

# ABB BALDOR RELIANCE III

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## Customer information packet

### EM2547T-G

60HP, 1775RPM, 3PH, 60HZ, 364T, 4278M, OPSB, F1

**Specifications**

|                                       |                                                                  |
|---------------------------------------|------------------------------------------------------------------|
| <b>Enclosure</b>                      | OPSB                                                             |
| <b>Frame</b>                          | 364T                                                             |
| <b>Frame Material</b>                 | Steel                                                            |
| <b>Frequency</b>                      | 60.00 Hz                                                         |
| <b>Motor Letter Type</b>              | Three Phase                                                      |
| <b>Output @ Frequency</b>             | 60.000 HP @ 60 HZ                                                |
| <b>Phase</b>                          | 3                                                                |
| <b>Synchronous Speed @ Frequency</b>  | 1800 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>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>              | 144.000 A @ 208.0 V<br>68.000 A @ 460.0 V<br>136.000 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>         | 95.0 %                                                           |
| <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                                                             |
| <b>Heater Indicator</b>               | No Heater                                                        |
| <b>High Voltage Full Load Amps</b>    | 68.0 a                                                           |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | X          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 42E260     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 42WGW587   |
| <b>Layout</b>       | 42LYE260   |
| <b>Eff. date</b>    | 04-24-2026 |
| <b>CD Diagram</b>   | CD0180     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#6        |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 11-30-2011 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Insulation Class</b>              | H                     |
| <b>Inverter Code</b>                 | Inverter Ready        |
| <b>KVA Code</b>                      | G                     |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>      | Locked Bearing        |
| <b>Motor Lead Exit</b>               | Ko Box                |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 6 AWG             |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 4278M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 4                     |
| <b>Overall Length</b>                | 30.69 IN              |
| <b>Power Factor</b>                  | 87                    |
| <b>Product Family</b>                | General Purpose       |
| <b>Pulley End Bearing Type</b>       | Ball                  |
| <b>Pulley Face Code</b>              | Standard              |
| <b>Pulley Shaft Indicator</b>        | Standard              |
| <b>Rodent Screen</b>                 | None                  |
| <b>Service Factor</b>                | 1.15                  |
| <b>Shaft Diameter</b>                | 2.375 IN              |
| <b>Shaft Extension Location</b>      | Pulley End            |
| <b>Shaft Ground Indicator</b>        | Shaft Grounding       |
| <b>Shaft Rotation</b>                | Reversible            |
| <b>Shaft Slinger Indicator</b>       | No Slinger            |
| <b>Speed</b>                         | 1775 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**

| NP2138LUA    |                            |          |    |        |          |       |     |            |   |           |      |        |      |
|--------------|----------------------------|----------|----|--------|----------|-------|-----|------------|---|-----------|------|--------|------|
| CAT.NO.      | EM2547T-G                  |          |    |        | P/N      |       |     |            |   | ENCLOSURE |      | OPSB   |      |
| SPEC.        | 42E260W587G1               |          |    | CC     | 010A     | FRAME |     | 364T       |   | S/N       |      |        |      |
| HP           | 60                         |          |    |        | CLASS    |       | H   | HZ         |   | 60        |      |        |      |
| RPM          | 1775                       |          |    |        | PH       | 3     | DES |            | A |           |      |        |      |
| VOLT         | 230/460                    |          |    |        | KVA-CODE |       |     | H          |   | ODE BRG   | 6311 | DE BRG | 6313 |
| AMP          | 138/69                     |          |    |        |          |       |     |            |   |           |      |        |      |
| RATING       | 40C AMB-CONT               |          |    |        | GREASE   |       |     | POLYREX EM |   |           |      |        |      |
| NEMA-NOM-EFF | 95                         | PF       | 86 | SER.F. | 1.15     |       |     |            |   |           |      |        |      |
|              | 50HZ 60HP 190/380V 162/81A |          |    |        | SF1.0    |       |     |            |   |           |      |        |      |
| HTR-VOLTS    |                            | HTR-AMPS |    |        |          |       |     |            |   |           |      |        |      |

**AC Induction Motor Performance Data**

Record # 17314

Typical performance - not guaranteed values

| Winding: 42WGW587-R005 |          |              | Type: 4278M                              |  | Enclosure: OPSB |  |
|------------------------|----------|--------------|------------------------------------------|--|-----------------|--|
| Nameplate Data         |          |              | 460 V, 60 Hz:<br>High Voltage Connection |  |                 |  |
| Rated Output (HP)      |          | 60           | Full Load Torque                         |  | 178 LB-FT       |  |
| Volts                  |          | 230/460      | Start Configuration                      |  | direct on line  |  |
| Full Load Amps         |          | 138/69       | Breakdown Torque                         |  | 584 LB-FT       |  |
| R.P.M.                 |          | 1775         | Pull-up Torque                           |  | 285 LB-FT       |  |
| Hz                     | 60 Phase | 3            | Locked-rotor Torque                      |  | 311 LB-FT       |  |
| NEMA Design Code       |          | A            | KVA Code                                 |  | H               |  |
| Service Factor (S.F.)  |          | 1.15         | Starting Current                         |  | 514 A           |  |
| NEMA Nom. Eff.         |          | 95           | Power Factor                             |  | 86              |  |
| Rating - Duty          |          | 40C AMB-CONT | Line-line Res. @ 25°C                    |  | 0.0911 Ω        |  |
| S.F. Amps              |          |              | Temp. Rise @ Rated Load                  |  | 38°C            |  |
|                        |          |              | Temp. Rise @ S.F. Load                   |  | 46°C            |  |
|                        |          |              | Locked-rotor Power Factor                |  | 26.2            |  |
|                        |          |              | Rotor inertia                            |  | 10.4 LB-FT2     |  |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 51   | 72   | 81   | 85   | 86   | 87   | 86   |
| Efficiency      | 92.4 | 94.9 | 95.3 | 95   | 94.6 | 93.9 | 94.8 |
| Speed           | 1794 | 1789 | 1784 | 1779 | 1774 | 1768 | 1776 |
| Line amperes    | 30.4 | 41   | 54.7 | 69.9 | 86.2 | 103  | 79.7 |

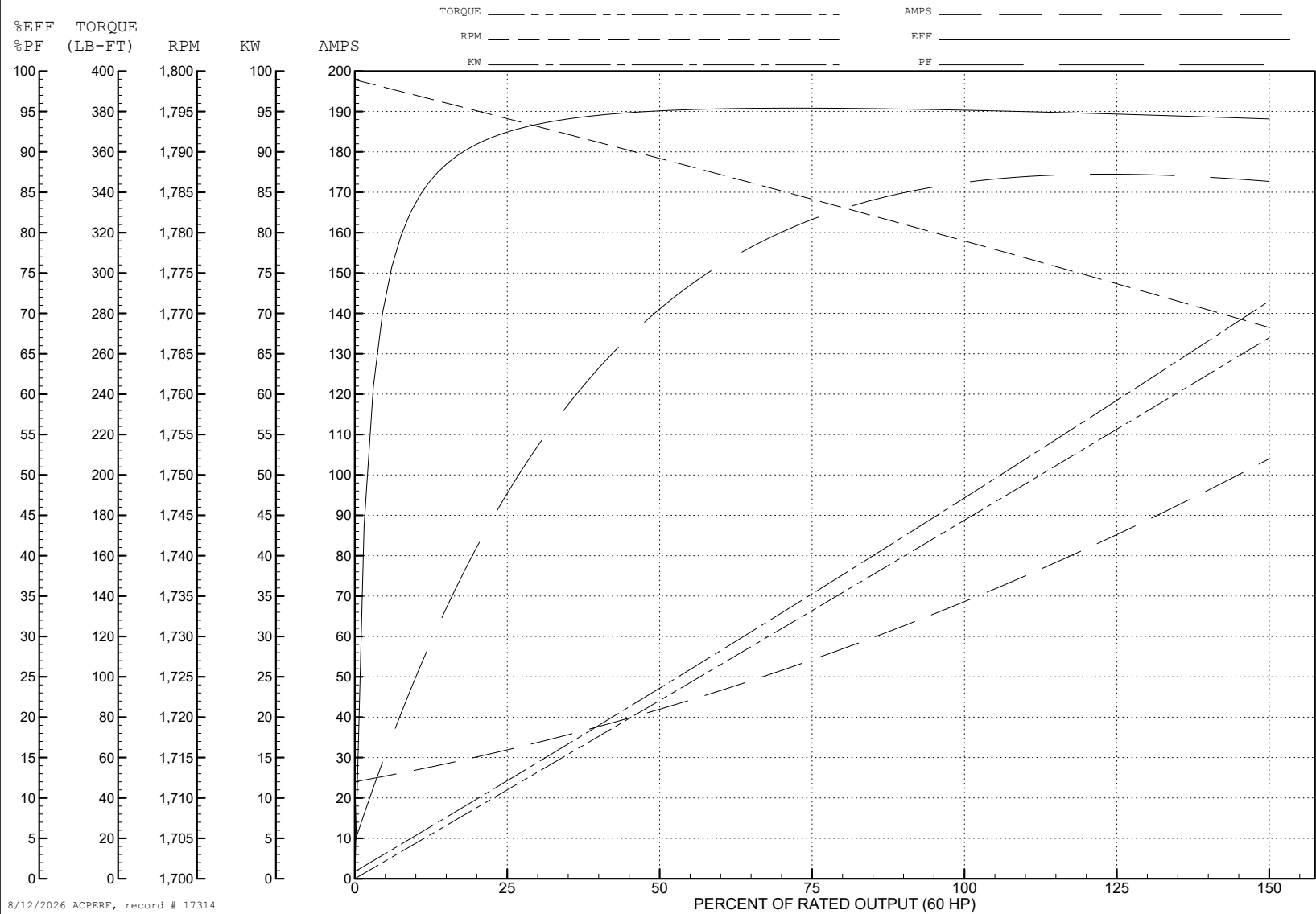
ABB Motors and Mechanical Inc.

WINDING # 42GW587

Typical performance - not guaranteed values.

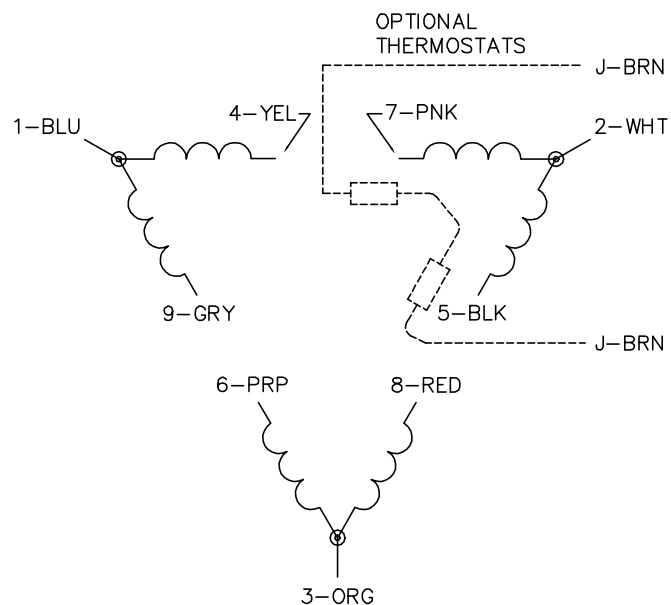
60 HP 3 PH 60 HZ 1775 RPM 460 V 4278M

TORQUES (LB-FT): PO=584 PU=285 LR=311 LRA=514

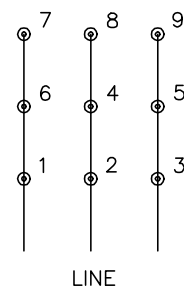




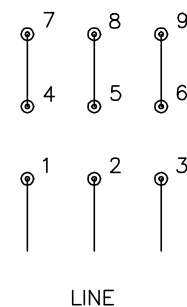
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



**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.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: -



**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1