

BALDOR • RELIANCE

Customer information packet

VNDM3538

.5HP, 1775RPM, 3PH, 60HZ, 56C, 3514M, TENV, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|--|
| Enclosure | TENV |
| 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 | .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 |
| Agency Approvals | CCSA US UR |
| Ambient Temperature | 40 °C |
| Auxillary Box | No Auxillary Box |
| Auxillary Box Lead Termination | None |
| Base Indicator | No Mounting |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Constant Torque Speed Range | 6 |
| Current @ Voltage | 1.010 A @ 460.0 V 2.020 A @ 230.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 81.5 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 1.0 a |

Part detail

| | |
|--------------|------------|
| Revision | - |
| Type | AC |
| Mech. spec. | 35E4329 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 35WGG069 |
| Layout | 35LYE4329 |
| Eff. date | 10-05-2023 |
| CD Diagram | CD0005 |
| Poles | 04 |
| Leads | 9#18 |
| Proprietary | False |
| Created date | 09-15-2023 |

| | |
|-------------------------------|---------------------|
| Insulation Class | F |
| Inverter Code | Inverter Ready |
| KVA Code | P |
| Lifting Lugs | No Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3514M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 11.06 IN |
| Power Factor | 58 |
| Product Family | Dirty Duty Plus |
| Pulley End Bearing Type | Sealed Bearing |
| 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 | 1775 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

| NP3505 | | | | | | | | | |
|---------------------|---------------|-----------------|------|-------------------|----|-----------------|----|--|--|
| CAT NO | VNDM3538 | | | | | | | | |
| SPEC. | 35E4329G069G2 | ENCL | TENV | | | | | | |
| FRAME | 56C | HP | .5 | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| FLA | 2.02/1.01 | I.P. | 56 | | | | | | |
| RPM | 1775 | RPM MAX | | | | | | | |
| HZ | 60 | PH | 3 | CLASS | F | | | | |
| SER.F. | 1.15 | DES | B | CC | | | | | |
| NEMA-NOM-EFF | 81.5 | | | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| DE BRG | 6205 | ODE BRG | 6203 | | | | | | |
| GREASE | POLYREX EM | | | | | | | | |
| INV.TYPE | | C HP FR | 60 | C HP TO | 90 | | | | |
| CT HZ FROM | 6 | CT HZ TO | 60 | VT HZ FROM | 6 | VT HZ TO | 60 | | |
| SER.NO | 2.2/1.1 | | | | | | | | |

Parts list

| Part number | Description | Quantity |
|---------------|--|----------|
| SA418467 | SA 35E4329G069G2 | 1.000 ea |
| RA410370 | RA 35E4329G069G2 | 1.000 ea |
| 34FN3002B01 | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/ | 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 |
| 35EP1100B94E | FREP TENV (4).125 NPT DRAINS | 1.000 ea |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 ea |
| HW4500S33 | 1/8 NPT STAINLESS #304 SS PLUG | 3.000 ea |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 ea |
| 35EP1300A113E | PUEP ENCL 205 BRG F/SEAL, (4).125 NPT | 1.000 ea |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 ea |
| HW4606A02 | JM CLIPPER/SEAL (LWE-0938-1624-AL23) | 1.000 ea |
| HW4500S33 | 1/8 NPT STAINLESS #304 SS PLUG | 3.000 ea |
| 12XN1032S20 | 10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL | 2.000 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 |
| 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, POLYREX EM EXXON | 0.050 lb |
| MG1500Y02 | WILKOPON PRIMER YELLOW | 0.010 ga |

| | | |
|-----------|--|----------|
| MG1025L01 | WILKOFAS FD, 786.04, BLACK | 0.010 ga |
| HA3100S08 | THRUBOLT 7.375LG SS | 4.000 ea |
| LC0005 | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING | 1.000 ea |
| NP3505 | SS DIRTY DUTY PLUS INV UL CSA-C US EEV C | 1.000 ea |
| 35PA1066 | PKG GRP, PRINT PK1008A06 | 1.000 ea |
| PK3082 | STYROFOAM CRADLE | 1.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500bx)4/22 | 1.000 ea |

AC Induction Motor Performance Data

Record # 102249

Typical performance - not guaranteed values

| Winding: 35WGG069-R082 | | Type: 3514M | | Enclosure: TENV | |
|-------------------------------|--------------------------|--------------------|--|--------------------------|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | .5 | | Full Load Torque | 1.48 LB-FT | |
| Volts | 230/460 | | Start Configuration | direct on line | |
| Full Load Amps | 2.02/1.01 | | Breakdown Torque | 8 LB-FT | |
| R.P.M. | 1775 | | Pull-up Torque | 4.4 LB-FT | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 5.1 LB-FT | |
| NEMA Design Code | B KVA Code | P | Starting Current | 8.4 A | |
| Service Factor (S.F.) | 1.15 | | No-load Current | 0.85 A | |
| NEMA Nom. Eff. | 81.5 Power Factor | 58 | Line-line Res. @ 25°C | 30.3 Ω | |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 19°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 21°C | |
| | | | Locked-rotor Power Factor | 66.8 | |
| | | | Rotor inertia | 0.101 lb-ft ² | |

Load Characteristics 460 V, 60 Hz, 0.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 24 | 37 | 48 | 58 | 65 | 71 | 62 |
| Efficiency | 58.9 | 72.5 | 78.4 | 80.5 | 81.6 | 81.5 | 81.2 |
| Speed | 1793 | 1788 | 1782 | 1776 | 1771 | 1763 | 1773 |
| Line amperes | 0.85 | 0.89 | 0.94 | 1.01 | 1.11 | 1.21 | 1.07 |

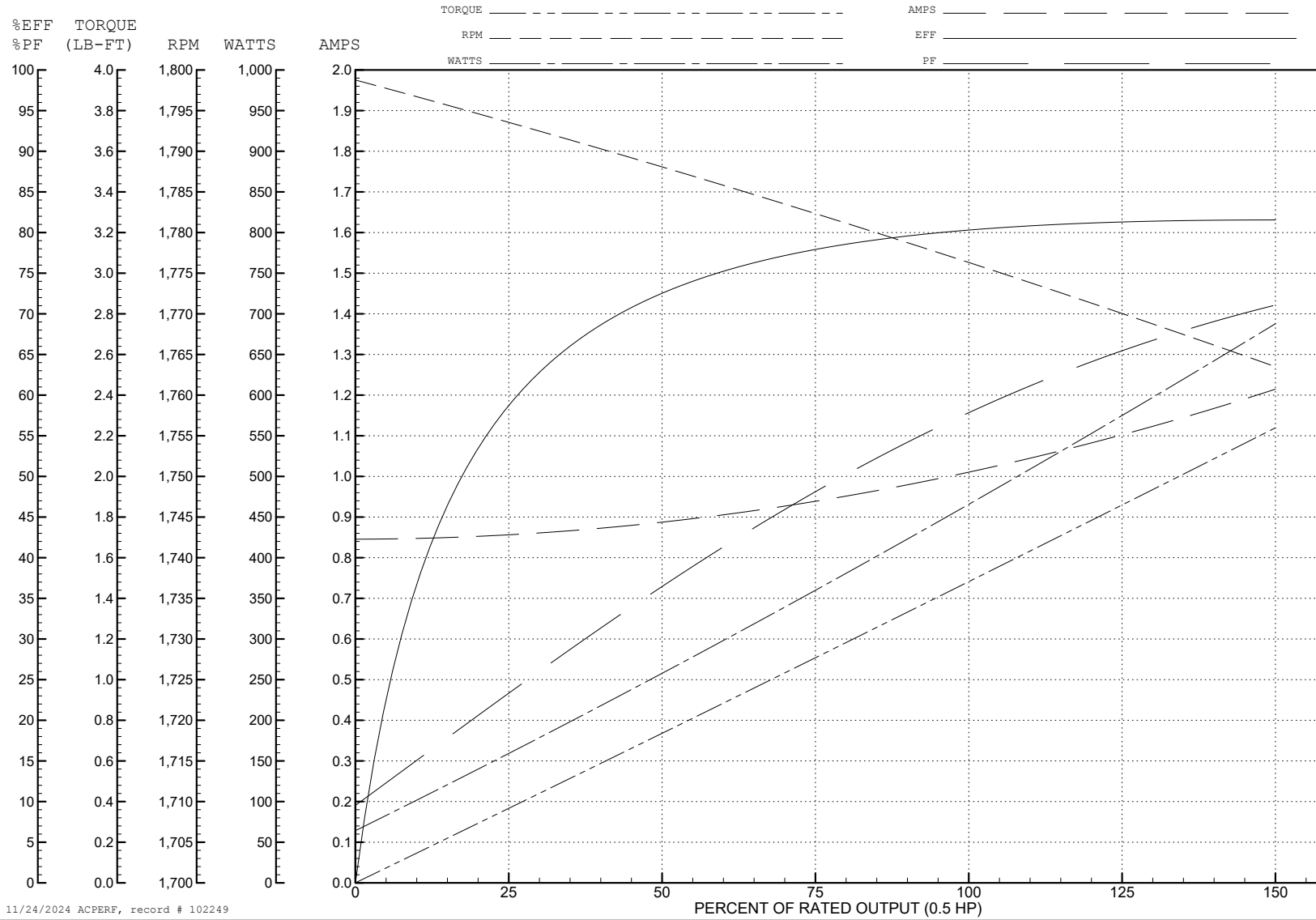
ABB Motors and Mechanical Inc.

WINDING # 35WGG069

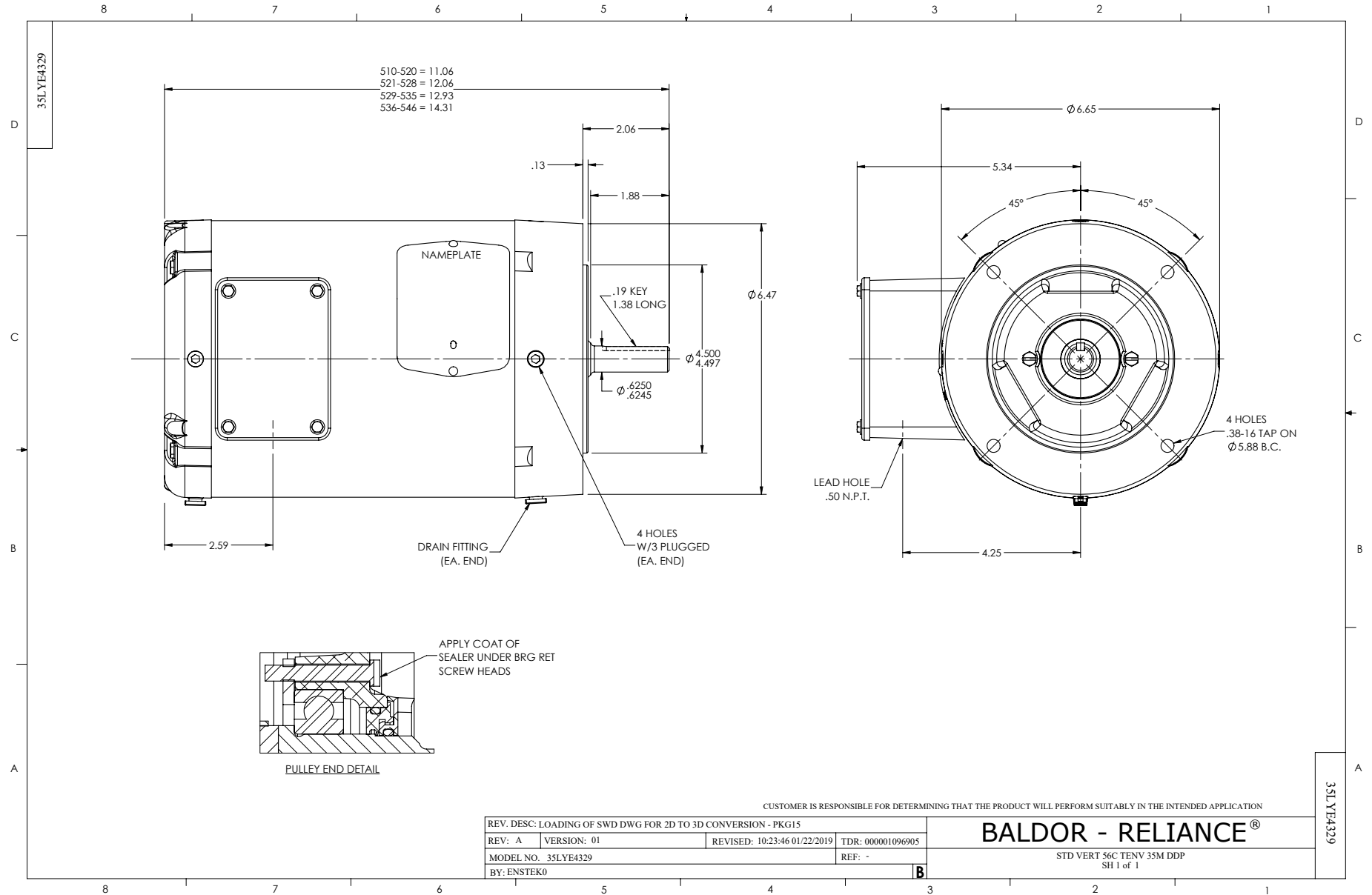
0.5 HP 3 PH 60 HZ 1775 RPM 460 V 3514M

Typical performance - not guaranteed values.

TORQUES (LB-FT) : PO=8 PU=4.4 LR=5.1 LRA=8.4



11/24/2024 ACPERF, record # 102249



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

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|---|---------|-------------------------|--------------|
| 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