

# ABB BALDOR RELIANCE III

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## Customer information packet

### CDPX3575

1.5HP, 1750RPM, DC, 145TC, X3548P, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division -

**Specifications**

|                                      |                           |
|--------------------------------------|---------------------------|
| <b>Armature Voltage</b>              | 180 V                     |
| <b>Base Speed</b>                    | 1750 rpm                  |
| <b>Enclosure</b>                     | XPFC                      |
| <b>Frame</b>                         | 145TC                     |
| <b>Frame Material</b>                | Steel                     |
| <b>Haz Area Class and Group</b>      | CLI GP D; CLII GP F,G     |
| <b>Output Power</b>                  | 1.500 HP                  |
| <b>Agency Approvals</b>              | CSA<br>UL<br>UR           |
| <b>Ambient Temperature</b>           | 40 °C                     |
| <b>Armature Current</b>              | 7.1 a                     |
| <b>Armature Inertia</b>              | 40.456 lb-ft <sup>2</sup> |
| <b>Base Indicator</b>                | Rigid                     |
| <b>Bearing Grease Type</b>           | Polyrex EM (-20F +300F)   |
| <b>Drip Cover</b>                    | No Drip Cover             |
| <b>Duty Rating</b>                   | CONT                      |
| <b>Feedback Device</b>               | NO FEEDBACK               |
| <b>Haz Area Temp Code</b>            | T3C                       |
| <b>Heater Indicator</b>              | No Heater                 |
| <b>Lifting Lugs</b>                  | No Lifting Lugs           |
| <b>Motor Lead Exit</b>               | Ko Box                    |
| <b>Motor Lead Quantity/Wire Size</b> | 2 @ 14 AWG                |
| <b>Motor Lead Termination</b>        | Flying Leads              |
| <b>Motor Standards</b>               | NEMA                      |
| <b>Mounting Arrangement</b>          | F1                        |
| <b>Overall Length</b>                | 19.43 IN                  |
| <b>Product Family</b>                | General Purpose           |
| <b>Pulley End Bearing Type</b>       | Sealed Bearing            |
| <b>Service Factor</b>                | 1.00                      |
| <b>Shaft Diameter</b>                | 0.875 IN                  |
| <b>Shaft Extension Location</b>      | Pulley End                |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | AA         |
| <b>Type</b>         | DC         |
| <b>Mech. spec.</b>  | 35P548     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGZ170   |
| <b>Layout</b>       | 35LYP548   |
| <b>Eff. date</b>    | 06-23-2023 |
| <b>CD Diagram</b>   | CD0194     |
| <b>Poles</b>        | 00         |
| <b>Leads</b>        |            |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 01-01-0001 |

|                         |                    |
|-------------------------|--------------------|
| Shaft Ground Indicator  | No Shaft Grounding |
| Shaft Rotation          | Reversible         |
| Shaft Slinger Indicator | No Slinger         |

**Nameplate**

| NP0727XPSL |              |         |       |      |
|------------|--------------|---------|-------|------|
| NO.        |              |         |       |      |
| SER.       |              |         |       |      |
| SPEC.      | 35P548Z170G1 |         |       |      |
| CAT.NO.    | CDPX3575     | T. CODE |       | T3C  |
| HP         | 1.5          | ENCL    |       | XPFC |
| RPM        | 1750         |         |       |      |
| FRAME      | 145TC        | TYPE    | 3548P |      |
| ARM V      | 180          | ARM A   | 7.1   |      |
| FLD V      |              | FLD A   |       |      |
| INSUL      | F            | AMB.    | 40    |      |
| DUTY       | CONT         | SUPPLY  | K     |      |
| BRG/DE     | 6205         | BRG/ODE | 6203  |      |
| BRUSHES    | 2/BP5035AB01 |         |       |      |
| BLANK      |              |         |       |      |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA005556      | SA 35P548Z170G1                          | 1.000 ea |
| AA003205      | AA 35P548Z170G1                          | 1.000 ea |
| MJ5000A09     | EFI KIT #1578 (400 ML CARTRIDGE OF EFI   | 0.050 ea |
| 35CB3001A02SP | EXPL PROOF CONDUIT BOX, 3/4"PIPE TAP LEA | 1.000 ea |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| BP5035AB01    | BRUSH ASSY, GRADE AB                     | 2.000 ea |
| BP5034        | BRSH SPRG ASSY. "REV.B" 35X PM MTR(VULCA | 2.000 ea |
| MJ5000A09     | EFI KIT #1578 (400 ML CARTRIDGE OF EFI   | 0.050 ea |
| HW3001B02     | BRASS CUP WASHER W/GROUND SYMBOL TAB,    | 1.000 ea |
| 35EP2700A01   | FR EP-203 BRG- X35L-M                    | 1.000 ea |
| HW4030A01     | 1-1/2" N.P.T. PIPE PLUG W/SQ.HEAD        | 2.000 ea |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 ea |
| HW4002A02     | 1-11.5X2LG PIPE NIPPLE (F/S)             | 1.000 ea |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 ea |
| 35EP3702A06   | PU EP-205 BRG-35X-56C-143-5TC            | 1.000 ea |
| 51XN1032A20   | 10-32 X 1 1/4 HX WS SL SR                | 2.000 ea |
| HA3013A01     | 1/2-20X5/8 SPL.HX BOLT                   | 2.000 ea |
| HW3021C06     | 3/32 DI X .625 PIN (F/S)                 | 1.000 ea |
| XY3118A12     | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 ea |
| 35FN3002A05SP | EXFN, PLASTIC, 6.376 OD, .638 ID         | 1.000 ea |
| 51XB1214A16   | 12-14X1.00 HXWSSLD SERTYB                | 1.000 ea |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 ea |
| 35CB3500A01SP | CONDUIT BOX LID, MACH                    | 1.000 ea |
| 51XN2520A16   | SCREW, HEX WS SLT, ZN, 1/4-20 X 1.00     | 4.000 ea |
| HW2501D13     | KEY, 3/16 SQ X 1.375                     | 1.000 ea |
| HA7000A01     | KEY RETAINER 7/8" DIA SHAFT              | 1.000 ea |
| NP0018W       | ALUM UL XP CONDUIT BOX NAMEPLATE         | 1.000 ea |
| NP0731        | NAMEPLATE, CAUTION FOR DC EXPLOSION PROO | 1.000 ea |
| 35FH4005A01SP | IEC FH NO GREASER W/PRIMED               | 1.000 ea |
| MG1025G29     | WILKOFAST, 789.229, DARK CHARCOAL GRAY   | 0.014 ga |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 8.000 ea |

|            |                                          |          |
|------------|------------------------------------------|----------|
| 35RK5001   | ROCKERARM ASSY X35PM W/TP1515A01 T'STAT  | 1.000 ea |
| HA3104A34  | THRUBOLT .31-18 X 11.625                 | 4.000 ea |
| MN416A01   | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |
| LB1624     | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LB1161     | LABEL,THERMOSTAT (ROLL LABEL)            | 1.000 ea |
| LC0194     | CONNECTION LABEL                         | 1.000 ea |
| NP0727XPSL | SS XP DC UL CSA CC CL-I GP-D CL-II GP-F& | 1.000 ea |
| G7PA1014   | PKG GRP, BLANK PK1034                    | 1.000 ea |

**DC Motor Performance Data**

Record # 1413

Typical performance - not guaranteed values

| Winding: 35WGZ170-R010 |              | Type: 3548P                   | Enclosure: XPFC |
|------------------------|--------------|-------------------------------|-----------------|
| Nameplate Data         |              | General Characteristics       |                 |
| Rated Output (HP)      | 1.5          | Armature Resistance<br>@ 25°C | 0.795 Ω         |
| R.P.M.                 | 1750         |                               |                 |
| Armature Volts         | 180          |                               |                 |
| Armature Amps          | 7.1          |                               |                 |
| Field Volts            |              | Armature Inductance           | 11.29 mH        |
| Field Amps             |              |                               |                 |
| Rating - Duty          | 40C AMB-CONT |                               |                 |
| Power Supply Code      | K            |                               |                 |

**Load Characteristics at 180 Armature Volts**

| Load Point       | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|------------------|------|------|------|------|------|------|------|
| Armature Amps    | 0.2  | 2.4  | 4.7  | 6.8  | 9    | 11.3 | 13.5 |
| R.P.M.           | 1806 | 1796 | 1770 | 1741 | 1707 | 1671 | 1663 |
| Torque ( LB-FT ) | 0    | 1.5  | 3    | 4.5  | 6    | 7.5  | 9    |

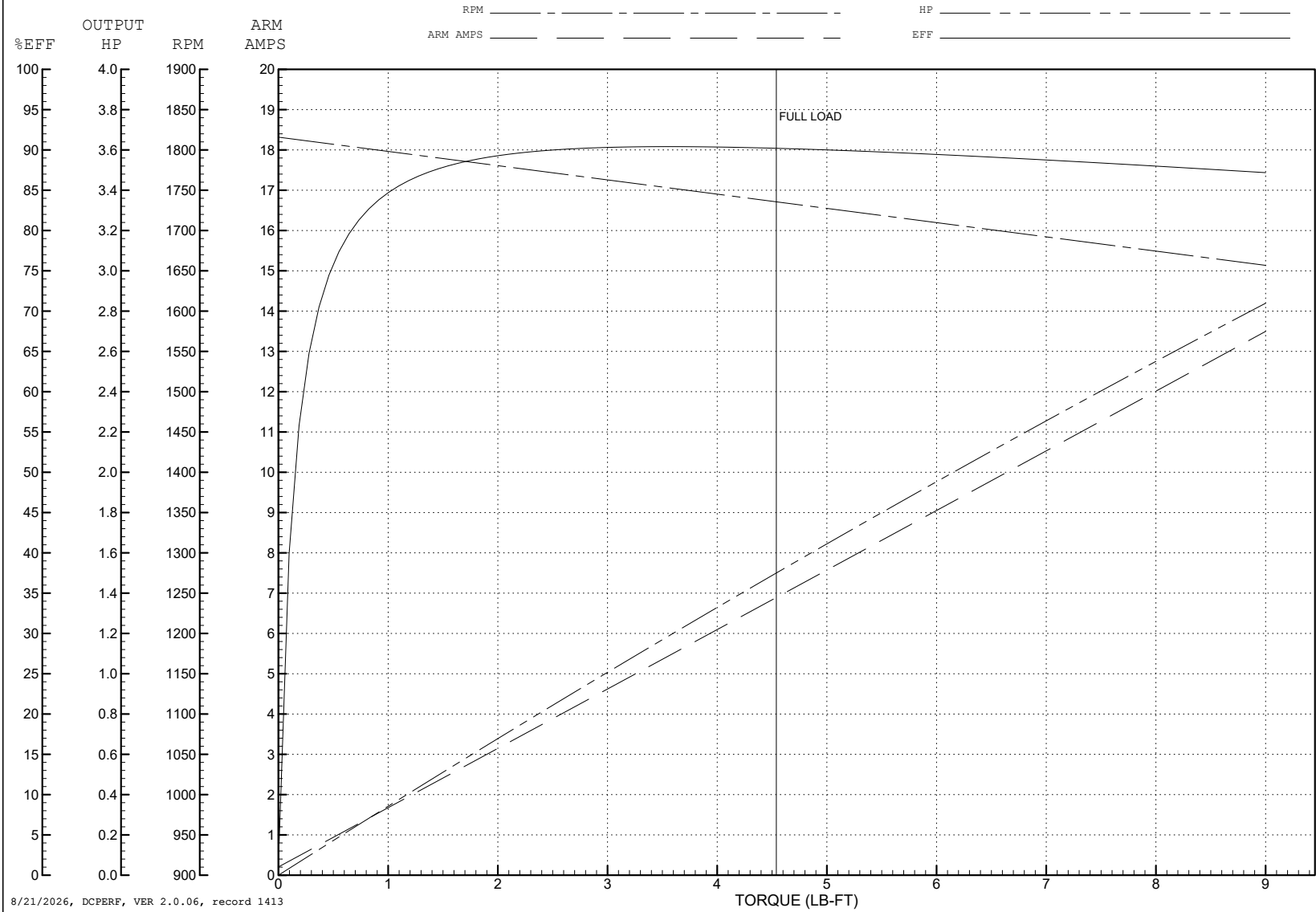
ABB Motors and Mechanical Inc.

WINDING # 35WGZ170

Typical performance - not guaranteed values.

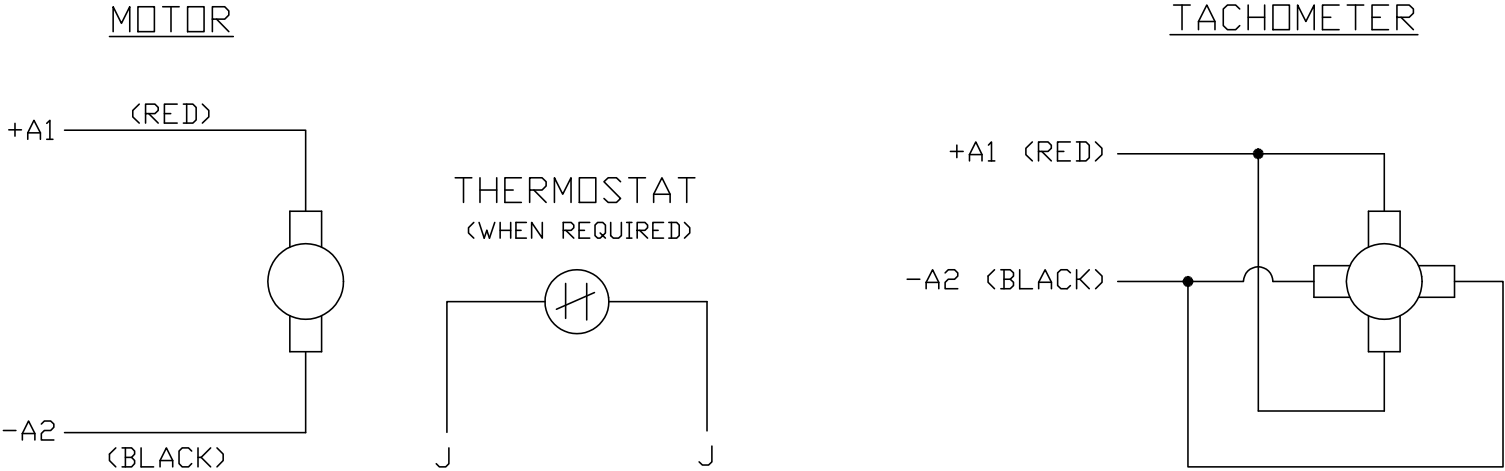
1.5 HP DC 1750 RPM 180 V 3548P

ENCL: XPFC DUTY: CONT CL: F





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 &..." |              |
| CD0194  |   | SCALE: -                                         | BY: CK       |
|         |   | FILE: AAA00004503                                | TDR: 0078737 |

**BALDOR ELECTRIC Co.**

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194