

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EJM3546**

**1HP,1760RPM,3PH,60HZ,56J,3522M,TEFC,F1,N**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | G      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 35WGL007   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 35F084 | Layout:     | 35LYF084   | Poles:      | 04     | Created Date: | 05-19-2015 |
| Base:       | N      | Eff. Date:  | 03-13-2019 | Leads:      | 9#18   |               |            |

| Specs                           |                         |                                |                 |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number:                 | EJM3546                 | Insulation Class:              | F               |
| Enclosure:                      | TEFC                    | Inverter Code:                 | Inverter Ready  |
| Frame:                          | 56J                     | IP Rating:                     | NONE            |
| Frame Material:                 | Steel                   | KVA Code:                      | N               |
| Motor Letter Type:              | Three Phase             | Lifting Lugs:                  | No Lifting Lugs |
| Output @ Frequency:             | 1.000 HP @ 60 HZ        | Locked Bearing Indicator:      | Locked Bearing  |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Motor Lead Quantity/Wire Size: | 9 @ 18 AWG      |
| Voltage @ Frequency:            | 460.0 V @ 60 HZ         | Motor Lead Exit:               | Ko Box          |
|                                 | 230.0 V @ 60 HZ         | Motor Lead Termination:        | Flying Leads    |
| XP Class and Group:             | None                    | Motor Type:                    | 3522M           |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F1              |
| Agency Approvals:               | CSA                     | Power Factor:                  | 62              |
|                                 | CSA EEV                 | Product Family:                | General Purpose |
|                                 | UR                      | Pulley End Bearing Type:       | Ball            |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:              | C-Face          |
| Auxillary Box Lead Termination: | None                    | Pulley Shaft Indicator:        | Ext Thread      |
| Base Indicator:                 | No Mounting             | Rodent Screen:                 | None            |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Shaft Extension Location:      | Pulley End      |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Blower:</b>                        | None                      | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
| <b>Current @ Voltage:</b>             | 1.700 A @ 460.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 3.400 A @ 230.0 V         | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Design Code:</b>                   | B                         | <b>Speed Code:</b>                 | Single Speed        |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Motor Standards:</b>            | NEMA                |
| <b>Duty Rating:</b>                   | CONT                      | <b>Starting Method:</b>            | Direct on line      |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Face Code:</b>               | Standard                  | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 1:</b>          | None                |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 2:</b>          | None                |

|                            |              |  |             |    |                       |      |  |           |           |   |
|----------------------------|--------------|--|-------------|----|-----------------------|------|--|-----------|-----------|---|
| <b>Nameplate NP3441L</b>   |              |  |             |    |                       |      |  |           |           |   |
| <b>CAT.NO.</b>             | EJM3546      |  |             |    |                       |      |  |           |           |   |
| <b>SPEC.</b>               | 35F084L007G1 |  |             |    |                       |      |  |           |           |   |
| <b>HP</b>                  | 1            |  |             |    |                       |      |  |           |           |   |
| <b>VOLTS</b>               | 230/460      |  |             |    |                       |      |  |           |           |   |
| <b>AMP</b>                 | 3.4/1.7      |  |             |    |                       |      |  |           |           |   |
| <b>RPM</b>                 | 1760         |  |             |    |                       |      |  |           |           |   |
| <b>FRAME</b>               | 56J          |  |             |    | <b>HZ</b>             | 60   |  |           | <b>PH</b> | 3 |
| <b>SER.F.</b>              | 1.15         |  | <b>CODE</b> | N  | <b>DES</b>            | B    |  | <b>CL</b> | F         |   |
| <b>NEMA-NOM-EFF</b>        | 85.5         |  | <b>PF</b>   | 62 |                       |      |  |           |           |   |
| <b>RATING</b>              | 40C AMB-CONT |  |             |    |                       |      |  |           |           |   |
| <b>CC</b>                  | 010A         |  |             |    | <b>USABLE AT 208V</b> |      |  |           |           |   |
| <b>DE</b>                  | 6205         |  |             |    | <b>ODE</b>            | 6203 |  |           |           |   |
| <b>ENCL</b>                | TEFC         |  | <b>SN</b>   |    |                       |      |  |           |           |   |
| <b>VPWM INVERTER READY</b> |              |  |             |    |                       |      |  |           |           |   |
| CT6-60H(10:1)VT3-60H(20:1) |              |  |             |    |                       |      |  |           |           |   |
|                            |              |  |             |    |                       |      |  |           |           |   |

| Parts List  |                                          |          |
|-------------|------------------------------------------|----------|
| Part Number | Description                              | Quantity |
| SA301050    | SA 35F084L007G1                          | 1.000 EA |
| RA288121    | RA 35F084L007G1                          | 1.000 EA |
| 34FN3002B01 | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 EA |
| NS2512A01   | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB3007    | 35 CB CASTING W/.88 DIA. LEAD HOLE       | 1.000 EA |
| 36GS1000SP  | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE | 1.000 EA |
| 51XB1016A07 | 10-16 X 7/16 HXWSSLD SERTYB              | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 35EP3122K00 | MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG | 1.000 EA |
| HW5100A03   | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP3307G00 | MASTER DE,205 BRG,1.232SH,#26 DRN        | 1.000 EA |
| 51XN1032A20 | 10-32 X 1 1/4 HX WS SL SR                | 2.000 EA |
| 51XB1214A16 | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA |
| WD4100A10   | 465 NIAGARA PLUG (SO ELEC),FOR 1.093 DIA | 1.000 EA |
| 35FH4005A55 | IEC FH NO GRSR,3 MTG HOLE NO DIMPLES,    | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 35CB4521GX  | CONDUIT BOX LID KIT **ORDER INDIV PARTS  | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| LB1009N     | LABEL,ROTATION DIRECTION (ON ROLLS)      | 1.000 EA |
| MJ1000A02   | GREASE, POLYREX EM EXXON                 | 0.050 LB |
| HA3100A15   | THRUBOLT 10-32 X 8.375                   | 4.000 EA |
| MG1000Y03   | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.017 GA |
| LC0005E01   | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |

| <b>Parts List (continued)</b> |                                        |                 |
|-------------------------------|----------------------------------------|-----------------|
| <b>Part Number</b>            | <b>Description</b>                     | <b>Quantity</b> |
| NP3441L                       | ALUM SUPER-E VPWM INVERTER READY UL    | 1.000 EA        |
| 36PA1000                      | PKG GRP, PRINT PK1016A06               | 1.000 EA        |
| PK3082                        | STYROFOAM CRADLE                       | 1.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (2200bx) 4/22 | 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 # 61951

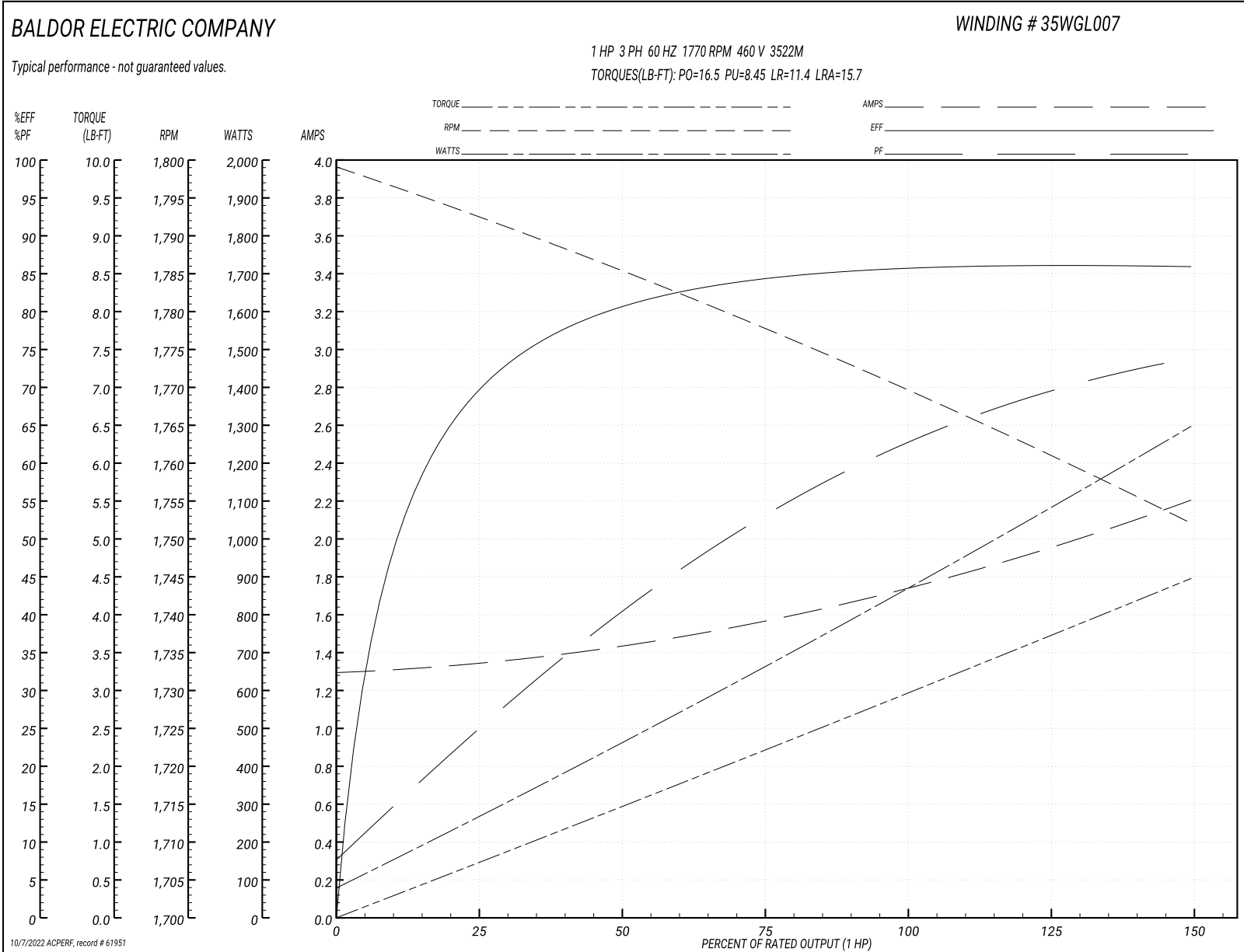
Typical performance - not guaranteed values

| <b>Winding: 35WGL007-R024</b> |                          | <b>Type: 3522M</b> |                                                  | <b>Enclosure: TEFC</b> |                         |
|-------------------------------|--------------------------|--------------------|--------------------------------------------------|------------------------|-------------------------|
| <b>Nameplate Data</b>         |                          |                    | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |                         |
| <b>Rated Output (HP)</b>      |                          | 1                  | <b>Full Load Torque</b>                          |                        | 2.95 LB-FT              |
| <b>Volts</b>                  | 200/400//230/460         |                    | <b>Start Configuration</b>                       |                        | direct on line          |
| <b>Full Load Amps</b>         | 4.0/2.0//3.4/1.7         |                    | <b>Breakdown Torque</b>                          |                        | 16.5 LB-FT              |
| <b>R.P.M.</b>                 | 1460//1760               |                    | <b>Pull-up Torque</b>                            |                        | 8.45 LB-FT              |
| <b>Hz</b>                     | 60 <b>Phase</b>          | 3                  | <b>Locked-rotor Torque</b>                       |                        | 11.4 LB-FT              |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b>        | N                  | <b>Starting Current</b>                          |                        | 15.7 A                  |
| <b>Service Factor (S.F.)</b>  |                          | 1.15               | <b>No-load Current</b>                           |                        | 1.3 A                   |
| <b>NEMA Nom. Eff.</b>         | 85.5 <b>Power Factor</b> | 62                 | <b>Line-line Res. @ 25°C</b>                     |                        | 10.6 Ω                  |
| <b>Rating - Duty</b>          | 40C AMB-CONT             |                    | <b>Temp. Rise @ Rated Load</b>                   |                        | 35°C                    |
| <b>S.F. Amps</b>              |                          |                    | <b>Temp. Rise @ S.F. Load</b>                    |                        | 39°C                    |
|                               |                          |                    | <b>Locked-rotor Power Factor</b>                 |                        | 51.4                    |
|                               |                          |                    | <b>Rotor inertia</b>                             |                        | 0.13 lb-ft <sup>2</sup> |

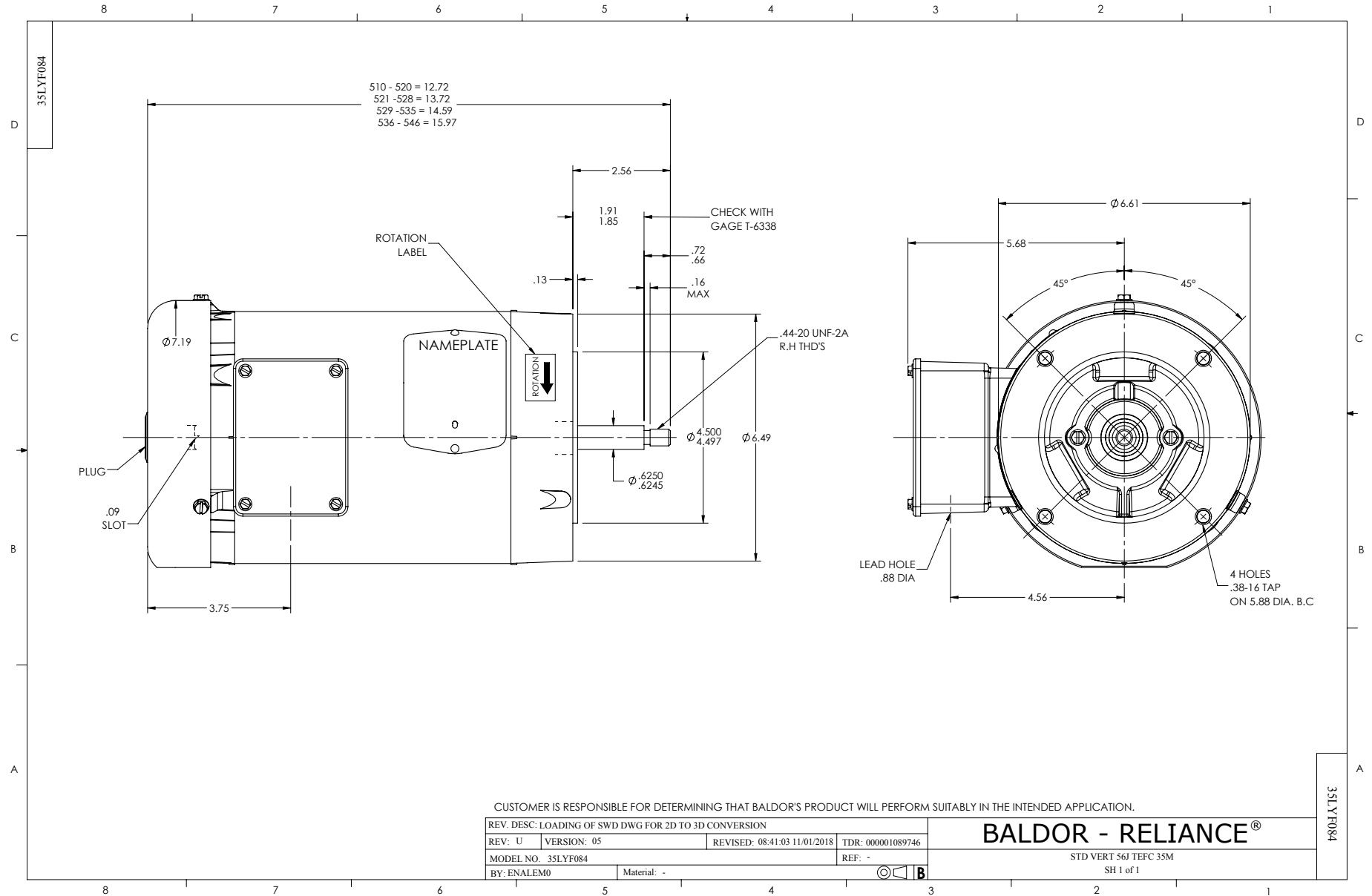
**Load Characteristics 460 V, 60 Hz, 1 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 25        | 41        | 53        | 62         | 69         | 74         | 66          |
| <b>Efficiency</b>      | 69        | 80.5      | 84.2      | 85.8       | 86.2       | 85.8       | 86          |
| <b>Speed</b>           | 1793      | 1785      | 1778      | 1770       | 1761       | 1752       | 1765        |
| <b>Line amperes</b>    | 1.34      | 1.42      | 1.57      | 1.74       | 1.96       | 2.2        | 1.87        |

Performance Graph at 460V, 60Hz, 1.0HP 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 |
| 900000                                    |         | FILE: AAA00005140       | MDL: -       |
|                                           |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005