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# Customer information packet

## D1802R

DC0189ATY, 2HP, 1750RPM, 180, 200, TENV, F3

## Specifications

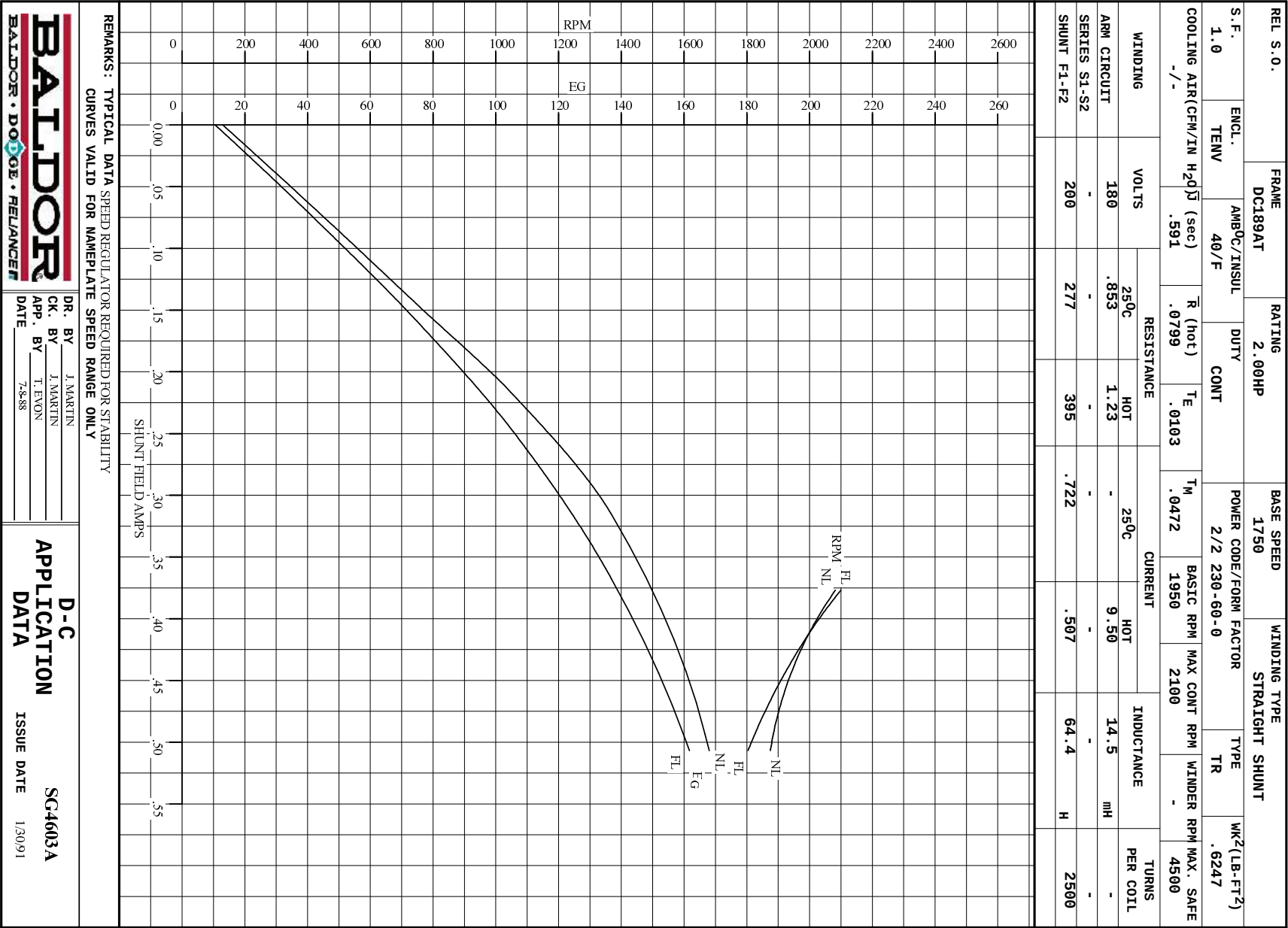
|                          |                       |
|--------------------------|-----------------------|
| Armature Voltage         | 180 V                 |
| Base Speed               | 1750 rpm              |
| Enclosure                | TENV                  |
| Field Voltage            | 200 V                 |
| Frame                    | DC0189ATY             |
| Output Power             | 2.000 HP              |
| Agency Approvals         | CCSA US               |
| Ambient Temperature      | 40 °C                 |
| Armature Current         | 9.5 a                 |
| Drip Cover               | No Drip Cover         |
| Duty Rating              | CONT                  |
| Feedback Device          | NO FEEDBACK           |
| Field Winding Type       | STR. SHUNT            |
| Frame Prefix             | DC                    |
| Heater Indicator         | No Heater             |
| Insulation Class         | F                     |
| Lifting Lugs             | Standard Lifting Lugs |
| Motor Standards          | NEMA                  |
| Mounting Arrangement     | F3                    |
| Overall Length           | 21.19 IN              |
| Service Factor           | 1.00                  |
| Shaft Diameter           | 0.875 IN              |
| Shaft Ground Indicator   | No Shaft Grounding    |
| Shaft Slinger Indicator  | No Slinger            |
| Thermal Device - Bearing | None                  |

## Part detail

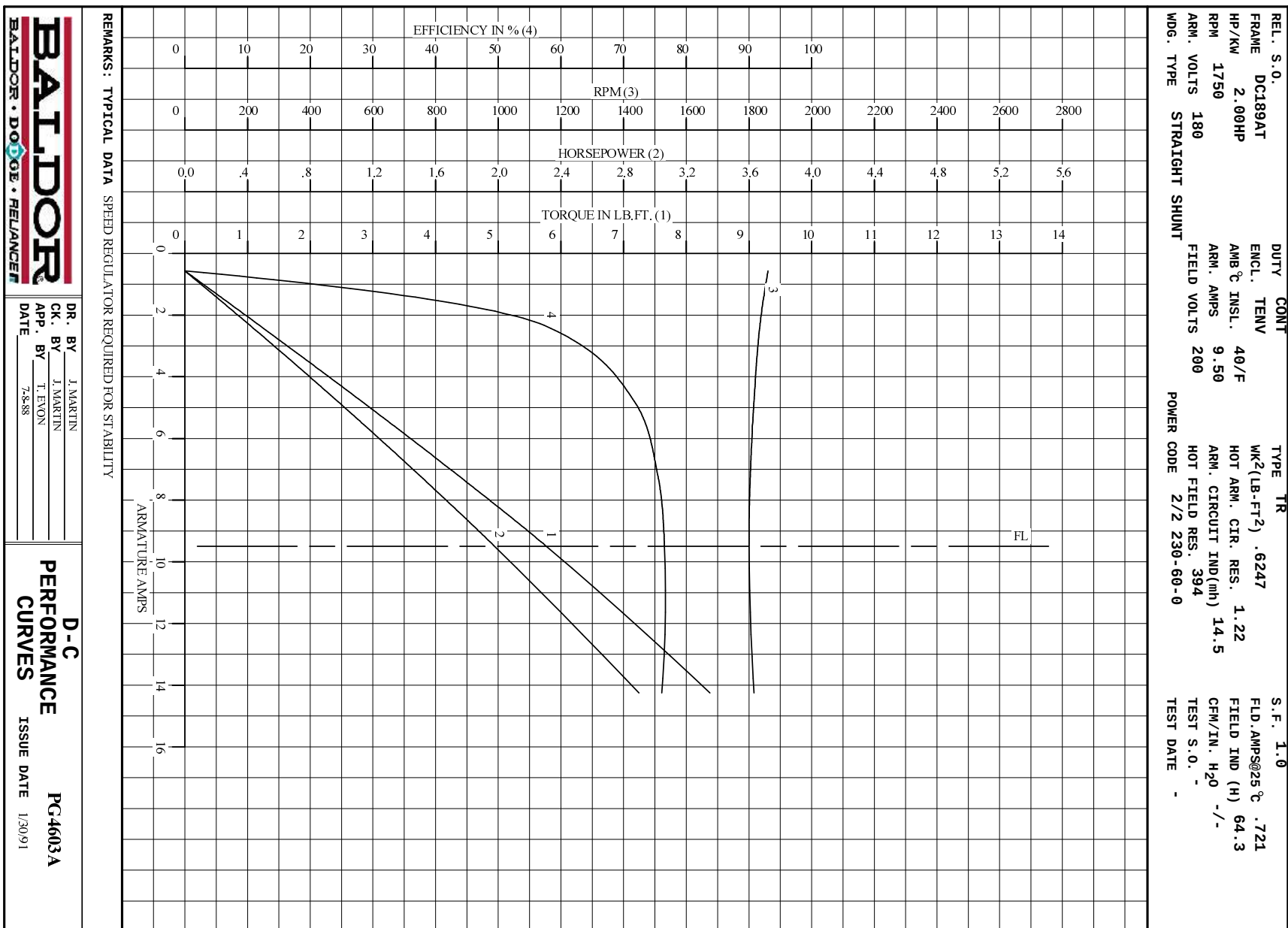
|              |            |
|--------------|------------|
| Revision     | -          |
| Type         | DC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | G4603A     |
| Layout       | 609980-503 |
| Eff. date    | 12-27-2019 |
| CD Diagram   | 406770-007 |
| Poles        | 00         |
| Leads        |            |
| Proprietary  | False      |
| Created date | 12-27-2019 |

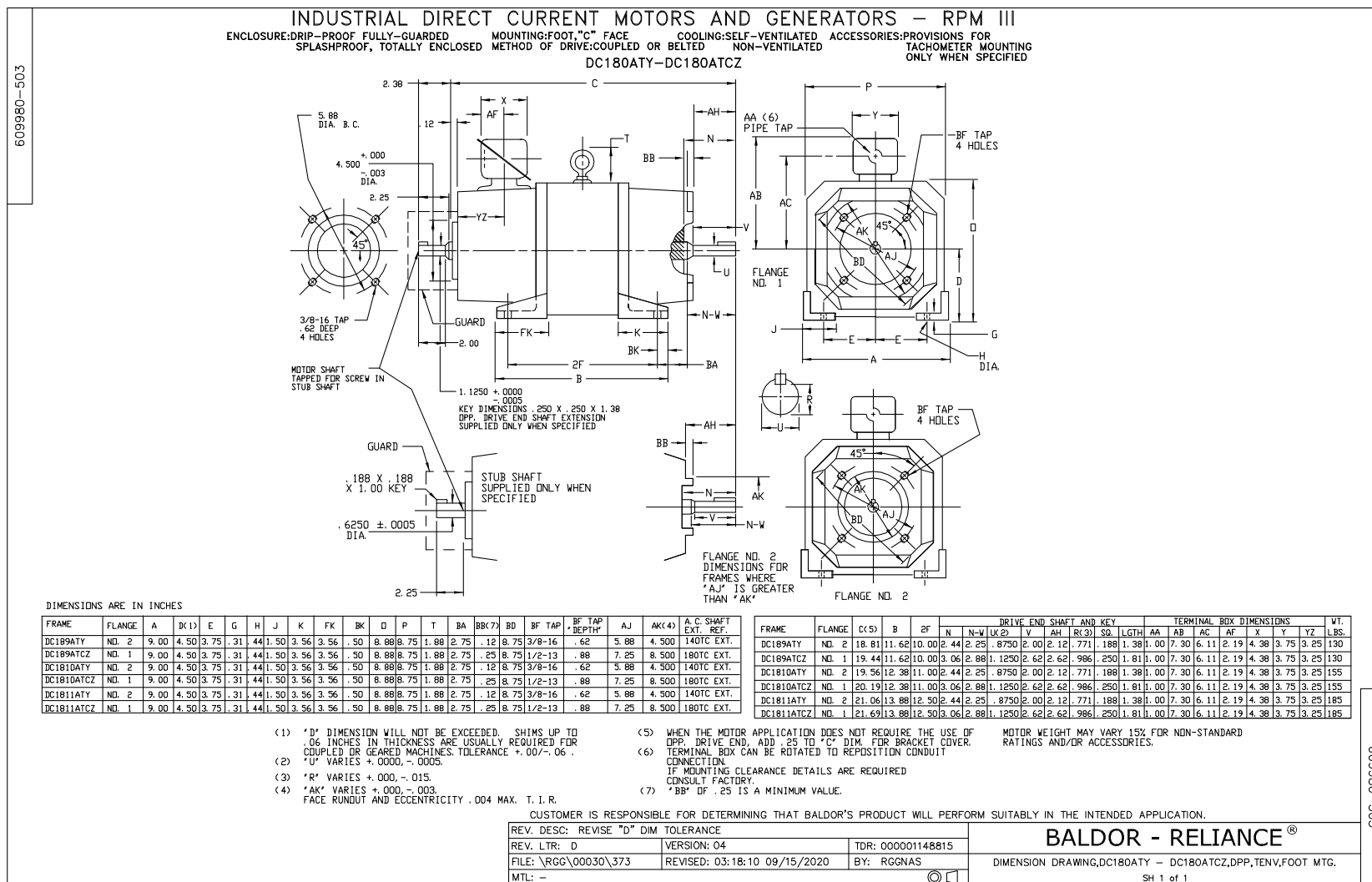
## Nameplate

| 000613006HP      |            |          |             |          |              |  |      |  |    |
|------------------|------------|----------|-------------|----------|--------------|--|------|--|----|
| CAT.NO.          | D1802R     | SPEC NO. |             | T18S1117 |              |  |      |  |    |
| FR               | DC0189ATY  | HP       | 2           |          | DUTY         |  | CONT |  |    |
| ENCL.            | TENV       | RPM      | 1750        |          | S.F.         |  | 1.0  |  |    |
| ENCL MOD         |            | VOLTS    | 180         |          | INSUL        |  | F    |  |    |
| MAX SAFE SPEED   | 04500      | AMPS     | 9.50        |          | AMB.         |  | 40   |  |    |
| FIELD DATA       |            | SER.NO.  |             |          |              |  |      |  |    |
| WINDING          | STR. SHUNT |          | POWER CODE  |          | 2/2-230-60-0 |  |      |  |    |
| VOLTS            | 100/200    |          | D.E. BRG.   |          | 30BC02JPP30A |  |      |  |    |
| MAX AMPS @ 25 C  | 1.44/.72   |          | O.D.E. BRG. |          | 30BC02JPG30A |  |      |  |    |
| HOT AMPS         | 1.02/.51   |          | MIN. AMB.   |          | 0            |  | TYPE |  | TR |
| BRUSH:419904050A |            |          |             |          |              |  |      |  |    |
| SPLASHPROOF      |            |          |             |          |              |  |      |  |    |



|                                                                                                         |                |                                                                        |                             |                                                                    |               |
|---------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------|---------------|
| REL S. O.                                                                                               | FRAME          | RATING                                                                 | RPM                         | ARM. VOLTS                                                         | ARM. AMPS     |
|                                                                                                         | DC189AT        | 2.00HP                                                                 | 1750                        | 180                                                                | 9.50          |
|                                                                                                         |                |                                                                        |                             |                                                                    |               |
| WINDING TYPE                                                                                            | S. F.          | ENCL.                                                                  | AMB °C/INSUL                | DUTY                                                               | FIELD VOLTS   |
| STRAIGHT SHUNT                                                                                          | 1.0            | TENV                                                                   | 40/F                        | CONT                                                               | 200           |
|                                                                                                         |                |                                                                        |                             |                                                                    |               |
| POWER CODE                                                                                              | TYPE           | WK <sup>2</sup> (LB-FT <sup>2</sup> )                                  | HOT ARM.CIR.RES.            | FLD. AMPS@25 °C                                                    | HOT FIELD RES |
| 2/2 230-60-0                                                                                            | TR             | .6247                                                                  | 1.22                        | .721                                                               | 394           |
|                                                                                                         |                |                                                                        |                             |                                                                    |               |
| ARM. CIR. IND. (mh)                                                                                     | FIELD IND. (H) | COOLING AIR(CFM/IN H 20)                                               | TURNS PER COIL SHUNT/SERIES | TEST DATE                                                          |               |
| 14.5                                                                                                    | 64.3           | -/-                                                                    | 2500/.00000                 | -                                                                  |               |
|                                                                                                         |                |                                                                        |                             |                                                                    |               |
| LOAD PERFORMANCE                                                                                        |                |                                                                        |                             |                                                                    |               |
| LOAD                                                                                                    | AMPERES        | TORQUE IN LB.-FT.                                                      | OUTPUT IN HP                | RPM                                                                | % EFFICIENCY  |
| NO LOAD                                                                                                 | .57            | 0                                                                      | 0                           | 1861                                                               | 0             |
| 1/4                                                                                                     | 2.4            | 1.22                                                                   | .425                        | 1835                                                               | 57.8          |
| 2/4                                                                                                     | 4.8            | 2.79                                                                   | .965                        | 1816                                                               | 71.6          |
| 3/4                                                                                                     | 7.1            | 4.31                                                                   | 1.48                        | 1805                                                               | 75.4          |
| 4/4                                                                                                     | 9.5            | 5.77                                                                   | 1.98                        | 1800                                                               | 76.5          |
| 0.L.                                                                                                    | 14             | 8.38                                                                   | 2.90                        | 1816                                                               | 76.1          |
|                                                                                                         |                |                                                                        |                             |                                                                    |               |
| RPM VS. FIELD AMPS                                                                                      |                |                                                                        | Eg VS. FIELD AMPS           |                                                                    |               |
| FIELD AMPS                                                                                              | RPM N.L.       | RPM F.L.                                                               | Eg N.L. @ BASE SPEED        | Eg F.L. @ BASE SPEED                                               |               |
| .506                                                                                                    | 1861           | 1799                                                                   | 167                         | 161                                                                |               |
| .474                                                                                                    | 1902           | 1859                                                                   | 164                         | 156                                                                |               |
| .441                                                                                                    | 1944           | 1926                                                                   | 161                         | 151                                                                |               |
| .409                                                                                                    | 2003           | 2005                                                                   | 156                         | 145                                                                |               |
| .376                                                                                                    | 2082           | 2100                                                                   | 150                         | 138                                                                |               |
|                                                                                                         |                |                                                                        |                             |                                                                    |               |
| REMARKS: TYPICAL DATA      MAXIMUM SAFE SPEED = 4500      RPM<br>SPEED REGULATOR REQUIRED FOR STABILITY |                |                                                                        |                             |                                                                    |               |
|                        |                | DR. BY J. MARTIN<br>CK. BY J. MARTIN<br>APP. BY T. EVON<br>DATE 7-8-88 |                             | D-C MOTOR      Dg4603A<br>PERFORMANCE DATA      ISSUE DATE 1/30/91 |               |

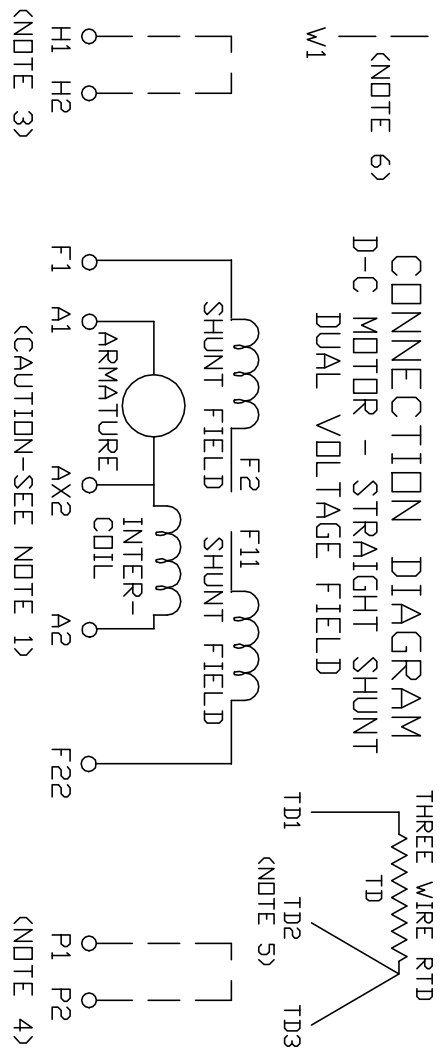




406770-007

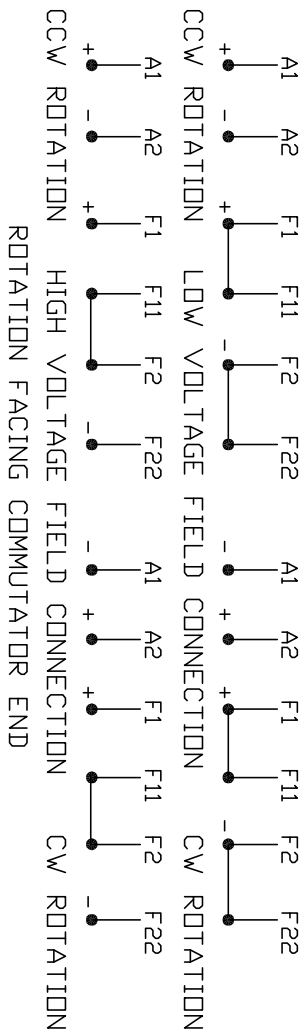
### CONNECTION DIAGRAM D-C MOTOR - STRAIGHT SHUNT DUAL VOLTAGE FIELD

406770-007



## ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS



1. CAUTION — ARMATURE MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
3. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
4. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
5. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3.
6. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
7. WARNING — MOTOR MUST BE GROUNDED TO PREVENT SERIOUS INJURIES TO PERSONNEL. GROUND THE MOTOR PER IEC, NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL ELECTRICAL CODES. A TAPPED HOLE IS PROVIDED IN THE CONDUIT BOX, ON THE FOOT. FRAME BRACE OR OPPOSITE OPPOSITE DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER \_\_\_\_\_ CUSTOMER RELIANCE  
ORDER NO. \_\_\_\_\_ S.D. NO. \_\_\_\_\_

REV. DESC: UPDATE LOGO AND TITLEBLOCK: LOADED TO BUS

REV. LTR: -

VERSION: 00

TDR: 000000784225

FILE: \MGA\00001\391

REVISÉ: 02:50:46 02/01/2013

MTL: —

BY: MGHPC

# BALDOR

D-C MOTOR CONNECTION DIAGRAM, STR. SHUNT, DUAL VOLTAGE FIELD

SH 1 of 1