

BALDOR® • **RELIANCE**

Product Information Packet

VL3505

.5HP, 1140RPM, 1PH, 60HZ, 56C, 3528L, TEFC, F1

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | G | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 35WGN457 | CD Diagram: | CD0001 | Mfg Plant: | |
| Mech. Spec: | 35C013 | Layout: | 35LYC013 | Poles: | 06 | Created Date: | 09-19-2012 |
| Base: | N | Eff. Date: | 04-05-2017 | Leads: | 6#18 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number: | VL3505 | Insulation Class: | F |
| Enclosure: | TEFC | Inverter Code: | Not Inverter |
| Frame: | 56C | KVA Code: | L |
| Frame Material: | Steel | Lifting Lugs: | No Lifting Lugs |
| Output @ Frequency: | .500 HP @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Synchronous Speed @ Frequency: | 1200 RPM @ 60 HZ | Motor Lead Quantity/Wire Size: | 6 @ 18 AWG |
| Voltage @ Frequency: | 230.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| | 115.0 V @ 60 HZ | Motor Lead Termination: | Flying Leads |
| XP Class and Group: | None | Motor Type: | 3528L |
| XP Division: | Not Applicable | Mounting Arrangement: | F1 |
| Agency Approvals: | CSA | Power Factor: | 65 |
| | UR | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | C-Face |
| Base Indicator: | No Mounting | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | RoHS Status: | ROHS COMPLIANT |
| Current @ Voltage: | 3.900 A @ 230.0 V | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| | 4.500 A @ 208.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| | 7.800 A @ 115.0 V | Shaft Rotation: | Reversible |
| Design Code: | N | Shaft Slinger Indicator: | No Slinger |
| Drip Cover: | No Drip Cover | Speed Code: | Single Speed |
| Duty Rating: | CONT | Motor Standards: | NEMA |
| Electrically Isolated Bearing: | Not Electrically Isolated | Starting Method: | Direct on line |
| Feedback Device: | NO FEEDBACK | Thermal Device - Bearing: | None |
| Front Face Code: | Standard | Thermal Device - Winding: | None |
| Front Shaft Indicator: | None | Vibration Sensor Indicator: | No Vibration Sensor |
| Heater Indicator: | No Heater | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

| Nameplate NP1256L | | | | | | | | | | |
|-------------------|--------------|--|------|----|-----|------|--|----------------|-----|---|
| CAT.NO. | VL3505 | | | | | | | | | |
| SPEC. | 35C013N457G1 | | | | | | | | | |
| HP | .5 | | | | | | | | | |
| VOLTS | 115/230 | | | | | | | | | |
| AMP | 7.8/3.9 | | | | | | | | | |
| RPM | 1140 | | | | | | | | | |
| FRAME | 56C | | | | HZ | 60 | | | PH | 1 |
| SER.F. | 1.25 | | CODE | L | DES | N | | CLASS | F | |
| NEMA-NOM-EFF | 62.5 | | PF | 65 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | | | | | | | | USABLE AT 208V | 4.5 | |
| DE | 6205 | | | | ODE | 6203 | | | | |
| ENCL | TEFC | | SN | | | | | | | |
| | SFA 9/4.5 | | | | | | | | | |

AC Induction Motor Performance Data

Record # 38799 - Typical performance - not guaranteed values

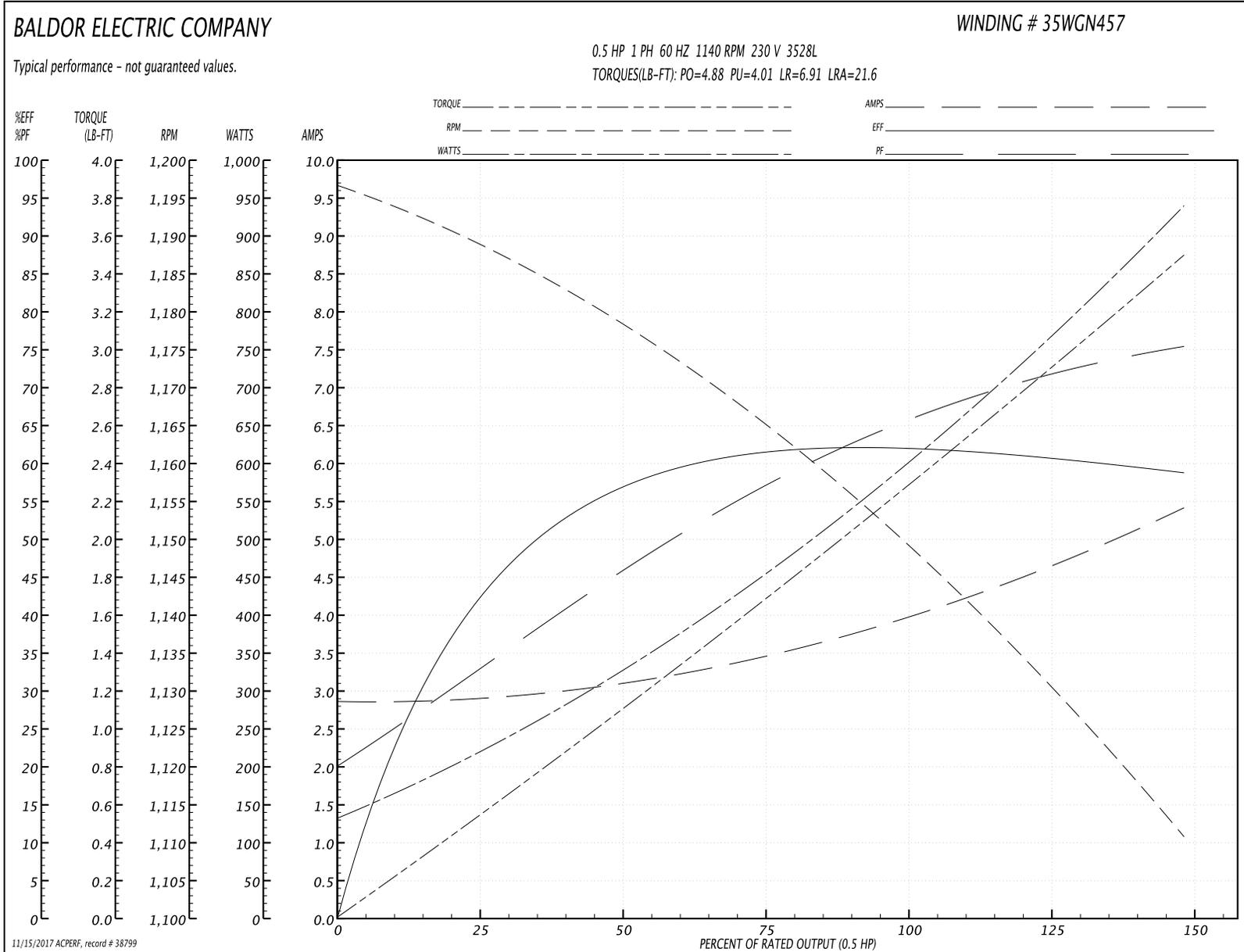
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 35WGN457-R001 | Type: 3528L | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 230 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|--------------------------------|
| Rated Output (HP) | .5 | | | Full Load Torque | 2.24 LB-FT |
| Volts | 115/230 | | | Start Configuration | direct on line |
| Full Load Amps | 7.8/3.9 | | | Breakdown Torque | 4.88 LB-FT |
| R.P.M. | 1140 | | | Pull-up Torque | 4.01 LB-FT |
| Hz | 60 | Phase | 1 | Locked-rotor Torque | 6.91 LB-FT |
| NEMA Design Code | N | KVA Code | L | Starting Current | 21.6 A |
| Service Factor (S.F.) | 1.25 | | | No-load Current | 2.84 A |
| NEMA Nom. Eff. | 62.5 | Power Factor | 65 | Line-line Res. @ 25°C | 4.9379 Ω A Ph 2.7993 Ω B Ph |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 65°C |
| S.F. Amps | 9/4.5 | | | Temp. Rise @ S.F. Load | 91°C |

Load Characteristics 230 V, 60 Hz, 0.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|--------|--------|--------|--------|------|--------|------|
| Power Factor | 33 | 46 | 57 | 65 | 72 | 76 | 72 |
| Efficiency | 39.6 | 54.5 | 61.1 | 62.7 | 61.8 | 58.1 | 61.8 |
| Speed | 1187.5 | 1177.3 | 1165.8 | 1152.4 | 1135 | 1108.2 | 1135 |
| Line amperes | 2.9 | 3.12 | 3.44 | 3.91 | 4.54 | 5.46 | 4.54 |

Performance Graph at 230V, 60Hz, 0.5HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 44451 - Typical performance - not guaranteed values

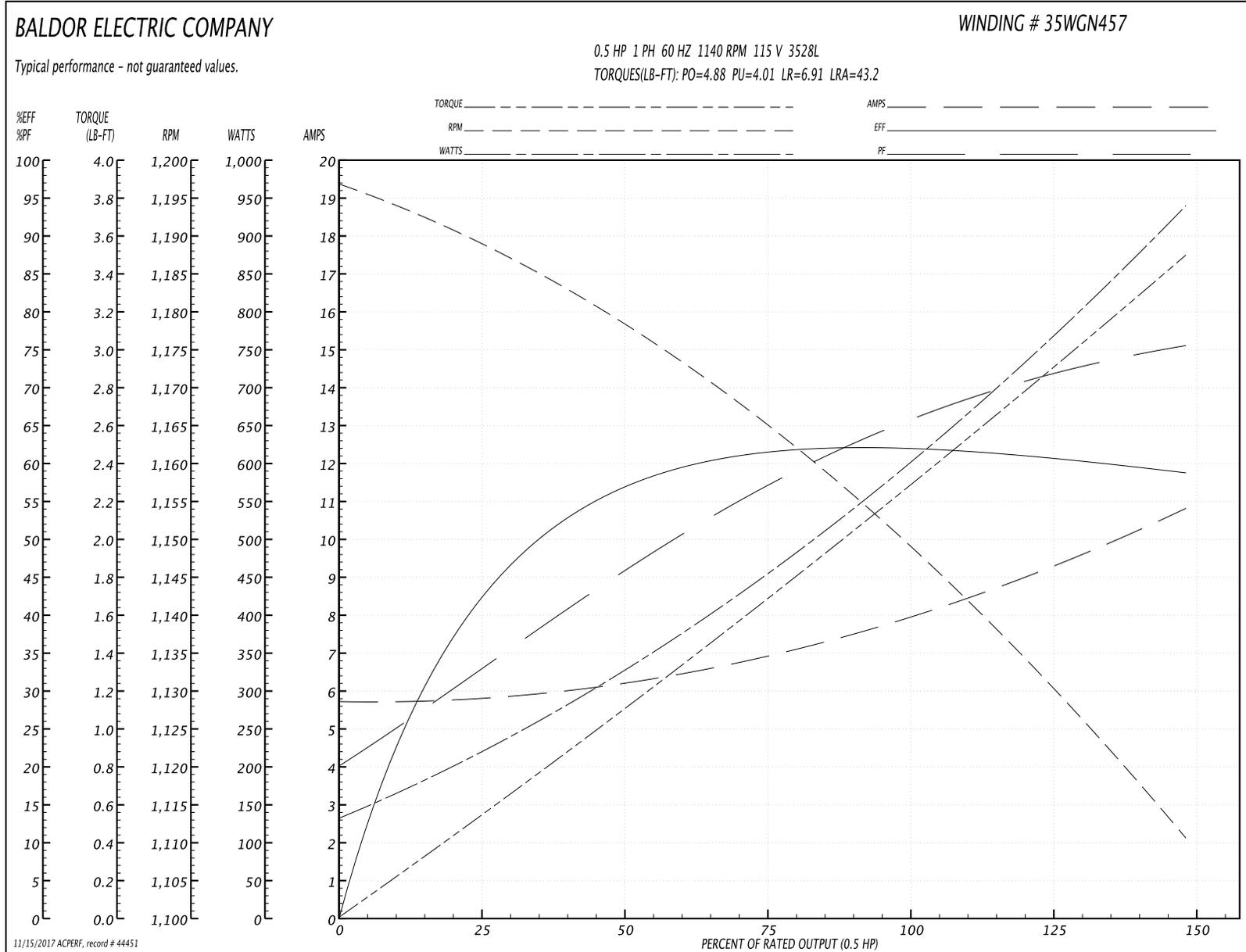
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 35WGN457-R001 | Type: 3528L | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

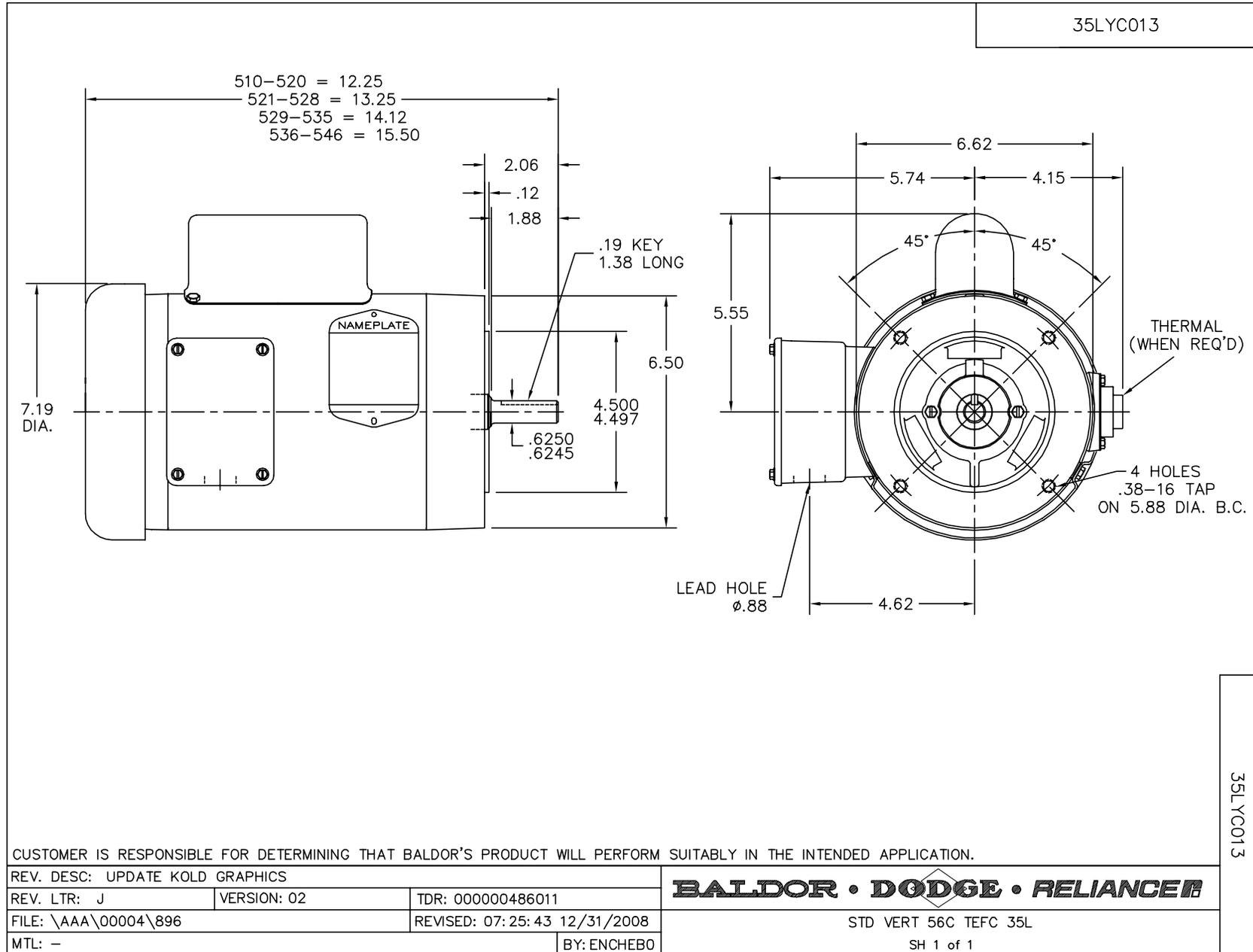
| Nameplate Data | | | | 115 V, 60 Hz: Low Voltage Connection | |
|-----------------------|--------------|--------------|----|---|----------------------------|
| Rated Output (HP) | .5 | | | Full Load Torque | 2.24 LB-FT |
| Volts | 115/230 | | | Start Configuration | direct on line |
| Full Load Amps | 7.8/3.9 | | | Breakdown Torque | 4.88 LB-FT |
| R.P.M. | 1140 | | | Pull-up Torque | 4.01 LB-FT |
| Hz | 60 | Phase | 1 | Locked-rotor Torque | 6.91 LB-FT |
| NEMA Design Code | N | KVA Code | L | Starting Current | 43.2 A |
| Service Factor (S.F.) | 1.25 | | | No-load Current | 5.68 A |
| NEMA Nom. Eff. | 62.5 | Power Factor | 65 | Line-line Res. @ 25°C | 1.23 Ω A Ph 2.86 Ω B Ph |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 65°C |
| S.F. Amps | 9/4.5 | | | Temp. Rise @ S.F. Load | 79°C |
| | | | | Rotor inertia | 0.166 LB-FT ² |

Load Characteristics 115 V, 60 Hz, 0.5 HP

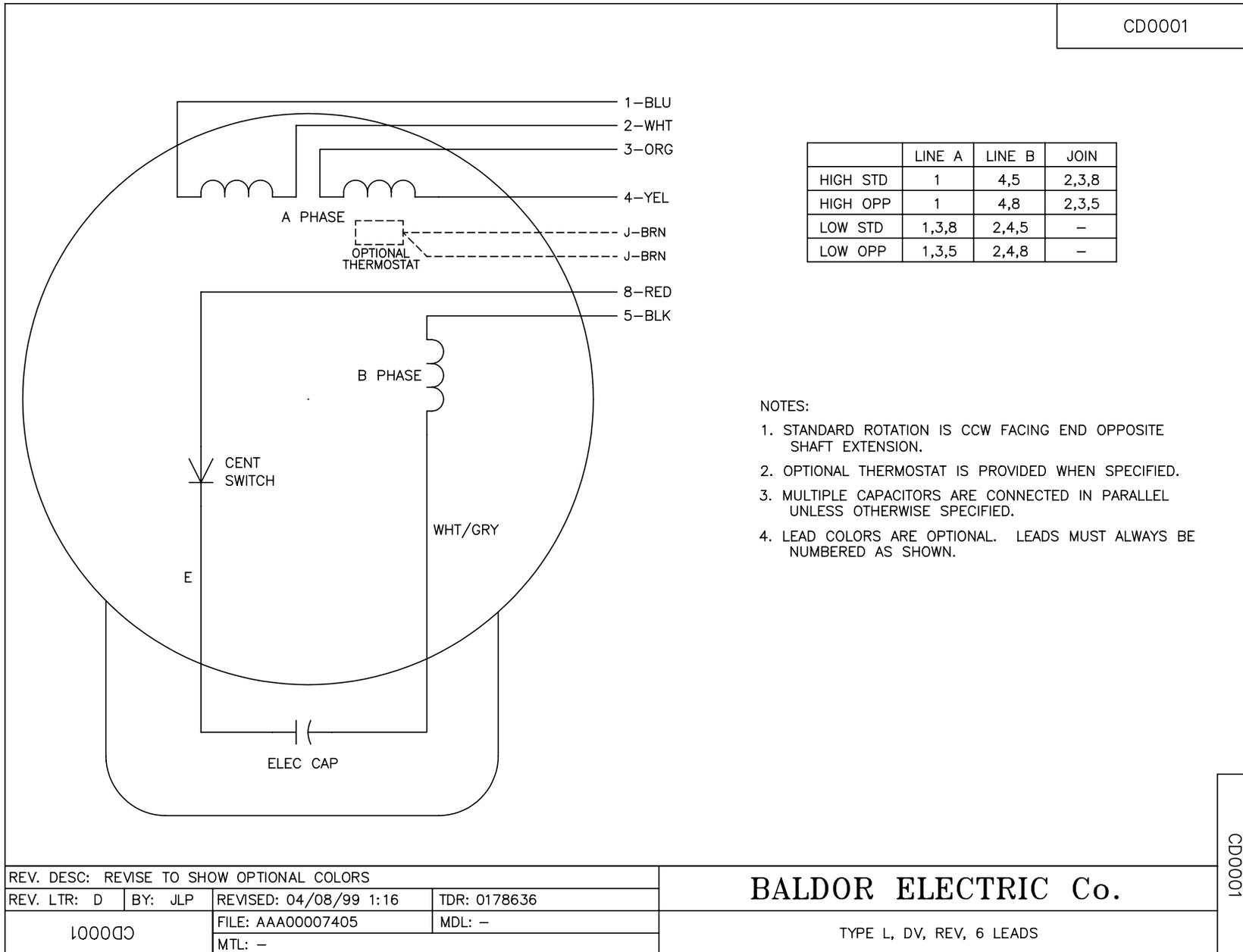
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 32 | 46 | 56 | 65 | 71 | 76 | 80 |
| Efficiency | 39.7 | 54.6 | 60.9 | 62.8 | 61.9 | 58.2 | 82.4 |
| Speed | 1188 | 1177 | 1166 | 1152 | 1135 | 1108 | 1442 |
| Line amperes | 5.8 | 6.24 | 6.88 | 7.82 | 9.08 | 10.9 | 2.95 |

Performance Graph at 115V, 60Hz, 0.5HP Typical performance - Not guaranteed values





CD0001



| | | | |
|---|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: D | BY: JLP | REVISED: 04/08/99 1:16 | TDR: 0178636 |
| 100000 | | FILE: AAA00007405 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

TYPE L, DV, REV, 6 LEADS

CD0001