

BALDOR • RELIANCE

Customer information packet

EBM3603Y

1HP, 1770RPM, 3PH, 60HZ, 182, 3520M, TEFC, F1, B

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|---|
| Enclosure | TEFC |
| Frame | 182 |
| 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 | 1.000 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 | CURUSEEV NEMA PREMIUM |
| 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 | 1.600 A @ 460.0 V 3.200 A @ 208.0 V 3.200 A @ 230.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 85.5 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 1.6 a |

Part detail

| | |
|--------------|------------|
| Revision | E |
| Type | AC |
| Mech. spec. | 35M527 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 35WGG004 |
| Layout | 35LYM527 |
| Eff. date | 06-07-2024 |
| CD Diagram | CD0005 |
| Poles | 04 |
| Leads | 9#18 Y |
| Proprietary | False |
| Created date | 01-10-2022 |

| | |
|--------------------------------------|---------------------|
| Insulation Class | F |
| Inverter Code | Inverter Ready |
| KVA Code | N |
| 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 | NEMA |
| Motor Type | 3520M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 17.49 IN |
| Power Factor | 69 |
| Product Family | General Purpose |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Standard |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| Service Factor | 1.15 |
| Shaft Diameter | 0.875 IN |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed | 1770 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

| NP1259L | | | | | | | | | |
|---------------------|--------------|-------------|-----------|------------|---|-----------|---|--|--|
| CAT.NO. | EBM3603Y | | | | | | | | |
| SPEC. | 35M527G004G1 | | | | | | | | |
| HP | 1 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMP | 3.2/1.6 | | | | | | | | |
| RPM | 1770 | | | | | | | | |
| FRAME | 182 | | HZ | 60 | | PH | 3 | | |
| SER.F. | 1.15 | CODE | N | DES | B | CL | F | | |
| NEMA-NOM-EFF | 85.5 | PF | 69 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | | | | | | | | |
| DE | 6205 | ODE | 6203 | | | | | | |
| ENCL | TEFC | SN | | | | | | | |
| | SFA 3.4/1.7 | | | | | | | | |

AC Induction Motor Performance Data

Record # 91625

Typical performance - not guaranteed values

| Winding: 35WGG004-R001 | | Type: 3520M | | Enclosure: TEFC | |
|-------------------------------|------|---------------------|--|----------------------------------|--------------------------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | | 1 | Full Load Torque | | 2.982 LB-FT |
| Volts | | 230/460 | Start Configuration | | direct on line |
| Full Load Amps | | 3.2/1.6 | Breakdown Torque | | 14.6 LB-FT |
| R.P.M. | | 1770 | Pull-up Torque | | 7.57 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 9.17 LB-FT |
| NEMA Design Code | B | KVA Code | N | Starting Current | 14.6 A |
| Service Factor (S.F.) | | 1.15 | No-load Current | | 1.2 A |
| NEMA Nom. Eff. | 85.5 | Power Factor | 69 | Line-line Res. @ 25°C | 16.049 Ω |
| Rating - Duty | | 40C | AMB-CONT | Temp. Rise @ Rated Load | 36°C |
| S.F. Amps | | 3.4/1.7 | | Temp. Rise @ S.F. Load | 41°C |
| | | | | Locked-rotor Power Factor | 61.549 |
| | | | | Rotor inertia | 0.144 lb-ft ² |

Load Characteristics 460 V, 60 Hz, 1 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 29 | 45 | 58 | 67 | 73 | 78 | 71 |
| Efficiency | 71.1 | 81.2 | 84.7 | 85.8 | 86 | 85.6 | 85.9 |
| Speed | 1794 | 1787.3 | 1781.1 | 1774.3 | 1767.4 | 1759.4 | 1770 |
| Line amperes | 1.22 | 1.31 | 1.46 | 1.64 | 1.86 | 2.11 | 1.77 |

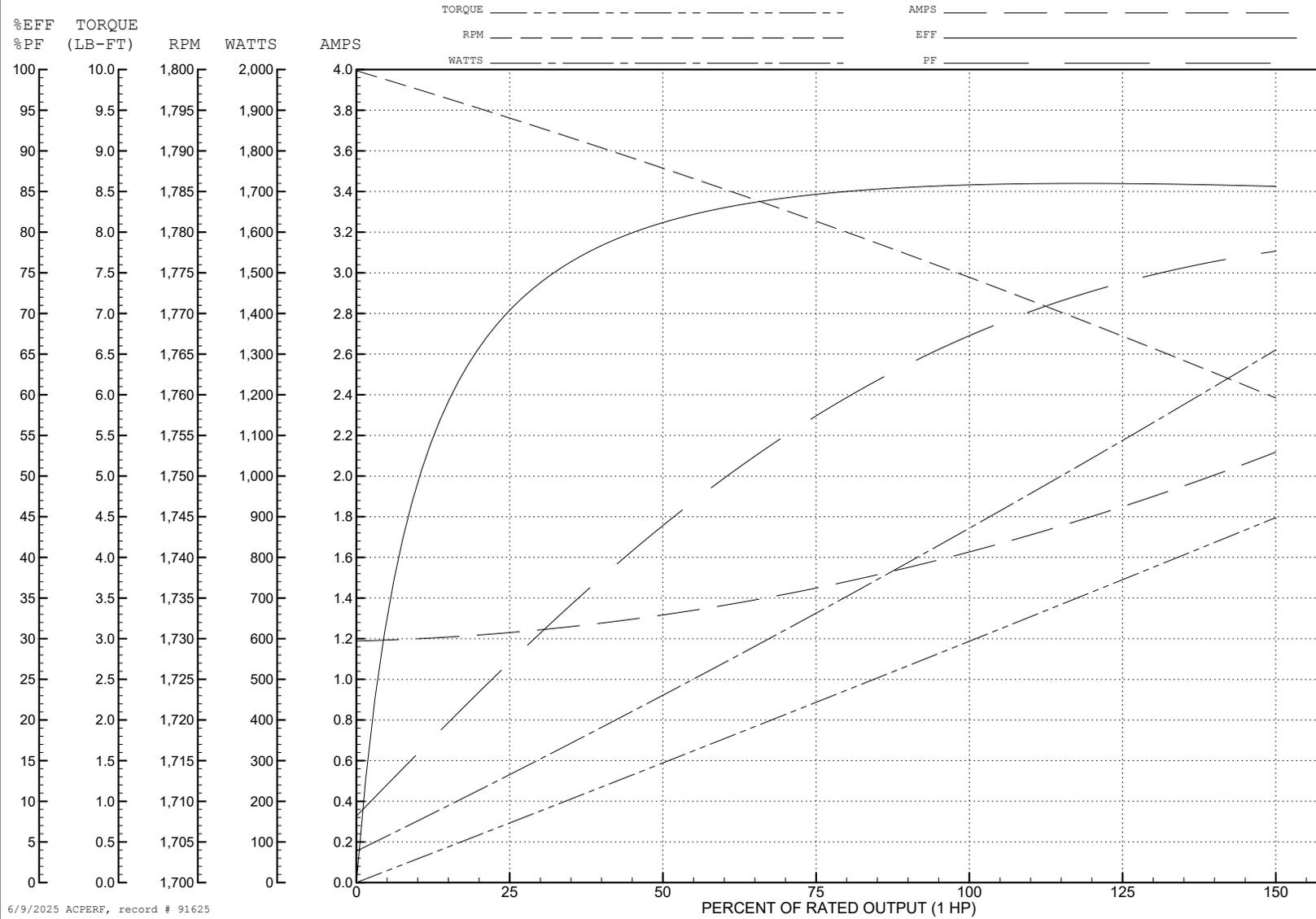
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

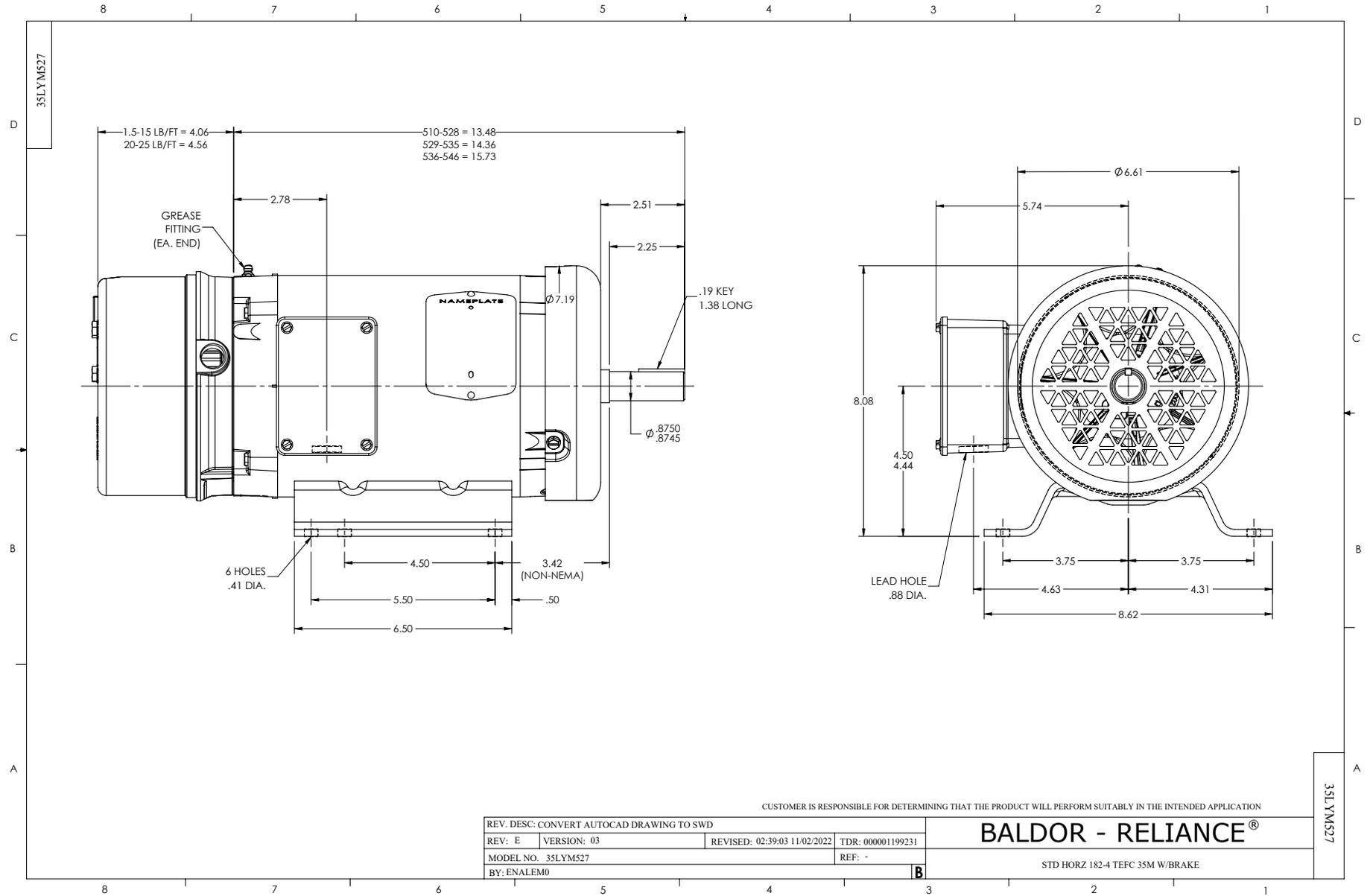
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

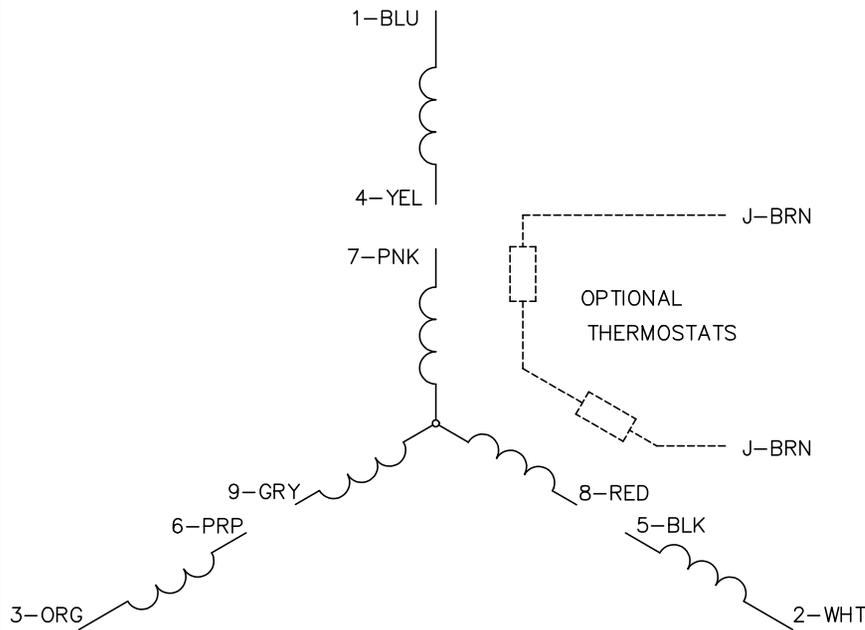
TORQUES (LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6



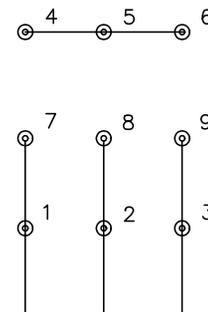
6/9/2025 ACPERF, record # 91625



CD0005

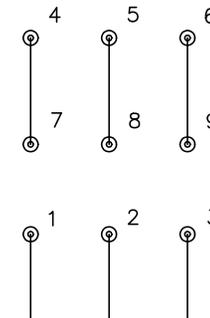


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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 | | | |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS