

# ABB BALDOR RELIANCE III

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## Customer information packet

### CEM2547T-G

60HP, 1775RPM, 3PH, 60HZ, 364TC, OPSB, F1

**Specifications**

|                                       |                                           |
|---------------------------------------|-------------------------------------------|
| <b>Enclosure</b>                      | OPSB                                      |
| <b>Frame</b>                          | 364TC                                     |
| <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>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>              | 136.000 A @ 230.0 V<br>68.000 A @ 460.0 V |
| <b>Design Code</b>                    | A                                         |
| <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>Heater Indicator</b>               | No Heater                                 |
| <b>High Voltage Full Load Amps</b>    | 68.0 a                                    |
| <b>Insulation Class</b>               | H                                         |
| <b>Inverter Code</b>                  | Inverter Ready                            |

**Part Detail**

|                     |              |
|---------------------|--------------|
| <b>Revision</b>     | G            |
| <b>Type</b>         | AC           |
| <b>Mech. spec.</b>  |              |
| <b>Base</b>         |              |
| <b>Status</b>       | PRD/A        |
| <b>Elec. spec.</b>  | 42WGW587     |
| <b>Layout</b>       | 42LY-000-019 |
| <b>Eff. date</b>    | 05-29-2025   |
| <b>CD Diagram</b>   | CD0180       |
| <b>Poles</b>        | 04           |
| <b>Leads</b>        | 9#6          |
| <b>Proprietary</b>  | False        |
| <b>Created date</b> | 08-21-2019   |

|                                   |                       |
|-----------------------------------|-----------------------|
| <b>IP Rating</b>                  | NONE                  |
| <b>KVA Code</b>                   | G                     |
| <b>Lifting Lugs</b>               | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>   | Locked Bearing        |
| <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>             | 32.75 IN              |
| <b>Power Factor</b>               | 87                    |
| <b>Product Family</b>             | General Purpose       |
| <b>Pulley Face Code</b>           | C-Face                |
| <b>Rodent Screen</b>              | None                  |
| <b>Service Factor</b>             | 1.15                  |
| <b>Shaft Diameter</b>             | 2.375 IN              |
| <b>Shaft Ground Indicator</b>     | Shaft Grounding       |
| <b>Shaft Rotation</b>             | Reversible            |
| <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**

| NP3554LUA |                            |  |                         |              |      |       |                           |       |         |         |      |            |      |
|-----------|----------------------------|--|-------------------------|--------------|------|-------|---------------------------|-------|---------|---------|------|------------|------|
| CAT.NO.   | CEM2547T-G                 |  |                         |              | P/N  |       |                           |       | ENCL    |         |      |            | OPSB |
| SPEC.     | 42-0000-0049               |  | CC                      | 010A         |      | FRAME |                           | 364TC |         | SER.NO. |      |            |      |
| HP        | 60                         |  |                         | CLASS        |      | H     |                           | HZ    |         | 60      |      |            |      |
| RPM       | 1775                       |  |                         | PH           | 3    |       | DES                       |       | A       |         |      |            |      |
| VOLTS     | 230/460                    |  |                         |              | CODE |       | H                         |       | ODE BRG |         | 6311 | DE BRG     | 6313 |
| AMPS      | 138/69                     |  |                         |              |      |       |                           |       |         |         |      |            |      |
| RATING    | 40C AMB-CONT               |  |                         | NEMA-NOM-EFF |      |       |                           | 95    |         | GREASE  |      | POLYREX EM |      |
| PF        | 86                         |  | SER.F.                  | 1.15         |      |       | CT30-60(2:1) VT3-60(20:1) |       |         |         |      |            |      |
| USABLE AT | 50HZ 50HP 190/380V 140/70A |  |                         |              |      | SF1.0 |                           |       |         |         |      |            |      |
| HTR-VOLTS | HTR-AMPS                   |  | MAX. SPACE HEATER TEMP. |              |      |       |                           |       |         |         |      |            |      |

**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                                        | Starting Current      |                           |
| Service Factor (S.F.)  |    | 1.15    |              | No-load Current                          |                       | 25.4 A                    |
| NEMA Nom. Eff.         |    | 95      | Power Factor | 86                                       | Line-line Res. @ 25°C |                           |
| Rating - Duty          |    | 40C     |              | AMB-CONT                                 |                       | Temp. Rise @ Rated Load   |
| S.F. Amps              |    |         |              |                                          |                       | Temp. Rise @ S.F. Load    |
|                        |    |         |              |                                          |                       | Locked-rotor Power Factor |
|                        |    |         |              |                                          |                       | Rotor inertia             |

**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 |

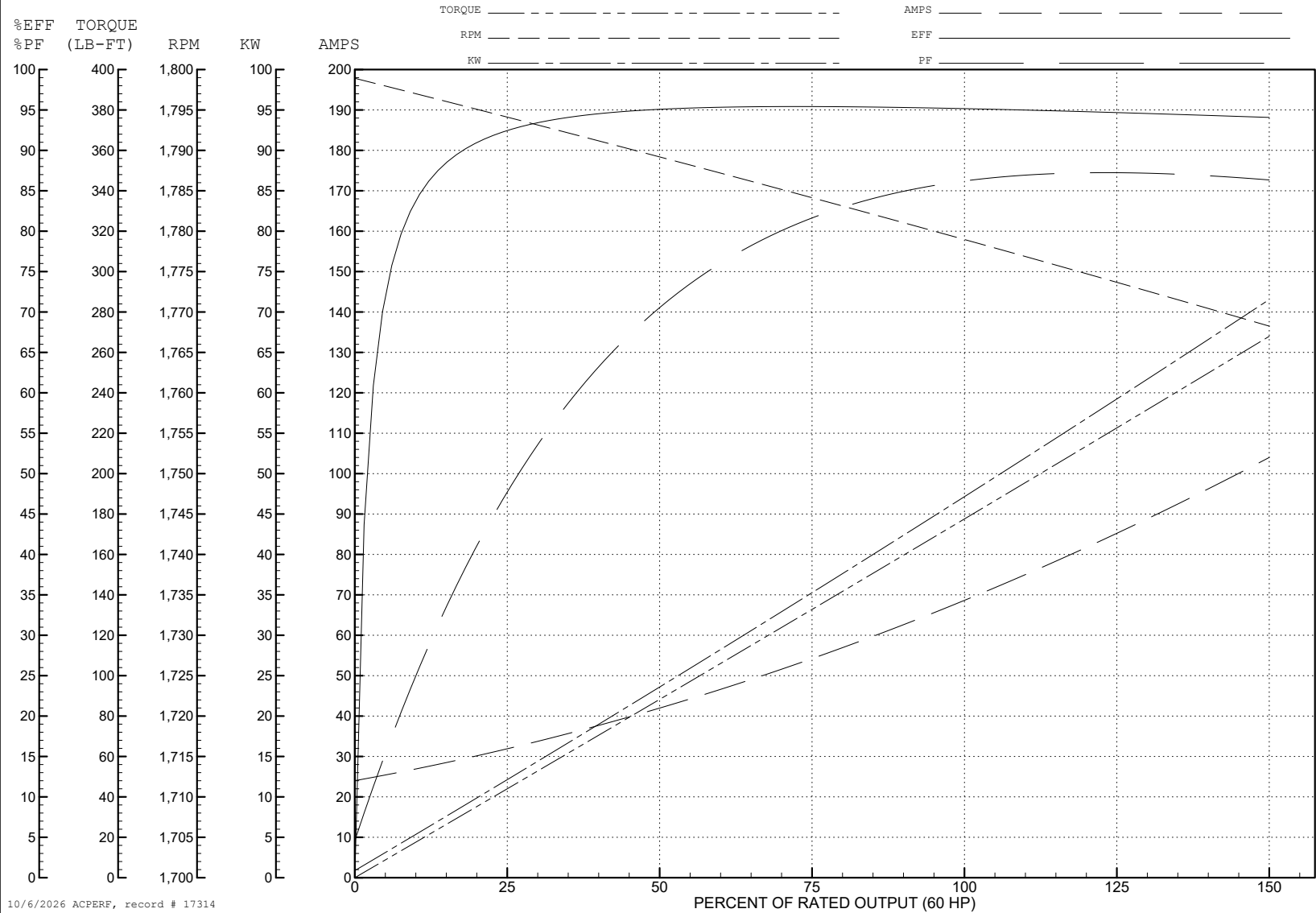
ABB Motors and Mechanical Inc.

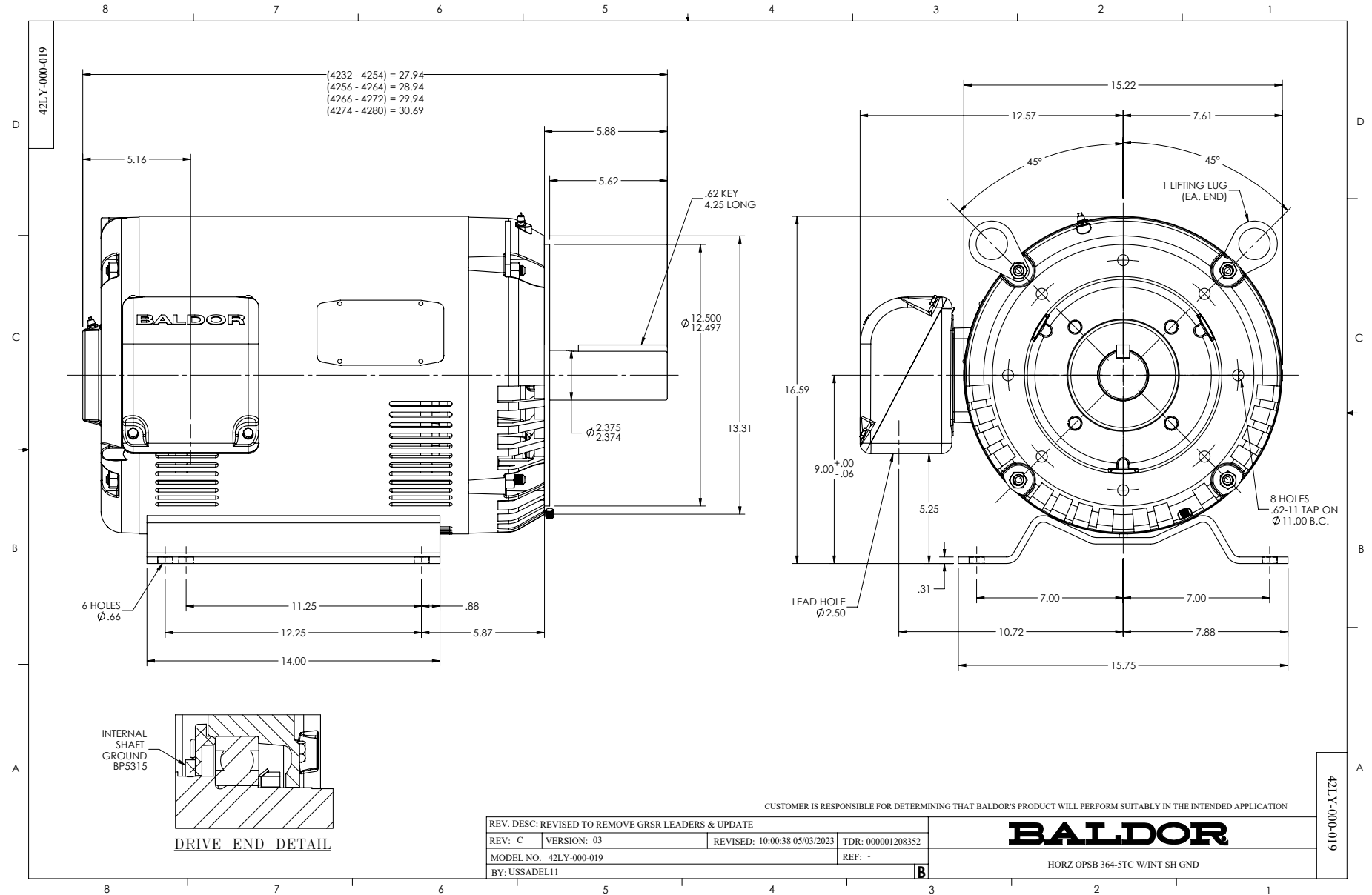
WINDING # 42WG587

Typical performance - not guaranteed values.

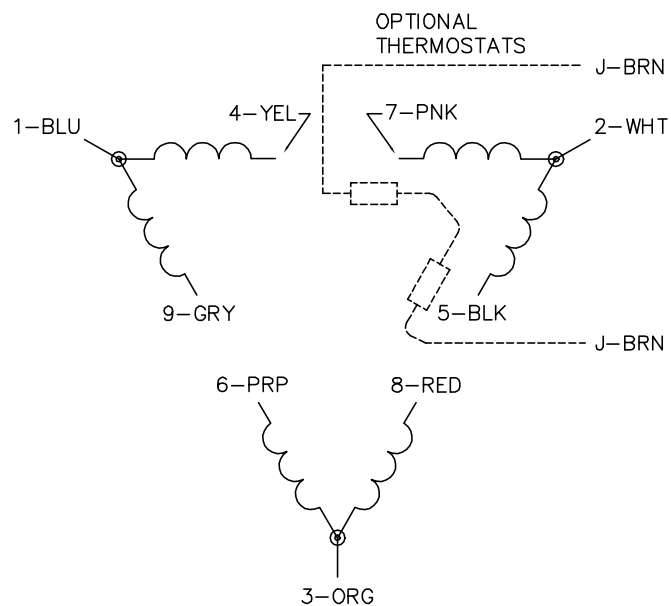
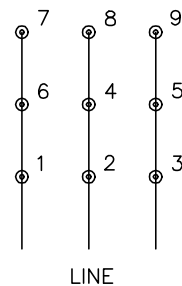
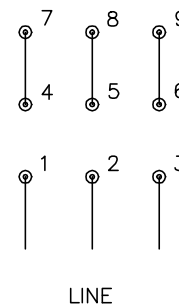
60 HP 3 PH 60 HZ 1775 RPM 460 V 4278M

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

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