

BALDOR® • RELIANCE 

Product Information Packet

EM3154T-G

1.5HP,1755RPM,3PH,60HZ,145T,3522M,OPSB,F

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | V | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 35WGM495 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 35Z069 | Layout: | 35LYZ069 | Poles: | 04 | Created Date: | 10-20-2010 |
| Base: | RG | Eff. Date: | 06-10-2019 | Leads: | 9#18 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number: | EM3154T-G | Heater Indicator: | No Heater |
| Enclosure: | OPSB | Insulation Class: | H |
| Frame: | 145T | Inverter Code: | Inverter Ready |
| Frame Material: | Steel | KVA Code: | L |
| Output @ Frequency: | 1.500 HP @ 60 HZ | Lifting Lugs: | No 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 @ 18 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: | 3522M |
| Agency Approvals: | UR | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 72 |
| | CSA | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | Standard |
| Base Indicator: | Rigid | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Current @ Voltage: | 2.200 A @ 460.0 V | Shaft Ground Indicator: | Shaft Grounding |
| | 4.400 A @ 230.0 V | Shaft Rotation: | Reversible |
| | 4.500 A @ 208.0 V | Shaft Slinger Indicator: | No Slinger |
| Design Code: | B | Speed Code: | Single Speed |
| Drip Cover: | No Drip Cover | Motor Standards: | NEMA |
| Duty Rating: | CONT | Starting Method: | Direct on line |
| Electrically Isolated Bearing: | Not Electrically Isolated | Thermal Device - Bearing: | None |
| Feedback Device: | NO FEEDBACK | Thermal Device - Winding: | None |
| Front Face Code: | Standard | Vibration Sensor Indicator: | No Vibration Sensor |
| Front Shaft Indicator: | None | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

Nameplate NP3553LUA

| | | | | | | | | |
|---------------------------|------------------------------|--|----------------|------|-----|-----|-------|---|
| CAT.NO. | EM3154T-G | | | | | | | |
| SPEC. | 35Z069M495G2 | | | | | | | |
| HP | 1.5 | | | | | | | |
| VOLTS | 230/460 | | | | | | | |
| AMPS | 4.4/2.2 | | | | | | | |
| RPM | 1755 | | | | | | | |
| FRAME | 145T | | HZ | 60 | | PH | 3 | |
| SF | 1.15 | | CODE | L | DES | B | CLASS | H |
| NEMA NOM. EFF | 86.5 | | PF | 72 | | | | |
| RATING | 40C AMB-CONT | | | | | | | |
| CC | 010A | | USABLE AT 208V | | | 4.5 | | |
| DE | 6205 | | ODE | 6203 | | | | |
| ENCL | OPSB | | SN | | | | | |
| VPWM INVERTER READY | | | | | | | | |
| CT30-60(2:1) VT3-60(20:1) | | | | | | | | |
| USABLE AT | 50HZ 1.5HP 190/380V 5.2/2.6A | | | | | | SF1.0 | |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA204963 | SA 35Z069M495G2 | 1.000 EA |
| RA192211 | RA 35Z069M495G2 | 1.000 EA |
| NS2512A01 | INSULATOR, CONDUIT BOX X | 1.000 EA |
| 35CB3009 | 35 CB W/1.09 DIA. LEAD HOLE @ 6: | 1.000 EA |
| 51XB1016A06 | 10-16X3/8 HXWSSLD SERTYB | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 35EP3209G00 | MASTER ODE,203 BRG | 1.000 EA |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 EA |
| 35EP3210C00 | MASTER DE,205 BRG,1.000SH,LCK BRG | 1.000 EA |
| 51XN1032A18 | 10-32 X 1 1/8 HX WS SL SR (ESKAY) | 2.000 EA |
| XY1032A02 | 10-32 HEX NUT DIRECTIONAL SERRATION | 4.000 EA |
| 35CB4521 | 35 LIPPED CB LID (GALV & PHOSPH) | 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 |
| LB1459 | AEGIS SGR LABEL "AEGISLBL-100" | 1.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.017 GA |
| HA3100A45 | THRUBOLT 10-32 X 8.875 | 4.000 EA |
| 35AD2005A01 | BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR | 1.000 EA |
| LC0005E01 | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3553LUA | ALUM SUPER-E VPWM INVERTER READY UL | 1.000 EA |
| 35PA1066 | PKG GRP, PRINT PK1008A06 | 1.000 EA |

| Parts List (continued) | | |
|-------------------------------|---|-----------------|
| Part Number | Description | Quantity |
| MN416A01 | TAG-INSTAL-MAINT no wire (2100/bx) 4/22 | 1.000 EA |
| LB1350 | BAR CODE LABEL FOR YORK | 1.000 EA |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 EA |
| FE-0000001 | ZRTG FE ASSEMBLY | 1.000 EA |

AC Induction Motor Performance Data

Record # 35594

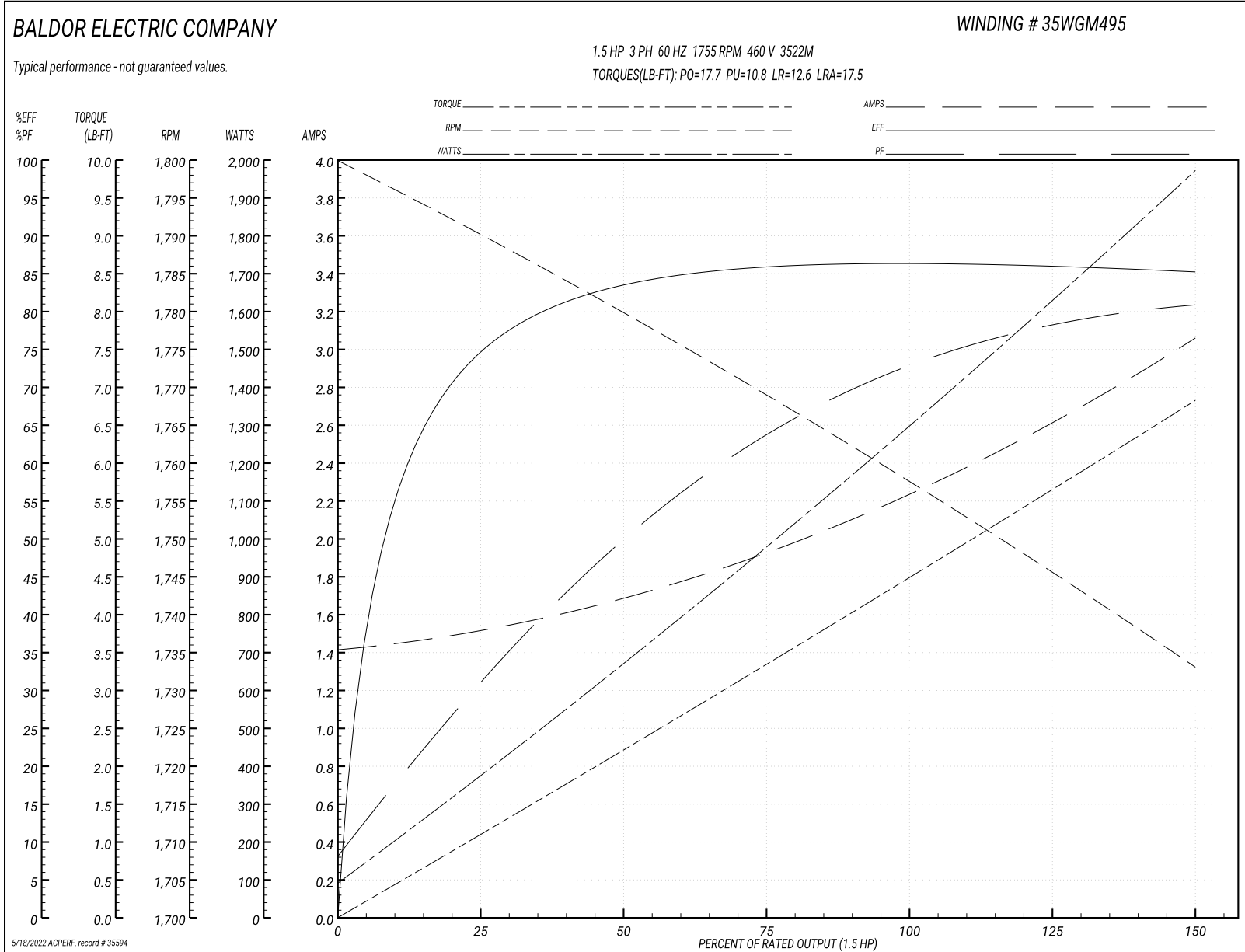
Typical performance - not guaranteed values

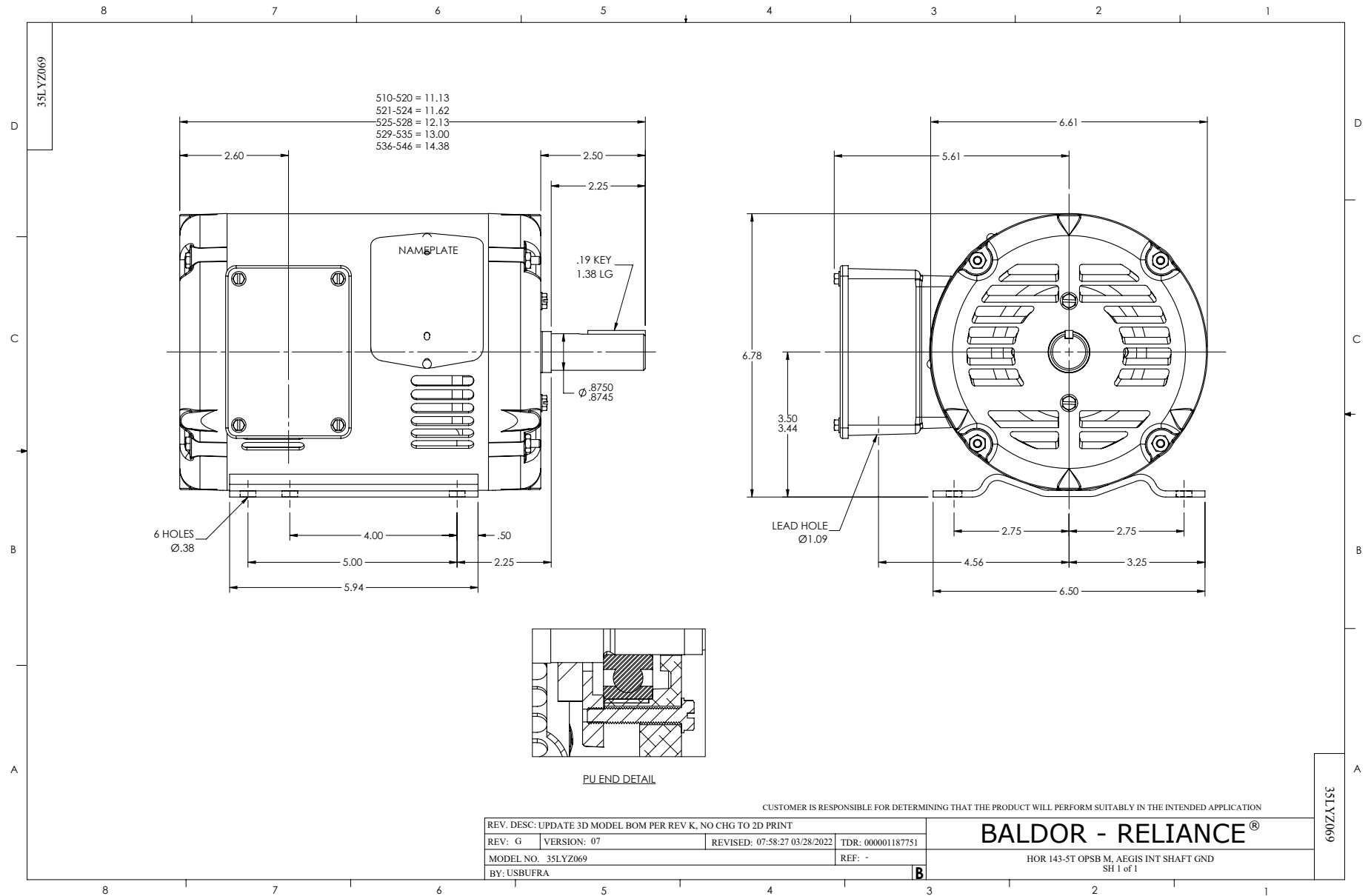
| Winding: 35WGM495-R002 | | Type: 3522M | | Enclosure: OPSB | |
|-------------------------------|--------------------------|----------------------------|--|------------------------|-------------------------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 1.5 | Full Load Torque | | 4.46 LB-FT | |
| Volts | 230/460 | Start Configuration | | direct on line | |
| Full Load Amps | 4.4/2.2 | Breakdown Torque | | 17.7 LB-FT | |
| R.P.M. | 1755 | Pull-up Torque | | 10.8 LB-FT | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | | 12.6 LB-FT |
| NEMA Design Code | B KVA Code | L | Starting Current | | 17.5 A |
| Service Factor (S.F.) | | 1.15 | No-load Current | | 1.43 A |
| NEMA Nom. Eff. | 86.5 Power Factor | 72 | Line-line Res. @ 25°C | | 11.1 Ω |
| Rating - Duty | | 40C AMB-CONT | Temp. Rise @ Rated Load | | 34°C |
| S.F. Amps | | | Temp. Rise @ S.F. Load | | 40°C |
| | | | Locked-rotor Power Factor | | 53 |
| | | | Rotor inertia | | 0.13 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 | 32 | 50 | 63 | 72 | 78 | 81 | 76 |
| Efficiency | 74.7 | 83.3 | 85.9 | 86.5 | 86.1 | 85.2 | 86.3 |
| Speed | 1790 | 1780 | 1769 | 1758 | 1746 | 1733 | 1751 |
| Line amperes | 1.5 | 1.67 | 1.93 | 2.24 | 2.61 | 3.05 | 2.46 |

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





CD0005



LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

| | | | |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 90000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005