

# ABB BALDOR RELIANCE III

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## Customer information packet

### CEWDM3554-H

1.5HP, 1770RPM, 3PH, 60HZ, 56HC, 3530M, TENV, F

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TENV                                                        |
| <b>Frame</b>                          | 56HC                                                        |
| <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>             | 1.500 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | CSA EEV<br>UR<br>NEMA_PREMIUM<br>NEMA PREMIUM               |
| <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>              | 2.100 A @ 460.0 V<br>4.200 A @ 230.0 V<br>4.400 A @ 208.0 V |
| <b>Design Code</b>                    | B                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 86.5 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Heater Indicator</b>               | No Heater                                                   |

**Part Detail**

|                     |              |
|---------------------|--------------|
| <b>Revision</b>     | B            |
| <b>Type</b>         | AC           |
| <b>Mech. spec.</b>  |              |
| <b>Base</b>         |              |
| <b>Status</b>       | PRD/A        |
| <b>Elec. spec.</b>  | 35WGG178     |
| <b>Layout</b>       | 35LY-000-259 |
| <b>Eff. date</b>    | 02-14-2024   |
| <b>CD Diagram</b>   | CD0005       |
| <b>Poles</b>        | 04           |
| <b>Leads</b>        | 9#18         |
| <b>Proprietary</b>  | False        |
| <b>Created date</b> | 10-28-2021   |

|                             |                     |
|-----------------------------|---------------------|
| High Voltage Full Load Amps | 2.1 a               |
| Insulation Class            | F                   |
| Inverter Code               | Inverter Ready      |
| KVA Code                    | N                   |
| Lifting Lugs                | No Lifting Lugs     |
| Locked Bearing Indicator    | No Locked Bearing   |
| Motor Lead Termination      | Flying Leads        |
| Motor Standards             | NEMA                |
| Motor Type                  | 3530M               |
| Mounting Arrangement        | F1                  |
| Number of Poles             | 4                   |
| Overall Length              | 11.91 IN            |
| Power Factor                | 76                  |
| Product Family              | Wash Down           |
| Pulley Face Code            | C-Face              |
| Rodent Screen               | None                |
| Service Factor              | 1.00                |
| Shaft Diameter              | 0.625 IN            |
| Shaft Ground Indicator      | No Shaft Grounding  |
| Shaft Rotation              | Reversible          |
| 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**

| NP1669L      |              |  |      |      |     |   |  |       |   |  |  |
|--------------|--------------|--|------|------|-----|---|--|-------|---|--|--|
| CAT.NO.      | CEWDM3554-H  |  |      |      |     |   |  |       |   |  |  |
| SPEC.        | 35-0000-1384 |  |      |      |     |   |  |       |   |  |  |
| HP           | 1.5          |  |      |      |     |   |  |       |   |  |  |
| VOLTS        | 230/460      |  |      |      |     |   |  |       |   |  |  |
| AMP          | 4.2/2.1      |  |      |      |     |   |  |       |   |  |  |
| RPM          | 1770         |  |      |      |     |   |  |       |   |  |  |
| FRAME        | 56HC         |  | HZ   | 60   |     |   |  | PH    | 3 |  |  |
| SER.F.       | 1.00         |  | CODE | N    | DES | B |  | CLASS | H |  |  |
| NEMA-NOM-EFF | 86.5         |  | PF   | 76   |     |   |  |       |   |  |  |
| RATING       | 40C AMB-CONT |  |      |      |     |   |  |       |   |  |  |
| CC           | 010A         |  |      |      |     |   |  |       |   |  |  |
| DE           | 6205         |  | ODE  | 6203 |     |   |  |       |   |  |  |
| ENCL         | TENV         |  | SN   |      |     |   |  |       |   |  |  |
| BLANK        |              |  |      |      |     |   |  |       |   |  |  |

**AC Induction Motor Performance Data**

Record # 87056

Typical performance - not guaranteed values

| Winding: 35WGG178-R003 |          |                   | Type: 3530M                              |  | Enclosure: TENV |  |
|------------------------|----------|-------------------|------------------------------------------|--|-----------------|--|
|                        |          |                   |                                          |  |                 |  |
| Nameplate Data         |          |                   | 460 V, 60 Hz:<br>High Voltage Connection |  |                 |  |
| Rated Output (HP)      |          | 1.5               | Full Load Torque                         |  | 4.48 LB-FT      |  |
| Volts                  |          | 230/460           | Start Configuration                      |  | direct on line  |  |
| Full Load Amps         |          | 4.6/2.3           | Breakdown Torque                         |  | 21.02 LB-FT     |  |
| R.P.M.                 |          | 1770              | Pull-up Torque                           |  | 12.29 LB-FT     |  |
| Hz                     | 60 Phase | 3                 | Locked-rotor Torque                      |  | 14.9 LB-FT      |  |
| NEMA Design Code       |          | B KVA Code        | Starting Current                         |  | 21.32 A         |  |
| Service Factor (S.F.)  |          | 1                 | No-load Current                          |  | 1.29 A          |  |
| NEMA Nom. Eff.         |          | 86.5 Power Factor | Line-line Res. @ 25°C                    |  | 10.1 Ω          |  |
| Rating - Duty          |          | 40C AMB-CONT      | Temp. Rise @ Rated Load                  |  | 80°C            |  |
|                        |          |                   | Locked-rotor Power Factor                |  | 55.5            |  |
|                        |          |                   | Rotor inertia                            |  | 0.217 lb-ft²    |  |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 33   | 54   | 68   | 76   | 81   | 84   |
| Efficiency      | 79.1 | 86.3 | 88.1 | 88.3 | 87.6 | 86.6 |
| Speed           | 1790 | 1783 | 1776 | 1769 | 1761 | 1752 |
| Line amperes    | 1.35 | 1.52 | 1.78 | 2.11 | 2.47 | 2.89 |

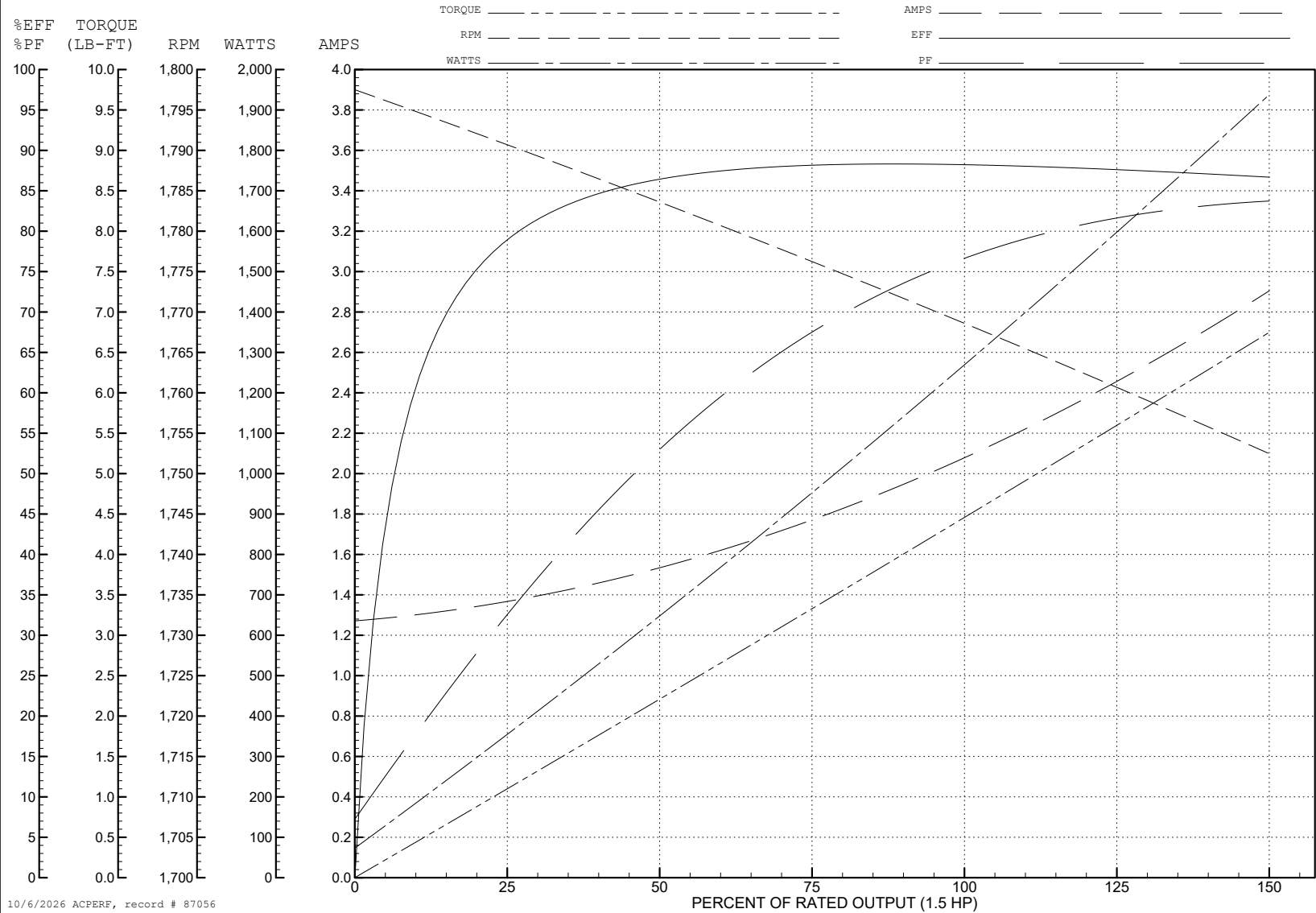
ABB Motors and Mechanical Inc.

WINDING # 35WGG178

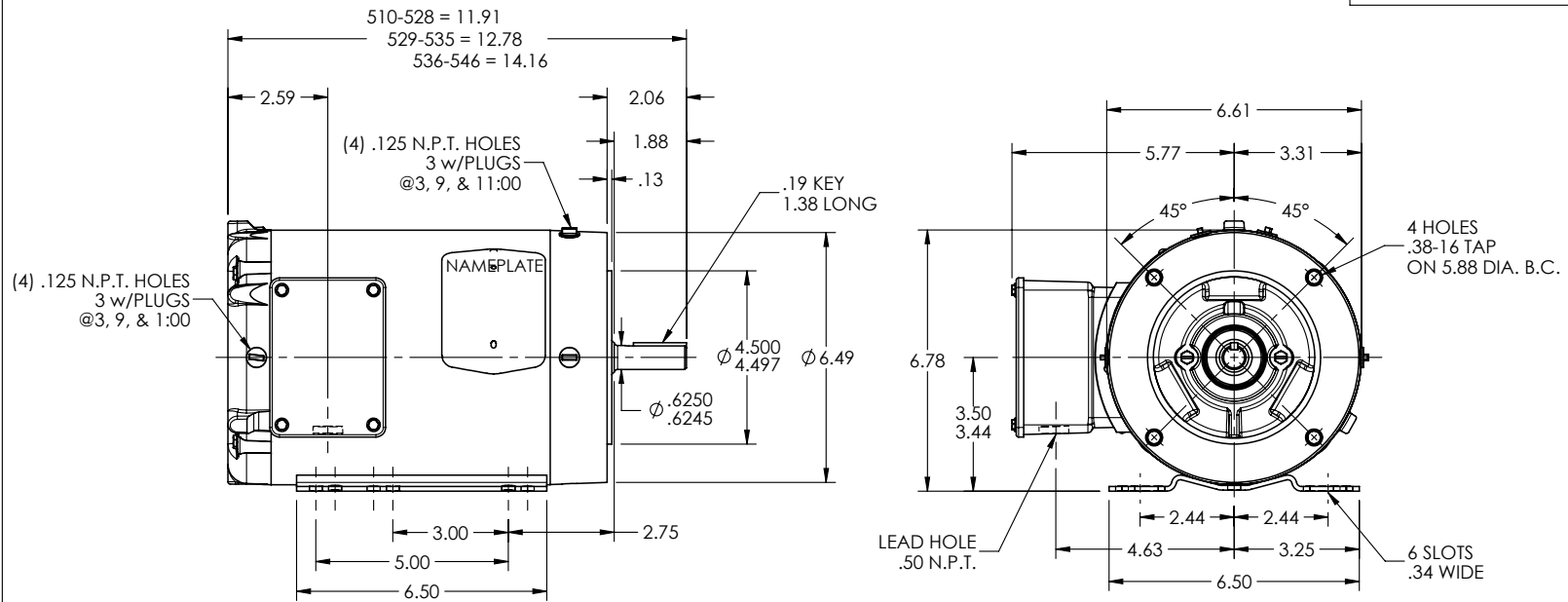
Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1770 RPM 460 V 3530M

TORQUES (LB-FT): PO=21.02 PU=12.29 LR=14.9 LRA=21.32



35LY-000-259



PULLEY END DETAIL

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: UPDATE MATE ERRORS IN 3D MODEL

|        |             |                              |                   |
|--------|-------------|------------------------------|-------------------|
| REV: A | VERSION: 01 | REVISED: 08:47:50 04/21/2022 | TDR: 000001188385 |
|--------|-------------|------------------------------|-------------------|

657-000-1759

MODEL NO. 35LY-000-259

BY: USBUFRA

REF: -

**BALDOR - RELIANCE®**

STD HORZ 56HC TENV 35M WD

35LY-000-259

