

# ABB BALDOR RELIANCE III

---

## Customer information packet

### CEM7064T-I-5

50HP, 1775RPM, 3PH, 60HZ, 326TC, 1276M, XPFC, F

Class - CLI GP C,D

Division - Division I

**Specifications**

|                                |                            |
|--------------------------------|----------------------------|
| Enclosure                      | XPFC                       |
| Frame                          | 326TC                      |
| Frame Material                 | Iron                       |
| 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             | 50.000 HP @ 60 HZ          |
| Phase                          | 3                          |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ           |
| Voltage @ Frequency            | 575.0 V @ 60 HZ            |
| Agency Approvals               | UL<br>CSA<br>CSA EEV<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              | 47.000 A @ 575.0 V         |
| Design Code                    | A                          |
| Drip Cover                     | No Drip Cover              |
| Duty Rating                    | CONT                       |
| Efficiency @ 100% Load         | 94.5 %                     |
| 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                  |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | Q          |
| Type         | AC         |
| Mech. spec.  | 12F857     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 12WGY593   |
| Layout       | 12LYF857   |
| Eff. date    | 12-04-2024 |
| CD Diagram   | CD0006     |
| Poles        | 04         |
| Leads        | 3#8        |
| Proprietary  | False      |
| Created date | 11-22-2013 |

|                               |                            |
|-------------------------------|----------------------------|
| High Voltage Full Load Amps   | 47.0 a                     |
| Insulation Class              | F                          |
| Inverter Code                 | Not Inverter               |
| KVA Code                      | J                          |
| Lifting Lugs                  | Standard Lifting Lugs      |
| Locked Bearing Indicator      | Locked Bearing             |
| Motor Lead Exit               | Ko Box                     |
| Motor Lead Quantity/Wire Size | 3 @ 8 AWG                  |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Motor Type                    | X1276M                     |
| Mounting Arrangement          | F1                         |
| Number of Poles               | 4                          |
| Overall Length                | 32.00 IN                   |
| Power Factor                  | 84                         |
| Product Family                | General Purpose            |
| Pulley End Bearing Type       | Sealed Bearing             |
| Pulley Face Code              | C-Face                     |
| Pulley Shaft Indicator        | Standard                   |
| Rodent Screen                 | None                       |
| RoHS Status                   | ROHS NON-COMPLIANT         |
| Service Factor                | 1.15                       |
| Shaft Diameter                | 2.125 IN                   |
| Shaft Extension Location      | Pulley End                 |
| Shaft Ground Indicator        | No Shaft Grounding         |
| Shaft Rotation                | Reversible                 |
| Shaft Slinger Indicator       | Shaft Slinger              |
| Speed                         | 1775 rpm                   |
| Speed Code                    | Single Speed               |
| Starting Method               | Direct on line             |
| Thermal Device - Bearing      | None                       |
| Thermal Device - Winding      | Normally Closed Thermostat |
| Vibration Sensor Indicator    | No Vibration Sensor        |
| Winding Thermal 1             | None                       |

Winding Thermal 2

None

---

**Nameplate**

| NP0977XPSLEV |                           |     |        |              |              |         |      |           |      |     |    |  |
|--------------|---------------------------|-----|--------|--------------|--------------|---------|------|-----------|------|-----|----|--|
| NO.          |                           |     |        |              |              |         |      | CC        | 010A |     |    |  |
| SER.         |                           |     |        |              |              |         |      | TEMP CODE |      | T3C |    |  |
| SPEC.        | 12F857Y593G1              |     |        |              |              |         |      |           |      |     |    |  |
| CAT.NO.      | CEM7064T-I-5              |     |        |              |              |         |      |           |      |     |    |  |
| HP           | 50 NEMA MG-1 PT.5,IP55    |     |        |              |              |         |      |           |      |     |    |  |
| VOLTS        | 575                       |     |        |              |              |         |      |           |      |     |    |  |
| AMPS         | 47                        |     |        |              |              |         |      |           |      |     |    |  |
| RPM          | 1775                      |     |        |              | MOTOR WEIGHT |         |      |           | 800  |     |    |  |
| HERTZ        | 60                        | PH  | 3      | CL           | F            | DE BRG  | 6312 |           |      |     |    |  |
| SER.F.       | 1.15                      | DES | A      | CODE         | J            | ODE BRG |      |           | 6311 |     |    |  |
| FRAME        | 326TC                     |     | GREASE |              | POLYREX EM   |         |      |           |      |     |    |  |
| RATING       | 40C AMB-CONT              |     |        |              |              |         |      |           |      |     |    |  |
|              |                           |     |        | NEMA-NOM-EFF |              |         |      | 94.5      |      | PF  | 84 |  |
|              | 55C AMB @ 1.0 SF,60C RISE |     |        |              |              |         |      |           |      |     |    |  |

**AC Induction Motor Performance Data**

Record # 39103

Typical performance - not guaranteed values

| Winding: 12WGY593-R001 |      |              | Type: 1276M                           |                       | Enclosure: XPFC |  |
|------------------------|------|--------------|---------------------------------------|-----------------------|-----------------|--|
| Nameplate Data         |      |              | 575 V, 60 Hz:<br>Single Voltage Motor |                       |                 |  |
| Rated Output (HP)      |      | 50           | Full Load Torque                      |                       | 148 LB-FT       |  |
| Volts                  |      | 575          | Start Configuration                   |                       | direct on line  |  |
| Full Load Amps         |      | 47           | Breakdown Torque                      |                       | 560 LB-FT       |  |
| R.P.M.                 |      | 1775         | Pull-up Torque                        |                       | 235 LB-FT       |  |
| Hz                     | 60   | Phase        | 3                                     | Locked-rotor Torque   | 278 LB-FT       |  |
| NEMA Design Code       | A    | KVA Code     | J                                     | Starting Current      | 378 A           |  |
| Service Factor (S.F.)  |      | 1.15         | No-load Current                       |                       | 19.8 A          |  |
| NEMA Nom. Eff.         | 94.5 | Power Factor | 84                                    | Line-line Res. @ 25°C | 0.143 Ω         |  |
| Rating - Duty          |      | 40C AMB-CONT | Temp. Rise @ Rated Load               |                       | 55°C            |  |
| S.F. Amps              |      |              | Temp. Rise @ S.F. Load                |                       | 66°C            |  |
|                        |      |              | Locked-rotor Power Factor             |                       | 26.3            |  |
|                        |      |              | Rotor inertia                         |                       | 10.1 LB-FT2     |  |

**Load Characteristics 575 V, 60 Hz, 50 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 45   | 68   | 78   | 84   | 86   | 87   | 85   |
| Efficiency      | 91.2 | 94.3 | 94.9 | 95.2 | 94.7 | 94.1 | 94.9 |
| Speed           | 1794 | 1789 | 1784 | 1779 | 1774 | 1767 | 1776 |
| Line amperes    | 22.6 | 29.3 | 37.6 | 47   | 57.7 | 68.8 | 53.4 |

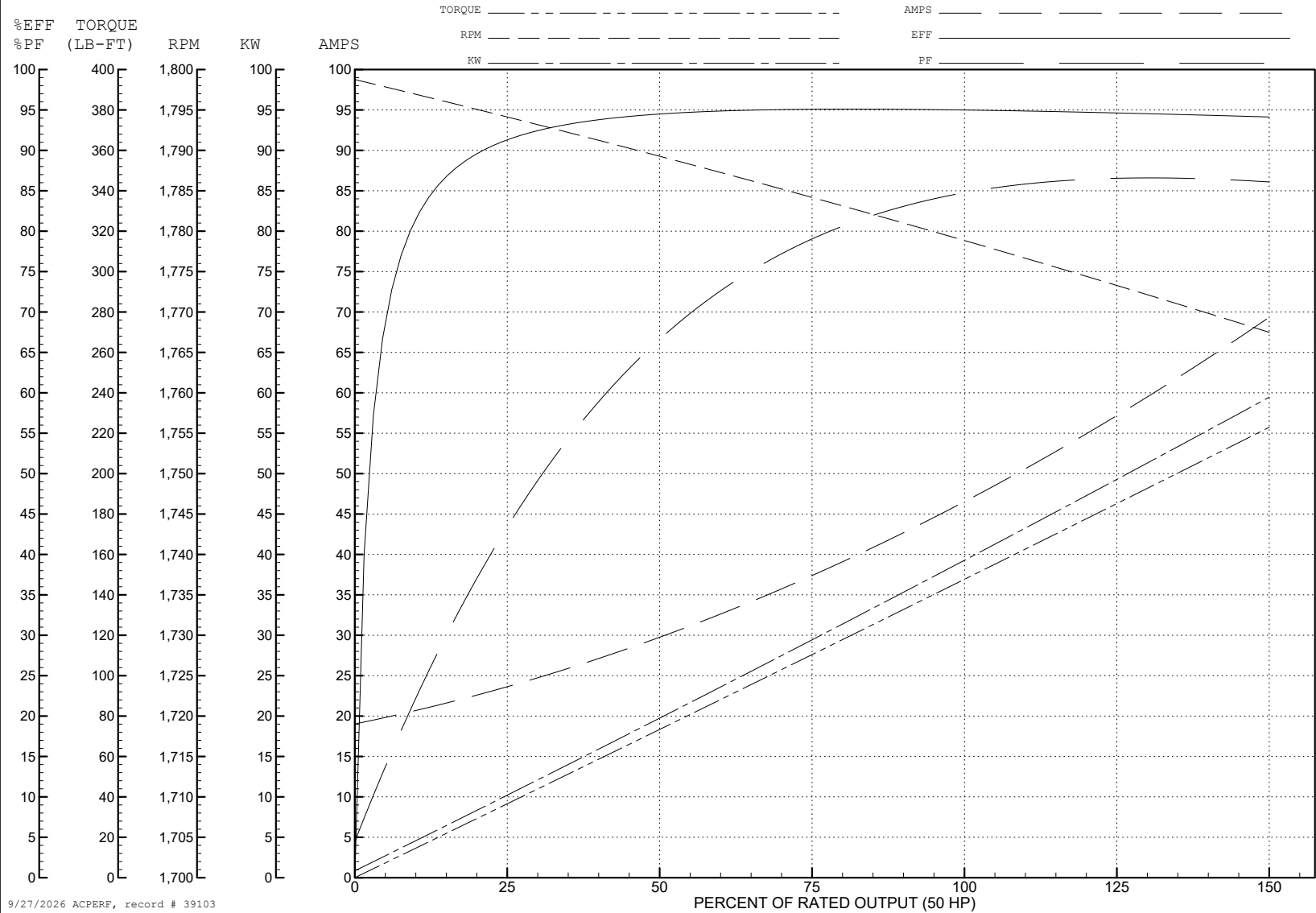
ABB Motors and Mechanical Inc.

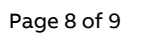
WINDING # 12WGY593

Typical performance - not guaranteed values.

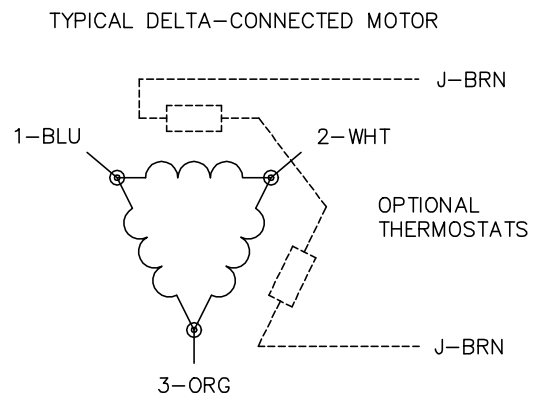
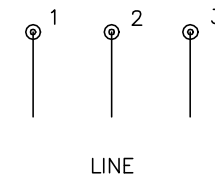
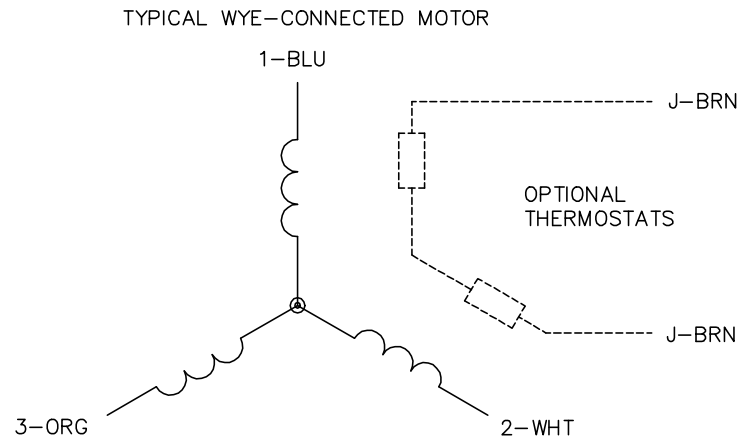
50 HP 3 PH 60 HZ 1775 RPM 575 V 1276M

TORQUES (LB-FT): PO=560 PU=235 LR=278 LRA=378





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