

# ABB BALDOR RELIANCE III

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## Customer information packet

### EM4104T-BG

30HP, 1760RPM, 3PH, 60HZ, 286T, 1056M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |  |
|---------------------------------------|--|
| <b>Enclosure</b>                      | TEFC   |
| <b>Frame</b>                          | 286T   |
| <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>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                             |
| <b>Agency Approvals</b>               | CSA<br>CSA EEV<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>              | 76.000 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 Face Code</b>                | Standard   |
| <b>Front Shaft Indicator</b>          | None   |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | Y          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 10J470     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 10WGY538   |
| <b>Layout</b>       | 10LYJ470   |
| <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> | 10-09-2013 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Heater Indicator</b>              | No Heater             |
| <b>High Voltage Full Load Amps</b>   | 38.0 a                |
| <b>Insulation Class</b>              | H                     |
| <b>Inverter Code</b>                 | Inverter Ready        |
| <b>KVA Code</b>                      | J                     |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>      | Locked Bearing        |
| <b>Motor Lead Exit</b>               | Ko Box                |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 8 AWG             |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 1056M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 4                     |
| <b>Overall Length</b>                | 27.76 IN              |
| <b>Power Factor</b>                  | 80                    |
| <b>Product Family</b>                | General Purpose       |
| <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>                | 1.875 IN              |
| <b>Shaft Extension Location</b>      | Pulley End            |
| <b>Shaft Ground Indicator</b>        | Shaft Grounding       |
| <b>Shaft Rotation</b>                | Reversible            |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger         |
| <b>Speed</b>                         | 1760 rpm              |
| <b>Speed Code</b>                    | Single Speed          |
| <b>Starting Method</b>               | Direct on line        |
| <b>Thermal Device - Bearing</b>      | NONE (OLD)            |
| <b>Thermal Device - Winding</b>      | None                  |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor   |
| <b>Winding Thermal 1</b>             | None                  |

**Winding Thermal 2**

**None**

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**Nameplate**

**NP3443LUA**

|                  |                           |                                |              |                       |                                   |                |                |               |      |
|------------------|---------------------------|--------------------------------|--------------|-----------------------|-----------------------------------|----------------|----------------|---------------|------|
| <b>CAT.NO.</b>   | EM4104T-BG                |                                |              | <b>CUST. P/N</b>      |                                   |                |                | <b>ENCL</b>   | TEFC |
| <b>SPEC.</b>     | 10J470Y538G1              | <b>CC</b>                      | 010A         | <b>FRAME</b>          | 286T                              |                | <b>SER.NO.</b> |               |      |
| <b>HP</b>        | 30                        |                                | <b>CLASS</b> | H                     | <b>HZ</b>                         | 60             |                |               |      |
| <b>R.P.M.</b>    | 1760                      |                                | <b>PH.</b>   | 3                     | <b>DES.</b>                       | A              |                |               |      |
| <b>VOLTS</b>     | 230/460                   |                                |              | <b>CODE</b>           | J                                 | <b>ODE BRG</b> | 6309           | <b>DE BRG</b> | 6311 |
| <b>AMPS</b>      | 76/38                     |                                |              |                       |                                   |                |                |               |      |
| <b>RATING</b>    | 40C AMB-CONT              |                                |              | <b>NEMA NOM. EFF.</b> | 93.6                              |                | <b>GREASE</b>  | POLYREX EM    |      |
| <b>P.F.</b>      | 80                        | <b>SER.F.</b>                  | 1.15         |                       | <b>CT6-60H(10:1)VT3-60H(20:1)</b> |                |                |               |      |
| <b>USABLE AT</b> | 50HZ 30HP 190/380V 88/44A |                                |              | SF1.0                 |                                   |                |                |               |      |
| <b>VOLTS</b>     | <b>AMPS</b>               | <b>MAX. SPACE HEATER TEMP.</b> |              |                       |                                   |                |                |               |      |

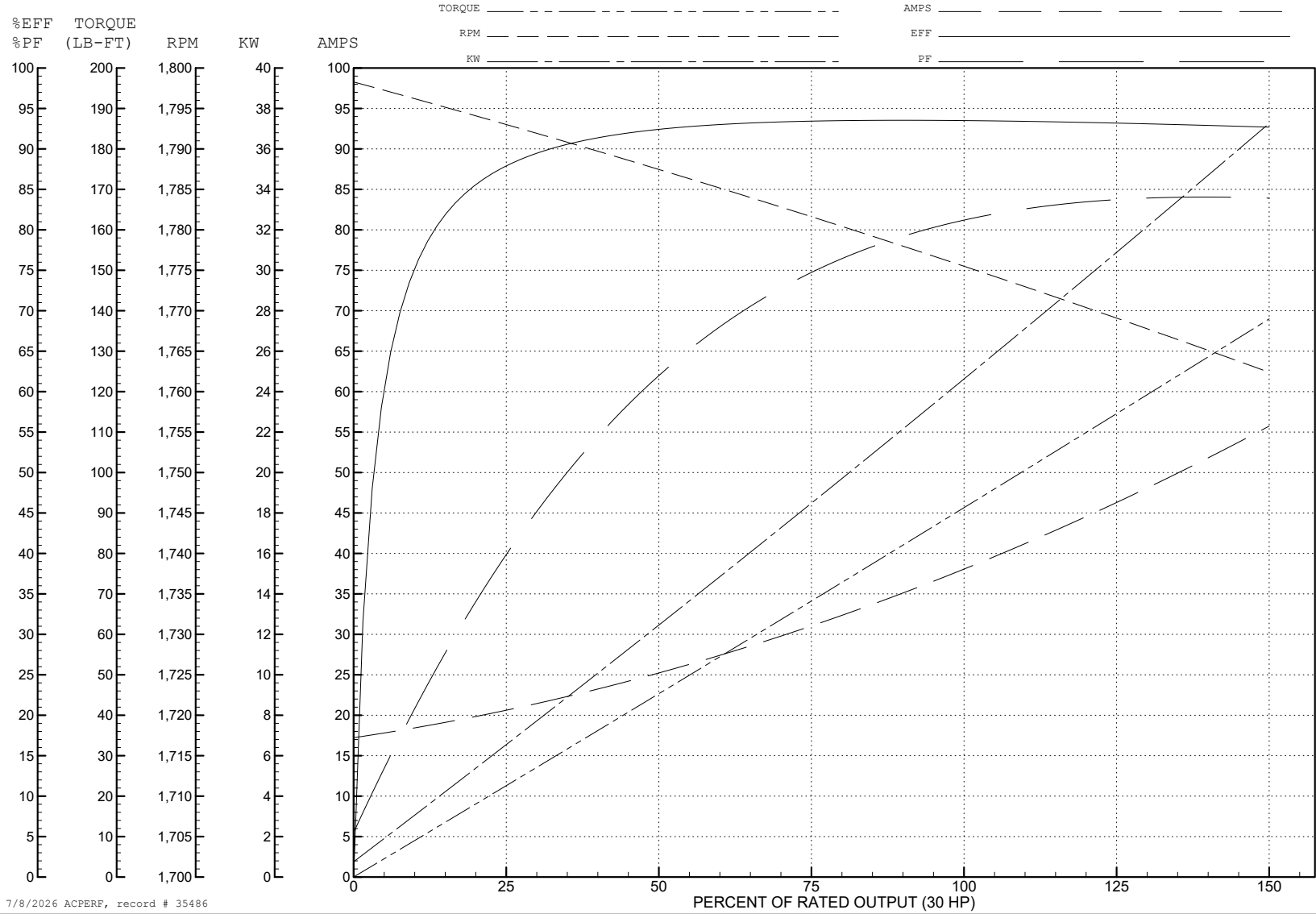
ABB Motors and Mechanical Inc.

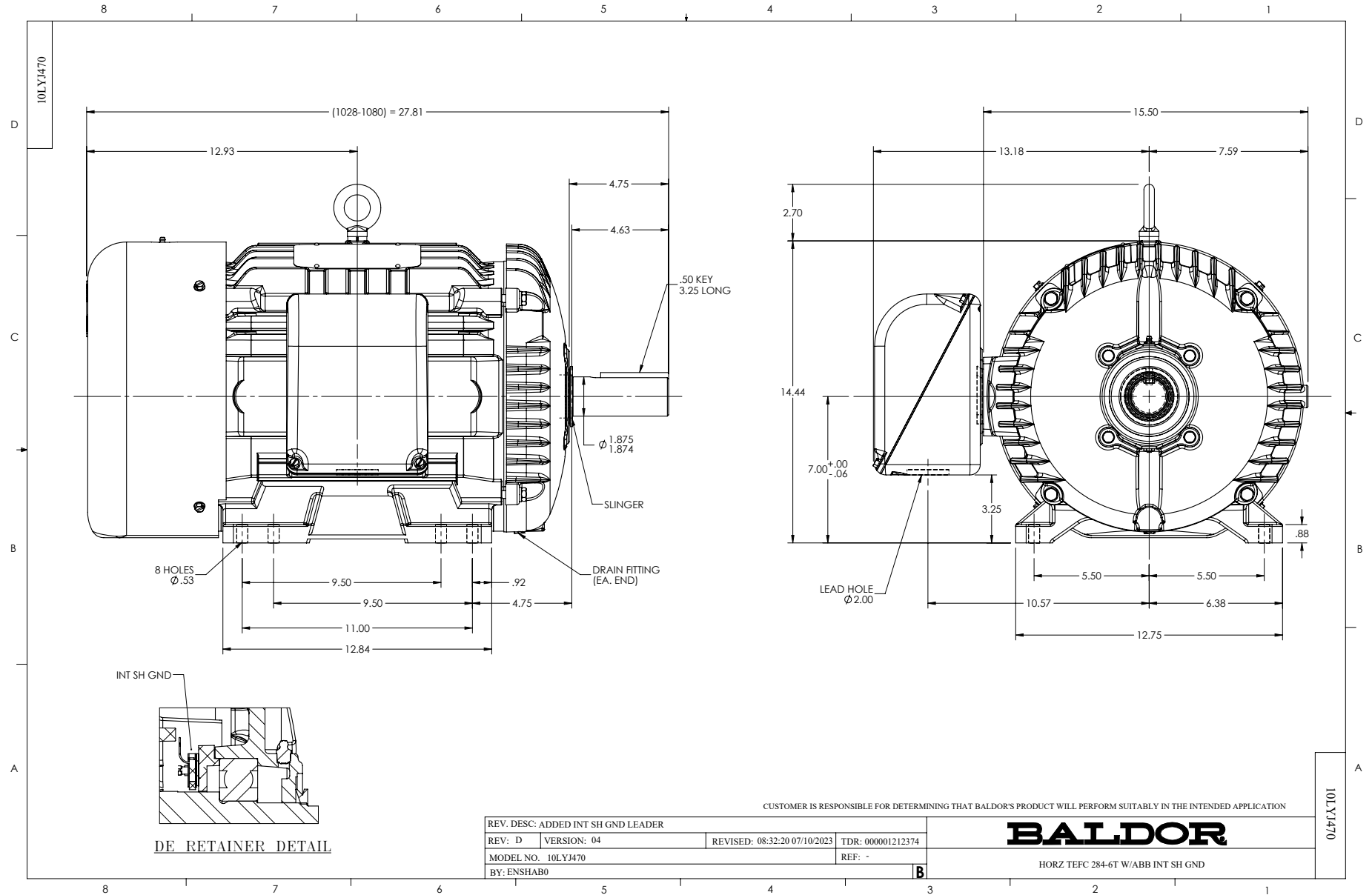
WINDING # 10WGY538

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

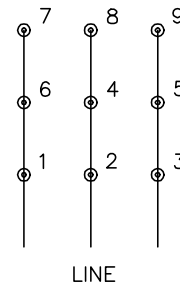




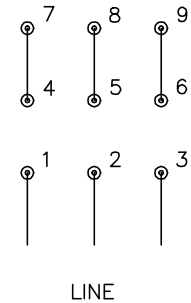
CD0180



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

SH 1 of 1