

BALDOR • RELIANCE

Customer information packet

IDVSM3770T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 0738M, TEFC

Class - None

Division - Not Applicable

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Specifications

| | |
|--------------------------------|---|
| Enclosure | TEFC |
| Frame | 213TC |
| Frame Material | Iron |
| Frequency | 60.00 Hz |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 7.500 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| XP Class and Group | None |
| XP Division | Not Applicable |
| 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 | 19.000 A @ 230.0 V 20.000 A @ 208.0 V 9.500 A @ 460.0 V |
| Design Code | A |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 91.7 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Shaft Indicator | No Key Or Flat |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 9.5 a |

Part detail

| | |
|--------------|------------|
| Revision | - |
| Type | AC |
| Mech. spec. | 07M288 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 07WGT510 |
| Layout | 07LYM288 |
| Eff. date | 02-18-2021 |
| CD Diagram | CD0005 |
| Poles | 04 |
| Leads | 9#14 |
| Proprietary | False |
| Created date | 01-28-2021 |

| | |
|-------------------------------|----------------------------|
| Insulation Class | F |
| Inverter Code | Inverter Duty |
| KVA Code | J |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Max Speed | 4000 rpm |
| Motor Lead Quantity/Wire Size | 9 @ 14 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 0738M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 24.59 IN |
| Power Factor | 81 |
| Product Family | General Purpose |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | C-Face |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| RoHS Status | ROHS NON-COMPLIANT |
| Service Factor | 1.00 |
| Shaft Diameter | 1.375 IN |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed | 1770 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Bearing | None |
| Thermal Device - Winding | Normally Closed Thermostat |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

Nameplate

| NP3301L | | | |
|---------------------|----------------|----------------|------------------|
| CAT NO | IDVSM3770T | | |
| SPEC. | 07M288T510G1 | | |
| FRAME | 213TC | HP | 7.5 TE |
| VOLTS | 230/460 | | |
| MAG CUR | 8.6/4.3 | FLA | 19/9.5 |
| RPM | 1770 | RPM MAX | 4000 |
| HZ | 60 | PH | 3 CLASS F |
| SER.F. | 1.00 | SL HZ | 1 |
| NEMA-NOM-EFF | 91.7 | WK2 | 0.934 |
| RATING | 40C AMB-CONT | | |
| DE BRG | 6307 | ODE BRG | 6206 |
| CC | 010A SN | | |
| | 1.5:1 CHP PWM | | |

Parts list

| Part number | Description | Quantity |
|--------------|---|----------|
| SA390710 | SA 07M288T510G1 | 1.000 ea |
| RA381168 | RA 07M288T510G1 | 1.000 ea |
| 37FN3002C01 | EXFN, PLASTIC, 6.00 OD, 1.155 ID | 1.000 ea |
| HW3201A05 | 3/8-16 EYEBOLT | 1.000 ea |
| 09CB3002SP | CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30 | 1.000 ea |
| 09GS1000 | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE | 1.000 ea |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 ea |
| 59XW2520G07 | .25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN | 1.000 ea |
| 07EP1901A36 | FRONT 206 BRG,GRSR,REL,#18 DRAIN | 1.000 ea |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 ea |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 ea |
| HW5100A06 | W2420-025 WVY WSHR (WB) | 1.000 ea |
| 37PE1300A10 | PUEP ASSEMBLY FOR ROUTING | 1.000 ea |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 ea |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 ea |
| 10XN2520A30 | HEX HD CAP SCREW-STD THD-.25 X 20 THD PE | 4.000 ea |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 ea |
| XY3118A12 | 5/16-18 HEX NUT DIRECTIONAL SERRATION | 4.000 ea |
| 07FH1002A24 | C-FACE FH W/ 206 BRG. GR SR, REL & STD DR | 1.000 ea |
| WD4100A02 | DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL | 1.000 ea |
| 10XN3118A52 | 5/16-18 X 3-1/4 HEX HEAD CAP SCR,GR.5,Z/ | 4.000 ea |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 ea |
| HA1103A13 | #4 X 4 SCREEN FOR FAN CVR 07FH1002 (MR21 | 1.000 ea |
| 13XT0832A07 | 8-32X7/16 TYP 23 PAN HD SLT DX | 4.000 ea |
| HA6059A05 | ADAPTER FOR 8.50" RABBET TO 4.50" RABBET | 1.000 ea |
| 84XN5013J16S | 1/2-13 X 1 LOW HEAD HEX SOC HD, GRADE 8 | 4.000 ea |
| HA6881 | BEI HS35 THRU SHAFT ENCODER PROTECTIVE C | 1.000 ea |
| 10XN3816A10 | 3/8-16 X 5/8 HEX HD CAP SCREW | 3.000 ea |
| 09CB3501SP | CONDUIT BOX LID FOR 09CB3001 & 09CB3002 | 1.000 ea |
| 09GS1013SP | GS FOR 09CB3501, 12CB1500 & 12CB1503 LID | 1.000 ea |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 ea |

| | | |
|-------------|--|----------|
| HW2501F21 | KEY, 5/16 SQ X 2.375 | 1.000 ea |
| HA7000A02 | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA | 1.000 ea |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 ea |
| LB1624 | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.050 lb |
| HA3104A32 | THRUBOLT- 5/16-18 X12.750 | 4.000 ea |
| 51XB1214A20 | 12-14X1.25 HXWSSLD SERTYB | 1.000 ea |
| MG1025N19 | MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G, | 0.036 ga |
| LC0145B01 | CONNECTION LABEL | 1.000 ea |
| NP3301L | SS INV UL CSA CC (W/OUT DESIGN FIELD) | 1.000 ea |
| 07PA1011 | PKG GRP, 07 CAST IRON PK1181 | 1.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2100bx)4/22 | 1.000 ea |

AC Induction Motor Performance Data

Record # 86626

Preliminary Data Sheet

| Winding: 07WGT510-R003 | | Type: 0738M | | Enclosure: TEFC | |
|------------------------|--------------|---------------------|--|--------------------------|--------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 7.5 | Full Load Torque | 22.3 LB-FT | | |
| Volts | 230/460 | Start Configuration | direct on line | | |
| Full Load Amps | 19/9.5 | Breakdown Torque | 69.1 LB-FT | | |
| R.P.M. | 1770 | Pull-up Torque | 28.7 LB-FT | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 39.1 LB-FT | |
| NEMA Design Code | A | KVA Code | J | Starting Current | 67.4 A |
| Service Factor (S.F.) | 1 | No-load Current | 4.07 A | | |
| NEMA Nom. Eff. | 91.7 | Power Factor | 81 | Line-line Res. @ 25°C | 1.48 Ω |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 48°C | |
| | | | Locked-rotor Power Factor | 37.0974 | |
| | | | Rotor inertia | 0.934 lb-ft ² | |

Load Characteristics 460 V, 60 Hz, 7.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 |
|-----------------|------|------|------|------|------|------|
| Power Factor | 44 | 66 | 76 | 81 | 84 | 85 |
| Efficiency | 86.7 | 91 | 92.2 | 91.8 | 90.3 | 89.4 |
| Speed | 1792 | 1785 | 1777 | 1769 | 1759 | 1749 |
| Line amperes | 4.61 | 5.85 | 7.48 | 9.43 | 11.6 | 13.9 |

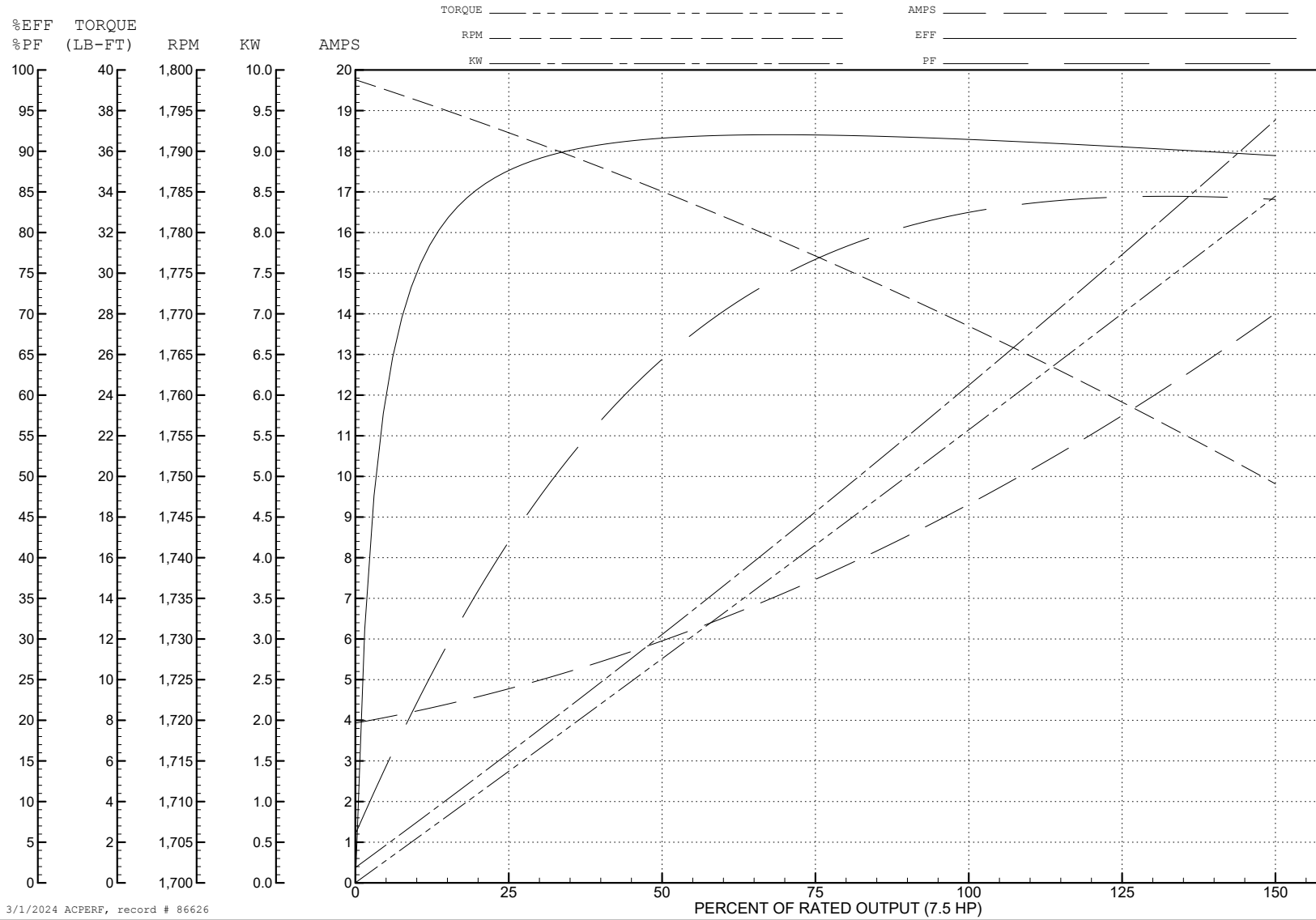
ABB Motors and Mechanical Inc.

WINDING # 07WGT510

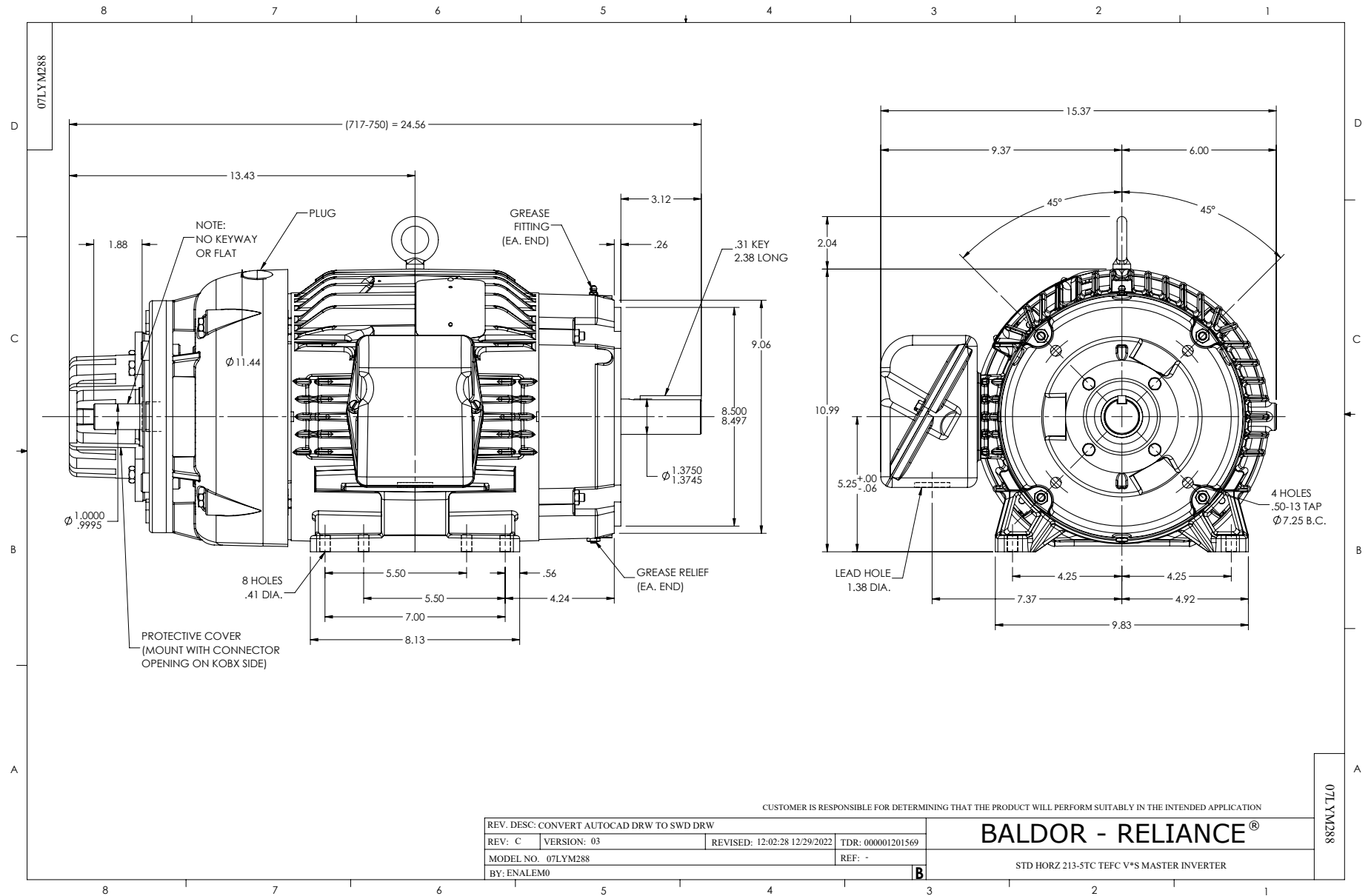
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=69.1 PU=28.7 LR=39.1 LRA=67.4



3/1/2024 ACPERF, record # 86626



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