ABB BALDOR RELIANCE

# Customer information packet

## MVM3542D

.56HP, 1725RPM, 3PH, 60HZ, D80D, 3420M, TEFC, B
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | D80D |
| **Frame Material** | Steel |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | .750 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 460.0 V @ 60 HZ |
| | 230.0 V @ 60 HZ |
| | 208.0 V @ 60 HZ |
| **Agency Approvals** | CSA |
| | UR |
| **Ambient Temperature** | 40 °C |
| **Auxiliary Box** | NO AUXILLARY BOX |
| **Auxiliary Box Lead Termination** | None |
| **Base Indicator** | No Mounting |
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Blower** | None |
| **Current @ Voltage** | 3.200 A @ 208.0 V |
| | 3.000 A @ 230.0 V |
| | 1.500 A @ 460.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 75.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Frame Prefix** | D |
| **Front Shaft Indicator** | None |

## Part Detail

| | |
|---|---|
| **Revision** | F |
| **Type** | AC |
| **Mech. spec.** | 34H339 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 34WGR707 |
| **Layout** | 34LYH339 |
| **Eff. date** | 03-09-2026 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 |
| **Proprietary** | False |
| **Created date** | 01-29-2021 |

| | |
|---|---|
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 1.5 a |
| **Insulation Class** | B |
| **Inverter Code** | Not Inverter |
| **KVA Code** | M |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | No Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 9 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | IEC |
| **Motor Type** | 3420M |
| **Mounting Arrangement** | B5 |
| **Number of Poles** | 4 |
| **Overall Length** | 10.73 IN |
| **Power Factor** | 64 |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | D-Flange |
| **Pulley Shaft Indicator** | Tapped & Key |
| **Rodent Screen** | None |
| **Service Factor** | 1.25 |
| **Shaft Diameter** | 0.748 IN |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1725 rpm |
| **Speed Code** | Single Speed |
| **Starting Method** | Direct on line |
| **Thermal Device - Bearing** | None |
| **Thermal Device - Winding** | None |
| **Vibration Sensor Indicator** | No Vibration Sensor |
| **Winding Thermal 1** | None |
| **Winding Thermal 2** | None |

**Nameplate**

| NP1379L | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CAT.NO.** | MVM3542D | | | | | | |
| **SPEC.** | 34H339R707G1 | | | | | | |
| **IEC FRAME** | D80D | **K.W.** | .56 TE | | | | |
| **VOLTS** | 208-230/460 | | | | | | |
| **AMP** | 3.2-3/1.5 | | | | | | |
| **RPM** | 1725 | **I.P.** | 54 | | | | |
| **HZ** | 60 | **PH** | 3 | **CL** | B | | |
| **SER.F.** | 1.25 | **DES** | B | **CODE** | M | | |
| **NEMA-NOM-EFF** | 75.5 | **PF** | 64 | | | | |
| **RATING** | 40C AMB-CONT | | | | | | |
| **CC** | | | | | | | |
| **DE** | 6205 | **ODE** | 6203 | | | | |
| **SER. #** | SFA 3.6-3.4/1.7 | | | | | | |

**AC Induction Motor Performance Data**
Record # 85439
Preliminary Data Sheet

| **Winding:** 34WGR707-R001 | **Type:** 3420M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | |
|---|---|---|---|
| **Rated Output (HP)** | | | 0.75 |
| **Volts** | | | 208-230/460 |
| **Full Load Amps** | | | 3.2-3.0/1.5 |
| **R.P.M.** | | | 1725 |
| **Hz** | 60 | **Phase** | 3 |
| **NEMA Design Code** | B | **KVA Code** | M |
| **Service Factor (S.F.)** | | | 1.25 |
| **NEMA Nom. Eff.** | 77 | **Power Factor** | 61 |
| **Rating - Duty** | | | 40C-AMB CONT |
| **S.F. Amps** | | | 3.6-3.4/1.7 |

| **460 V, 60 Hz: High Voltage Connection** | |
|---|---|
| **Full Load Torque** | 2.27 LB-FT |
| **Start Configuration** | direct on line |
| **Breakdown Torque** | 9.9 LB-FT |
| **Pull-up Torque** | 7.1 LB-FT |
| **Locked-rotor Torque** | 9.2 LB-FT |
| **Starting Current** | 9.8 A |
| **No-load Current** | 1.08 A |
| **Line-line Res. @ 25ºC** | 21 Ω |
| **Temp. Rise @ Rated Load** | 69°C |
| **Temp. Rise @ S.F. Load** | 83°C |
| **Locked-rotor Power Factor** | 59.2 |
| **Rotor inertia** | 0.0476 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 0.75 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 29 | 44 | 56 | 66 | 73 | 79 | 73 |
| **Efficiency** | 54.7 | 68.4 | 73.5 | 75.2 | 75.8 | 74.9 | 76.5 |
| **Speed** | 1780 | 1763 | 1745 | 1726 | 1723 | 1700 | 1723 |
| **Line amperes** | 1.09 | 1.15 | 1.26 | 1.4 | 1.58 | 1.79 | 1.58 |

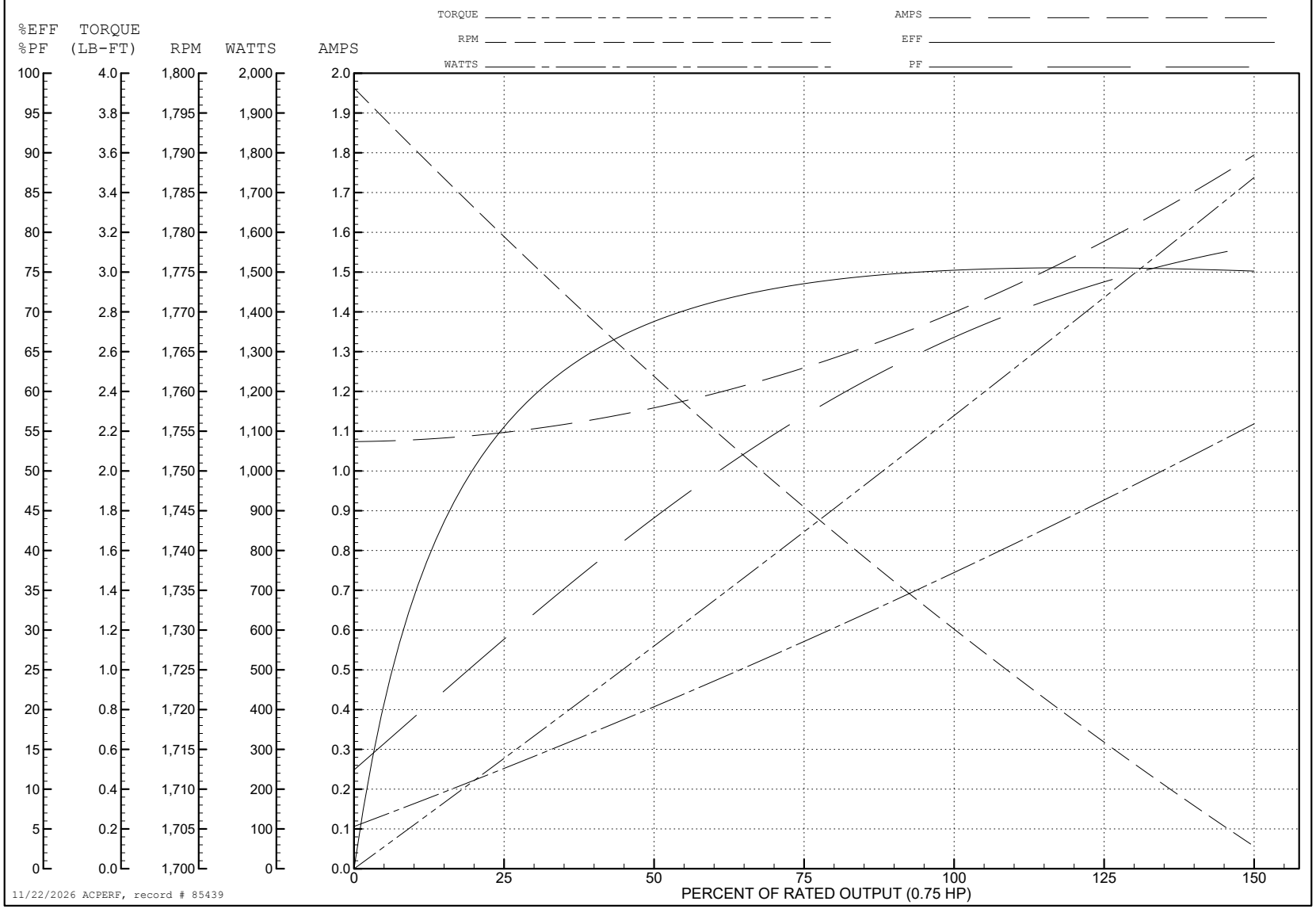
ABB Motors and Mechanical Inc.

WINDING # 34WGR707

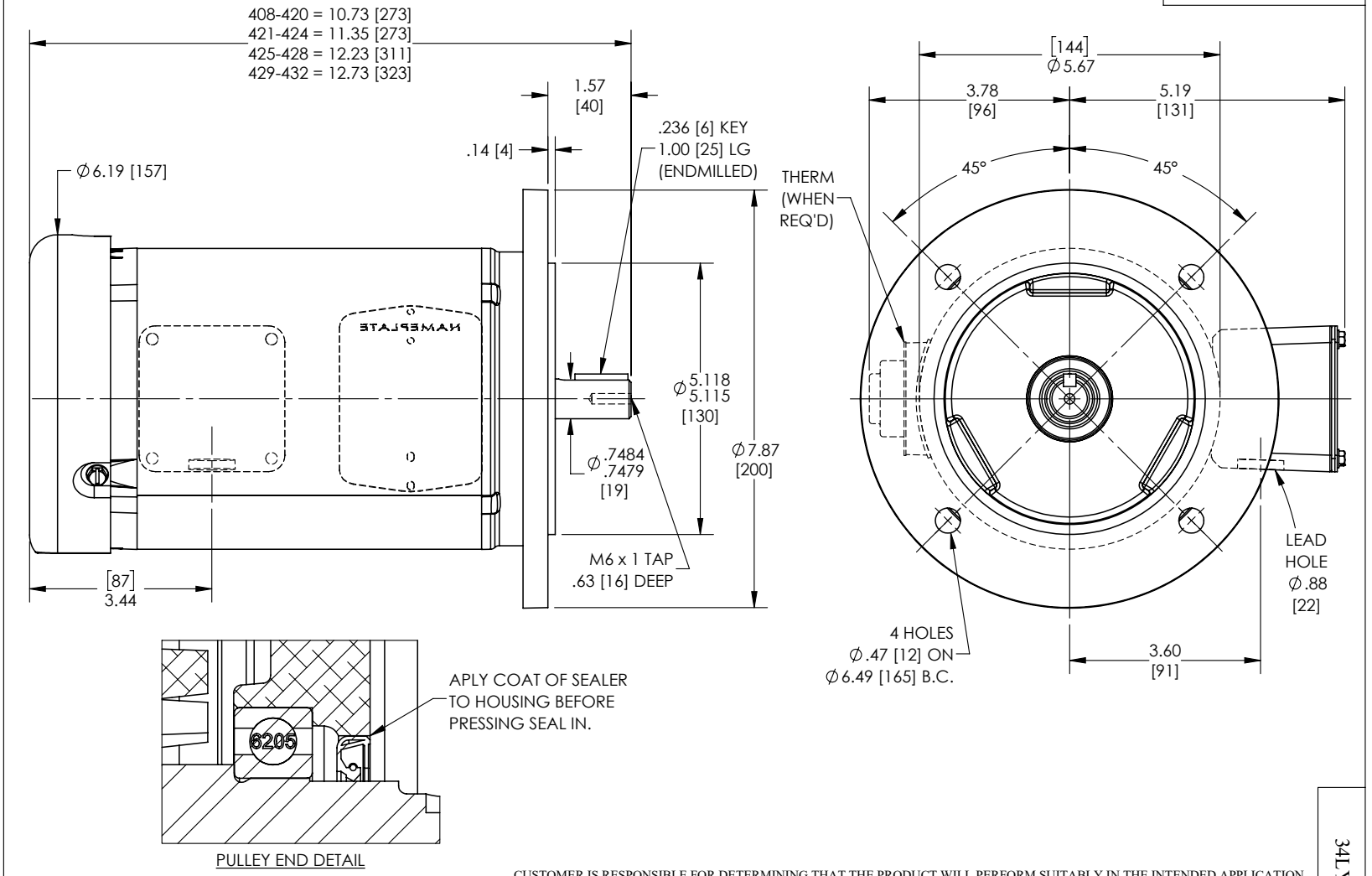
0.75 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=9.9 PU=7.1 LR=9.2 LRA=9.8



34LYH339




CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

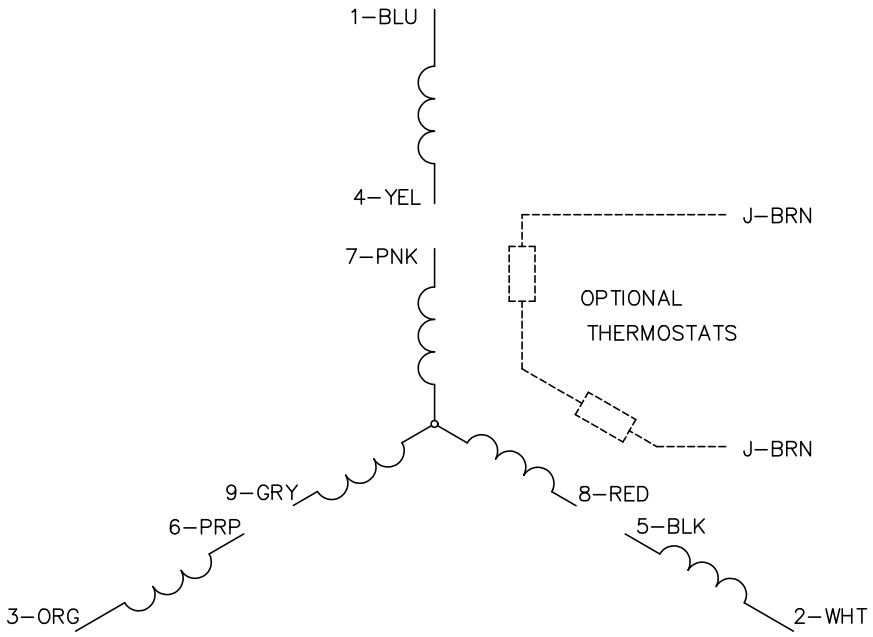
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| REV. DESC: LOAD TO SOLIDWORKS - REV E | | | |
| REV: F | VERSION: 06 | REVISED: 09:06:03 04/25/2023 | TDR: 000001201165 |
| 34LYH339 | MODEL NO. 34LYH339 | | REF: - |
| | BY: ENFRAJ0 | | |

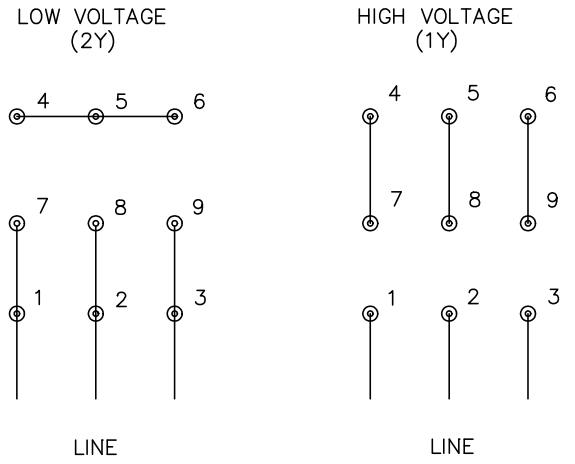
BALDOR - RELIANCE®

VERT 34M IEC D80D TEFC F2 MTG W/SEAL

34LYH339

CD0005




NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

| | | | |
|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| CD0005 | | FILE: AAA00005140 | MDL: – |
| | | MTL: – | 3PH, DV, 9 LEADS |