

# ABB BALDOR RELIANCE III

---

## Customer information packet CEM2546T

60HP, 3540RPM, 3PH, 60HZ, 326TSC, OPSB, F1

**Specifications**

|                                       |                                           |
|---------------------------------------|-------------------------------------------|
| <b>Enclosure</b>                      | OPSB                                      |
| <b>Frame</b>                          | 326TSC                                    |
| <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>  | 3600 RPM @ 60 HZ                          |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ        |
| <b>Agency Approvals</b>               | CURUSEEV<br>NEMA PREMIUM                  |
| <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>              | 68.000 A @ 460.0 V<br>136.000 A @ 230.0 V |
| <b>Design Code</b>                    | A                                         |
| <b>Drip Cover</b>                     | No Drip Cover                             |
| <b>Duty Rating</b>                    | CONT                                      |
| <b>Efficiency @ 100% Load</b>         | 93.6 %                                    |
| <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>               | F                                         |
| <b>Inverter Code</b>                  | Inverter Ready                            |
| <b>IP Rating</b>                      | NONE                                      |
| <b>KVA Code</b>                       | G                                         |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | C          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 42WGW410   |
| <b>Layout</b>       | 42LYF069   |
| <b>Eff. date</b>    | 02-12-2024 |
| <b>CD Diagram</b>   | CD0180     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#6        |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 03-06-2020 |

|                                   |                       |
|-----------------------------------|-----------------------|
| <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>                 | 4250M                 |
| <b>Mounting Arrangement</b>       | F1                    |
| <b>Number of Poles</b>            | 2                     |
| <b>Overall Length</b>             | 25.19 IN              |
| <b>Power Factor</b>               | 89                    |
| <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>             | 1.875 IN              |
| <b>Shaft Ground Indicator</b>     | No Shaft Grounding    |
| <b>Shaft Rotation</b>             | Reversible            |
| <b>Speed</b>                      | 3540 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**

| NP2138L      |              |    |    |        |          |      |            |     |          |   |           |  |         |  |      |        |      |
|--------------|--------------|----|----|--------|----------|------|------------|-----|----------|---|-----------|--|---------|--|------|--------|------|
| CAT.NO.      | CEM2546T     |    |    |        | P/N      |      |            |     |          |   | ENCLOSURE |  | OPSB    |  |      |        |      |
| SPEC.        | 42-0000-0074 |    |    | CC     | 010A     |      | FRAME      |     | 326TSC   |   | S/N       |  |         |  |      |        |      |
| HP           | 60           |    |    |        | CLASS    |      | F          |     | HZ       |   | 60        |  |         |  |      |        |      |
| RPM          | 3540         |    |    |        | PH       | 3    |            | DES |          | A |           |  |         |  |      |        |      |
| VOLT         | 230/460      |    |    |        |          |      |            |     | KVA-CODE |   | G         |  | ODE BRG |  | 6311 | DE BRG | 6312 |
| AMP          | 136/68       |    |    |        |          |      |            |     |          |   |           |  |         |  |      |        |      |
| RATING       | 40C AMB-CONT |    |    |        | GREASE   |      | POLYREX EM |     |          |   |           |  |         |  |      |        |      |
| NEMA-NOM-EFF | 93.6         | PF | 89 | SER.F. |          | 1.15 |            |     |          |   |           |  |         |  |      |        |      |
| HTR-VOLTS    |              |    |    |        | HTR-AMPS |      |            |     |          |   |           |  |         |  |      |        |      |

**AC Induction Motor Performance Data**

Record # 33331

Typical performance - not guaranteed values

| Winding: 42WGW410-R001 |                   | Type: 4250M                              | Enclosure: OPSB |
|------------------------|-------------------|------------------------------------------|-----------------|
| Nameplate Data         |                   | 460 V, 60 Hz:<br>High Voltage Connection |                 |
| Rated Output (HP)      | 60                | Full Load Torque                         | 88.9 LB-FT      |
| Volts                  | 230/460           | Start Configuration                      | direct on line  |
| Full Load Amps         | 136/68            | Breakdown Torque                         | 304 LB-FT       |
| R.P.M.                 | 3540              | Pull-up Torque                           | 91.4 LB-FT      |
| Hz                     | 60 Phase          | Locked-rotor Torque                      | 128 LB-FT       |
| NEMA Design Code       | B KVA Code        | Starting Current                         | 443 A           |
| Service Factor (S.F.)  | 1.15              | No-load Current                          | 17.7 A          |
| NEMA Nom. Eff.         | 93.6 Power Factor | Line-line Res. @ 25°C                    | 0.09668 Ω       |
| Rating - Duty          | 40C AMB-CONT      | Temp. Rise @ Rated Load                  | 35°C            |
| S.F. Amps              |                   | Temp. Rise @ S.F. Load                   | 43°C            |

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

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 65     | 82     | 88     | 90     | 90     | 89     | 90   |
| Efficiency      | 90.7   | 93.7   | 94.2   | 93.9   | 93.3   | 92.5   | 93.5 |
| Speed           | 3585.3 | 3574.5 | 3562.4 | 3549.9 | 3535.7 | 3520.5 | 3541 |
| Line amperes    | 24.4   | 36.9   | 51.5   | 66.9   | 83.7   | 102    | 77   |

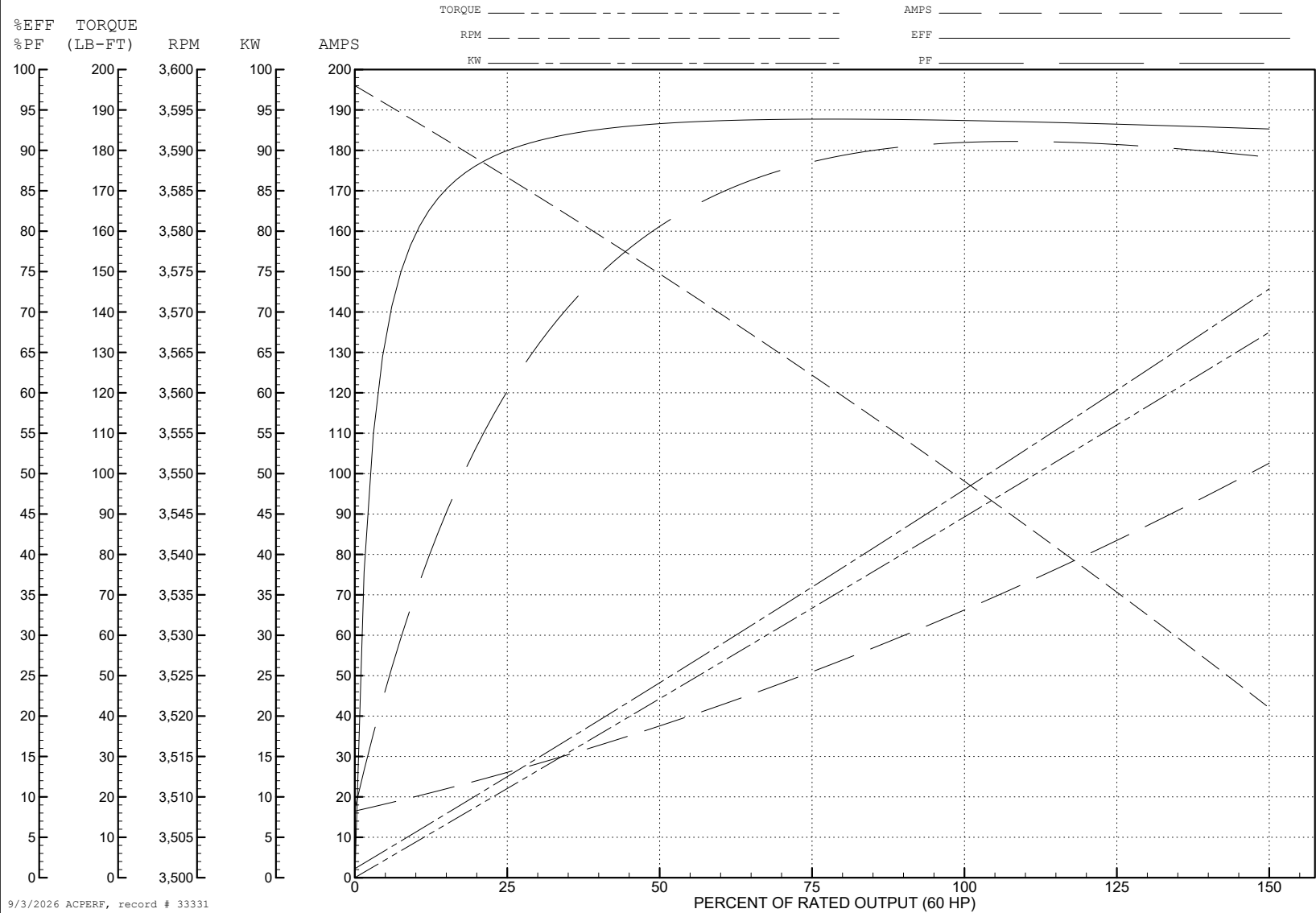
ABB Motors and Mechanical Inc.

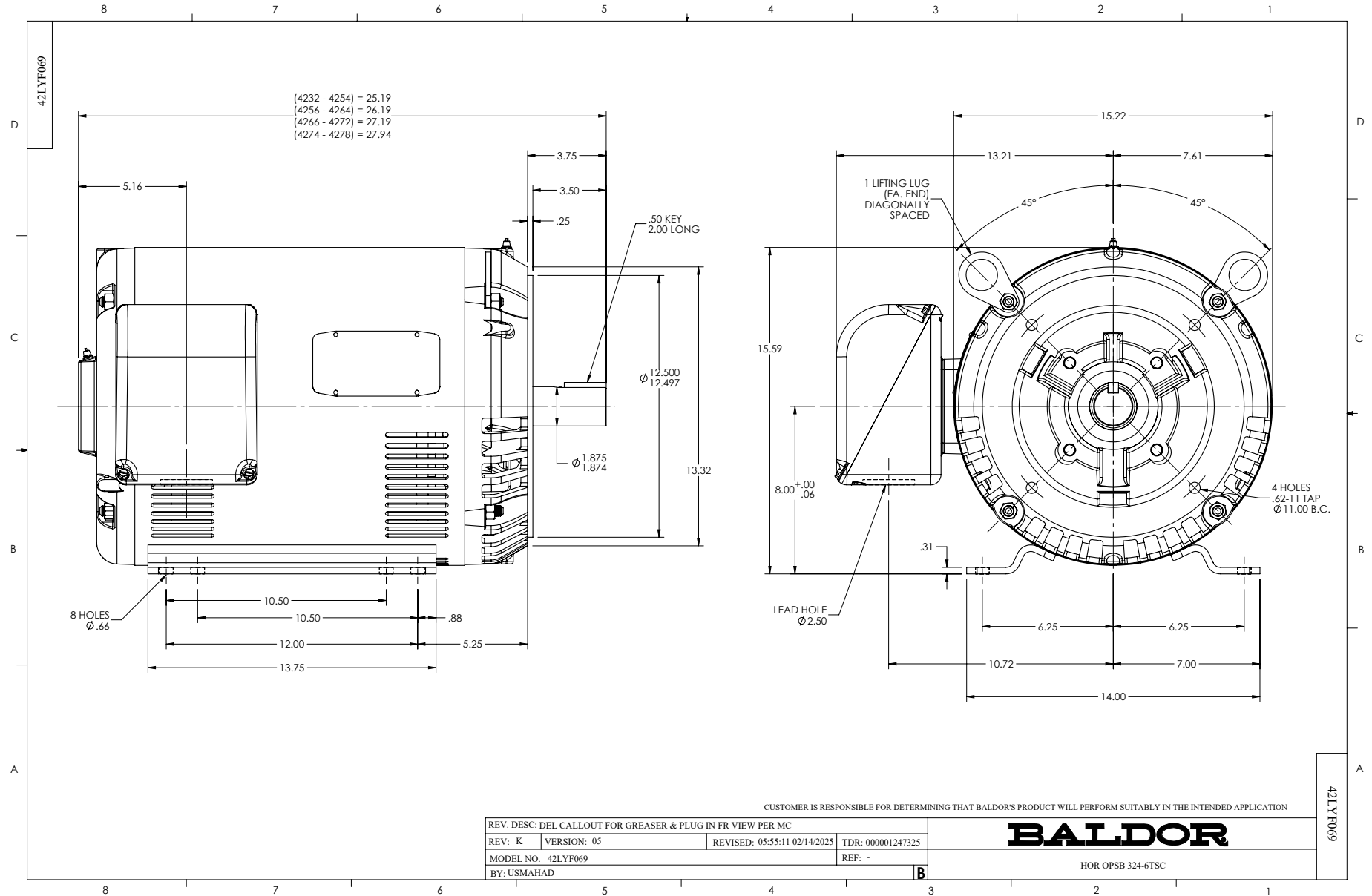
WINDING # 42WG410

Typical performance - not guaranteed values.

60 HP 3 PH 60 HZ 3540 RPM 460 V 4250M

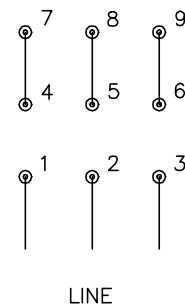
TORQUES (LB-FT): PO=304 PU=91.4 LR=128 LRA=443





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