

# ABB BALDOR RELIANCE III

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## Customer information packet

### VEM7075T

3HP, 3450RPM, 3PH, 60HZ, 145TC, 3532M, XPFC, F1

Class - CLI GP D

Division - Division I

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | XPFC                                                        |
| <b>Frame</b>                          | 145TC                                                       |
| <b>Frame Material</b>                 | Steel                                                       |
| <b>Frequency</b>                      | 60.00 Hz                                                    |
| <b>Haz Area Class and Group</b>       | CLI GP D                                                    |
| <b>Haz Area Division</b>              | Division I                                                  |
| <b>Motor Letter Type</b>              | Three Phase                                                 |
| <b>Output @ Frequency</b>             | 3.000 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>               | UR<br>CSA<br>CSA EEV                                        |
| <b>Ambient Temperature</b>            | 40 °C                                                       |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                            |
| <b>Auxiliary Box Lead Termination</b> | None                                                        |
| <b>Base Indicator</b>                 | No Mounting                                                 |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                     |
| <b>Blower</b>                         | None                                                        |
| <b>Current @ Voltage</b>              | 7.900 A @ 208.0 V<br>7.200 A @ 230.0 V<br>3.600 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>         | 86.5 %                                                      |
| <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>     | M          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35E378     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGQ060   |
| <b>Layout</b>       | 35LYE378   |
| <b>Eff. date</b>    | 03-08-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 09-30-2015 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Haz Area Temp Code</b>            | T2C                        |
| <b>Heater Indicator</b>              | No Heater                  |
| <b>High Voltage Full Load Amps</b>   | 3.6 a                      |
| <b>Insulation Class</b>              | B                          |
| <b>Inverter Code</b>                 | Not Inverter               |
| <b>KVA Code</b>                      | L                          |
| <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>                    | 3532M                      |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 2                          |
| <b>Overall Length</b>                | 16.10 IN                   |
| <b>Power Factor</b>                  | 92                         |
| <b>Product Family</b>                | Hazardous Location Motor   |
| <b>Pulley End Bearing Type</b>       | Ball                       |
| <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>                | 1.00                       |
| <b>Shaft Diameter</b>                | 0.875 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>      | Normally Closed Thermostat |

| Vibration Sensor Indicator | No Vibration Sensor |
|----------------------------|---------------------|
| Winding Thermal 1          | None                |
| Winding Thermal 2          | None                |

Nameplate

| NP0015XPSLEV |              |              |      |      |   |  |  |  |  |
|--------------|--------------|--------------|------|------|---|--|--|--|--|
| NO.          |              | CC           | 010A |      |   |  |  |  |  |
| SER.         |              |              |      |      |   |  |  |  |  |
| SPEC.        | 35E378Q060G1 |              |      |      |   |  |  |  |  |
| CAT.NO.      | VEM7075T     |              |      |      |   |  |  |  |  |
| HP           | 3            | T. CODE      | T2B  |      |   |  |  |  |  |
| VOLTS        | 230/460      |              |      |      |   |  |  |  |  |
| AMPS         | 7.2/3.6      |              |      |      |   |  |  |  |  |
| RPM          | 3450         |              |      |      |   |  |  |  |  |
| HZ           | 60           | PH           | 3    | CL   | B |  |  |  |  |
| SER.F.       | 1.00         | DES          | B    | CODE | L |  |  |  |  |
| RATING       | 40C AMB-CONT |              |      |      |   |  |  |  |  |
| FRAME        | 145TC        | NEMA-NOM-EFF | 86.5 |      |   |  |  |  |  |
|              |              | PF           | 92   |      |   |  |  |  |  |
| BLANK        |              |              |      |      |   |  |  |  |  |

**AC Induction Motor Performance Data**

Record # 35668

Typical performance - not guaranteed values

| Winding: 35WGQ060-R003 |                   | Type: 3532M                              | Enclosure: XPFC |
|------------------------|-------------------|------------------------------------------|-----------------|
| Nameplate Data         |                   | 460 V, 60 Hz:<br>High Voltage Connection |                 |
| Rated Output (HP)      | 3                 | Full Load Torque                         | 4.5 LB-FT       |
| Volts                  | 230/460           | Start Configuration                      | direct on line  |
| Full Load Amps         | 7.2/3.6           | Breakdown Torque                         | 18 LB-FT        |
| R.P.M.                 | 3450              | Pull-up Torque                           | 11 LB-FT        |
| Hz                     | 60 Phase          | Locked-rotor Torque                      | 16 LB-FT        |
| NEMA Design Code       | B KVA Code        | Starting Current                         | 33 A            |
| Service Factor (S.F.)  | 1                 | No-load Current                          | 1.2 A           |
| NEMA Nom. Eff.         | 86.5 Power Factor | Line-line Res. @ 25°C                    | 4.72 Ω          |
| Rating - Duty          | 40C AMB-CONT      | Temp. Rise @ Rated Load                  | 61°C            |
| S.F. Amps              |                   | Temp. Rise @ S.F. Load                   | 73°C            |
|                        |                   | Locked-rotor Power Factor                | 47              |
|                        |                   | Rotor inertia                            | 0.0885 LB-FT2   |

**Load Characteristics 460 V, 60 Hz, 3 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 57   | 77   | 85   | 88   | 89   | 90   |
| Efficiency      | 84.1 | 87.9 | 88.4 | 87.2 | 85.7 | 83.5 |
| Speed           | 3562 | 3531 | 3498 | 3462 | 3421 | 3375 |
| Line amperes    | 1.5  | 2.1  | 2.8  | 3.6  | 4.5  | 5.4  |

ABB Motors and Mechanical Inc.

WINDING # 35WGQ060

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3450 RPM 460 V 3532M

TORQUES (LB-FT): PO=18 PU=11 LR=16 LRA=33





