



Product Information Packet

ECR9304T

30HP,1770RPM,3PH,60HZ,286T,1072M,TEFC,F1

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | J | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 10WGG351 | CD Diagram: | CD0180 | Mfg Plant: | |
| Mech. Spec: | 10J907 | Layout: | 10LYJ907 | Poles: | 04 | Created Date: | 01-08-2015 |
| Base: | RG | Eff. Date: | 08-21-2018 | Leads: | 9#10 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------------|
| Catalog Number: | ECR9304T | Heater Indicator: | No Heater |
| Enclosure: | TEFC | Insulation Class: | F |
| Frame: | 286T | Inverter Code: | Inverter Duty |
| Frame Material: | Iron | KVA Code: | G |
| Output @ Frequency: | 30.000 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 10 AWG |
| | 230.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| XP Class and Group: | None | Motor Lead Termination: | Flying Leads |
| XP Division: | Not Applicable | Motor Type: | 1072M |
| Agency Approvals: | UR | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 81 |
| | CSA | Product Family: | Super-E Chemical Processing |
| Auxiliary Box: | No Auxiliary Box | Pulley End Bearing Type: | Ball |
| Auxiliary Box Lead Termination: | None | Pulley Face Code: | Standard |
| Base Indicator: | Rigid | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Constant Torque Speed Range: | 6 | Shaft Ground Indicator: | No Shaft Grounding |
| Current @ Voltage: | 37.000 A @ 460.0 V | Shaft Rotation: | Reversible |
| | 74.000 A @ 230.0 V | Shaft Slinger Indicator: | Shaft Slinger |
| Design Code: | A | Speed Code: | Single Speed |
| Drip Cover: | No Drip Cover | Motor Standards: | NEMA |
| Duty Rating: | CONT | Starting Method: | Direct on line |
| Electrically Isolated Bearing: | Not Electrically Isolated | Thermal Device - Bearing: | NONE (OLD) |
| Feedback Device: | NO FEEDBACK | Thermal Device - Winding: | None |
| Front Face Code: | Standard | Vibration Sensor Indicator: | No Vibration Sensor |
| Front Shaft Indicator: | None | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

Nameplate NP3293

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|-----------|--------------|----------|--------|------|--------------|-----------|------------|------------|
| CAT.NO. | ECR9304T | | P/N | | | ENCLOSURE | TEFC | |
| SPEC. | 10J907Z351G1 | | CC | 010A | FRAME | 286T | S/N | |
| HP | 30 | | CLASS | F | HZ | 60 | DES | A |
| RPM | 1770 | RPM MAX | 2700 | | PH | 3 | KVA-CODE | G |
| VOLT | 230/460 | | | | I.P. | 55 | | |
| AMP | 74/37 | | SER.F. | 1.25 | PF | 81 | ODE BRG | 6311 |
| RATING | 40C AMB-CONT | | | | NEMA-NOM-EFF | 93.6 | GREASE | POLYREX EM |
| HTR-VOLTS | | HTR-AMPS | | | HTR-WATTS | | INV.TYPE | |
| | SFA 92/46 | | | | C HP FR | 60 | C HP TO | 90 |
| | | | | | CT HZ FROM | 6 | CT HZ TO | 60 |
| | | | | | MOTOR WEIGHT | 465 | VT HZ FROM | 6 |
| | | | | | | | VT HZ TO | 60 |

| Parts List | | |
|--------------|--|----------|
| Part Number | Description | Quantity |
| SA292169 | SA 10J907Z351G1 | 1.000 EA |
| RA278286 | RA 10J907Z351G1 | 1.000 EA |
| 09FN3001D02 | EXTERNAL FAN, PLASTIC | 1.000 EA |
| 10CB1000A09P | CONDUIT BOX, MACH W/EPOXY PRIMER | 1.000 EA |
| 09GS1010 | GASKET, DWG, LEADWIRE SEPERATOR | 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 |
| 10XN2520K06 | 1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P | 1.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 1.000 EA |
| 10XN3816K28 | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HW4600B41 | V-RING SLINGER 2.125 X 2.880 X 0.280 | 1.000 EA |
| HA4017A11 | 1/8 X 2.75 GREASE EXT (F/S) | 1.000 EA |
| HA4017A02 | .125X2.50 GREASER EXTENS.F/S | 1.000 EA |
| HW4019A01 | PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING | 1.000 EA |
| HW4600B67 | V-RING SLINGER 1.770 X 2.170 X .28 VITON | 1.000 EA |
| HW5100A13 | W4627-047 WVY WSHER | 1.000 EA |
| 10XN3118K36 | 5/16-18 X 2.25" HEX HD, GRADE 5 | 4.000 EA |
| 10XN3118K44 | 5/16-18 X 2.75" HEX HD, GRADE 5 | 4.000 EA |
| 10EP1108A01P | PULLEY ENDPLATE - 312 BRG.- ENCL., EPOXY | 1.000 EA |
| 10XN3816K28 | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 10FH1007A24P | FAN COVER, MACH W/EPOXY PRIMER | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| 10XN3118K20 | 5/16-18 X 1 1/4 GRADE 5 STEEL ZC PLATED | 3.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 3.000 EA |
| 10CB1503A01P | CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR | 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 |
| MJ5001A27 | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL | 0.031 QT |
| MJ5001A14 | DYNAPRO SEALANT, CP MTR VC#2508050 (603 | 0.026 EA |
| MJ5002A01 | SILICON RUBBER SEALANT, 732CL 10.3 OZ TU | 0.025 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| 10EP1110A06PP44 | FREP, MACH W/PRIMER & MG1025G96 | 1.000 EA |
| HW4500A21 | 1618BALEMITE FITTING 825 UNIVERSAL | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 0.130 LB |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| HW2500A25 | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 EA |
| 51XB1214A20 | 12-14X1.25 HXWSSLD SERTYB | 1.000 EA |
| MG1025G96 | WILKOFAS SG, 779.7048, MOUSE GRAY #7048 | 0.070 GA |

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|-------------|--|----------|
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0181 | CONNECTION LABEL | 1.000 EA |
| NP3293 | SS CRUSHER DUTY INV UL CSA-EEV PREM CC | 1.000 EA |
| 10PA1000 | PACKAGING GROUP COMBINED PRINT PK1023A06 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA |

AC Induction Motor Performance Data

Record # 49559 - Typical performance - not guaranteed values

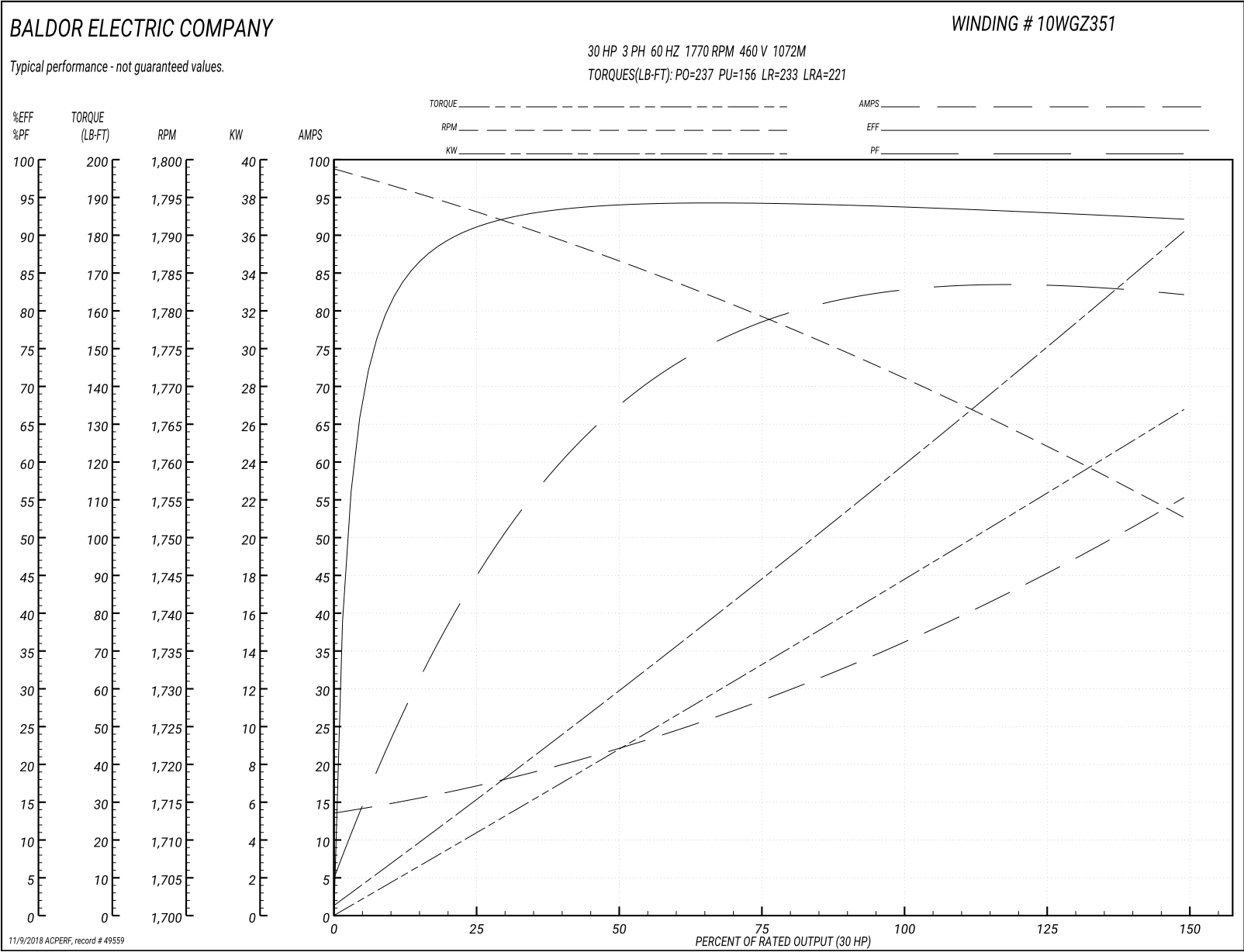
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 10WGZ351-R001 | Type: 1072M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

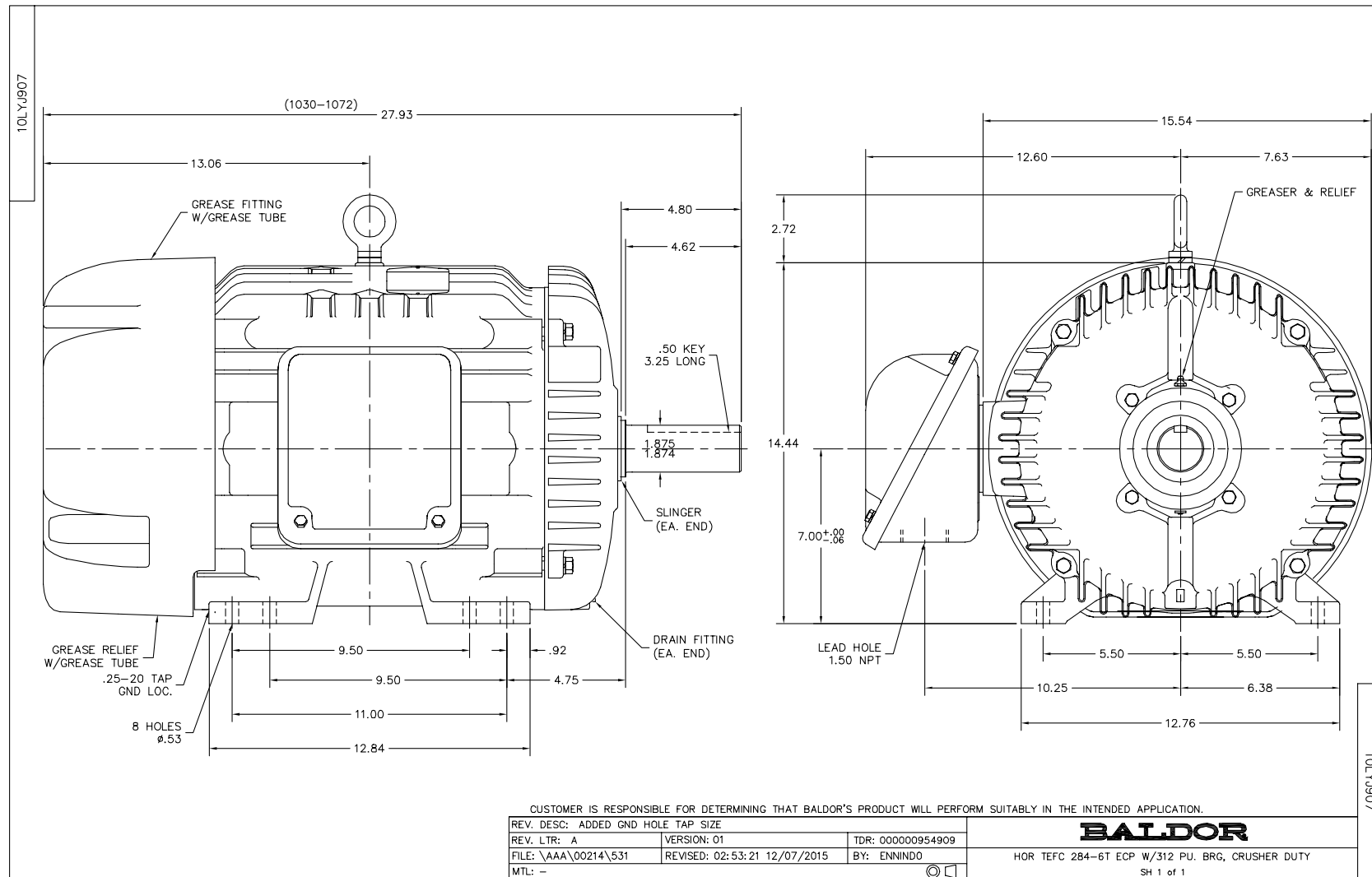
| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|-------------------------|
| Rated Output (HP) | 30 | | | Full Load Torque | 89.2 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 74/37 | | | Breakdown Torque | 237 LB-FT |
| R.P.M. | 1770 | | | Pull-up Torque | 156 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 233 LB-FT |
| NEMA Design Code | A | KVA Code | G | Starting Current | 221 A |
| Service Factor (S.F.) | 1.25 | | | No-load Current | 14.1 A |
| NEMA Nom. Eff. | 93.6 | Power Factor | 81 | Line-line Res. @ 25°C | 0.219 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 63°C |
| S.F. Amps | 92/46 | | | Temp. Rise @ S.F. Load | 87°C |
| | | | | Locked-rotor Power Factor | 34.6 |
| | | | | Rotor inertia | 5.69 LB-FT ² |

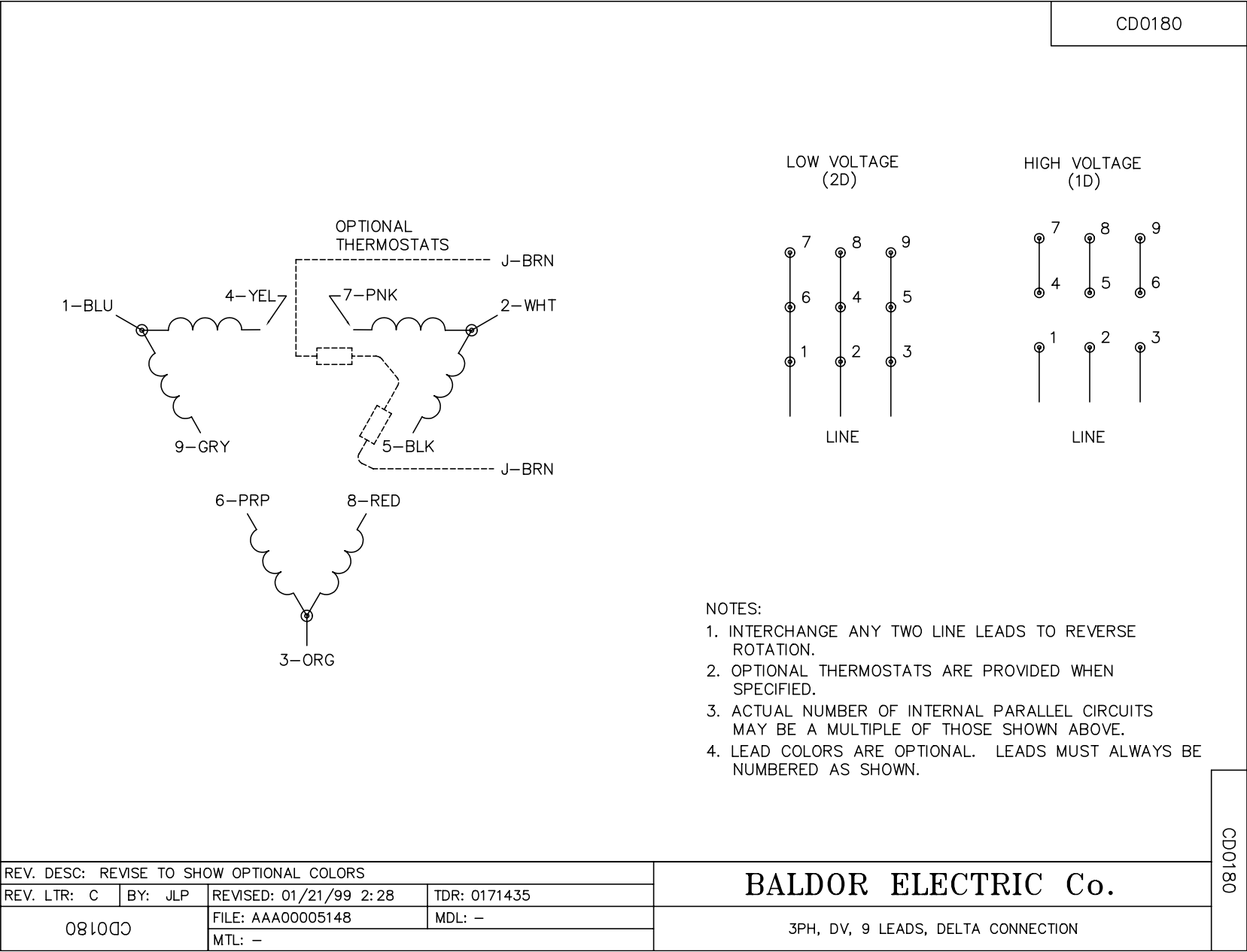
Load Characteristics 460 V, 60 Hz, 30 HP

| | | | | | | | |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
| Power Factor | 48 | 69 | 78 | 81 | 83 | 83 | 83 |
| Efficiency | 90.8 | 93.8 | 94.3 | 93.9 | 93.3 | 92.2 | 93.3 |
| Speed | 1793 | 1786 | 1779 | 1771 | 1763 | 1752 | 1763 |
| Line amperes | 16.5 | 21.9 | 28.7 | 36.9 | 45.5 | 55 | 45.5 |

Performance Graph at 460V, 60Hz, 30.0HP Typical performance - Not guaranteed values







Marketing maintained PDF of MN416:

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