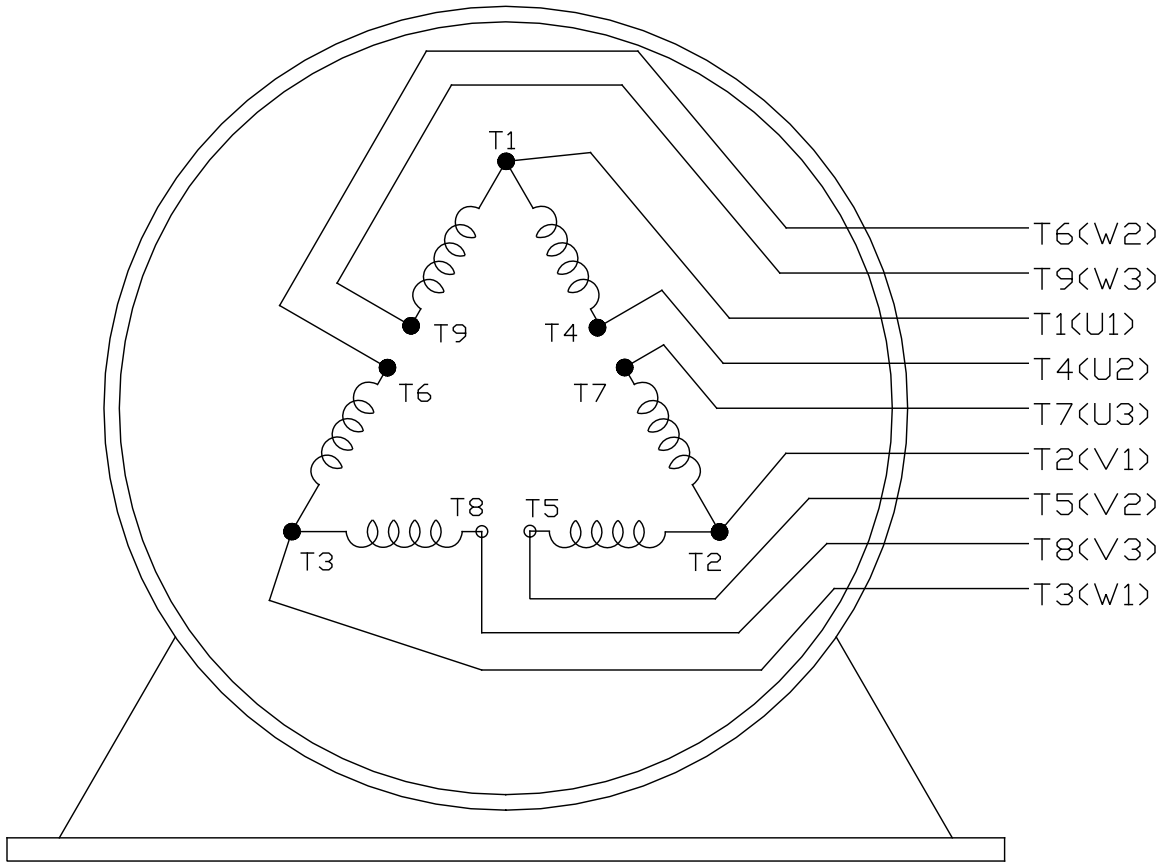
EE7308K

## LOW VOLTAGE




## HIGH VOLTAGE




VIEW OF TERMINAL END

| NO. | REVISION | BY & DATE | CHK |
|---|---|---|---|
| E | CORRECTED IEC MARKINGS ECO-0111208 | WGJ 01-23-2017 | EMH |
| D | RE-DRAWN WITH REGAL LOGO ECO-0110493 | WGJ 09-30-2016 | EMH |
| 8 | ADDED IEC DESIGNATIONS MU95020 | TJW 4/30/2010 | MJS |
| 7 | REVISD HIGH VOLTAGE L2 WAS L3 CN52600-354 | MRB 09-21-1998 | |
| 6 | REDRAWN ON CADD | PGK 06-05-1997 | |

TOLERANCES UNLESS SPECIFIED

| DEC. | INCHES |
|---|---|
| .X | ±.1 |
| .XX | ±.02 |
| .XXX | ±.005 |
| .XXXX | ±.0005 |
| ANG | ±7'30" |

REGAL - BELOIT CORPORATION

TITLE: CONNECTION DIAGRAM
DELTA CON. - 3Ø - 9 LEADS

MAT'L.

FINISH

CAD FILE EE7308K

RFP

DIST

DRAWN PGK 06-04-1997
CHK ML 06-05-1997
APPD GK 06-15-1997
SCALE
REF
FMF
PREV

| SIZE | DRAWING NO. | PAGE OF | REV. |
|---|---|---|---|
| A | EE7308K | | E |

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

**DATA VOLTS:** 460

# CERTIFICATION DATA SHEET

**CONN. DIAGRAM:** EE7308K **CAT #:** B199011.00
**OUTLINE:** SS620703
**WINDING:** HE31606007 NONE 2

## TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|---|---|---|---|---|---|---|---|---|
| 7.5 | 5.6 | 1200 | 1182 | 254T | TEFC | TFC | H | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 60/50 | 230/460#190/380 | 19.8/9.9&17/8.5 | LINE OR INVERTER | CONT | F | 1.15 | 40 | 3300 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F.L. EFF | 91.0 | 3/4 LD EFF | 91.0 | 1/2 LD EFF | 89.5 | GTD EFF | ELECT. TYPE |
| F.L. PF | 78.5 | 3/4 LD PF | 72.0 | 1/2 LD PF | 60.0 | 90.2 | SQ CAGE INV RATED |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (°C) |
|---|---|---|---|---|
| 33.4 LB-FT | 60.0 | 65.0 LB-FT 195% | 89.0 LB-FT 266% | 40 |

| PRESSURE @ 3 | POWER | ROTOR WK² | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | MOTOR WGT |
|---|---|---|---|---|---|---|
| 56 dBA | 65 dBA | 2.30 LB-FT² | 150 LB-FT² | 20 SEC. | 2 | 325 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 | NO | NONE | NO | NONE | BLUE (ENAMEL) |

| BEARINGS DE | BEARINGS ODE | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|---|---|---|---|---|---|---|---|
| BALL 6309 | BALL 6209 | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | 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 |
|---|---|---|---|---|---|---|
| 0.839 | 0.465 | 2.37 | 3.081 | 51.106 | 0.080 | ODE |

*
**NOTES**
*

**INVERTER TORQUE:** CONSTANT 20:1
**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:** 1/24/2018

# Data Sheet

**Date:** 1/24/2018

LEESON

B199011.00

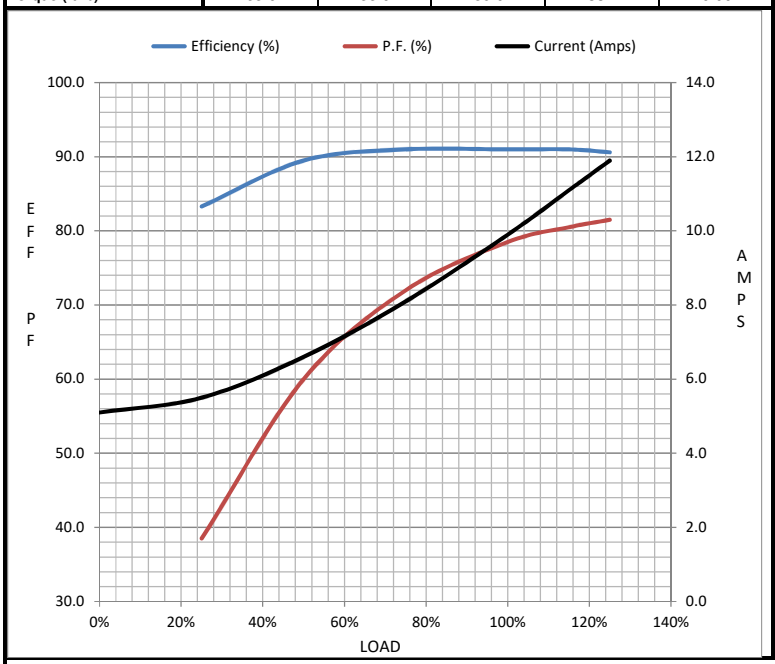
Data @ 460 V

## Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|---|---|---|---|---|---|---|---|---|---|
| Current (Amps) | 5.1 | 5.5 | 6.6 | 8.1 | 9.9 | 11.1 | 11.9 | 60.0 | |
| Torque (ft-lb) | 0.00 | 8.3 | 16.5 | 25.0 | 33.4 | 38.5 | 41.9 | 65.0 | |
| RPM | 1200 | 1195 | 1190 | 1185 | 1182 | 1,178 | 1175 | 0 | |
| Efficiency (%) | | 83.3 | 89.5 | 91.0 | 91.0 | 91.0 | 90.6 | | |
| P.F. (%) | 6.5 | 38.5 | 60.0 | 72.0 | 78.5 | 80.5 | 81.5 | 42.0 | |

## Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|---|---|---|---|---|---|
| Speed (RPM) | 0 | 600 | 1090 | 1182 | 1200 |
| Current (Amps) | 60.0 | 53.0 | 36.0 | 9.9 | 5.1 |
| Torque (ft-lb) | 65.0 | 55.0 | 89.0 | 33.4 | 0.00 |




## Information Block

| | | |
|---|---|---|
| HP | 7.5 | |
| Sync. RPM | 1200 | |
| Frame | 254 | |
| Enclosure | TEFC | |
| Construction | TFC | |
| Voltage | 230/460#190/380 | V |
| Frequency | 60 | Hz |
| Design | B | |
| LR Code letter | H | |
| Service Factor | 1.15 | |
| Temp Rise @ FL | 40 | ° C |
| Duty | CONT | |
| Ambient | 40 | ° C |
| Elevation | 1,000 | feet |
| Rotor/Shaft wk² | 2.30 | Lb-Ft² |
| Ref Wdg | HE31606007 NONE | |
| Sound Pressure @ 1M | 56 | dBA |
| VFD Rating | CONSTANT 20:1 | |
| Outline Dwg | SS620703 | |
| Conn. Diag | EE7308K | |
| Additional Specifications: | | |
| 0 | | |
| 0 | | |

EQUIV CKT (OHMS / PHASE)

| R1 | R2 | X1 | X2 | Xm |
|---|---|---|---|---|
| 0.8390 | 0.4650 | 2.3700 | 3.0810 | 51.1060 |

## Speed -Torque Curve