

BALDOR® • RELIANCE 

Product Information Packet

VEDM3558

2HP,1755RPM,3PH,60HZ,56C,3528M,TEFC,F1,N

| Part Detail | | | | | | | |
|-------------|---------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | H | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 35WGN909 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 35E4312 | Layout: | 35LYE4312 | Poles: | 04 | Created Date: | 04-08-2016 |
| Base: | N | Eff. Date: | 06-10-2021 | Leads: | 9#18 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number: | VEDM3558 | Heater Indicator: | No Heater |
| Enclosure: | TEFC | Insulation Class: | F |
| Frame: | 56C | Inverter Code: | Inverter Duty |
| Frame Material: | Steel | KVA Code: | L |
| Output @ Frequency: | 2.000 HP @ 60 HZ | Lifting Lugs: | No 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 @ 18 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: | 3528M |
| Agency Approvals: | UR | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 75 |
| | CCSA US | Product Family: | Dirty Duty Plus |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Sealed Bearing |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | C-Face |
| Base Indicator: | No Mounting | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | RoHS Status: | ROHS COMPLIANT |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Constant Torque Speed Range: | 6 | Shaft Extension Location: | Pulley End |
| Current @ Voltage: | 2.900 A @ 460.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| | 5.800 A @ 230.0 V | Shaft Rotation: | Reversible |
| | 6.600 A @ 208.0 V | Shaft Slinger Indicator: | No Slinger |
| Design Code: | B | 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 |
| 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 NP3504E | | | | | | | | | | |
|-------------------|---------------|--|--|----------|---|------------|-------|------|----------|----|
| CAT NO | VEDM3558 | | | | | | | | | |
| SPEC. | 35E4312N909G1 | | | | | | | ENCL | TEFC | |
| FRAME | 56C | | | HP | | 2 | | | | |
| VOLTS | 230/460 | | | | | | | | | |
| FLA | 5.8/2.9 | | | | | I.P. | 56 | | | |
| RPM | 1755 | | | RPM MAX | | 2700 | | | | |
| HZ | 60 | | | PH | 3 | | CLASS | F | | |
| SER.F. | 1.15 | | | DES | B | | CC | 010A | | |
| NEMA-NOM-EFF | 86.5 | | | | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| DE BRG | 6205 | | | ODE BRG | | 6203 | | | | |
| GREASE | POLYREX EM | | | | | | | | | |
| C HP FR | 60 | | | C HP TO | | 90 | | | | |
| CT HZ FROM | 6 | | | CT HZ TO | | 60 | | | | |
| SER.NO | | | | | | | | | | |
| | 50C AT 1.0 SF | | | | | | | | | |
| | | | | | | VT HZ FROM | 6 | | VT HZ TO | 60 |

| Parts List | | |
|----------------|--|----------|
| Part Number | Description | Quantity |
| SA319741 | SA 35E4312N909G1 | 1.000 EA |
| RA307450 | RA 35E4312N909G1 | 1.000 EA |
| NS2512A01 | INSULATOR, CONDUIT BOX X | 1.000 EA |
| 35CB1001A01E | SPL CONDUIT BOX, MACHINED (E-COAT) | 1.000 EA |
| 35GS1022A02 | GASKET BOX .06 THK NEOP BLK HDN 30-40 DU | 1.000 EA |
| 51XB1016A08 | 10-16X 1/2HXWSSLD SERTYB | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW3001B01 | BRASS CUP WASHER, FOR #10 SCREW | 1.000 EA |
| 35EP1100F12EP5 | FRONT TEFC 203 BRG W/ SEAL | 1.000 EA |
| HW4606A01 | JM CLIPPER/SEAL (WDE-0667-1064-BH49) | 1.000 EA |
| HW4500S33 | 1/8 NPT STAINLESS #304 SS PLUG | 3.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 EA |
| 35EP1300A113E | PUEP ENCL 205 BRG F/SEAL, (4).125 NPT | 1.000 EA |
| HW4500S33 | 1/8 NPT STAINLESS #304 SS PLUG | 3.000 EA |
| HW4606A02 | JM CLIPPER/SEAL (LWE-0938-1624-AL23) | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| 12XN1032S20 | 10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL | 2.000 EA |
| 35FH4005A01EP5 | IEC FH NO GREASER | 1.000 EA |
| 10XN1032S08 | 10-32X1/2 HEX HEAD S STL | 3.000 EA |
| 35CB4516E | CONDUIT BOX LID, E-COAT | 1.000 EA |
| 36GS1002 | GASKET, 1/16" NEOPRENE CONDUIT BOX LID | 1.000 EA |
| 59XW0832S07 | TAPTITE II,HEX WSHR UNSLTD SER,410 S.S., | 4.000 EA |
| HW2502D13 | SS KEY, 3/16 SQ X 1.375 | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| HA7000A04 | KEY RETAINER 0.625 DIA SHAFTS | 1.000 EA |
| MJ5001A02 | 732 CL SEALANT 3 OZ DIXIE BEARING 289100 | 0.001 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| LB1164 | LABEL,WARNING AND DRAIN | 1.000 EA |
| MJ5001A23 | P.D. GEORGE B-276 AIR DRY VARNISH | 0.001 GA |
| LB1000 | LABEL, DIRTY DUTY | 1.000 EA |
| WD1000D21 | TRM,T&B #B71M,RING,18-14,.25,NON-INSL | 9.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |
| MG1500Y02 | WILKOPON PRIMER YELLOW | 0.010 GA |
| MG1025L01 | WILKOFASD FD, 786.04, BLACK | 0.010 GA |
| 51XB1214A16 | 12-14X1.00 HXWSSLD SERTYB | 1.000 EA |
| 35FN3002A05SP | EXFN, PLASTIC, 6.376 OD, .638 ID | 1.000 EA |
| HA3100S07 | THRUBOLT 10-32 X 8.375 SS | 4.000 EA |
| LC0005 | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING | 1.000 EA |
| NP3504E | SS DIRTY DUTY PLUS INV UL CSA-C US EEV | 1.000 EA |
| 36PA1000 | PKG GRP, PRINT PK1016A06 | 1.000 EA |
| PK3082 | STYROFOAM CRADLE | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (2100/bx) 4/22 | 1.000 EA |

AC Induction Motor Performance Data

Record # 55769

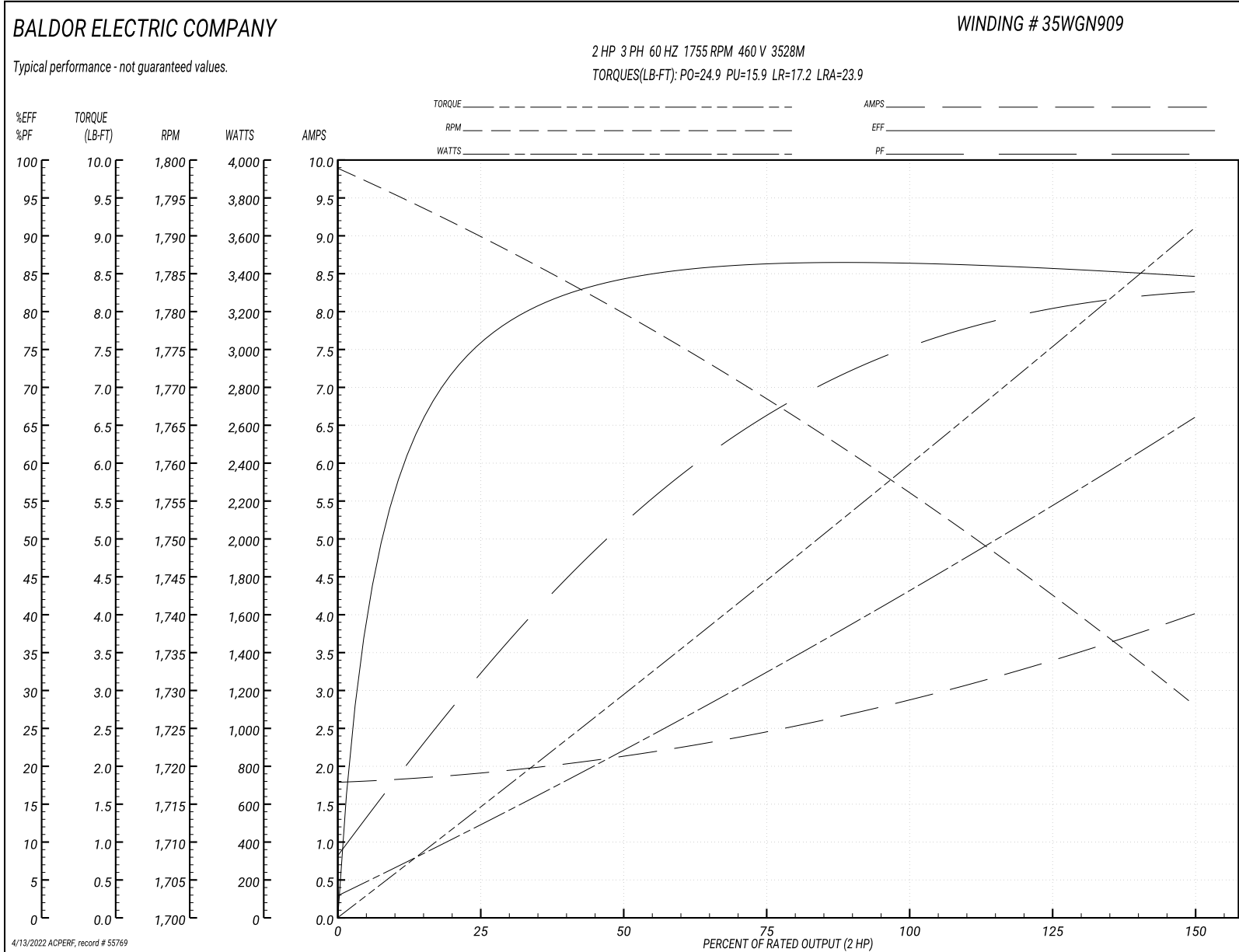
Typical performance - not guaranteed values

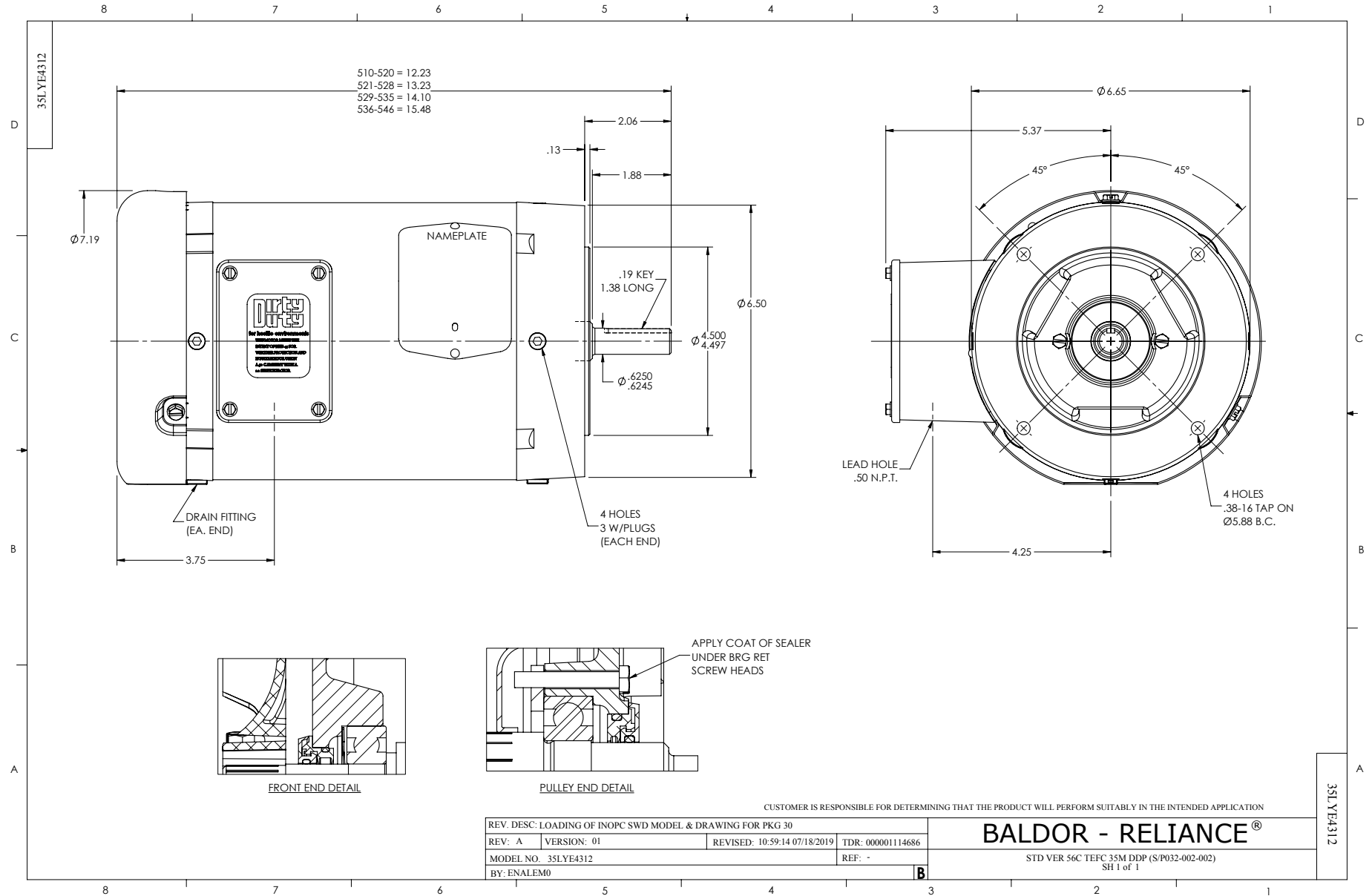
| Winding: 35WGN909-R039 | | Type: 3528M | | Enclosure: TEFC | |
|-------------------------------|-------------------|----------------------------|--|------------------------------|----------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 2 | Full Load Torque | 5.985 LB-FT | | |
| Volts | 230/460 | Start Configuration | direct on line | | |
| Full Load Amps | 5.8/2.9 | Breakdown Torque | 24.9 LB-FT | | |
| R.P.M. | 1755 | Pull-up Torque | 15.9 LB-FT | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 17.2 LB-FT | |
| NEMA Design Code | B KVA Code | L | Starting Current | 23.9 A | |
| Service Factor (S.F.) | 1.15 | | No-load Current | 1.81 A | |
| NEMA Nom. Eff. | 86.5 | Power Factor | 75 | Line-line Res. @ 25°C | 8.1641 Ω |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 65°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 77°C | |
| | | | Locked-rotor Power Factor | 52.4 | |
| | | | Rotor inertia | 0.165 LB-FT ² | |

Load Characteristics 460 V, 60 Hz, 2 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 33 | 53 | 66 | 75 | 80 | 83 | 78 |
| Efficiency | 75.7 | 84.1 | 86.3 | 86.5 | 85.9 | 84.6 | 86.1 |
| Speed | 1790 | 1779.4 | 1768.5 | 1756.1 | 1742.7 | 1727.9 | 1748 |
| Line amperes | 1.89 | 2.11 | 2.46 | 2.91 | 3.4 | 4 | 3.2 |

Performance Graph at 460V, 60Hz, 2.0HP Typical performance - Not guaranteed values

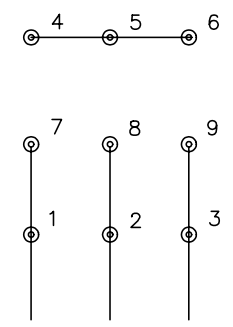




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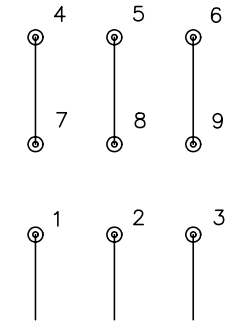


LOW VOLTAGE
(2Y)



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.

| | | | |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 90000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005