

BALDOR • RELIANCE

Customer information packet

CEM3558-5

2HP, 1764RPM, 3PH, 60HZ, 56C, 3528M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|---|
| Enclosure | TEFC |
| Frame | 56C |
| Frame Material | Steel |
| Frequency | 60.00 Hz |
| Haz Area Class and Group | None |
| Haz Area Division | Not Applicable |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 2.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 575.0 V @ 60 HZ |
| Agency Approvals | NEMA PREMIUM NEMA_PREMIUM UR CSA EEV |
| 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 | 2.150 A @ 575.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 86.5 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 2.2 a |
| Insulation Class | F |

Part detail

| | |
|--------------|------------|
| Revision | H |
| Type | AC |
| Mech. spec. | 35A012 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 35WGG113 |
| Layout | 35LYA012 |
| Eff. date | 04-29-2024 |
| CD Diagram | CD0006 |
| Poles | 04 |
| Leads | 3#18 |
| Proprietary | False |
| Created date | 09-29-2021 |

| | |
|-------------------------------|---------------------|
| Inverter Code | Not Inverter |
| KVA Code | L |
| Lifting Lugs | No Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Motor Lead Quantity/Wire Size | 3 @ 18 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3528M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 13.23 IN |
| Power Factor | 80 |
| Product Family | General Purpose |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | C-Face |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| Service Factor | 1.15 |
| Shaft Diameter | 0.625 IN |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed | 1764 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

| NP3441L | | | | | | | | | |
|----------------------------------|--------------|-------------|------------|------------|---|-----------|---|--|--|
| CAT.NO. | CEM3558-5 | | | | | | | | |
| SPEC. | 35A012G113G1 | | | | | | | | |
| HP | 2 | | | | | | | | |
| VOLTS | 575 | | | | | | | | |
| AMP | 2.15 | | | | | | | | |
| RPM | 1765 | | | | | | | | |
| FRAME | 56C | | HZ | 60 | | PH | 3 | | |
| SER.F. | 1.15 | CODE | L | DES | B | CL | F | | |
| NEMA-NOM-EFF | 86.5 | PF | 80 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | | | | | | | | |
| DE | 6205 | | ODE | 6203 | | | | | |
| ENCL | TEFC | SN | | | | | | | |
| VPWM INVERTER READY | | | | | | | | | |
| CT6-60H(10:1)VT3-60H(20:1 | | | | | | | | | |
| | SFA 2.56 | | | | | | | | |

Parts list

| Part number | Description | Quantity |
|---------------|--|----------|
| SA398198 | SA 35A012G113G1 | 1.000 ea |
| RA389146 | RA 35A012G113G1 | 1.000 ea |
| 34FN3002B01 | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/ | 1.000 ea |
| NS2512A01 | INSULATOR, CONDUIT BOX X | 1.000 ea |
| 35CB3007 | 35 CB CASTING W/.88 DIA. LEAD HOLE | 1.000 ea |
| 36GS1000SP | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE | 1.000 ea |
| 51XB1016A07 | 10-16 X 7/16 HXWSSLD SERTYB | 2.000 ea |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| 35EP3122K00 | MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG | 1.000 ea |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 ea |
| 35EP3307F00 | MASTER DE,205 BRG,.998SH,#26 DRN | 1.000 ea |
| 51XN1032A20 | 10-32 X 1 1/4 HX WS SL SR | 2.000 ea |
| 51XB1214A16 | 12-14X1.00 HXWSSLD SERTYB | 1.000 ea |
| 35FH4005A32SP | IEC FH NO GRSR W/3 HOLES - PRIMED | 1.000 ea |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 ea |
| 35CB4521GX | CONDUIT BOX LID KIT **ORDER INDIV PARTS | 1.000 ea |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 ea |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 ea |
| HA7000A04 | KEY RETAINER 0.625 DIA SHAFTS | 1.000 ea |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.050 lb |
| HA3100A15 | THRUBOLT 10-32 X 8.375 | 4.000 ea |
| MG1050Y01 | CELEROL BALDOR GOLD *** NLA IN 5 GALLON | 0.017 ga |
| LB1624 | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| NP3441L | ALUM SUPER-E VPWM INVERTER READY UL EEV | 1.000 ea |
| LC0006 | CONNECTION LABEL | 1.000 ea |
| 36PA1000 | PKG GRP, PRINT PK1016A06 | 1.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500bx)4/22 | 1.000 ea |
| FE-0000001 | ZRTG FE ASSEMBLY | 1.000 ea |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 ea |

AC Induction Motor Performance Data

Record # 81982

Typical performance - not guaranteed values

| Winding: 35WGG113-R001 | | Type: 3528M | | Enclosure: TEFC | |
|-------------------------------|------|---------------------|---|----------------------------------|--------------------------|
| Nameplate Data | | | 575 V, 60 Hz: Single Voltage Motor | | |
| Rated Output (HP) | | 2 | Full Load Torque | | 5.95 LB-FT |
| Volts | | 575 | Start Configuration | | direct on line |
| Full Load Amps | | 2.15 | Breakdown Torque | | 23.7 LB-FT |
| R.P.M. | | 1765 | Pull-up Torque | | 14.43 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 17.45 LB-FT |
| NEMA Design Code | B | KVA Code | L | Starting Current | 19.89 A |
| Service Factor (S.F.) | | 1.15 | No-load Current | | 1.39 A |
| NEMA Nom. Eff. | 86.5 | Power Factor | 80 | Line-line Res. @ 25°C | 15 Ω |
| Rating - Duty | | 40C | AMB-CONT | Temp. Rise @ Rated Load | 58°C |
| S.F. Amps | | 2.56 | | Temp. Rise @ S.F. Load | 70°C |
| | | | | Locked-rotor Power Factor | 57 |
| | | | | Rotor inertia | 0.188 lb-ft ² |

Load Characteristics 575 V, 60 Hz, 2 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 34 | 54 | 68 | 76 | 81 | 84 | 79 |
| Efficiency | 77 | 84.7 | 86.6 | 86.3 | 85.3 | 83.7 | 85.7 |
| Speed | 1791 | 1783 | 1775 | 1766 | 1757 | 1745 | 1761 |
| Line amperes | 1.45 | 1.64 | 1.93 | 2.29 | 2.74 | 3.19 | 2.56 |

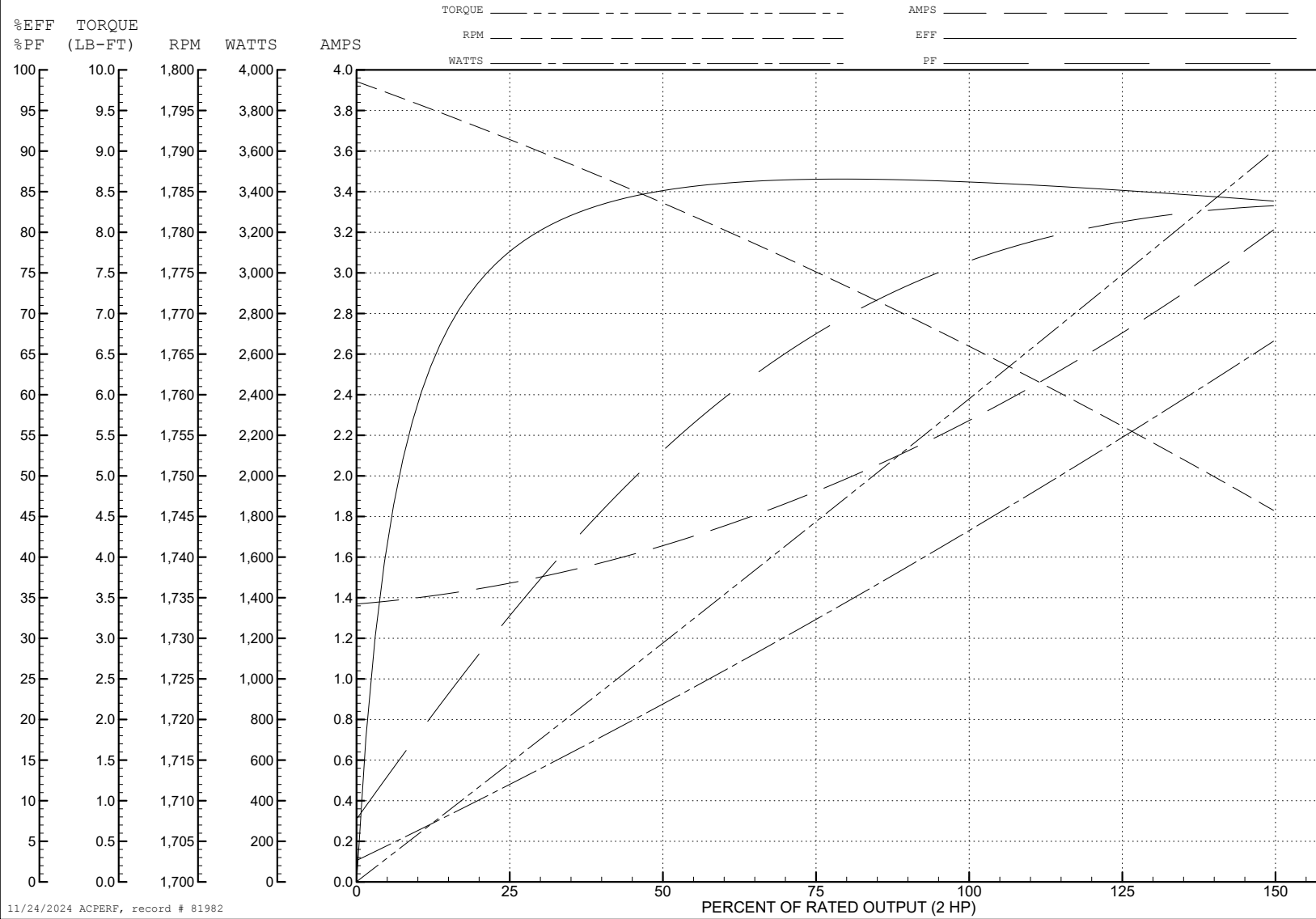
ABB Motors and Mechanical Inc.

WINDING # 35WGG113

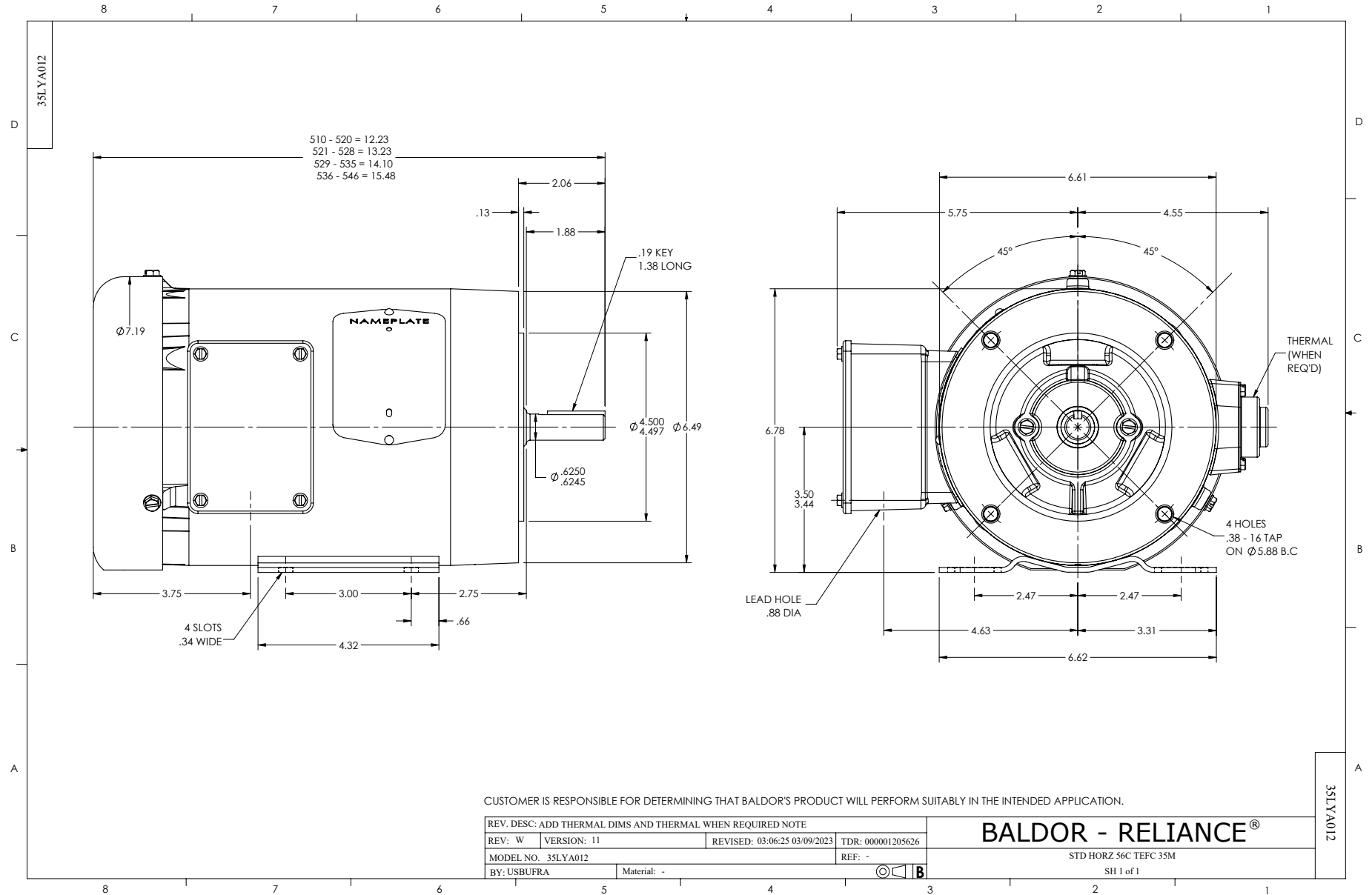
Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1765 RPM 575 V 3528M

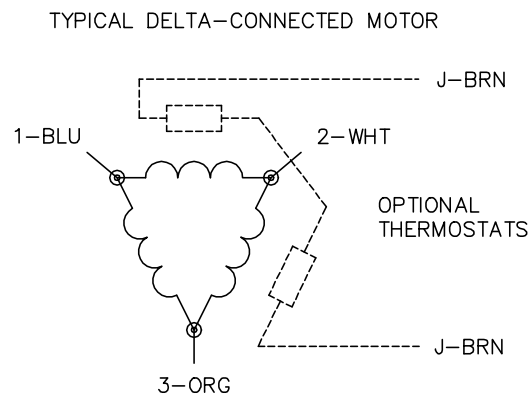
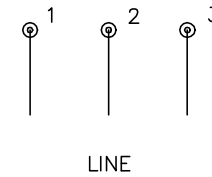
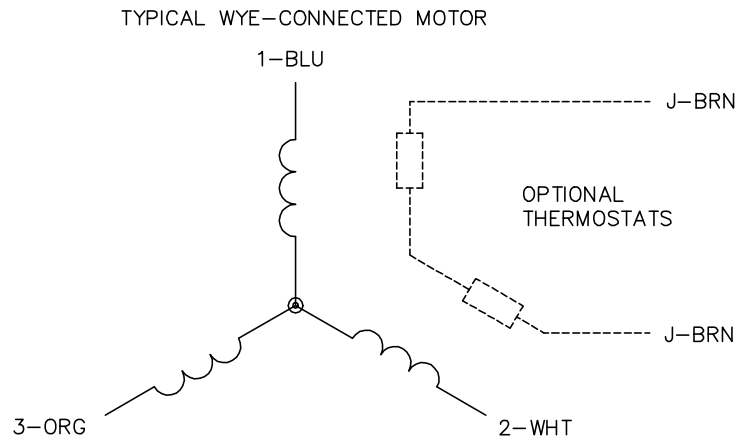
TORQUES (LB-FT): PO=23.7 PU=14.43 LR=17.45 LRA=19.89



11/24/2024 ACPERF, record # 81982



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.

CD0006

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|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: E | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00005\141 | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO |
| MTL: - | © □ | |

BALDOR - RELIANCE®

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

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