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# Customer information packet

## CDPWD3605

5HP, 1750RPM, DC, 1810ATC, 3681P, TEFC, F1

Class - None

Division -

## Specifications

|                               |                            |
|-------------------------------|----------------------------|
| Armature Voltage              | 180 V                      |
| Base Speed                    | 1750 rpm                   |
| Enclosure                     | TEFC                       |
| Frame                         | 1810ATC                    |
| Frame Material                | Steel                      |
| Haz Area Class and Group      | None                       |
| Output Power                  | 5.000 HP                   |
| Agency Approvals              | CE<br>CSA<br>UR            |
| Ambient Temperature           | 40 °C                      |
| Armature Current              | 24.5 a                     |
| Armature Inertia              | 177.060 lb-ft <sup>2</sup> |
| Base Indicator                | Rigid                      |
| Bearing Grease Type           | Polyrex EM (-20F +300F)    |
| Drip Cover                    | No Drip Cover              |
| Duty Rating                   | CONT                       |
| Feedback Device               | NO FEEDBACK                |
| Heater Indicator              | No Heater                  |
| Lifting Lugs                  | Standard Lifting Lugs      |
| Motor Lead Exit               | Ko Box                     |
| Motor Lead Quantity/Wire Size | 2 @ 12 AWG, A              |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Mounting Arrangement          | F1                         |
| Overall Length                | 27.83 IN                   |
| Product Family                | Wash Down                  |
| Pulley End Bearing Type       | Sealed Bearing             |
| Service Factor                | 1.00                       |
| Shaft Diameter                | 1.125 IN                   |
| Shaft Extension Location      | Pulley End                 |
| Shaft Ground Indicator        | No Shaft Grounding         |

## Part detail

|              |            |
|--------------|------------|
| Revision     | AV         |
| Type         | DC         |
| Mech. spec.  | 36P128     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 36WGZ509   |
| Layout       | 36LYP128   |
| Eff. date    | 10-09-2023 |
| CD Diagram   | CD0194     |
| Poles        | 00         |
| Leads        | 2#12 A Y   |
| Proprietary  | False      |
| Created date | 01-01-0001 |

|                         |               |
|-------------------------|---------------|
| Shaft Rotation          | Reversible    |
| Shaft Slinger Indicator | Shaft Slinger |

## Nameplate

| NP1509   |             |         |   |         |      |
|----------|-------------|---------|---|---------|------|
| CAT.NO.  | CDPWD3605   |         |   |         |      |
| SPEC.    | 36P128Z509  |         |   |         |      |
| HP       | 5/KW3.73    | ENCL    |   | TEFC    |      |
| RPM      | 1750        |         |   |         |      |
| FRAME    | 1810ATC     | TYPE    |   | 3681P   |      |
| ARM V    | 180         | ARM A   |   | 24.5    |      |
| FLD V    |             | FLD A   |   |         |      |
| INSUL    | F           | AMB.    |   | 40      |      |
| DUTY     | CONT        | SUPPLY  |   |         | K    |
| BRG/DE   | 6206        | BRG/ODE |   |         | 6206 |
| BRUSHES  | 2/BP5027A01 |         |   |         |      |
|          |             | BLANK   |   |         |      |
| SER.     |             |         |   |         |      |
| BLANK    | IP55 KG 71  |         |   |         |      |
| APRV-CSA | Y           | APRV-UL | Y | APRV-CE | Y    |

## DC Motor Performance Data

Record # 312

Typical performance - not guaranteed values

| Winding: 36WGZ509-R001 |              | Type: 3681P                   | Enclosure: TEFC          |
|------------------------|--------------|-------------------------------|--------------------------|
| Nameplate Data         |              | General Characteristics       |                          |
| Rated Output (HP)      | 5            | Armature Resistance<br>@ 25°C | 0.16 $\Omega$            |
| R.P.M.                 | 1750         |                               |                          |
| Armature Volts         | 180          | Voltage Constant              | 91.78 v/krpm             |
| Armature Amps          | 24.5         |                               |                          |
| Field Volts            |              | Armature Inductance           | 3.677 mH                 |
| Field Amps             |              | Armature Inertia              | 177.0597 LI <sup>2</sup> |
| 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    | 1.1  | 7.1  | 12.8 | 18.4  | 24.1  | 29.9 | 35.99 |
| R.P.M.           | 1931 | 1915 | 1886 | 1870  | 1850  | 1832 | 1815  |
| Torque ( LB-FT ) | 0    | 3.8  | 7.57 | 11.39 | 15.18 | 19   | 22.81 |

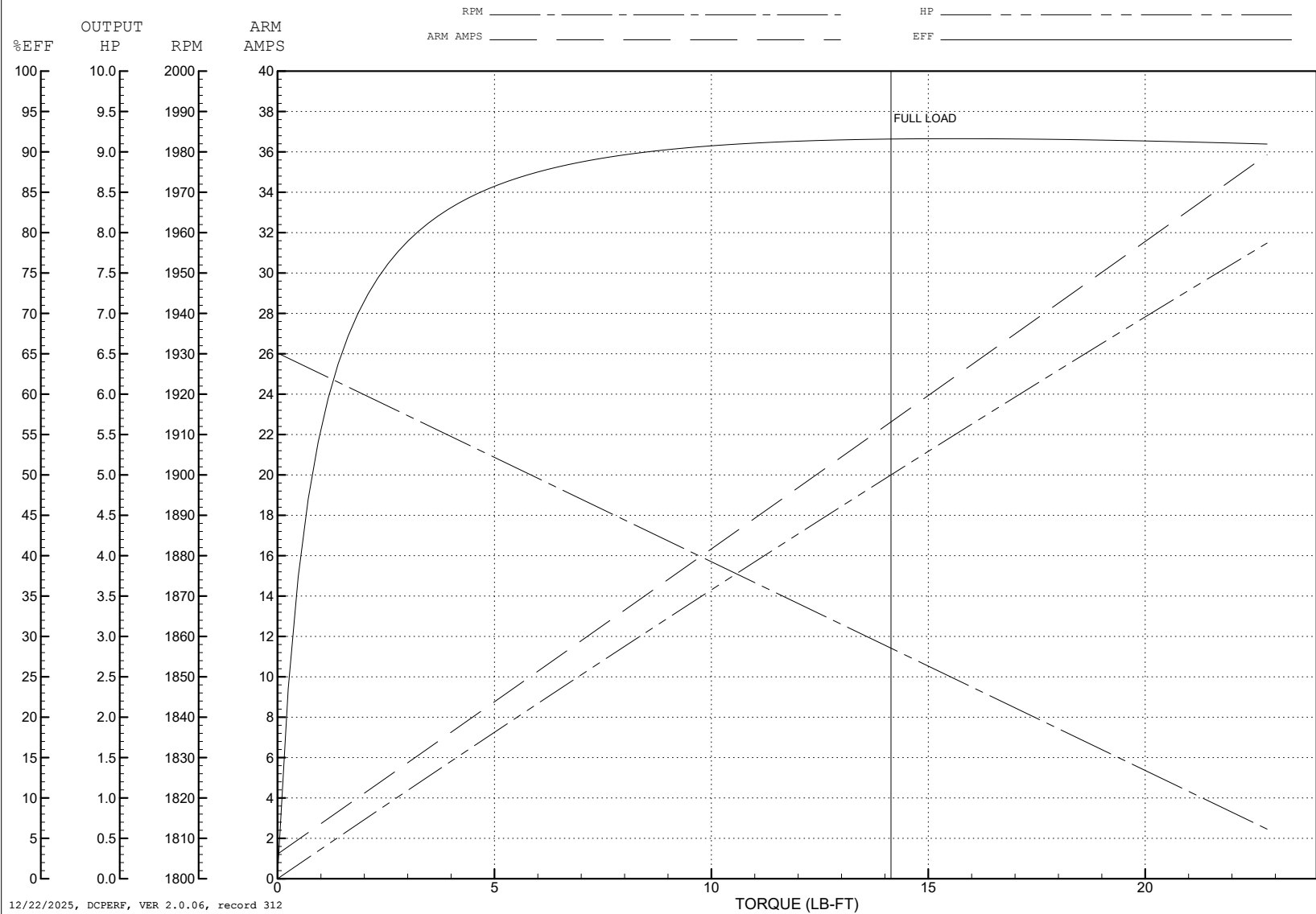
ABB Motors and Mechanical Inc.

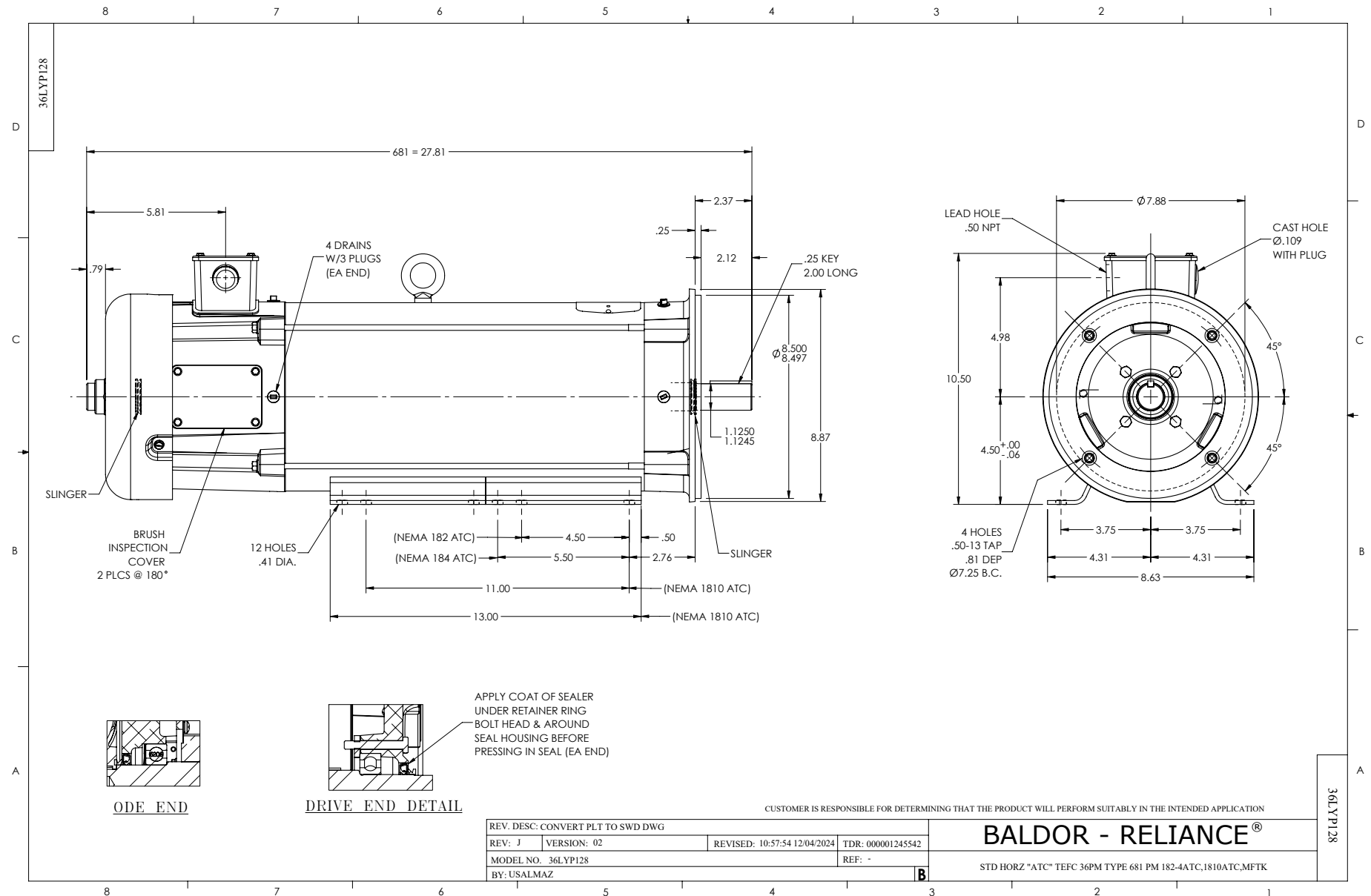
WINDING # 36WGZ509

Typical performance - not guaranteed values.

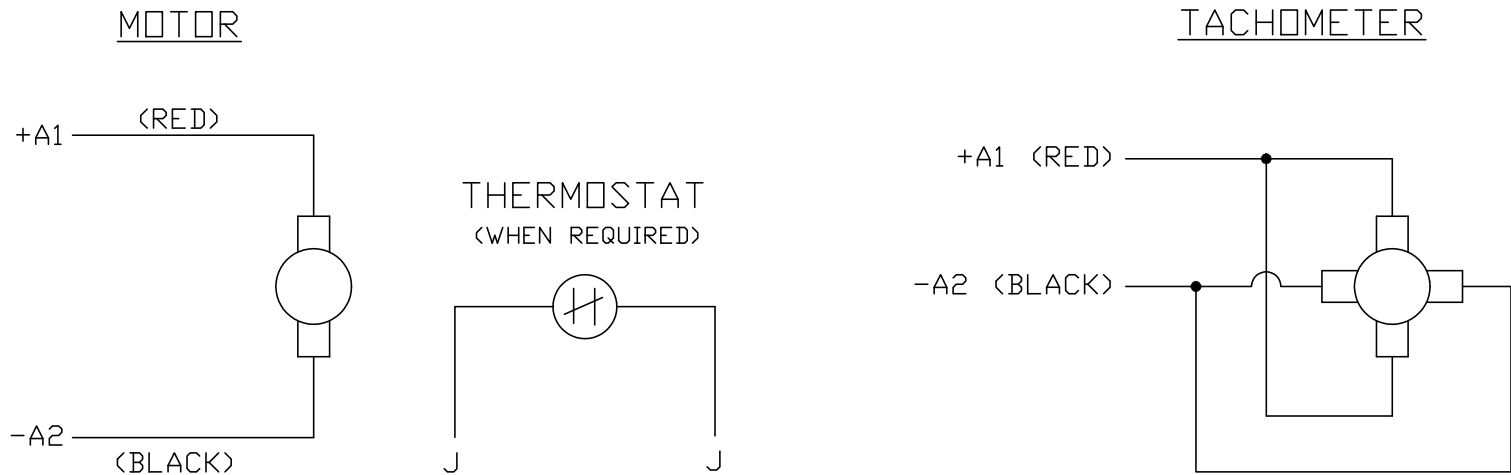
5 HP DC 1750 RPM 180 V 3681P

ENCL: TEFC 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: - |   |                                                  |        | BALDOR ELECTRIC Co. |                                                      |
| REV:    | E | ADDED NOTE "LEAD COLORS FOR REFERENCE ONLY &..." |        |                     |                                                      |
| CD0194  |   | SCALE: -                                         | BY: CK | REVISED: 07/28/95   | CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS |
|         |   | FILE: AAA00004503                                |        | TDR: 0078737        |                                                      |

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