



Customer information packet

EBM3116T

1HP, 1760RPM, 3PH, 60HZ, 143T, 3520M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|---|
| Enclosure | OPEN |
| Frame | 143T |
| 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 | 1.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| Agency Approvals | CURUSEEV NEMA PREMIUM |
| 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 | 1.630 A @ 460.0 V 3.200 A @ 208.0 V 3.260 A @ 230.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 85.5 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 1.6 a |

Part detail

| | |
|--------------|------------|
| Revision | E |
| Type | AC |
| Mech. spec. | 35BB021 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 35WGG004 |
| Layout | 35LYBB021 |
| Eff. date | 06-07-2024 |
| CD Diagram | CD0005 |
| Poles | 04 |
| Leads | 9#18 |
| Proprietary | False |
| Created date | 03-11-2022 |

| | |
|--------------------------------------|---------------------|
| Insulation Class | F |
| Inverter Code | Inverter Ready |
| KVA Code | N |
| Lifting Lugs | No Lifting Lugs |
| Locked Bearing Indicator | No Locked Bearing |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3520M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 15.37 IN |
| Power Factor | 67 |
| Product Family | General Purpose |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Standard |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| Service Factor | 1.15 |
| Shaft Diameter | 0.875 IN |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed | 1760 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

| NP1259L | | | | | | | | | |
|---------------------|---------------|-------------|------------|------------|---|-----------|---|--|--|
| CAT.NO. | EBM3116T | | | | | | | | |
| SPEC. | 35BB021G004G1 | | | | | | | | |
| HP | 1 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMP | 3.26/1.63 | | | | | | | | |
| RPM | 1760 | | | | | | | | |
| FRAME | 143T | | HZ | 60 | | PH | 3 | | |
| SER.F. | 1.15 | CODE | N | DES | B | CL | F | | |
| NEMA-NOM-EFF | 85.5 | PF | 67 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | | | | | | | | |
| DE | 6205 | | ODE | 6203 | | | | | |
| ENCL | OPEN | SN | | | | | | | |
| | SFA 3.52/1.76 | | | | | | | | |

Parts list

| Part number | Description | Quantity |
|-------------|--|----------|
| SA409259 | SA 35BB021G004G1 | 1.000 ea |
| RA400804 | RA 35BB021G004G1 | 1.000 ea |
| 34FN3002B01 | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/ | 1.000 ea |
| NS2512A01 | INSULATOR, CONDUIT BOX X | 1.000 ea |
| 35CB3009 | 35 CB W/1.09 DIA. LEAD HOLE @ 6: | 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 |
| 35EP3900A02 | SPL FACE MTD FR EP-OPEN-W/STEARNS BRAKE | 1.000 ea |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 ea |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 ea |
| 35EP3210A00 | MASTER DE,205 BRG,1.000SH,GRSR | 1.000 ea |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 ea |
| XY1032A02 | 10-32 HEX NUT DIRECTIONAL SERRATION | 4.000 ea |
| HW2501D10 | KEY, 3/16 SQ X 1.000 | 1.000 ea |
| 35CB4521 | 35 LIPPED CB LID (GALV & PHOSPH) | 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 |
| HA7000A01 | KEY RETAINER 7/8" DIA SHAFT | 1.000 ea |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.050 lb |
| 84XN3816J28 | HEX SOC HD, 3/8-16 X 1.75 LONG | 2.000 ea |
| MG1050Y01 | CELEROL BALDOR GOLD *** NLA IN 5 GALLON | 0.017 ga |
| HA3100A15 | THRUBOLT 10-32 X 8.375 | 4.000 ea |
| 76BK2100BQF | 1-056-021-00-BQF BRAKE TDR# 79345 | 1.000 ea |
| LC0005E01 | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 ea |
| NP1259L | ALUM SUPER-E UL CC NEMA PREMIUM A60 | 1.000 ea |
| 36PA1000 | PKG GRP, PRINT PK1016A06 | 1.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500bx)4/22 | 1.000 ea |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 ea |

AC Induction Motor Performance Data

Record # 86927

Typical performance - not guaranteed values

| Winding: 35WGG004-R007 | | Type: 3520M | | Enclosure: OPEN | | |
|------------------------|-------------------|---------------------------|--|-----------------|--|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | | |
| Rated Output (HP) | 1 | Full Load Torque | 2.97 LB-FT | | | |
| Volts | 230/460 | Start Configuration | direct on line | | | |
| Full Load Amps | 3.26/1.63 | Breakdown Torque | 13.68 LB-FT | | | |
| R.P.M. | 1760 | Pull-up Torque | 7.85 LB-FT | | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 9.01 LB-FT | | |
| NEMA Design Code | B KVA Code | N | Starting Current | 14.13 A | | |
| Service Factor (S.F.) | 1.15 | No-load Current | 1.08 A | | | |
| NEMA Nom. Eff. | 85.5 Power Factor | 67 | Line-line Res. @ 25°C | 16.9 Ω | | |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 24°C | | | |
| S.F. Amps | 3.52/1.76 | Temp. Rise @ S.F. Load | 27°C | | | |
| | | Locked-rotor Power Factor | 61.5 | | | |
| | | Rotor inertia | 0.144 lb-ft ² | | | |

Load Characteristics 460 V, 60 Hz, 1 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 30 | 47 | 60 | 69 | 76 | 79 | 73 |
| Efficiency | 72.1 | 81.7 | 84.7 | 85.7 | 85.5 | 84.7 | 85.6 |
| Speed | 1791 | 1784 | 1776 | 1768 | 1759 | 1750 | 1763 |
| Line amperes | 1.11 | 1.22 | 1.38 | 1.59 | 1.82 | 2.09 | 1.73 |

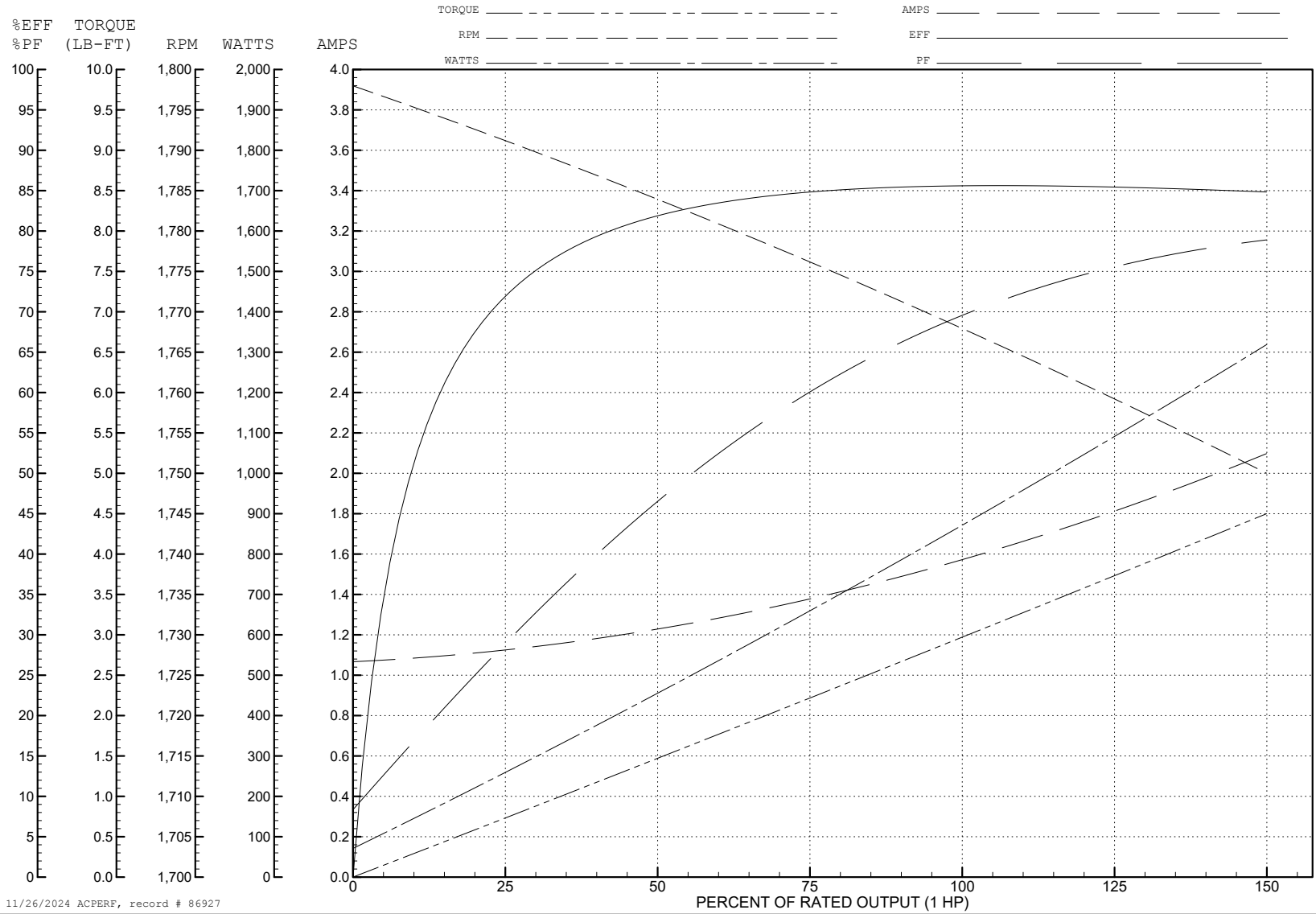
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

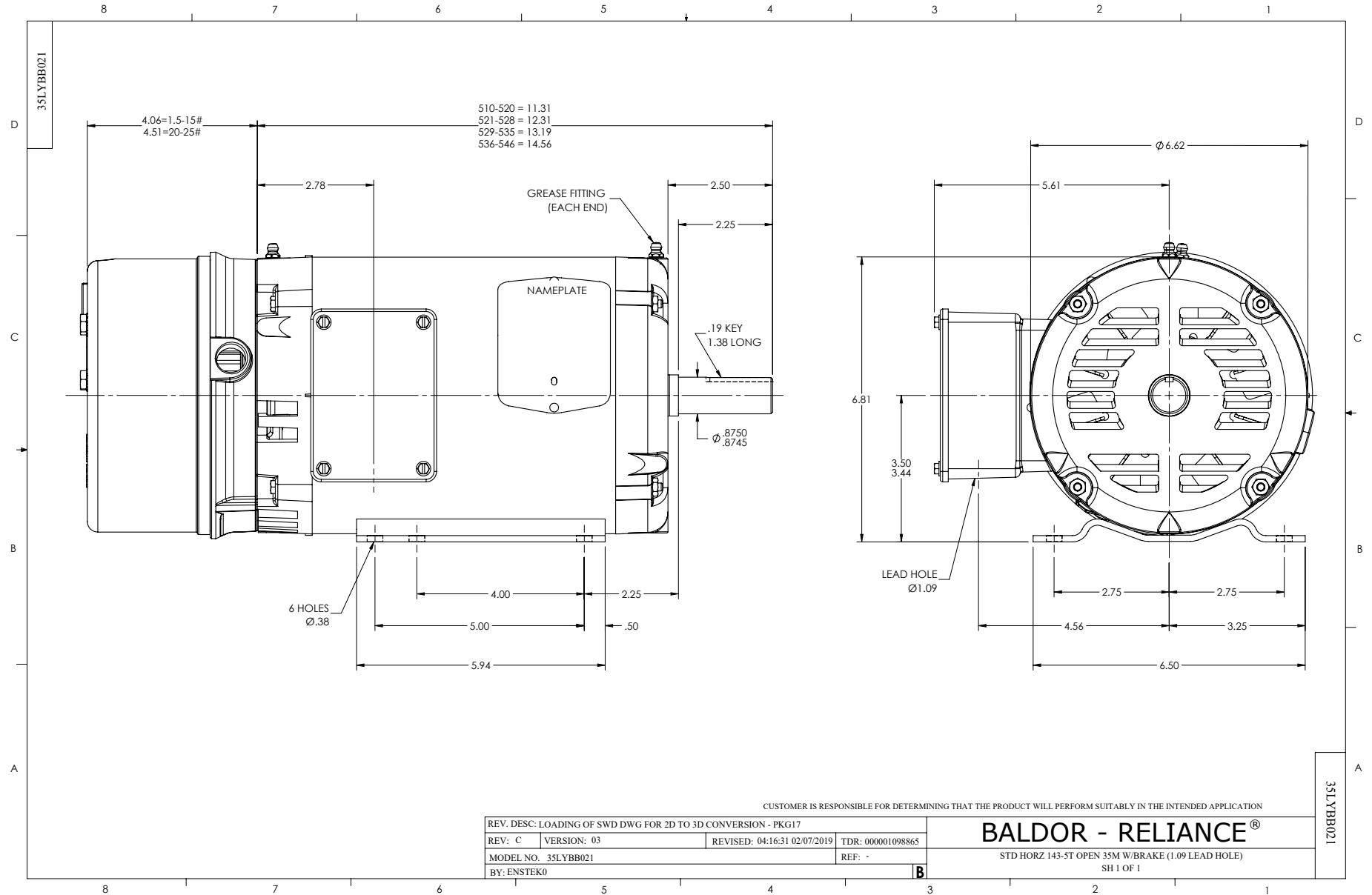
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1760 RPM 460 V 3520M

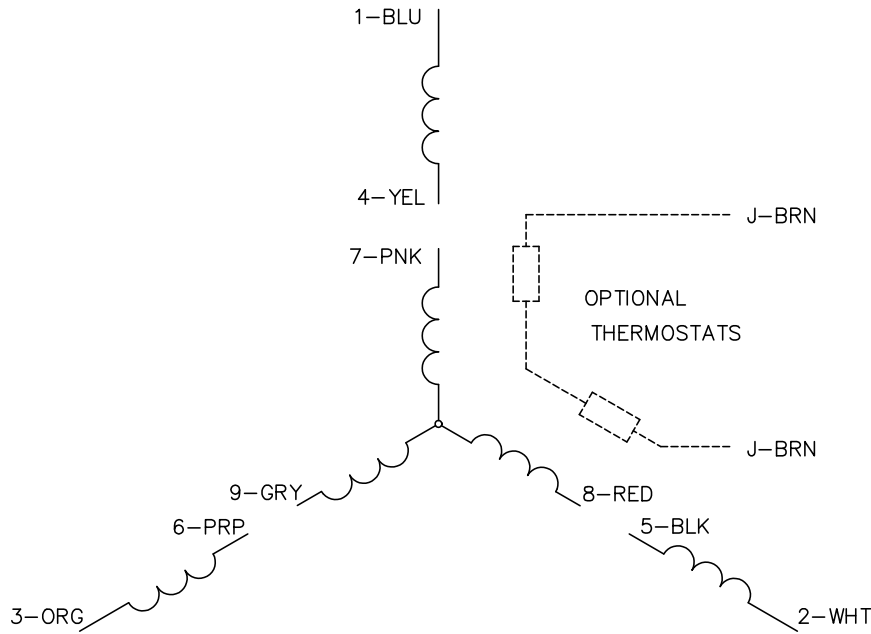
TORQUES (LB-FT): PO=13.68 PU=7.85 LR=9.01 LRA=14.13



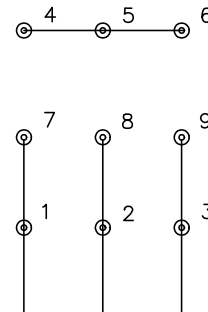
11/26/2024 ACPERF, record # 86927



CD0005

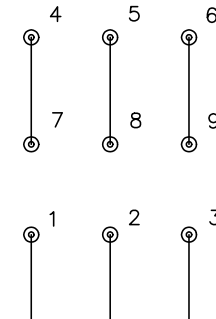


LOW VOLTAGE
(2Y)



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 |
| S00000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS