

# ABB BALDOR RELIANCE III

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## Customer information packet

### CEM7044T-I-5

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3644M, XPFC, F1

Class - CLI GP C,D

Division - Division I

**Specifications**

|                                |                           |
|--------------------------------|---------------------------|
| Enclosure                      | XPFC                      |
| Frame                          | 184TC                     |
| Frame Material                 | Steel                     |
| Frequency                      | 60.00 Hz                  |
| Haz Area Class and Group       | CLI GP C,D                |
| Haz Area Division              | Division I                |
| Motor Letter Type              | Three Phase               |
| Output @ Frequency             | 5.000 HP @ 60 HZ          |
| Phase                          | 3                         |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ          |
| Voltage @ Frequency            | 575.0 V @ 60 HZ           |
| Agency Approvals               | UL<br>CSA                 |
| 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              | 5.200 A @ 575.0 V         |
| Design Code                    | B                         |
| Drip Cover                     | No Drip Cover             |
| Duty Rating                    | CONT                      |
| Efficiency @ 100% Load         | 89.5 %                    |
| Electrically Isolated Bearing  | Not Electrically Isolated |
| Feedback Device                | NO FEEDBACK               |
| Front Face Code                | Standard                  |
| Front Shaft Indicator          | None                      |
| Haz Area Temp Code             | T3C                       |
| Heater Indicator               | No Heater                 |
| High Voltage Full Load Amps    | 5.2 a                     |
| Insulation Class               | F                         |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | M          |
| Type         | AC         |
| Mech. spec.  | 36P268     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 36WGT032   |
| Layout       | 36LYP268   |
| Eff. date    | 04-16-2024 |
| CD Diagram   | CD0006     |
| Poles        | 04         |
| Leads        | 3#16       |
| Proprietary  | False      |
| Created date | 12-05-2013 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Inverter Code</b>                 | Not Inverter               |
| <b>KVA Code</b>                      | K                          |
| <b>Lifting Lugs</b>                  | No Lifting Lugs            |
| <b>Locked Bearing Indicator</b>      | Locked Bearing             |
| <b>Motor Lead Exit</b>               | Ko Box                     |
| <b>Motor Lead Quantity/Wire Size</b> | 3 @ 16 AWG                 |
| <b>Motor Lead Termination</b>        | Flying Leads               |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | 3644M                      |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 4                          |
| <b>Overall Length</b>                | 20.84 IN                   |
| <b>Power Factor</b>                  | 80                         |
| <b>Product Family</b>                | General Purpose            |
| <b>Pulley End Bearing Type</b>       | Ball                       |
| <b>Pulley Face Code</b>              | C-Face                     |
| <b>Pulley Shaft Indicator</b>        | Standard                   |
| <b>Rodent Screen</b>                 | None                       |
| <b>RoHS Status</b>                   | ROHS COMPLIANT             |
| <b>Service Factor</b>                | 1.15                       |
| <b>Shaft Diameter</b>                | 1.125 IN                   |
| <b>Shaft Extension Location</b>      | Pulley End                 |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Shaft Slinger Indicator</b>       | No Slinger                 |
| <b>Speed</b>                         | 1750 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>      | Normally Closed Thermostat |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor        |
| <b>Winding Thermal 1</b>             | None                       |
| <b>Winding Thermal 2</b>             | None                       |

**Nameplate**

| NP0977XPSL |                               |     |        |              |              |         |           |      |     |    |    |  |
|------------|-------------------------------|-----|--------|--------------|--------------|---------|-----------|------|-----|----|----|--|
| NO.        |                               |     |        |              |              |         | CC        | 010A |     |    |    |  |
| SER.       |                               |     |        |              |              |         | TEMP CODE | T3C  |     |    |    |  |
| SPEC.      | 36P268T032G1                  |     |        |              |              |         |           |      |     |    |    |  |
| CAT.NO.    | CEM7044T-I-5                  |     |        |              |              |         |           |      |     |    |    |  |
| HP         | 5                             |     |        |              |              |         |           |      |     |    |    |  |
| VOLTS      | 575                           |     |        |              |              |         |           |      |     |    |    |  |
| AMPS       | 5.2                           |     |        |              |              |         |           |      |     |    |    |  |
| RPM        | 1750                          |     |        |              | MOTOR WEIGHT |         |           |      | 136 |    |    |  |
| HERTZ      | 60                            | PH  | 3      | CL           | F            | DE BRG  | 6206      |      |     |    |    |  |
| SER.F.     | 1.15                          | DES | B      | CODE         | K            | ODE BRG | 6205      |      |     |    |    |  |
| FRAME      | 184TC                         |     | GREASE |              | POLYREX EM   |         |           |      |     |    |    |  |
| RATING     | 40C AMB-CONT 55C AMB @ 1.0 SF |     |        |              |              |         |           |      |     |    |    |  |
|            |                               |     |        | NEMA-NOM-EFF |              |         |           | 89.5 |     | PF | 80 |  |
|            | NEMA MG-1 PT 5,IP55           |     |        |              |              |         |           |      |     |    |    |  |

**AC Induction Motor Performance Data**

Record # 35738

Typical performance - not guaranteed values

| Winding: 36WGT032-R013 |    |       |              | Type: 3644M                           |                       | Enclosure: XPFC           |         |              |
|------------------------|----|-------|--------------|---------------------------------------|-----------------------|---------------------------|---------|--------------|
| Nameplate Data         |    |       |              | 575 V, 60 Hz:<br>Single Voltage Motor |                       |                           |         |              |
| Rated Output (HP)      |    | 5     |              | Full Load Torque                      |                       | 15.1 LB-FT                |         |              |
| Volts                  |    | 575   |              | Start Configuration                   |                       | direct on line            |         |              |
| Full Load Amps         |    | 5.2   |              | Breakdown Torque                      |                       | 58.94 LB-FT               |         |              |
| R.P.M.                 |    | 1750  |              | Pull-up Torque                        |                       | 25.11 LB-FT               |         |              |
| Hz                     | 60 | Phase | 3            | Locked-rotor Torque                   |                       | 38.11 LB-FT               |         |              |
| NEMA Design Code       |    | B     | KVA Code     | K                                     | Starting Current      |                           | 43.13 A |              |
| Service Factor (S.F.)  |    | 1.15  |              | No-load Current                       |                       | 2.62 A                    |         |              |
| NEMA Nom. Eff.         |    | 89.5  | Power Factor | 80                                    | Line-line Res. @ 25°C |                           | 3.59 Ω  |              |
| Rating - Duty          |    | 40C   |              | AMB-CONT                              |                       | Temp. Rise @ Rated Load   |         | 54°C         |
| S.F. Amps              |    |       |              |                                       |                       | Temp. Rise @ S.F. Load    |         | 66°C         |
|                        |    |       |              |                                       |                       | Locked-rotor Power Factor |         | 51.7         |
|                        |    |       |              |                                       |                       | Rotor inertia             |         | 0.409 LB-FT2 |

**Load Characteristics 575 V, 60 Hz, 5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 39   | 61   | 74   | 80   | 84   | 86   | 82   |
| Efficiency      | 84.8 | 89.8 | 90.3 | 90.2 | 88.9 | 87.6 | 90.2 |
| Speed           | 1790 | 1779 | 1767 | 1755 | 1741 | 1724 | 1746 |
| Line amperes    | 2.87 | 3.46 | 4.27 | 5.22 | 6.32 | 7.72 | 5.8  |

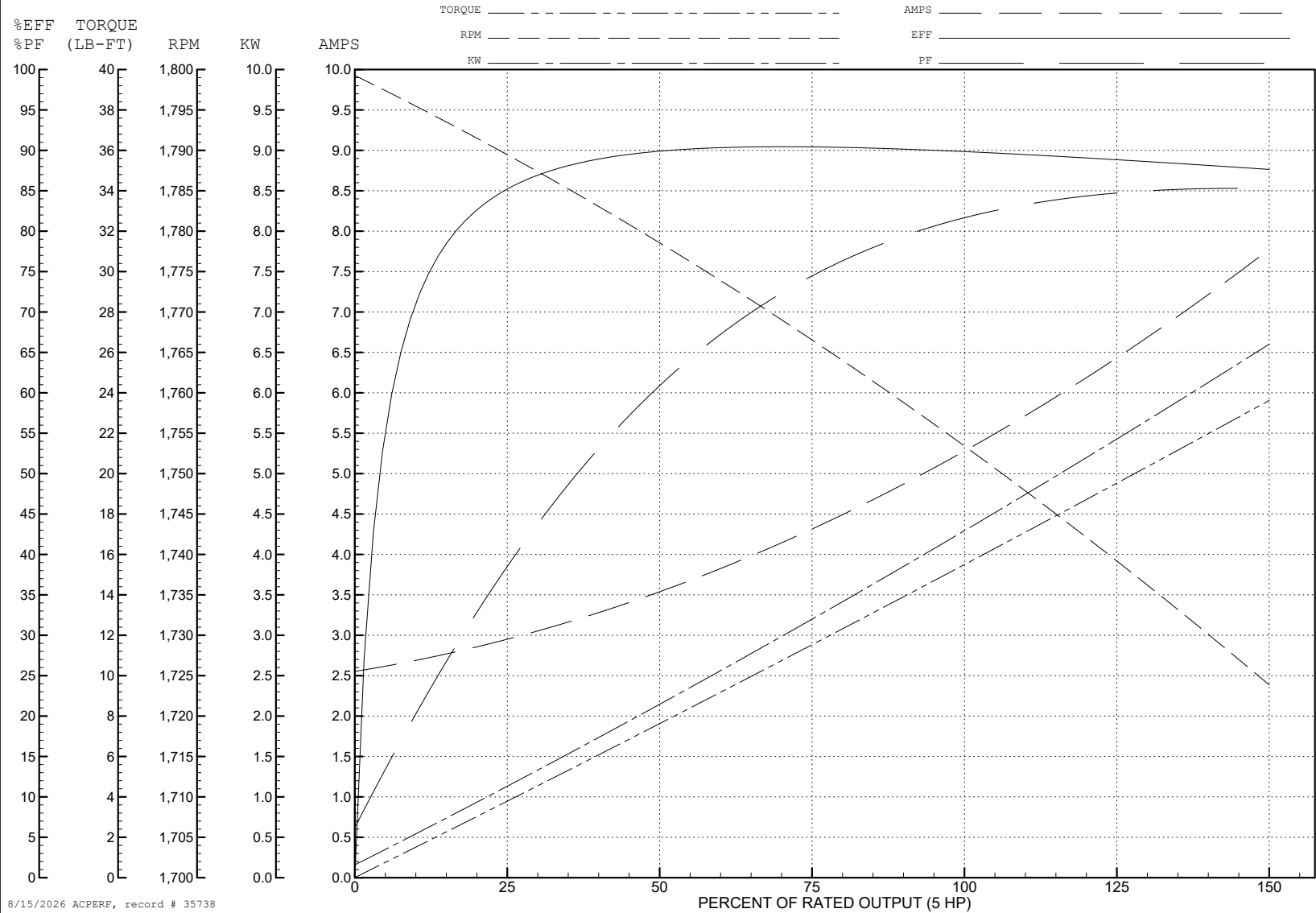
ABB Motors and Mechanical Inc.

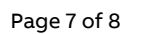
WINDING # 36WGT032

Typical performance - not guaranteed values.

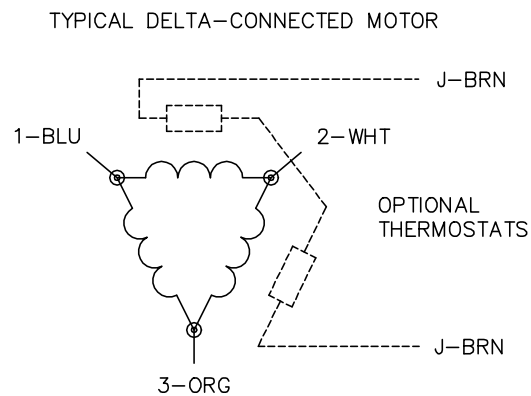
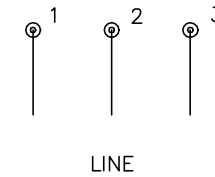
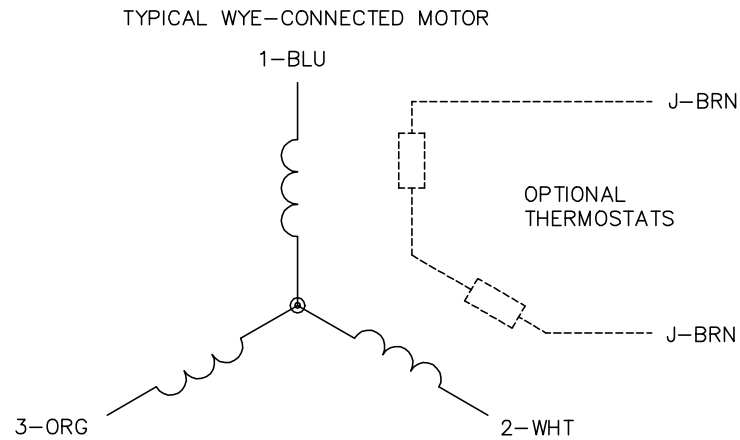
5 HP 3 PH 60 HZ 1750 RPM 575 V 3644M

TORQUES (LB-FT) : PO=58.94 PU=25.11 LR=38.11 LRA=43.13





CD0006


**NOTES:**

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10: 24: 49 02/19/2019

BY: ENBRIRO

MTL: —


**BALDOR - RELIANCE®**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1