

BALDOR® • RELIANCE 

Product Information Packet

CL3510

1HP,1725RPM,1PH,60HZ,56C,3524L,TEFC,F1,N

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|----|
| Revision: | AR | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 35WGX945 | CD Diagram: | CD0001 | Mfg Plant: | |
| Mech. Spec: | 35C012 | Layout: | 35LYC012 | Poles: | 04 | Created Date: | |
| Base: | RG | Eff. Date: | 03-09-2020 | Leads: | 6#18 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number: | CL3510 | Inverter Code: | Not Inverter |
| Enclosure: | TEFC | IP Rating: | NONE |
| Frame: | 56C | KVA Code: | K |
| Frame Material: | Steel | Lifting Lugs: | No Lifting Lugs |
| Output @ Frequency: | 1.000 HP @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Synchronous Speed @ Frequency: | 1800 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: | 3524L |
| XP Division: | Not Applicable | Mounting Arrangement: | F1 |
| Agency Approvals: | CSA | Power Factor: | 74 |
| | 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: | Rigid | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | RoHS Status: | ROHS COMPLIANT |
| Current @ Voltage: | 12.800 A @ 115.0 V | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| | 6.400 A @ 230.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| | 7.000 A @ 208.0 V | Shaft Rotation: | Reversible |
| Design Code: | L | 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 |
| Insulation Class: | F | Winding Thermal 2: | None |

| Nameplate NP1256L | | | | | | | | | | |
|-------------------|--------------|--|------|----|-----|------|--|----------------|----|---|
| CAT.NO. | CL3510 | | | | | | | | | |
| SPEC. | 35C12X945 | | | | | | | | | |
| HP | 1 | | | | | | | | | |
| VOLTS | 115/230 | | | | | | | | | |
| AMP | 12.8/6.4 | | | | | | | | | |
| RPM | 1725 | | | | | | | | | |
| FRAME | 56C | | | | HZ | 60 | | | PH | 1 |
| SER.F. | 1.15 | | CODE | K | DES | L | | CLASS | F | |
| NEMA-NOM-EFF | 68 | | PF | 74 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | | | | | | | | USABLE AT 208V | 7 | |
| DE | 6205 | | | | ODE | 6203 | | | | |
| ENCL | TEFC | | SN | | | | | | | |

| Parts List | | |
|---------------|--|----------|
| Part Number | Description | Quantity |
| SA022562 | SA 35C12X945 | 1.000 EA |
| RA018612 | RA 35C12X945 | 1.000 EA |
| EC1645A06SP | ELEC CAP, 645-774 MFD, 125V, 2.06D X 4. | 1.000 EA |
| NS2512A01 | INSULATOR, CONDUIT BOX X | 1.000 EA |
| 35CB3007 | 35 CB CASTING W/.88 DIA. LEAD HOLE | 1.000 EA |
| 36GS1000SP | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE | 1.000 EA |
| 51XB1016A07 | 10-16 X 7/16 HXWSSLD SERTYB | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 EA |
| 35EP3122K00 | MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG | 1.000 EA |
| 51XB1016A05 | 10-16X5/16HX WA SL SR TYB (F/S) | 2.000 EA |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 EA |
| 35EP3307F00 | MASTER DE,205 BRG,.998SH,#26 DRN | 1.000 EA |
| 51XN1032A20 | 10-32 X 1 1/4 HX WS SL SR | 2.000 EA |
| 35FN3002A05SP | EXFN, PLASTIC, 6.376 OD, .638 ID | 1.000 EA |
| 51XB1214A16 | 12-14X1.00 HXWSSLD SERTYB | 1.000 EA |
| 35FH4005A32SP | IEC FH NO GRSR W/3 HOLES - PRIMED | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 35CB4521GX | CONDUIT BOX LID KIT **ORDER INDIV PARTS | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 EA |
| HA7000A04 | KEY RETAINER 0.625 DIA SHAFTS | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| WD1000A15 | 3-520132-2 AMP FLAG (4M/RL NON-CANC/NON- | 2.000 EA |

| Parts List (continued) | | |
|-------------------------------|--|-----------------|
| Part Number | Description | Quantity |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |
| MG1000G27 | MED CHARCOAL METALLIC GREY 400-0096 | 0.017 GA |
| SP5051A24 | MODEL 35 TORQ STATIONARY SWITCH FOR "L" | 1.000 EA |
| 35CB4802A02SP | CAPACITOR COVER, STAMPED X | 1.000 EA |
| 34GS5003 | FOAM SLEEVE, ID = 2 1/16" X 3 3/8" | 1.000 EA |
| 35GS3001A02 | GASKET, CA.COVER, 5.38 LONG .06 CS301 | 1.000 EA |
| HA3100A15 | THRUBOLT 10-32 X 8.375 | 4.000 EA |
| LC0001A01 | CONN LABEL / WARNING LABEL (LC0001 / LB1 | 1.000 EA |
| NP1256L | ALUM UL CSA CC INDUSTRIAL MOTOR A60 | 1.000 EA |
| 35PA1066 | PKG GRP, PRINT PK1008A06 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 3/19 | 1.000 EA |
| FE-0000001 | ZRTG FE ASSEMBLY | 1.000 EA |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 EA |

AC Induction Motor Performance Data

Record # 33217 - Typical performance - not guaranteed values

| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 35WGX945-R003 | Type: 3524L | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 230 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|--------------------------|
| Rated Output (HP) | 1 | | | Full Load Torque | 3 LB-FT |
| Volts | 115/230 | | | Start Configuration | direct on line |
| Full Load Amps | 12.8/6.4 | | | Breakdown Torque | 6.9 LB-FT |
| R.P.M. | 1725 | | | Pull-up Torque | 5.9 LB-FT |
| Hz | 60 | Phase | 1 | Locked-rotor Torque | 10 LB-FT |
| NEMA Design Code | L | KVA Code | K | Starting Current | 39 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 4.1 A |
| NEMA Nom. Eff. | 68 | Power Factor | 74 | Line-line Res. @ 25°C | 2.6 Ω A Ph 1.8 Ω B Ph |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 79°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 96°C |

Load Characteristics 230 V, 60 Hz, 1 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 39 | 53 | 67 | 75 | 81 | 84 | 79 |
| Efficiency | 52.9 | 67.6 | 70 | 70.3 | 68.6 | 64.9 | 69.3 |
| Speed | 1781 | 1765 | 1746 | 1726 | 1701 | 1666 | 1711 |
| Line amperes | 4.3 | 4.7 | 5.3 | 6.2 | 7.4 | 8.9 | 6.9 |

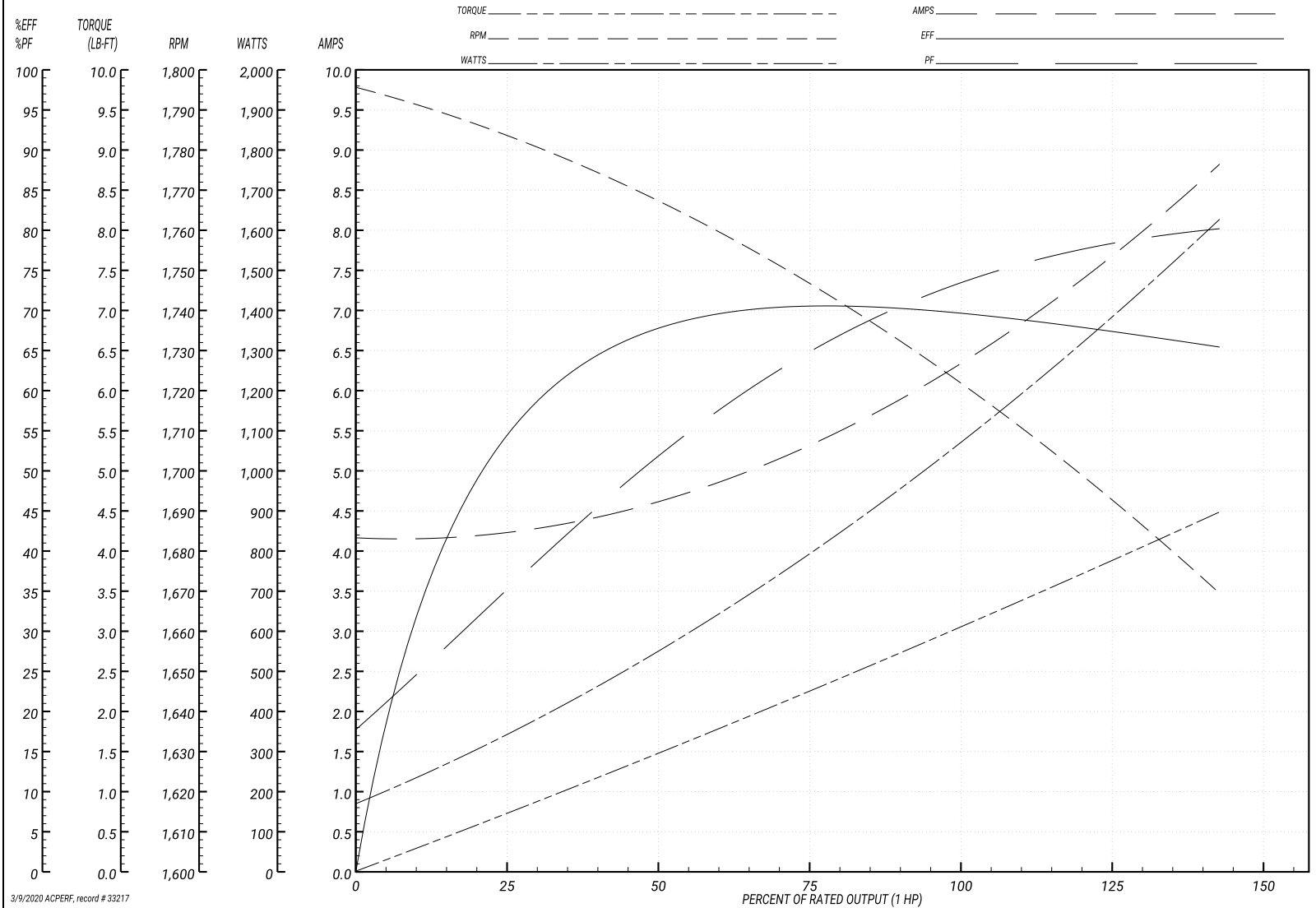
Performance Graph at 230V, 60Hz, 1.0HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 35WG945

Typical performance - not guaranteed values.

1 HP 1 PH 60 HZ 1725 RPM 230 V 3524L
 TORQUES(LB-FT): PO=6.9 PU=5.9 LR=10 LRA=39



3/9/2020 ACPERF, record # 33217

AC Induction Motor Performance Data

Record # 59549 - Typical performance - not guaranteed values

| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 35WGX945-R003 | Type: 3524L | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 115 V, 60 Hz: Low Voltage Connection | |
|-----------------------|--------------|--------------|----|---|---------------------------|
| Rated Output (HP) | 1 | | | Full Load Torque | 3 LB-FT |
| Volts | 115/230 | | | Start Configuration | direct on line |
| Full Load Amps | 12.8/6.4 | | | Breakdown Torque | 6.9 LB-FT |
| R.P.M. | 1725 | | | Pull-up Torque | 5.9 LB-FT |
| Hz | 60 | Phase | 1 | Locked-rotor Torque | 10 LB-FT |
| NEMA Design Code | L | KVA Code | K | Starting Current | 78 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 8.2 A |
| NEMA Nom. Eff. | 68 | Power Factor | 74 | Line-line Res. @ 25°C | 0.65 Ω A Ph 1.8 Ω B Ph |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 79°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 96°C |

Load Characteristics 115 V, 60 Hz, 1 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 39 | 53 | 67 | 75 | 81 | 84 | 79 |
| Efficiency | 52.9 | 67.6 | 70 | 70.3 | 68.6 | 64.9 | 69.3 |
| Speed | 1781 | 1765 | 1746 | 1726 | 1701 | 1666 | 1711 |
| Line amperes | 8.6 | 9.4 | 10.6 | 12.4 | 14.8 | 17.8 | 13.8 |

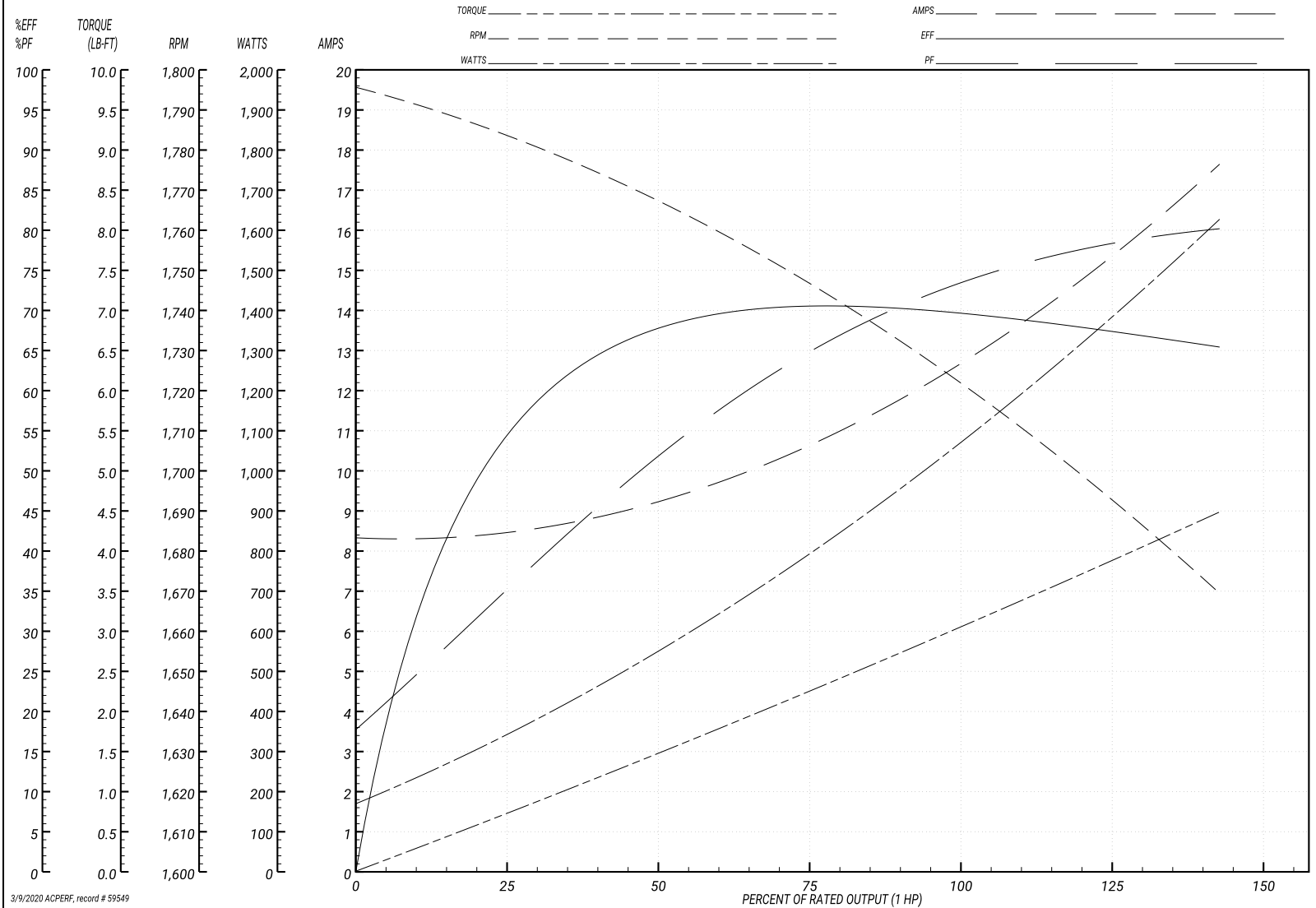
Performance Graph at 115V, 60Hz, 1.0HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

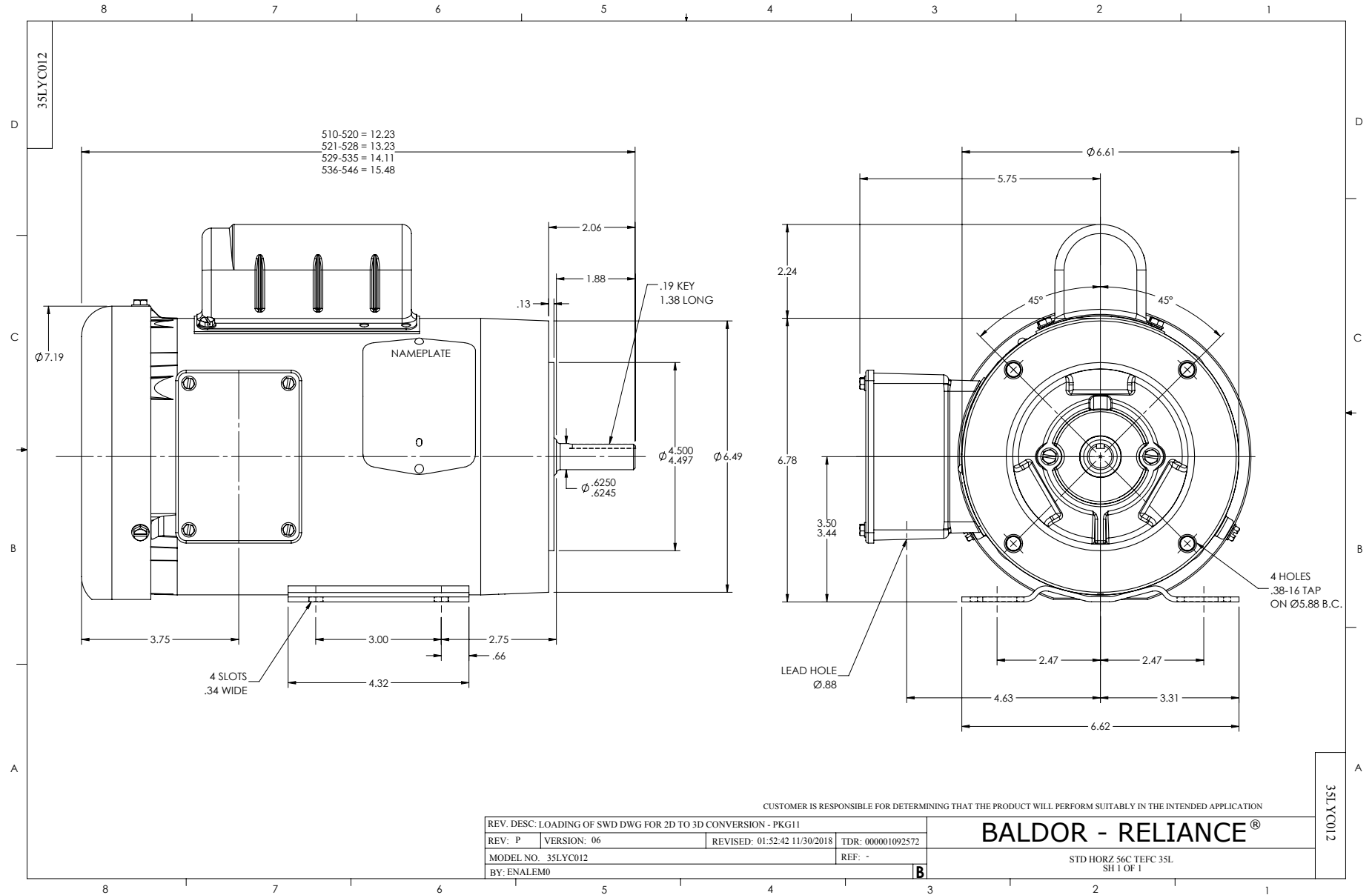
WINDING # 35WGx945

Typical performance - not guaranteed values.

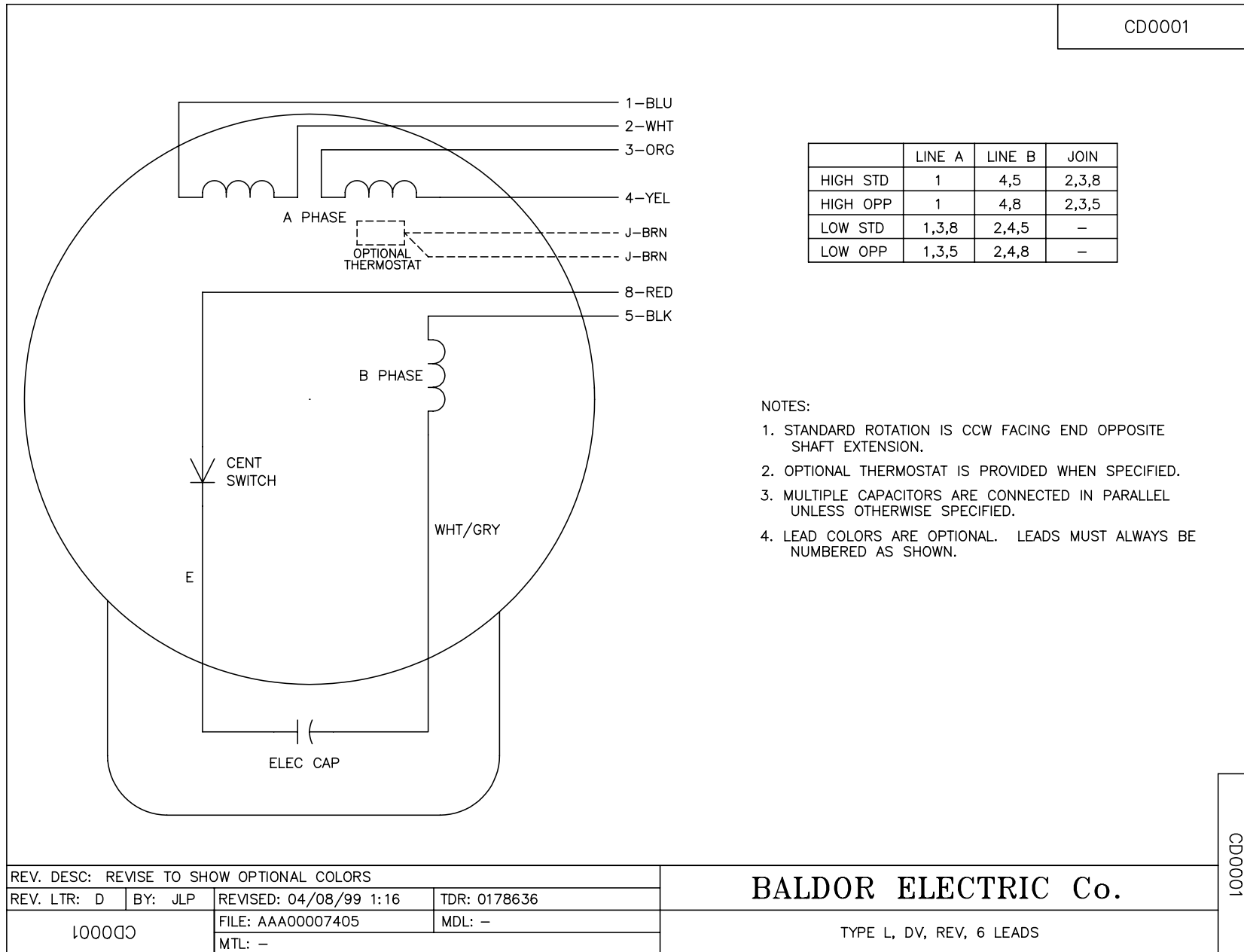
1 HP 1 PH 60 HZ 1725 RPM 115 V 3524L
 TORQUES(LB-FT): PO=6.9 PU=5.9 LR=10 LRA=78



3/9/2020 ACPERF, record # 59549



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