# PRODUCT INFORMATION PACKET

Model No: 5SME39HXL697I-S
Catalog No: 5SME39HXL697I-S
1/2HP,208-230V,1050RPM,60/50HZ,ECM MOTOR

## Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | 1 | Output HP | 1/2 Hp |
| Voltage | 208-230 V | Speed | 1050 rpm |
| Service Factor | 1 | Frame | 48 |
| Enclosure | Open Air Over | Thermal Protection | No Protection |
| Ambient Temperature | 40 °C | Frequency | 60/50 Hz |
| Current | 4.1 A | Duty | Continuous Air Over |
| Insulation Class | B | UL | Recognized |
| CSA | Y | CE | N |
| Number of Speeds | 1 | | |

## Technical Specifications

| | | | |
|---|---|---|---|
| Electrical Type | Electronically Commutated Motor | Poles | 12 |
| Rotation | Counterclockwise/Clockwise | Mounting | Round |
| Motor Orientation | Vsd | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Rolled Steel |
| Shaft Type | Flat | Overall Length | 9.67 in |
| Frame Length | 4.82 in | Shaft Diameter | 0.500 in |
| Shaft Extension | 3.92 in | | |
| Outline Drawing | 5SME39HXL697I | Connection Drawing | 24X328008 |

# Winding and Test Specification

## WTS # 24X332717-1

| Revision # 2 | Revised By : LONG | Rev. Date : Jul 13, 2018 | First Made for : |
|---|---|---|---|

**Comments : UPDATED COPPER WEIGHT PER ECO-0148493**

### Engineering Data

| | | | |
|---|---|---|---|
| **Frame** | 39 | **Stator Punching** | 24C301024 |
| **Motor Type** | SME | **Rotor Punching** | |
| **Air Gap** | .012 | **PE Endring** | |
| **Stack** | 1.50 | **OPE Endring** | |
| **Con. Diag.** | 423B631FIG35 | **Skew, Electric** | $11^{o}$ |
| **Wdg. Diag.** | 24C303033 | **Rotor Resistance** | |
| **Engineer** | PALESH DUVVURI | **Max Space Factor** | .39 |
| **Spl. Insul.** | | **Energy SaverLbl** | No |
| **Design Type** | | **Steel mat'l code** | |
| **Magnet Length** | 1.8 | **Control Type** | Trapazoid |
| **Magnet Material** | Std Fer24B202126 | **Rotor Type** | Surface Mnt |

### WTS Nameplate Data

| | | | |
|---|---|---|---|
| **Horsepower** | 1/2 | **RPM** | 1050 |
| **Voltage** | 277/208-230/115 | **Amps** | 4.10 6.80 |
| **Frequency** | 60/50 | **Phases** | 1 |
| **Capacitor** | | **Cap Volts** | |

**Test Volts :** 115 **Low Spd St Volts :**

**Test Frequency :** 60

**Test Instructions :** 24A105040AA-P1

| Winding | Winding Characteristics | | | | | | | | Resistance | | | Tap (Coil#) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Poles | N1e | Strands | Wire Size | Wire Spec | Shift | Turns | Weight | Min | Nominal | Max | |
| **Main** * | 12 | | 1 | 0.0239 | B50FG145 | 0 | 150 | 0.52 | 6.17 | 6.50 | 6.83 | |
| **X Main** | 12 | | 1 | 0.0239 | B50FG145 | -60 | 150 | 0.52 | 6.17 | 6.50 | 6.83 | |
| **Y Main** | | | | | | | | | | | | |
| **Z Main** | | | | | | | | | | | | |
| **W Main** | | | | | | | | | | | | |
| **Start** | 12 | | 1 | 0.0239 | B50FG145 | 120 | 150 | 0.52 | 6.17 | 6.50 | 6.83 | |

| | N. L. Performance Data | | | | Full Load Performance | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Amps | Watts | | Cap. Volts | Amps | | Watts | | Speed | Torque | |
| | Nominal | Nominal | Max | | Nominal | Max | Nominal | Max | Nominal | Min | Nominal |
| **High** | 3.55 | 33 | 40 | | | | | | | | |
| **Med. High** | | | | | | | | | | | |
| **Medium** | | | | | | | | | | | |
| **Med. Low** | | | | | | | | | | | |
| **Low** | | | | | | | | | | | |

| | Max. Torque | | |
|---|---|---|---|
| | RPM | Torque | |
| | | Min | Nominal |
| **High** | | | |
| **Med. High** | | | |
| **Medium** | | | |
| **Med. Low** | | | |
| **Low** | | | |

| Locked Rotor | | |
|---|---|---|
| Amps | Watts | Torque |
| Nominal | Nominal | Nominal |
| | | |
| | | |
| | | |
| | | |
| | | |

| | Customer/Special Load Points | | | | | | |
|---|---|---|---|---|---|---|---|
| | Speed | Torque | | Watts | | Amps | |
| | Nominal | Min | Nominal | Nominal | Max | Nominal | Max |
| **High** | | | | | | | |
| **Med. High** | | | | | | | |
| **Medium** | | | | | | | |
| **Med. Low** | | | | | | | |
| **Low** | | | | | | | |

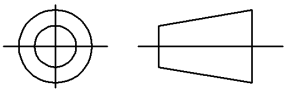
* Large wire size may be double stranded.

NAME:501108895 OBJECT:24X328008 DATE:16-May-05 19:37:32

SHEET 1 | REV 2 | 24X328008 | DRAWING NO. | SIZE A

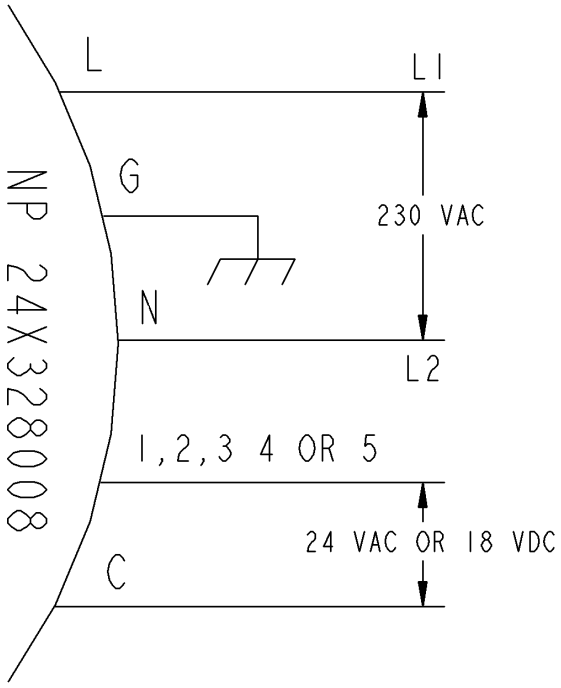


THIRD ANGLE PROJECTION



| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | DATE | APPROVED |
| 1 | MODIFIED PER ISAAC 05-1148 | SURAJ 05/16/05 | PALESH |
| 2 | CHANGED "GE" FORMAT TO "RBC" FORMAT AS PER ISAAC 05-1777 | GEETHA 09/05/05 | PALESH |

# 230V UNIT CONNECTION




| FOR ADDITIONAL INFO REFER TO: | SIGNATURES | | DATE |
|---|---|---|---|
| APPLIED PRACTICES | MODEL | | |
| DIMENSIONS ARE IN INCHES | DETAIL | SREYAS | 05/09/05 |
| TOLERANCE ON: | CHECKED | | |
| 1 PL DECIMALS ± 0.1 | ENGRG | | |
| 2 PL DECIMALS ± 0.01 | MFG | | |
| 3 PL DECIMALS ± 0.005 | QUALITY | | |
| ANGLES ± 0.5 | ISSUED | | |
| FRACTIONS ± | | | |
| FINISH ✓ | | | |
| MATERIAL | SOLID MODEL: MODEL NAME | | |

REGAL-BELOIT CORPORATION

TITLE
**NAME PLATE CONNECTION DIAGRAM**
FMF X-13 MODELS

| SIZE | DRAWING | REV |
|---|---|---|
| A | 24X328008 | 2 |

SCALE: | SHEET 1 OF 1

# Winding and Test Specification

## WTS # 24X332717-1

| Revision # 2 | Revised By : LONG | Rev. Date : Jul 13, 2018 | First Made for : |
|---|---|---|---|

**Comments : UPDATED COPPER WEIGHT PER ECO-0148493**

### Engineering Data

| | | | |
|---|---|---|---|
| **Frame** | 39 | **Stator Punching** | 24C301024 |
| **Motor Type** | SME | **Rotor Punching** | |
| **Air Gap** | .012 | **PE Endring** | |
| **Stack** | 1.50 | **OPE Endring** | |
| **Con. Diag.** | 423B631FIG35 | **Skew, Electric** | $11^{o}$ |
| **Wdg. Diag.** | 24C303033 | **Rotor Resistance** | |
| **Engineer** | PALESH DUVVURI | **Max Space Factor** | .39 |
| **Spl. Insul.** | | **Energy SaverLbl** | No |
| **Design Type** | | **Steel mat'l code** | |
| **Magnet Length** | 1.8 | **Control Type** | Trapazoid |
| **Magnet Material** | Std Fer24B202126 | **Rotor Type** | Surface Mnt |

### WTS Nameplate Data

| | | | |
|---|---|---|---|
| **Horsepower** | 1/2 | **RPM** | 1050 |
| **Voltage** | 277/208-230/115 | **Amps** | 4.10 6.80 |
| **Frequency** | 60/50 | **Phases** | 1 |
| **Capacitor** | | **Cap Volts** | |

**Test Volts :** 115 **Low Spd St Volts :**

**Test Frequency :** 60

**Test Instructions :** 24A105040AA-P1

| Winding | Winding Characteristics | | | | | | | | Resistance | | | Tap (Coil#) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Poles | N1e | Strands | Wire Size | Wire Spec | Shift | Turns | Weight | Min | Nominal | Max | |
| **Main** * | 12 | | 1 | 0.0239 | B50FG145 | 0 | 150 | 0.52 | 6.17 | 6.50 | 6.83 | |
| **X Main** | 12 | | 1 | 0.0239 | B50FG145 | -60 | 150 | 0.52 | 6.17 | 6.50 | 6.83 | |
| **Y Main** | | | | | | | | | | | | |
| **Z Main** | | | | | | | | | | | | |
| **W Main** | | | | | | | | | | | | |
| **Start** | 12 | | 1 | 0.0239 | B50FG145 | 120 | 150 | 0.52 | 6.17 | 6.50 | 6.83 | |

| | N. L. Performance Data | | | | Full Load Performance | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Amps | Watts | | Cap. Volts | Amps | | Watts | | Speed | Torque | |
| | Nominal | Nominal | Max | | Nominal | Max | Nominal | Max | Nominal | Min | Nominal |
| **High** | 3.55 | 33 | 40 | | | | | | | | |
| **Med. High** | | | | | | | | | | | |
| **Medium** | | | | | | | | | | | |
| **Med. Low** | | | | | | | | | | | |
| **Low** | | | | | | | | | | | |

| | Max. Torque | | | Locked Rotor | | |
|---|---|---|---|---|---|---|
| | RPM | Torque | | Amps | Watts | Torque |
| | | Min | Nominal | Nominal | Nominal | Nominal |
| **High** | | | | | | |
| **Med. High** | | | | | | |
| **Medium** | | | | | | |
| **Med. Low** | | | | | | |
| **Low** | | | | | | |

| | Customer/Special Load Points | | | | | | |
|---|---|---|---|---|---|---|---|
| | Speed | Torque | | Watts | | Amps | |
| | Nominal | Min | Nominal | Nominal | Max | Nominal | Max |
| **High** | | | | | | | |
| **Med. High** | | | | | | | |
| **Medium** | | | | | | | |
| **Med. Low** | | | | | | | |
| **Low** | | | | | | | |

* Large wire size may be double stranded.


## Motor Details

| | | | |
|---|---|---|---|
| **Model :** | **5SME39HXL697I** | **Catalog Number :** | **N/A** |
| **General:** | | | |
| Application : | **INDOOR INT CONTROL** | Motor Category : | **COMPLETE MOTOR** |
| Phases : | **1** | Production Status : | **PROD** |
| # of Speeds : | **1** | Stock Status : | |
| Testspec : | **24X332717-1** | Approved For Sale : | |
| Horiz/Vertical : | **VSD** | Restricted Model : | |
| Shell Enclosure : | **OPEN** | Customer : | **LENNOX INDUSTRIES** |
| Endshield Enclosure : | **CLOSED** | Customer Part# : | **104953-02** |
| **Nameplate Data:** | | | |
| Horsepower : | **1/2** | GE Type : | **SME** |
| RPM : | **1050** | Time Rating : | **CAO** |
| Voltage : | **208-230** | Frequency : | **60/50** |
| FL Amps : | **4.1** | Insulation Class: | **B** |
| Capacitor 1mFd/V : | **N/R** | Capacitor 2mFd/V : | **N/R** |
| Additional Information : | **N/R**<br>**N/R** | | |
| **Miscellaneous:** | | | |
| Fullload RPM - HI : | | GE Frame : | **39** |
| Poles : | **12** | Shell Length : | **4.82** |
| Rotation : | **CCW/CW** | Drains : | **Y** |
| Thermal Protection : | | Est. Weight : | **12** |
| Finish Color: | **STD GRAY** | Capacitor By : | **N/R** |
| **OVERLOAD INFORMATION::** | | | |
| Protector: | **N/R** | Overload Temp : | **N/A** |
| Catalog No: | **N/A** | Vendor Name: | **N/A** |
| **THERMAL CUT-OFF INFORMATION:** | | | |
| TCO: | **N/A** | Overload Temp : | **N/A** |
| Catalog No: | **N/A** | Vendor Name: | **N/A** |
| **U.L.CONSTRUCTION FILES:** | | | |
| Motor Construction: | **E46035(excluding SME)** | Class B Insulation : | **E306343(excluding SME)** |
| Over Load : | **E27885(excluding SME)** | CSA(REY) : | **MC236833(excluding SME)** |
| **Shaft:** | | | |
| PE Type : | **FLAT** | OPE Type : | **N/R** |
| PE Length : | **3.92** | OPE Length : | **N/R** |
| PE Diameter : | | OPE Diameter : | |
| PE Flat Length : | **3.50** | OPE Flat Length : | **N/R** |
| **Endshields:** | | | |
| PE Material : | **AL** | OPE Material : | **AL** |
| PE Hub Type : | **FLAT** | OPE Hub Type : | **FLAT** |
| PE Oiler : | **N/R** | OPE Oiler : | **N/R** |
| PE Oil Plug : | **N/R** | OPE Oil Plug : | **N/R** |
| PE Mounting Holes : | **N/R** | OPE Mounting Holes : | **N/R** |
| **Bearings:** | | | |
| PE Bearing Type : | **BALL** | OPE Bearing Type : | **BALL** |
| Bearing Protection : | **No** | Rohs Compliant : | **No** |
| **Mounting:** | | | |
| Base : | **N/R** | Lug : | **N/R** |
| Clamp Screw : | **Yes** | Weld Screw : | **No** |
| **Extended Clamp Screws:** | | | |
| PE Pattern : | | OPE Pattern : | |
| PE Length : | **0** | OPE Length : | **0** |
| PE Nut Qty : | **0** | OPE Nut Qty : | **0** |
| Head End : | **PE** | Screw Size : | **#8** |
| Nut Thickness : | **.12** | | |
| **Lead & Cord :** | | | |
| Lead End : | **OPE** | Lead Type : | **SINGLE COND** |
| Lead Exit H/W : | **N/R** | Lead Harness Desc : | **LEAD HARNESS** |

Lead Exit H/W Orient. : **N/R**

**Note :** Exit position is viewed from the Lead End with the Shell Weld at 6:00.

**Grounding :**

| | | | |
|---|---|---|---|
| Type : | **N/R** | Location : | **N/R** viewed from **N/R** with Oil boss at 12:00 |
| Exit Type : | **N/R** | AWG Size : | **0** |
| Length : | **N/R** | Color : | **N/R** |
| Terminal : | **N/R** | Ins.Material & Thickness | **N/R N/R** |

**Diagrams and Dimensions :**

| | | | |
|---|---|---|---|
| Outline Drawing : | | C-Dimension : | |
| Connection Diagram : | **423B631 Fig# 35** | Connection Label : | **24X328008** |

**Notes :**

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Date of last revision : **03-FEB-23**