

PRODUCT INFORMATION PACKET

Model No: 256THFNA19033

Catalog No: W554

20 HP Severe Duty Motor, 3 phase, 1800 RPM, 575 V, 256T Frame, TEFC
Severe Duty Motors



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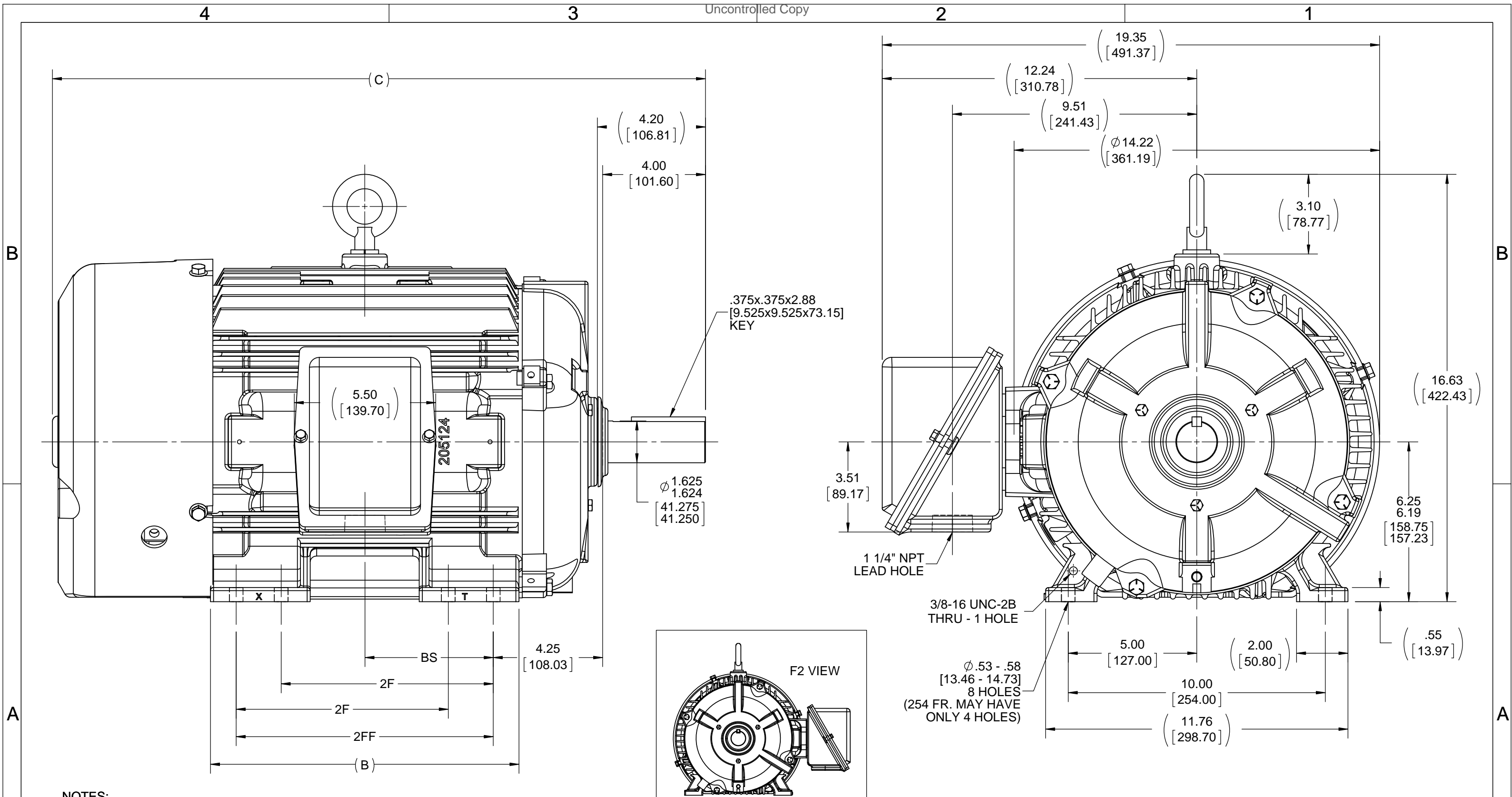


Nameplate Specifications

| | | | |
|------------------------|-------------------|----------------------------|------------------------------------|
| Output HP | 20 Hp | Output KW | 14.9 kW |
| Frequency | 60 Hz | Voltage | 575 V |
| Current | 19.5 A | Speed | 1775 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 93 % | Power Factor | 84 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Frame | 256T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6309 | Opp Drive End Bearing Size | 6210 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 56 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|-----------------------|-------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | .474 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 | 25.40 in |
| Frame Length | 12.25 in | Shaft Diameter | 1.625 in |
| Shaft Extension | 4.2 in | Assembly/Box Mounting | F1/F2 Capable |
| Inverter Load | CONSTANT 2:1 | | |
| Outline Drawing | B-SS203002-1225 | Connection Drawing | A-EE7300 |



- NOTES:
 1. CONDUIT BOX CAN BE ROTATED ON ITS AXIS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

| | | | | | | |
|------|----------|-------------------|-------------------|------------------|-------------------|------------------|
| 1050 | 254T | 23.65 [600.71] | 10.25 [260.35] | --- | 8.25 [209.55] | 4.25 [107.95] |
| 1225 | 254/256T | 25.40 [645.16] | 12.00 [304.80] | 8.25 [209.55] | 10.00 [254.00] | 5.00 [127.00] |
| DASH | FRAME | C | B | 2F | 2FF | BS |
| | | 4 | | | | |

| | | |
|---|----------------------------|--------------------|
| DRAWING REVISION E | REVISION BY M GERTSCHEN | DATE 11-17-2016 |
| ECO ECO-0112972 | APPROVED BY T VUE | DATE 11-17-2016 |
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TOLERANCES UNLESS OTHERWISE SPECIFIED:
 DEC. INCH mm ANGLE
 .X ±0.1 [±2.5] ±7° 30"
 .XX ±0.03 [±0.76]
 .XXX ±0.005 [±0.127]
 .XXX ±0.0005 [±0.0127]
 REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°
 CORNER FILLETS: R.02 [51]
 MACHINED SURFACES: 200 INCH mm 5.1
 mm SHOWN IN [BRACKETS]

| | |
|-----------------------|------------------------|
| DRAWN BY TVUE | DATE 12-18-2013 |
| APPROVED BY TBROWN | DATE 12-18-2013 |
| REFERENCE | THIRD ANGLE PROJECTION |

| | |
|---|-----------------------------|
| REGAL ™ Regal Beloit America, Inc. | |
| DESCRIPTION | OUTLINE |
| | 250T FR. - TEFC - BB - STD. |
| MATERIAL | PROCESS/FINISH |
| SIZE B | DRAWING NUMBER SS203002 |
| | SHEET 1 OF 1 |

**THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.**

TERMINAL BLOCK WHEN SPECIFIED



VIEW OF TERMINAL END

**IF MOTOR HAS
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD
CONNECTION**



| | | |
|---|--------------------|--------------------|
| DRAWING REVISION AB | REVISION BY JJB | DATE 06-27-2017 |
| ECO ECO-0125361 | APPROVED BY TB | DATE 06-27-2017 |
| ECO DESCRIPTION UPDATED TO CURRENT STANDARDS | | |
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| |
|---------------------------|
| DRAWN BY DA |
| DATE 03-26-1993 |
| APPROVED BY TB |
| DATE 03-26-1993 |
| REFERENCE |
| THIRD ANGLE PROJECTION |

| | |
|----------------------------|---------------------------------|
| Regal Beloit America, Inc. | |
| | |
| MATERIAL | PROCESS/FINISH |
| SIZE A | DRAWING NUMBER EE7300 |
| SHEET 1 OF 1 | |

CERTIFICATION DATA SHEET

Model#: 256THFNA19056 AA
CONN. DIAGRAM: A-EE7300
OUTLINE: B-SS203002-1225

WINDING#: K2564164 NONE 2
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|------|-----------|----------|-------|-----------|----------|--------|
| 20 | 14.9 | 1800 | 1775 | 256T | TEFC | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|----|-------|---------|------------------|------------|------|------|-------|-----------|
| 3 | 60 | 460 | 24.1 | LINE OR INVERTER | CONTINUOUS | F3 | 1.15 | 40 | 3300 |

| FULL LOAD EFF: 93 | 3/4 LOAD EFF: 93.6 | 1/2 LOAD EFF: 93 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|-------------------|--------------------|------------------|----------|-------------------|--------------|
| FULL LOAD PF: 84 | 3/4 LOAD PF: 81 | 1/2 LOAD PF: 72 | 92.4 | SQ CAGE INV RATED | 8.5 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|---------------|---------------|-------------|
| 59.2 LB-FT | 138 | 105 LB-FT 177 | 146 LB-FT 247 | 65 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|-------------|-------------|-----------------|--------------|-------------------|
| 65 dBA | 75 dBA | 3.2 LB-FT^2 | 125 LB-FT^2 | 25 SEC. | 2 | 400 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 | NONE | FALSE | NONE | BLUE (EPOXY) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|-------------------------|----------------|
| DE | OPE | | | | | | |
| BALL | BALL | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |
| 6309 | 6210 | | | | | | |

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

If Inverter equals NONE, contact factory for further information

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|---|
| INVERTER TORQUE: CONSTANT 20:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED |
| ENCODER: NONE NONE NONE NONE NONE PPR |
| BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz |

DATE: 06/23/2017 04:40:38 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 15-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



256THFNA19033

Submittal

Data @ 575 V

Motor Load Data

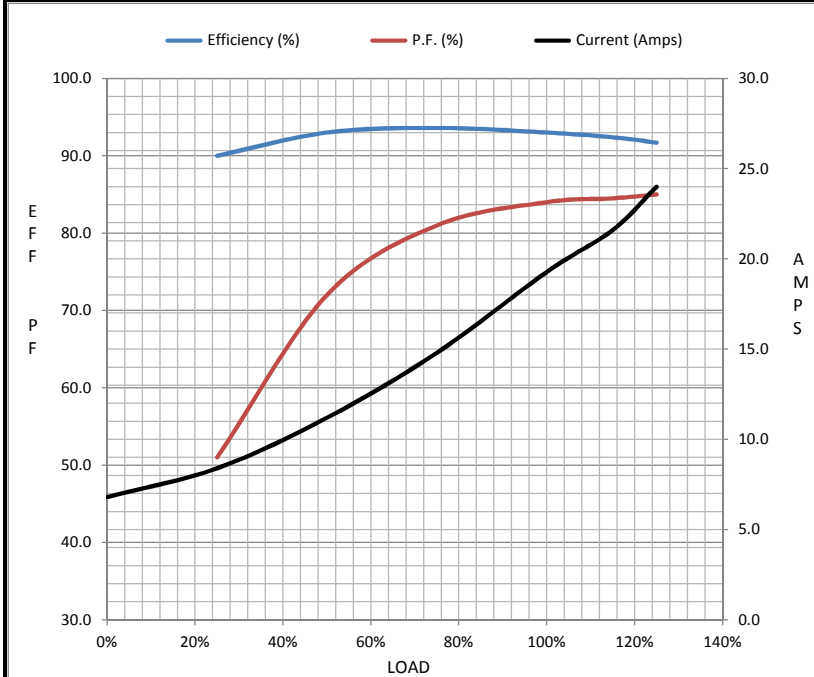
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 6.8 | 8.4 | 11.2 | 14.8 | 19.3 | 21.6 | 24.0 | 110 |
| Torque (ft-lb) | 0.00 | 14.5 | 29.5 | 44.5 | 59.2 | 68.0 | 74.5 | 105 |
| RPM | 1800 | 1795 | 1785 | 1780 | 1775 | 1,770 | 1760 | 0 |
| Efficiency (%) | | 90.0 | 93.0 | 93.6 | 93.0 | 92.4 | 91.7 | |
| P.F. (%) | 8.5 | 51.0 | 72.0 | 81.0 | 84.0 | 84.5 | 85.0 | 40.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 900 | 1625 | 1775 | 1800 |
| Current (Amps) | 110 | 92.0 | 68.8 | 19.3 | 6.8 |
| Torque (ft-lb) | 105 | 100 | 146 | 59.2 | 0.00 |

Information Block

| | | | | |
|-----------------------------|------------------------|--------|--------|---------|
| HP | 20.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 256 | | | |
| Enclosure | TEFC | | | |
| Construction | TFN | | | |
| Voltage | 575 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 | 3.2 Lb-Ft ² | | | |
| Ref Wdg | K2564164 NONE | | | |
| Sound Pressure @ 1M | 65 dBA | | | |
| VFD Rating | CONSTANT 2:1 | | | |
| Outline Dwg | B-SS203002-1225 | | | |
| Conn. Diag | A-EE7300 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 365THFS8036 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.4170 | 0.3240 | 1.5460 | 2.3300 | 44.3750 |



Speed - Torque Curve

