

# ABB BALDOR RELIANCE III

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## Customer information packet

### CEWDM3545T

1HP, 3450RPM, 3PH, 60HZ, 143TC, TENV, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                        |
|---------------------------------------|----------------------------------------|
| <b>Enclosure</b>                      | TENV                                   |
| <b>Frame</b>                          | 143TC                                  |
| <b>Frame Material</b>                 | Steel                                  |
| <b>Frequency</b>                      | 60.00 Hz                               |
| <b>Haz Area Class and Group</b>       | None                                   |
| <b>Haz Area Division</b>              | Not Applicable                         |
| <b>Motor Letter Type</b>              | Three Phase                            |
| <b>Output @ Frequency</b>             | 1.000 HP @ 60 HZ                       |
| <b>Phase</b>                          | 3                                      |
| <b>Synchronous Speed @ Frequency</b>  | 3600 RPM @ 60 HZ                       |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ     |
| <b>Agency Approvals</b>               | CSA<br>CSA EEV<br>NEMA PREMIUM<br>UR   |
| <b>Ambient Temperature</b>            | 40 °C                                  |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                       |
| <b>Auxiliary Box Lead Termination</b> | None                                   |
| <b>Base Indicator</b>                 | Rigid                                  |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                |
| <b>Blower</b>                         | None                                   |
| <b>Current @ Voltage</b>              | 1.300 A @ 460.0 V<br>2.600 A @ 230.0 V |
| <b>Design Code</b>                    | B                                      |
| <b>Drip Cover</b>                     | No Drip Cover                          |
| <b>Duty Rating</b>                    | CONT                                   |
| <b>Efficiency @ 100% Load</b>         | 82.5 %                                 |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated              |
| <b>Feedback Device</b>                | NO FEEDBACK                            |
| <b>Heater Indicator</b>               | No Heater                              |
| <b>High Voltage Full Load Amps</b>    | 1.3 a                                  |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | C          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGR933   |
| <b>Layout</b>       | 35LYSS592  |
| <b>Eff. date</b>    | 02-14-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 12-09-2019 |

|                                   |                            |
|-----------------------------------|----------------------------|
| <b>Insulation Class</b>           | <b>F</b>                   |
| <b>Inverter Code</b>              | <b>Inverter Ready</b>      |
| <b>KVA Code</b>                   | <b>L</b>                   |
| <b>Lifting Lugs</b>               | <b>No Lifting Lugs</b>     |
| <b>Locked Bearing Indicator</b>   | <b>Locked Bearing</b>      |
| <b>Motor Lead Termination</b>     | <b>Flying Leads</b>        |
| <b>Motor Standards</b>            | <b>NEMA</b>                |
| <b>Motor Type</b>                 | <b>3516M</b>               |
| <b>Mounting Arrangement</b>       | <b>F1</b>                  |
| <b>Number of Poles</b>            | <b>2</b>                   |
| <b>Overall Length</b>             | <b>12.12 IN</b>            |
| <b>Power Factor</b>               | <b>88</b>                  |
| <b>Product Family</b>             | <b>Wash Down</b>           |
| <b>Pulley Face Code</b>           | <b>C-Face</b>              |
| <b>Rodent Screen</b>              | <b>None</b>                |
| <b>Service Factor</b>             | <b>1.15</b>                |
| <b>Shaft Diameter</b>             | <b>0.875 IN</b>            |
| <b>Shaft Ground Indicator</b>     | <b>No Shaft Grounding</b>  |
| <b>Shaft Rotation</b>             | <b>Reversible</b>          |
| <b>Speed</b>                      | <b>3450 rpm</b>            |
| <b>Speed Code</b>                 | <b>Single Speed</b>        |
| <b>Starting Method</b>            | <b>Direct on line</b>      |
| <b>Thermal Device - Bearing</b>   | <b>None</b>                |
| <b>Thermal Device - Winding</b>   | <b>None</b>                |
| <b>Vibration Sensor Indicator</b> | <b>No Vibration Sensor</b> |
| <b>Winding Thermal 1</b>          | <b>None</b>                |
| <b>Winding Thermal 2</b>          | <b>None</b>                |

Nameplate

| NP1669L      |                       |      |     |      |   |       |    |   |  |
|--------------|-----------------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | CEWDM3545T            |      |     |      |   |       |    |   |  |
| SPEC.        | 35-0000-0481          |      |     |      |   |       |    |   |  |
| HP           | 1                     |      |     |      |   |       |    |   |  |
| VOLTS        | 230/460               |      |     |      |   |       |    |   |  |
| AMP          | 2.6/1.3               |      |     |      |   |       |    |   |  |
| RPM          | 3450                  |      |     |      |   |       |    |   |  |
| FRAME        | 143TC                 |      | HZ  | 60   |   |       | PH | 3 |  |
| SER.F.       | 1.15                  | CODE | L   | DES  | B | CLASS |    | F |  |
| NEMA-NOM-EFF | 82.5                  | PF   | 88  |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT          |      |     |      |   |       |    |   |  |
| CC           | 010A                  |      |     |      |   |       |    |   |  |
| DE           | 6205                  |      | ODE | 6203 |   |       |    |   |  |
| ENCL         | TENV                  | SN   |     |      |   |       |    |   |  |
| BLANK        | 20:1CT, 20:1VT,1.00SF |      |     |      |   |       |    |   |  |

**AC Induction Motor Performance Data**

Record # 79990

Typical performance - not guaranteed values

| Winding: 35WGR933-R004 |                   | Type: 3516M                              | Enclosure: TENV           |
|------------------------|-------------------|------------------------------------------|---------------------------|
| Nameplate Data         |                   | 460 V, 60 Hz:<br>High Voltage Connection |                           |
| Rated Output (HP)      | 1                 | Full Load Torque                         | 1.5 LB-FT                 |
| Volts                  | 230/460           | Start Configuration                      | direct on line            |
| Full Load Amps         | 2.6/1.3           | Breakdown Torque                         | 7.5 LB-FT                 |
| R.P.M.                 | 3450              | Pull-up Torque                           | 4.2 LB-FT                 |
| Hz                     | 60 Phase          | Locked-rotor Torque                      | 5.6 LB-FT                 |
| NEMA Design Code       | B KVA Code        | Starting Current                         | 12.4 A                    |
| Service Factor (S.F.)  | 1.15              | No-load Current                          | 0.63 A                    |
| NEMA Nom. Eff.         | 82.5 Power Factor | Line-line Res. @ 25°C                    | 15.2 Ω                    |
| Rating - Duty          | 40C AMB-CONT      | Temp. Rise @ Rated Load                  | 80°C                      |
| S.F. Amps              |                   | Temp. Rise @ S.F. Load                   | 93°C                      |
|                        |                   | Locked-rotor Power Factor                | 56.1                      |
|                        |                   | Rotor inertia                            | 0.0443 LB-FT <sup>2</sup> |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 48   | 69   | 81   | 86   | 88   | 90   | 87   |
| Efficiency      | 71.5 | 80.5 | 83.4 | 83.6 | 82.9 | 81.3 | 83.2 |
| Speed           | 3560 | 3529 | 3494 | 3462 | 3423 | 3378 | 3439 |
| Line amperes    | 0.7  | 0.85 | 1.04 | 1.28 | 1.58 | 1.86 | 1.46 |

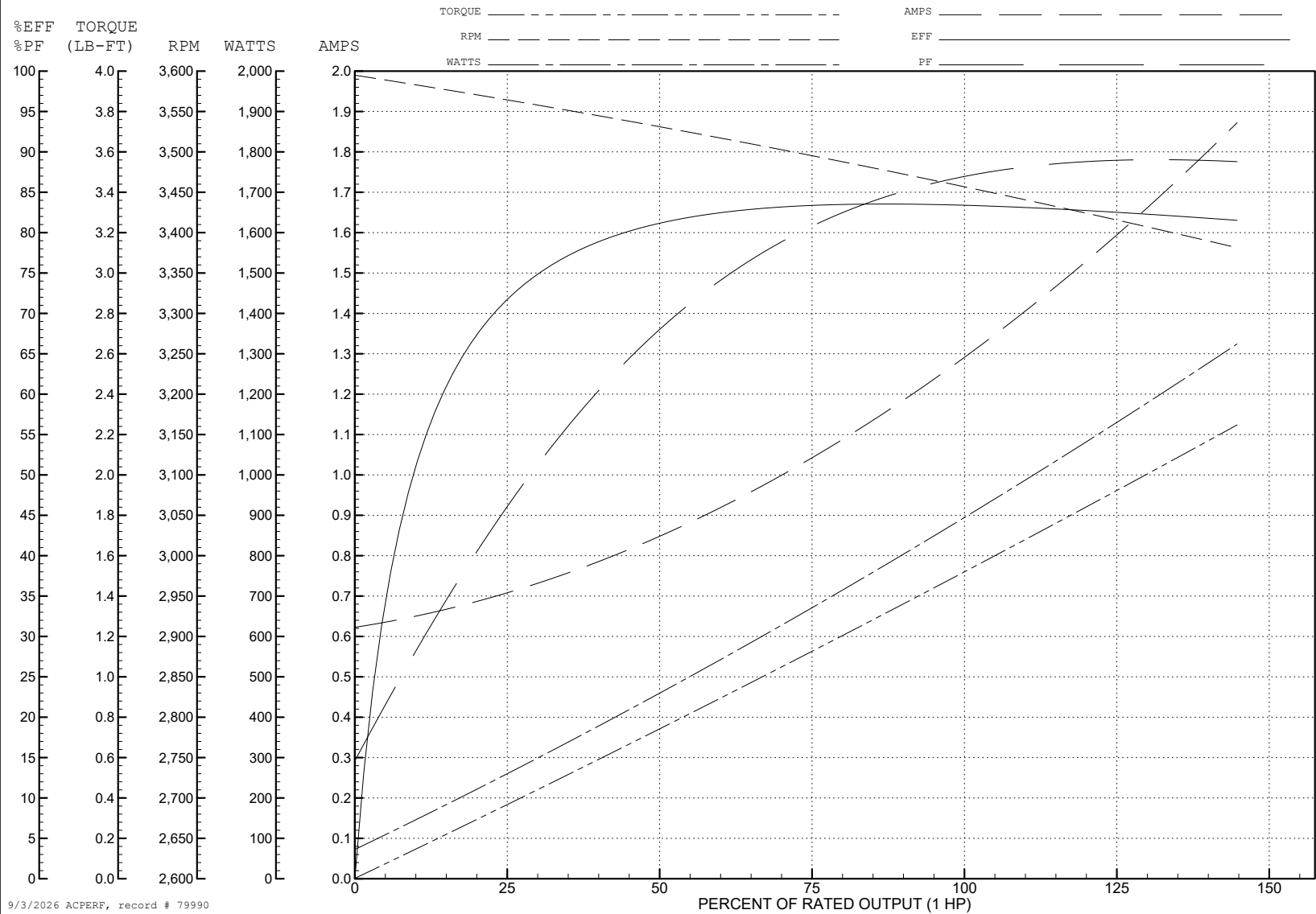
ABB Motors and Mechanical Inc.

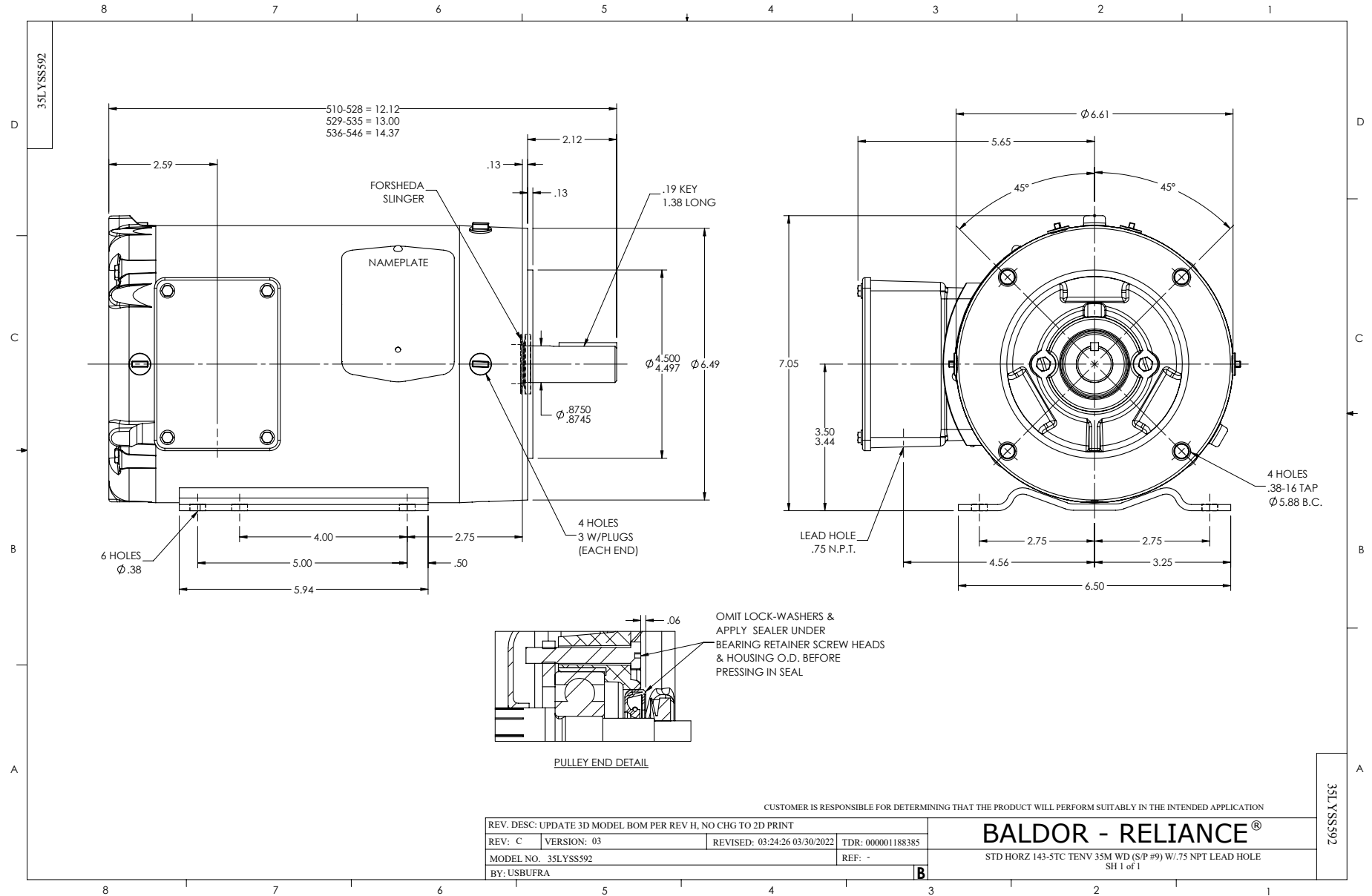
WINDING # 35WGR933

Typical performance - not guaranteed values.

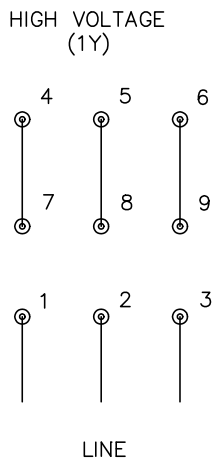
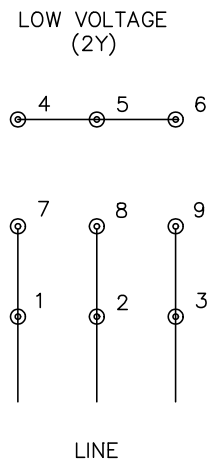
1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

TORQUES (LB-FT): PO=7.5 PU=4.2 LR=5.6 LRA=12.4





CD0005



- 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