

BALDOR® • ***RELIANCE***

Product Information Packet

VEJMM2334T-5

20HP, 1765RPM, 3PH, 60HZ, 256JM, 0952M, TEFC, F

| Part Detail | | | | | | | |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision: | G | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Prod. Type: | 0952M | Elec. Spec: | 09WGY638 | CD Diagram: | CD0006 |
| Enclosure: | TEFC | Mfg Plant: | | Mech. Spec: | 09E178 | Layout: | 09LYE178 |
| Frame: | 256JM | Mounting: | F1 | Poles: | 04 | Created Date: | 01-15-2013 |
| Base: | N | Rotation: | R | Insulation: | F | Eff. Date: | 11-16-2016 |
| Leads: | 3#12 | | | | | Replaced By: | |
| Literature: | | Elec. Diagram: | | | | | |

| | | | | | | | | | | |
|----------------------------|--------------|--|-------------|----|-----------------------|------|--|-----------|-----------|---|
| Nameplate NP3441L | | | | | | | | | | |
| CAT.NO. | VEJMM2334T-5 | | | | | | | | | |
| SPEC. | 09E178Y638G1 | | | | | | | | | |
| HP | 20 | | | | | | | | | |
| VOLTS | 575 | | | | | | | | | |
| AMP | 19.2 | | | | | | | | | |
| RPM | 1765 | | | | | | | | | |
| FRAME | 256JM | | | | HZ | 60 | | | PH | 3 |
| SER.F. | 1.15 | | CODE | H | DES | A | | CL | F | |
| NEMA-NOM-EFF | 93 | | PF | 84 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | 010A | | | | USABLE AT 208V | | | | | |
| DE | 6309 | | | | ODE | 6208 | | | | |
| ENCL | TEFC | | SN | | | | | | | |
| VPWM INVERTER READY | | | | | | | | | | |
| CT6-60H(10:1)VT3-60H(20:1) | | | | | | | | | | |
| | | | | | | | | | | |

| Parts List | | |
|----------------|--|----------|
| Part Number | Description | Quantity |
| SA256987 | SA 09E178Y638G1 | 1.000 EA |
| RA243774 | RA 09E178Y638G1 | 1.000 EA |
| 09FN3001D01 | EXTERNAL FAN, PLASTIC | 1.000 EA |
| S/P107-000-005 | SUPER-E PROC'S(254/6 FR.) ZK PLANT - POL | 1.000 EA |
| HW1002A63 | WASHER, 5/8 HI-COLLAR SPRLCKWASHER | 1.000 EA |
| 09CB3002 | CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30 | 1.000 EA |
| 09GS1000 | 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 | T&B CX35TN TERMINAL | 1.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 09FE1100A14 | FREP ASSEMBLY, 09EP1100A14 | 1.000 EA |
| XY3816A12 | 3/8-16 FINISHED NUT | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 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 |
| 09EP1300A13 | ENDPLATE, MACH | 1.000 EA |
| HW4600B67 | V-RING SLINGER 1.770 X 2.170 X .28 VITON | 1.000 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 |
| HA3113A02 | THRUBOLT 3/8-16 X 16.750 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 09FH4000SP | FAN COVER, STAMPED | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| HA2081A05 | SPACER TUBE, 309 FAN HSG, 2.00 LONG | 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 |
| 09CB3501 | CONDUIT BOX LID FOR 09CB3001 & 09CB3002 | 1.000 EA |
| 09GS1013 | 09 GS FOR 09CB3501 LID - LEXIDE | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 EA |
| HW2501E22 | KEY, 1/4 SQ X 2.500 | 1.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 11/14 | 1.000 EA |
| PK6014 | STEEL STRAP FOR 309-312 BASELESS MOTORS | 3.000 EA |
| 19XW3118A08 | .31-18 X .50 HEX WASHER HEAD TAPTITE II | 3.000 EA |
| HW4500A05 | 1669B ALEM/UNIV860 GR FTG X | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 0.080 LB |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW2500A25 | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 EA |
| 51XB1214A20 | 12-14X1.25 HXWSSLD SERTYB | 1.000 EA |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.050 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |

| | | |
|----------|-------------------------------------|----------|
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0006 | CONNECTION LABEL | 1.000 EA |
| NP3441L | ALUM SUPER-E VPWM INVERTER READY UL | 1.000 EA |
| 40PA1014 | PACKAGING GROUP, 09 NO BASE | 1.000 EA |

AC Induction Motor Performance Data
Record # 2074 - Typical performance - not guaranteed values

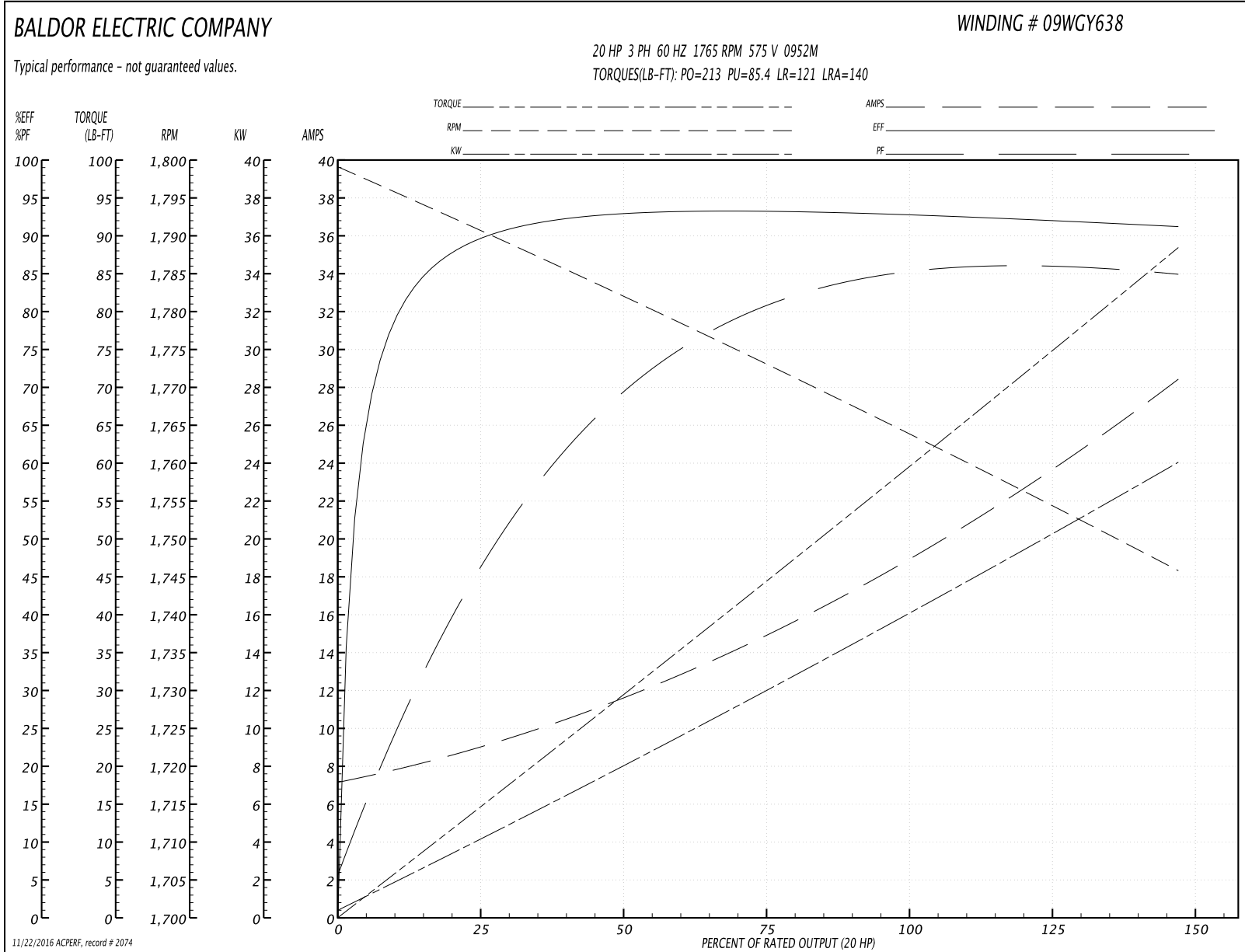
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 09WGY638-R001 | Type: 0952M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 575 V, 60 Hz: Single Voltage Motor | |
|-----------------------|--------------|--------------|----|---------------------------------------|-------------------------|
| Rated Output (HP) | 20 | | | Full Load Torque | 59 LB-FT |
| Volts | 575 | | | Start Configuration | direct on line |
| Full Load Amps | 19.2 | | | Breakdown Torque | 213 LB-FT |
| R.P.M. | 1765 | | | Pull-up Torque | 85.4 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 121 LB-FT |
| NEMA Design Code | A | KVA Code | H | Starting Current | 140 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 7.5 A |
| NEMA Nom. Eff. | 93 | Power Factor | 84 | Line-line Res. @ 25°C | 0.617 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 60°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 74°C |
| | | | | Locked-rotor Power Factor | 33 |
| | | | | Rotor inertia | 2.27 LB-FT ² |

Load Characteristics 575 V, 60 Hz, 20 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 46 | 69 | 80 | 84 | 86 | 87 | 85 |
| Efficiency | 89 | 92.8 | 93.1 | 93 | 92.2 | 91.1 | 92.5 |
| Speed | 1791 | 1783 | 1770 | 1766 | 1756 | 1745 | 1760 |
| Line amperes | 8.6 | 11.2 | 15.3 | 19 | 23.3 | 28.3 | 21.6 |

Performance Graph at 575V, 60Hz, 20.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 35473 - Typical performance - not guaranteed values

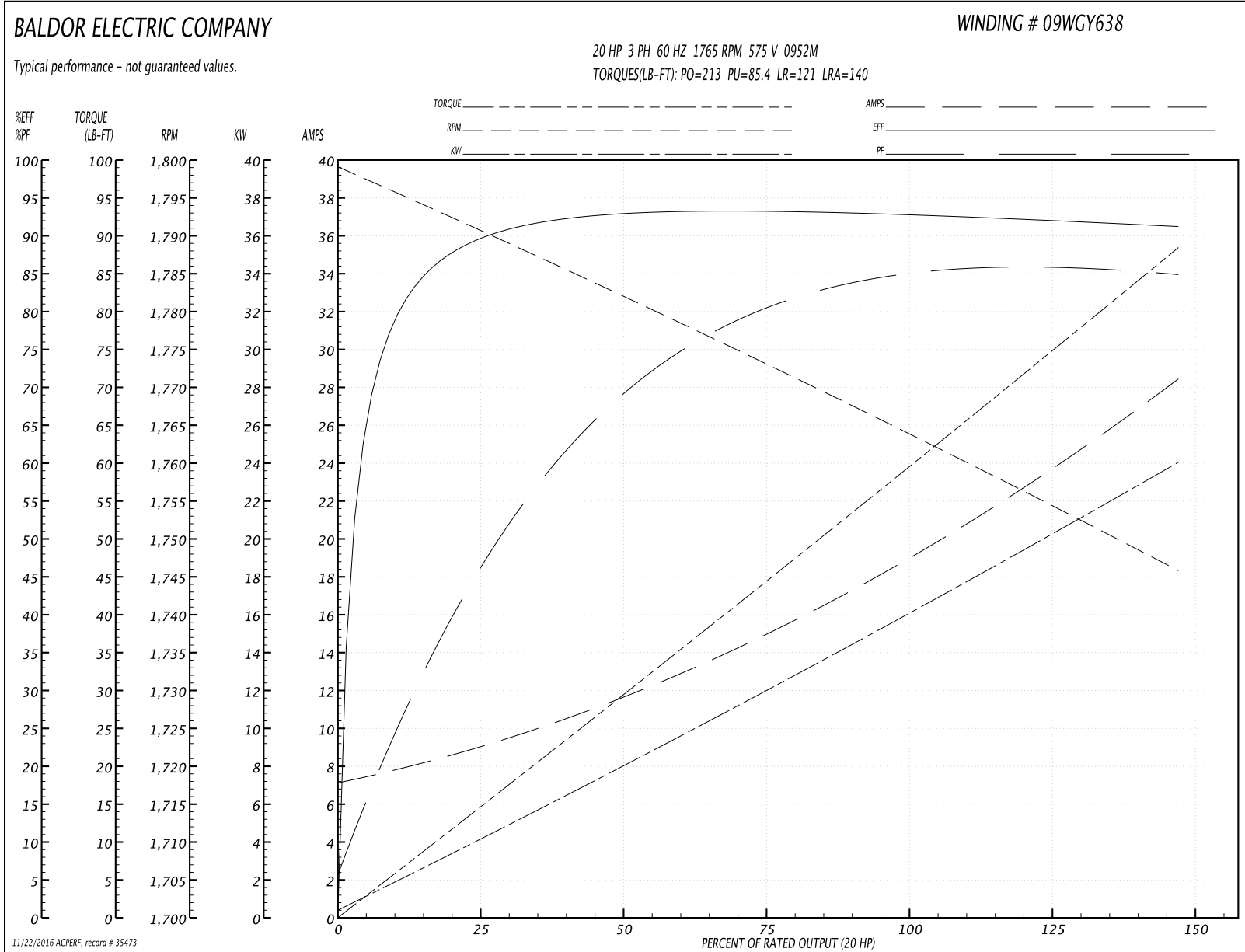
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 09WGY638-R010 | Type: 0952M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

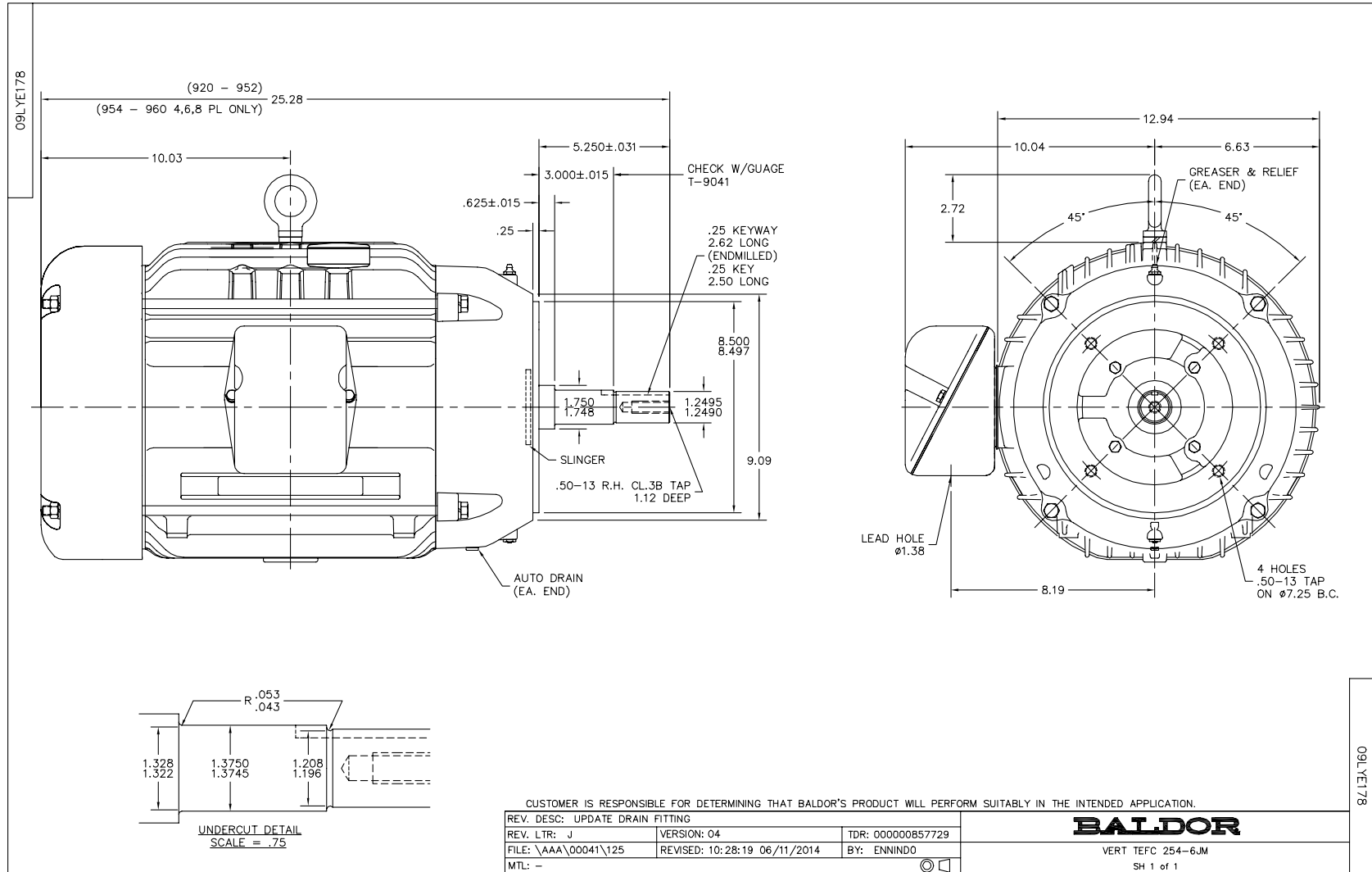
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| Volts | 575 | | | Start Configuration | direct on line |
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| R.P.M. | 1765 | | | Pull-up Torque | 85.4 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 121 LB-FT |
| NEMA Design Code | A | KVA Code | H | Starting Current | 140 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 7.5 A |
| NEMA Nom. Eff. | 93 | Power Factor | 84 | Line-line Res. @ 25°C | 0.617 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 60°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 74°C |
| | | | | Locked-rotor Power Factor | 33 |
| | | | | Rotor inertia | 2.27 LB-FT ² |

Load Characteristics 575 V, 60 Hz, 20 HP

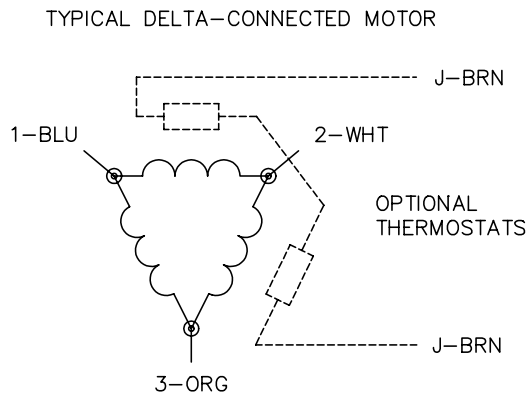
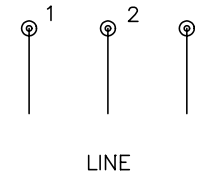
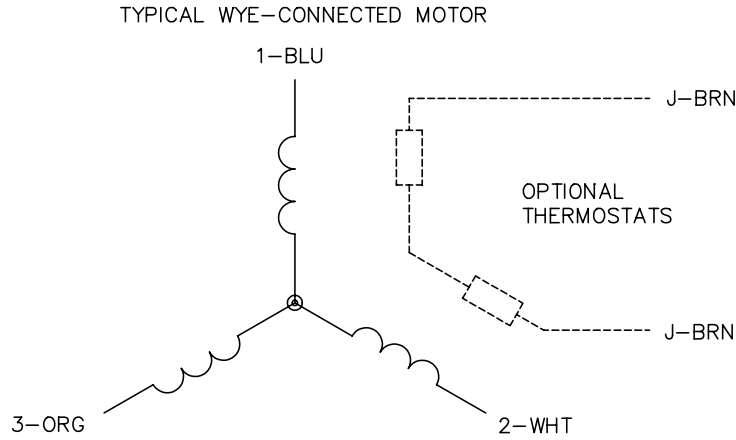
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 46 | 69 | 80 | 84 | 86 | 87 | 85 |
| Efficiency | 89 | 92.8 | 93.1 | 93 | 92.2 | 91.1 | 92.5 |
| Speed | 1791 | 1783 | 1770 | 1766 | 1756 | 1745 | 1760 |
| Line amperes | 8.6 | 11.2 | 15.3 | 19.2 | 23.3 | 28.3 | 21.6 |

Performance Graph at 575V, 60Hz, 20.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

| | | | |
|---|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: D | BY: JLP | REVISED: 01/21/99 4:02 | TDR: 0171435 |
| 9000D | | FILE: AAA00005141 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006