

# ABB BALDOR RELIANCE III

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## Customer information packet

### VUHL3518

.5/.37KWHP, 1740RPM, 1PH, 60HZ, 56C, 3518LC, T

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                        |
| <b>Frame</b>                          | 56C                                                         |
| <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>              | Cap Start, Cap Run                                          |
| <b>Output @ Frequency</b>             | .500 HP @ 60 HZ                                             |
| <b>Phase</b>                          | 1                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 115.0 V @ 60 HZ<br>208.0 V @ 60 HZ<br>230.0 V @ 60 HZ       |
| <b>Agency Approvals</b>               | C UR US<br>CE<br>CURUS<br>UKCA<br>WEEE                      |
| <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>              | 6.200 A @ 115.0 V<br>3.100 A @ 230.0 V<br>3.100 A @ 208.0 V |
| <b>Design Code</b>                    | N                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 72.0 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | D          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35E022     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGG588   |
| <b>Layout</b>       | 35LYE022   |
| <b>Eff. date</b>    | 09-17-2025 |
| <b>CD Diagram</b>   | CD0055     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 6#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 10-09-2023 |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Feedback Device</b>               | <b>NO FEEDBACK</b>  |
| <b>Front Shaft Indicator</b>         | None                |
| <b>Heater Indicator</b>              | No Heater           |
| <b>High Voltage Full Load Amps</b>   | 3.1 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 Quantity/Wire Size</b> | 6 @ 18 AWG          |
| <b>Motor Lead Termination</b>        | Flying Leads        |
| <b>Motor Standards</b>               | NEMA                |
| <b>Motor Type</b>                    | 3518LC              |
| <b>Mounting Arrangement</b>          | F1                  |
| <b>Number of Poles</b>               | 4                   |
| <b>Overall Length</b>                | 13.23 IN            |
| <b>Power Factor</b>                  | 72                  |
| <b>Product Family</b>                | General Purpose     |
| <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>Service Factor</b>                | 1.15                |
| <b>Shaft Diameter</b>                | 0.625 IN            |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding  |
| <b>Shaft Rotation</b>                | Reversible          |
| <b>Shaft Slinger Indicator</b>       | No Slinger          |
| <b>Speed</b>                         | 1740 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                |

Winding Thermal 2

None

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**Nameplate**

| NP1372L        |                              |      |  |      |     |    |    |   |  |
|----------------|------------------------------|------|--|------|-----|----|----|---|--|
| CAT.NO.        | VUHL3518                     |      |  |      |     |    |    |   |  |
| SPEC.          | 35E022G588                   |      |  |      |     |    |    |   |  |
| HP             | .5/.37KW                     |      |  |      |     |    |    |   |  |
| VOLTS          | 115/208-230                  |      |  |      |     |    |    |   |  |
| AMP            | 6.2/3.1                      |      |  |      |     |    |    |   |  |
| R.P.M. (1/MIN) | 1740                         |      |  |      |     |    |    |   |  |
| FRAME          | 56C                          | HZ   |  | 60   |     | PH |    | 1 |  |
| SER.F.         | 1.15                         | CODE |  | N    | DES | N  | CL | F |  |
| NEMA-NOM-EFF   | 72                           | PF   |  | 72   |     |    |    |   |  |
| RATING         | 40C AMB-S1 CONT              |      |  |      |     |    |    |   |  |
| CC             | IP44 IC411 13KG              |      |  |      |     |    |    |   |  |
| DE             | 6205                         | ODE  |  | 6203 |     |    |    |   |  |
| ENCL           | TEFC                         | SN   |  |      |     |    |    |   |  |
|                | IE2-60HZ 69.9(75%),62.5(50%) |      |  |      |     |    |    |   |  |

**AC Induction Motor Performance Data**

Record # 101468

Typical performance - not guaranteed values

| Winding: 35WGG588-R001 |    |             | Type: 3518LC                             |                     | Enclosure: TEFC         |                       |
|------------------------|----|-------------|------------------------------------------|---------------------|-------------------------|-----------------------|
| Nameplate Data         |    |             | 230 V, 60 Hz:<br>High Voltage Connection |                     |                         |                       |
| Rated Output (HP)      |    | .5          | Full Load Torque                         |                     | 1.509 LB-FT             |                       |
| Volts                  |    | 115/208-230 | Start Configuration                      |                     | direct on line          |                       |
| Full Load Amps         |    | 6.2/3.1     | Breakdown Torque                         |                     | 4.66 LB-FT              |                       |
| R.P.M.                 |    | 1740        | Pull-up Torque                           |                     | 3.43 LB-FT              |                       |
| Hz                     | 60 | Phase       | 1                                        | Locked-rotor Torque |                         | 7.79 LB-FT            |
| NEMA Design Code       |    | N           | KVA Code                                 |                     | N                       |                       |
| Service Factor (S.F.)  |    | 1.15        | Starting Current                         |                     | 25.3 A                  |                       |
| Service Factor (S.F.)  |    | 1.15        | No-load Current                          |                     | 2.25 A                  |                       |
| NEMA Nom. Eff.         |    | 72          | Power Factor                             |                     | 72                      | Line-line Res. @ 25°C |
| Rating - Duty          |    | 40C         | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |                       |
| S.F. Amps              |    | 6.6/3.5-3.3 | Temp. Rise @ S.F. Load                   |                     | 44°C                    |                       |

**Load Characteristics 230 V, 60 Hz, 0.5 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 39     | 53     | 64     | 72     | 78     | 83     | 76   |
| Efficiency      | 46.3   | 62.5   | 69.9   | 73.2   | 74.2   | 73.6   | 73.8 |
| Speed           | 1781.7 | 1768.9 | 1755.3 | 1740.7 | 1723.7 | 1704.2 | 1730 |
| Line amperes    | 2.29   | 2.46   | 2.72   | 3.06   | 3.49   | 4      | 3.32 |

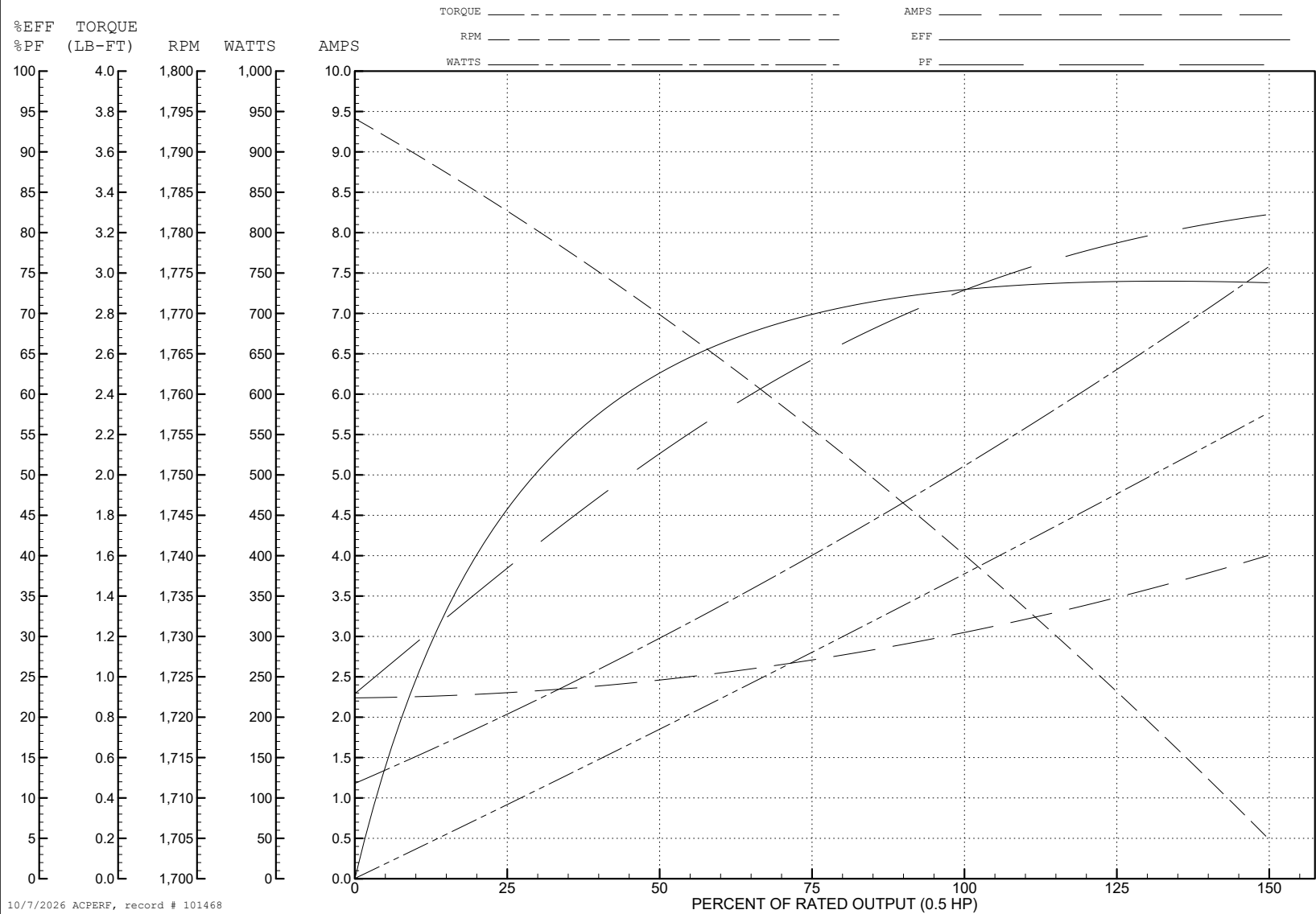
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WINDING # 35WGG588

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 1740 RPM 230 V 3518LC

TORQUES (LB-FT): PO=4.66 PU=3.43 LR=7.79 LRA=25.3



**AC Induction Motor Performance Data**

Record # 101469

Typical performance - not guaranteed values

| Winding: 35WGG588-R001 |    |             | Type: 3518LC                             |                     | Enclosure: TEFC                |            |
|------------------------|----|-------------|------------------------------------------|---------------------|--------------------------------|------------|
| Nameplate Data         |    |             | 208 V, 60 Hz:<br>High Voltage Connection |                     |                                |            |
| Rated Output (HP)      |    | .5          | Full Load Torque                         |                     | 1.514 LB-FT                    |            |
| Volts                  |    | 115/208-230 | Start Configuration                      |                     | direct on line                 |            |
| Full Load Amps         |    | 6.2/3.1     | Breakdown Torque                         |                     | 3.86 LB-FT                     |            |
| R.P.M.                 |    | 1740        | Pull-up Torque                           |                     | 2.78 LB-FT                     |            |
| Hz                     | 60 | Phase       | 1                                        | Locked-rotor Torque |                                | 5.71 LB-FT |
| NEMA Design Code       |    | N           | KVA Code                                 |                     | N                              |            |
| Service Factor (S.F.)  |    | 1.15        | Starting Current                         |                     | 22.1 A                         |            |
| NEMA Nom. Eff.         |    | 72          | Power Factor                             |                     | 72                             |            |
| Rating - Duty          |    | 40C         | AMB-CONT                                 |                     | Temp. Rise @ Rated Load        |            |
| S.F. Amps              |    | 6.6/3.5-3.3 | Line-line Res. @ 25°C                    |                     | 4.0972 Ω A Ph<br>1.6154 Ω B Ph |            |
|                        |    |             | Temp. Rise @ S.F. Load                   |                     | 34°C                           |            |
|                        |    |             |                                          |                     | 40°C                           |            |

**Load Characteristics 208 V, 60 Hz, 0.5 HP**

| % of Rated Load | 25     | 50   | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|------|--------|--------|--------|--------|------|
| Power Factor    | 45     | 61   | 72     | 79     | 84     | 87     | 82   |
| Efficiency      | 51.2   | 66.3 | 71.8   | 73.5   | 72.6   | 70.3   | 73   |
| Speed           | 1778.5 | 1763 | 1745.6 | 1726.2 | 1701.3 | 1672.7 | 1711 |
| Line amperes    | 1.95   | 2.21 | 2.58   | 3.05   | 3.66   | 4.36   | 3.42 |

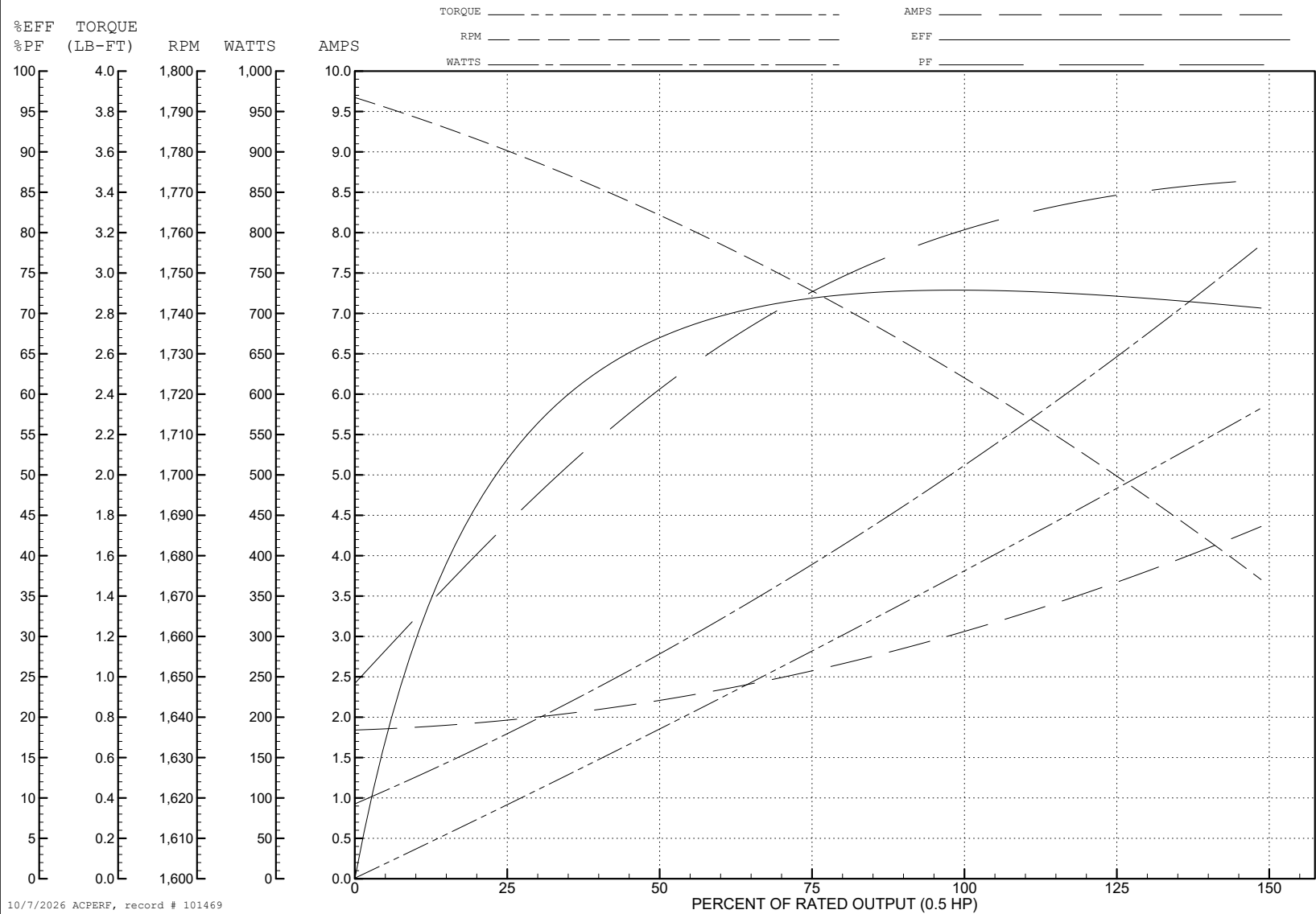
ABB Motors and Mechanical Inc.

WINDING # 35WGG588

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 1740 RPM 208 V 3518LC

TORQUES (LB-FT) : PO=3.86 PU=2.78 LR=5.71 LRA=22.1





CD0055

