

# ABB BALDOR RELIANCE III

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## Customer information packet

### EJMM4104T-G

56M 4P TEFC HOR 286JM SE

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                           |
| <b>Frame</b>                          | 286JM                                                          |
| <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>             | 30.000 HP @ 60 HZ                                              |
| <b>Phase</b>                          | 3                                                              |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                               |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 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>              | 78.000 A @ 208.0 V<br>76.000 A @ 230.0 V<br>38.000 A @ 460.0 V |
| <b>Design Code</b>                    | A                                                              |
| <b>Drip Cover</b>                     | No Drip Cover                                                  |
| <b>Duty Rating</b>                    | CONT                                                           |
| <b>Efficiency @ 100% Load</b>         | 93.6 %                                                         |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                      |
| <b>Feedback Device</b>                | NO FEEDBACK                                                    |
| <b>Front Shaft Indicator</b>          | None                                                           |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | J          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 10H520     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 10WGY538   |
| <b>Layout</b>       | 10LYH520   |
| <b>Eff. date</b>    | 06-05-2026 |
| <b>CD Diagram</b>   | CD0180     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#8        |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 04-02-2019 |

|                               |                       |
|-------------------------------|-----------------------|
| Heater Indicator              | No Heater             |
| High Voltage Full Load Amps   | 38.0 a                |
| Insulation Class              | F                     |
| Inverter Code                 | Inverter Ready        |
| IP Rating                     | NONE                  |
| KVA Code                      | J                     |
| Lifting Lugs                  | Standard Lifting Lugs |
| Locked Bearing Indicator      | Locked Bearing        |
| Motor Lead Quantity/Wire Size | 9 @ 8 AWG             |
| Motor Lead Termination        | Flying Leads          |
| Motor Standards               | NEMA                  |
| Motor Type                    | 1056M                 |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 4                     |
| Overall Length                | 28.64 IN              |
| Power Factor                  | 80                    |
| Product Family                | General Purpose       |
| Pulley End Bearing Type       | Ball                  |
| Pulley Face Code              | C-Face                |
| Pulley Shaft Indicator        | Tapped & Key          |
| Rodent Screen                 | None                  |
| RoHS Status                   | ROHS NON-COMPLIANT    |
| Service Factor                | 1.15                  |
| Shaft Diameter                | 1.375 IN              |
| Shaft Ground Indicator        | Shaft Grounding       |
| Shaft Rotation                | Reversible            |
| Shaft Slinger Indicator       | Shaft Slinger         |
| Speed                         | 1760 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**

| NP3443LUA |                           |                         |                |                           |       |         |        |      |            |      |  |      |
|-----------|---------------------------|-------------------------|----------------|---------------------------|-------|---------|--------|------|------------|------|--|------|
| CAT.NO.   | EJMM4104T-G               |                         |                | CUST. P/N                 |       |         |        | ENCL |            |      |  | TEFC |
| SPEC.     | 10H520Y538G2              | CC                      | 010A           | FRAME                     | 286JM | SER.NO. |        |      |            |      |  |      |
| HP        | 30                        |                         | CLASS          | H                         | HZ    | 60      |        |      |            |      |  |      |
| R.P.M.    | 1760                      |                         | PH.            | 3                         | DES.  | A       |        |      |            |      |  |      |
| VOLTS     | 230/460                   |                         | CODE           |                           | J     | ODE BRG |        | 6309 | DE BRG     | 6312 |  |      |
| AMPS      | 76/38                     |                         |                |                           |       |         |        |      |            |      |  |      |
| RATING    | 40C AMB-CONT              |                         | NEMA NOM. EFF. |                           |       | 93.6    | GREASE |      | POLYREX EM |      |  |      |
| P.F.      | 80                        | SER.F.                  | 1.15           | CT6-60H(10:1)VT3-60H(20:1 |       |         |        |      |            |      |  |      |
| USABLE AT | 50HZ 30HP 190/380V 88/44A |                         |                | SF1.0                     |       |         |        |      |            |      |  |      |
| VOLTS     | AMPS                      | MAX. SPACE HEATER TEMP. |                |                           |       |         |        |      |            |      |  |      |

**AC Induction Motor Performance Data**

Record # 28318

Typical performance - not guaranteed values

| Winding: 10WGY538-R001 |    |             | Type: 1056M                              |                     | Enclosure: TEFC           |           |             |
|------------------------|----|-------------|------------------------------------------|---------------------|---------------------------|-----------|-------------|
| Nameplate Data         |    |             | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |           |             |
| Rated Output (HP)      |    | 30          | Full Load Torque                         |                     | 88.7 LB-FT                |           |             |
| Volts                  |    | 208-230/460 | Start Configuration                      |                     | direct on line            |           |             |
| Full Load Amps         |    | 76/38       | Breakdown Torque                         |                     | 330 LB-FT                 |           |             |
| R.P.M.                 |    | 1760        | Pull-up Torque                           |                     | 142 LB-FT                 |           |             |
| Hz                     | 60 | Phase       | 3                                        | Locked-rotor Torque |                           | 178 LB-FT |             |
| NEMA Design Code       |    | A           | KVA Code                                 | J                   | Starting Current          |           | 270 A       |
| Service Factor (S.F.)  |    | 1.15        | No-load Current                          |                     | 17.9 A                    |           |             |
| NEMA Nom. Eff.         |    | 93.6        | Power Factor                             | 80                  | Line-line Res. @ 25°C     |           | 0.19377 Ω   |
| Rating - Duty          |    | 40C         | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |           | 64°C        |
| S.F. Amps              |    |             |                                          |                     | Temp. Rise @ S.F. Load    |           | 76°C        |
|                        |    |             |                                          |                     | Locked-rotor Power Factor |           | 31          |
|                        |    |             |                                          |                     | Rotor inertia             |           | 4.47 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 30 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 41     | 63     | 73     | 80     | 82     | 85     | 81   |
| Efficiency      | 87.6   | 91.9   | 93.2   | 93.6   | 93.4   | 92.9   | 93.5 |
| Speed           | 1792.2 | 1787.6 | 1782.4 | 1776.5 | 1770.3 | 1762.1 | 1773 |
| Line amperes    | 19.8   | 24.3   | 30.7   | 37.6   | 45.6   | 55.2   | 42.4 |

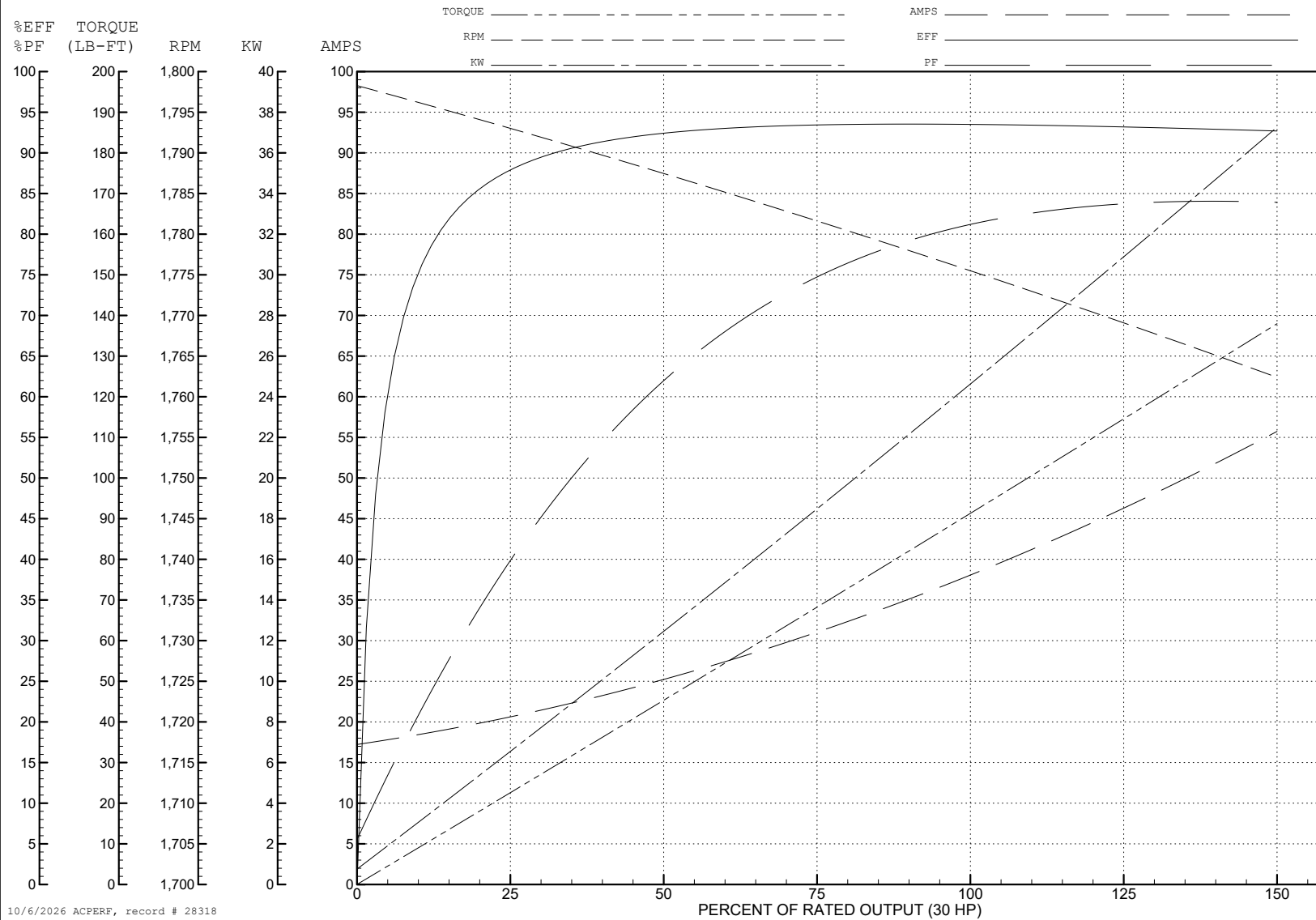
ABB Motors and Mechanical Inc.

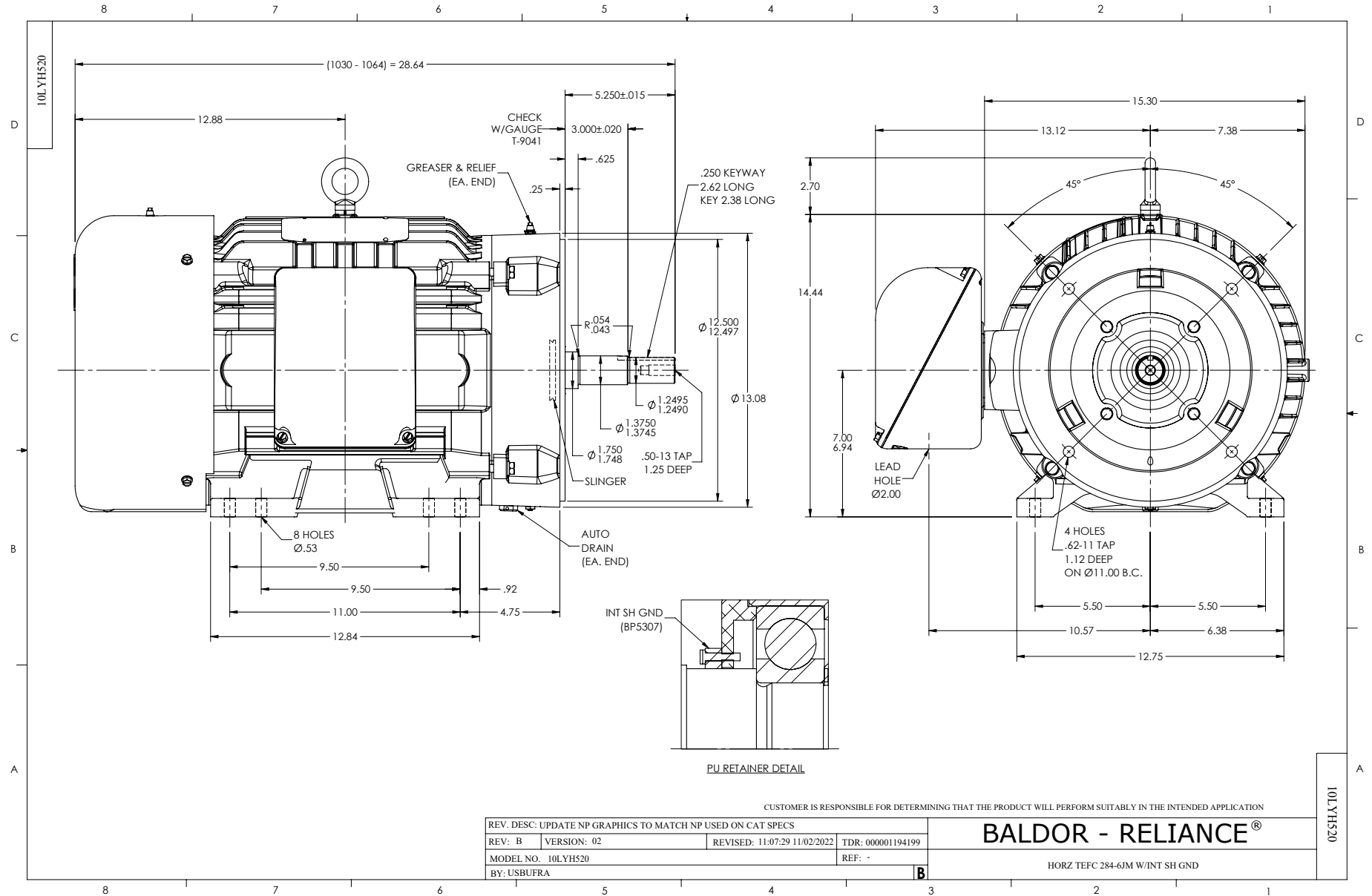
WINDING # 10WGY538

Typical performance - not guaranteed values.

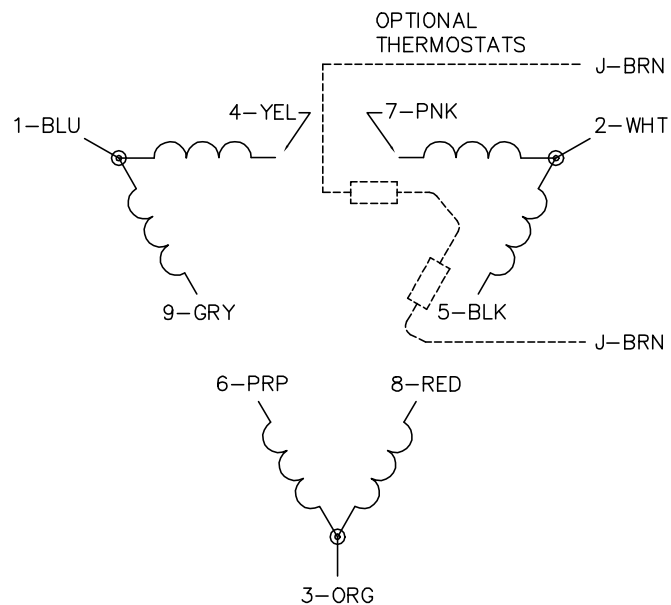
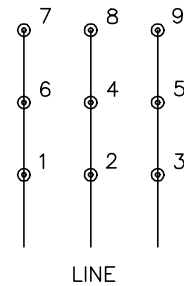
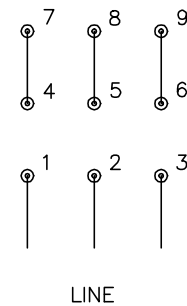
30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

TORQUES (LB-FT): PO=330 PU=142 LR=178 LRA=270





CD0180


LOW VOLTAGE  
(2D)

HIGH VOLTAGE  
(1D)

**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.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —


**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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