

# ABB BALDOR RELIANCE III

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## Customer information packet

### CESSWDM3558T

2HP, 1760RPM, 3PH, 60HZ, 145TC, 3532M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                        |
| <b>Frame</b>                          | 145TC                                                       |
| <b>Frame Material</b>                 | Stainless 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>             | 2.000 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>               | CURUSEEV<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>              | 2.800 A @ 460.0 V<br>5.600 A @ 230.0 V<br>6.000 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>Front Shaft Indicator</b>          | None                                                        |
| <b>Heater Indicator</b>               | No Heater                                                   |
| <b>High Voltage Full Load Amps</b>    | 2.8 a                                                       |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | A          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35VV818    |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGK632   |
| <b>Layout</b>       | 35LYVV818  |
| <b>Eff. date</b>    | 08-19-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 02-28-2025 |

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| <b>Insulation Class</b>              | <b>H</b>                             |
| <b>Inverter Code</b>                 | <b>Inverter Duty</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 Quantity/Wire Size</b> | <b>9 @ 18 AWG</b>                    |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>                  |
| <b>Motor Standards</b>               | <b>NEMA</b>                          |
| <b>Motor Type</b>                    | <b>3532M</b>                         |
| <b>Mounting Arrangement</b>          | <b>F1</b>                            |
| <b>Number of Poles</b>               | <b>4</b>                             |
| <b>Overall Length</b>                | <b>13.42 IN</b>                      |
| <b>Power Factor</b>                  | <b>77</b>                            |
| <b>Product Family</b>                | <b>Wash Down All Stainless Steel</b> |
| <b>Pulley End Bearing Type</b>       | <b>Sealed Bearing</b>                |
| <b>Pulley Face Code</b>              | <b>C-Face</b>                        |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</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>Shaft Slinger Indicator</b>       | <b>No Slinger</b>                    |
| <b>Speed</b>                         | <b>1760 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

| NP1953A01    |               |  |      |     |      |   |  |       |  |   |  |
|--------------|---------------|--|------|-----|------|---|--|-------|--|---|--|
| CAT.NO.      | CESSWDM3558T  |  |      |     |      |   |  |       |  |   |  |
| SPEC.        | 35VV818K632G1 |  |      |     |      |   |  |       |  |   |  |
| HP           | 2             |  |      |     |      |   |  |       |  |   |  |
| VOLTS        | 230/460       |  |      |     |      |   |  |       |  |   |  |
| AMP          | 5.6/2.8       |  |      |     |      |   |  |       |  |   |  |
| RPM          | 1760          |  |      |     |      |   |  |       |  |   |  |
| FRAME        | 145TC         |  |      | HZ  | 60   |   |  | PH    |  | 3 |  |
| SER.F.       | 1.15          |  | CODE | L   | DES  | B |  | CLASS |  | H |  |
| NEMA-NOM-EFF | 86.5          |  |      | PF  | 77   |   |  |       |  |   |  |
| RATING       | 40C AMB-CONT  |  |      |     |      |   |  |       |  |   |  |
| CC           | 010A          |  |      |     |      |   |  |       |  |   |  |
| DE           | 6205          |  |      | ODE | 6203 |   |  |       |  |   |  |
| ENCL         | TEFC          |  | SN   |     |      |   |  |       |  |   |  |
|              | 4:1CT 4:1VT   |  |      |     |      |   |  |       |  |   |  |

**AC Induction Motor Performance Data**

Record # 111071

Typical performance - not guaranteed values

| Winding: 35WGK632-R001 |    |          | Type: 3532M                              |                     | Enclosure: TEFC         |            |          |
|------------------------|----|----------|------------------------------------------|---------------------|-------------------------|------------|----------|
| Nameplate Data         |    |          | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |            |          |
| Rated Output (HP)      |    | 2        | Full Load Torque                         |                     | 6.01 LB-FT              |            |          |
| Volts                  |    | 230/460  | Start Configuration                      |                     | direct on line          |            |          |
| Full Load Amps         |    | 5.6/2.8  | Breakdown Torque                         |                     | 22.9 LB-FT              |            |          |
| R.P.M.                 |    | 1760     | Pull-up Torque                           |                     | 12.9 LB-FT              |            |          |
| Hz                     | 60 | Phase    | 3                                        | Locked-rotor Torque |                         | 16.3 LB-FT |          |
| NEMA Design Code       |    | B        | KVA Code                                 | L                   | Starting Current        |            | 24.4 A   |
| Service Factor (S.F.)  |    | 1.15     | No-load Current                          |                     | 1.55 A                  |            |          |
| NEMA Nom. Eff.         |    | 86.5     | Power Factor                             | 77                  | Line-line Res. @ 25°C   |            | 8.6033 Ω |
| Rating - Duty          |    | 40C      | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |            | 66°C     |
| S.F. Amps              |    | 6.3/3.15 | Temp. Rise @ S.F. Load                   |                     | 81°C                    |            |          |
|                        |    |          | Locked-rotor Power Factor                |                     | 53.6                    |            |          |
|                        |    |          | Rotor inertia                            |                     | 0.231 lb-ft²            |            |          |

**Load Characteristics 460 V, 60 Hz, 2 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 37     | 57     | 70     | 78     | 82     | 85     | 80   |
| Efficiency      | 78.6   | 85.5   | 86.9   | 86.6   | 85.5   | 84     | 85.9 |
| Speed           | 1789.9 | 1780.7 | 1770.8 | 1760.2 | 1748.4 | 1735.8 | 1753 |
| Line amperes    | 1.67   | 1.94   | 2.33   | 2.81   | 3.35   | 3.94   | 3.13 |

ABB Motors and Mechanical Inc.

WINDING # 35WGK632

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1760 RPM 460 V 3532M

TORQUES (LB-FT) : PO=22.9 PU=12.9 LR=16.3 LRA=24.4





