

# ABB BALDOR RELIANCE III

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## Customer information packet

### CSWDM3541

.75HP, 3450RPM, 3PH, 60HZ, 56C, 3518M, TENV, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TENV                                                        |
| <b>Frame</b>                          | 56C                                                         |
| <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>             | .750 HP @ 60 HZ                                             |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 3600 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ<br>208.0 V @ 60 HZ       |
| <b>Agency Approvals</b>               | CSA<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>              | 2.300 A @ 208.0 V<br>2.200 A @ 230.0 V<br>1.100 A @ 460.0 V |
| <b>Design Code</b>                    | B                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 80.0 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Front Face Code</b>                | Standard                                                    |
| <b>Front Shaft Indicator</b>          | None                                                        |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | Q          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35S630     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGT097   |
| <b>Layout</b>       | 35LYS630   |
| <b>Eff. date</b>    | 09-11-2023 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 02-19-2010 |

|                                      |                      |
|--------------------------------------|----------------------|
| <b>Heater Indicator</b>              | No Heater            |
| <b>High Voltage Full Load Amps</b>   | 1.1 a                |
| <b>Insulation Class</b>              | F                    |
| <b>Inverter Code</b>                 | Not Inverter         |
| <b>KVA Code</b>                      | N                    |
| <b>Lifting Lugs</b>                  | No Lifting Lugs      |
| <b>Locked Bearing Indicator</b>      | Locked Bearing       |
| <b>Motor Lead Exit</b>               | Ko Box               |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 18 AWG           |
| <b>Motor Lead Termination</b>        | Flying Leads         |
| <b>Motor Standards</b>               | NEMA                 |
| <b>Motor Type</b>                    | 3518M                |
| <b>Mounting Arrangement</b>          | F1                   |
| <b>Number of Poles</b>               | 2                    |
| <b>Overall Length</b>                | 11.06 IN             |
| <b>Power Factor</b>                  | 80                   |
| <b>Product Family</b>                | Wash Down Paint Free |
| <b>Pulley End Bearing Type</b>       | Sealed Bearing       |
| <b>Pulley Face Code</b>              | C-Face               |
| <b>Pulley Shaft Indicator</b>        | Standard             |
| <b>Rodent Screen</b>                 | None                 |
| <b>RoHS Status</b>                   | ROHS COMPLIANT       |
| <b>Service Factor</b>                | 1.25                 |
| <b>Shaft Diameter</b>                | 0.625 IN             |
| <b>Shaft Extension Location</b>      | Pulley End           |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding   |
| <b>Shaft Rotation</b>                | Reversible           |
| <b>Shaft Slinger Indicator</b>       | No Slinger           |
| <b>Speed</b>                         | 3450 rpm             |
| <b>Speed Code</b>                    | Single Speed         |
| <b>Starting Method</b>               | Direct on line       |
| <b>Thermal Device - Bearing</b>      | None                 |
| <b>Thermal Device - Winding</b>      | None                 |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor  |

|                   |      |
|-------------------|------|
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

**Nameplate**

| NP1496L      |                 |  |      |      |     |   |  |       |   |  |  |
|--------------|-----------------|--|------|------|-----|---|--|-------|---|--|--|
| CAT.NO.      | CSWDM3541       |  |      |      |     |   |  |       |   |  |  |
| SPEC.        | 35S630T097G1    |  |      |      |     |   |  |       |   |  |  |
| HP           | .75             |  |      |      |     |   |  |       |   |  |  |
| VOLTS        | 208-230/460     |  |      |      |     |   |  |       |   |  |  |
| AMP          | 2.3-2.2/1.1     |  |      |      |     |   |  |       |   |  |  |
| RPM          | 3450            |  |      |      |     |   |  |       |   |  |  |
| FRAME        | 56C             |  | HZ   | 60   |     |   |  | PH    | 3 |  |  |
| SER.F.       | 1.25            |  | CODE | N    | DES | B |  | CLASS | F |  |  |
| NEMA-NOM-EFF | 80              |  | PF   | 80   |     |   |  |       |   |  |  |
| RATING       | 40C AMB-CONT    |  |      |      |     |   |  |       |   |  |  |
| CC           |                 |  |      |      |     |   |  |       |   |  |  |
| DE           | 6205            |  | ODE  | 6203 |     |   |  |       |   |  |  |
| ENCL         | TENV            |  | SN   |      |     |   |  |       |   |  |  |
|              | SFA 2.8-2.6/1.3 |  |      |      |     |   |  |       |   |  |  |

**AC Induction Motor Performance Data**

Record # 36638

Typical performance - not guaranteed values

| Winding: 35WGT097-R002 |    |             | Type: 3518M                              |                     | Enclosure: TENV         |           |      |
|------------------------|----|-------------|------------------------------------------|---------------------|-------------------------|-----------|------|
| Nameplate Data         |    |             | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |           |      |
| Rated Output (HP)      |    | .75         | Full Load Torque                         |                     | 1.1 LB-FT               |           |      |
| Volts                  |    | 208-230/460 | Start Configuration                      |                     | direct on line          |           |      |
| Full Load Amps         |    | 2.3-2.2/1.1 | Breakdown Torque                         |                     | 7.6 LB-FT               |           |      |
| R.P.M.                 |    | 3450        | Pull-up Torque                           |                     | 4.1 LB-FT               |           |      |
| Hz                     | 60 | Phase       | 3                                        | Locked-rotor Torque |                         | 5.6 LB-FT |      |
| NEMA Design Code       |    | B           | KVA Code                                 |                     | N                       |           |      |
| Service Factor (S.F.)  |    | 1.25        | No-load Current                          |                     | 0.61 A                  |           |      |
| NEMA Nom. Eff.         |    | 80          | Power Factor                             |                     | 80                      |           |      |
| Rating - Duty          |    | 40C         | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |           | 65°C |
| S.F. Amps              |    | 2.8-2.6/1.3 | Temp. Rise @ S.F. Load                   |                     | 76°C                    |           |      |
|                        |    |             | Locked-rotor Power Factor                |                     | 58                      |           |      |
|                        |    |             | Rotor inertia                            |                     | 0.0498 LB-FT2           |           |      |

**Load Characteristics 460 V, 60 Hz, 0.75 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 42   | 61   | 72   | 78   | 81   | 82   | 81   |
| Efficiency      | 62.6 | 74.5 | 78.8 | 80.4 | 81   | 80.1 | 81   |
| Speed           | 3571 | 3536 | 3509 | 3477 | 3444 | 3406 | 3444 |
| Line amperes    | 0.66 | 0.76 | 0.91 | 1.09 | 1.29 | 1.52 | 1.29 |

ABB Motors and Mechanical Inc.

WINDING # 35WGT097

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 3450 RPM 460 V 3518M

TORQUES (LB-FT): PO=7.6 PU=4.1 LR=5.6 LRA=11.7





