

**BALDOR • RELIANCE**

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# Customer information packet

## CEM3154T

1.5HP, 1770RPM, 3PH, 60HZ, 145TC, 3524M, OPSB

Class - None

Division - Not Applicable

## Specifications

|                                |   |
|--------------------------------|---|
| Enclosure                      | OPSB  |
| Frame                          | 145TC   |
| 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             | 1.500 HP @ 60 HZ  |
| Phase                          | 3   |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ  |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| Agency Approvals               | CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>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              | 4.640 A @ 208.0 V<br>4.600 A @ 230.0 V<br>2.300 A @ 460.0 V |
| Design Code                    | B   |
| Drip Cover                     | No Drip Cover   |
| Duty Rating                    | CONT  |
| Efficiency @ 100% Load         | 86.5 %  |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | NO FEEDBACK   |
| Front Shaft Indicator          | None  |

## Part detail

|              |            |
|--------------|------------|
| Revision     | C          |
| Type         | AC         |
| Mech. spec.  | 35BB102    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGL955   |
| Layout       | 35LYBB102  |
| Eff. date    | 06-11-2024 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 01-10-2022 |

|                               |                     |
|-------------------------------|---------------------|
| Heater Indicator              | No Heater           |
| High Voltage Full Load Amps   | 2.3 a               |
| Insulation Class              | F                   |
| Inverter Code                 | Inverter Ready      |
| KVA Code                      | M                   |
| 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                    | 3524M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 4                   |
| Overall Length                | 11.62 IN            |
| Power Factor                  | 72                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | C-Face              |
| 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                         | 1770 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**

**NP3553LUA**

|                                  |                              |             |      |            |   |              |       |
|----------------------------------|------------------------------|-------------|------|------------|---|--------------|-------|
| <b>CAT.NO.</b>                   | CEM3154T                     |             |      |            |   |              |       |
| <b>SPEC.</b>                     | 35BB102L955G1                |             |      |            |   |              |       |
| <b>HP</b>                        | 1.5                          |             |      |            |   |              |       |
| <b>VOLTS</b>                     | 230/460                      |             |      |            |   |              |       |
| <b>AMPS</b>                      | 4.6/2.3                      |             |      |            |   |              |       |
| <b>RPM</b>                       | 1770                         |             |      |            |   |              |       |
| <b>FRAME</b>                     | 145TC                        | <b>HZ</b>   | 60   | <b>PH</b>  | 3 |              |       |
| <b>SF</b>                        | 1.15                         | <b>CODE</b> | M    | <b>DES</b> | B | <b>CLASS</b> | F     |
| <b>NEMA NOM. EFF</b>             | 86.5                         | <b>PF</b>   | 72   |            |   |              |       |
| <b>RATING</b>                    | 40C AMB-CONT                 |             |      |            |   |              |       |
| <b>CC</b>                        | 010A                         |             |      |            |   |              |       |
| <b>ENCL</b>                      | OPSB                         | <b>SN</b>   |      |            |   |              |       |
| <b>DE</b>                        | 6205                         | <b>ODE</b>  | 6203 |            |   |              |       |
| <b>VPWM INVERTER READY</b>       | SFA 5/2.5                    |             |      |            |   |              |       |
| <b>CT30-60(2:1) VT3-60(20:1)</b> |                              |             |      |            |   |              |       |
| <b>USABLE AT</b>                 | 1.5HP 190/380V 50HZ 5.2/2.6A |             |      |            |   |              | SF1.0 |

**AC Induction Motor Performance Data**

Record # 95388

Typical performance - not guaranteed values

| <b>Winding:</b> 35WGL955-R002 |                          | <b>Type:</b> 3524M               |  | <b>Enclosure:</b> OPEN |  |
|-------------------------------|--------------------------|----------------------------------|--|------------------------|--|
| <b>Nameplate Data</b>         |                          |                                  | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |  |
| <b>Rated Output (HP)</b>      | 1.5                      | <b>Full Load Torque</b>          | 4.48 LB-FT                                       |                        |  |
| <b>Volts</b>                  | 230/460                  | <b>Start Configuration</b>       | direct on line                                   |                        |  |
| <b>Full Load Amps</b>         | 4.6/2.3                  | <b>Breakdown Torque</b>          | 18.8 LB-FT                                       |                        |  |
| <b>R.P.M.</b>                 | 1770                     | <b>Pull-up Torque</b>            | 9.6 LB-FT  |                        |  |
| <b>Hz</b>                     | 60 <b>Phase</b>          | 3                                | <b>Locked-rotor Torque</b>                       | 12.6 LB-FT             |  |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b>        | M                                | <b>Starting Current</b>                          | 19.7 A                 |  |
| <b>Service Factor (S.F.)</b>  | 1.15                     | <b>No-load Current</b>           | 1.51 A   |                        |  |
| <b>NEMA Nom. Eff.</b>         | 86.5 <b>Power Factor</b> | 72                               | <b>Line-line Res. @ 25°C</b>                     | 11.8 Ω                 |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT             | <b>Temp. Rise @ Rated Load</b>   | 48°C   |                        |  |
| <b>S.F. Amps</b>              | 5/2.5                    | <b>Temp. Rise @ S.F. Load</b>    | 57°C   |                        |  |
|                               |                          | <b>Locked-rotor Power Factor</b> | 58.4   |                        |  |
|                               |                          | <b>Rotor inertia</b>             | 0.173 lb-ft <sup>2</sup>                         |                        |  |

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 31        | 49        | 63        | 72         | 78         | 81         | 76          |
| <b>Efficiency</b>      | 75.1      | 83.5      | 86        | 86.5       | 85.8       | 84.8       | 86.1        |
| <b>Speed</b>           | 1792      | 1785      | 1777      | 1769       | 1760       | 1750       | 1764        |
| <b>Line amperes</b>    | 1.56      | 1.72      | 1.97      | 2.28       | 2.65       | 3.06       | 2.5         |

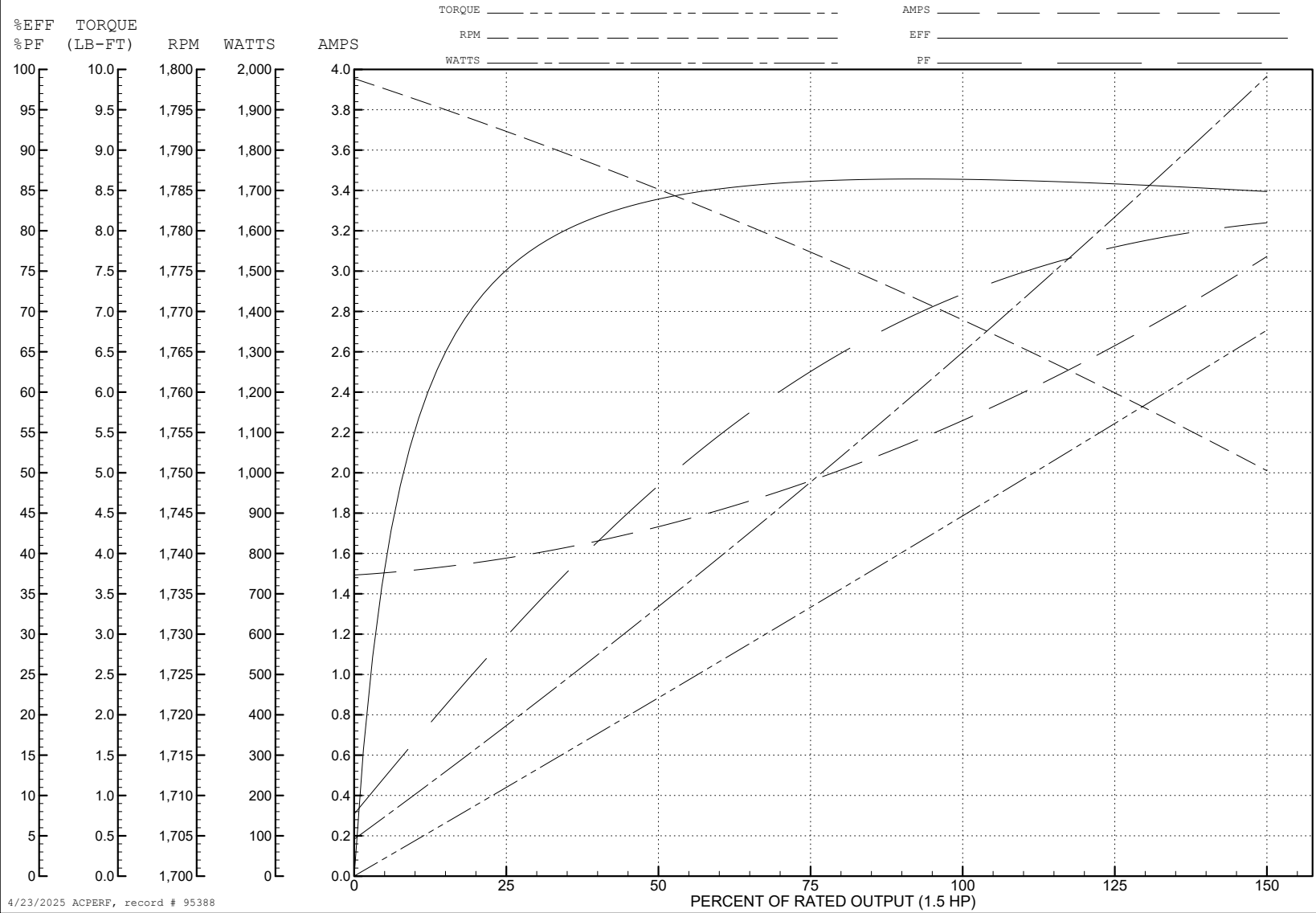
ABB Motors and Mechanical Inc.

WINDING # 35WGL955

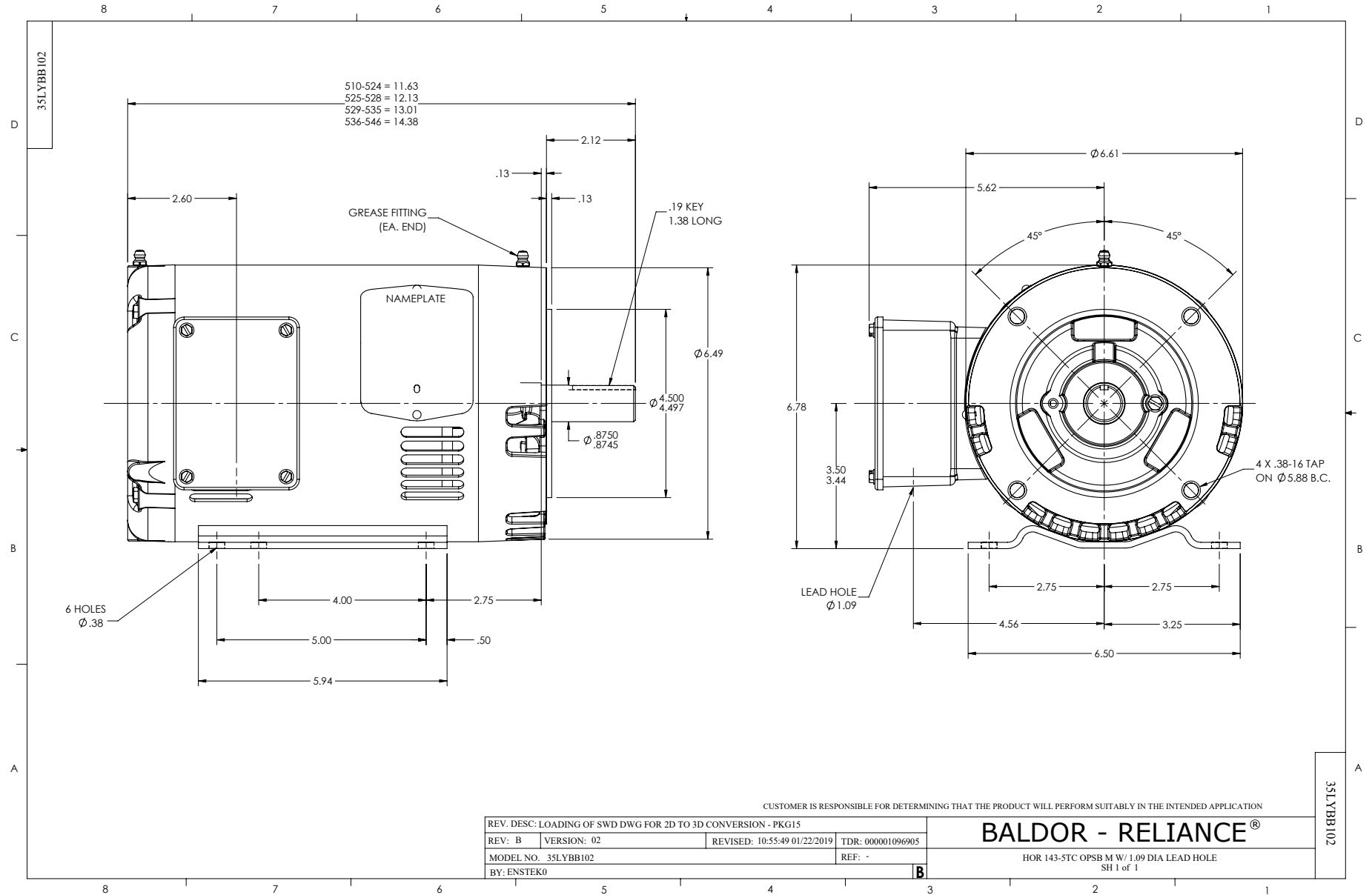
1.5 HP 3 PH 60 HZ 1770 RPM 460 V 3524M

Typical performance - not guaranteed values.

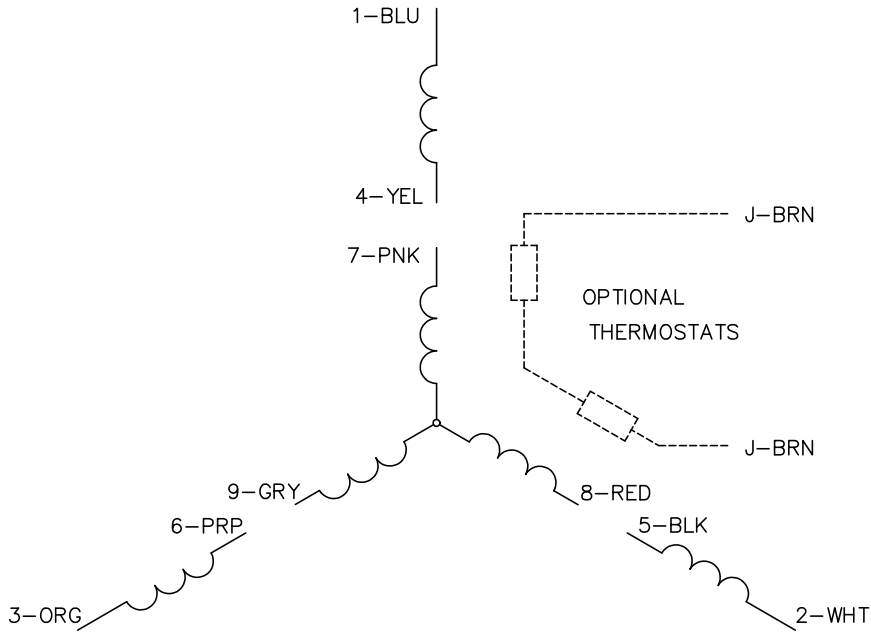
TORQUES (LB-FT): PO=18.8 PU=9.6 LR=12.6 LRA=19.7



4/23/2025 ACPERF, record # 95388



CD0005

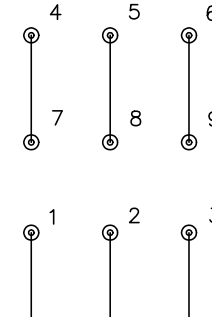


LOW VOLTAGE  
(2Y)



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

500000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS