ABB BALDOR RELIANCE

# Customer information packet

## 8102WD

24M 4P GRNDR

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11/19/2026 5:59:05 AM

## Specifications

| | |
|---|---|
| **Enclosure** | TENV |
| **Frame Material** | Steel |
| **Frequency** | 50.00 Hz |
| | 60.00 Hz |
| | 50.00 Hz |
| | 60.00 Hz |
| **Motor Letter Type** | Three Phase |
| **Nameplate Output** | .75 |
| **Number of Poles** | 4 |
| | 4 |
| **Output @ Frequency** | .750 HP @ 60 HZ |
| | .750 HP @ 50 HZ |
| **Phase** | 3 |
| | 3 |
| **Shaft Diameter** | 0.750 IN |
| | 0.750 IN |
| **Speed** | 1500 rpm |
| | 1800 rpm |
| | 1500 rpm |
| | 1800 rpm |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage** | 208 V |
| | 230 V |
| | 460 V |
| **Voltage @ Frequency** | 208.0 V @ 50 HZ |
| | 208.0 V @ 60 HZ |
| | 460.0 V @ 60 HZ |
| | 460.0 V @ 50 HZ |
| | 230.0 V @ 60 HZ |
| | 230.0 V @ 50 HZ |
| **Agency Approvals** | CSA |
| **Ambient Temperature** | 40 °C |
| **Base Indicator** | Rigid |

## Part Detail

| | |
|---|---|
| **Revision** | - |
| **Type** | AC |
| **Mech. spec.** | G8-236 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | G8WG0377 |
| **Layout** | G8LY0236 |
| **Eff. date** | 10-31-2024 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 |
| **Proprietary** | False |
| **Created date** | 10-25-2024 |

| | |
|---|---|
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Current @ Voltage** | 3.000 A @ 230.0 V |
| | 3.000 A @ 208.0 V |
| | 1.500 A @ 460.0 V |
| **Design Code** | - |
| **Duty Rating** | CONT |
| **Feedback Device** | NO FEEDBACK |
| **Insulation Class** | B |
| **KVA Code** | - |
| **Motor Lead Quantity/Wire Size** | 9 @ 18 AWG |
| **Motor Standards** | Other |
| **Motor Type** | 3524M |
| **Mounting Arrangement** | F1 |
| **Overall Length** | 23.24 IN |
| **Product Family** | Grinder |
| **Service Factor** | 1.00 |
| **Shaft Rotation** | Phase Seq-Opp Std Rot (CWODE) |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed Code** | Single Speed |
| **Starting Method** | Direct on line |
| **Thermal Device - Winding** | None |
| **Winding Thermal 1** | None |
| **Winding Thermal 2** | None |

**Nameplate**

| NP0113 | | | |
|---|---|---|---|
| **CAT.NO.** | 8102WD | | |
| **HP** | .75 | **VOLTS** | 208-230/460 |
| **PHASE** | 3 | **AMPS** | 3/1.5 |
| **HZ** | 50//60 | **RPM** | 1500//1800 |
| **SER.NO** | | | |
| **SPEC.** | G8-236G0377 | | |

**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 |
| B80 | 8" 36 GRIT GRINDING WHEEL | A8 |
| B81 | 8" 60 GRIT GRINDING WHEEL | A8 |
| GA9 | PAIR LIGHTED EYESHIELDS | A8 |
| GA9-1 | SINGLE LIGHTED EYESHIELD | A8 |
| GA9S | PAIR EYESHIELDS W/ ON-OFF SWITCH | A8 |
| GA11 | PAIR EYESHIELDS | A8 |
| DC8 | DUST CONTROL UNIT | A8 |

**AC Induction Motor Performance Data**
Record # 91058
Preliminary Data Sheet

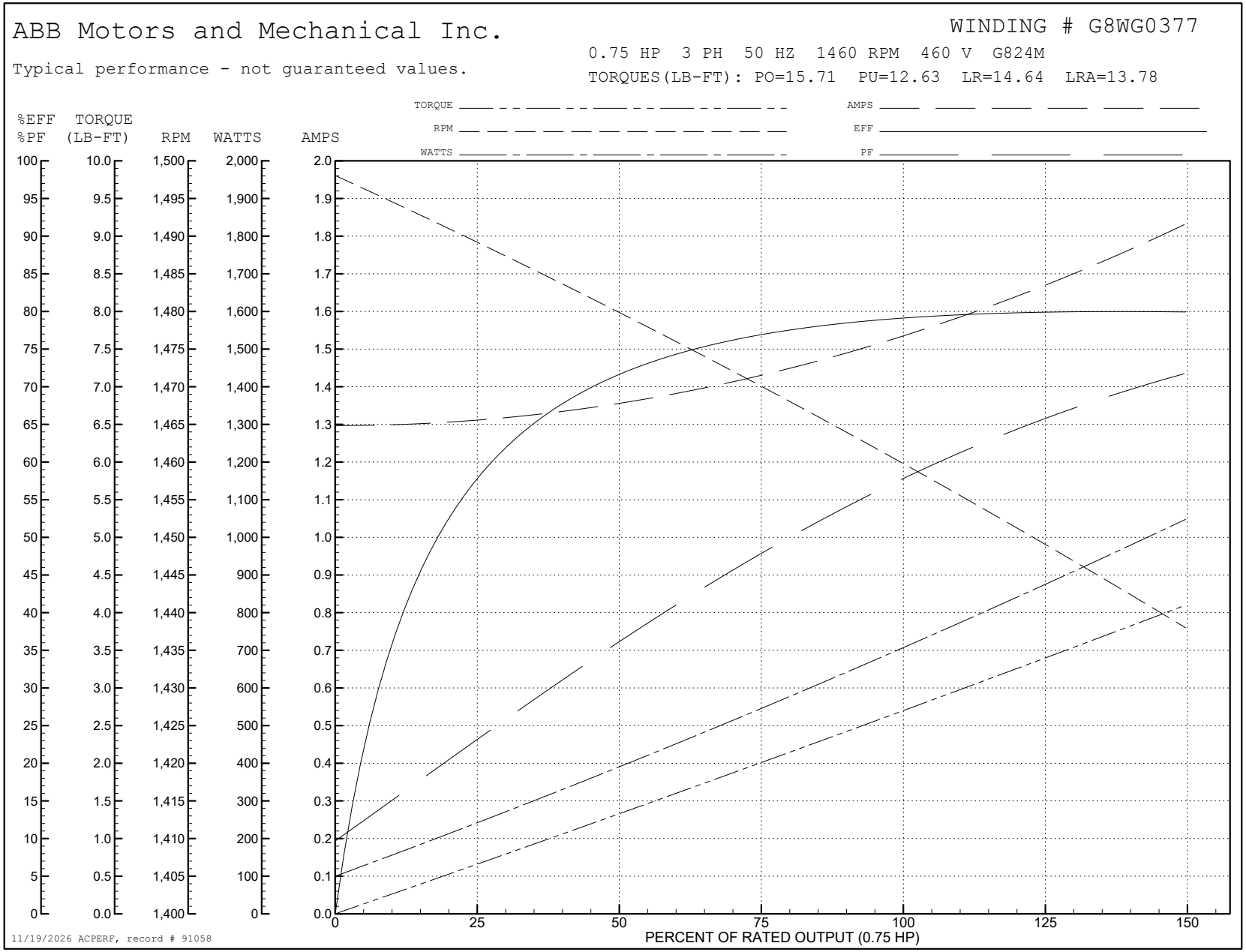
| **Winding:** G8WG0377-R001 | **Type:** G824M | **Enclosure:** TENV |
|---|---|---|

| **Nameplate Data** | | | |
|---|---|---|---|
| **Rated Output (HP)** | | | .75 |
| **Volts** | | | 208-230/460 |
| **Full Load Amps** | | | 2.75-2.9/1.45//2.48-2.4/1.2 |
| **R.P.M.** | | | 1500//1800 |
| **Hz** | 50//60 | **Phase** | 3 |
| **NEMA Design Code** | - | **KVA Code** | - |
| **Service Factor (S.F.)** | | | 1 |
| **NEMA Nom. Eff.** | 0 | **Power Factor** | 0 |
| **Rating - Duty** | | | 40C AMB-CONT |

| **460 V, 50 Hz: High Voltage Connection** | |
|---|---|
| **Full Load Torque** | 2.69 LB-FT |
| **Start Configuration** | direct on line |
| **Breakdown Torque** | 15.71 LB-FT |
| **Pull-up Torque** | 12.63 LB-FT |
| **Locked-rotor Torque** | 14.64 LB-FT |
| **Starting Current** | 13.78 A |
| **No-load Current** | 1.3 A |
| **Line-line Res. @ 25ºC** | 24 Ω |
| **Temp. Rise @ Rated Load** | 77°C |
| **Locked-rotor Power Factor** | 83.3954 |
| **Rotor inertia** | 0.173 lb-ft² |

**Load Characteristics 460 V, 50 Hz, 0.75 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** |
|---|---|---|---|---|---|---|
| **Power Factor** | 24 | 36 | 47 | 58 | 66 | 72 |
| **Efficiency** | 57.6 | 71.5 | 77.2 | 79 | 80 | 79.8 |
| **Speed** | 1489 | 1480 | 1470 | 1460 | 1449 | 1438 |
| **Line amperes** | 1.31 | 1.35 | 1.43 | 1.54 | 1.67 | 1.83 |


ABB Motors and Mechanical Inc.
WINDING # G8WG0377
0.75 HP 3 PH 50 HZ 1460 RPM 460 V G824M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=15.71 PU=12.63 LR=14.64 LRA=13.78
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.75 HP)
11/19/2026 ACPERF, record # 91058

**AC Induction Motor Performance Data**
Record # 91059
Preliminary Data Sheet

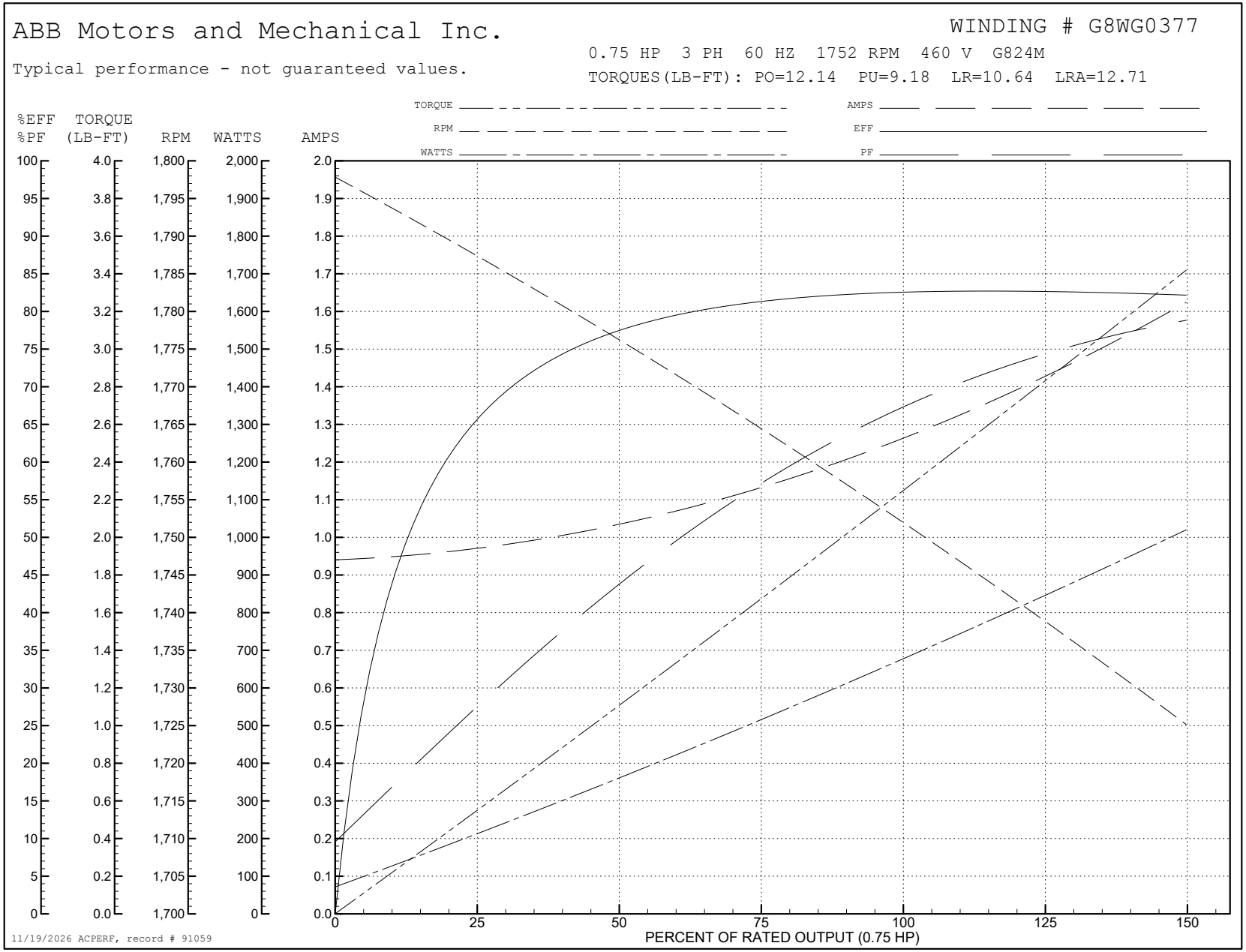
| **Winding:** G8WG0377-R001 | **Type:** G824M | **Enclosure:** TENV |
|---|---|---|

| **Nameplate Data** | | | |
|---|---|---|---|
| **Rated Output (HP)** | | | .75 |
| **Volts** | | | 208-230/460 |
| **Full Load Amps** | | | 2.75-2.9/1.45//2.48-2.4/1.2 |
| **R.P.M.** | | | 1500//1800 |
| **Hz** | 50//60 | **Phase** | 3 |
| **NEMA Design Code** | - | **KVA Code** | - |
| **Service Factor (S.F.)** | | | 1 |
| **NEMA Nom. Eff.** | 0 | **Power Factor** | 0 |
| **Rating - Duty** | | | 40C AMB-CONT |

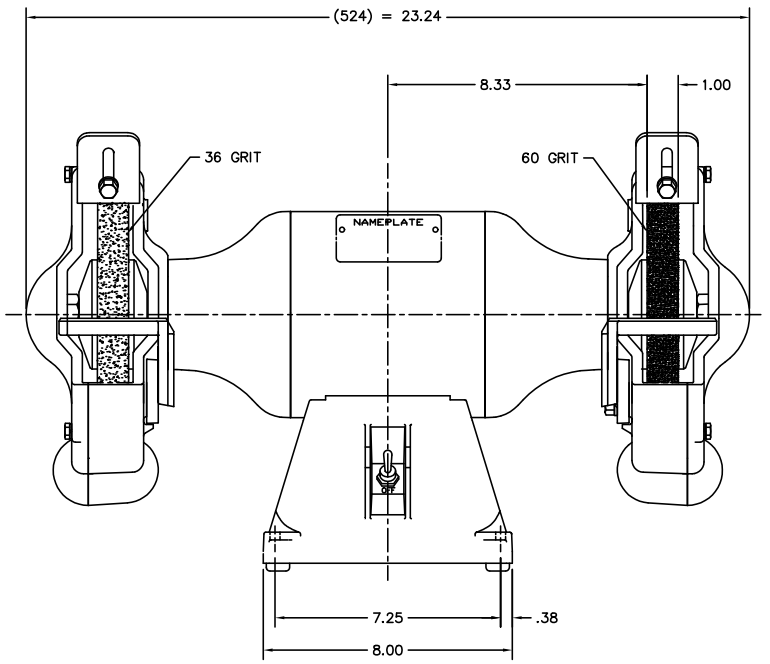
| **460 V, 60 Hz: High Voltage Connection** | |
|---|---|
| **Full Load Torque** | 2.25 LB-FT |
| **Start Configuration** | direct on line |
| **Breakdown Torque** | 12.14 LB-FT |
| **Pull-up Torque** | 9.18 LB-FT |
| **Locked-rotor Torque** | 10.64 LB-FT |
| **Starting Current** | 12.71 A |
| **No-load Current** | 0.946 A |
| **Line-line Res. @ 25ºC** | 24 Ω |
| **Temp. Rise @ Rated Load** | 55°C |
| **Locked-rotor Power Factor** | 77.6342 |
| **Rotor inertia** | 0.173 lb-ft² |

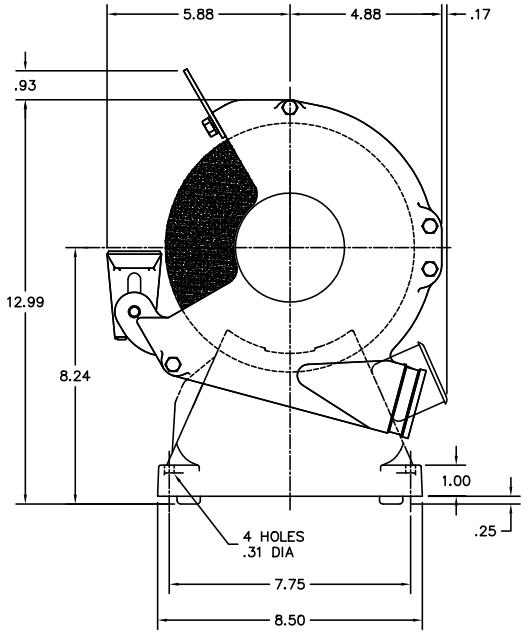
**Load Characteristics 460 V, 60 Hz, 0.75 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** |
|---|---|---|---|---|---|---|
| **Power Factor** | 28 | 44 | 57 | 67 | 74 | 79 |
| **Efficiency** | 65.5 | 77 | 81.4 | 82.7 | 82.7 | 82 |
| **Speed** | 1787 | 1776 | 1765 | 1752 | 1739 | 1725 |
| **Line amperes** | 0.965 | 1.03 | 1.13 | 1.27 | 1.43 | 1.62 |


ABB Motors and Mechanical Inc.
WINDING # G8WG0377
0.75 HP 3 PH 60 HZ 1752 RPM 460 V G824M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=12.14 PU=9.18 LR=10.64 LRA=12.71
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.75 HP)
11/19/2026 ACPERF, record # 91059

G8LY0236




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

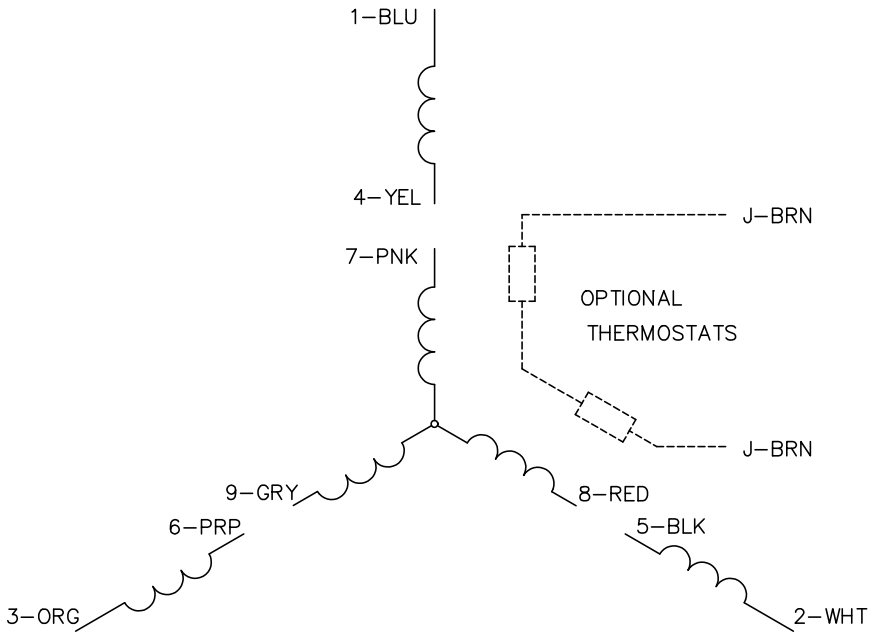
| | | | |
|---|---|---|---|
| REV. DESC: OMITTED FELT WSHR HA1025A03 & CHG'D TO SEALED BRGS | | | |
| REV. LTR: D | BY: SSS | REVISED: 09/29/00 2:38 | TDR: 0212666 |
| FILE: AAA00036170 | | | REF: – |
| MTL: – | | | |

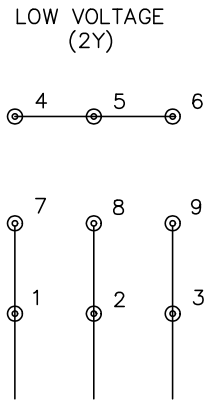
BALDOR ELECTRIC Co.

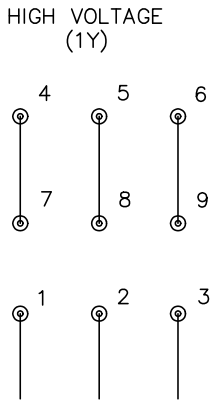
STD 8" GRINDER 524M W/EYESHIELDS, WATER POT, TOOL REST

G8LY0236

CD0005



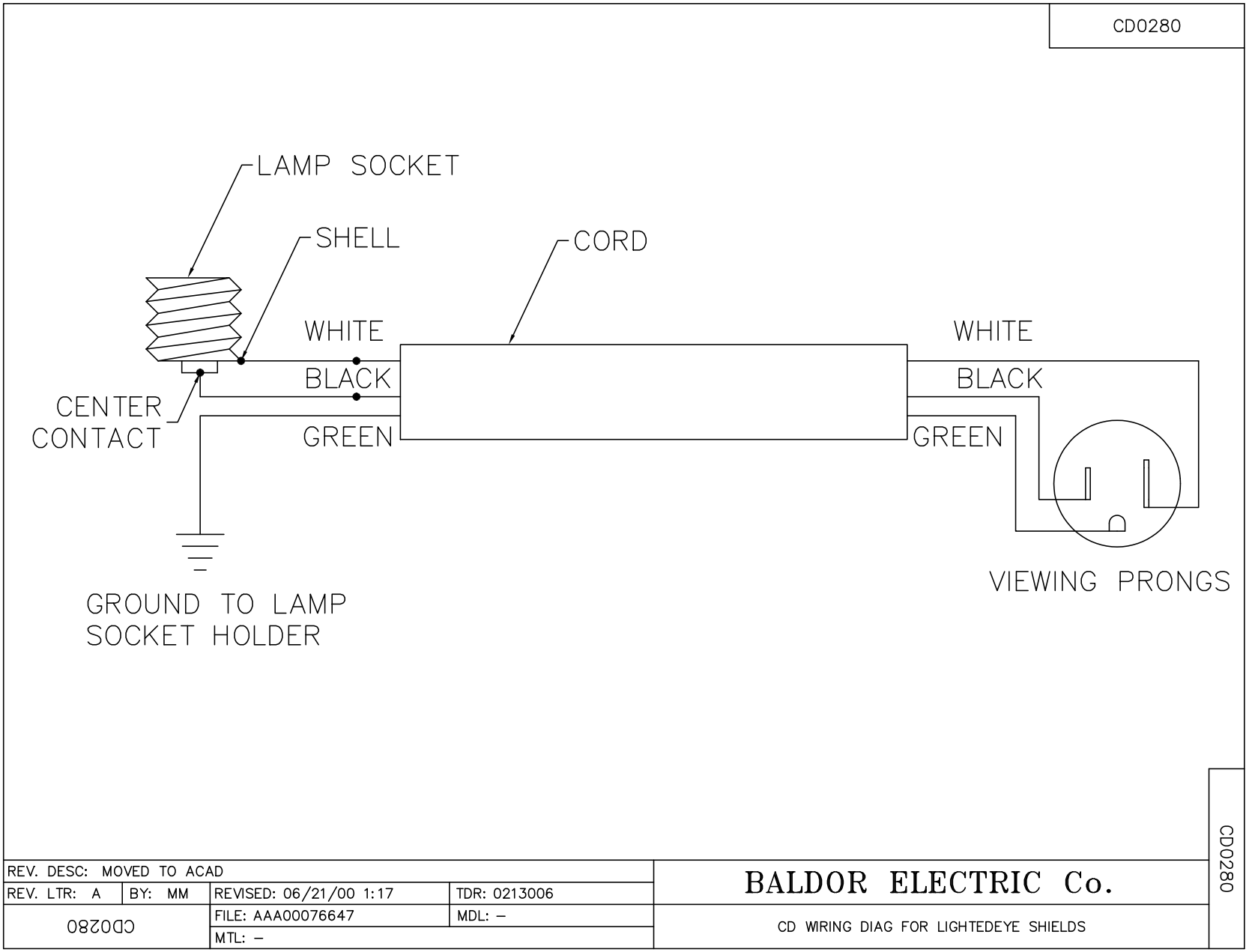




NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

| | | | |
|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| CD0005 | | FILE: AAA00005140 | MDL: – |
| | | MTL: – | 3PH, DV, 9 LEADS |


CD0280
LAMP SOCKET
SHELL
CORD
WHITE
BLACK
GREEN
CENTER CONTACT
WHITE
BLACK
GREEN
VIEWING PRONGS
GROUND TO LAMP SOCKET HOLDER
CD0280
REV. DESC: MOVED TO ACAD
REV. LTR: A
BY: MM
REVISED: 06/21/00 1:17
TDR: 0213006
FILE: AAA00076647
MDL: –
MTL: –
CD0280
BALDOR ELECTRIC Co.
CD WIRING DIAG FOR LIGHTEDEYE SHIELDS