

# ABB BALDOR RELIANCE III

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## Customer information packet

### ECP3584T

1.5HP, 1755RPM, 3PH, 60HZ, 145T, 0530M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                        |
| <b>Frame</b>                          | 145T                                                        |
| <b>Frame Material</b>                 | Iron                                                        |
| <b>Frequency</b>                      | 60.00 Hz                                                    |
| <b>Haz Area Class and Group</b>       | CLI GP A,B,C,D                                              |
| <b>Haz Area Division</b>              | Division II                                                 |
| <b>Motor Letter Type</b>              | Three Phase                                                 |
| <b>Output @ Frequency</b>             | 1.500 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ<br>208.0 V @ 60 HZ       |
| <b>Agency Approvals</b>               | CCSA US<br>CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR    |
| <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>Constant Torque Speed Range</b>    | 1.3                                                         |
| <b>Current @ Voltage</b>              | 4.300 A @ 208.0 V<br>4.100 A @ 230.0 V<br>2.050 A @ 460.0 V |
| <b>Design Code</b>                    | B                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 88.5 %                                                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | F          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 05F008     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 05WGX902   |
| <b>Layout</b>       | 05LYF008   |
| <b>Eff. date</b>    | 08-05-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 07-21-2022 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>Electrically Isolated Bearing</b> | Not Electrically Isolated    |
| <b>Feedback Device</b>               | NO FEEDBACK                  |
| <b>Front Shaft Indicator</b>         | None                         |
| <b>Haz Area Temp Code</b>            | T4                           |
| <b>Heater Indicator</b>              | No Heater                    |
| <b>High Voltage Full Load Amps</b>   | 2.1 a                        |
| <b>Insulation Class</b>              | F                            |
| <b>Inverter Code</b>                 | Inverter Ready               |
| <b>KVA Code</b>                      | K                            |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs        |
| <b>Locked Bearing Indicator</b>      | No Locked Bearing            |
| <b>Max Speed</b>                     | 2700 rpm                     |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 18 AWG                   |
| <b>Motor Lead Termination</b>        | Flying Leads                 |
| <b>Motor Standards</b>               | NEMA                         |
| <b>Motor Type</b>                    | 0530M                        |
| <b>Mounting Arrangement</b>          | F1                           |
| <b>Number of Poles</b>               | 4                            |
| <b>Overall Length</b>                | 12.88 IN                     |
| <b>Power Factor</b>                  | 83                           |
| <b>Product Family</b>                | Chemical Processing (Not DC) |
| <b>Pulley End Bearing Type</b>       | Ball                         |
| <b>Pulley Face Code</b>              | Standard                     |
| <b>Pulley Shaft Indicator</b>        | Standard                     |
| <b>Rodent Screen</b>                 | None                         |
| <b>Service Factor</b>                | 1.15                         |
| <b>Shaft Diameter</b>                | 0.875 IN                     |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding           |
| <b>Shaft Rotation</b>                | Reversible                   |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger                |
| <b>Speed</b>                         | 1755 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**

| NP3258       |              |      |  |      |     |  |   |    |   |
|--------------|--------------|------|--|------|-----|--|---|----|---|
| CAT.NO.      | ECP3584T     |      |  |      |     |  |   |    |   |
| SPEC.        | 05F008X902G2 |      |  |      |     |  |   |    |   |
| HP           | 1.5 TE       |      |  |      |     |  |   |    |   |
| VOLTS        | 208-230/460  |      |  |      |     |  |   |    |   |
| AMP          | 4.6-4.4/2.2  |      |  |      |     |  |   |    |   |
| RPM          | 1760         |      |  |      |     |  |   |    |   |
| FRAME        | 145T         | HZ   |  | 60   | PH  |  | 3 |    |   |
| SER.F.       | 1.15         | CODE |  | M    | DES |  | B | CL | F |
| RATING       | 40C AMB-CONT |      |  |      |     |  |   |    |   |
| SN           |              |      |  |      |     |  |   |    |   |
| DE           | 6205         | ODE  |  | 6205 |     |  |   |    |   |
| NEMA-NOM-EFF | 86.5         | PF   |  | 72   |     |  |   |    |   |
| G.MIN.EFF    | 84           | CC   |  | 010A |     |  |   |    |   |
| T. CODE      | T4           | T=   |  | 135  |     |  |   |    |   |

| NP3261      |                 |                         |    |
|-------------|-----------------|-------------------------|----|
| SPEC.       | 05F008X902G2    |                         |    |
| D.E. BRG.   | 25BC02XP30X     |                         |    |
| O.D.E. BRG. | 25BC02XP30X     |                         |    |
| GREASE      | POLYREX EM      |                         |    |
| RPM MAX     | 2700            | MAX. KVAR               |    |
|             |                 |                         |    |
| BLANK       | SFA 4.8-4.6/2.3 |                         |    |
| INV.TYPE    | PWM             |                         |    |
| T=          | 135             |                         |    |
| C HP FR     | 60              | C HP TO                 | 90 |
| CT HZ FROM  | 1.3             | CT HZ TO                | 60 |
| VT HZ FROM  | 0-              | VT HZ TO                | 60 |
| HTR-VOLTS   |                 | HTR-AMPS                |    |
| HTR-WATTS   |                 | MAX. SPACE HEATER TEMP. |    |

**Accessories**

| Part number | Description | Multiplier |
|-------------|-------------|------------|
| 35-1300     | C FACE KIT  | A8         |

**AC Induction Motor Performance Data**

Record # 102445

Typical performance - not guaranteed values

| Winding: 05WGX902-R001 |    |             | Type: 0530M                              |                       | Enclosure: TEFC         |          |      |
|------------------------|----|-------------|------------------------------------------|-----------------------|-------------------------|----------|------|
| Nameplate Data         |    |             | 460 V, 60 Hz:<br>High Voltage Connection |                       |                         |          |      |
| Rated Output (HP)      |    | 1.5         | Full Load Torque                         |                       | 4.496 LB-FT             |          |      |
| Volts                  |    | 208-230/460 | Start Configuration                      |                       | direct on line          |          |      |
| Full Load Amps         |    | 4.6-4.4/2.2 | Breakdown Torque                         |                       | 21.2 LB-FT              |          |      |
| R.P.M.                 |    | 1760        | Pull-up Torque                           |                       | 14.4 LB-FT              |          |      |
| Hz                     | 60 | Phase       | 3                                        | Locked-rotor Torque   |                         | 16 LB-FT |      |
| NEMA Design Code       |    | B           | KVA Code                                 | Starting Current      |                         | 19.7 A   |      |
| Service Factor (S.F.)  |    | 1.15        | No-load Current                          |                       | 1.41 A                  |          |      |
| NEMA Nom. Eff.         |    | 86.5        | Power Factor                             | Line-line Res. @ 25°C |                         | 10.007 Ω |      |
| Rating - Duty          |    | 40C         | AMB-CONT                                 |                       | Temp. Rise @ Rated Load |          | 36°C |
| S.F. Amps              |    | 5.2-5/2.5   | Temp. Rise @ S.F. Load                   |                       | 42°C                    |          |      |
|                        |    |             | Locked-rotor Power Factor                |                       | 59.9                    |          |      |
|                        |    |             | Rotor inertia                            |                       | 0.217 lb-ft²            |          |      |

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 32     | 51     | 64     | 72     | 78     | 81     | 76   |
| Efficiency      | 76.4   | 84.6   | 86.9   | 87.3   | 86.8   | 85.8   | 87   |
| Speed           | 1789.3 | 1779.7 | 1769.5 | 1758.8 | 1747.1 | 1734.7 | 1752 |
| Line amperes    | 1.47   | 1.65   | 1.91   | 2.23   | 2.6    | 3.01   | 2.45 |



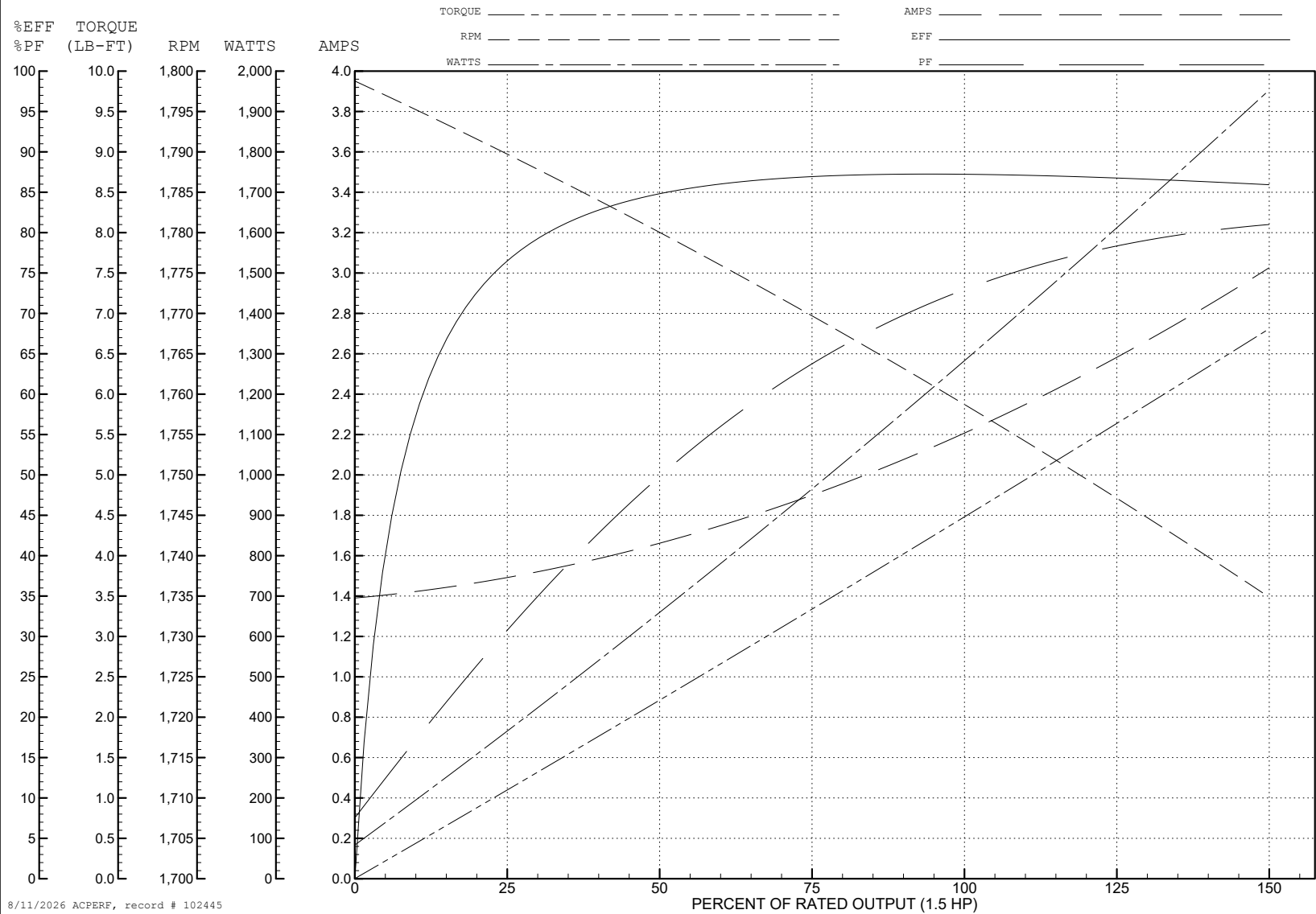
ABB Motors and Mechanical Inc.

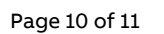
WINDING # 05WGX902

Typical performance - not guaranteed values.

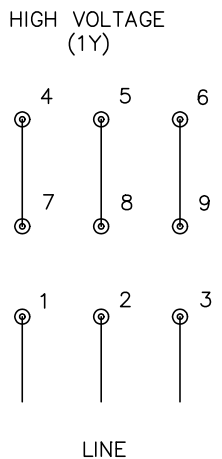
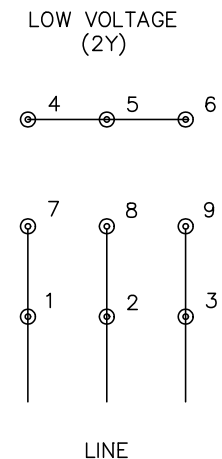
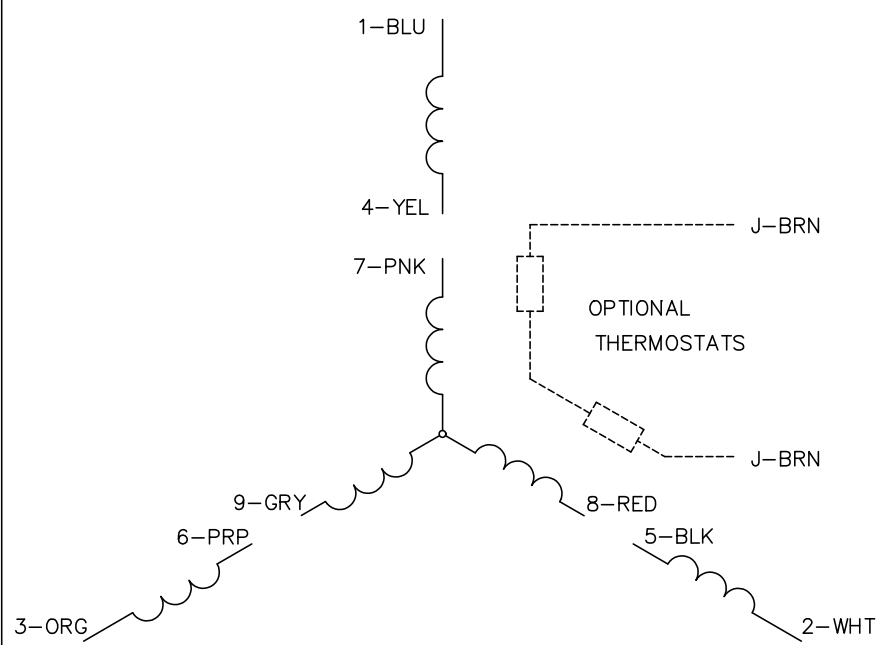
1.5 HP 3 PH 60 HZ 1760 RPM 460 V 0530M

TORQUES (LB-FT): PO=21.2 PU=14.4 LR=16 LRA=19.7





CD0005



- 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.

|                                           |         |                         |              |
|-------------------------------------------|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 900000                                    |         | FILE: AAA00005140       | MDL: -       |
|                                           |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005