

BALDOR® • RELIANCE 

Product Information Packet

248-153TD

1.5HP,3600RPM,3PH,60HZ,3516M,3516M,TEFC

| Part Detail | | | | | | | |
|-------------|------|-------------|------------|-------------|-----|---------------|----|
| Revision: | AS | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | | CD Diagram: | | Mfg Plant: | |
| Mech. Spec: | B2-5 | Layout: | B2LY0005 | Poles: | /// | Created Date: | |
| Base: | RG | Eff. Date: | 12-01-2016 | Leads: | | | |

| Specs | | | |
|-------------------|-------------|--|--|
| Nameplate Output: | 1.5 | | |
| Product Style: | BELT SANDER | | |

| Nameplate NP3118 | |
|------------------|-------------------|
| CAT.NO. | 248-153TD |
| HP | 1.5 |
| PHASE | |
| HZ | 60 |
| SER.NO | |
| SPEC. | B2-5C |
| | VOLTS 208-230/460 |
| | AMPS 5-4.6/2.3 |
| | RPM 3450 |

| Parts List | | |
|---------------|------------------------------------------|----------|
| Part Number | Description | Quantity |
| HA6219A01 | BELT GRNDR ADAPTOR, MACH | 1.000 EA |
| 91XN3816A16 | 3/8-16X1 HEX SOC CNTRSK | 4.000 EA |
| HA6220A01 | PIVOTAL BRACKET, MACH | 1.000 EA |
| MG1000G01 | MUNSELL 5.93PB 3.81/ 2.71 | 0.017 GA |
| 35H410-82 | 1 1/2HP,3600RPM,3PH,60HZ,56CYZ,3516M,TEF | 1.000 EA |
| LB1008 | LABEL, UL | 1.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 3.000 EA |
| 10XN2520A08 | 1/4-20X1/2 HEX HEAD CAP | 3.000 EA |
| RB4011A01 | BEARING RETAINER, STAMPED (PLATED) | 1.000 EA |
| 53XN1032A06 | 10-32X3/8 PAN HD SLTD SER | 2.000 EA |
| LC0005 | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING | 1.000 EA |
| HA6218A01 | MOUNTING BRACKET, MACH | 1.000 EA |
| 91XN3816A16 | 3/8-16X1 HEX SOC CNTRSK | 4.000 EA |
| HA6222 | PULL KNOB RETAINER PLATE | 1.000 EA |
| HA6068A02 | BRACKET, TOOL REST MACH | 1.000 EA |
| 10XN3118A14 | 5/16-18 X 7/8 HEX HEAD CAP | 1.000 EA |
| HW1000A31 | 5/16 SAE FL WSHR NARROW, ID=.344, OD=.62 | 1.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 1.000 EA |
| G8AP1003A01SP | TOOL REST | 1.000 EA |
| 10XN3816A24 | 3/8-16 X 1 1/2 HEX HD CAP SCREW | 1.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 1.000 EA |
| XY3816A12 | 3/8-16 FINISHED NUT | 1.000 EA |
| HW1000A38 | WASHER, 3/8" FLAT, SAE Z/P | 2.000 EA |

| Parts List (continued) | | |
|------------------------|------------------------------------------|----------|
| Part Number | Description | Quantity |
| B2AP1005A02 | PLATEN FOR BELT GRINDER WELKER | 1.000 EA |
| 12XN0832A08 | 15194-125 | 2.000 EA |
| HW1001A08 | WASHER, #8 SPLT LK, ZN | 2.000 EA |
| B2FH2806A01SP | CONTACT WHEEL GUARD | 1.000 EA |
| 10XN2520A26 | 1/4-20X 1 5/8 HEX HD | 2.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| B2AP5002A01 | TRACK ARM & SHAFT ASSY | 1.000 EA |
| B2FH2801A01SP | GRINDER GUARD, MACH | 1.000 EA |
| 10XN2520A12 | 1/4-20 X 3/4 HEX HEAD CAP | 2.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| HW1000A25 | 1/4 SAE FLAT WASHER (FS) | 2.000 EA |
| B2AP3003A01SP | IDLER WHEEL -- BELT GRINDER | 1.000 EA |
| HW5000A51 | N5000-156 RETAINER RING (F/S) | 2.000 EA |
| BG6203E03 | 6203 D.SL,C3,POLYREX EM | 2.000 EA |
| HW5010A32 | RET RING 5100-66 (WALDES) | 1.000 EA |
| B2AP1000A01 | LATCH, IDLER ARM -- MACH | 1.000 EA |
| HA7001A01 | TORSION SPRING,4.5" FREE-LENGTH, .855 I. | 1.000 EA |
| HA7002A01 | TORSION SPRING, .843 FREELNGTH, .437 I. | 1.000 EA |
| 10XN3816A20 | 3/8-16X1 1/4 HEX HD CAP | 1.000 EA |
| 80XN2520A06 | 1/4-20 X 3/8 SET SCREW | 1.000 EA |
| HA5000A01 | KNOB AND STUD ASSY | 1.000 EA |
| B2AP5001A01SP | CONTACT WHEEL ASSY WITH RUBBER THREAD | 1.000 EA |
| HW1000A75 | WASHER, 3/4 FLAT, ZN | 2.000 EA |
| XY7510A12SP | 3/4-10 NUT R.H. HEX (NC) ZINC PLATED | 1.000 EA |

Product Information Packet: 248-153TD - 1.5HP,3600RPM,3PH,60HZ,3516M,3516M,TEFC

| | | |
|---------------|------------------------------------------|----------|
| AB248 | ABRASIVE BELT, 2" X 48" ZGR300501 | 1.000 EA |
| B2FH2810A01SP | GUARD (HALF) MACHINED, USE W/B2FH2811A01 | 1.000 EA |
| B2FH2810A01SP | GUARD (HALF) MACHINED, USE W/B2FH2810A01 | 1.000 EA |
| 51XN1032A12 | 10-32 X 0.750 HX WS SL SR | 3.000 EA |
| HW1023A10 | WASHER,#10 INT/EX TH LK, ZN X TDR#2 | 3.000 EA |
| XY1032A02 | 10-32 HEX NUT DIRECTIONAL SERRATION | 3.000 EA |
| 93XN1032A12 | 10-32X3/4 SHOULDER/TYPE T TDR 1 | 2.000 EA |
| HW1003A10 | WASHER, #10 EX TH LK, ZN X | 2.000 EA |
| B2FH2808A01SP | GUARD COVER, MACH | 1.000 EA |
| 93XN1032A12 | 10-32X3/4 SHOULDER/TYPE T TDR 1 | 2.000 EA |
| HW1003A10 | WASHER, #10 EX TH LK, ZN X | 2.000 EA |
| B2FH2809A01SP | GUARD COVER, MACH | 1.000 EA |
| 93XN1032A08 | 10-32X1/2 SHOULDER/TYPE T | 1.000 EA |
| HA6223 | LOCKING PIN (WELKER) | 1.000 EA |
| HW2404A01 | KNOB, #597 DIMCO-GRAY | 1.000 EA |
| HA7005A02 | C0360-032-0940S,ASSC.SPRGSTLS.STEEL,.94 | 1.000 EA |
| B2PA1001 | PACKAGING GROUP | 1.000 EA |
| MN902 | MANUAL FOR BELT GRINDERS | 1.000 EA |

| Accessories | | |
|--------------------|-----------------------------------------|-------------------|
| Part Number | Description | Multiplier |
| GA16 | PEDESTAL INDUSTRIAL, CAST IRON 6" - 10" | A8 |
| GA14 | PEDESTAL FABRICATED STEEL W/SHELVES | A8 |
| GA20 | PEDESTAL INDUSTRIAL, CAST IRON 8"-14" | A8 |
| GA20E | PEDESTAL LIGHT INDUSTRIAL,STEEL | A8 |
| AB248 | 2' X 48' 80 GRIT GRINDER BELT | A8 |

AC Induction Motor Performance Data

Record # 8025 - Typical performance - not guaranteed values

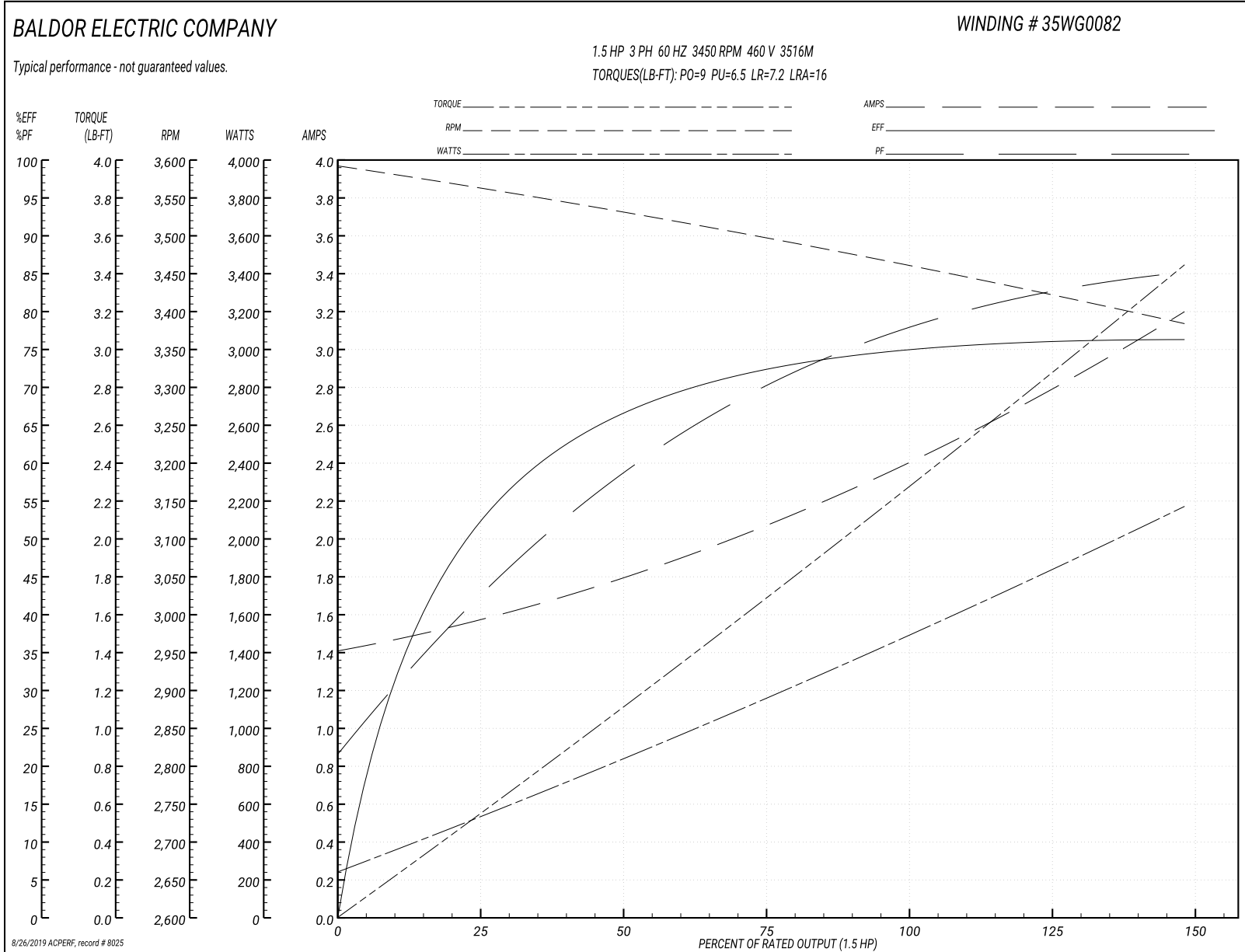
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 35WG0082-R001 | Type: 3516M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|------------------------------------------|---------------------------|
| Rated Output (HP) | 1.5 | | | Full Load Torque | 2.3 LB-FT |
| Volts | 208-230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 5-4.6/2.3 | | | Breakdown Torque | 9 LB-FT |
| R.P.M. | 3450 | | | Pull-up Torque | 6.5 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 7.2 LB-FT |
| NEMA Design Code | B | KVA Code | G | Starting Current | 16 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 1.4 A |
| NEMA Nom. Eff. | 75.5 | Power Factor | 76 | Line-line Res. @ 25°C | 11.8 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 63°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 70°C |
| | | | | Locked-rotor Power Factor | 67 |
| | | | | Rotor inertia | 0.0443 LB-FT ² |

Load Characteristics 460 V, 60 Hz, 1.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 43 | 59 | 71 | 79 | 83 | 86 | 81 |
| Efficiency | 52.2 | 66.7 | 72.7 | 75.5 | 76.2 | 76.1 | 75.9 |
| Speed | 3558 | 3528 | 3496 | 3461 | 3424 | 3382 | 3439 |
| Line amperes | 1.6 | 1.8 | 2.1 | 2.4 | 2.8 | 3.2 | 2.64 |

Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 20302 - Typical performance - not guaranteed values

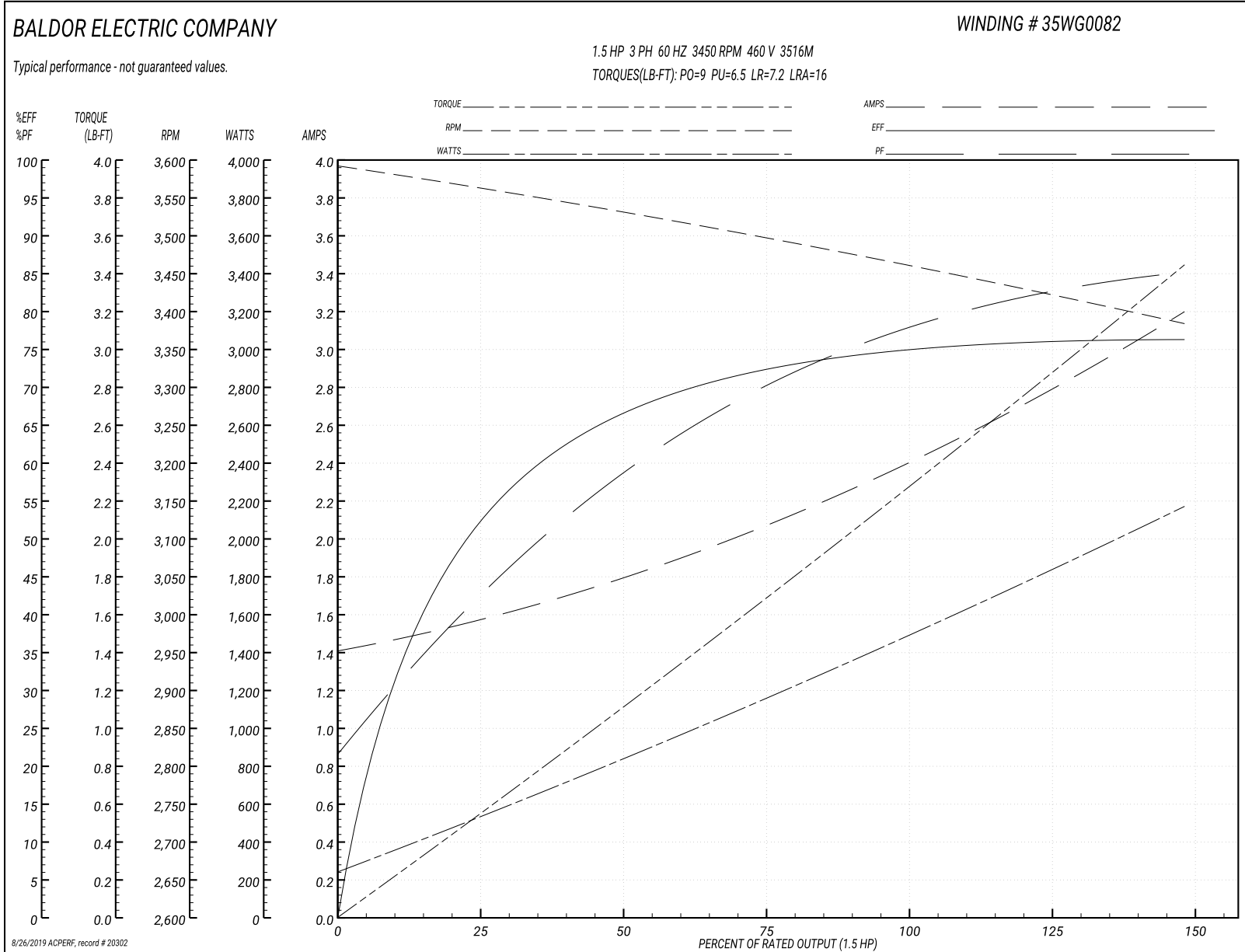
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|-------------------------------|--------------------|------------------------|
| Winding: 35WG0082-R008 | Type: 3516M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|------------------------------------------|---------------------------|
| Rated Output (HP) | 1.5 | | | Full Load Torque | 2.3 LB-FT |
| Volts | 208-230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 5-4.6/2.3 | | | Breakdown Torque | 9 LB-FT |
| R.P.M. | 3450 | | | Pull-up Torque | 6.5 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 7.2 LB-FT |
| NEMA Design Code | B | KVA Code | G | Starting Current | 16 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 1.4 A |
| NEMA Nom. Eff. | 75.5 | Power Factor | 76 | Line-line Res. @ 25°C | 11.8 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 63°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 70°C |
| | | | | Locked-rotor Power Factor | 67 |
| | | | | Rotor inertia | 0.0443 LB-FT ² |

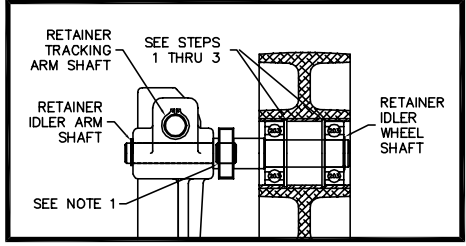
Load Characteristics 460 V, 60 Hz, 1.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 43 | 59 | 71 | 79 | 83 | 86 | 81 |
| Efficiency | 52.2 | 66.7 | 72.7 | 75.5 | 76.2 | 76.1 | 75.9 |
| Speed | 3558 | 3528 | 3496 | 3461 | 3424 | 3382 | 3439 |
| Line amperes | 1.6 | 1.8 | 2.1 | 2.4 | 2.8 | 3.2 | 2.64 |

Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values



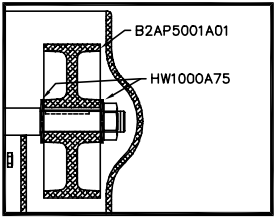
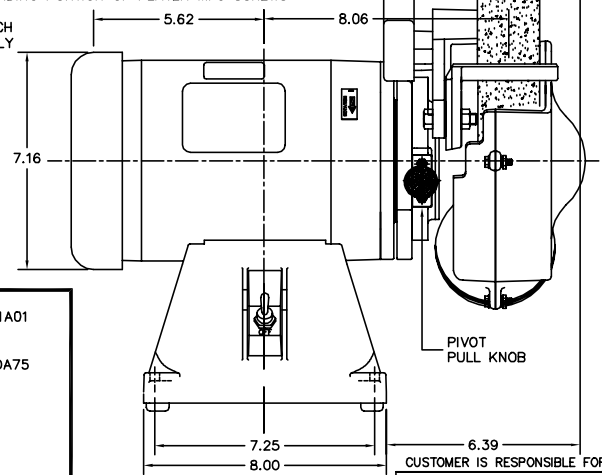
B2LY0005



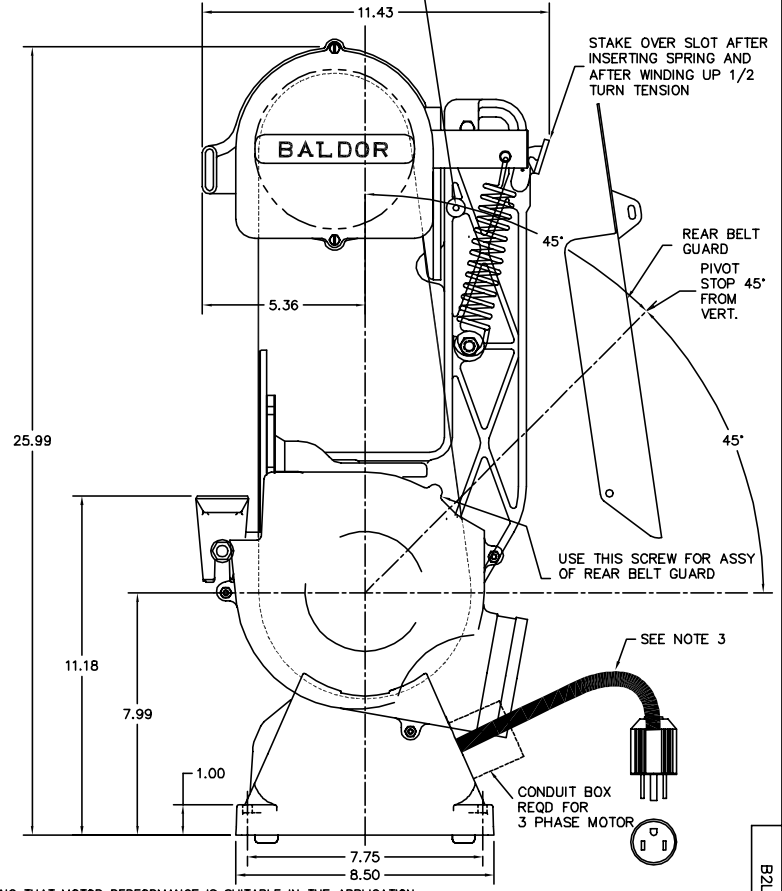
IDLER WHEEL/TRACKING ARM SHAFT ASSY DETAIL

- STEPS:**
1. PLACE INSIDE RETAINER RINGS INSIDE IDLER WHEEL AS SHOWN
 2. PRESS BEARING IN AT EACH END OF IDLER WHEEL UNTIL ENGAGES RETAINER
 3. ASSEMBLE IDLER WHEEL ONTO SHAFT (SLIP FIT)

- NOTES:**
1. WELD IDLER WHEEL SHAFT & TRACKING ARM SHAFT TO IDLER ARM AS SHOWN PER DETAIL. IDLER ARM MUST NOT BE BENT, BUT MUST BE STRAIGHT
 2. ASSEMBLE PLATEN TO BRACKET WITH CHAMFERED EDGE TOWARD BELT. GRIND OFF EXTENDING PORTION OF PLATEN MFG SCREWS FLUSH WITH PLATEN
 3. CORD, PLUG AND SWITCH FOR SINGLE PHASE ONLY



ASSEMBLE REAR BELT GUARD HERE USING 93XN1032A08 SCREW



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

| | | | |
|-----------------------------|---------|------------------------------|-------------|
| REV. DESC: ADDED DIMENSIONS | | | |
| REV. LTR: Q | BY: KCT | REVISED: 16:11:01 09/11/2003 | TDR: 312404 |
| FILE: AAA00050587 | | REF: B2LY0005 | |
| MTL: - | | | |

BALDOR ELECTRIC Co.

PIVOTAL BELT GRINDER 35 L & M FRAMES

B2LY0005