

UNITS: INCHES
 ROTATION FROM ODE
☒ CCW ☐ CW

NOTES:
 1. MAIN CONDUIT BOX MAY BE ROTATED IN 90° INCREMENTS
 2. STANDARD PRODUCT USES BI-DIRECTIONAL FAN. OPPOSITE ROTATION AVAILABLE ONLY BY CONNECTION CHANGE.
 3. KEY DIMENSIONS EQUAL 0.1875X0.1875X1.378" (MOTOR SUPPLIED WITH KEY)

TOSHIBA RESERVES THE RIGHT TO MAKE CHANGES OF TECHNICAL IMPROVEMENT AND THE DATA MAY CHANGE WITHOUT NOTICE ☐ PRELIMINARY

DO NOT USE FOR CONSTRUCTION, INSTALLATION, OR APPLICATION PURPOSES UNLESS THE DRAWING IS MARKED AS CERTIFIED ☒ CERTIFIED

TOSHIBA
 www.toshiba.com/tic
 EQP Global SD
 TOTALLY ENCLOSED FAN COOLED
 FOOTED C-FACED
 3 PHASE INDUCTION MOTOR
 L56/56HC F1 ASSEMBLY
 DRAWING #: 3HFN000620/MDSL V127-02
 REV. DATE: 2/14/20 REV. #: 1 PER: N.DanH
 REV. DESCIP: Remove dimension KEY, Adding L

TYPICAL MOTOR PERFORMANCE DATA

Model: Y156SDSR42H-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|-----------|-----|------------|--------|-------|----------------|-------------|----------|--------------|
| 1.50 | 1.1 | 6 | 1175 | 56C | 230/460 | 60 | 3 | 5.2/2.6 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 55 | F | 1.15 | CONT | 87.5 | B | | 40 C |

| Load | HP | kW | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|------|-----|---------|----------------|------------------|
| Full Load | 1.50 | 1.1 | 2.6 | 86.8 | 62.9 |
| ¾ Load | 1.13 | 0.8 | 2.2 | 84.9 | 54.2 |
| ½ Load | 0.75 | 0.6 | 2.0 | 80.2 | 42.0 |
| ¼ Load | 0.38 | 0.3 | 1.2 | 76.7 | 36.6 |
| No Load | | | 1.8 | | 7.6 |
| Locked Rotor | | | 20 | | 44.2 |

| Torque | | | | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | |
| 6.70 | 300 | 230 | 350 | 0.34 |

| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|--------|----------------------------|
| Cold | Hot | | DE | NDE | |
| 35 | 15 | | 6305ZZ | 6305ZZ | 77 |

*Bearings are the only recommended spare part(s).

Motor Options:
Product Family:EQP Global SD CFace Footed
Mounting:C-Face Footed,Shaft:56

| | |
|-------------|--|
| Customer | |
| Customer PO | |
| Sales Order | |
| Project # | |

Tag:

All characteristics are average expected values.

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| | | | | | |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | SPinzon | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1119 / 0 |
| Engr. Date | 6/24/2022 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

TYPICAL MOTOR PERFORMANCE DATA

Model: Y156SDSR42H-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|-----------|------|------------|--------|-------|----------------|-------------|----------|--------------|
| 1 | 0.75 | 6 | 980 | 56C | 190/380 | 50 | 3 | 4.6/2.3 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 55 | F | 1.0 | CONT | 78.9 | B | | 40 C |

| Load | HP | kW | Amperes | Efficiency (%) | Power Factor (%) |
|--------------|------|-----|---------|----------------|------------------|
| Full Load | 1.00 | 0.7 | 2.3 | 84.9 | 57.2 |
| ¾ Load | 0.75 | 0.6 | 2.1 | 82.1 | 48.3 |
| ½ Load | 0.50 | 0.4 | 2.0 | 76.4 | 37.2 |
| ¼ Load | 0.25 | 0.2 | 1.0 | 75.3 | 36.7 |
| No Load | | | 1.8 | | |
| Locked Rotor | | | 19.6 | | |

| Torque | | | | Rotor wk² Inertia (lb-ft²) |
|-------------------|----------------------|-----------------|--------------------|----------------------------|
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | |
| 5.36 | 380 | 320 | 395 | 0.34 |

| Safe Stall Time(s) | | Sound Pressure dB(A) @ 1M | Bearings* | | Approx. Motor Weight (lbs) |
|--------------------|-----|---------------------------|-----------|--------|----------------------------|
| Cold | Hot | | DE | NDE | |
| 35 | 15 | | 6305ZZ | 6305ZZ | 77 |

*Bearings are the only recommended spare part(s).

Motor Options:
Product Family:EQP Global SD CFace Footed
Mounting:C-Face Footed,Shaft:56

| | |
|-------------|--|
| Customer | |
| Customer PO | |
| Sales Order | |
| Project # | |

Tag:

All characteristics are average expected values.

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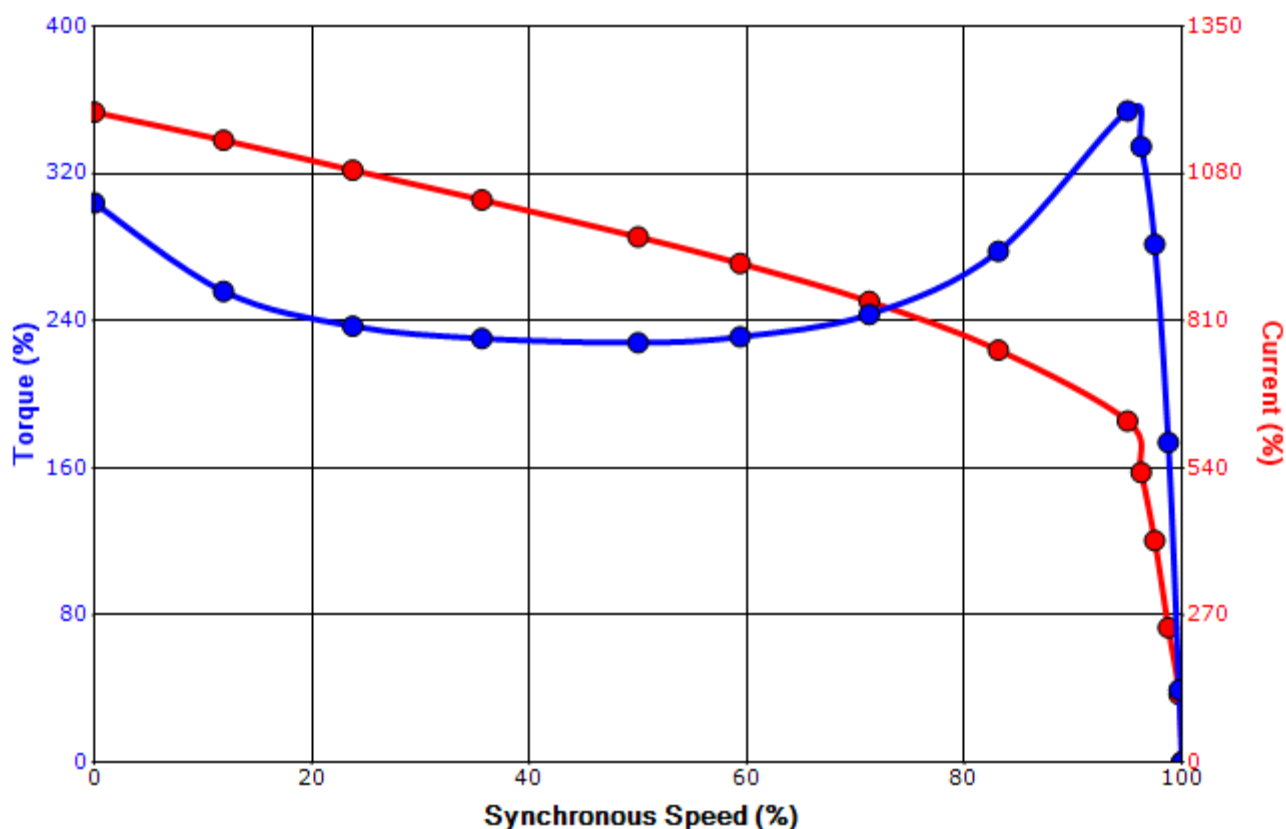
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| Engineering | SPinzon | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1119 / 0 |
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SPEED TORQUE/CURRENT CURVE

Model: Y156SDSR42H-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|-------------------|---|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 1.50 | 1.1 | 6 | 1175 | 56C | 230/460 | 60 | 3 | 5.2/2.6 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 55 | F | 1.15 | CONT | 87.5 | B | | 40 C |
| Locked Rotor Amps | Rotor wk ² Inertia (lb-ft ²) | Torque | | | | | | |
| | | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | | Break Down (%) | | |
| 20 | 0.34 | 6.70 | 300 | 230 | | 350 | | |

Design Values



| | | | | |
|-------------|--|--|--|-----|
| Customer | | | wk ² Load Inertia (lb-ft ²) | - |
| Customer PO | | | Load Type | - |
| Sales Order | | | Voltage (%) | 100 |
| Project # | | | Accel. Time | - |

Tag:

All characteristics are average expected values.

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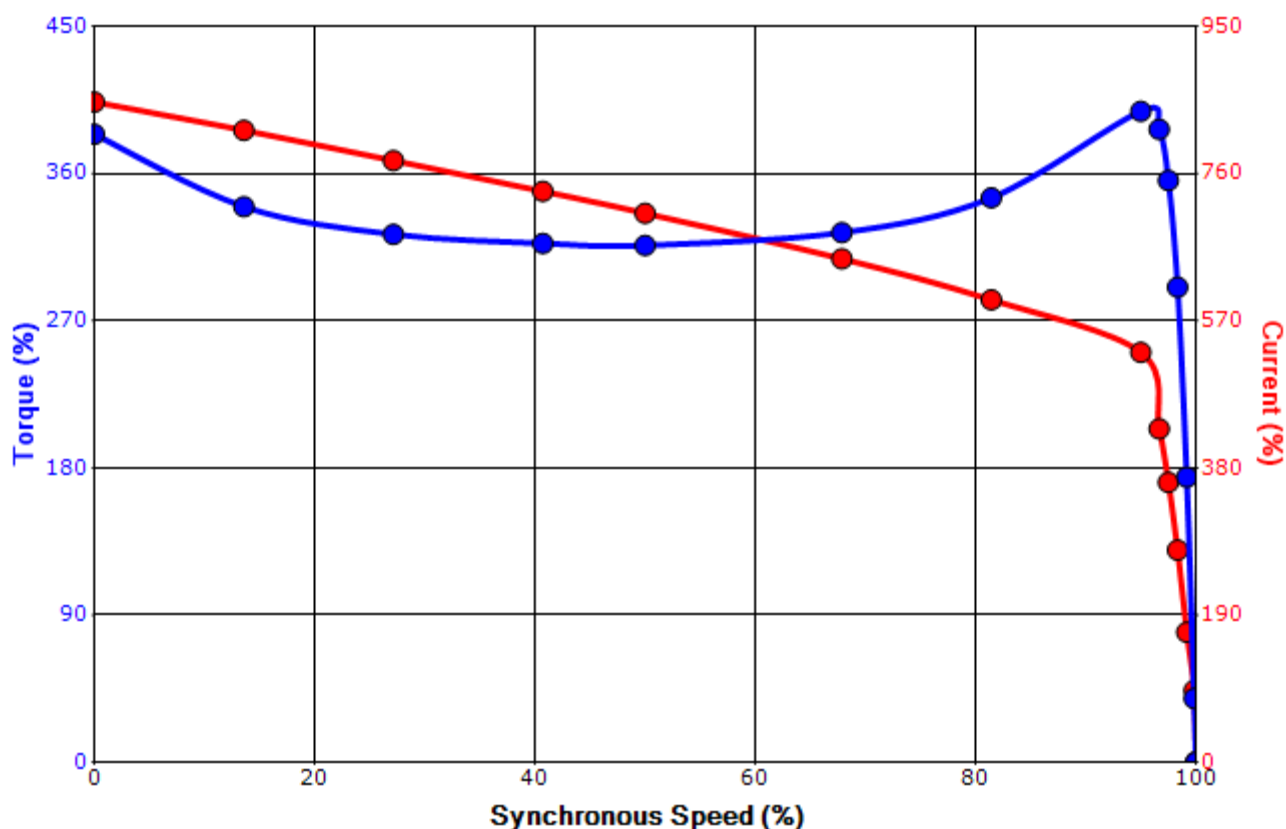
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|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | SPinzon | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date | 6/24/2022 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

SPEED TORQUE/CURRENT CURVE

Model: Y156SDSR42H-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|-------------------|---|-------------------|------------------|-------------|----------------|----------------|----------|--------------|
| 1 | 0.75 | 6 | 980 | 56C | 190/380 | 50 | 3 | 4.6/2.3 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 55 | F | 1.0 | CONT | 78.9 | B | | 40 C |
| Locked Rotor Amps | Rotor wk ² Inertia (lb-ft ²) | Torque | | | | | | |
| | | Full Load (lb-ft) | Locked Rotor (%) | Pull Up (%) | | Break Down (%) | | |
| 19.6 | 0.34 | 5.36 | 380 | 320 | | 395 | | |

Design Values



| | | | |
|-------------|--|--|-----|
| Customer | | wk ² Load Inertia (lb-ft ²) | - |
| Customer PO | | Load Type | - |
| Sales Order | | Voltage (%) | 100 |
| Project # | | Accel. Time | - |

Tag:

All characteristics are average expected values.

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| | | | | | |
|-------------|-----------|------------------|-------------|-------------|---------------|
| Engineering | SPinzon | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1121 / 0 |
| Engr. Date | 6/24/2022 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |

Motor Connection Diagrams
9 Leads

Across-the-Line Starting / Running Connections

Low Voltage Wye



High Voltage Wye



Switch L1 and L2 to reverse rotation

SPARE PARTS LIST*

Model: Y156SDSR42H-P

| HP | kW | Pole | FL RPM | Frame | Voltage | Hz | Phase | FL Amps |
|-----------|-----|------------|--------|-------|-------------------|----------------|----------|-----------------|
| 1.50 | 1.1 | 6 | 1175 | 56C | 230/460 | 60 | 3 | 5.2/2.6 |
| Enclosure | IP | Ins. Class | S.F. | Duty | NEMA Nom. Eff. | NEMA Design | kVA Code | Ambient (°C) |
| TEFC | 55 | F | 1.15 | CONT | 87.5 | B | | 40 C |

Bearings DE 6305ZZ / 25BC03JPPOX

Bearings NDE 6305ZZ / 25BC03JPPOX

*Bearings are the only recommended spare part(s).

Other than the grease used for regreasable bearings and the oil used for oil-lubricated bearings, Toshiba advises that there are no "use" parts. The only insurance spares that Toshiba suggests for these squirrel-cage induction motors are industry-standard and commercially available off-the-shelf bearings as noted above.

Motor components such as terminal boxes, fan covers and other machined parts are available on special request. In these cases, please advise our order entry department of the model and serial numbers found on the motor nameplate and a description of the needed components. With this information they will be able to furnish the current part number, price and availability.

Note: Our internal part numbers are subject to change without notice and are not published.

| | | |
|--------------------|--|--|
| Customer | | |
| Customer PO | | |
| Sales Order | | |
| Project # | | |

Tag:

All characteristics are average expected values.

TOSHIBA INTERNATIONAL CORPORATION · HOUSTON, TEXAS U.S.A.

| | | | | | |
|--------------------|-----------|-------------------------|-------------|--------------------|---------------|
| Engineering | SPinzon | Doc. Written By | D. Suarez | Doc.# / Rev | MPCF-1125 / 0 |
| Engr. Date | 6/24/2022 | Doc. Approved By | M. Campbell | Doc. Issued | 6/8/2011 |