

# ABB BALDOR RELIANCE III

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## Customer information packet

### EM3586T-G

2HP, 3490RPM, 3PH, 60HZ, 145T, TEFC, F1

Class - None

Division - Not Applicable

**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>       | None                                                        |
| <b>Haz Area Division</b>              | Not Applicable                                              |
| <b>Motor Letter Type</b>              | Three Phase                                                 |
| <b>Output @ Frequency</b>             | 2.000 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 3600 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | CSA<br>CSA EEV<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>Current @ Voltage</b>              | 5.300 A @ 208.0 V<br>5.000 A @ 230.0 V<br>2.500 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>         | 85.5 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Heater Indicator</b>               | No Heater                                                   |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | E          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 05WGX117   |
| <b>Layout</b>       | 05LYG784   |
| <b>Eff. date</b>    | 01-02-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 04-09-2019 |

|                             |                     |
|-----------------------------|---------------------|
| High Voltage Full Load Amps | 2.5 a               |
| Insulation Class            | H                   |
| Inverter Code               | Inverter Ready      |
| IP Rating                   | NONE                |
| KVA Code                    | M                   |
| Lifting Lugs                | No Lifting Lugs     |
| Locked Bearing Indicator    | Locked Bearing      |
| Motor Lead Termination      | Flying Leads        |
| Motor Standards             | NEMA                |
| Motor Type                  | 0526M               |
| Mounting Arrangement        | F1                  |
| Number of Poles             | 2                   |
| Overall Length              | 12.54 IN            |
| Power Factor                | 88                  |
| Product Family              | General Purpose     |
| Pulley Face Code            | Standard            |
| Rodent Screen               | None                |
| Service Factor              | 1.15                |
| Shaft Diameter              | 0.875 IN            |
| Shaft Ground Indicator      | Shaft Grounding     |
| Shaft Rotation              | Reversible          |
| Speed                       | 3490 rpm            |
| Speed Code                  | Single Speed        |
| Starting Method             | Direct on line      |
| Thermal Device - Winding    | None                |
| Vibration Sensor Indicator  | No Vibration Sensor |
| Winding Thermal 1           | None                |
| Winding Thermal 2           | None                |

Nameplate

| NP3441LUA                 |              |      |     |      |   |       |   |  |  |
|---------------------------|--------------|------|-----|------|---|-------|---|--|--|
| CAT.NO.                   | EM3586T-G    |      |     |      |   |       |   |  |  |
| SPEC                      | 05-0000-0042 |      |     |      |   |       |   |  |  |
| HP                        | 2            |      |     |      |   |       |   |  |  |
| VOLTS                     | 230/460      |      |     |      |   |       |   |  |  |
| AMPS                      | 5/2.5        |      |     |      |   |       |   |  |  |
| RPM                       | 3490         |      |     |      |   |       |   |  |  |
| FRAME                     | 145T         |      | HZ  | 60   |   | PH    | 3 |  |  |
| SF                        | 1.15         | CODE | M   | DES  | B | CLASS | H |  |  |
| NEMA NOM. EFF             | 85.5         | PF   | 88  |      |   |       |   |  |  |
| RATING                    | 40C AMB-CONT |      |     |      |   |       |   |  |  |
| CC                        | 010A         |      |     |      |   |       |   |  |  |
| ENCL                      | TEFC         | SER  |     |      |   |       |   |  |  |
| DE                        | 6205         |      | ODE | 6203 |   |       |   |  |  |
| VPWM INVERTER READY       |              |      |     |      |   |       |   |  |  |
| CT6-60H(10:1)VT3-60H(20:1 |              |      |     |      |   |       |   |  |  |
|                           |              |      |     |      |   |       |   |  |  |

**AC Induction Motor Performance Data**

Record # 75451

Typical performance - not guaranteed values

| Winding: 05WGX117-R004 |    |              | Type: 0526M                              |                           | Enclosure: TEFC       |               |        |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------------|---------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                       |               |        |
| Rated Output (HP)      |    | 2            | Full Load Torque                         |                           | 2.98 LB-FT            |               |        |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line        |               |        |
| Full Load Amps         |    | 5/2.5        | Breakdown Torque                         |                           | 14.2 LB-FT            |               |        |
| R.P.M.                 |    | 3490         | Pull-up Torque                           |                           | 6.33 LB-FT            |               |        |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                       | 11.2 LB-FT    |        |
| NEMA Design Code       |    | B            | KVA Code                                 | M                         | Starting Current      |               | 25.9 A |
| Service Factor (S.F.)  |    | 1.15         |                                          | No-load Current           |                       | 0.912 A       |        |
| NEMA Nom. Eff.         |    | 85.5         | Power Factor                             | 88                        | Line-line Res. @ 25°C |               | 6.88 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                       | 44°C          |        |
| S.F. Amps              |    |              |                                          | Temp. Rise @ S.F. Load    |                       | 52°C          |        |
|                        |    |              |                                          | Locked-rotor Power Factor |                       | 49.9          |        |
|                        |    |              |                                          | Rotor inertia             |                       | 0.0719 LB-FT2 |        |

**Load Characteristics 460 V, 60 Hz, 2 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 55   | 75   | 84   | 88   | 90   | 91   | 89   |
| Efficiency      | 73.4 | 83.6 | 85.7 | 86.3 | 85.7 | 84.6 | 85.9 |
| Speed           | 3572 | 3547 | 3520 | 3492 | 3461 | 3426 | 3473 |
| Line amperes    | 1.1  | 1.47 | 1.93 | 2.44 | 3    | 3.61 | 2.78 |

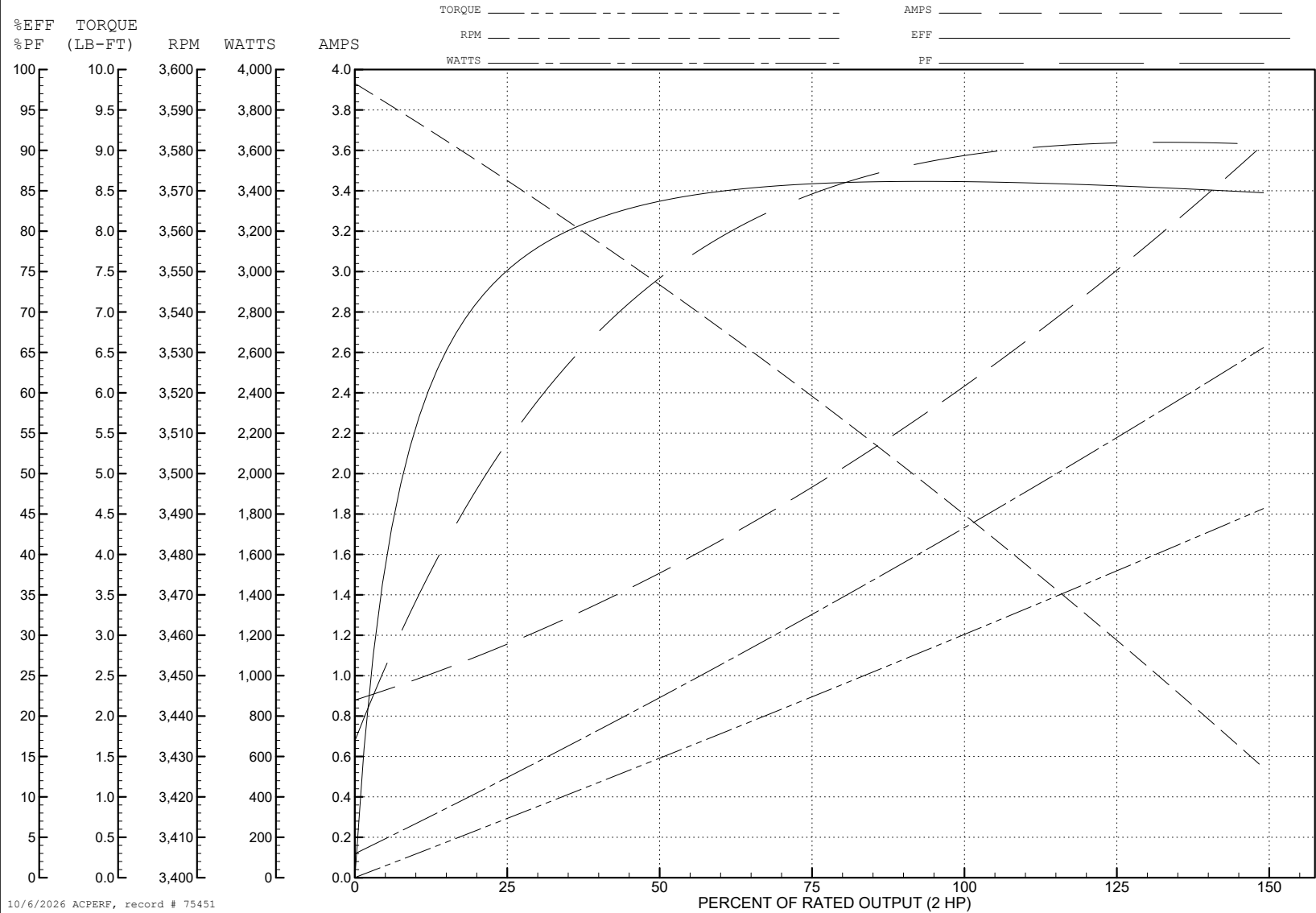
ABB Motors and Mechanical Inc.

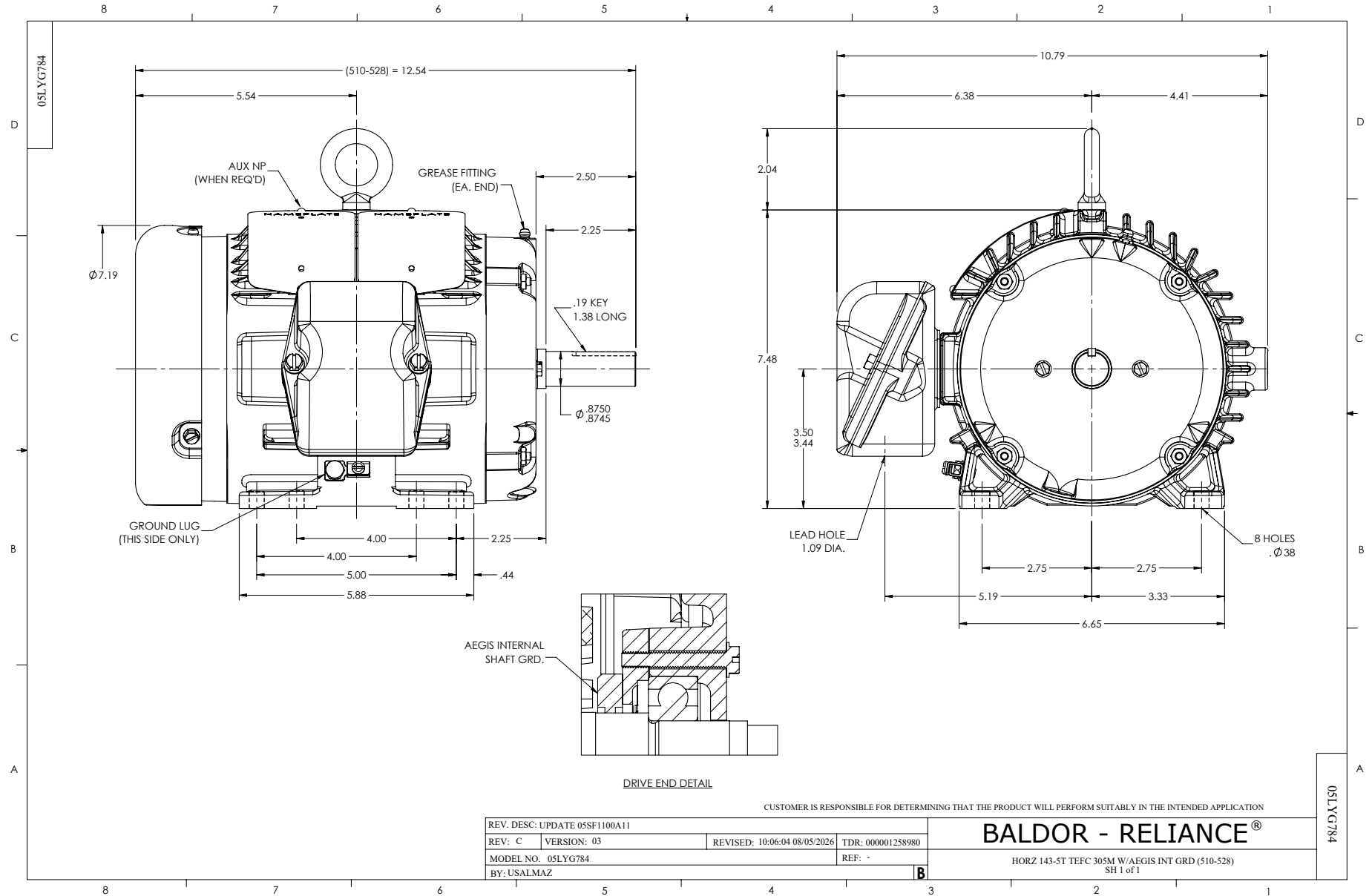
WINDING # 05WGX117

Typical performance - not guaranteed values.

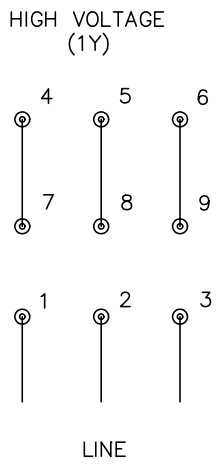
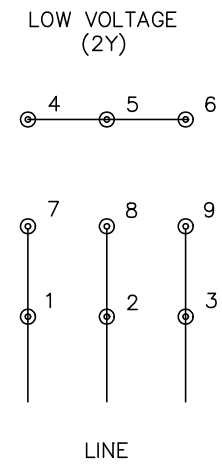
2 HP 3 PH 60 HZ 3490 RPM 460 V 0526M

TORQUES (LB-FT): PO=14.2 PU=6.33 LR=11.2 LRA=25.9





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 |
| S00000                                    |         | FILE: AAA00005140       | MDL: -       |
|                                           |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005