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# Customer information packet

## CEM2549T-G

75HP, 3535RPM, 3PH, 60HZ, 364TSC, OPSB, F1

## Specifications

|                                |                                           |
|--------------------------------|-------------------------------------------|
| Enclosure                      | OPSB                                      |
| Frame                          | 364TSC                                    |
| Frame Material                 | Steel                                     |
| Frequency                      | 60.00 Hz                                  |
| Motor Letter Type              | Three Phase                               |
| Output @ Frequency             | 75.000 HP @ 60 HZ                         |
| Phase                          | 3                                         |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                          |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ        |
| Agency Approvals               | CSA<br>CSA EEV<br>NEMA PREMIUM<br>UR      |
| Ambient Temperature            | 40 °C                                     |
| Auxiliary Box                  | NO AUXILLARY BOX                          |
| Auxiliary Box Lead Termination | None                                      |
| Base Indicator                 | Rigid                                     |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                   |
| Blower                         | None                                      |
| Current @ Voltage              | 168.000 A @ 230.0 V<br>84.000 A @ 460.0 V |
| Design Code                    | A                                         |
| Drip Cover                     | No Drip Cover                             |
| Duty Rating                    | CONT                                      |
| Efficiency @ 100% Load         | 93.6 %                                    |
| Electrically Isolated Bearing  | Not Electrically Isolated                 |
| Feedback Device                | NO FEEDBACK                               |
| Heater Indicator               | No Heater                                 |
| High Voltage Full Load Amps    | 84.0 a                                    |
| Insulation Class               | H                                         |
| Inverter Code                  | Inverter Duty                             |

## Part detail

|              |              |
|--------------|--------------|
| Revision     | E            |
| Type         | AC           |
| Mech. spec.  |              |
| Base         |              |
| Status       | PRD/A        |
| Elec. spec.  | 42WGX343     |
| Layout       | 42LY-000-037 |
| Eff. date    | 06-27-2024   |
| CD Diagram   | CD0180       |
| Poles        | 02           |
| Leads        | 9#6          |
| Proprietary  | False        |
| Created date | 09-16-2020   |

|                            |                       |
|----------------------------|-----------------------|
| IP Rating                  | NONE                  |
| KVA Code                   | F                     |
| Lifting Lugs               | Standard Lifting Lugs |
| Locked Bearing Indicator   | Locked Bearing        |
| Motor Lead Termination     | Flying Leads          |
| Motor Standards            | NEMA                  |
| Motor Type                 | 4250M                 |
| Mounting Arrangement       | F1                    |
| Number of Poles            | 2                     |
| Overall Length             | 25.81 IN              |
| Power Factor               | 90                    |
| Product Family             | General Purpose       |
| Pulley Face Code           | C-Face                |
| Rodent Screen              | None                  |
| Service Factor             | 1.15                  |
| Shaft Diameter             | 1.875 IN              |
| Shaft Ground Indicator     | Shaft Grounding       |
| Shaft Rotation             | Reversible            |
| Speed                      | 3535 rpm              |
| Speed Code                 | Single Speed          |
| Starting Method            | Direct on line        |
| Thermal Device - Bearing   | None                  |
| Thermal Device - Winding   | None                  |
| Vibration Sensor Indicator | No Vibration Sensor   |
| Winding Thermal 1          | None                  |
| Winding Thermal 2          | None                  |

## Nameplate

| NP3554LUA |                             |                         |              |                           |        |         |        |            |      |      |      |
|-----------|-----------------------------|-------------------------|--------------|---------------------------|--------|---------|--------|------------|------|------|------|
| CAT.NO.   | CEM2549T-G                  |                         |              | P/N                       |        |         |        |            |      | ENCL | OPSE |
| SPEC.     | 42-0000-0090                | CC                      | 010A         | FRAME                     | 364TSC | SER.NO. |        |            |      |      |      |
| HP        | 75                          |                         | CLASS        | H                         | HZ     | 60      |        |            |      |      |      |
| RPM       | 3535                        |                         | PH           | 3                         | DES    | A       |        |            |      |      |      |
| VOLTS     | 230/460                     |                         |              | CODE                      | F      | ODE BRG | 6311   | DE BRG     | 6313 |      |      |
| AMPS      | 168/84                      |                         |              |                           |        |         |        |            |      |      |      |
| RATING    | 40C AMB-CONT                |                         | NEMA-NOM-EFF |                           |        | 93.6    | GREASE | POLYREX EM |      |      |      |
| PF        | 90                          | SER.F.                  | 1.15         | CT30-60(2:1) VT3-60(20:1) |        |         |        |            |      |      |      |
| USABLE AT | 50HZ 60HP 190/380V 204/102A |                         |              | SF1.0                     |        |         |        |            |      |      |      |
| HTR-VOLTS | HTR-AMPS                    | MAX. SPACE HEATER TEMP. |              |                           |        |         |        |            |      |      |      |

**AC Induction Motor Performance Data**

Record # 69619

Typical performance - not guaranteed values

| Winding: 42WGX343-R001 |    |              |              | Type: 4250M                              |                       | Enclosure: OPSB  |            |       |
|------------------------|----|--------------|--------------|------------------------------------------|-----------------------|------------------|------------|-------|
| Nameplate Data         |    |              |              | 460 V, 60 Hz:<br>High Voltage Connection |                       |                  |            |       |
| Rated Output (HP)      |    | 75           |              | Full Load Torque                         |                       | 112 LB-FT        |            |       |
| Volts                  |    | 230/460      |              | Start Configuration                      |                       | direct on line   |            |       |
| Full Load Amps         |    | 168/84       |              | Breakdown Torque                         |                       | 381 LB-FT        |            |       |
| R.P.M.                 |    | 3535         |              | Pull-up Torque                           |                       | 111 LB-FT        |            |       |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                      |                       | 148 LB-FT        |            |       |
| NEMA Design Code       |    | B            |              | KVA Code                                 | F                     | Starting Current |            | 509 A |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                          |                       | 19.8 A           |            |       |
| NEMA Nom. Eff.         |    | 93.6         | Power Factor | 90                                       | Line-line Res. @ 25°C |                  | 0.092782 Ω |       |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                  |                       | 41°C             |            |       |
| S.F. Amps              |    |              |              | Temp. Rise @ S.F. Load                   |                       | 52°C             |            |       |
|                        |    |              |              | Locked-rotor Power Factor                |                       | 21.3             |            |       |

**Load Characteristics 460 V, 60 Hz, 75 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125  | 150    | S.F. |
|-----------------|--------|--------|--------|--------|------|--------|------|
| Power Factor    | 67     | 84     | 89     | 90     | 90   | 89     | 90   |
| Efficiency      | 92.4   | 94.5   | 94.5   | 93.8   | 92.8 | 91.5   | 93.2 |
| Speed           | 3584.7 | 3571.7 | 3556.4 | 3538.6 | 3518 | 3495.6 | 3526 |
| Line amperes    | 28.3   | 44.4   | 63     | 83.9   | 106  | 130    | 97.2 |

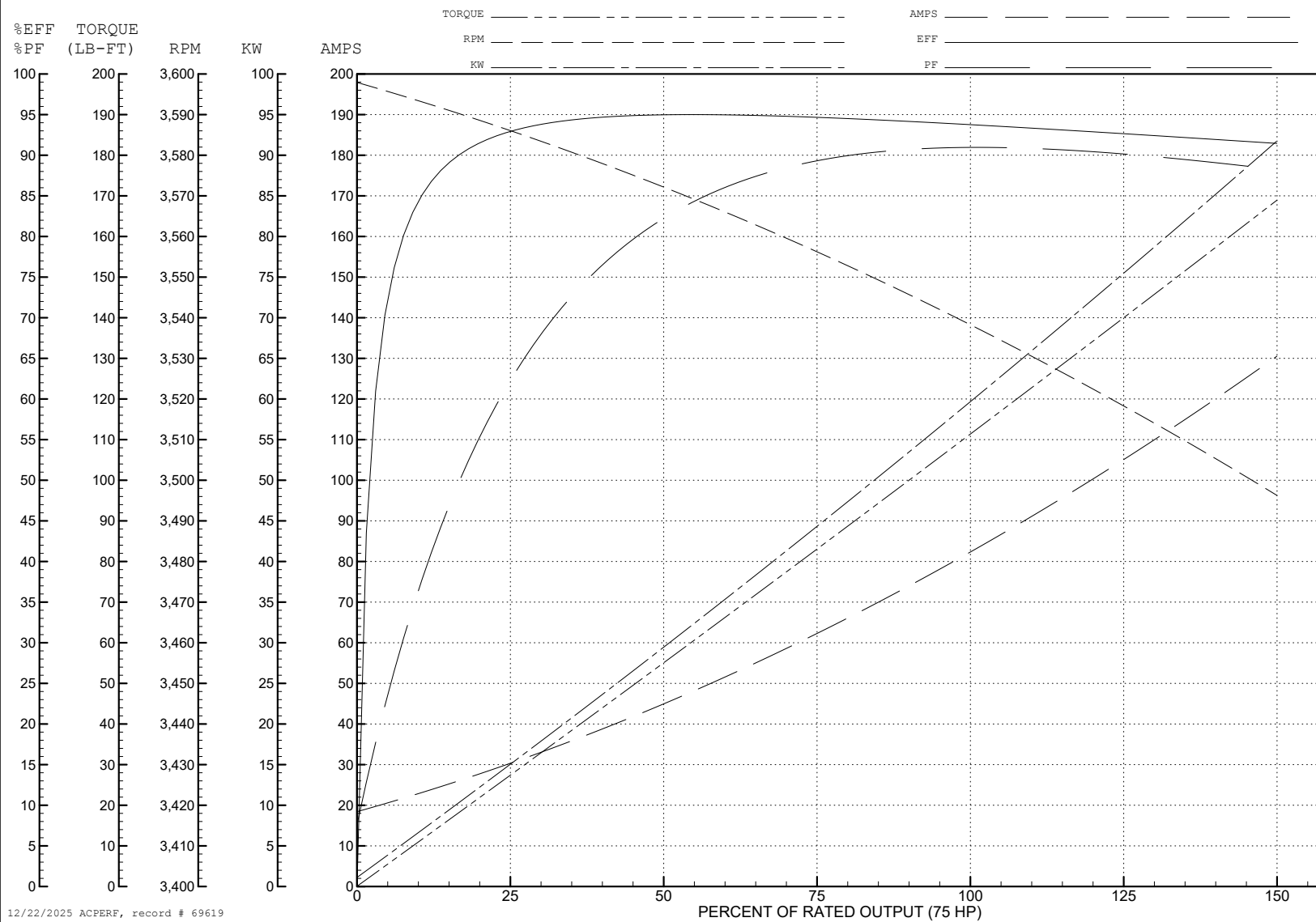
ABB Motors and Mechanical Inc.

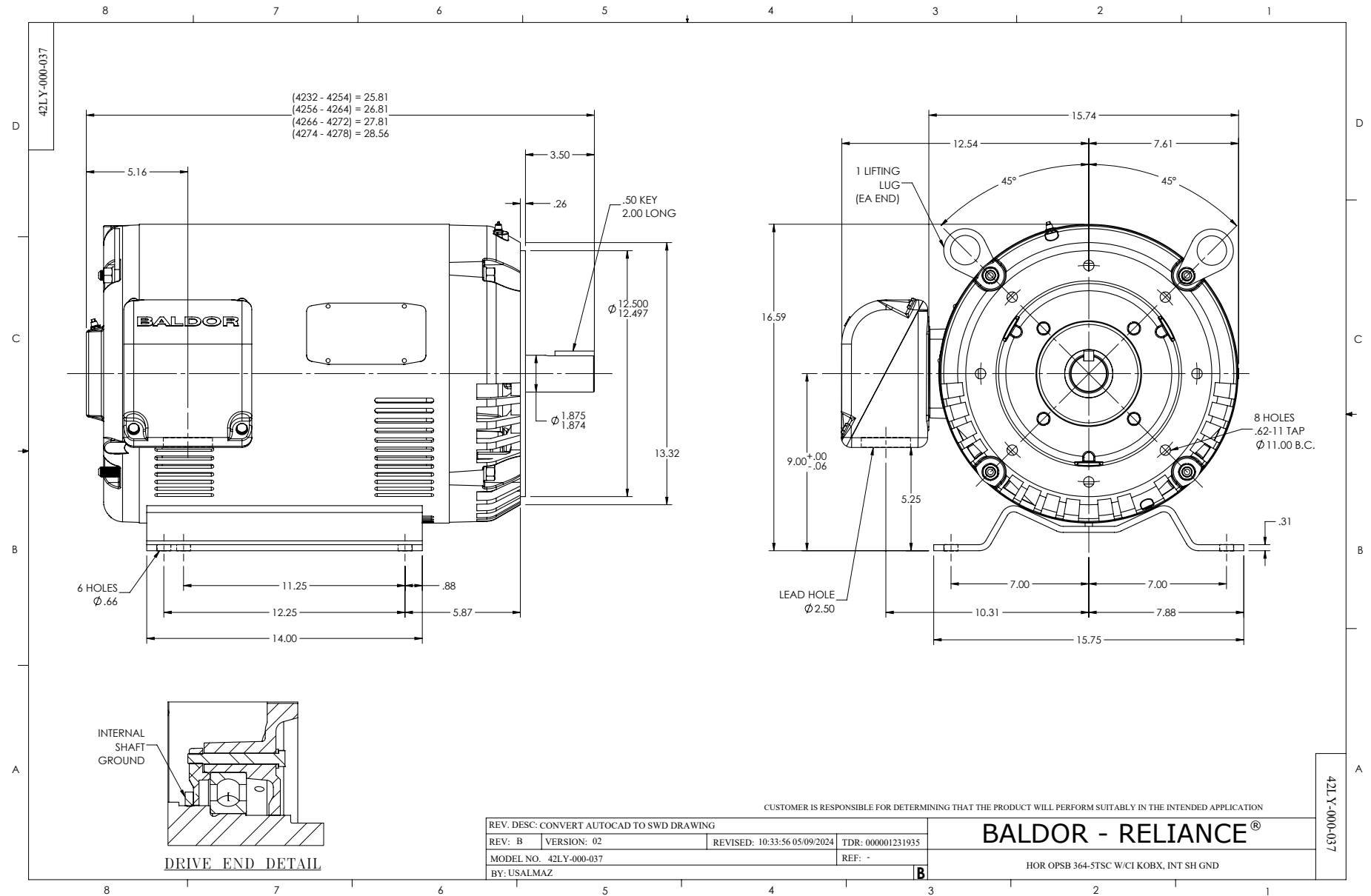
WINDING # 42WGX343

Typical performance - not guaranteed values.

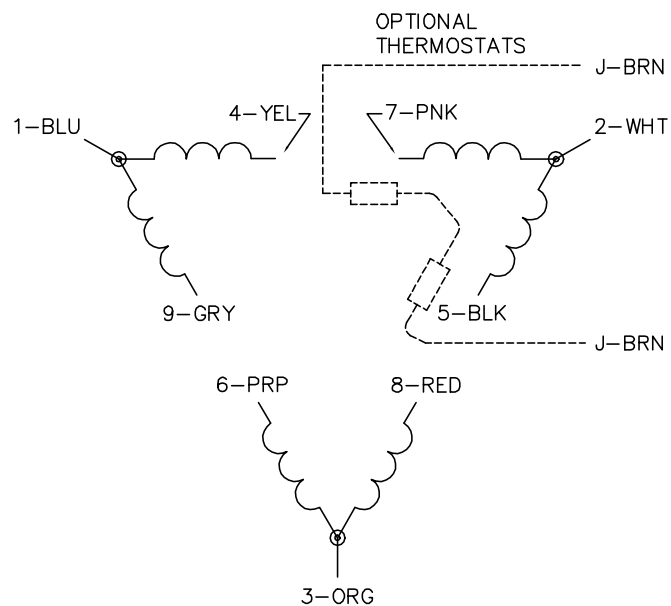
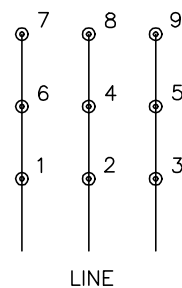
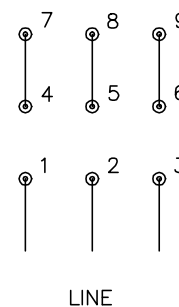
75 HP 3 PH 60 HZ 3535 RPM 460 V 4250M

TORQUES (LB-FT): PO=381 PU=111 LR=148 LRA=509





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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