

# ABB BALDOR RELIANCE III

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## Customer information packet

### EWDM3618T

1.5HP, 855RPM, 3PH, 60HZ, 184T, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                        |
|---------------------------------------|----------------------------------------|
| <b>Enclosure</b>                      | TEFC                                   |
| <b>Frame</b>                          | 184T                                   |
| <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>             | 1.500 HP @ 60 HZ                       |
| <b>Phase</b>                          | 3                                      |
| <b>Synchronous Speed @ Frequency</b>  | 900 RPM @ 60 HZ                        |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ     |
| <b>Agency Approvals</b>               | CSA<br>CSA EEV<br>NEMA PREMIUM<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>              | 3.000 A @ 460.0 V<br>6.000 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>         | 78.5 %                                 |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated              |
| <b>Feedback Device</b>                | NO FEEDBACK                            |
| <b>Heater Indicator</b>               | No Heater                              |
| <b>High Voltage Full Load Amps</b>    | 3.0 a                                  |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | B          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 36WGN164   |
| <b>Layout</b>       | 36LYK186   |
| <b>Eff. date</b>    | 02-14-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 08         |
| <b>Leads</b>        | 9#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 12-02-2019 |

|                                   |                       |
|-----------------------------------|-----------------------|
| <b>Insulation Class</b>           | F                     |
| <b>Inverter Code</b>              | Not Inverter          |
| <b>KVA Code</b>                   | K                     |
| <b>Lifting Lugs</b>               | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>   | No Locked Bearing     |
| <b>Motor Lead Termination</b>     | Flying Leads          |
| <b>Motor Standards</b>            | NEMA                  |
| <b>Motor Type</b>                 | 3646M                 |
| <b>Mounting Arrangement</b>       | F1                    |
| <b>Number of Poles</b>            | 8                     |
| <b>Overall Length</b>             | 18.04 IN              |
| <b>Power Factor</b>               | 61                    |
| <b>Product Family</b>             | Wash Down             |
| <b>Pulley Face Code</b>           | Standard              |
| <b>Rodent Screen</b>              | None                  |
| <b>Service Factor</b>             | 1.15                  |
| <b>Shaft Diameter</b>             | 1.125 IN              |
| <b>Shaft Ground Indicator</b>     | No Shaft Grounding    |
| <b>Shaft Rotation</b>             | Reversible            |
| <b>Speed</b>                      | 855 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                  |

**Nameplate**

| NP1669L      |                       |      |     |      |   |       |    |   |  |
|--------------|-----------------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | EWDM3618T             |      |     |      |   |       |    |   |  |
| SPEC.        | 36-0000-0237          |      |     |      |   |       |    |   |  |
| HP           | 1.5                   |      |     |      |   |       |    |   |  |
| VOLTS        | 230/460               |      |     |      |   |       |    |   |  |
| AMP          | 6/3                   |      |     |      |   |       |    |   |  |
| RPM          | 855                   |      |     |      |   |       |    |   |  |
| FRAME        | 184T                  |      | HZ  | 60   |   |       | PH | 3 |  |
| SER.F.       | 1.15                  | CODE | K   | DES  | B | CLASS |    | F |  |
| NEMA-NOM-EFF | 78.5                  | PF   | 61  |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT          |      |     |      |   |       |    |   |  |
| CC           | 010A                  |      |     |      |   |       |    |   |  |
| DE           | 6206                  |      | ODE | 6205 |   |       |    |   |  |
| ENCL         | TEFC                  | SN   |     |      |   |       |    |   |  |
| BLANK        | 10:1CT, 10:1VT,1.00SF |      |     |      |   |       |    |   |  |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA377327      | SA 36-0000-0237                          | 1.000 ea |
| RA367243      | RA 36-0000-0237                          | 1.000 ea |
| LB1164        | LABEL,WARNING AND DRAIN                  | 1.000 ea |
| LC0005        | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING  | 1.000 ea |
| NP1669L       | SS WD SUPER-E UL PREM REV MTG            | 1.000 ea |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| MN416A01      | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |
| HW3200A01     | 3/8-16X3/4 EYEBOLT WELDED F/S            | 1.000 ea |
| 36FH4010A08   | IEC FH NO GREASER - W/PRIMER             | 1.000 ea |
| 11XW1032S06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 3.000 ea |
| 36FN3000A01SP | EXFN, PLASTIC, 7.00 OD, .912 ID          | 1.000 ea |
| 51XB1214A16   | 12-14X1.00 HXWSSLD SERTYB                | 1.000 ea |
| MJ1000A02     | GREASE, POLYREX EM EXXON                 | 0.050 lb |
| HA3101S28     | THRUBOLT- 1/4-20 X 12.50 SS              | 4.000 ea |
| XY2520S12     | 1/4-20 SS HEX NUT                        | 4.000 ea |
| 36EP3104A03MW | FREP MACH (RAISED FH PADS) WHITE EPOXY   | 1.000 ea |
| HW4600B32SP   | V-RING SLINGER 1.000 X 1.540 X .24 VITON | 1.000 ea |
| HW5100A05     | WVY WSHR F/205 & 304 BRGS                | 1.000 ea |
| HW4032A01     | BLACK DRAIN PLUG FOR WASH DOWN MOTORS    | 3.000 ea |
| 36EP3100A40MW | PU ENDPLATE-ENCL.WASH DOWN DUTY (WHITE E | 1.000 ea |
| HW4600B36SP   | V-RING SLINGER 1.188 X 1.380 X .24 VITON | 1.000 ea |
| HW4600B50     | SEAL 1.156 X 1.874 X 0.250 SINGLE LIP DB | 1.000 ea |
| HA5027A01     | HA4066A01 T-DRAIN X2 BAGGED              | 1.000 ea |
| HW4032A01     | BLACK DRAIN PLUG FOR WASH DOWN MOTORS    | 3.000 ea |
| 36CB3005A03W  | 36 CB .75 NPT @ 6 W/WHITE EPOXY          | 1.000 ea |
| 35GS1039      | 05 MOLDED GASKET W/LIP, 1.12 LEAD HOLE,  | 1.000 ea |
| 51XB1016A08   | 10-16X 1/2HXWSSLD SERTYB                 | 2.000 ea |
| HW3001B02     | BRASS CUP WASHER W/GROUND SYMBOL TAB,    | 1.000 ea |
| 36CB4518      | 36 LIPPED CB LID PRIMED                  | 1.000 ea |
| 37GS3010SP    | 1/16"WHITE LID GASKET                    | 1.000 ea |
| 59XW0832S07   | TAPTITE II,HEX WSHR UNSLTD SER,410 S.S., | 4.000 ea |

|            |                                          |          |
|------------|------------------------------------------|----------|
| MG1025W01  | WILKOFAST, 781.01, SIGNAL WHITE #9003    | 0.022 ga |
| MJ5001A27  | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 qt |
| G0PA1000   | PKG GRP, PRINT PK1026A06                 | 1.000 ea |
| HW2502E16  | #303 SS,SQ KEY 1/4 X 1.750               | 1.000 ea |
| HA7000A02  | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 ea |
| MG1025Z02  | ACTIVATOR WILKOFAST 060.02HF 55 GALLON   | 0.022 ga |
| FE-0000001 | ZRTG FE ASSEMBLY                         | 1.000 ea |
| PE-0000002 | ZRTG PE ASSEMBLY                         | 1.000 ea |
| LB1624     | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 67026

Typical performance - not guaranteed values

| Winding: 36WGN164-R001 |    |              | Type: 3646M  |                                          | Enclosure: TEFC |                       |          |
|------------------------|----|--------------|--------------|------------------------------------------|-----------------|-----------------------|----------|
| Nameplate Data         |    |              |              | 460 V, 60 Hz:<br>High Voltage Connection |                 |                       |          |
| Rated Output (HP)      |    | 1.5          |              | Full Load Torque                         |                 | 9.309 LB-FT           |          |
| Volts                  |    | 230/460      |              | Start Configuration                      |                 | direct on line        |          |
| Full Load Amps         |    | 6/3          |              | Breakdown Torque                         |                 | 31.1 LB-FT            |          |
| R.P.M.                 |    | 855          |              | Pull-up Torque                           |                 | 23.1 LB-FT            |          |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                      |                 | 29.5 LB-FT            |          |
| NEMA Design Code       |    | B            | KVA Code     | Starting Current                         |                 | 15 A                  |          |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                          |                 | 2.11 A                |          |
| NEMA Nom. Eff.         |    | 78.5         | Power Factor | 61                                       |                 | Line-line Res. @ 25°C | 8.9864 Ω |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                  |                 | 61°C                  |          |
| S.F. Amps              |    |              |              | Temp. Rise @ S.F. Load                   |                 | 75°C                  |          |
|                        |    |              |              | Locked-rotor Power Factor                |                 | 42.7                  |          |

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

| % of Rated Load | 25    | 50    | 75    | 100   | 125  | 150   | S.F. |
|-----------------|-------|-------|-------|-------|------|-------|------|
| Power Factor    | 26    | 41    | 52    | 61    | 68   | 72    | 65   |
| Efficiency      | 66.5  | 76.5  | 78.8  | 78.6  | 76.9 | 74.3  | 77.6 |
| Speed           | 889.4 | 879.1 | 867.8 | 855.3 | 840  | 822.1 | 846  |
| Line amperes    | 2.15  | 2.34  | 2.6   | 2.95  | 3.41 | 3.95  | 3.23 |

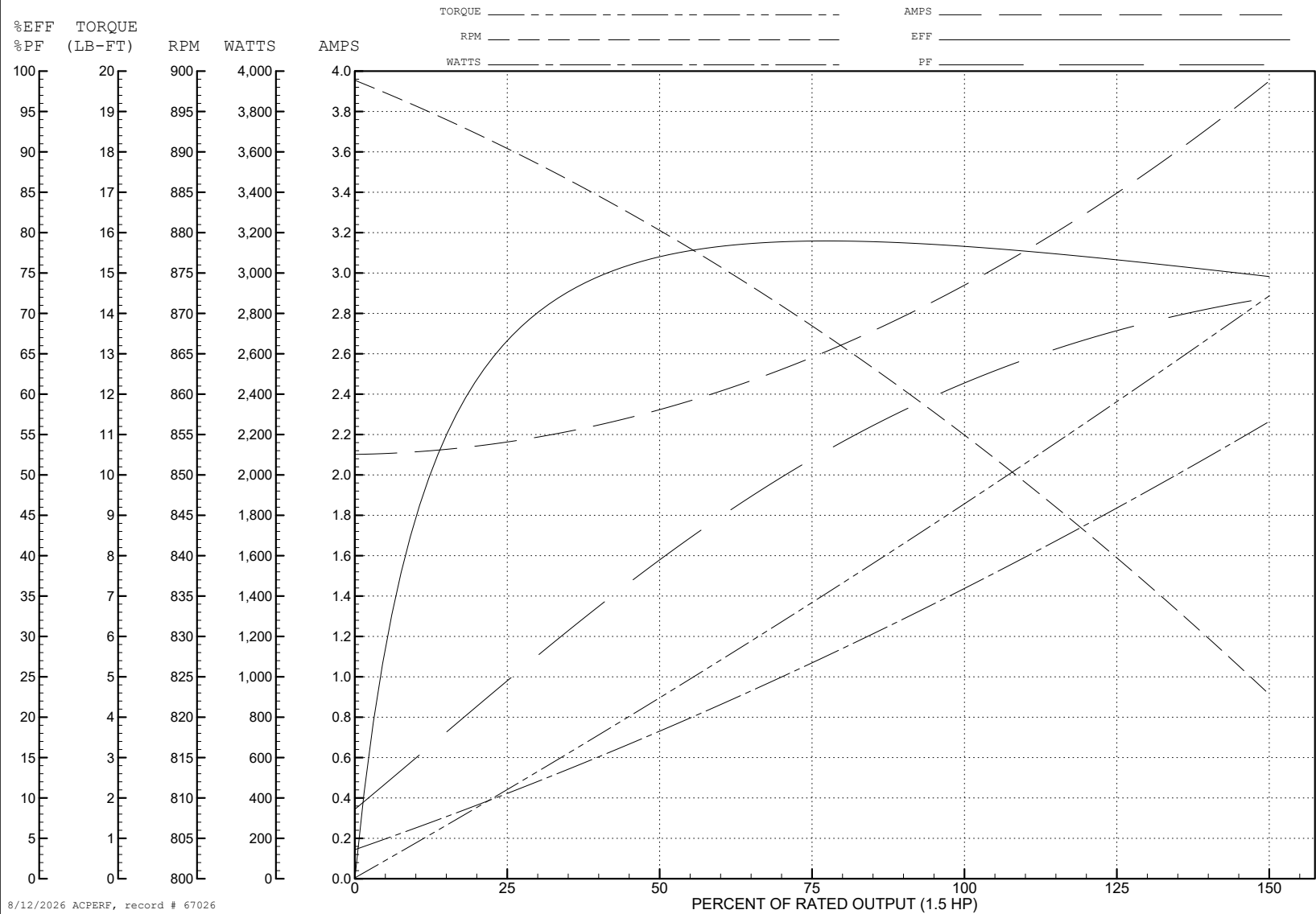
ABB Motors and Mechanical Inc.

WINDING # 36WGN164

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 855 RPM 460 V 3646M

TORQUES (LB-FT): PO=31.1 PU=23.1 LR=29.5 LRA=15





CD0005



- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
  - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
  - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
  - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

|                                           |         |                         |              |
|-------------------------------------------|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000                                    |         | FILE: AAA00005140       | MDL: -       |
|                                           |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005