

BALDOR • RELIANCE

Customer information packet

CESSWDM41906T

20HP, 3525RPM, 3PH, 60HZ, 256TC, 3960M, TEFC, F

Class -

Division - Not Applicable

Specifications

| | |
|--------------------------------|--|
| Enclosure | TEFC |
| Frame | 256TC |
| Frame Material | Stainless Steel |
| Frequency | 60.00 Hz |
| Haz Area Division | Not Applicable |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 20.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 3600 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| Agency Approvals | CSA UR |
| Ambient Temperature | 40 °C |
| Auxillary Box | No Auxillary Box |
| Auxillary Box Lead Termination | None |
| Base Indicator | Rigid |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Current @ Voltage | 43.000 A @ 230.0 V 21.500 A @ 460.0 V |
| Design Code | A |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 91.0 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Face Code | Standard |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 21.5 a |
| Insulation Class | F |

Part detail

| | |
|--------------|------------|
| Revision | AS |
| Type | AC |
| Mech. spec. | 39E119 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 39WGX632 |
| Layout | 39LYE119 |
| Eff. date | 08-02-2024 |
| CD Diagram | CD0005 |
| Poles | 02 |
| Leads | 9#10 |
| Proprietary | False |
| Created date | 03-18-2008 |

| | |
|-------------------------------|-------------------------------|
| Inverter Code | Inverter Ready |
| KVA Code | G |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Motor Lead Exit | Ko Box |
| Motor Lead Quantity/Wire Size | 9 @ 10 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3960M |
| Mounting Arrangement | F1 |
| Number of Poles | 2 |
| Overall Length | 24.67 IN |
| Power Factor | 93 |
| Product Family | Wash Down All Stainless Steel |
| Pulley End Bearing Type | Sealed Bearing |
| Pulley Face Code | Standard |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| Service Factor | 1.15 |
| Shaft Diameter | 1.625 IN |
| Shaft Extension Location | Pulley End |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | Shaft Slinger |
| Speed | 3525 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Bearing | None |
| Thermal Device - Winding | None |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

Nameplate

| NP1953D01 | | | | | | | | | |
|---------------------|----------------|-----------------------|-----------|------------|---|--------------|---|--|--|
| CAT.NO. | CESSWDM41906T | | | | | | | | |
| SPEC. | 39E119X632G1 | | | | | | | | |
| HP | 20 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMP | 43/21.5 | | | | | | | | |
| RPM | 3525 | | | | | | | | |
| FRAME | 256TC | | HZ | 60 | | PH | 3 | | |
| SER.F. | 1.00 | CODE | G | DES | A | CLASS | F | | |
| NEMA-NOM-EFF | 91 | PF | 93 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | USABLE AT 208V | N/A | | | | | | |
| DE | 6309 | ODE | 6208 | | | | | | |
| ENCL | TEFC | SN | | | | | | | |
| | 2:1 CT/10:1 VT | | | | | | | | |

Parts list

| Part number | Description | Quantity |
|---------------|--|----------|
| SA169225 | SA 39E119X632G1 | 1.000 ea |
| RA157501 | RA 39E119X632G1 | 1.000 ea |
| 09FN3001C01SP | EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO | 1.000 ea |
| WD1000B17 | T&B CX35TN OR L35P TERMINAL LUG | 1.000 ea |
| 11XW1032S06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| 39EP1901A01 | S.S. FR ENDPLATE, MACH | 1.000 ea |
| HW5100A08 | W3118-035 WVY WSHR (WB) | 1.000 ea |
| HW4606A16 | PROTECH/SEAL (WDE-1575-2125-BG38) | 1.000 ea |
| 39EP1903A01 | S.S. C-FACE PU ENDPLATE, MACH | 1.000 ea |
| 10XN2520S28 | 1/4-20X 1 3/4 HEX HD SS X | 4.000 ea |
| HW4606A15 | PROTECH/SEAL (WDE-1688-2250-BG37) | 1.000 ea |
| HW3100S01 | 3/8-16 X 17.25 S.S. ALL THREAD ROD | 4.000 ea |
| XY3816S12 | 3/8-16 HEX FINISHED NUT SS | 8.000 ea |
| 39FH4004A01 | 304 SS FANCOVER SPUN W/SLOTS & MTG(POLIS | 1.000 ea |
| 10XN2520S08 | SCREW, 1/4-20 X 1/2 HHCS SS | 3.000 ea |
| HW1001S25 | WASHER, 1/4 SPLT LK, STAINLESS STEEL | 3.000 ea |
| 09CB1505A01 | S.S. LIPPED KOBX LID | 1.000 ea |
| 12GS1002 | GASKET, CONDUIT BOX LID, NEOP | 1.000 ea |
| 10XN3118S12 | 5/16-18 X 3/4 HEX HEAD CAP, STAINLESS ST | 2.000 ea |
| HW1001S31 | WASHER, 5/16 SPLT LK, STAINLESS STEEL | 2.000 ea |
| HW2502G25 | #303 SS,SQ KEY 3/8 X 2.880 | 1.000 ea |
| MJ5002A01 | SILICON RUBBER SEALANT, 732CL 10.3 OZ TU | 0.031 ea |
| MJ5002A02 | NON-CORROSIVE SILICONE, DOW 748, 10.3 OZ | 0.031 ea |
| HA5027A01 | HA4066A01 T-DRAIN X2 BAGGED | 1.000 ea |
| HW4032A01 | BLACK DRAIN PLUG FOR WASH DOWN MOTORS | 3.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500bx)4/22 | 1.000 ea |
| LD7020E09 | LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS | 1.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.030 lb |
| HW4032A01 | BLACK DRAIN PLUG FOR WASH DOWN MOTORS | 3.000 ea |
| HW2502F08 | KEY, 5/16 SQ X .875 303 SS | 1.000 ea |
| 40PA1000 | PACKAGING GROUP | 1.000 ea |

| | | |
|------------|--|----------|
| LB1624 | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| FE-0000013 | ZRTG FE ASSEMBLY | 1.000 ea |
| PE-0000003 | ZRTG PE ASSEMBLY | 1.000 ea |

AC Induction Motor Performance Data

Record # 26903

Typical performance - not guaranteed values

| Winding: 39WGX632-R001 | | Type: 3960M | Enclosure: TEFC | |
|------------------------|-----------------|---------------------|--|-------------------------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | |
| Rated Output (HP) | 20 | Full Load Torque | 29.6 LB-FT | |
| Volts | 230/460 | Start Configuration | direct on line | |
| Full Load Amps | 43/21.5 | Breakdown Torque | 114 LB-FT | |
| R.P.M. | 3525 | Pull-up Torque | 35.3 LB-FT | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 51 LB-FT |
| NEMA Design Code | B KVA Code | G | Starting Current | 152 A |
| Service Factor (S.F.) | 1.15 | No-load Current | 4.75 A | |
| NEMA Nom. Eff. | 91 Power Factor | 93 | Line-line Res. @ 25°C | 0.437 Ω |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 75°C |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 97°C |
| | | | Locked-rotor Power Factor | 27 |
| | | | Rotor inertia | 1.53 LB-FT ² |

Load Characteristics 460 V, 60 Hz, 20 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 71 | 88 | 92 | 93 | 93 | 92 | 93 |
| Efficiency | 91 | 93.5 | 93.3 | 92.5 | 91.2 | 89.7 | 91.7 |
| Speed | 3581 | 3562 | 3541 | 3519 | 3492 | 3465 | 3503 |
| Line amperes | 6.84 | 11.2 | 16.2 | 21.5 | 27.6 | 33.8 | 25.2 |

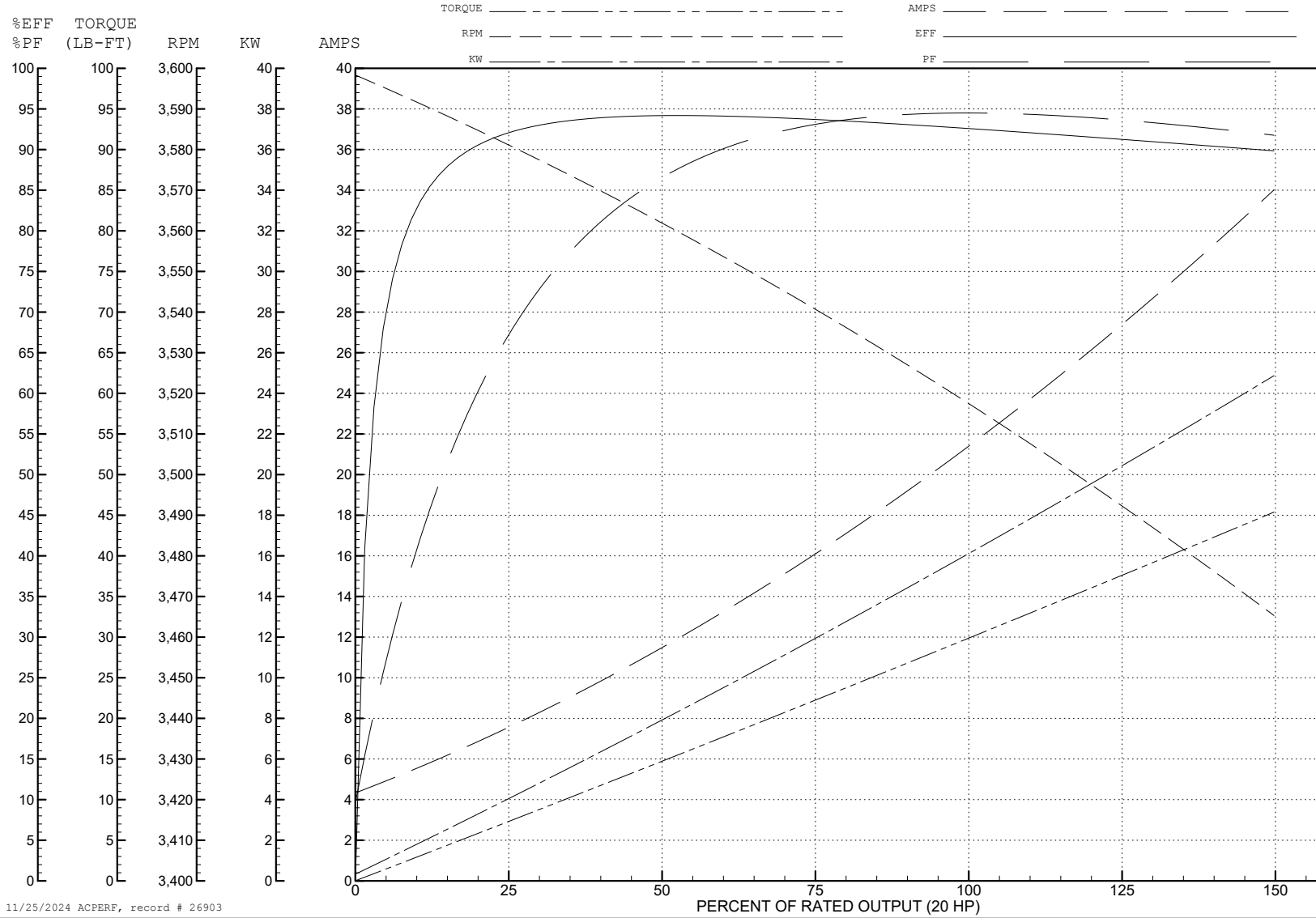
ABB Motors and Mechanical Inc.

WINDING # 39WGX632

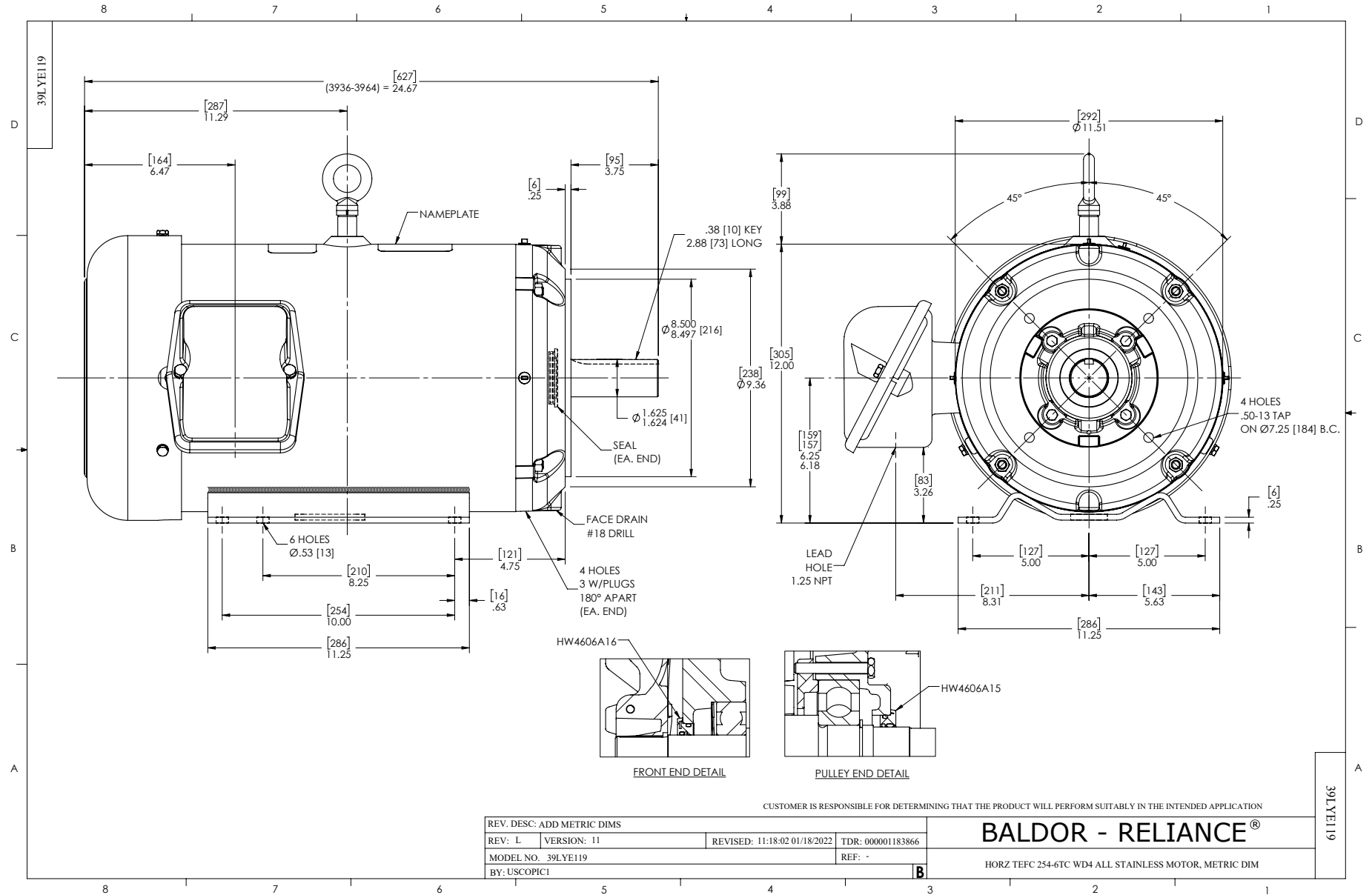
20 HP 3 PH 60 HZ 3525 RPM 460 V 3960M

Typical performance - not guaranteed values.

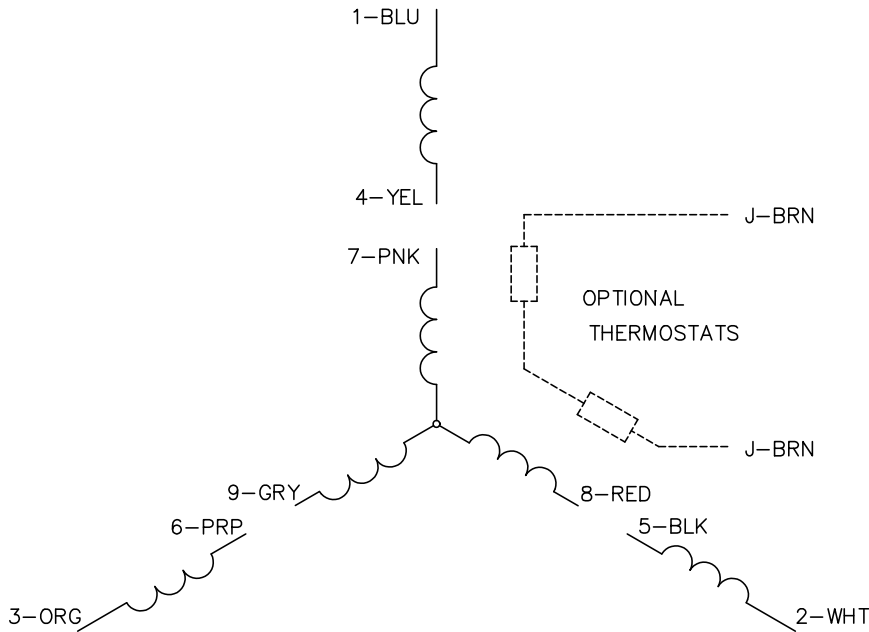
TORQUES (LB-FT): PO=114 PU=35.3 LR=51 LRA=152



11/25/2024 ACPERF, record # 26903



CD0005



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP REVISED: 01/19/99 10:15 TDR: 0171435

500000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS