

# **BALDOR**® • **RELIANCE**

## **Product Information Packet**

# **OF3420T**

**20HP, 1125RPM, 3PH, 60HZ, 286T, 1044M, OPEN, F2**

| Part Detail |                 |                |       |             |          |               |            |
|-------------|-----------------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | S               | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC              | Prod. Type:    | 1044M | Elec. Spec: | 10WGY235 | CD Diagram:   | CD0321     |
| Enclosure:  | OPEN            | Mfg Plant:     |       | Mech. Spec: | 10H74    | Layout:       | 10LYH074   |
| Frame:      | 286T            | Mounting:      | F2    | Poles:      | 06       | Created Date: | 05-19-2006 |
| Base:       | RG              | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 08-05-2016 |
| Leads:      | 12#12 ML4400B12 |                | Y     |             |          | Replaced By:  |            |
| Literature: |                 | Elec. Diagram: |       |             |          |               |            |

|                          |              |  |  |      |      |    |     |                |   |       |   |
|--------------------------|--------------|--|--|------|------|----|-----|----------------|---|-------|---|
| <b>Nameplate NP2961E</b> |              |  |  |      |      |    |     |                |   |       |   |
| CAT.NO.                  | OF3420T      |  |  |      |      |    |     |                |   |       |   |
| SPEC.                    | 10H074Y235   |  |  |      |      |    |     |                |   |       |   |
| HP                       | 20           |  |  |      |      |    |     |                |   |       |   |
| VOLTS                    | 230/460/796  |  |  |      |      |    |     |                |   |       |   |
| AMP                      | 58/29/16.8   |  |  |      |      |    |     |                |   |       |   |
| RPM                      | 1125         |  |  |      |      |    |     |                |   |       |   |
| FRAME                    | 286T         |  |  |      | HZ   | 60 |     | PH             | 3 |       |   |
| SER.F.                   | 1.15         |  |  | CODE | G    |    | DES | D              |   | CLASS | F |
| NEMA-NOM-EFF             | 86.5         |  |  | PF   | 74   |    |     |                |   |       |   |
| RATING                   | 40C AMB-CONT |  |  |      |      |    |     |                |   |       |   |
| CC                       |              |  |  |      |      |    |     | USABLE AT 208V |   |       |   |
| DE                       | 6310         |  |  | ODE  | 6309 |    |     |                |   |       |   |
| ENCL                     | OPEN         |  |  | SN   |      |    |     |                |   |       |   |

Nameplate NP0090E

FRONT 6309

PULLEY 6310

LUBRICATE WITH

GREASE POLYREX EM

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA142863    | SA 10H074Y235                            | 1.000 EA |
| RA132137    | RA 10H074Y235                            | 1.000 EA |
| 10CB1000A09 | CONDUIT BOX, MACH                        | 1.000 EA |
| 10GS1001    | GASKET CONDUIT BOX NEOP                  | 1.000 EA |
| 10XN3118K16 | 5/16-18 X 1' GRADE #5, STL, ZINC PLATE   | 4.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| WD1000B16   | T&B CX70TN TERMINAL                      | 1.000 EA |
| 10XN2520K08 | 1/4-20 X .50 GRADE #5, STL, ZINC PLATE   | 1.000 EA |
| HW1001A25   | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 1.000 EA |
| 10EP1200A01 | ENDPLATE, MACH FR. FOR RODENT SCREENS    | 1.000 EA |
| HA4051A00   | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| 10AD2000A02 | AIR DEFLECTOR, STAT                      | 1.000 EA |
| HA1103A02   | 310-560 RODENT SCREEN                    | 1.000 EA |
| 12XN0832A12 | 8-32 X 3/4 HEX HD SCREW                  | 2.000 EA |
| XY0832A02   | 8-32 HEX NUT                             | 2.000 EA |
| HW1000A08   | #8 SAE FLAT WASHER                       | 2.000 EA |
| 12XN0832A06 | 8-32 X 3/8 HEX HD SCREW                  | 1.000 EA |
| HW1000A08   | #8 SAE FLAT WASHER                       | 1.000 EA |
| 10XN3816K76 | 3/8-16 X 4.75 HEX HD CAP SCREW, GRADE 5  | 4.000 EA |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HW5100A11   | W3917-042 WVY WSHR (WB)                  | 1.000 EA |
| 10EP1200A02 | ENDPLATE, MACH PU. FOR RODENT SCREENS    | 1.000 EA |
| HA4051A00   | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| HA1103A02   | 310-560 RODENT SCREEN                    | 1.000 EA |

| Parts List (continued) |  |          |
|------------------------|--|----------|
| Part Number            | Description                              | Quantity |
| 12XN0832A12            | 8-32 X 3/4 HEX HD SCREW                  | 2.000 EA |
| HW1000A08              | #8 SAE FLAT WASHER                       | 2.000 EA |
| XY0832A02              | 8-32 HEX NUT                             | 2.000 EA |
| 12XN0832A06            | 8-32 X 3/8 HEX HD SCREW                  | 1.000 EA |
| HW1000A08              | #8 SAE FLAT WASHER                       | 1.000 EA |
| 10AD2000A02            | AIR DEFLECTOR, STAT                      | 1.000 EA |
| 10XN3118K32            | 5/16-18 X 2.00" HEX HD, GRADE 5          | 8.000 EA |
| HW1001A31              | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 8.000 EA |
| 10XN3816K76            | 3/8-16 X 4.75 HEX HD CAP SCREW, GRADE 5  | 4.000 EA |
| HW1001A38              | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 10CB1500A01SP          | CONDUIT BOX LID, MACH                    | 1.000 EA |
| 14GS1003               | GASKET CONDUIT BOX LID, NEOP             | 1.000 EA |
| 10XN2520K16            | 1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P   | 4.000 EA |
| HW1001A25              | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| HW2501H28              | KEY, 1/2 SQ X 3.250                      | 1.000 EA |
| LB1115N                | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| HW4500A03              | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A17              | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.130 LB |
| HW4500A03              | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A17              | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| MG1025G03              | WILKOFASST, 789.901, OIL RIG SILVER      | 0.070 GA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 4.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 11/14 | 1.000 EA |

|          |  |          |
|----------|--|----------|
| LB1119N  | WARNING LABEL                            | 1.000 EA |
| LC0321   | CONNECTION LABEL                         | 1.000 EA |
| NP2961E  | ALUM CSA CC                              | 1.000 EA |
| NP0090E  | SS NO LOGO'S BEARING & GREASE DATA       | 1.000 EA |
| 10PA1000 | PACKAGING GROUP COMBINED PRINT PK1023A06 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 22849 - Typical performance - not guaranteed values

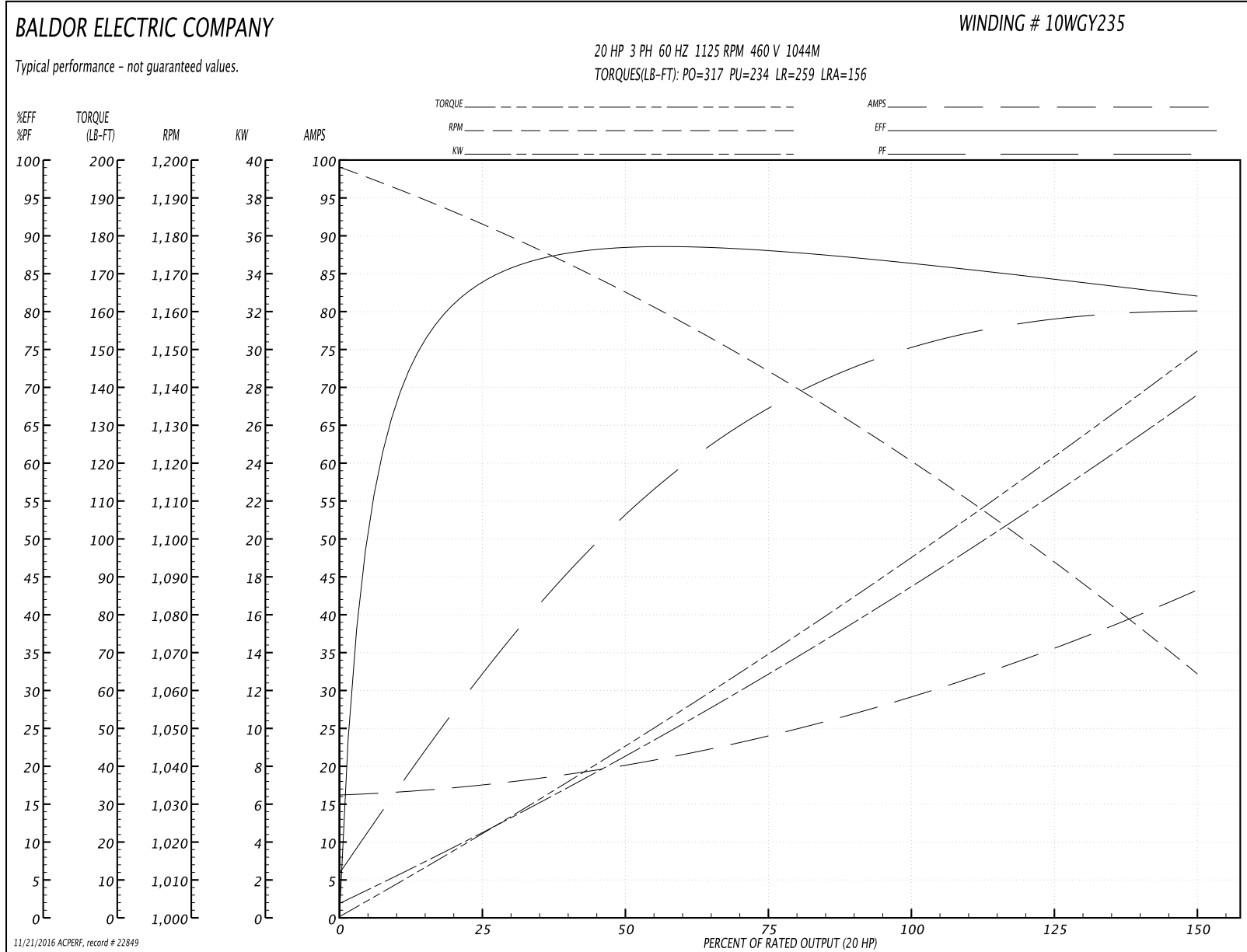
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 10WGY235-R001 | <b>Type:</b> 1044M | <b>Enclosure:</b> OPEN |
|-------------------------------|--------------------|------------------------|

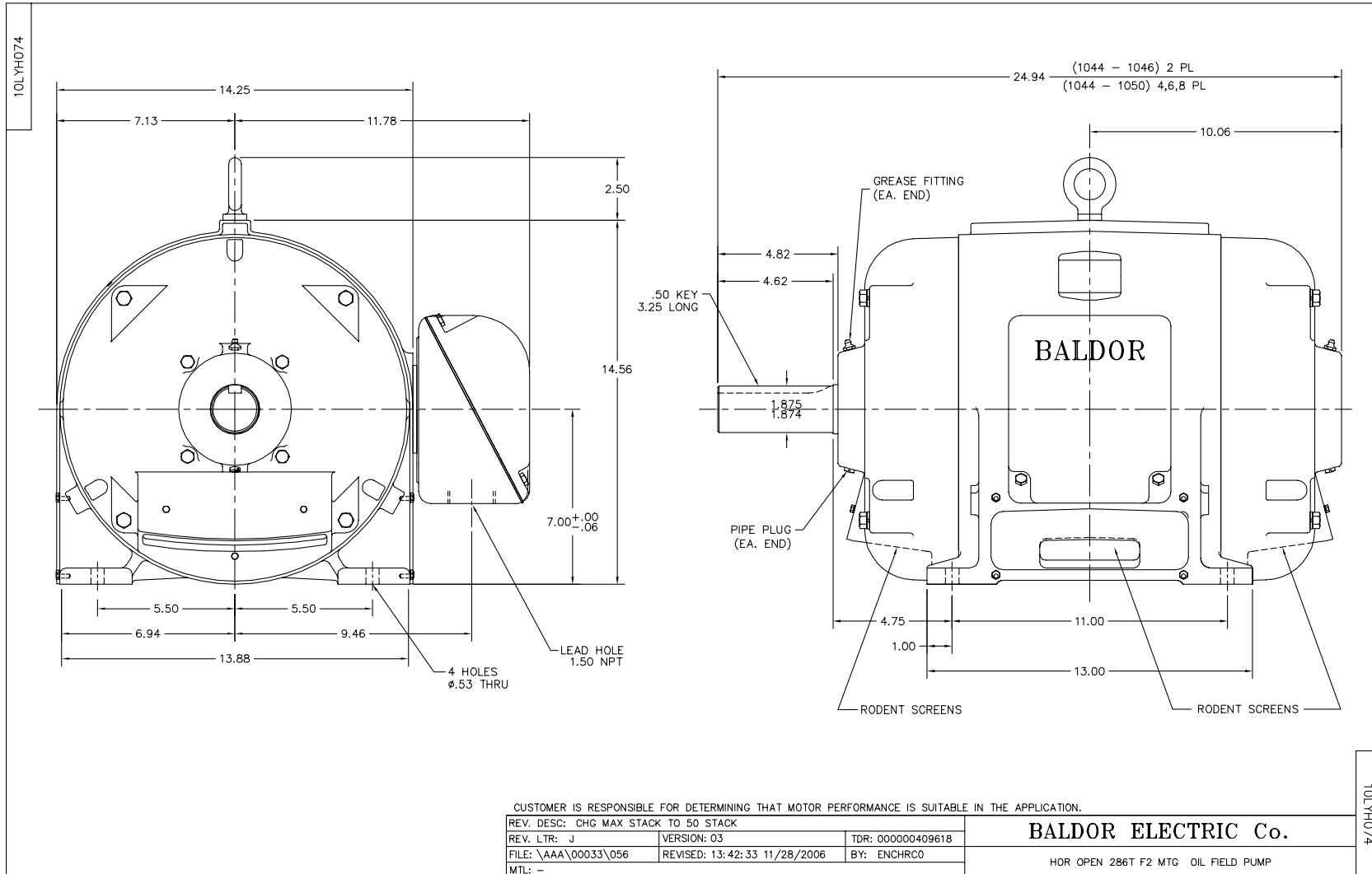
| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>2nd Voltage Connection |                |
|-----------------------|--------------|--------------|----|---|----------------|
| Rated Output (HP)     | 20           |              |    | Full Load Torque                        | 93.2 LB-FT     |
| Volts                 | 230/460/796  |              |    | Start Configuration                     | direct on line |
| Full Load Amps        | 58/29/16.8   |              |    | Breakdown Torque                        | 317 LB-FT      |
| R.P.M.                | 1125         |              |    | Pull-up Torque                          | 234 LB-FT      |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                     | 259 LB-FT      |
| NEMA Design Code      | D            | KVA Code     | G  | Starting Current                        | 156 A          |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                         | 16.5 A         |
| NEMA Nom. Eff.        | 86.5         | Power Factor | 74 | Line-line Res. @ 25°C                   | 0.437 Ω        |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                 | 68°C           |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                  | 88°C           |

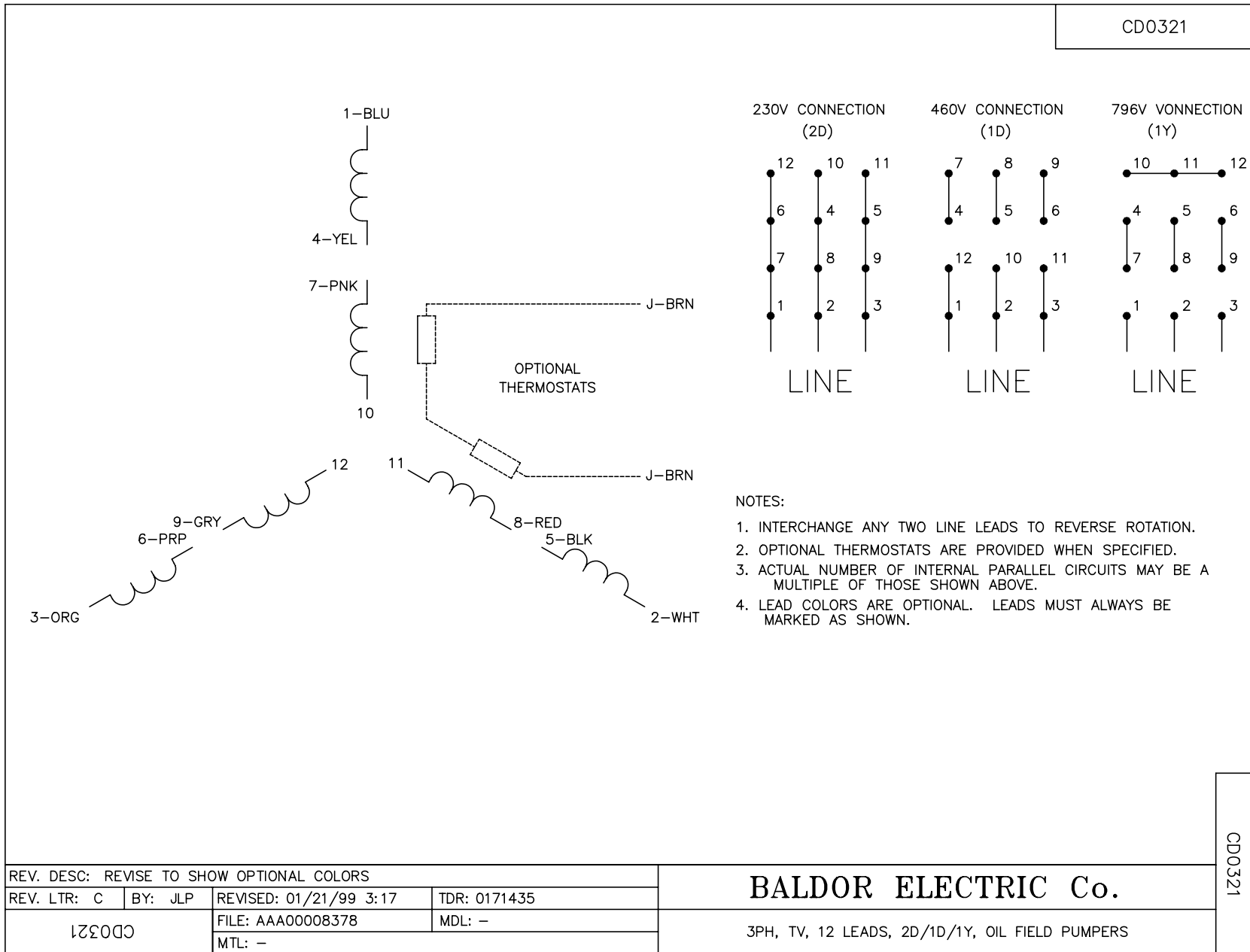
Load Characteristics 460 V, 60 Hz, 20 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 33   | 53   | 66   | 74   | 78   | 81   | 76   |
| Efficiency      | 83   | 87.8 | 88.2 | 87.1 | 85   | 81.9 | 85.8 |
| Speed           | 1183 | 1164 | 1145 | 1123 | 1097 | 1063 | 1107 |
| Line amperes    | 17.1 | 19.9 | 24   | 28.9 | 35.4 | 43.1 | 32.8 |

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







Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>