

BALDOR® • RELIANCE 

Product Information Packet

CDPT3330

.5HP, 1750RPM, DC, 56C, 3336P, TENV, F1

| Part Detail | | | | | | | |
|-------------|------|-------------|-------|----------------|----------|---------------|------------|
| Revision: | P | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | DC | Prod. Type: | 3336P | Elec. Spec: | 33WGZ122 | CD Diagram: | CD0194 |
| Enclosure: | TENV | Mfg Plant: | | Mech. Spec: | 33-2155 | Layout: | 33LY2155 |
| Frame: | 56C | Mounting: | F1 | Poles: | 00 | Created Date: | |
| Base: | RG | Rotation: | R | Insulation: | F | Eff. Date: | 11-05-2018 |
| Field Type: | | Literature: | | Elec. Diagram: | | Replaced By: | |

| Specs | | | |
|--------------------------------|-------------------------|--|--|
| Enclosure: | TENV | | |
| Frame: | 56C | | |
| Frame Material: | Steel | | |
| Agency Approvals: | CE | | |
| | CSA | | |
| | UR | | |
| | WEEE | | |
| Base Indicator: | Rigid | | |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | | |
| Drip Cover: | No Drip Cover | | |
| Duty Rating: | CONT | | |
| Feedback Device: | TACHOMETER | | |
| Heater Indicator: | No Heater | | |
| Insulation Class: | F | | |
| Lifting Lugs: | No Lifting Lugs | | |
| Motor Lead Quantity/Wire Size: | 2 @ 18 AWG, A | | |

| | | | |
|----------------------------------|--------------------|--|--|
| Motor Lead Exit: | Ko Box | | |
| Motor Lead Termination: | Flying Leads | | |
| Mounting Arrangement: | F1 | | |
| Product Family: | General Purpose | | |
| Pulley End Bearing Type: | Sealed Bearing | | |
| RoHS Status: | ROHS COMPLIANT | | |
| Shaft Extension Location: | Pulley End | | |
| Shaft Ground Indicator: | No Shaft Grounding | | |
| Shaft Rotation: | Reversible | | |
| Shaft Slinger Indicator: | No Slinger | | |
| Motor Standards: | NEMA | | |

| | | | |
|--------------------------|----------------------------|-----------------|----------------------------|
| Nameplate NP0891L | | | |
| CAT.NO. | CDPT3330 | | |
| SPEC. | 33-2155Z122 | | |
| HP | .5 | ENCL | TENV |
| RPM | 1750 | | |
| FRAME | 56C | TYPE | 3336P |
| ARM V | 90 | ARM A | 4.8 |
| FLD V | | FLD A | |
| INSUL | F | AMB. | 40 |
| DUTY | CONT | SUPPLY | 1.3 |
| BRG/DE | 6203 | BRG/ODE | 6203 |
| BRUSHES | 2/BP5011T01 | | |
| SER. | | BLANK | IP44 |
| BLANK | | | |
| APRV-CE | <input type="checkbox"/> Y | APRV-CSA | <input type="checkbox"/> Y |
| | | APRV-UL | <input type="checkbox"/> Y |

| Parts List | | |
|---------------|--|----------|
| Part Number | Description | Quantity |
| SA005105 | SA 33-2155Z122 | 1.000 EA |
| AA002754 | AA 33-2155Z122 | 1.000 EA |
| BP5011T01SP | CARBON BRUSH - 33P, 90V | 1.000 EA |
| BP5012A04SP | BRUSH SPRING FOR DC MOTORS | 1.000 EA |
| 33CB5000A03 | 33P BOX & LEAD ASSY | 1.000 EA |
| 33GS1006A01 | GASKET CONDUIT BOX (LEXIDE) | 1.000 EA |
| 51XT0832A08 | 8-32 X 1/2 TY23 HXWS SLDSR | 3.000 EA |
| 51XW0832G07 | 8-32 X 7/16 TY23 HXWS SLDSR GR | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| 33EP3101A04 | FR ENDPLATE, MACH | 1.000 EA |
| HA6340A01 | TG-300 TACH. ADAPTER MACH'D FOR 33 FRAME | 1.000 EA |
| 84XN2520J12 | 1/4-20 X 3/4 SOC.HD CAP SCR | 4.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| 33CB4507 | COVER- 33 TACH. ADAP(CLOWTDR 10478 ORDER | 1.000 EA |
| 33GS5000 | GASKET-COVER 33 TACH ADAPTER | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 3.000 EA |
| XY3824A12 | .375-24 UNF-2B HEX NUT | 1.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 1.000 EA |
| HW1000A38 | WASHER, 3/8" FLAT, SAE Z/P | 1.000 EA |
| 18XN0632A16 | FLAT HEAD SCREW | 2.000 EA |
| 12XN0440A12 | 4-40X.750 SLOTTED HEX HD CAP ZN | 2.000 EA |
| HW1001A04 | WASHER, #4 SPLT LK ZINC | 2.000 EA |
| WD4100A26 | HEYCO UNIVERSAL BUSHING P/N 2089, MTG HO | 1.000 EA |
| 33CB4501A01SP | BRUSH INSPECTION COVER | 2.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| 33GS1005A01 | GASKET, BRUSH INSP. COVERELECTRICLY NON- | 2.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 EA |
| 33EP3302A10 | PU ENDPLATE, MACH | 1.000 EA |
| 51XN1032A20 | 10-32 X 1 1/4 HX WS SL SR | 2.000 EA |
| WD4102A12 | SR 6P-4 HEYCO STRN RELIEF OR 23MP06P40 M | 1.000 EA |
| 34CB4512 | 34 CB LID, GALVANNEAL STAMPED | 1.000 EA |
| 34GS1001 | GASKET, STD CONDUIT BOX LID (LEXIDE) | 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 |
| HW3001B02 | BRASS CUP WASHER W/GROUND SYMBOL TAB, | 1.000 EA |
| X3B003Z029 | TACH TG-300 50V .625BORE W/NOTCH CW | 1.000 EA |
| MG1000G27 | MED CHARCOAL METALLIC GREY 400-0096 | 0.013 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| 33RK5004SP | ROCKERARM | 1.000 EA |
| HA3100S03 | THRUBOLT- 10-32 X 10.625 302 OR 303 SS | 2.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0194 | CONNECTION LABEL | 1.000 EA |
| NP0891L | NP STD LASER ENGRAVED DC MTRS, UL CSA CE | 1.000 EA |
| 27PA1001 | PKG GRP, PRINT PK1027A06 | 1.000 EA |

DC Motor Performance Data

Record # 216 - Typical performance - not guaranteed values

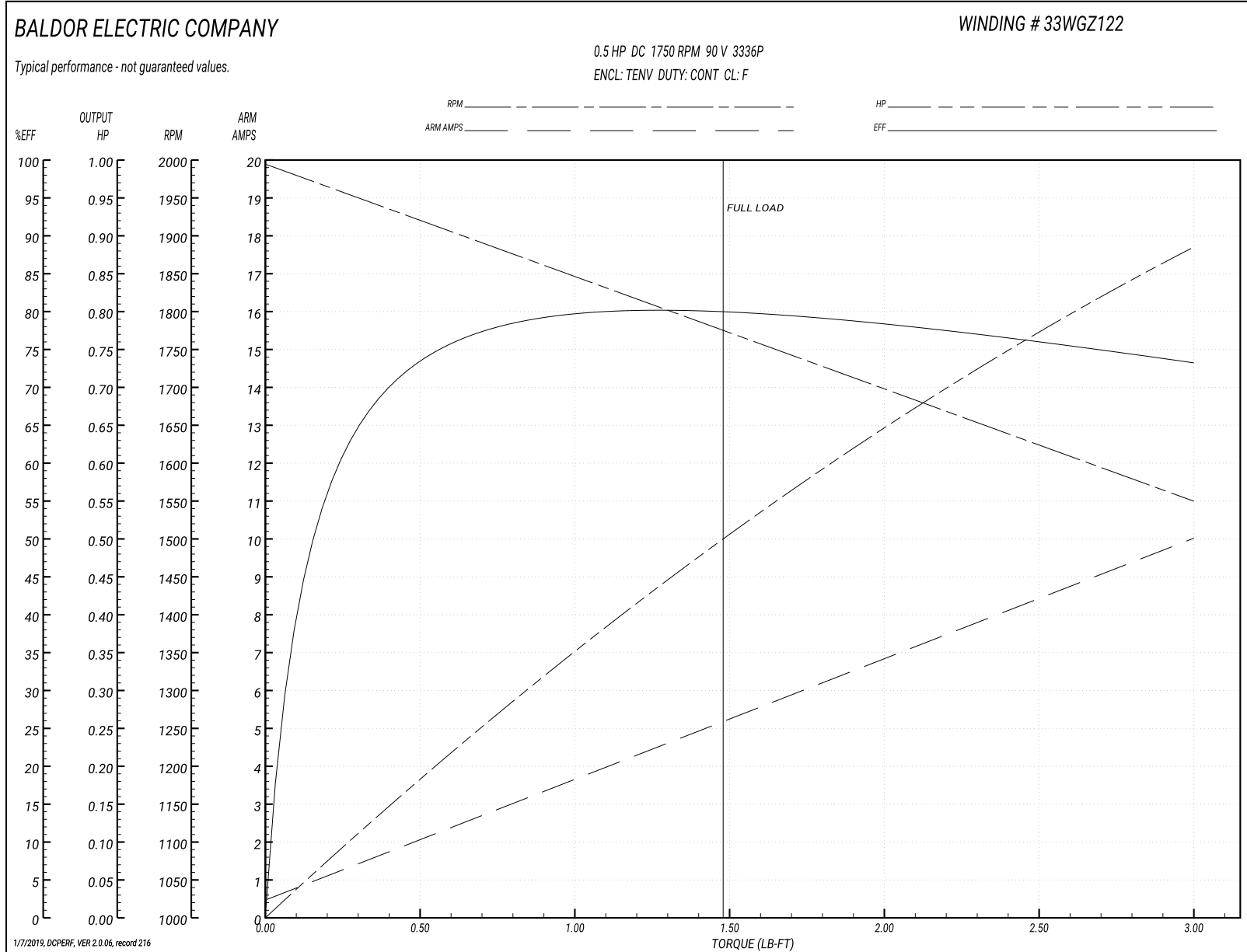
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 33WGZ122-R001 | Type: 3336P | Enclosure: TENV |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | General Characteristics | |
|-------------------|--------------|-------------------------------|-----------|
| Rated Output (HP) | 0.5 | Armature Resistance @ 25°C | 1.22 Ω |
| R.P.M. | 1750 | | |
| Armature Volts | 90 | | |
| Armature Amps | 4.8 | | |
| Field Volts | | Armature Inductance | 15.574 mH |
| Field Amps | | | |
| Rating - Duty | 40C AMB-CONT | | |
| Form Factor | 1.3 | Maximum allowable inrush amps | 44 |
| | | | |

Load Characteristics at 90 Armature Volts

| Load Point | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------|-------|-------|-------|-------|-------|-------|-------|
| Armature Amps | 0.474 | 2.065 | 3.656 | 5.247 | 6.838 | 8.429 | 10.02 |
| R.P.M. | 1995 | 1920 | 1846 | 1772 | 1698 | 1624 | 1550 |
| Torque (LB-FT) | 0 | 0.5 | 1 | 1.5 | 2 | 2.5 | 3 |

Performance Graph at 90.0 Arm V, 0.5HP Typical performance - Not guaranteed values



DC Motor Performance Data

Record # 515 - Typical performance - not guaranteed values

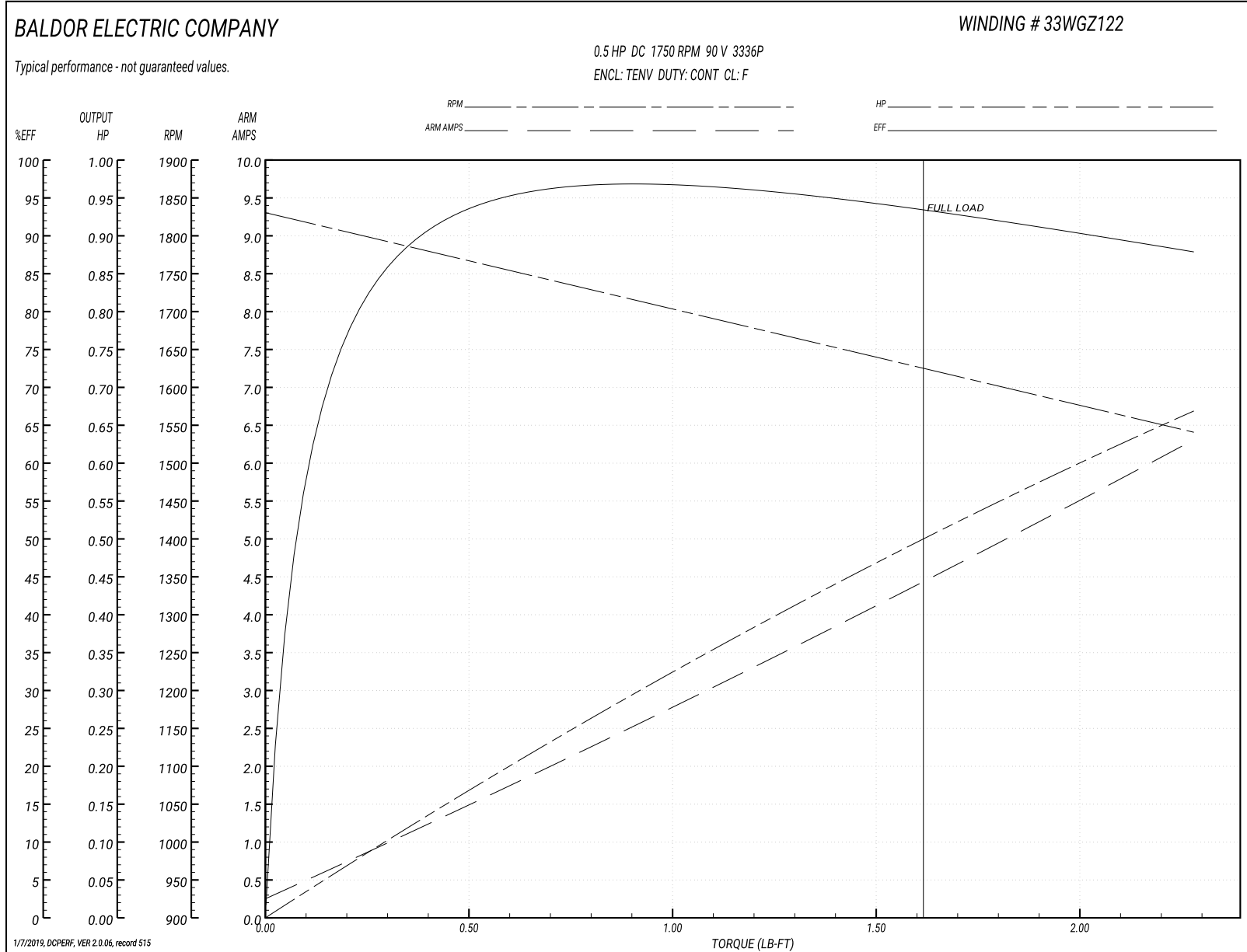
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 33WGZ122-R001 | Type: 3336P | Enclosure: TENV |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | General Characteristics | |
|-------------------|--------------|----------------------------|-----------|
| Rated Output (HP) | 0.5 | Armature Resistance @ 25°C | 1.2779 Ω |
| R.P.M. | 1750 | | |
| Armature Volts | 90 | | |
| Armature Amps | 4.8 | | |
| Field Volts | | Armature Inductance | 15.798 mH |
| Field Amps | | | |
| Rating - Duty | 40C AMB-CONT | | |
| Form Factor | 1.3 | | |
| | | | |

Load Characteristics at 90 Armature Volts

| Load Point | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------|------|------|------|------|------|------|------|
| Armature Amps | 0.24 | 1.25 | 2.1 | 3.15 | 4.05 | 5.36 | 6.25 |
| R.P.M. | 1835 | 1793 | 1721 | 1672 | 1648 | 1584 | 1549 |
| Torque (LB-FT) | 0 | 0.38 | 0.76 | 1.14 | 1.5 | 1.9 | 2.28 |

Performance Graph at 90.0 Arm V, 0.5HP Typical performance - Not guaranteed values



DC Motor Performance Data

Record # 516 - Typical performance - not guaranteed values

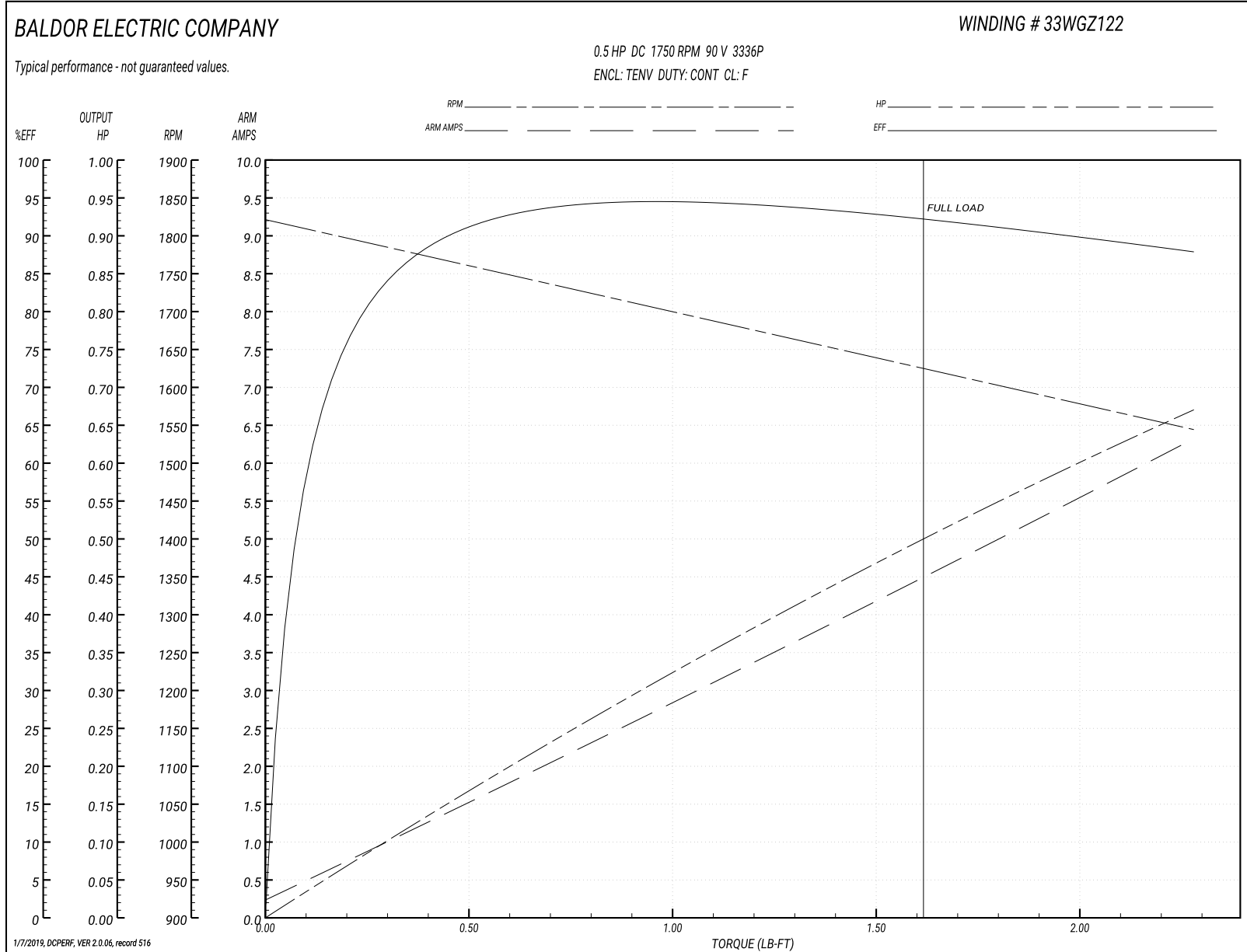
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 33WGZ122-R001 | Type: 3336P | Enclosure: TENV |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | General Characteristics | |
|-------------------|--------------|----------------------------|-----------|
| Rated Output (HP) | 0.5 | Armature Resistance @ 25°C | 1.2525 Ω |
| R.P.M. | 1750 | | |
| Armature Volts | 90 | | |
| Armature Amps | 4.8 | | |
| Field Volts | | Armature Inductance | 15.413 mH |
| Field Amps | | | |
| Rating - Duty | 40C AMB-CONT | | |
| Form Factor | 1.3 | | |
| | | | |

Load Characteristics at 90 Armature Volts

| Load Point | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------|------|------|------|------|------|------|------|
| Armature Amps | 0.24 | 1.15 | 2.35 | 3.16 | 4.07 | 5.37 | 6.3 |
| R.P.M. | 1835 | 1770 | 1723 | 1683 | 1624 | 1588 | 1559 |
| Torque (LB-FT) | 0 | 0.38 | 0.76 | 1.14 | 1.5 | 1.9 | 2.28 |

Performance Graph at 90.0 Arm V, 0.5HP Typical performance - Not guaranteed values



DC Motor Performance Data

Record # 1619 - Typical performance - not guaranteed values

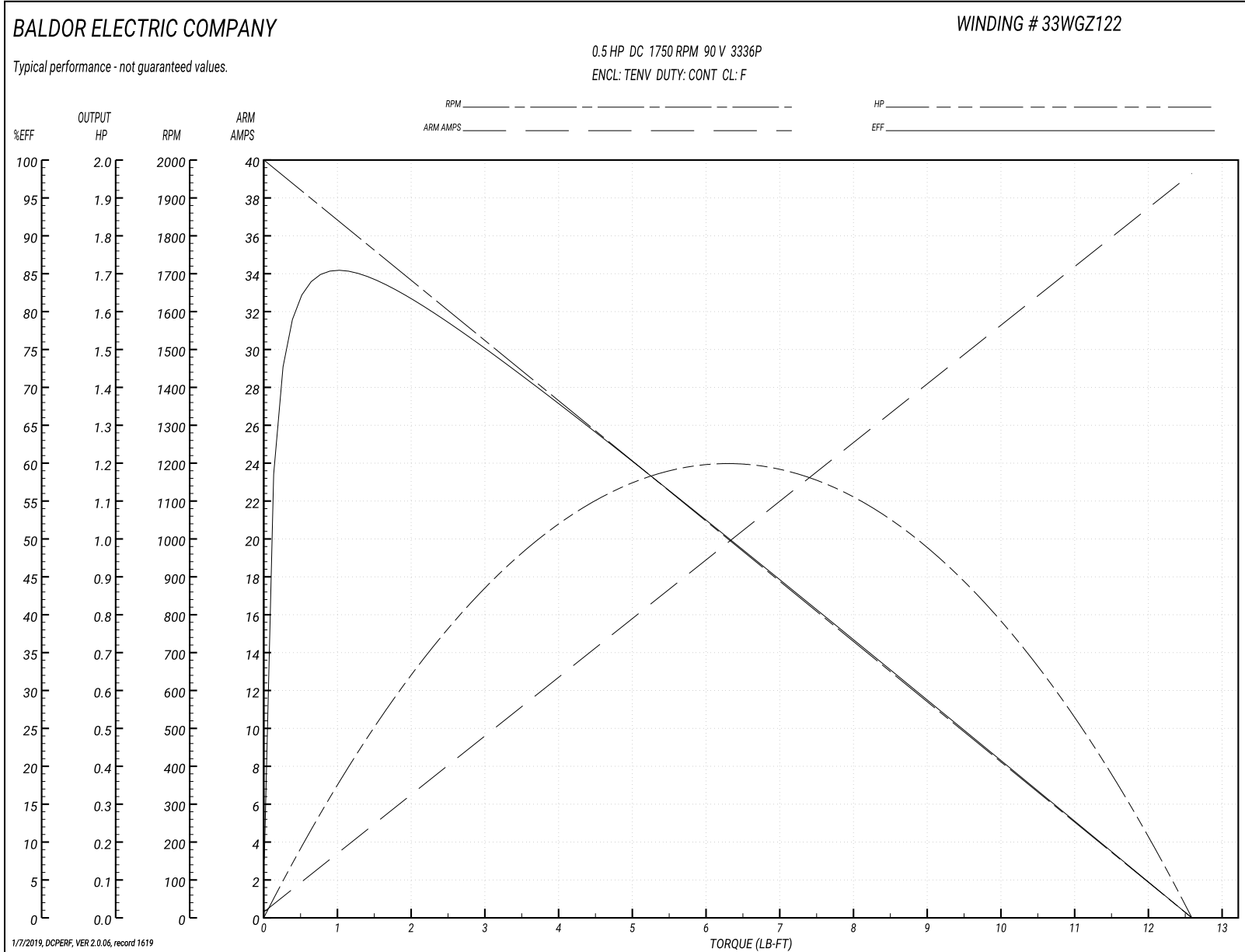
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 33WGZ122-R001 | Type: 3336P | Enclosure: TENV |
|-------------------------------|--------------------|------------------------|

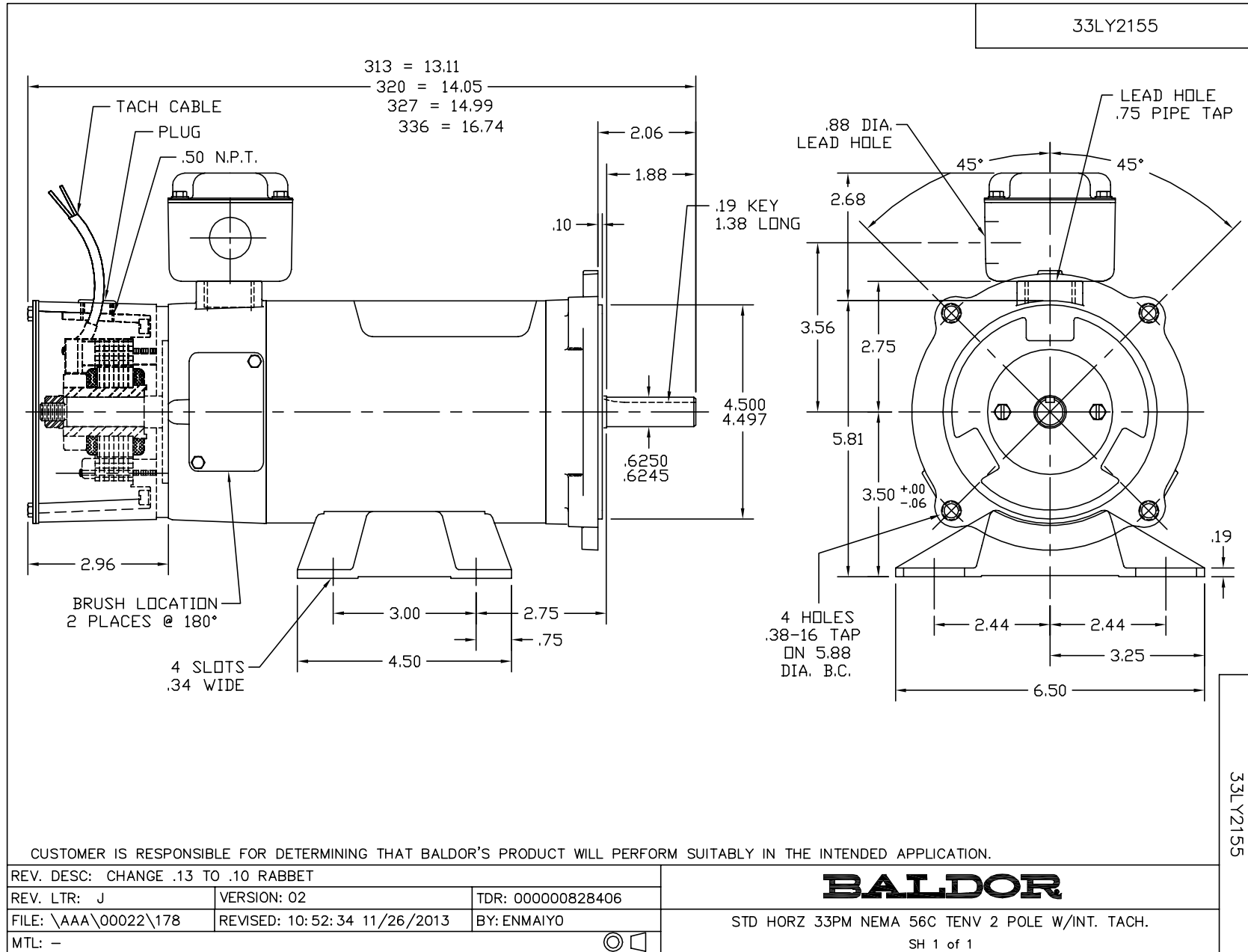
| Nameplate Data | | General Characteristics | |
|-------------------|--------------|----------------------------|-------------------------|
| Rated Output (HP) | 0.5 | Armature Resistance @ 25°C | 1.22 Ω |
| R.P.M. | 1750 | | |
| Armature Volts | 90 | Voltage Constant | 44.63 v/krpm |
| Armature Amps | 4.8 | | |
| Field Volts | | Armature Inductance | 15.574 mH |
| Field Amps | | Armature Inertia | 14.0472 LI ² |
| Rating - Duty | 40C AMB-CONT | | |
| Form Factor | 1.3 | | |
| | | | |

Load Characteristics at 90 Armature Volts

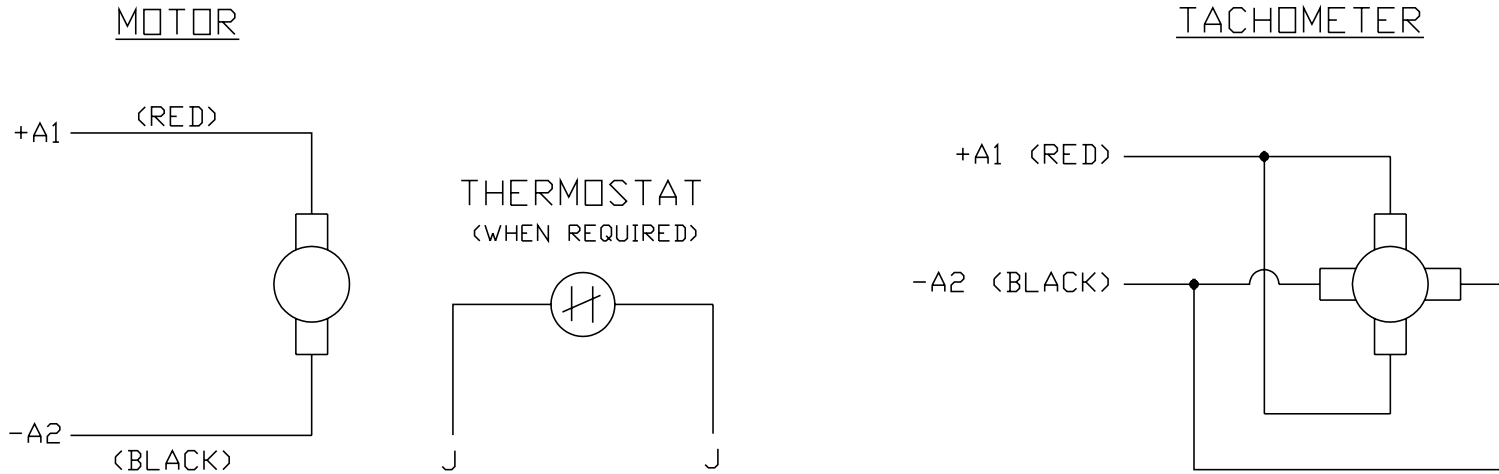
| Load Point | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------|------|------|------|-------|-------|-------|-------|
| Armature Amps | 0.32 | 6.51 | 12.7 | 18.89 | 25.08 | 31.28 | 39.3 |
| R.P.M. | 2000 | 1682 | 1365 | 1047 | 729 | 412 | 0.1 |
| Torque (LB-FT) | 0 | 2 | 4 | 6 | 8 | 10 | 12.59 |

Performance Graph at 90.0 Arm V, 0.5HP Typical performance - Not guaranteed values





CD0194



NOTES:

1. CCW ROTATION AS SHOWN FACING COMMUTATOR END. TO REVERSE MOTOR ROTATION OR TACHOMETER OUTPUT POLARITY INTERCHANGE LEADS A1(RED) & A2(BLACK)
2. LEAD COLORS FOR REFERENCE ONLY & NOT SPECIFIED BY THIS DRAWING. LEAD COLORS SPECIFIED BY LAYOUT DRAWING & BILL OF MATERIAL ONLY.

| | | | |
|---------|--|--------|-------------------|
| MATL: - | | | |
| REV: E | ADDED NOTE "LEAD COLORS FOR REFERENCE ONLY &..." | | |
| 761000 | SCALE: - | BY: CK | REVISED: 07/28/95 |
| | FILE: AAA00004503 | | TDR: 0078737 |

BALDOR ELECTRIC Co.

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194