

**BALDOR® • RELIANCE** 

**Product Information Packet**

**1458**

**5HP, 1500/1800RPM, 3PH, 50/60HZ, 3735M, BUFF**

| Part Detail |         |             |            |             |                      |               |    |
|-------------|---------|-------------|------------|-------------|----------------------|---------------|----|
| Revision:   | Y       | Status:     | PRD/A      | Change #:   |                      | Proprietary:  | No |
| Type:       | AC      | Elec. Spec: | G4WG0036   | CD Diagram: | CD0258               | Mfg Plant:    |    |
| Mech. Spec: | G14-117 | Layout:     | G4LY0117   | Poles:      | 04                   | Created Date: |    |
| Base:       | RG      | Eff. Date:  | 02-11-2022 | Leads:      | 9#14 11"FROM ENDTURN |               | Y  |

| Specs             |         |  |  |
|-------------------|---------|--|--|
| Nameplate Output: | 5       |  |  |
| Product Style:    | GRINDER |  |  |

## Nameplate NP3411L

|         |                 |       |            |
|---------|-----------------|-------|------------|
| CAT.NO. | 1458            |       |            |
| HP      | 5               | VOLTS | 230        |
| PHASE   | 3               | AMPS  | 13.6       |
| HZ      | 50//60          | RPM   | 1500//1800 |
| SER.NO  |                 |       |            |
| SPEC.   | G14-117C-0036G1 |       |            |
| BLANK   |                 |       |            |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA051924    | SA G14-117C-0036G1                       | 1.000 EA |
| RA046749    | RA G14-117C-0036G1                       | 1.000 EA |
| G4BA1000A01 | BASE, MACH                               | 1.000 EA |
| 19XA3812A20 | 38-12X1 1/4 HEX WSHR HD TYPE AB          | 4.000 EA |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| G4GS5000    | G14-23 GASKET X                          | 1.000 EA |
| 19XB2514A20 | 1/4-14X1-1/4 HX WS, TY B                 | 2.000 EA |
| HW1001A25   | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| HA2025A01   | LEAD BUSHING                             | 1.000 EA |
| RM1006A01   | GROMMET,#2196:.75ID,.9375GROOVE DIA,.062 | 1.000 EA |
| 52XN1032A04 | 10-32X1/4 HX HD SLTD SER X               | 3.000 EA |
| 52XN1032A08 | SCREW, SER HX SLT HD, ZN X               | 1.000 EA |
| XY1032A02   | 10-32 HEX NUT DIRECTIONAL SERRATION      | 2.000 EA |
| 36CB4516    | 750LIPPED CB LID - GALVANNEAL            | 1.000 EA |
| 37GS1001    | GASKET, CONDUIT BOX LID, .06 THICK LEXID | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| G4EP1900A01 | ENDPLATE, MACH                           | 2.000 EA |
| HW5100A11   | W3917-042 WVY WSHR (WB)                  | 2.000 EA |
| HA1000A59   | .020 BEARING GUARD 3.931 OD              | 2.000 EA |
| HA3104A14   | THRUBOLT- 5/16-18 X12.125(OHIO)          | 4.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| XY3118A12   | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 EA |
| 10XN3816A20 | 3/8-16X1 1/4 HEX HD CAP                  | 8.000 EA |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 8.000 EA |

| Parts List (continued) |  |          |
|------------------------|--|----------|
| Part Number            | Description                              | Quantity |
| HA6051                 | FLANGE, WHEEL, CAST                      | 4.000 EA |
| HW3022J06              | 1/4X.625 ROLLED SPR PIN                  | 2.000 EA |
| XZ2007A62SP            | 1 1/4-7 NUT LH HEX (NC)                  | 1.000 EA |
| XZ2007A12SP            | 1 1/4-7 NUT RH HX(NC)(F/S                | 1.000 EA |
| RM1010A07              | VNYL CAP 1.875-21 701-89 BLACK S/R Q=1   | 2.000 EA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 1.000 EA |
| HA6194A05              | BRACKET, 14" GRINDER FOR 'GE' MAGNETIC S | 1.000 EA |
| MJ1000A02              | GREASE, MOBIL POLYREX EM - 124047        | 0.050 LB |
| MG1000G01              | MUNSELL 5.93PB 3.81/ 2.71                | 0.017 GA |
| LB1009N                | LABEL,ROTATION DIRECTION (ON ROLLS)      | 1.000 EA |
| LB1092                 | LABEL, WARNING BUFFERS                   | 1.000 EA |
| LB5010                 | TAG, CAUTION PRINT SHOP                  | 1.000 EA |
| CN1900A03              | MAGNETIC STARTER 'GE' NO. CR306C10300AAA | 1.000 EA |
| CN2006151B             | HEATER, 'GE' NO. CR123C151B (FOR 'GE' ST | 3.000 EA |
| MG2000A02              | RUST VETO-377-HF HOUGHTON                | 0.001 GA |
| LB1119N                | WARNING LABEL                            | 1.000 EA |
| NP3411L                | ALUM NAMEPLATE - BALDOR BUFFER CSA       | 1.000 EA |
| G2PA1001               | PACKAGING GROUP                          | 1.000 EA |
| MN906                  | Baldor Buffer 6/13                       | 1.000 EA |
| LB1618                 | PROPOSITION 65 WARNING LABEL 1-1/2 X 1/2 | 1.000 EA |

| <b>Accessories</b> |                                       |                   |
|--------------------|---------------------------------------|-------------------|
| <b>Part Number</b> | <b>Description</b>                    | <b>Multiplier</b> |
| GA20               | PEDESTAL INDUSTRIAL, CAST IRON 8"-14" | A8                |

**AC Induction Motor Performance Data**

Record # 23658

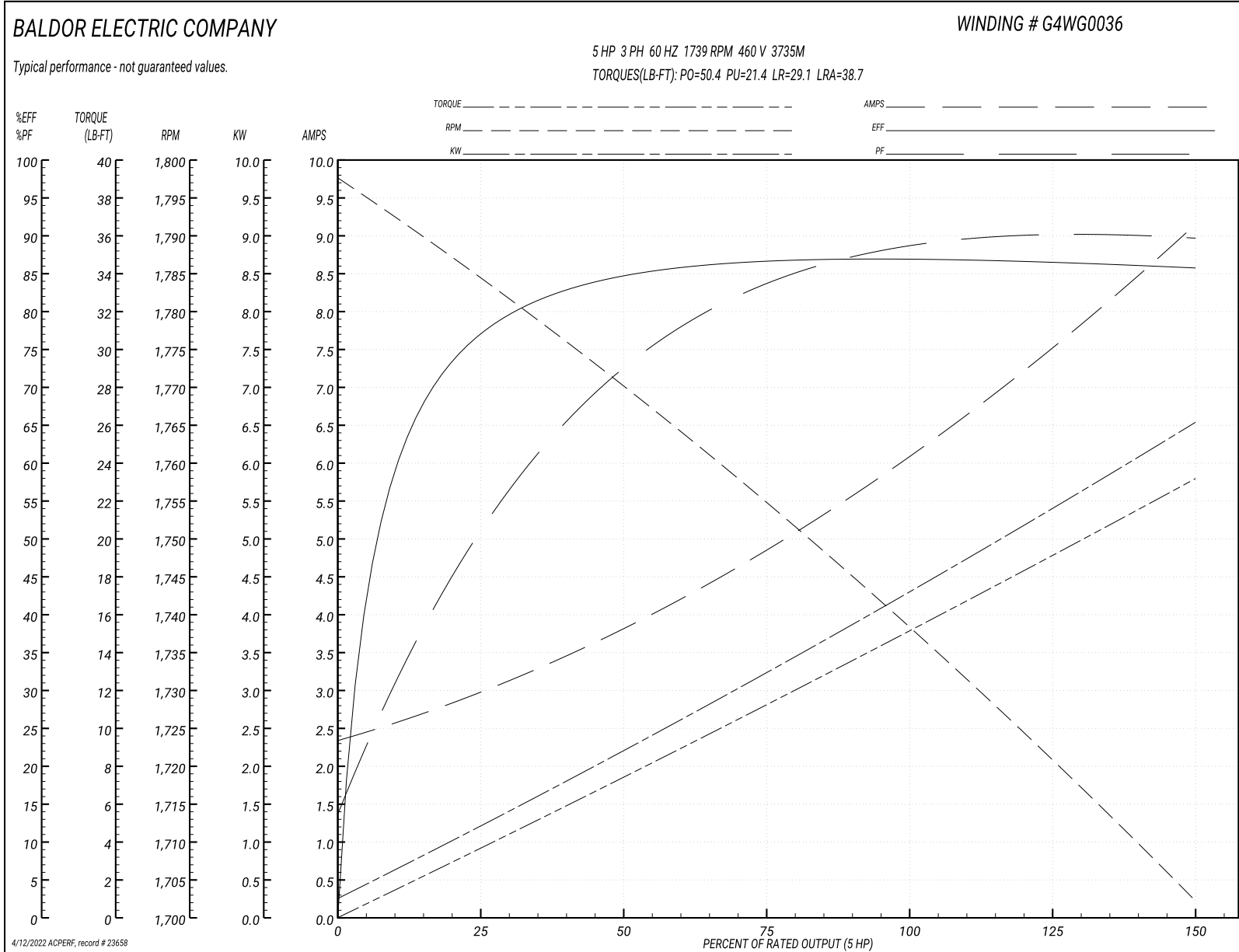
Preliminary Data Sheet

| <b>Winding: G4WG0036-R001</b> |                       | <b>Type: 3735M</b>               |  | <b>Enclosure: TENV</b> |  |
|-------------------------------|-----------------------|----------------------------------|--|------------------------|--|
| <b>Nameplate Data</b>         |                       |                                  | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |  |
| <b>Rated Output (HP)</b>      | 5                     | <b>Full Load Torque</b>          | 15.1 LB-FT                                       |                        |  |
| <b>Volts</b>                  | 208-230/460           | <b>Start Configuration</b>       | direct on line                                   |                        |  |
| <b>Full Load Amps</b>         | 15-13.6/6.8//15/6.8   | <b>Breakdown Torque</b>          | 50.4 LB-FT                                       |                        |  |
| <b>R.P.M.</b>                 | 1500//1800            | <b>Pull-up Torque</b>            | 21.4 LB-FT                                       |                        |  |
| <b>Hz</b>                     | 50//60 <b>Phase</b>   | <b>Locked-rotor Torque</b>       | 29.1 LB-FT                                       |                        |  |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b>     | <b>Starting Current</b>          | 38.7 A   |                        |  |
| <b>Service Factor (S.F.)</b>  | 1                     | <b>No-load Current</b>           | 2.43 A   |                        |  |
| <b>NEMA Nom. Eff.</b>         | <b>0 Power Factor</b> | <b>Line-line Res. @ 25°C</b>     | 2.24 Ω   |                        |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT          | <b>Temp. Rise @ Rated Load</b>   |  |                        |  |
|                               |                       | <b>Locked-rotor Power Factor</b> | 40   |                        |  |
|                               |                       | <b>Rotor inertia</b>             | 0.74 LB-FT <sup>2</sup>                          |                        |  |

**Load Characteristics 460 V, 60 Hz, 5 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|
| <b>Power Factor</b>    | 53        | 74        | 83        | 87         | 90         | 90         |
| <b>Efficiency</b>      | 76.9      | 84.7      | 86.7      | 87.1       | 86.5       | 85.5       |
| <b>Speed</b>           | 1784      | 1770      | 1755      | 1739       | 1721       | 1702       |
| <b>Line amperes</b>    | 2.87      | 3.74      | 4.87      | 6.15       | 7.56       | 9.09       |

Performance Graph at 460V, 60Hz, 5.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 23659

Preliminary Data Sheet

| <b>Winding: G4WG0036-R001</b> |                       | <b>Type: 3735M</b>         |  | <b>Enclosure: TENV</b>  |  |
|-------------------------------|-----------------------|----------------------------|--|-------------------------|--|
| <b>Nameplate Data</b>         |                       |                            | <b>460 V, 50 Hz:<br/>High Voltage Connection</b> |                         |  |
| <b>Rated Output (HP)</b>      | 5                     | <b>Full Load Torque</b>    | 18.1 LB-FT                                       |                         |  |
| <b>Volts</b>                  | 208-230/460           | <b>Start Configuration</b> | direct on line                                   |                         |  |
| <b>Full Load Amps</b>         | 15-13.6/6.8//15/6.8   | <b>Breakdown Torque</b>    | 71.6 LB-FT                                       |                         |  |
| <b>R.P.M.</b>                 | 1500//1800            | <b>Pull-up Torque</b>      | 35.3 LB-FT                                       |                         |  |
| <b>Hz</b>                     | 50//60 <b>Phase</b>   | 3                          | <b>Locked-rotor Torque</b>                       | 47.8 LB-FT              |  |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b>     | H                          | <b>Starting Current</b>                          | 46 A                    |  |
| <b>Service Factor (S.F.)</b>  |                       | 1                          | <b>No-load Current</b>                           | 3.33 A                  |  |
| <b>NEMA Nom. Eff.</b>         | <b>0 Power Factor</b> | 0                          | <b>Line-line Res. @ 25°C</b>                     | 2.24 Ω                  |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT          |                            | <b>Temp. Rise @ Rated Load</b>                   |                         |  |
|                               |                       |                            | <b>Locked-rotor Power Factor</b>                 | 47                      |  |
|                               |                       |                            | <b>Rotor inertia</b>                             | 0.74 LB-FT <sup>2</sup> |  |

**Load Characteristics 460 V, 50 Hz, 5 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|
| <b>Power Factor</b>    | 43        | 64        | 76        | 83         | 86         | 88         |
| <b>Efficiency</b>      | 73.7      | 82.7      | 85.4      | 86         | 85.7       | 84.9       |
| <b>Speed</b>           | 1487      | 1475      | 1462      | 1449       | 1434       | 1419       |
| <b>Line amperes</b>    | 3.67      | 4.4       | 5.4       | 6.58       | 7.91       | 9.36       |

Performance Graph at 460V, 50Hz, 5.0HP Typical performance - Not guaranteed values

