ABB BALDOR RELIANCE

# Customer information packet

## VSPM3538

.5HP, 1725RPM, 3PH, 60HZ, 56C, 3420M, TEFC, F1
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 56C |
| **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** | .500 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 230.0 V @ 60 HZ |
| | 460.0 V @ 60 HZ |
| **Agency Approvals** | C UR US |
| | CURUS |
| | WEEE |
| **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** | .750 A @ 460.0 V |
| | 1.500 A @ 230.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 81.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 0.8 a |

## Part Detail

| | |
|---|---|
| **Revision** | D |
| **Type** | AC |
| **Mech. spec.** | 34N585 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 34WGR771 |
| **Layout** | 34LYN585 |
| **Eff. date** | 03-04-2025 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 |
| **Proprietary** | False |
| **Created date** | 03-07-2024 |

| | |
|---|---|
| **Insulation Class** | F |
| **Inverter Code** | Not Inverter |
| **KVA Code** | K |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 9 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3420M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 11.34 IN |
| **Power Factor** | 76 |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **Service Factor** | 1.25 |
| **Shaft Diameter** | 0.625 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**

| NP4558A02LL | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CAT #** | VSPM3538 | | | **WGT** | 27 | **LBS** | | | | |
| **SER #** | | | | | **ENCL** | TEFC | | | | |
| **SPEC** | 34N585R771 | | | | **CC** | 010A | **IP** | 54 | | |
| **HP** | .5 | | | | | | **NEMA NOM. EFF** | | 81.5 | |
| **VOLTS** | 230/460 | | | | **PF** | 76 | | | | |
| **AMPS** | 1.5/.75 | | | | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | |
| **RPM** | 1725 | | | | **PH** | 3 | **DES** | B | | |
| **FRAME** | 56C | **HZ** | 60 | | **CODE** | K | **CLASS** | F | | |
| **SER.F.** | 1.25 | **SF AMP** | 1.76/.88 | | | | | | | |
| **DE** | 6203 | | **ODE** | 6203 | | | | | | |
| **GREASE** | POLYREX EM | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |
| | | | | | | **QR** | | | | |
| **YR** | | | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 100716
Preliminary Data Sheet

| **Winding:** 34WGR771-R001 | **Type:** 3420M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | .5 | **Full Load Torque** | 1.51 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 1.5/.75 | **Breakdown Torque** | 5.3 LB-FT |
| **R.P.M.** | | | 1725 | **Pull-up Torque** | 3.5 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 4.1 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | K | **Starting Current** | 5.4 A |
| **Service Factor (S.F.)** | | | 1.25 | **No-load Current** | 0.46 A |
| **NEMA Nom. Eff.** | 81.5 | **Power Factor** | 76 | **Line-line Res. @ 25ºC** | 30.4 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 41°C |
| **S.F. Amps** | | | 1.76/.88 | **Temp. Rise @ S.F. Load** | 54°C |
| | | | | **Locked-rotor Power Factor** | 54.5 |
| | | | | **Rotor inertia** | 0.0476 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 0.5 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 37 | 56 | 69 | 76 | 80 | 82 | 80 |
| **Efficiency** | 66.3 | 77.5 | 81.1 | 81.9 | 81.7 | 80.6 | 81.7 |
| **Speed** | 1779 | 1762 | 1744 | 1725 | 1704 | 1681 | 1704 |
| **Line amperes** | 0.48 | 0.55 | 0.63 | 0.75 | 0.88 | 1.03 | 0.88 |

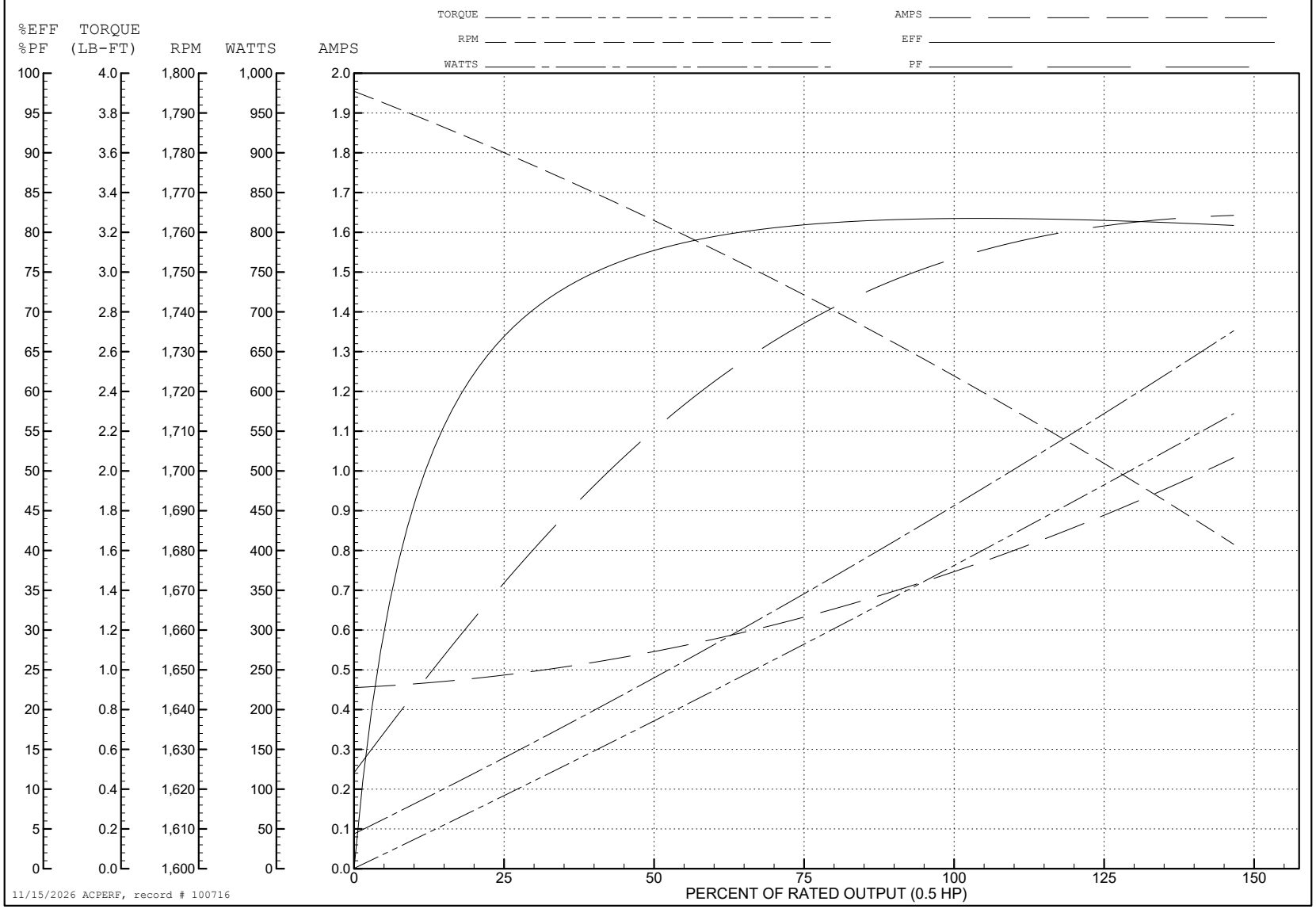
ABB Motors and Mechanical Inc.

WINDING # 34WGR771

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

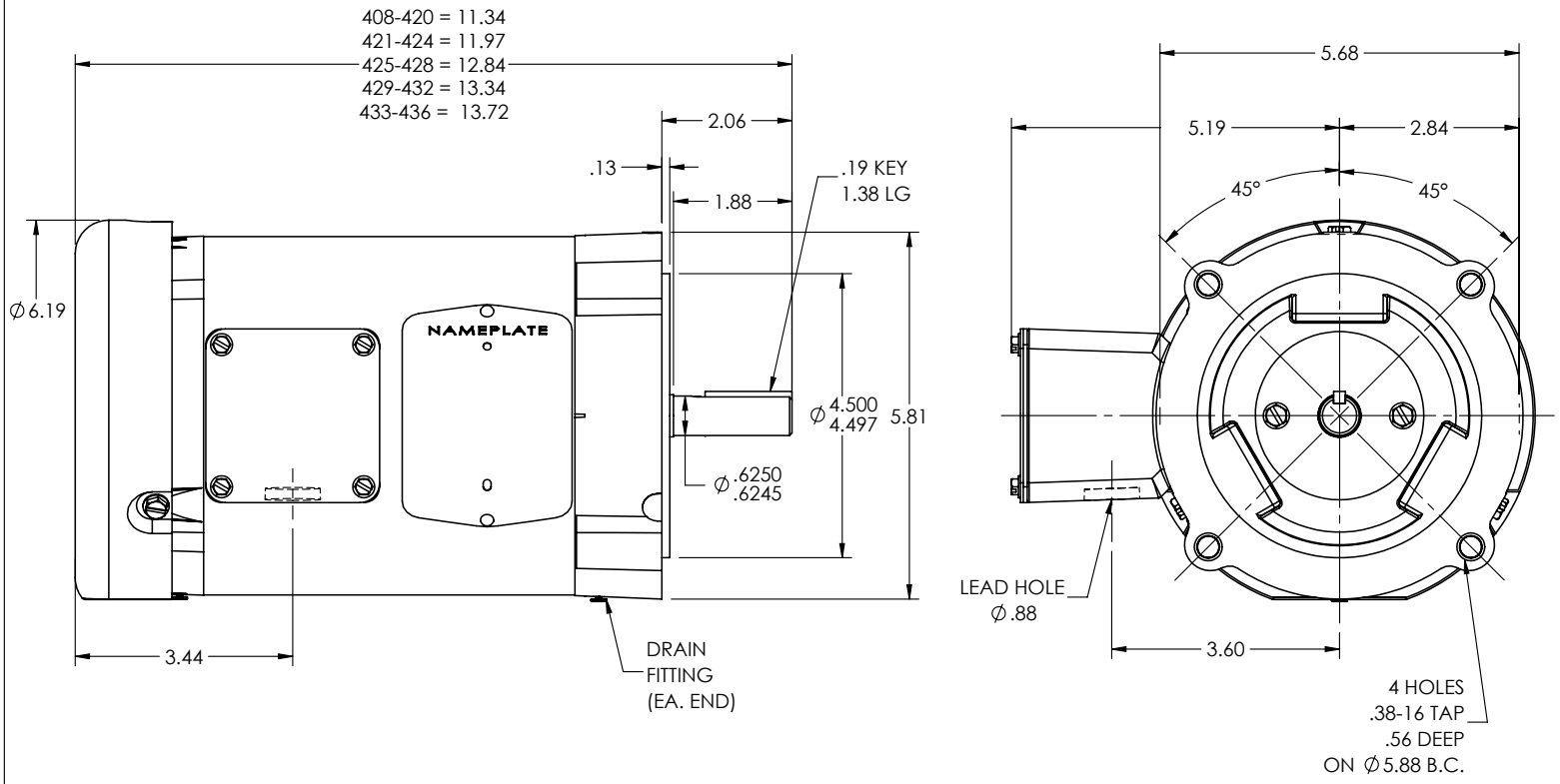
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=5.3 PU=3.5 LR=4.1 LRA=5.4




11/15/2026 ACPERF, record # 100716

34LYN585

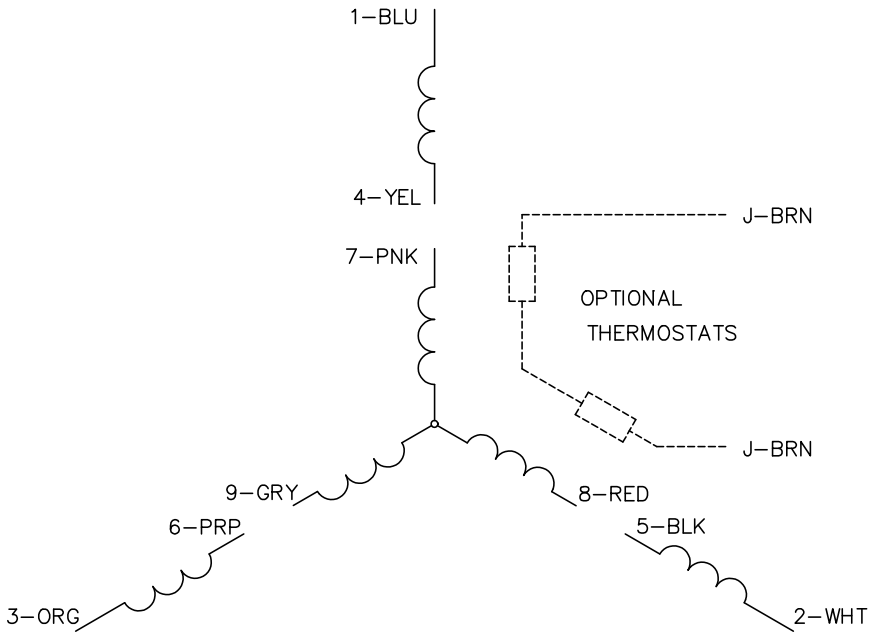


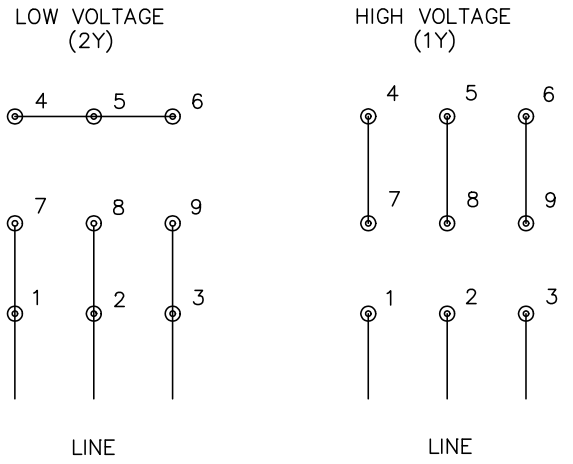

34LYN585

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

| | | | | |
|---|---|---|---|---|
| REV. DESC: NEW | | | | BALDOR - RELIANCE® |
| REV: - | VERSION: 00 | REVISED: 01:20:17 03/05/2024 | TDR: 000001227262 | |
| 34LYN585 | MODEL NO. 34LYN585 | | REF: - | VERT 34M NEMA 56C TEFC W/DRAINS (IP54) |
| | BY: USALMAZ | | | |

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

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|---|---|---|---|
| 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 |