

BALDOR • RELIANCE

Customer information packet

FDL3516TM

2HP, 1740RPM, 1PH, 60HZ, 56HZ, 3535LC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|--|
| Enclosure | TEFC |
| Frame | 56HZ |
| Frame Material | Steel |
| Frequency | 60.00 Hz |
| Haz Area Class and Group | None |
| Haz Area Division | Not Applicable |
| Motor Letter Type | Cap Start, Cap Run |
| Output @ Frequency | 2.000 HP @ 60 HZ |
| Phase | 1 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 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 | 7.900 A @ 230.0 V 8.900 A @ 208.0 V |
| Design Code | L |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 82.5 % |
| 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 | 7.9 a |
| Insulation Class | F |

Part detail

| | |
|--------------|--------------------|
| Revision | H |
| Type | AC |
| Mech. spec. | 35E2347 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 35WGN499 |
| Layout | 35LYE2347 |
| Eff. date | 07-25-2024 |
| CD Diagram | CD0002A02 |
| Poles | 04 |
| Leads | 2#16 A PH,3#18 B%J |
| Proprietary | False |
| Created date | 12-13-2013 |

| | |
|-------------------------------|-------------------------|
| Inverter Code | Not Inverter |
| KVA Code | H |
| Lifting Lugs | No Lifting Lugs |
| Locked Bearing Indicator | No Locked Bearing |
| Motor Lead Exit | Ko Box |
| Motor Lead Quantity/Wire Size | 2 @ 16 AWG, A PH |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3535LC |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 14.19 IN |
| Power Factor | 99 |
| Product Family | General Purpose |
| Pulley End Bearing Type | Sealed Bearing |
| Pulley Face Code | Standard |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| Service Factor | 1.15 |
| Shaft Diameter | 0.875 IN |
| Shaft Extension Location | Pulley End |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | Shaft Slinger |
| Speed | 1740 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Bearing | None |
| Thermal Device - Winding | Do Not Use |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1 | Manual Thermal Overload |
| Winding Thermal 1 Location | KO |
| Winding Thermal 2 | None |

Nameplate

| NP1280L | | | | | | | | | |
|---------------------|---------------|-------------|------|------------|---|-----------|---|--|--|
| CAT.NO. | FDL3516TM | | | | | | | | |
| SPEC. | 35E2347N499G1 | | | | | | | | |
| HP | 2 | | | | | | | | |
| VOLTS | 230 | | | | | | | | |
| AMP | 7.9 | | | | | | | | |
| RPM | 1740 | | | | | | | | |
| FRAME | 56HZ | HZ | 60 | PH | 1 | | | | |
| SER.F. | 1.15 | CODE | H | DES | L | CL | F | | |
| NEMA-NOM-EFF | 82.5 | PF | 99 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | | | | | | | | | |
| DE | 6205 | ODE | 6203 | | | | | | |
| ENCL | TEFC | SN | | | | | | | |

Accessories

| Part number | Description | Multiplier |
|--------------------|---|-------------------|
| 35-3300FD | C FACE KIT FARM DUTY 143-5TC ENCL, 6205 | A8 |
| 35EP1506A01SP | D-FLANGE KIT | A8 |

AC Induction Motor Performance Data

Record # 41679

Typical performance - not guaranteed values

| Winding: 35WGN499-R001 | | Type: 3535LC | | Enclosure: TEFC | |
|-------------------------------|--------------|----------------------------|---|------------------------------|--------------------------------|
| Nameplate Data | | | 230 V, 60 Hz: Single Voltage Motor | | |
| Rated Output (HP) | 2 | Full Load Torque | 6.04 LB-FT | | |
| Volts | 230 | Start Configuration | direct on line | | |
| Full Load Amps | 7.9 | Breakdown Torque | 13.1 LB-FT | | |
| R.P.M. | 1740 | Pull-up Torque | 12.2 LB-FT | | |
| Hz | 60 | Phase | 1 | Locked-rotor Torque | 17.9 LB-FT |
| NEMA Design Code | L | KVA Code | H | Starting Current | 58.5 A |
| Service Factor (S.F.) | 1.15 | No-load Current | 1.22 A | | |
| NEMA Nom. Eff. | 82.5 | Power Factor | 99 | Line-line Res. @ 25°C | 1.5935 Ω A Ph 3.2782 Ω B Ph |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 75°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 93°C | |

Load Characteristics 230 V, 60 Hz, 2 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 99 | 100 | 100 | 99 | 99 | 98 | 99 |
| Efficiency | 61.1 | 77.4 | 82.1 | 83.1 | 81.2 | 77.3 | 82 |
| Speed | 1786.6 | 1773.4 | 1758.2 | 1739.3 | 1717.4 | 1687 | 1726 |
| Line amperes | 2.65 | 4.18 | 5.92 | 7.87 | 10.1 | 12.8 | 9.21 |

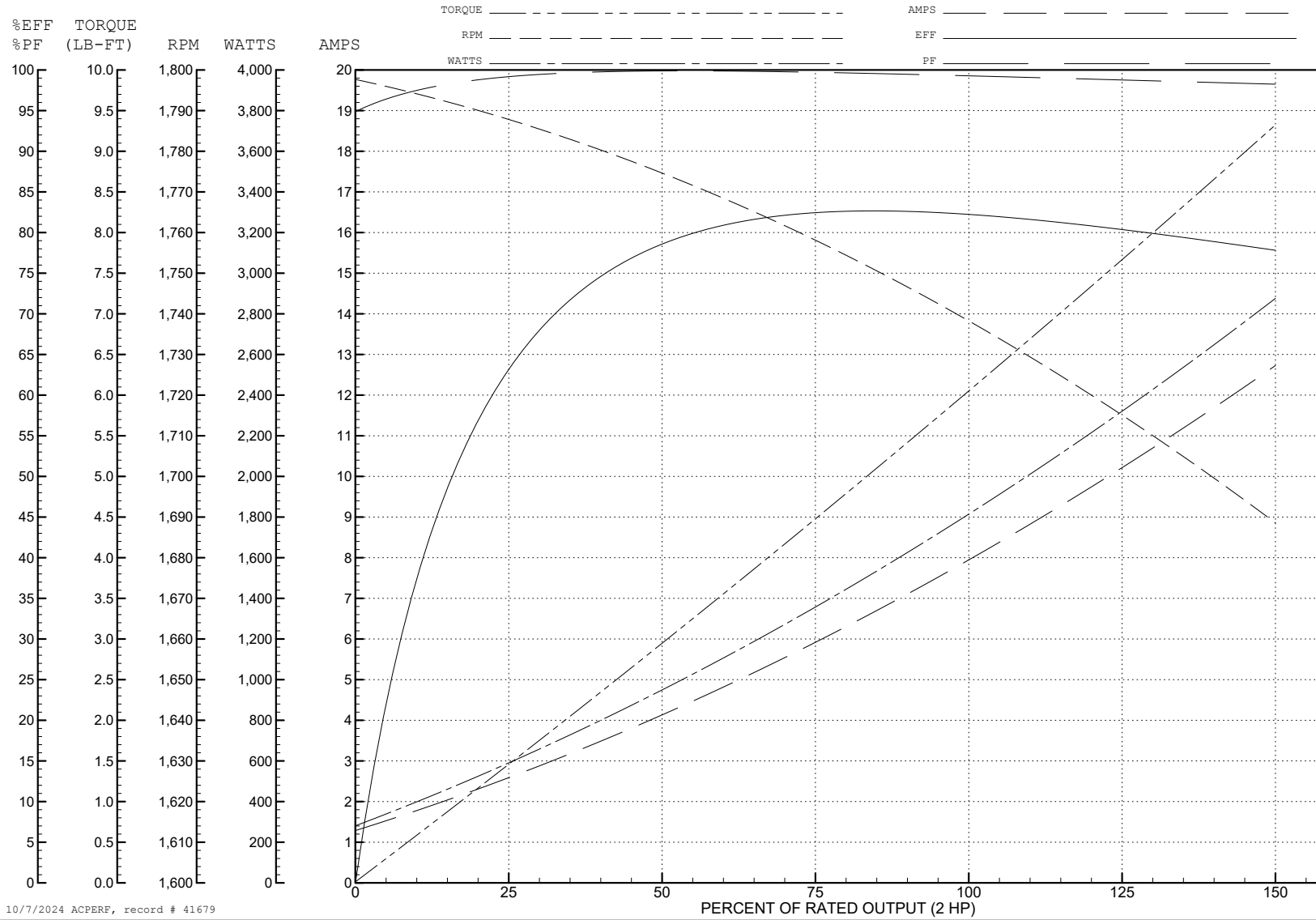
ABB Motors and Mechanical Inc.

WINDING # 35WGN499

Typical performance - not guaranteed values.

2 HP 1 PH 60 HZ 1740 RPM 230 V 3535LC

TORQUES (LB-FT): PO=13.1 PU=12.2 LR=17.9 LRA=58.5



10/7/2024 ACPERF, record # 41679

AC Induction Motor Performance Data

Record # 42038

Typical performance - not guaranteed values

| Winding: 35WGN499-R001 | | Type: 3535LC | Enclosure: TEFC | |
|------------------------|-------------------|-------------------------|---|--|
| Nameplate Data | | | 208 V, 60 Hz: Single Voltage Motor | |
| Rated Output (HP) | 2 | Full Load Torque | 6.09 LB-FT | |
| Volts | 230 | Start Configuration | direct on line | |
| Full Load Amps | 7.9 | Breakdown Torque | 10.7 LB-FT | |
| R.P.M. | 1740 | Pull-up Torque | 10 LB-FT | |
| Hz | 60 Phase | Locked-rotor Torque | 14.6 LB-FT | |
| NEMA Design Code | L KVA Code | Starting Current | 52.8 A | |
| Service Factor (S.F.) | 1 | No-load Current | 1.25 A | |
| NEMA Nom. Eff. | 82.5 Power Factor | Line-line Res. @ 25°C | 1.62 Ω A Ph 3.25 Ω B Ph | |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 90°C | |

Load Characteristics 208 V, 60 Hz, 2 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 |
|-----------------|------|------|------|------|------|------|
| Power Factor | 98 | 100 | 100 | 99 | 98 | 96 |
| Efficiency | 66 | 80.6 | 83.2 | 82.8 | 79.4 | 73 |
| Speed | 1784 | 1768 | 1749 | 1726 | 1696 | 1650 |
| Line amperes | 2.75 | 4.46 | 6.44 | 8.73 | 11.5 | 15.3 |

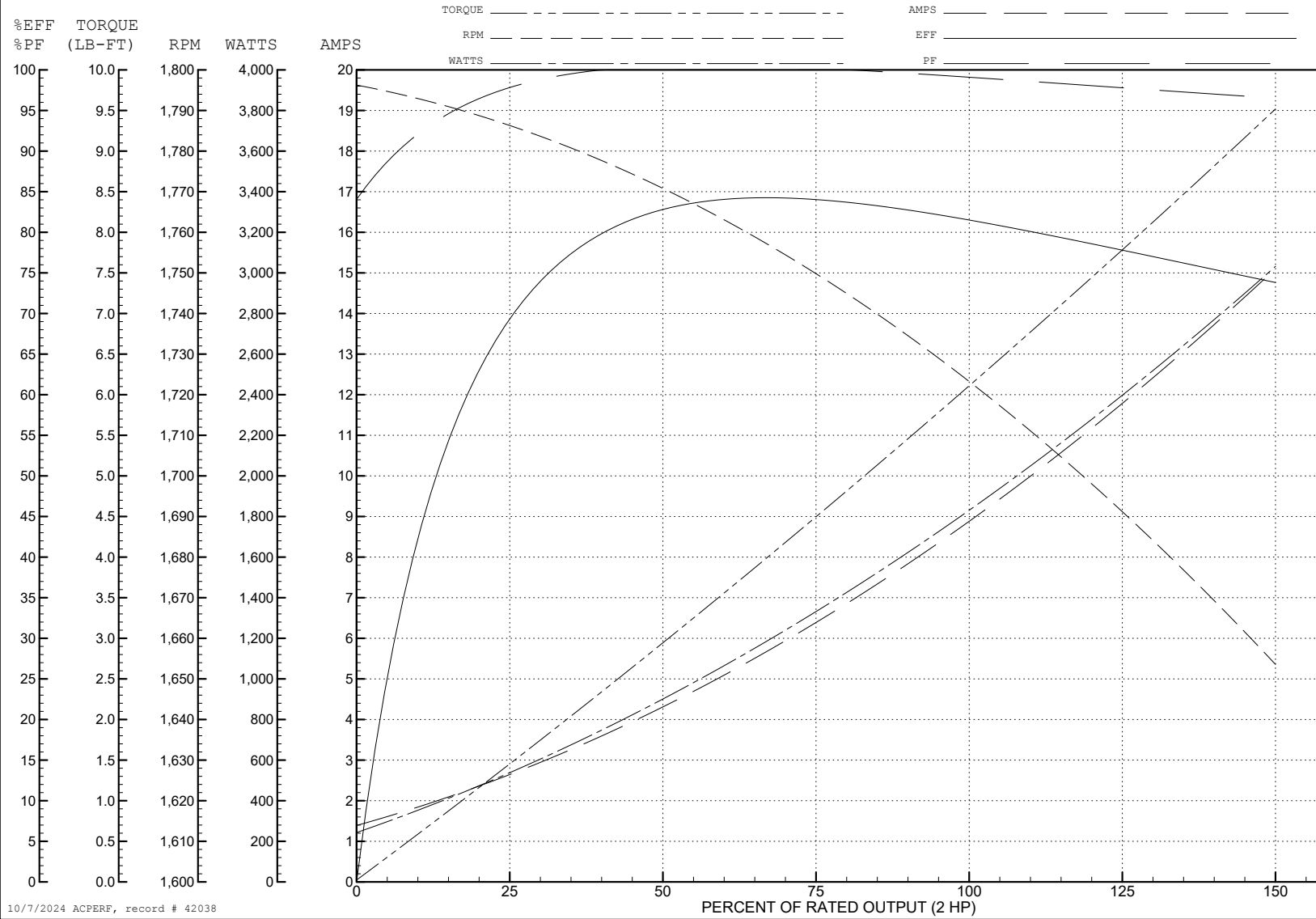
ABB Motors and Mechanical Inc.

WINDING # 35WGN499

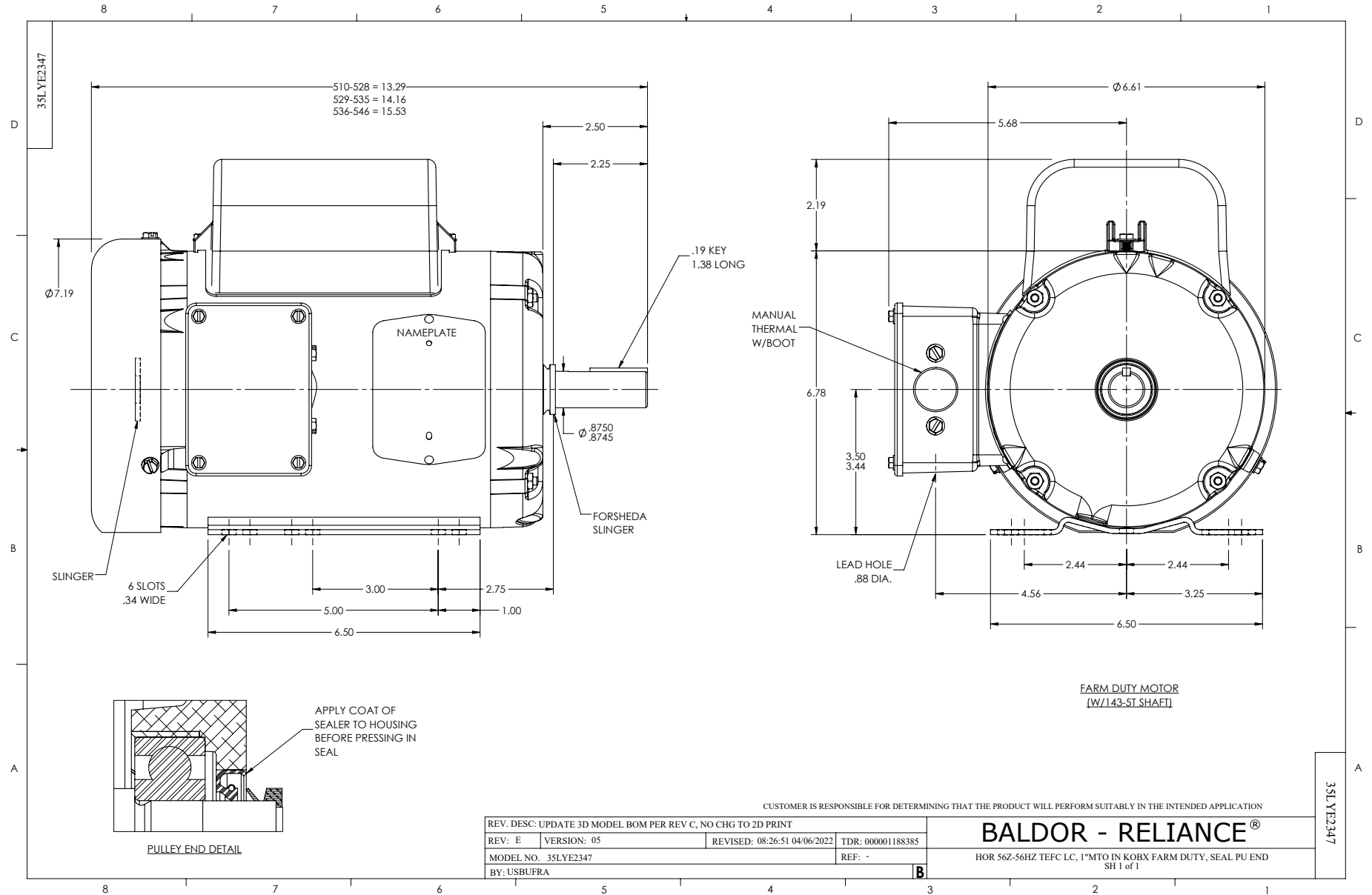
Typical performance - not guaranteed values.

2 HP 1 PH 60 HZ 1740 RPM 208 V 3535LC

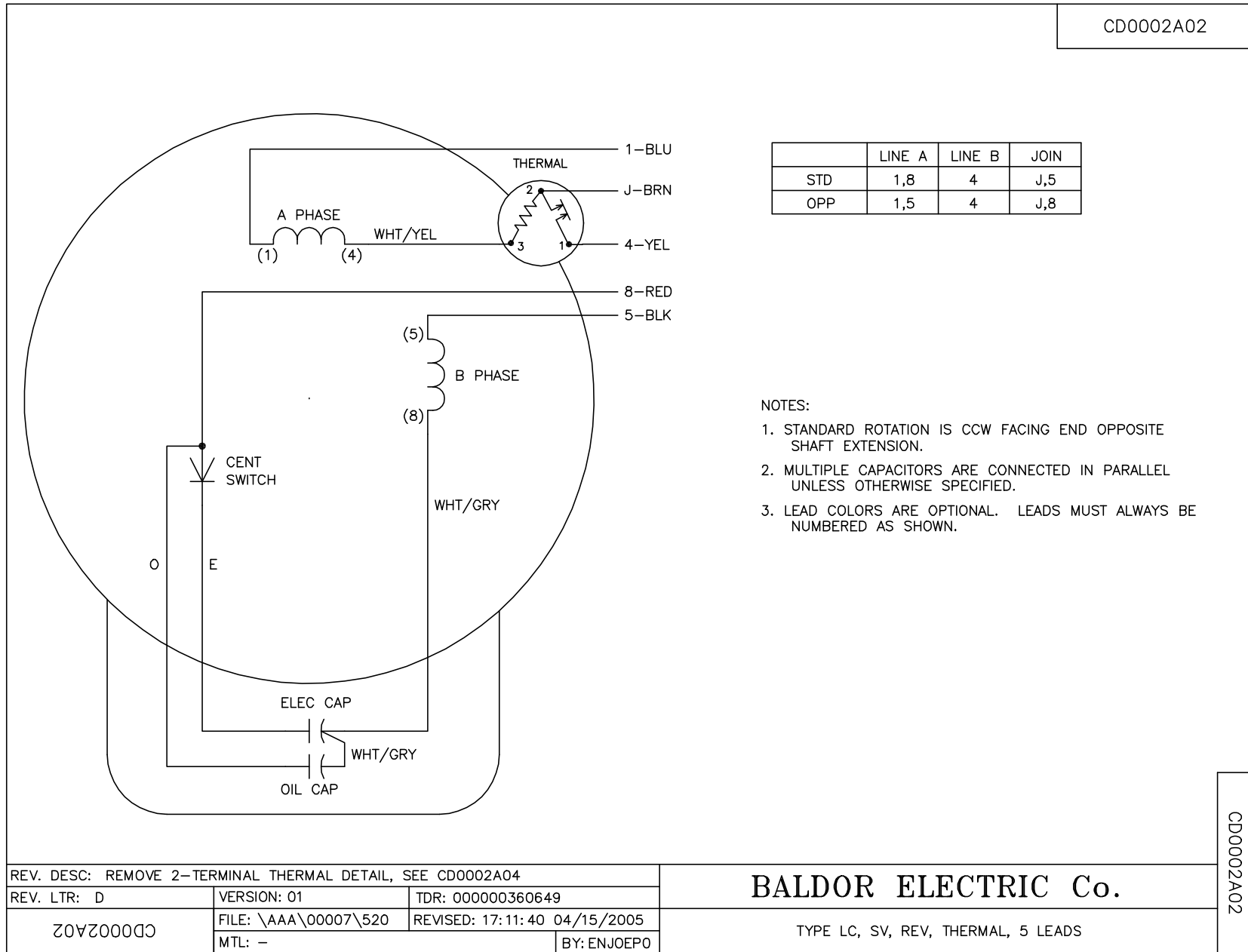
TORQUES (LB-FT): PO=10.7 PU=10 LR=14.6 LRA=52.8



10/7/2024 ACPERF, record # 42038



CD0002A02



| | LINE A | LINE B | JOIN |
|-----|--------|--------|------|
| STD | 1,8 | 4 | J,5 |
| OPP | 1,5 | 4 | J,8 |

NOTES:

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

| | | |
|--|----------------------|------------------------------|
| REV. DESC: REMOVE 2-TERMINAL THERMAL DETAIL, SEE CD0002A04 | | |
| REV. LTR: D | VERSION: 01 | TDR: 000000360649 |
| CD0002A02 | FILE: \AAA\00007\520 | REVISED: 17:11:40 04/15/2005 |
| | MTL: - | BY: ENJOEPO |

BALDOR ELECTRIC Co.

TYPE LC, SV, REV, THERMAL, 5 LEADS

CD0002A02