

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **GP3307**

**G.M. F27UA 90VDC 50:1 HD GEARSET**

| Part Detail |      |             |       |                |  |               |                 |
|-------------|------|-------------|-------|----------------|--|---------------|-----------------|
| Revision:   | U    | Status:     | PRD/A | Change #:      |  | Proprietary:  | No              |
| Type:       |      | Prod. Type: |       | Elec. Spec:    |  | CD Diagram:   |                 |
| Enclosure:  | TENV | Mfg Plant:  |       | Mech. Spec:    |  | Layout:       | 33-2408Z148G1K4 |
| Frame:      | JH   | Mounting:   |       | Poles:         |  | Created Date: |                 |
| Base:       |      | Rotation:   | R     | Insulation:    |  | Eff. Date:    | 05-06-2016      |
| Field Type: |      | Literature: |       | Elec. Diagram: |  | Replaced By:  |                 |

|                     |                 |            |           |
|---------------------|-----------------|------------|-----------|
| Nameplate NP1286A06 |                 |            |           |
| SPEC.               | 33-2408Z148G1K4 |            |           |
| R.P.M.              | 50              | DATE CODE  | DATE CODE |
| RATIO               | 50:1            | TORQ/IN LB | 234       |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SR000948      | SR 33-2408Z148G1K4                       | 1.000 EA |
| 33-2408Z148G1 | .5HP,2500RPM,DC,42CZ,3327P,TENV,F1,N     | 1.000 EA |
| HW3081C06     | 3/32 X 5/8 GROOVE PIN TYPE A,THRU HARDEN | 1.000 EA |
| MJ5019A01     | ADHESIVE LOCTITE #680 WAS BAD4525        | 0.010 EA |
| HA6032A04G    | ADAPTER, MACH F/BOEHM MACH'D. FOR SEAL   | 1.000 EA |
| HW4600B91     | SEAL, TCM #06132TB .625X1.375X.252       | 1.000 EA |
| 10XN2520A16   | 1/4-20 X 1 HEX HEAD CAP SCR, ZINC PLATED | 4.000 EA |
| HW1001A25     | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| HG0039A04G    | HSG,JK EX CLOSED W/ GRAY POWDER COAT     | 1.000 EA |
| BS0114A01G    | BS,JH OP 6204STD OPEN W/ GRAY POWDER COA | 1.000 EA |
| HW5002A57     | WALDES N5002-187 BEVELED 1.850           | 1.000 EA |
| 60XM0832A08   | SCREW, PAN TORX 8-32X.500 THREAD FORMING | 4.000 EA |
| RM1020A21     | O-RING,3.240 I.D. X .052 BUNA-N (NITRILE | 1.000 EA |
| WM0055A20     | WORM,JH 50.0 INP (918 GEARING)           | 1.000 EA |
| MJ1000B02     | KLUB. GH6-460 GEAR OIL 1 GALLON          | 0.030 GA |
| HW5109A10     | WASHER, WAVE SPRING FOR 47MM BORE SMALLE | 1.000 EA |
| HW4600G71     | SEAL, .750 X 1.250 X .250 SGL LIP FT802  | 1.000 EA |
| RM1057        | RUBBER SQUARE RING 1.424 I.D.            | 1.000 EA |
| 19XN1032A12   | SCREW, HEX WASHER HEAD, #10-32 X .750    | 4.000 EA |
| HA1194B01     | BLADDER,CJK EXPANSION                    | 1.000 EA |
| 15XM0632A06   | SCREW, 6-32X .375, THREAD FORMING        | 3.000 EA |
| HW2501D10     | KEY, 3/16 SQ X 1.000                     | 1.000 EA |
| HA4021A05     | 1/16 NPSF-HX SOC PIPE PLUG TAPER DRY SEA | 1.000 EA |
| NP1286A06     | NP,GR AD NONE H                          | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| CPA1001                | PACKING GROUP OVERSIZED SINGLE           | 1.000 EA |
| ME4000                 | .375-.75" DIA.#SW-04 WOVEN SHAFT PROTECT | 0.125 FT |

| Accessories |                                         |            |
|-------------|-----------------------------------------|------------|
| Part Number | Description                             | Multiplier |
| BC140       | CS2934A,120/240VAC .5/1-HP SCR CTL,NEMA | E9         |
| BC140-FBR   | 3479G KBMD-240D w/FBR CN3000A54         | E9         |
| BC141       | CHASSIS MOUNT FSCN CN3000A20            | E9         |
| BR0025      | PLUG IN RESISTOR,0.025 ohm              | E9         |

**DC Motor Performance Data**

Record # 352 - Typical performance - not guaranteed values

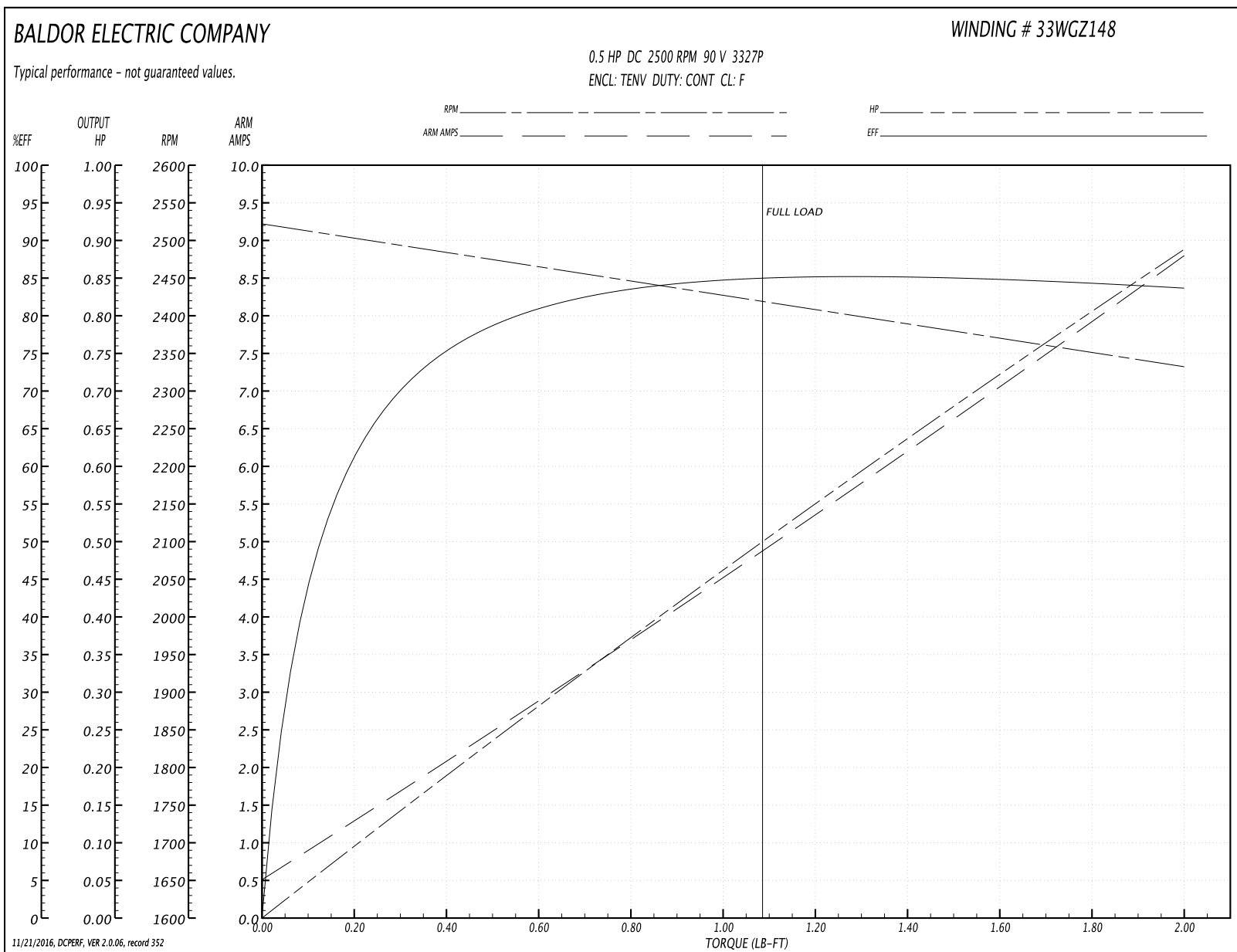
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 33WGZ148-R002 | <b>Type:</b> 3327P | <b>Enclosure:</b> TENV |
|-------------------------------|--------------------|------------------------|

| Nameplate Data    |              | General Characteristics       |                       |
|-------------------|--------------|-------------------------------|-----------------------|
| Rated Output (HP) | 0.5          | Armature Resistance<br>@ 25°C | 0.664 Ω               |
| R.P.M.            | 2500         |                               |                       |
| Armature Volts    | 90           | Voltage Constant              | 35.76 v/krpm          |
| Armature Amps     | 5            |                               |                       |
| Field Volts       |              | Armature Inductance           | 5.119 mH              |
| Field Amps        |              | Armature Inertia              | 6.318 LI <sup>2</sup> |
| Rating - Duty     | 40C AMB-CONT |                               |                       |
| Form Factor       | 1.3          |                               |                       |
|                   |              |                               |                       |

## Load Characteristics at 90 Armature Volts

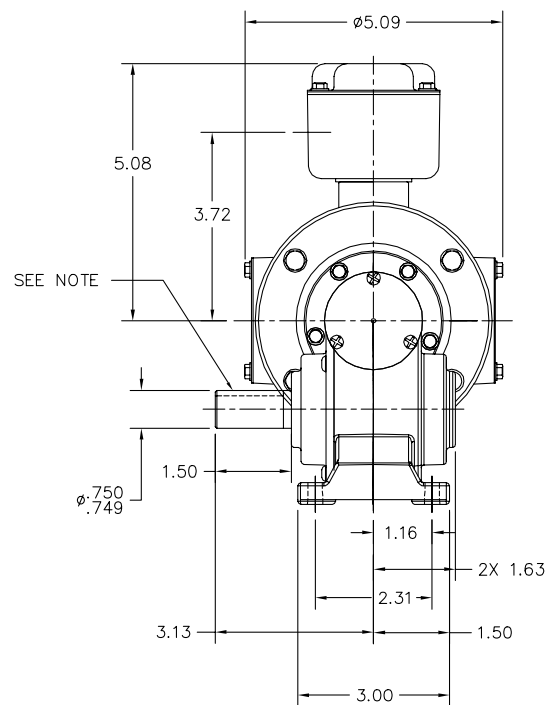
| Load Point       | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|------------------|------|------|------|------|------|------|------|
| Armature Amps    | 0.5  | 2.5  | 3.5  | 4.6  | 5.4  | 6.7  | 8.8  |
| R.P.M.           | 2526 | 2469 | 2447 | 2426 | 2415 | 2375 | 2332 |
| Torque ( LB-FT ) | 0    | 0.5  | 0.75 | 1    | 1.25 | 1.5  | 2    |

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

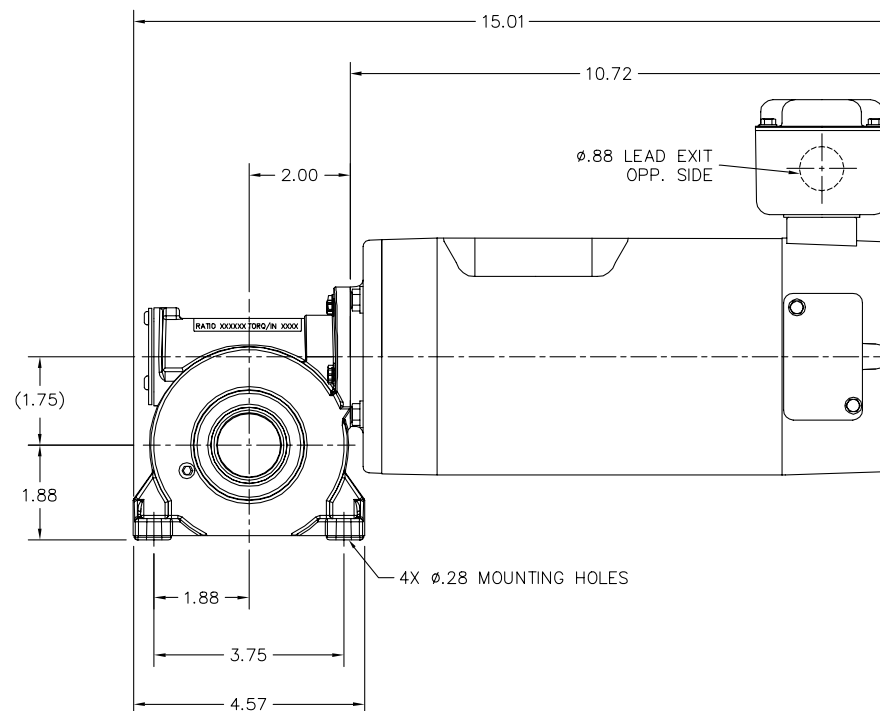




33-2408Z148G1K4



KEYWAY: .188 X .093 X 1.250



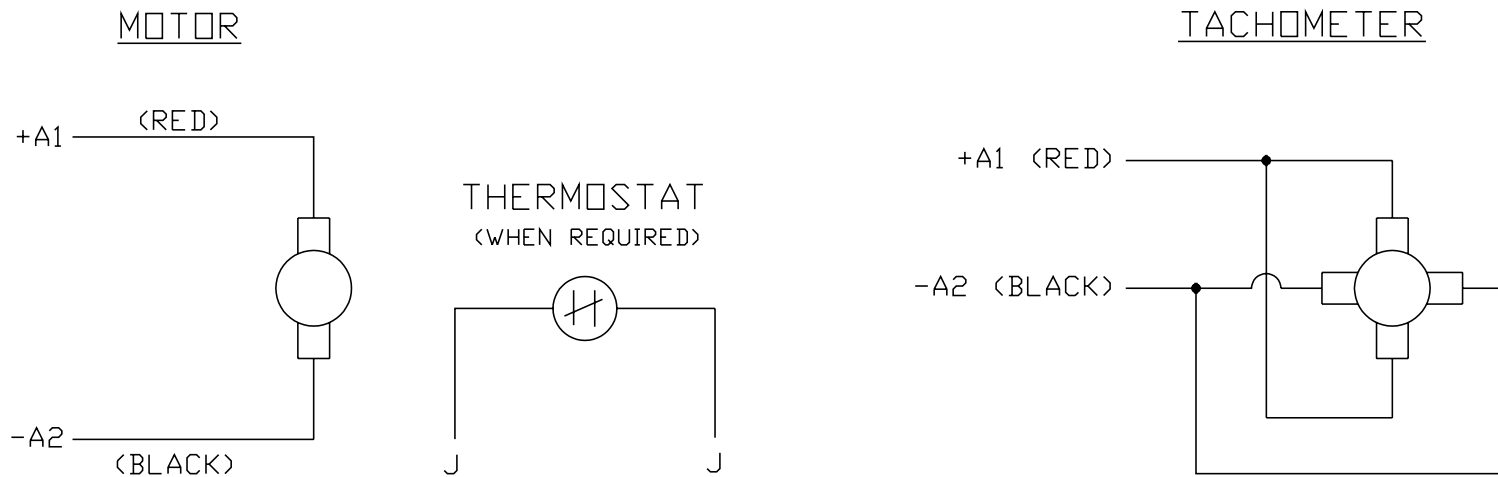
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|                                     |                      |                             |
|-------------------------------------|----------------------|-----------------------------|
| REV. DESC: COMPLETE RIGHT HAND VIEW | VERSION: 03          | TDR: 000000B19826           |
| REV. LTR: C                         | FILE: \CKA\00019\949 | REVISD: 01:15:42 09/30/2013 |
| MTL: -                              | BY: CKBRIS0          |                             |

**BALDOR**  
 LY,33DC JH RSB TENV GP NONE 918 GEARING  
 SH 1 of 1

33-2408Z148G1K4

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                                | REVISED: 07/28/95 |
|         |   | TDR: 0078737                                     |                   |

**BALDOR ELECTRIC Co.**

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194