



BALDOR® • *RELIANCE*

Product Information Packet

EHM9139T

20HP,1760RPM,3PH,60HZ,256T,0944M,TEFC,F1

| Product Detail | | | | | | | |
|----------------|------|-------------|-------|----------------|----------|---------------|------------|
| Revision: | N | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Prod Type: | 0944M | Elec. Spec: | 09WGX531 | CD Diagram: | CD0005 |
| Enclosure | TEFC | Mfg Plant: | | Mech Spec: | 09F511 | Layout: | 09LYF511 |
| Frame: | 256T | Mounting: | F1 | Poles: | 04 | Created Date: | |
| Base: | RG | Rotation: | R | Insulation: | F | Eff. Date: | 10-22-2008 |
| Leads: | 9#12 | Literature: | | Elec. Diagram: | | Replaced By: | |

Nameplate NP1371

| | | | | | | | |
|--------------|--------------|----------------|------|-----|---|-------|---|
| CAT.NO. | EHM9139T | | | | | | |
| SPEC. | 09F511X531G1 | | | | | | |
| HP | 20 | | | | | | |
| VOLTS | 230/460 | | | | | | |
| AMP | 48/24 | | | | | | |
| RPM | 1760 | | | | | | |
| FRAME | 256T | HZ | 60 | PH | 3 | | |
| SER.F. | 1.15 | CODE | G | DES | B | CLASS | F |
| NEMA-NOM-EFF | 91.7 | PF | 85 | | | | |
| RATING | 40C AMB-CONT | | | | | | |
| CC | 010A | USABLE AT 208V | 51.9 | | | | |
| DE | 6309 | ODE | 6208 | | | | |
| ENCL | TEFC | SN | | | | | |

| Parts List | | | |
|-------------------|--|-----------------|-------------------|
| Product ID | Description | Quantity | List Price |
| SA071359 | SA 09F511X531G1 | 1.000 | 1,369.00 |
| RA065207 | RA 09F511X531G1 | 1.000 | 1,141.00 |
| S/P111-000-001 | S/P111-000-001 CORONA TEST | 1.000 | |
| HW1002A63 | WASHER, 5/8 HI-COLLAR SPRLCKWASHER | 1.000 | 2.00 |
| 09CB3002SP | CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30 | 1.000 | 21.00 |
| 09GS1000SP | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE | 1.000 | 3.00 |
| 10XN2520K12 | 1/4-20 X.75 GRD 5 | 2.000 | 2.00 |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 | 2.00 |
| WD1000B17 | KPA-8C BURNDY TERMINAL | 1.000 | 3.00 |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 | 3.00 |
| 09EP1100A41 | ENDPLATE, MACH | 1.000 | 128.00 |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 | 2.00 |
| XY3816A12 | 3/8-16 FINISHED NUT | 4.000 | 2.00 |
| HW5100A08 | W3118-035 WVY WSHR (WB) | 1.000 | 2.00 |
| 09EP1101A59 | PU ENDPLATE, MACH, W/O RET RING HOLES | 1.000 | 174.00 |
| HA3113A02 | THRUBOLT 3/8-16X16.625 | 4.000 | 4.00 |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 | 2.00 |
| HW4600B44SP | V-RING SLINGER 1.500 X 2.290 X 0.280 | 1.000 | 5.00 |
| 09FH4000SP | FAN COVER, STAMPED | 1.000 | 128.00 |
| HA2081A05 | SPACER TUBE, 309 FAN HSG, 2.00 LONG | 4.000 | 2.00 |
| XY3816A12 | 3/8-16 FINISHED NUT | 4.000 | 2.00 |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 | 2.00 |
| 09CB3501SP | CONDUIT BOX LID FOR 09CB3001 & 09CB3002 | 1.000 | 18.00 |
| 09GS1013SP | 09 GS FOR 09CB3501 LID - LEXIDE | 1.000 | 2.00 |

| Parts List (continued) | | | |
|-------------------------------|--|-----------------|-------------------|
| Product ID | Description | Quantity | List Price |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 | 2.00 |
| HW2501G25 | KEY, 3/8 SQ X 2.875 | 1.000 | 5.00 |
| LB1115 | LABEL,LIFTING DEVICE (ON ROLLS0 | 1.000 | 2.00 |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 | 4.00 |
| HA4001A01SP | DRAIN PLUG, PLASTIC (MICRO PLAS) | 1.000 | 2.00 |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.080 | 10.00 |
| HA4001A01SP | DRAIN PLUG, PLASTIC (MICRO PLAS) | 1.000 | 2.00 |
| MG1000G55 | 682.62 LACQUER LIGHT GRAY LHAPS | 0.050 | 61.00 |
| 85XU0407A04 | #4-7 X 1/4 DRIVE PIN | 2.000 | 2.00 |
| LB5040 | INSTRUCTION TAG, AC & DC | 1.000 | 2.00 |
| HA4017A10 | 1/8X1.25 GREASE EXT (F/S) | 1.000 | 3.00 |
| HW4500A35 | 1/8 NPT STEEL .50 HEX CAP | 1.000 | 5.00 |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 2.000 | 2.00 |
| 09FN3001D01 | EXTERNAL FAN, PLASTIC | 1.000 | 68.00 |
| 51XB1214A20 | 12-14X1.25 HXWSSLD SERTYB | 1.000 | 2.00 |
| HW2500A25 | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 | 2.00 |
| LB1125C04 | STD-E (STOCK CTN LABEL STD-E WITH FLAG) | 4.000 | 2.00 |
| LC0005E02 | SPL CONN.DIA./WARN.LABEL(LC0005/LB1119) | 1.000 | 2.00 |
| NP1371 | NP STD PREM EFF HVAC MTR W/O THRM, UL CS | 1.000 | |
| 09PA1000 | PACKAGING GROUP COMBINED PRINT | 1.000 | 96.00 |

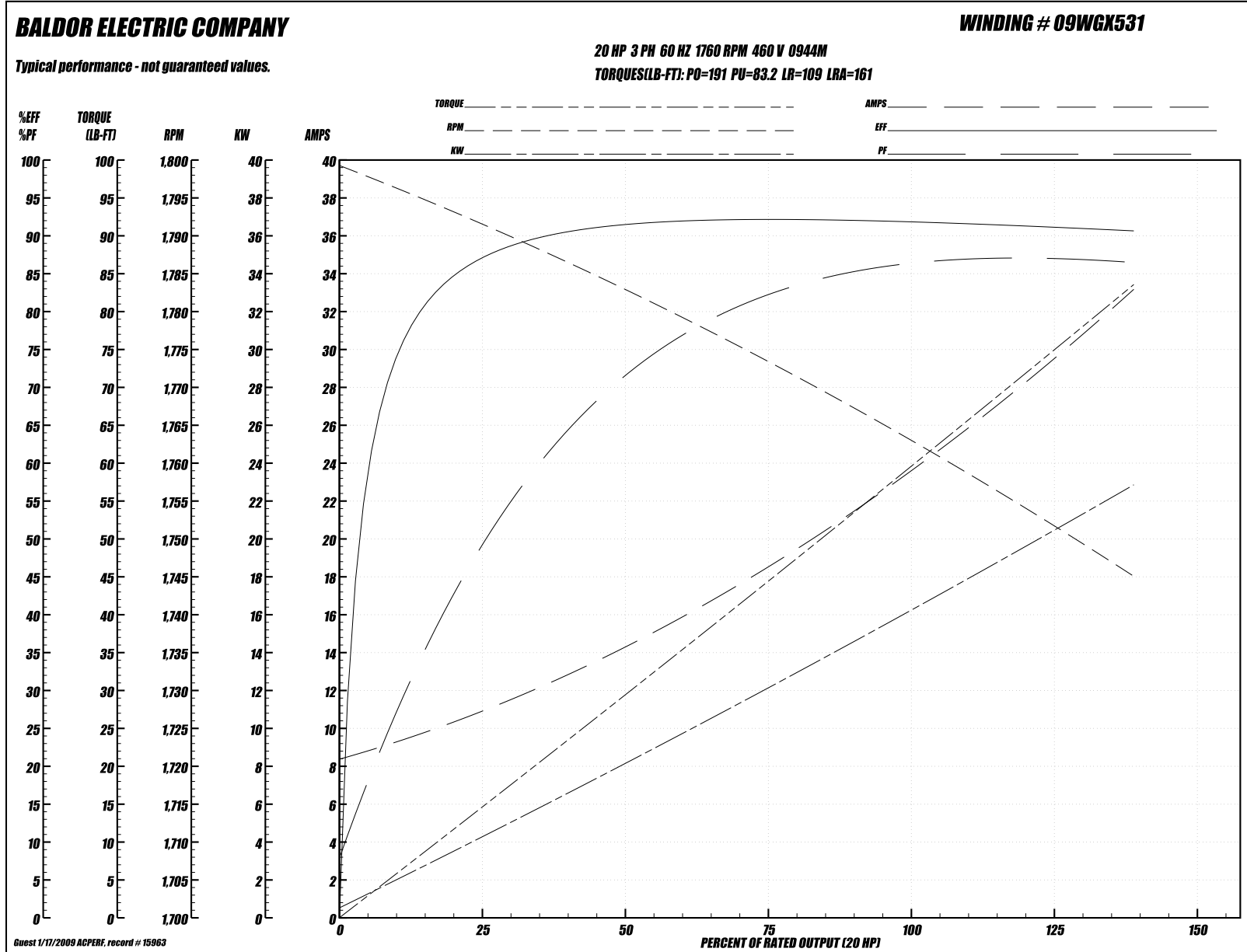
Performance Data at 460V, 60Hz, 20.0HP (Typical performance - Not guaranteed values)
General Characteristics

| | | | |
|---------------------------------|---------------------------------|-----------------------------|-------------|
| Full Load Torque: | 59.5 LB-FT | Start Configuration: | DOL |
| No-Load Current: | 8.68 Amps | Break-Down Torque: | 191.0 LB-FT |
| Line-line Res. @ 25°C.: | 0.474 Ohms A Ph / 0.0 Ohms B Ph | Pull-Up Torque: | 83.2 LB-FT |
| Temp. Rise @ Rated Load: | 72°C | Locked-Rotor Torque: | 109.0 LB-FT |
| Temp. Rise @ S.F. Load: | 87°C | Starting Current: | 161.0 Amps |

Load Characteristics

| % of Rated Load: | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor: | 51.0 | 73.0 | 82.0 | 85.0 | 87.0 | 87.0 | 86.0 |
| Efficiency: | 86.8 | 91.3 | 92.2 | 91.9 | 91.2 | 90.6 | 91.5 |
| Speed: | 1792.0 | 1783.0 | 1773.0 | 1763.0 | 1752.0 | 1745.0 | 1756.0 |
| Line Amperes: | 10.5 | 14.1 | 18.7 | 23.9 | 29.5 | 33.0 | 27.3 |

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



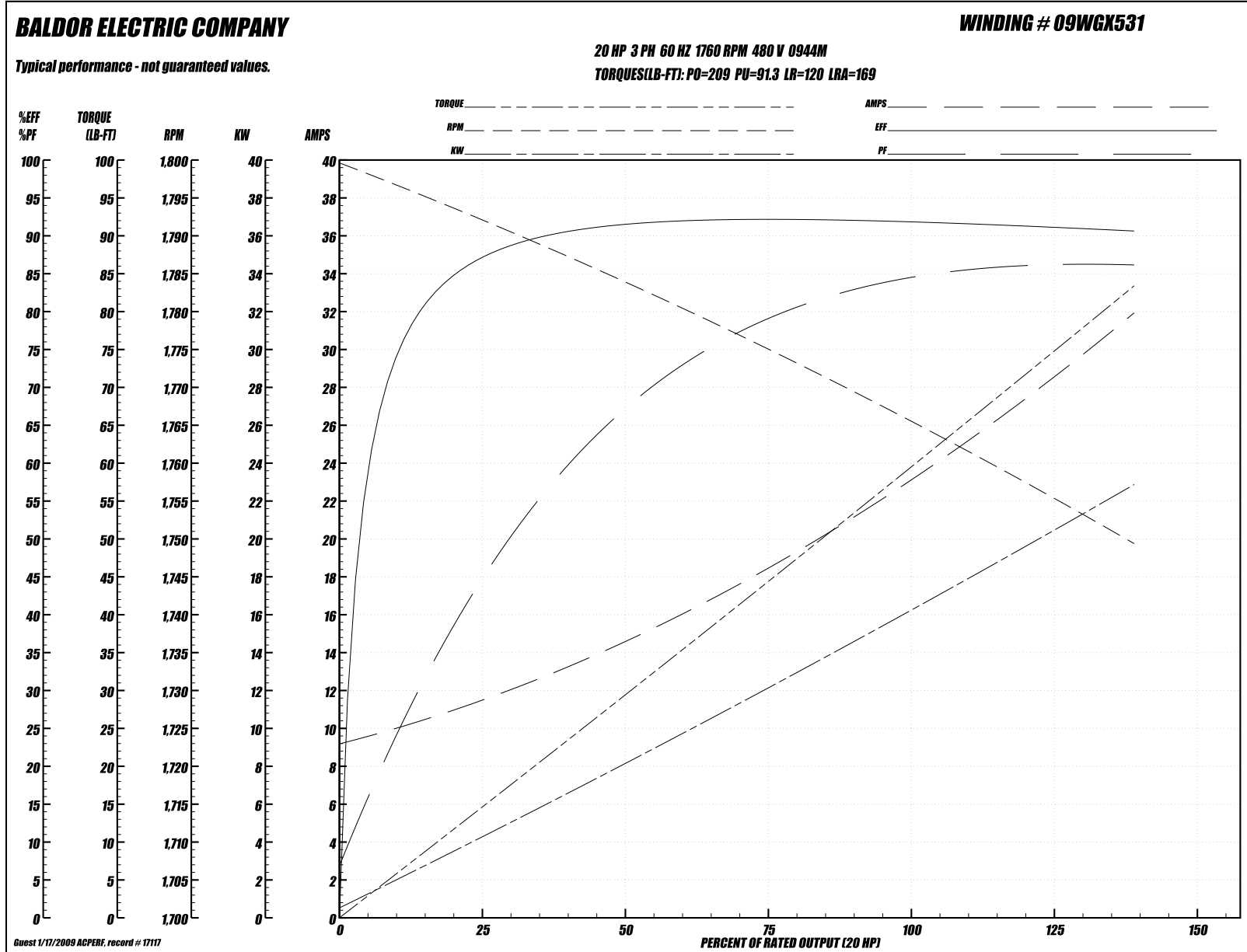
Performance Data at 480V, 60Hz, 20.0HP (Typical performance - Not guaranteed values)
General Characteristics

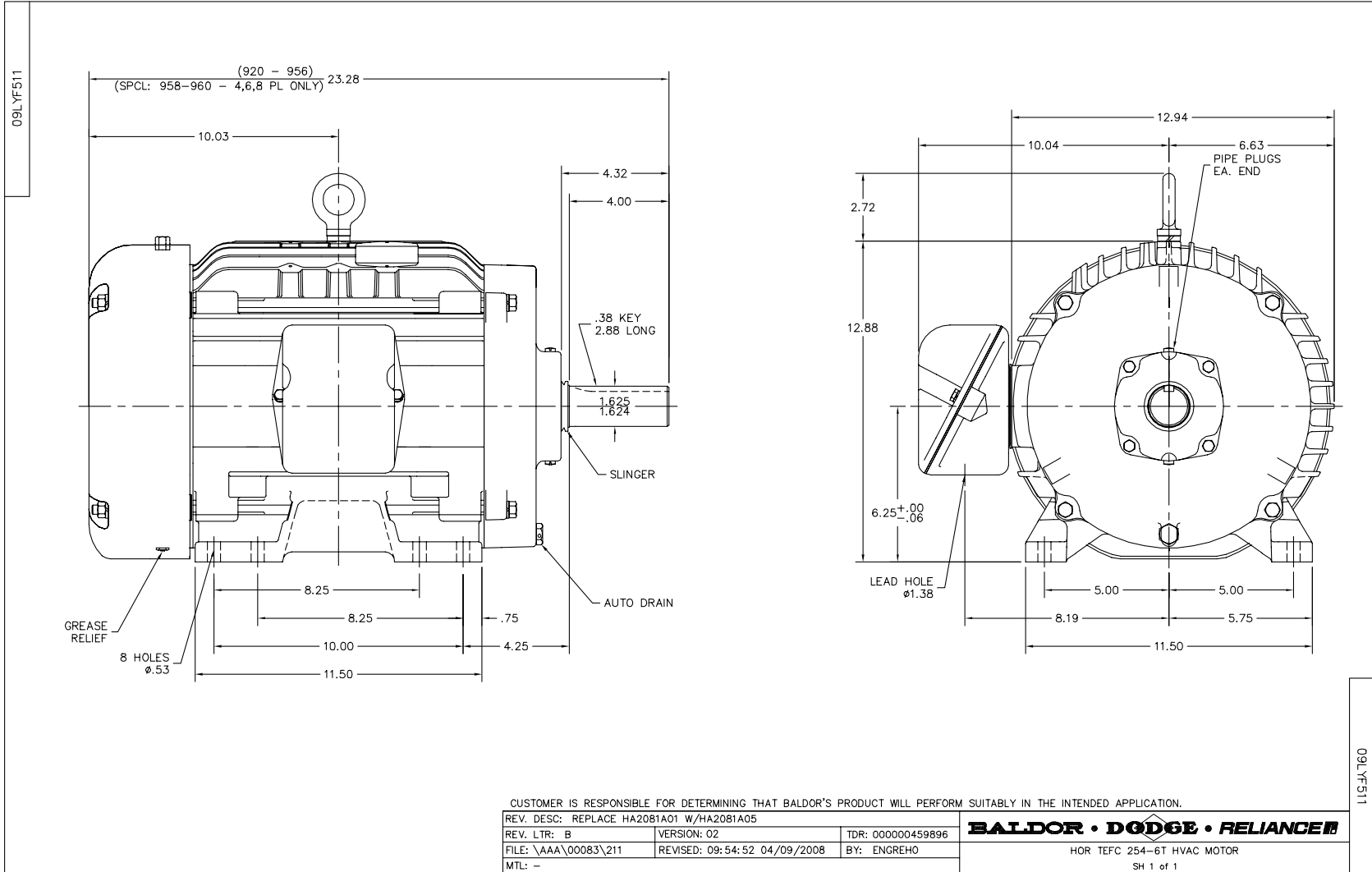
| | | | |
|---------------------------------|---------------------------------|-----------------------------|-------------|
| Full Load Torque: | 59.4 LB-FT | Start Configuration: | DOL |
| No-Load Current: | 9.48 Amps | Break-Down Torque: | 209.0 LB-FT |
| Line-line Res. @ 25°C.: | 0.466 Ohms A Ph / 0.0 Ohms B Ph | Pull-Up Torque: | 91.3 LB-FT |
| Temp. Rise @ Rated Load: | 72°C | Locked-Rotor Torque: | 120.0 LB-FT |
| Temp. Rise @ S.F. Load: | 85°C | Starting Current: | 169.0 Amps |

Load Characteristics

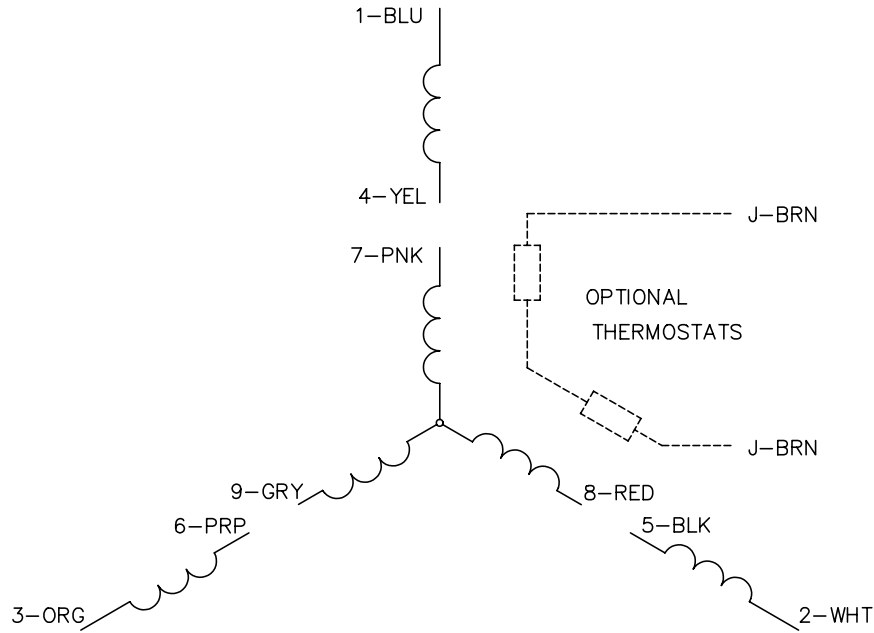
| % of Rated Load: | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor: | 47.0 | 68.0 | 78.0 | 83.0 | 86.0 | 87.0 | 85.0 |
| Efficiency: | 86.9 | 91.5 | 92.2 | 91.9 | 91.1 | 90.6 | 91.4 |
| Speed: | 1793.0 | 1784.0 | 1775.0 | 1765.0 | 1755.0 | 1750.0 | 1759.0 |
| Line Amperes: | 11.1 | 14.4 | 18.6 | 23.4 | 28.6 | 31.7 | 26.5 |

Performance Graph at 480V, 60Hz, 20.0HP (Typical performance - Not guaranteed values)

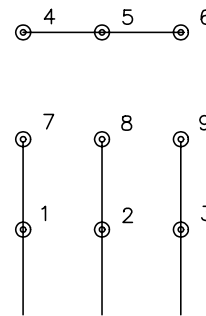




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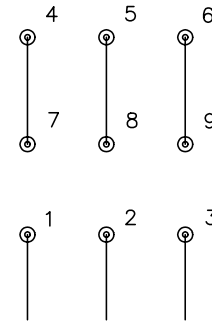


LOW VOLTAGE
(2Y)



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