

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **IDVSM2334T**

**20HP,1800RPM,3PH,60HZ,256TC,TEFC,FOOT,**

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| Part Detail       |       |                |         |                |          |               |            |  |  |
|-------------------|-------|----------------|---------|----------------|----------|---------------|------------|--|--|
| Revision:         | D     | Status:        | PRD/A   | Change #:      |          | Proprietary:  | No         |  |  |
| Type:             | AC    | Prod. Type:    | 0952M   | Elec. Spec:    | 09WGW772 | CD Diagram:   |            |  |  |
| Enclosure:        | TEFC  | Mfg Plant:     |         | Mech. Spec:    | 09K146   | Layout:       |            |  |  |
| Frame:            | 256TC | Mounting:      | F1      | Poles:         | 04       | Created Date: | 02-17-2012 |  |  |
| Base:             | RG    | Rotation:      | R       | Insulation:    | F        | Eff. Date:    | 07-31-2012 |  |  |
| Leads:            | 9#12  | Literature:    |         | Elec. Diagram: |          | Replaced By:  |            |  |  |
| Nameplate NP1163L |       |                |         |                |          |               |            |  |  |
| CAT NO            |       | IDVSM2334T     |         |                |          |               |            |  |  |
| SPEC.             |       | 09K146W772G1   |         |                |          |               |            |  |  |
| FRAME             |       | 256TC          | HP      | 20             | TE       |               |            |  |  |
| VOLTS             |       | 230/460        |         |                |          |               |            |  |  |
| MAG CUR           |       | 17/8.5         | FLA     | 48/24          |          |               |            |  |  |
| RPM               |       | 1765           | RPM MAX | 2700           |          |               |            |  |  |
| HZ                |       | 60             | PH      | 3              | CLASS    | F             |            |  |  |
| SER.F.            |       | 1.00           | DES     | B              | SL HZ    | 1.12          |            |  |  |
| NEMA-NOM-EFF      |       | 93             | WK2     | 2.27           |          |               |            |  |  |
| BLWR V            |       |                | PH      |                | HZ       |               | A          |  |  |
| RATING            |       | 40C AMB-CONT   |         |                |          |               |            |  |  |
| DE BRG            |       | 6309           | ODE BRG | 6208           |          |               |            |  |  |
| CC                |       | 010A           | SN      |                |          |               |            |  |  |
|                   |       | 1.5:1 C HP PWM |         |                |          |               |            |  |  |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA239672      | SA 09K146W772G1                          | 1.000 EA |
| RA226575      | RA 09K146W772G1                          | 1.000 EA |
| 09CB3000SP    | CONDUIT BOX CAST                         | 1.000 EA |
| 09GS1000SP    | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE    | 1.000 EA |
| 10XN2520K12   | 1/4-20 X.75 GRD 5                        | 2.000 EA |
| HW1001A25     | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| WD1000B17     | KPA-8C BURNDY TERMINAL                   | 1.000 EA |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 09EP1100A14SP | ENDPLATE, MACH                           | 1.000 EA |
| HW5100A08     | W3118-035 WVY WSHR (WB)                  | 1.000 EA |
| 10XN2520K28   | 1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P | 2.000 EA |
| HW1001A25     | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| 10XN2520K36   | 1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P | 4.000 EA |
| HW1001A25     | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| 09EP1300A12   | ENDPLATE, MACH                           | 1.000 EA |
| HW1001A38     | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HW4600B44SP   | V-RING SLINGER 1.500 X 2.290 X 0.280     | 1.000 EA |
| HA3113A02     | THRUBOLT 3/8-16 X 16.750                 | 4.000 EA |
| HW1001A38     | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| XY3816A12     | 3/8-16 FINISHED NUT                      | 4.000 EA |
| 09FH1000A38   | FAN HSG, W/1.75 BORE & ENCODER CVR MTG   | 1.000 EA |
| HA2081A05     | SPACER TUBE, 309 FAN HSG, 2.00 LONG      | 4.000 EA |
| XY3816A12     | 3/8-16 FINISHED NUT                      | 4.000 EA |
| HA6881        | BEI HS35 THRU SHAFT ENCODER PROTECTIVE C | 1.000 EA |

**Parts List (continued)**

| Part Number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| 10XN1032K12   | 10-32 X .75 HD, GRADE 5                  | 2.000 EA |
| HW1001A10     | WASHER, #10 SPLT LK, ZN X                | 2.000 EA |
| HW1000A10     | #10 FLAT WASHER (SAE)                    | 2.000 EA |
| 09CB3500SP    | CONDUIT BOX LID, CAST                    | 1.000 EA |
| 09GS1001SP    | GASKET-CONDUIT BOX LID, 1/16 THICK LEXID | 1.000 EA |
| 51XW2520A12   | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 EA |
| HW2501G25     | KEY, 3/8 SQ X 2.875                      | 1.000 EA |
| LB1115        | LABEL,LIFTING DEVICE                     | 1.000 EA |
| LB5040        | INSTRUCTION TAG, AC & DC                 | 1.000 EA |
| HW4500A05     | 1669B ALEM/UNIV860 GR FTG X              | 1.000 EA |
| HW4500A17     | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HA4001A01SP   | DRAIN PLUG, PLASTIC (MICRO PLAS)         | 1.000 EA |
| HA4051A00     | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| MJ1000A75     | GREASE, POLYREX EM EXXON                 | 0.080 LB |
| HW4500A03     | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A17     | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HA4001A01SP   | DRAIN PLUG, PLASTIC (MICRO PLAS)         | 1.000 EA |
| HA4051A00     | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| 09FN3001D01SP | EXTERNAL FAN, PLASTIC                    | 1.000 EA |
| HW2500A25     | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 EA |
| 51XB1214A20   | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |
| MG1000G27     | PAINT- S9282E CHARCOAL GREY              | 0.050 GA |
| 85XU0407A04   | #4-7 X 1/4 DRIVE PIN                     | 2.000 EA |
| LB1119        | WARNING LABEL                            | 1.000 EA |

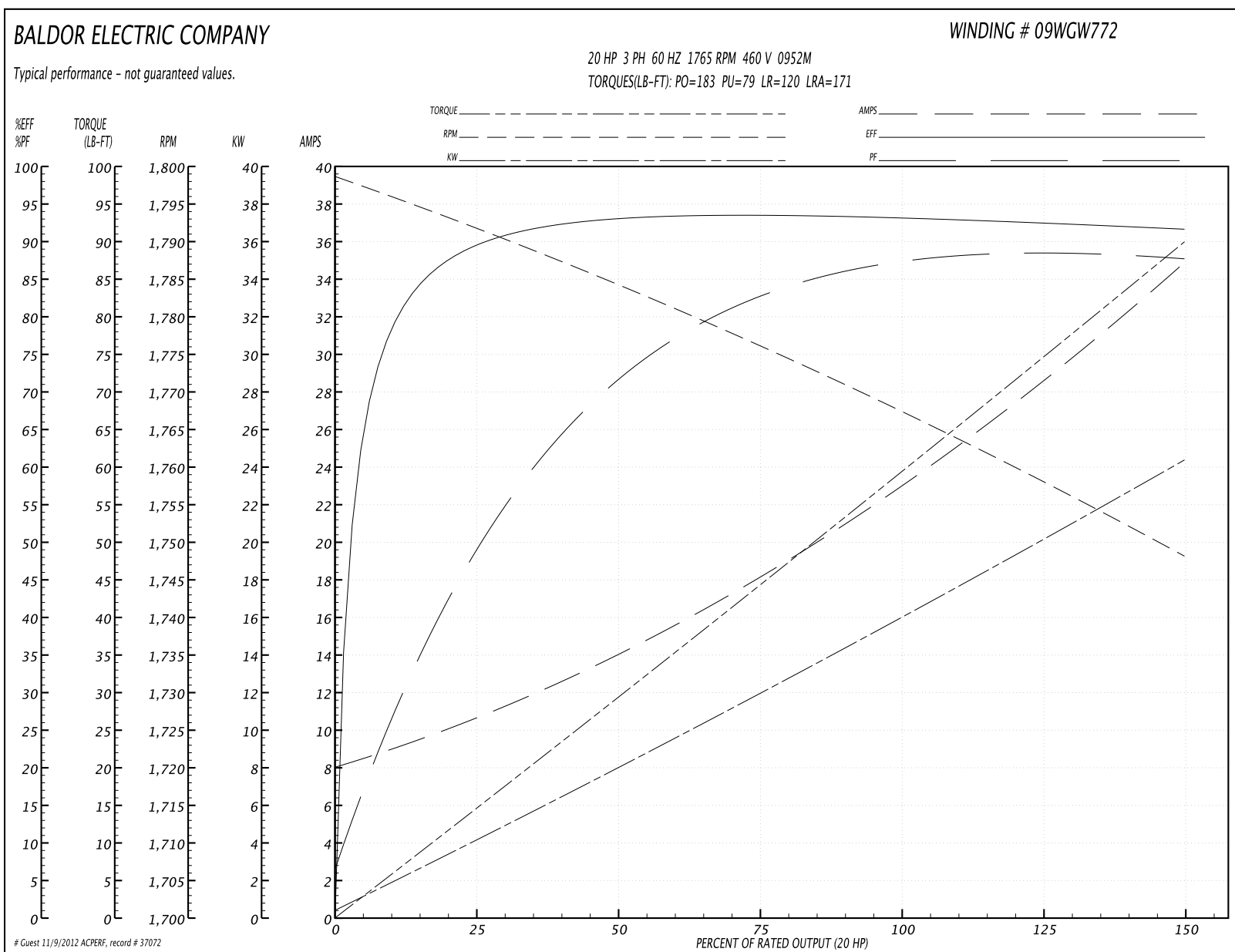
**Parts List (continued)**

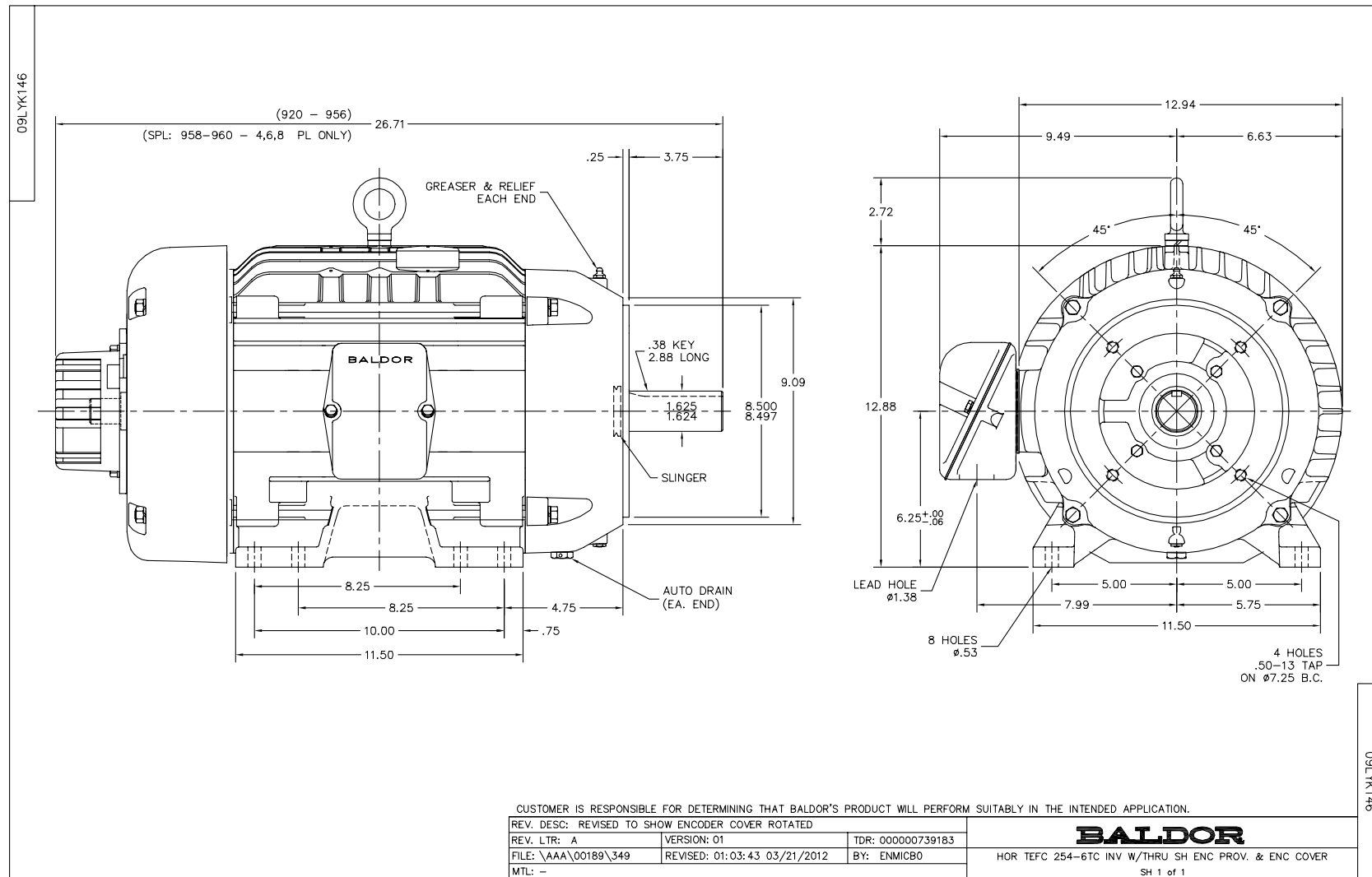
| <b>Part Number</b> | <b>Description</b>                       | <b>Quantity</b> |
|--------------------|------------------------------------------|-----------------|
| LB1125C01          | STD (STOCK) CARTON LABEL BALDOR WITH FLA | 4.000 EA        |
| LC0181             | CONNECTION LABEL                         | 1.000 EA        |
| NP1163L            | ALUM INV UL CSA CC                       | 1.000 EA        |
| 40PA1005           | PACKAGING GROUP, 09 STD                  | 1.000 EA        |

**Performance Data at 460V, 60Hz, 20.0HP (Typical performance - Not guaranteed values)**

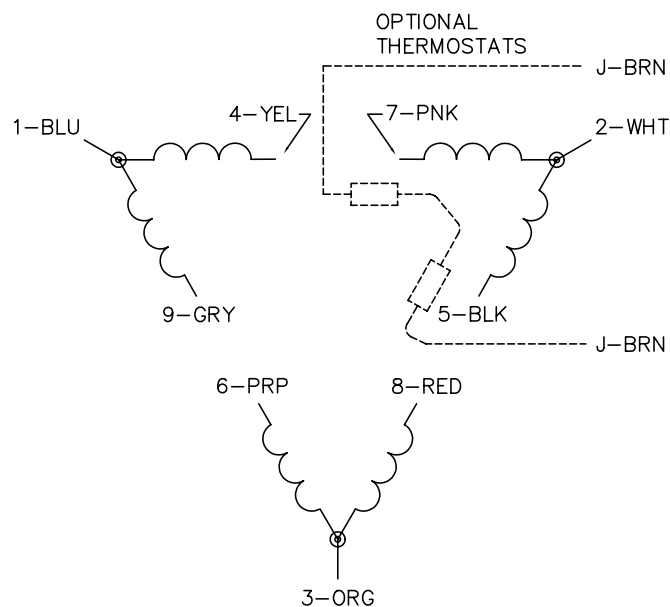
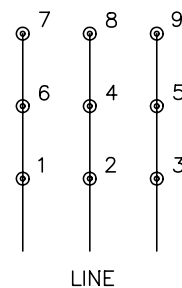
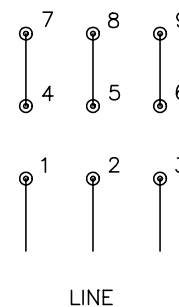
| General Characteristics  |        |                                  |        |                      |        |             |      |
|--------------------------|--------|----------------------------------|--------|----------------------|--------|-------------|------|
| Full Load Torque:        |        | 60.0 LB-FT                       |        | Start Configuration: |        | DOL         |      |
| No-Load Current:         |        | 8.5 Amps                         |        | Break-Down Torque:   |        | 183.0 LB-FT |      |
| Line-line Res. @ 25°C.:  |        | 0.4083 Ohms A Ph / 0.0 Ohms B Ph |        | Pull-Up Torque:      |        | 79.0 LB-FT  |      |
| Temp. Rise @ Rated Load: |        | 57 C                             |        | Locked-Rotor Torque: |        | 120.0 LB-FT |      |
| Temp. Rise @ S.F. Load:  |        |                                  |        | Starting Current:    |        | 171.0 Amps  |      |
| Load Characteristics     |        |                                  |        |                      |        |             |      |
| % of Rated Load          | 25     | 50                               | 75     | 100                  | 125    | 150         | S.F. |
| Power Factor:            | 45.0   | 67.0                             | 79.0   | 84.0                 | 86.0   | 87.0        | 0.0  |
| Efficiency:              | 89.6   | 92.9                             | 93.5   | 93.2                 | 92.5   | 91.6        | 0.0  |
| Speed:                   | 1791.0 | 1784.0                           | 1776.0 | 1767.0               | 1758.0 | 1748.0      | 0.0  |
| Line Amperes:            | 10.17  | 13.79                            | 18.39  | 23.89                | 28.78  | 34.6        | 0.0  |

## Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values





CD0180

LOW VOLTAGE  
(2D)HIGH VOLTAGE  
(1D)

## 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: C

BY: JLP

REVISED: 01/21/99 2:28

TDR: 0171435

0810D0

FILE: AAA00005148

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180