

# ABB BALDOR RELIANCE III

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## Customer information packet

### ECP63770TR-4

7.5HP, 1765RPM, 3PH, 60HZ, 213T, 0740M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

|                                |                                                          |
|--------------------------------|----------------------------------------------------------|
| Enclosure                      | TEFC                                                     |
| Frame                          | 213T                                                     |
| Frame Material                 | Iron                                                     |
| Frequency                      | 60.00 Hz                                                 |
| Haz Area Class and Group       | CLI GP A,B,C,D                                           |
| Haz Area Division              | Division II                                              |
| Motor Letter Type              | Three Phase                                              |
| Output @ Frequency             | 7.500 HP @ 60 HZ                                         |
| Phase                          | 3                                                        |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                                         |
| Voltage @ Frequency            | 460.0 V @ 60 HZ                                          |
| Agency Approvals               | CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR<br>CCSA US |
| Ambient Temperature            | 40 °C                                                    |
| Auxiliary Box                  | NO AUXILLARY BOX                                         |
| Auxiliary Box Lead Termination | None                                                     |
| Base Indicator                 | Rigid                                                    |
| Bearing Grease Type            | Mobilith SHC220, HC9455                                  |
| Blower                         | None                                                     |
| Constant Torque Speed Range    | 1.2                                                      |
| Current @ Voltage              | 9.500 A @ 460.0 V                                        |
| Design Code                    | B                                                        |
| Drip Cover                     | No Drip Cover                                            |
| Duty Rating                    | CONT                                                     |
| Efficiency @ 100% Load         | 91.7 %                                                   |
| Electrically Isolated Bearing  | Not Electrically Isolated                                |
| Feedback Device                | NO FEEDBACK                                              |
| Front Face Code                | C-Face                                                   |
| Front Shaft Indicator          | None                                                     |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | AJ         |
| Type         | AC         |
| Mech. spec.  | 07M686     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 07WGX814   |
| Layout       | 07LYM686   |
| Eff. date    | 09-09-2024 |
| CD Diagram   | CD0006     |
| Poles        | 04         |
| Leads        | 3#14       |
| Proprietary  | False      |
| Created date | 08-22-2013 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>Haz Area Temp Code</b>            | T3C                          |
| <b>Heater Indicator</b>              | No Heater                    |
| <b>High Voltage Full Load Amps</b>   | 9.5 a                        |
| <b>Insulation Class</b>              | F                            |
| <b>Inverter Code</b>                 | Inverter Duty                |
| <b>KVA Code</b>                      | H                            |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs        |
| <b>Locked Bearing Indicator</b>      | Locked Bearing               |
| <b>Max Speed</b>                     | 2700 rpm                     |
| <b>Motor Lead Exit</b>               | Ko Box                       |
| <b>Motor Lead Quantity/Wire Size</b> | 3 @ 14 AWG                   |
| <b>Motor Lead Termination</b>        | Flying Leads                 |
| <b>Motor Standards</b>               | NEMA                         |
| <b>Motor Type</b>                    | 0740M                        |
| <b>Mounting Arrangement</b>          | F1                           |
| <b>Number of Poles</b>               | 4                            |
| <b>Overall Length</b>                | 19.49 IN                     |
| <b>Power Factor</b>                  | 82                           |
| <b>Product Family</b>                | Chemical Processing (Not DC) |
| <b>Pulley End Bearing Type</b>       | Roller                       |
| <b>Pulley Face Code</b>              | Standard                     |
| <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>                | 1.376 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>       | Shaft Slinger                |
| <b>Speed</b>                         | 1765 rpm                     |
| <b>Speed Code</b>                    | Single Speed                 |
| <b>Starting Method</b>               | Direct on line               |
| <b>Thermal Device - Bearing</b>      | None                         |

|                            |                     |
|----------------------------|---------------------|
| Thermal Device - Winding   | None                |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1          | None                |
| Winding Thermal 2          | None                |

**Nameplate**

| NP4366          |              |      |       |      |      |       |    |   |  |
|-----------------|--------------|------|-------|------|------|-------|----|---|--|
| CAT.NO.         | ECP63770TR-4 |      |       |      |      |       |    |   |  |
| SPEC.           | 07M686X814G1 |      |       |      |      |       |    |   |  |
| HP              | 7.5 TE       |      |       |      | IP   | 56    |    |   |  |
| VOLTS           | 460          |      |       |      |      |       |    |   |  |
| AMPS            | 9.5          |      |       |      |      |       |    |   |  |
| R.P.M.          | 1765         |      |       |      |      |       |    |   |  |
| FRAME           | 213T         |      | HZ    |      | 60   |       | PH | 3 |  |
| SER.F.          | 1.15         | CODE | H     | DES. | B    | CLASS | F  |   |  |
| RATING          | 40C AMB-CONT |      |       |      |      |       |    |   |  |
| SN              |              |      |       |      |      |       |    |   |  |
| DE              | NU307        |      | ODE   |      | 6307 |       |    |   |  |
| NEMA NOM. EFF.  | 91.7         |      | P.F.  |      | 82   |       |    |   |  |
| GUAR. MIN. EFF. | 90.2         |      | CC    | 010A |      |       |    |   |  |
| T. CODE         | T3C          |      | TEMP= |      | 160  |       |    |   |  |

| NP3187             |               |                                |     |                             |
|--------------------|---------------|--------------------------------|-----|-----------------------------|
| <b>SPEC.</b>       | 07M686X814G1  |                                |     |                             |
| <b>D.E. BRG.</b>   | 35RU03X30X    |                                |     |                             |
| <b>O.D.E. BRG.</b> | 35BC03XP30X   |                                |     |                             |
| <b>GREASE</b>      | MOBIL SHC 222 |                                |     |                             |
| <b>WEIGHT</b>      | 195           | <b># OF ROTOR BARS</b>         | 28  | <b># OF STATOR SLOTS</b> 36 |
| <b>RPM MAX</b>     | 2700          | <b>MAX. KVAR</b>               | 1.3 |                             |
| <b>BLANK</b>       |               |                                |     |                             |
| <b>INV.TYPE</b>    | PWM           |                                |     |                             |
| <b>T=</b>          | 160           |                                |     |                             |
| <b>C HP FR</b>     | 60            | <b>C HP TO</b>                 | 90  |                             |
| <b>CT HZ FROM</b>  | 1.2           | <b>CT HZ TO</b>                | 60  |                             |
| <b>VT HZ FROM</b>  | 0-            | <b>VT HZ TO</b>                | 60  |                             |
| <b>HTR-VOLTS</b>   | N/A           | <b>HTR-AMPS</b>                | N/A |                             |
| <b>WATTS</b>       | N/A           | <b>MAX. SPACE HEATER TEMP.</b> | N/A |                             |

**AC Induction Motor Performance Data**

Record # 92344

Typical performance - not guaranteed values

| Winding: 07WGX814-R056 |  |      |  | Type: 0740M                           |  | Enclosure: TEFC           |  |
|------------------------|--|------|--|---------------------------------------|--|---------------------------|--|
| Nameplate Data         |  |      |  | 460 V, 60 Hz:<br>Single Voltage Motor |  |                           |  |
| Rated Output (HP)      |  | 7.5  |  | Full Load Torque                      |  | 22.32 LB-FT               |  |
| Volts                  |  | 460  |  | Start Configuration                   |  | direct on line            |  |
| Full Load Amps         |  | 9.5  |  | Breakdown Torque                      |  | 66.8 LB-FT                |  |
| R.P.M.                 |  | 1765 |  | Pull-up Torque                        |  | 30 LB-FT                  |  |
| Hz                     |  | 60   |  | Phase                                 |  | 3                         |  |
| NEMA Design Code       |  | B    |  | KVA Code                              |  | H                         |  |
| Service Factor (S.F.)  |  | 1.15 |  | No-load Current                       |  | 3.71 A                    |  |
| NEMA Nom. Eff.         |  | 91.7 |  | Power Factor                          |  | 81                        |  |
| Rating - Duty          |  | 40C  |  | AMB-CONT                              |  | Temp. Rise @ Rated Load   |  |
| S.F. Amps              |  |      |  |                                       |  | Temp. Rise @ S.F. Load    |  |
|                        |  |      |  |                                       |  | Locked-rotor Power Factor |  |

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 46     | 68     | 78     | 82     | 84     | 85     | 83   |
| Efficiency      | 88.6   | 92.1   | 92.4   | 91.7   | 90.7   | 89.3   | 91.1 |
| Speed           | 1789.9 | 1782.7 | 1774.5 | 1765.4 | 1755.6 | 1743.7 | 1760 |
| Line amperes    | 4.3    | 5.61   | 7.32   | 9.31   | 11.5   | 13.9   | 10.6 |

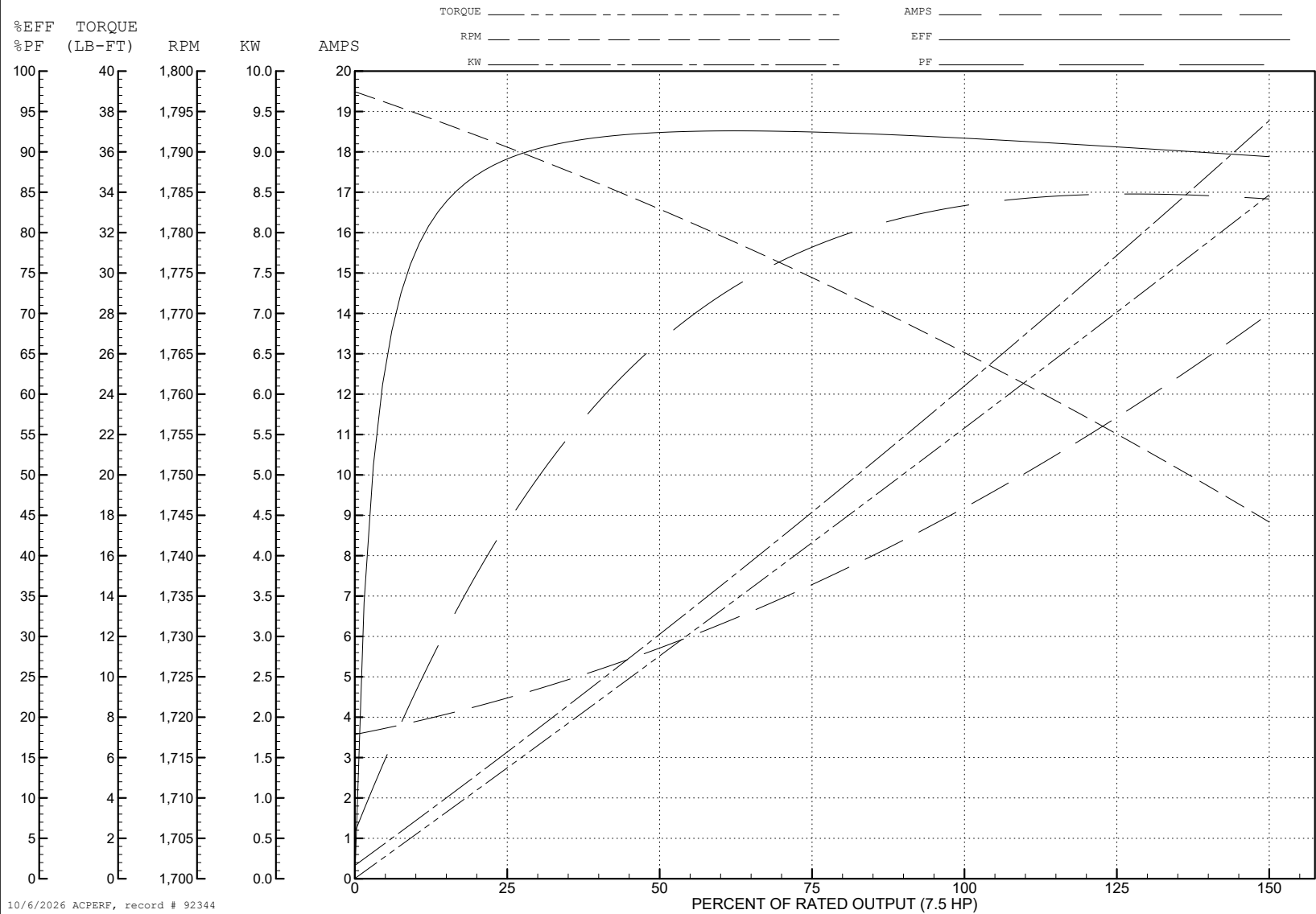
ABB Motors and Mechanical Inc.

WINDING # 07WGX814

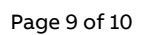
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1765 RPM 460 V 0740M

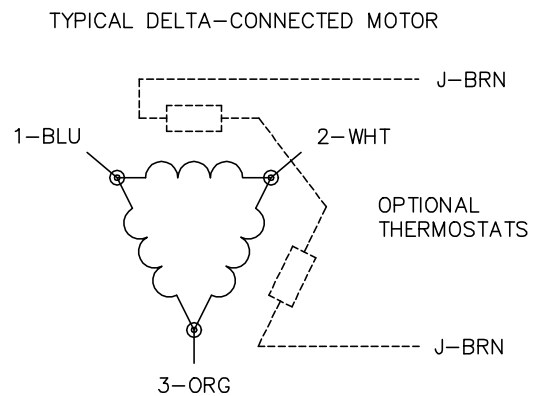
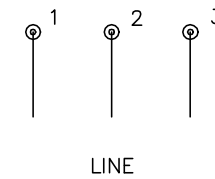
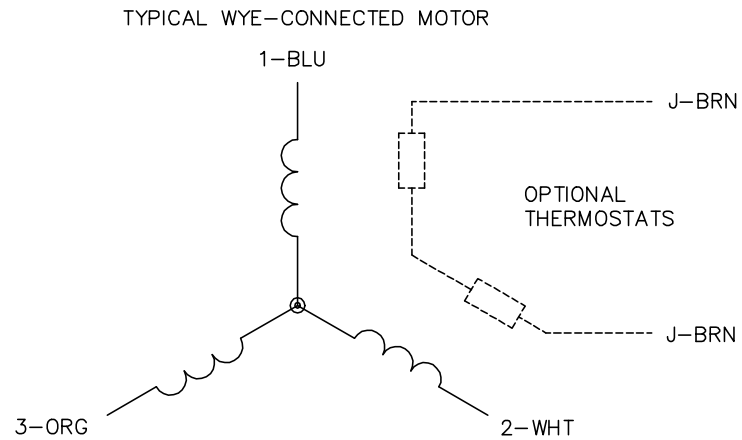
TORQUES (LB-FT): PO=66.8 PU=30 LR=39.7 LRA=63.5



10/6/2026 ACPERF, record # 92344



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