

BALDOR® • RELIANCE 

Product Information Packet

VEM3615T

5HP, 1755RPM, 3PH, 60HZ, 184TC, 3642M, TEFC, F1

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | B | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 36WGQ032 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 36A003 | Layout: | 36LYA003 | Poles: | 04 | Created Date: | 12-03-2020 |
| Base: | N | Eff. Date: | 12-02-2021 | Leads: | 9#16 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | VEM3615T | Heater Indicator: | No Heater |
| Enclosure: | TEFC | Insulation Class: | F |
| Frame: | 184TC | Inverter Code: | Inverter Ready |
| Frame Material: | Steel | IP Rating: | NONE |
| Motor Letter Type: | Three Phase | KVA Code: | J |
| Output @ Frequency: | 5.000 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Voltage @ Frequency: | 230.0 V @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 16 AWG |
| | 460.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| XP Class and Group: | None | Motor Lead Termination: | Flying Leads |
| XP Division: | Not Applicable | Motor Type: | 3642M |
| Agency Approvals: | CSA | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 78 |
| | UR | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| 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 | Shaft Extension Location: | Pulley End |
| Current @ Voltage: | 6.700 A @ 460.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| | 14.000 A @ 208.0 V | Shaft Rotation: | Reversible |
| | 13.400 A @ 230.0 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 NP3441LUA

| | | | | | | | | |
|---------------------------|-----------------------------|--|----------------|------|-----|----|-------|---|
| CAT.NO. | VEM3615T | | | | | | | |
| SPEC | 36A003Q032G2 | | | | | | | |
| HP | 5 | | | | | | | |
| VOLTS | 230/460 | | | | | | | |
| AMPS | 13.4/6.7 | | | | | | | |
| RPM | 1755 | | | | | | | |
| FRAME | 184TC | | HZ | 60 | | PH | 3 | |
| SF | 1.15 | | CODE | J | DES | B | CLASS | F |
| NEMA NOM. EFF | 89.5 | | PF | 78 | | | | |
| RATING | 40C AMB-CONT | | | | | | | |
| CC | 010A | | USABLE AT 208V | | | 14 | | |
| ENCL | TEFC | | SER | | | | | |
| DE | 6206 | | ODE | 6205 | | | | |
| VPWM INVERTER READY | | | | | | | | |
| CT6-60H(10:1)VT3-60H(20:1 | | | | | | | | |
| | 50HZ 5HP 190/380V 15.6/7.8A | | | | | | | |
| | SF1.0 | | | | | | | |

| Parts List | | |
|---------------|--|----------|
| Part Number | Description | Quantity |
| SA388436 | SA 36A003Q032G2 | 1.000 EA |
| RA378797 | RA 36A003Q032G2 | 1.000 EA |
| 36FN3000C01SP | EXFN, PLASTIC, 5.25 OD, .912 ID | 1.000 EA |
| 36CB3004 | 36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0 | 1.000 EA |
| 36GS1000SP | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE | 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 |
| 36EP3104A01 | FREP MACH ASSEMBLY FOR ROUTING | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| HW5100A05 | WVY WSHR F/205 & 304 BRGS | 1.000 EA |
| 36EP3301A23 | PUEP ASSEMBLY FOR ROUTING PURPOSES | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| 10XN2520A28 | 1/4-20X 1 3/4 HEX HD | 4.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| 51XB1214A16 | 12-14X1.00 HXWSSLD SERTYB | 1.000 EA |
| 36FH4009A102 | IEC FH GREASER PRIMED | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 36CB4516 | 750LIPPED CB LID - GALVANNEAL | 1.000 EA |
| 37GS1001 | GASKET, CONDUIT BOX LID, .06 THICK LEXID | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501E16 | KEY, 1/4 SQ X 1.750 | 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 |

| Parts List (continued) | | |
|-------------------------------|--|-----------------|
| Part Number | Description | Quantity |
| HW3200A01 | 3/8-16X3/4 I-BLT WELDED F/S | 1.000 EA |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.050 LB |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| HA3101A28 | THRUBOLT 1/4-20 X 12.500 OHIO ROD | 4.000 EA |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.022 GA |
| LC0005E01 | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3441LUA | ALUM SUPER-E VPWM INV READY UL CSA-EEV C | 1.000 EA |
| 36PA1001 | PKG GRP, PRINT PK1017A06 | 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 # 89917

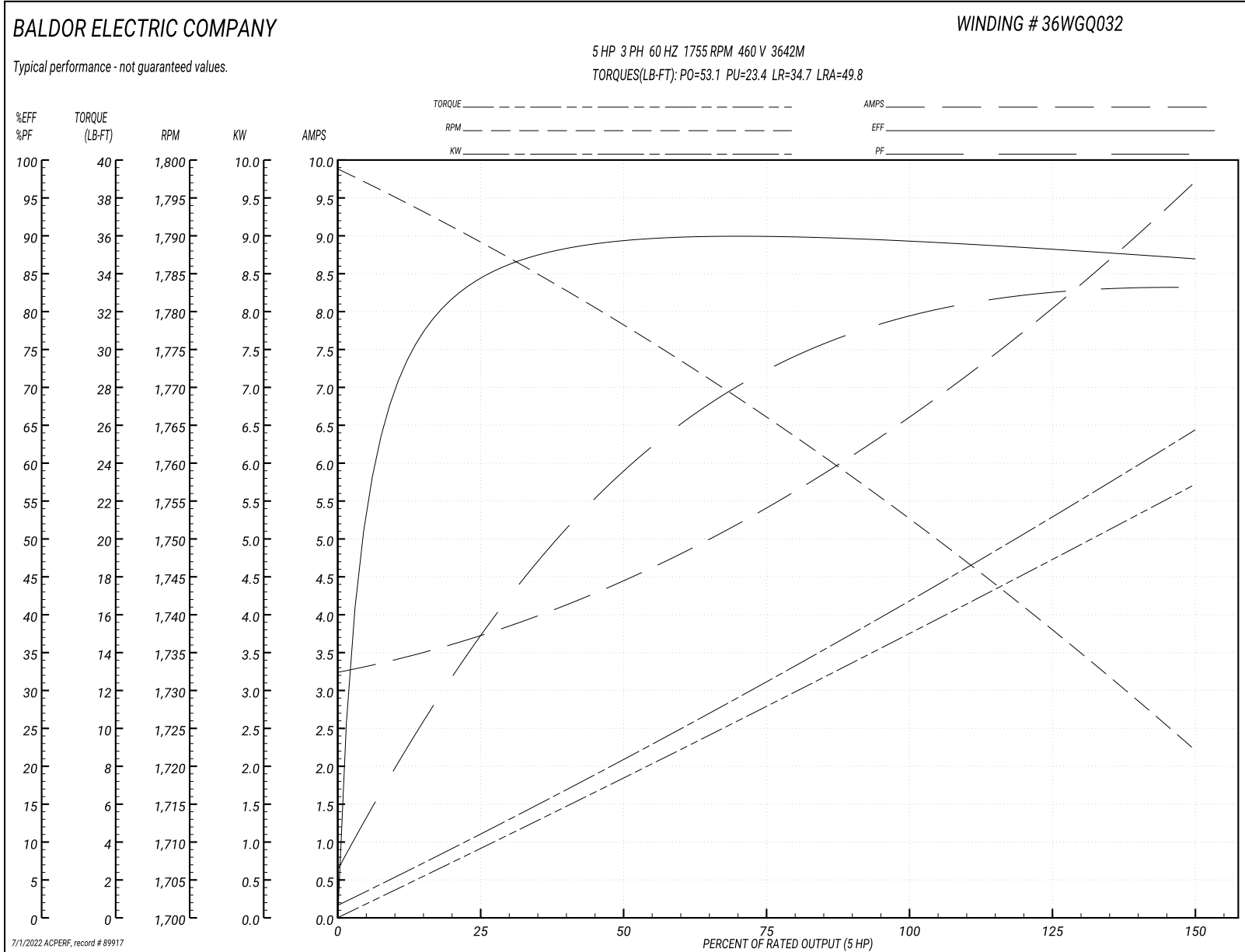
Typical performance - not guaranteed values

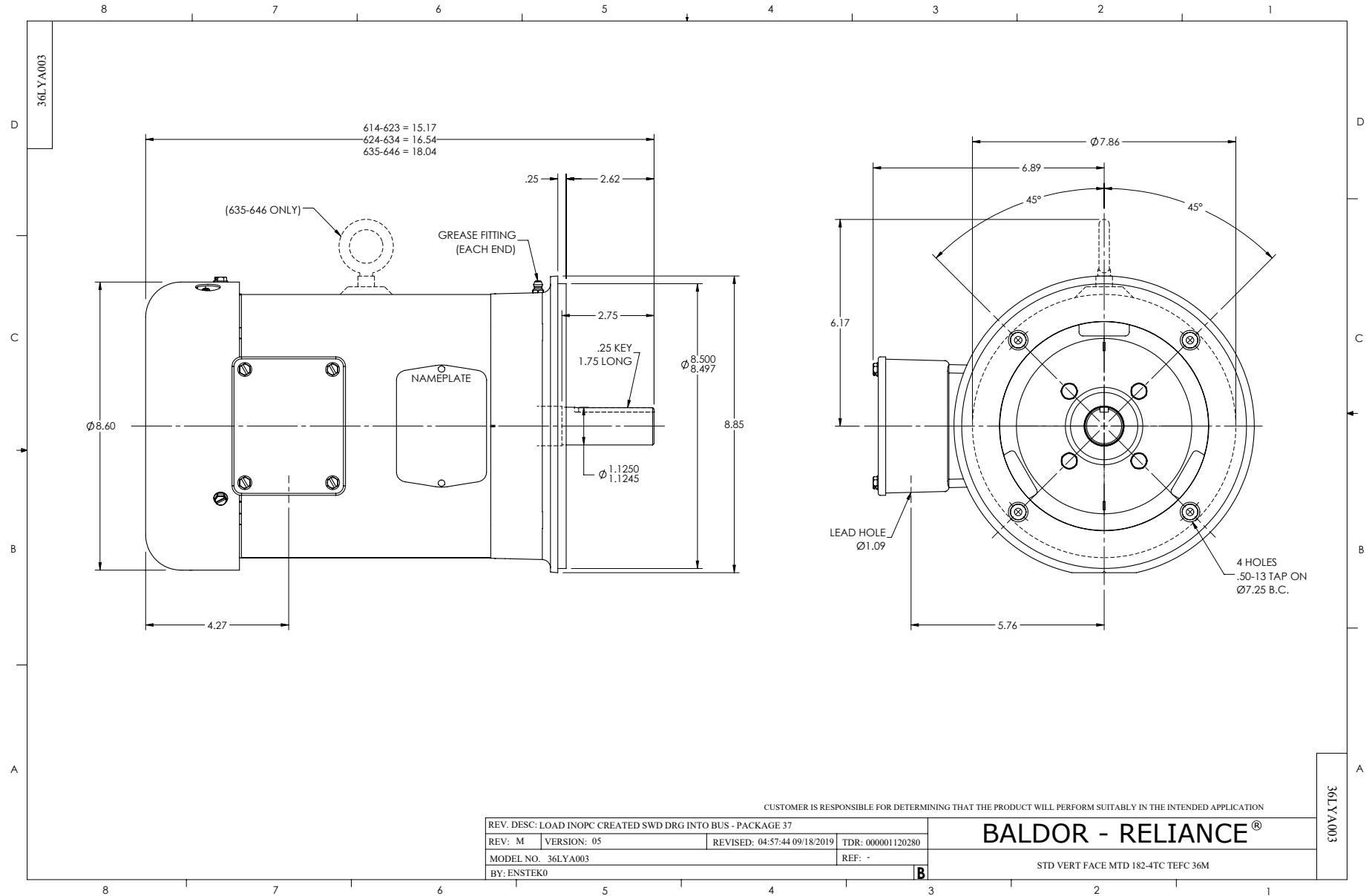
| Winding: 36WGQ032-R001 | | Type: 3642M | | Enclosure: TEFC | |
|-------------------------------|-------------------|----------------------------|--|------------------------------|-------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 5 | Full Load Torque | 15 LB-FT | | |
| Volts | 230/460 | Start Configuration | direct on line | | |
| Full Load Amps | 13.4/6.7 | Breakdown Torque | 53.1 LB-FT | | |
| R.P.M. | 1755 | Pull-up Torque | 23.4 LB-FT | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 34.7 LB-FT | |
| NEMA Design Code | B KVA Code | J | Starting Current | 49.8 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 3.31 A | | |
| NEMA Nom. Eff. | 89.5 | Power Factor | 78 | Line-line Res. @ 25°C | 2.4 Ω |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 71°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 86°C | |
| | | | Locked-rotor Power Factor | 40.6635 | |
| | | | Rotor inertia | 0.391 lb-ft ² | |

Load Characteristics 460 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 38 | 60 | 72 | 79 | 82 | 84 | 81 |
| Efficiency | 83.8 | 88.9 | 89.8 | 89.5 | 88.4 | 86.8 | 88.8 |
| Speed | 1789 | 1778 | 1766 | 1753 | 1738 | 1722 | 1744 |
| Line amperes | 3.64 | 4.39 | 5.45 | 6.66 | 8.08 | 9.67 | 7.51 |

Performance Graph at 460V, 60Hz, 5.0HP Typical performance - Not guaranteed values





CD0005

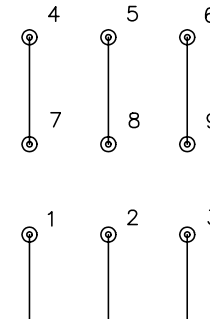


LOW VOLTAGE
(2Y)



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.

| | | | |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 900000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005