

# ABB BALDOR RELIANCE III

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## Customer information packet

### HBEM3556T

1HP, 1170RPM, 3PH, 60HZ, 145T, 3526M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                        |
|---------------------------------------|----------------------------------------|
| <b>Enclosure</b>                      | TEFC                                   |
| <b>Frame</b>                          | 145T                                   |
| <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>  | 1200 RPM @ 60 HZ                       |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ     |
| <b>Agency Approvals</b>               | WEEE<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>              | 1.500 A @ 460.0 V<br>3.000 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>  | Electrically Isolated Bearings         |
| <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>    | 1.5 a                                  |
| <b>Insulation Class</b>               | H                                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | C          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35E5738    |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGG019   |
| <b>Layout</b>       | 35LYE5738  |
| <b>Eff. date</b>    | 08-04-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 02-23-2023 |

|                                      |                      |
|--------------------------------------|----------------------|
| <b>Inverter Code</b>                 | <b>Inverter Duty</b> |
| <b>KVA Code</b>                      | J                    |
| <b>Lifting Lugs</b>                  | No Lifting Lugs      |
| <b>Locked Bearing Indicator</b>      | No Locked Bearing    |
| <b>Max Speed</b>                     | 1800 rpm             |
| <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>                    | 3526M                |
| <b>Mounting Arrangement</b>          | F1                   |
| <b>Number of Poles</b>               | 6                    |
| <b>Overall Length</b>                | 13.29 IN             |
| <b>Power Factor</b>                  | 67                   |
| <b>Product Family</b>                | General Purpose      |
| <b>Pulley End Bearing Type</b>       | Sealed Bearing       |
| <b>Pulley Face Code</b>              | Standard             |
| <b>Pulley Shaft Indicator</b>        | Standard             |
| <b>Rodent Screen</b>                 | None                 |
| <b>RoHS Status</b>                   | ROHS COMPLIANT       |
| <b>Service Factor</b>                | 1.15                 |
| <b>Shaft Diameter</b>                | 0.875 IN             |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding   |
| <b>Shaft Rotation</b>                | Reversible           |
| <b>Shaft Slinger Indicator</b>       | No Slinger           |
| <b>Speed</b>                         | 1170 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  |
| <b>Winding Thermal 1</b>             | None                 |
| <b>Winding Thermal 2</b>             | None                 |



**AC Induction Motor Performance Data**

Record # 53334

Typical performance - not guaranteed values

| Winding: 35WGM497-R064 |    |         | Type: 3526M                              |                     | Enclosure: TEFC           |            |              |
|------------------------|----|---------|------------------------------------------|---------------------|---------------------------|------------|--------------|
| Nameplate Data         |    |         | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |            |              |
| Rated Output (HP)      |    | 1       | Full Load Torque                         |                     | 4.51 LB-FT                |            |              |
| Volts                  |    | 230/460 | Start Configuration                      |                     | direct on line            |            |              |
| Full Load Amps         |    | 3.6/1.8 | Breakdown Torque                         |                     | 15.3 LB-FT                |            |              |
| R.P.M.                 |    | 1155    | Pull-up Torque                           |                     | 11.1 LB-FT                |            |              |
| Hz                     | 60 | Phase   | 3                                        | Locked-rotor Torque |                           | 11.9 LB-FT |              |
| NEMA Design Code       |    | B       | KVA Code                                 | K                   | Starting Current          |            | 10.8 A       |
| Service Factor (S.F.)  |    | 1.15    | No-load Current                          |                     | 1.21 A                    |            |              |
| NEMA Nom. Eff.         |    | 82.5    | Power Factor                             | 64                  | Line-line Res. @ 25°C     |            | 16.1 Ω       |
| Rating - Duty          |    | 40C     | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |            | 47°C         |
| S.F. Amps              |    |         |                                          |                     | Temp. Rise @ S.F. Load    |            | 56°C         |
|                        |    |         |                                          |                     | Locked-rotor Power Factor |            | 42           |
|                        |    |         |                                          |                     | Rotor inertia             |            | 0.155 LB-FT2 |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 27   | 43   | 55   | 64   | 70   | 75   | 68   |
| Efficiency      | 69.3 | 79.4 | 82.1 | 82.8 | 82.1 | 80.5 | 82.4 |
| Speed           | 1190 | 1181 | 1170 | 1159 | 1146 | 1130 | 1151 |
| Line amperes    | 1.25 | 1.36 | 1.53 | 1.75 | 2.02 | 2.33 | 1.91 |

ABB Motors and Mechanical Inc.

WINDING # 35WGM497

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1155 RPM 460 V 3526M

TORQUES (LB-FT): PO=15.3 PU=11.1 LR=11.9 LRA=10.8





