

BALDOR® • RELIANCE 

Product Information Packet

36A013T031G1

5HP,1750RPM,3PH,60HZ,184C,3644M,TEFC,F1

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|----|
| Revision: | M | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 36WGT031 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 36A013 | Layout: | 36LYA013 | Poles: | 04 | Created Date: | |
| Base: | N | Eff. Date: | 05-09-2019 | Leads: | 9#16 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Enclosure: | TEFC | Insulation Class: | F |
| Frame: | 184C | Inverter Code: | Inverter Ready |
| Frame Material: | Steel | KVA Code: | K |
| Output @ Frequency: | 5.000 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 16 AWG |
| | 230.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| XP Class and Group: | None | Motor Lead Termination: | Flying Leads |
| XP Division: | Not Applicable | Motor Type: | 3644M |
| Agency Approvals: | CE | Mounting Arrangement: | F1 |
| | CSA | Power Factor: | 80 |
| | UR | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | C-Face |
| Base Indicator: | No Mounting | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | RoHS Status: | ROHS COMPLIANT |
| Current @ Voltage: | 13.000 A @ 230.0 V | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| | 13.600 A @ 208.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| | 6.500 A @ 460.0 V | Shaft Rotation: | Reversible |
| Design Code: | B | Shaft Slinger Indicator: | No Slinger |
| Drip Cover: | No Drip Cover | Speed Code: | Single Speed |
| Duty Rating: | CONT | Motor Standards: | NEMA |
| Electrically Isolated Bearing: | Not Electrically Isolated | Starting Method: | Direct on line |
| Feedback Device: | NO FEEDBACK | Thermal Device - Bearing: | None |
| Front Face Code: | Standard | Thermal Device - Winding: | None |
| Front Shaft Indicator: | None | Vibration Sensor Indicator: | No Vibration Sensor |
| Heater Indicator: | No Heater | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

Nameplate NP2105L

| | | | | | | | | | | | |
|--------------|--------------|--|--|------|------|-----|--|----------------|------|---|--|
| CAT.NO. | | | | | | | | | | | |
| SPEC. | 36A013T031G1 | | | | | | | | | | |
| HP | 5 | | | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | | | |
| AMP | 13/6.5 | | | | | | | | | | |
| RPM | 1750 | | | | | | | | | | |
| FRAME | 184C | | | HZ | 60 | | | PH | 3 | | |
| SER.F. | 1.15 | | | CODE | K | DES | | B | CL | F | |
| NEMA-NOM-EFF | 90.2 | | | PF | 80 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | | |
| CC | 010A | | | | | | | USABLE AT 208V | 13.6 | | |
| DE | 6206 | | | ODE | 6205 | | | | | | |
| ENCL | TEFC | | | SN | | | | | | | |
| | IP44 | | | | | | | | | | |

| Parts List | | |
|--------------|--|----------|
| Part Number | Description | Quantity |
| SA091445 | SA 36A013T031G1 | 1.000 EA |
| RA084160 | RA 36A013T031G1 | 1.000 EA |
| 36CB3004 | 36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0 | 1.000 EA |
| 36GS1000SP | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE | 1.000 EA |
| 51XB1016A08 | 10-16X 1/2HXWSSLD SERTYB | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW3001B01 | BRASS CUP WASHER, FOR #10 SCREW | 1.000 EA |
| 36EP3104A01 | FREP MACH ASSEMBLY FOR ROUTING | 1.000 EA |
| HW4500A01 | | 1.000 EA |
| HW5100A05 | | 1.000 EA |
| 36EP3303A03 | STD PU ENDPLATE -ENCL- 206 BRG W/OUT T-S | 1.000 EA |
| HW4500A01 | | 1.000 EA |
| 10XN2520A24 | 1/4-20X 1 1/2 HEX HD X | 4.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| 51XB1214A16 | 12-14X1.00 HXWSSLD SERTYB | 1.000 EA |
| 36FH4009A102 | IEC FH GREASER PRIMED | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 36CB4516 | 36 LIPPED CB LID | 1.000 EA |
| 37GS1001SP | GASKET, CONDUIT BOX LID, .06 THICK LEXID | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 EA |
| HA7000A01 | KEY RETAINER 7/8" DIA SHAFT | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| HW3200A01 | 3/8-16X3/4 I-BLT WELDED F/S | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| MJ1000A02 | MOBIL POLYREX EM/35LB | 0.050 LB |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| 36FN3000C01SP | EXFN, PLASTIC, 5.25 OD, .912 ID | 1.000 EA |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.022 GA |
| HA3101A28 | THRUBOLT 1/4-20 X 12.500 OHIO ROD | 4.000 EA |
| LB1417 | () | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 3/19 | 1.000 EA |
| LC0005E01 | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP2105L | ALUM SUPER-E UL CSA-EEV CE CC | 1.000 EA |
| 36PA1001 | PKG GRP, PRINT PK1017A06 | 1.000 EA |

AC Induction Motor Performance Data

Record # 10561 - Typical performance - not guaranteed values

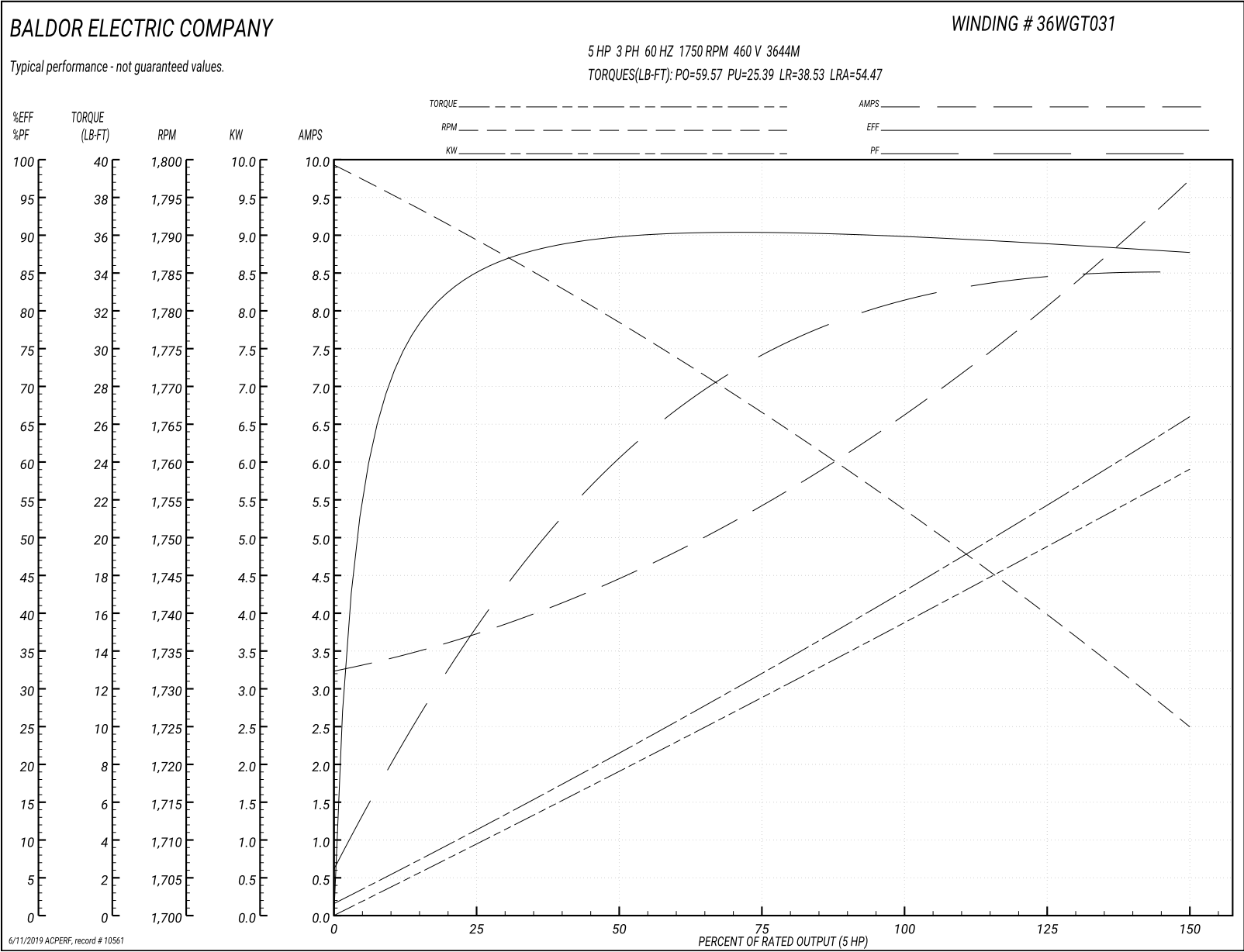
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 36WGT031-R001 | Type: 3644M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|--------------------------|
| Rated Output (HP) | 5 | | | Full Load Torque | 15.1 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 13/6.5 | | | Breakdown Torque | 59.57 LB-FT |
| R.P.M. | 1750 | | | Pull-up Torque | 25.39 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 38.53 LB-FT |
| NEMA Design Code | B | KVA Code | K | Starting Current | 54.47 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 3.32 A |
| NEMA Nom. Eff. | 90.2 | Power Factor | 80 | Line-line Res. @ 25°C | 2.26 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 54°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 65°C |
| | | | | Locked-rotor Power Factor | 51.7 |
| | | | | Rotor inertia | 0.409 LB-FT ² |

Load Characteristics 460 V, 60 Hz, 5 HP

| | | | | | | | |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
| Power Factor | 39 | 61 | 73 | 80 | 84 | 86 | 82 |
| Efficiency | 84.8 | 89.6 | 90.3 | 90.2 | 88.9 | 87.7 | 90 |
| Speed | 1790 | 1779 | 1767 | 1755 | 1742 | 1725 | 1746 |
| Line amperes | 3.62 | 4.36 | 5.37 | 6.55 | 7.9 | 9.67 | 7.3 |

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



AC Induction Motor Performance Data

Record # 38488 - Typical performance - not guaranteed values

| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 36WGT031-R001 | Type: 3644M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|--------------------------|
| Rated Output (HP) | 5 | | | Full Load Torque | 15.1 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 13/6.5 | | | Breakdown Torque | 59.57 LB-FT |
| R.P.M. | 1750 | | | Pull-up Torque | 25.39 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 38.53 LB-FT |
| NEMA Design Code | B | KVA Code | K | Starting Current | 54.47 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 3.32 A |
| NEMA Nom. Eff. | 90.2 | Power Factor | 80 | Line-line Res. @ 25°C | 2.26 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 54°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 65°C |
| | | | | Locked-rotor Power Factor | 51.7 |
| | | | | Rotor inertia | 0.409 LB-FT ² |

Load Characteristics 460 V, 60 Hz, 5 HP

| | | | | | | | |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
| Power Factor | 39 | 61 | 73 | 80 | 84 | 86 | 81 |
| Efficiency | 84.8 | 89.6 | 90.3 | 90.2 | 88.9 | 87.7 | 89.6 |
| Speed | 1790 | 1779 | 1767 | 1755 | 1742 | 1725 | 1748 |
| Line amperes | 3.62 | 4.36 | 5.37 | 6.55 | 7.9 | 9.67 | 7.41 |

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

