

BALDOR • RELIANCE

Customer information packet

EM31104-5

.33HP, 1725RPM, 3PH, 60HZ, 56, 3416M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|---------------------------|
| Enclosure | OPEN |
| Frame | 56 |
| 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 | .330 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 575.0 V @ 60 HZ |
| Agency Approvals | UR CSA |
| Ambient Temperature | 40 °C |
| Auxillary Box | No Auxillary Box |
| Auxillary Box Lead Termination | None |
| Base Indicator | Rigid |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Current @ Voltage | .500 A @ 575.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 73.4 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Face Code | Standard |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 0.5 a |
| Insulation Class | B |
| Inverter Code | Not Inverter |

Part detail

| | |
|--------------|------------|
| Revision | E |
| Type | AC |
| Mech. spec. | 34F779 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 34WGR271 |
| Layout | 34LYF779 |
| Eff. date | 02-14-2024 |
| CD Diagram | CD0006 |
| Poles | 04 |
| Leads | 3#18 |
| Proprietary | False |
| Created date | 01-12-2015 |

| | |
|--------------------------------------|---------------------|
| KVA Code | N |
| Lifting Lugs | No Lifting Lugs |
| Locked Bearing Indicator | No Locked Bearing |
| Motor Lead Exit | Ko Box |
| Motor Lead Quantity/Wire Size | 3 @ 18 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3416M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 9.51 IN |
| Power Factor | 66 |
| Product Family | General Purpose |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Standard |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| RoHS Status | ROHS COMPLIANT |
| Service Factor | 1.35 |
| Shaft Diameter | 0.625 IN |
| Shaft Extension Location | Pulley End |
| 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

| NP2116L | | | | | | | | | |
|---------------------|--------------|-------------|------|------------|----|-----------|-----------|---|--|
| CAT.NO. | EM31104-5 | | | | | | | | |
| SPEC. | 34F779R271G1 | | | | | | | | |
| HP | .33 | | | | | | | | |
| VOLTS | 575 | | | | | | | | |
| AMP | .5 | | | | | | | | |
| RPM | 1725 | | | | | | | | |
| FRAME | 56 | | | HZ | 60 | | PH | 3 | |
| SER.F. | 1.35 | CODE | N | DES | B | CL | B | | |
| NEMA-NOM-EFF | 73.4 | PF | 66 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | | | | | | | | | |
| DE | 6203 | ODE | 6203 | | | | | | |
| ENCL | OPEN | SN | | | | | | | |
| | SFA .6 | | | | | | | | |

AC Induction Motor Performance Data

Record # 48811

Typical performance - not guaranteed values

| Winding: 34WGR271-R001 | | Type: 3416M | Enclosure: OPEN | | |
|------------------------|----------|------------------------|--|---------------------------|--------|
| Nameplate Data | | | 575 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | .33 | Full Load Torque | 1.01 LB-FT | | |
| Volts | 575 | Start Configuration | direct on line | | |
| Full Load Amps | .5 | Breakdown Torque | 4.53 LB-FT | | |
| R.P.M. | 1725 | Pull-up Torque | 3.16 LB-FT | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 3.79 LB-FT | |
| NEMA Design Code | B | KVA Code | N | Starting Current | 3.77 A |
| Service Factor (S.F.) | 1.35 | No-load Current | 0.353 A | | |
| NEMA Nom. Eff. | 73.4 | Power Factor | 66 | Line-line Res. @ 25°C | 66.3 Ω |
| Rating - Duty | 40C | AMB-CONT | Temp. Rise @ Rated Load | | 18°C |
| S.F. Amps | .6 | Temp. Rise @ S.F. Load | | 23°C | |
| | | | Locked-rotor Power Factor | 58.6 | |
| | | | Rotor inertia | 0.0381 LB-FT ² | |

Load Characteristics 575 V, 60 Hz, 0.33 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|-------|-------|-------|-------|-------|-------|-------|
| Power Factor | 30 | 45 | 57 | 66 | 73 | 78 | 75 |
| Efficiency | 55.6 | 69.9 | 74.7 | 77 | 76.5 | 76.4 | 76.5 |
| Speed | 1786 | 1772 | 1758 | 1743 | 1726 | 1709 | 1719 |
| Line amperes | 0.364 | 0.396 | 0.438 | 0.492 | 0.556 | 0.629 | 0.585 |

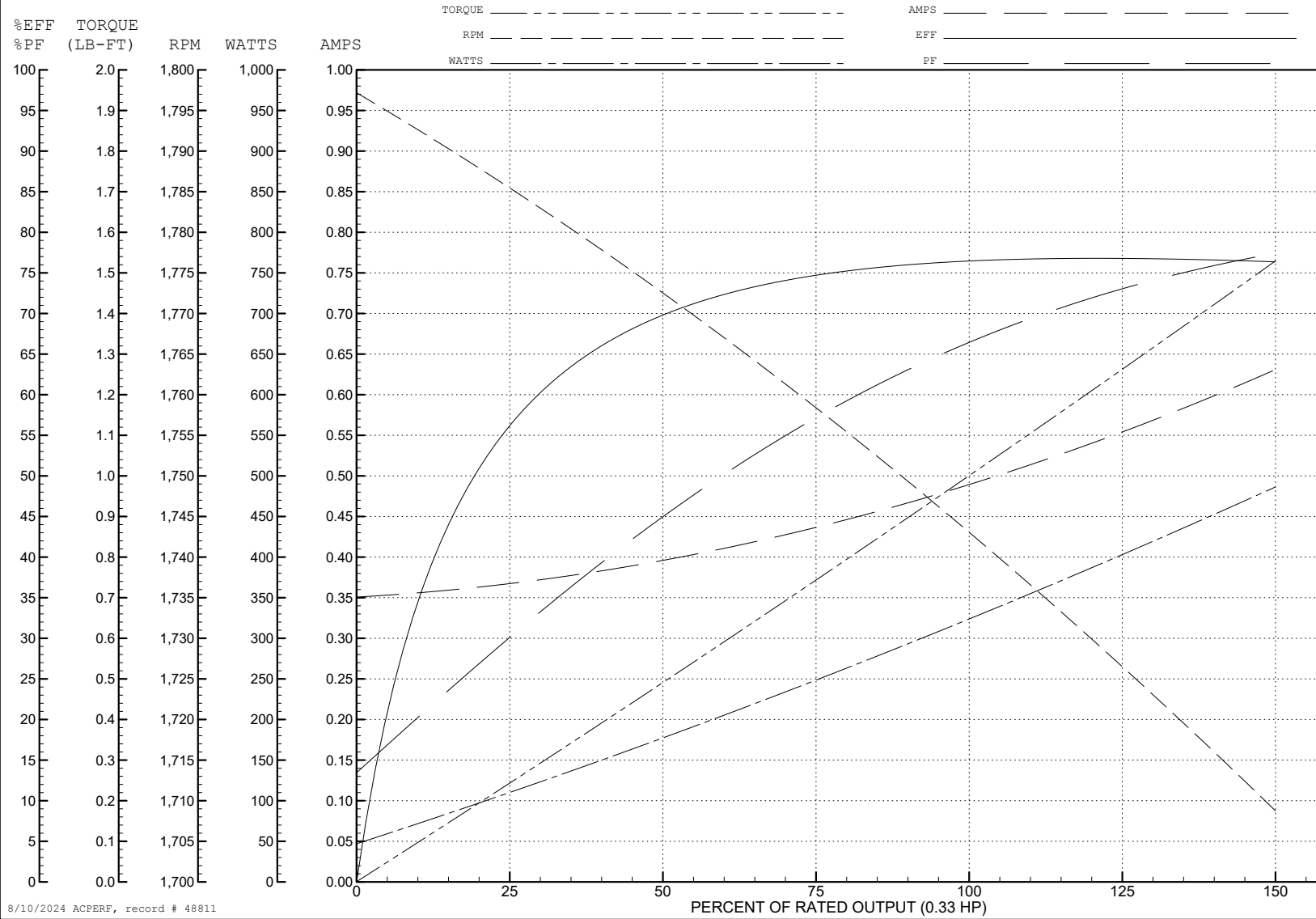
ABB Motors and Mechanical Inc.

WINDING # 34WGR271

Typical performance - not guaranteed values.

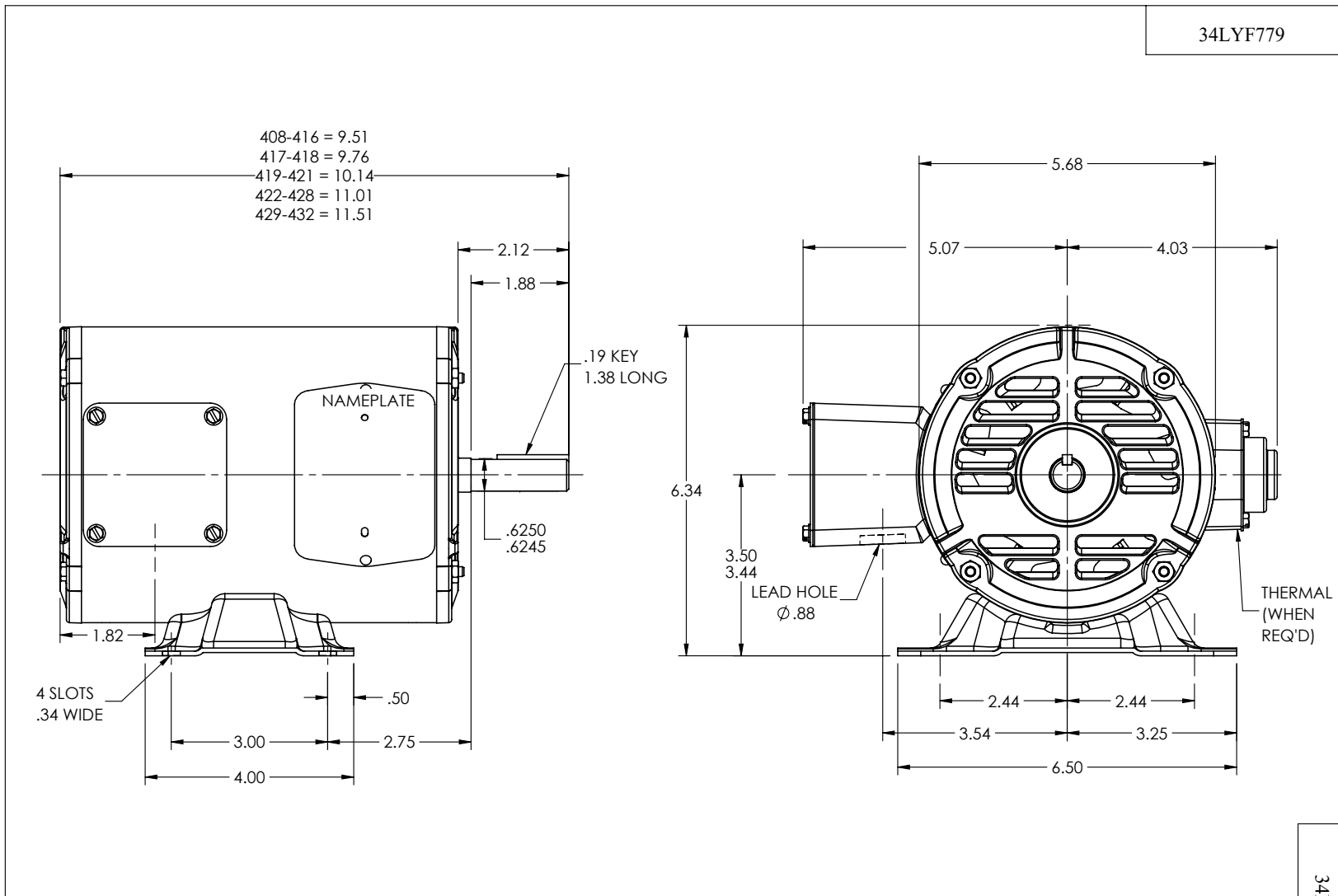
0.33 HP 3 PH 60 HZ 1725 RPM 575 V 3416M

TORQUES (LB-FT): PO=4.53 PU=3.16 LR=3.79 LRA=3.77



8/10/2024 ACPERF, record # 48811

34LYF779



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

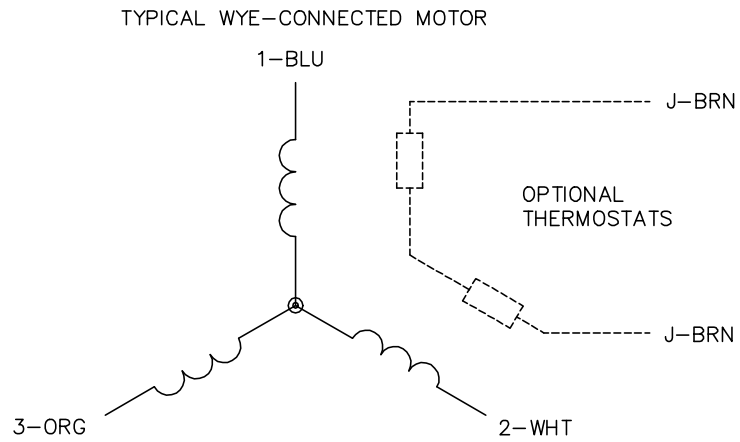
| | | | |
|-------------------------------|-------------|------------------------------|-------------------|
| REV. DESC: LOAD TO SOLIDWORKS | | | |
| REV: E | VERSION: 05 | REVISED: 04:43:07 09/21/2022 | TDR: 000001194274 |
| 34LYF779 | | MODEL NO. 34LYF779 | REF: - |
| | | BY: ENFRAJ0 | |

BALDOR - RELIANCE®

HORZ 34M NEMA 56 OPEN

34LYF779

CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

| | | |
|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: E | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00005\141 | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO |
| MTL: - | © □ | |

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1