

# ABB BALDOR RELIANCE III

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## Customer information packet

### EWDM2402T

10HP, 880RPM, 3PH, 60HZ, 284T, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                           |
| <b>Frame</b>                          | 284T                                                           |
| <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>             | 10.000 HP @ 60 HZ                                              |
| <b>Phase</b>                          | 3                                                              |
| <b>Synchronous Speed @ Frequency</b>  | 900 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>              | 30.000 A @ 208.0 V<br>29.200 A @ 230.0 V<br>14.600 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>         | 89.5 %                                                         |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                      |
| <b>Enclosure Modification</b>         | Severe Duty Features                                           |
| <b>Feedback Device</b>                | NO FEEDBACK                                                    |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | H          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 10WGZ392   |
| <b>Layout</b>       | 10LYN057   |
| <b>Eff. date</b>    | 02-21-2024 |
| <b>CD Diagram</b>   | CD0180     |
| <b>Poles</b>        | 08         |
| <b>Leads</b>        | 9#10       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 08-19-2019 |

|                                    |                       |
|------------------------------------|-----------------------|
| <b>Heater Indicator</b>            | No Heater             |
| <b>High Voltage Full Load Amps</b> | 14.6 a                |
| <b>Insulation Class</b>            | F                     |
| <b>Inverter Code</b>               | Inverter Duty         |
| <b>IP Rating</b>                   | IP55                  |
| <b>KVA Code</b>                    | H                     |
| <b>Lifting Lugs</b>                | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>    | Locked Bearing        |
| <b>Motor Lead Termination</b>      | Flying Leads          |
| <b>Motor Standards</b>             | NEMA                  |
| <b>Motor Type</b>                  | 1046M                 |
| <b>Mounting Arrangement</b>        | F1                    |
| <b>Number of Poles</b>             | 8                     |
| <b>Overall Length</b>              | 27.56 IN              |
| <b>Power Factor</b>                | 71                    |
| <b>Product Family</b>              | Washdown Features     |
| <b>Pulley Face Code</b>            | Standard              |
| <b>Rodent Screen</b>               | None                  |
| <b>Service Factor</b>              | 1.00                  |
| <b>Shaft Diameter</b>              | 1.875 IN              |
| <b>Shaft Ground Indicator</b>      | No Shaft Grounding    |
| <b>Shaft Rotation</b>              | Reversible            |
| <b>Speed</b>                       | 880 rpm               |
| <b>Speed Code</b>                  | Single Speed          |
| <b>Starting Method</b>             | Direct on line        |
| <b>Thermal Device - Bearing</b>    | None                  |
| <b>Thermal Device - Winding</b>    | None                  |
| <b>Vibration Sensor Indicator</b>  | No Vibration Sensor   |
| <b>Winding Thermal 1</b>           | None                  |
| <b>Winding Thermal 2</b>           | None                  |

Nameplate

| NP1669L      |                    |      |     |      |   |       |    |   |  |
|--------------|--------------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | EWDM2402T          |      |     |      |   |       |    |   |  |
| SPEC.        | 10-0000-1011       |      |     |      |   |       |    |   |  |
| HP           | 10                 |      |     |      |   |       |    |   |  |
| VOLTS        | 230/460 10:1 CT/VT |      |     |      |   |       |    |   |  |
| AMP          | 29.2/14.6          |      |     |      |   |       |    |   |  |
| RPM          | 880                |      |     |      |   |       |    |   |  |
| FRAME        | 284T               |      | HZ  | 60   |   |       | PH | 3 |  |
| SER.F.       | 1.00               | CODE | H   | DES  | B | CLASS |    | F |  |
| NEMA-NOM-EFF | 89.5               | PF   | 71  |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT       |      |     |      |   |       |    |   |  |
| CC           | 010A               |      |     |      |   |       |    |   |  |
| DE           | 6311               |      | ODE | 6309 |   |       |    |   |  |
| ENCL         | TEFC               | SN   |     |      |   |       |    |   |  |
| BLANK        | 1.15SF ON SINEWAVE |      |     |      |   |       |    |   |  |

**AC Induction Motor Performance Data**

Record # 65626

Typical performance - not guaranteed values

| Winding: 10WGZ392-R011 |  |              |  | Type: 1046M                              |  | Enclosure: TEFC |  |
|------------------------|--|--------------|--|------------------------------------------|--|-----------------|--|
| Nameplate Data         |  |              |  | 460 V, 60 Hz:<br>High Voltage Connection |  |                 |  |
| Rated Output (HP)      |  | 10           |  | Full Load Torque                         |  | 59.3 LB-FT      |  |
| Volts                  |  | 230/460      |  | Start Configuration                      |  | direct on line  |  |
| Full Load Amps         |  | 29.2/14.6    |  | Breakdown Torque                         |  | 169 LB-FT       |  |
| R.P.M.                 |  | 880          |  | Pull-up Torque                           |  | 76.4 LB-FT      |  |
| Hz                     |  | 60           |  | Phase                                    |  | 3               |  |
| NEMA Design Code       |  | B            |  | KVA Code                                 |  | H               |  |
| Service Factor (S.F.)  |  | 1            |  | No-load Current                          |  | 8.76 A          |  |
| NEMA Nom. Eff.         |  | 89.5         |  | Power Factor                             |  | 71              |  |
| Rating - Duty          |  | 40C AMB-CONT |  | Temp. Rise @ Rated Load                  |  | 65°C            |  |
|                        |  |              |  | Locked-rotor Power Factor                |  | 30.5            |  |
|                        |  |              |  | Rotor inertia                            |  | 5.67 LB-FT2     |  |

**Load Characteristics 460 V, 60 Hz, 10 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 32   | 51   | 64   | 71   | 75   | 77   |
| Efficiency      | 81   | 87.8 | 89.5 | 89.8 | 89.6 | 88.7 |
| Speed           | 896  | 893  | 890  | 886  | 881  | 876  |
| Line amperes    | 9.23 | 10.6 | 12.3 | 14.6 | 17.4 | 20.4 |

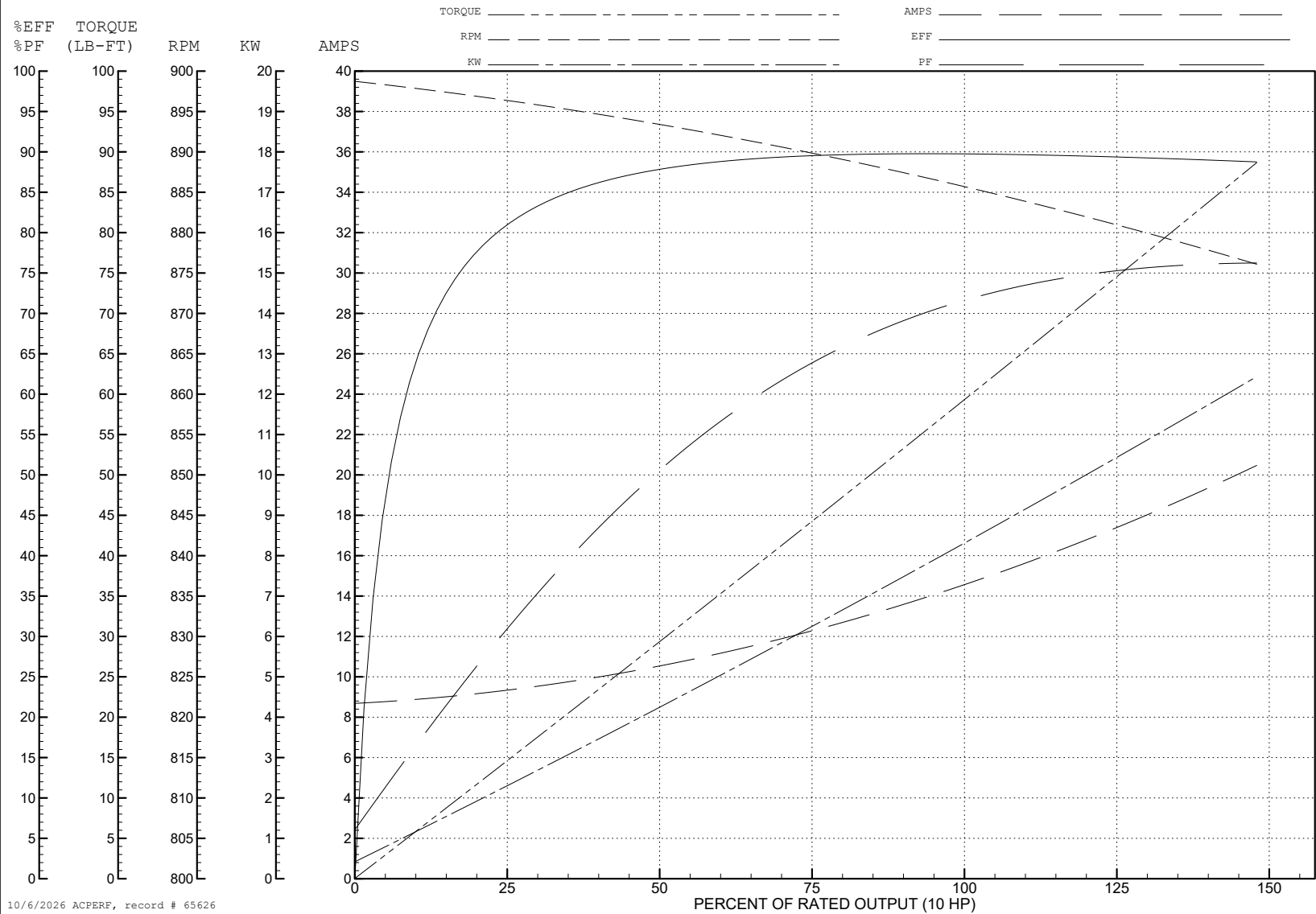
ABB Motors and Mechanical Inc.

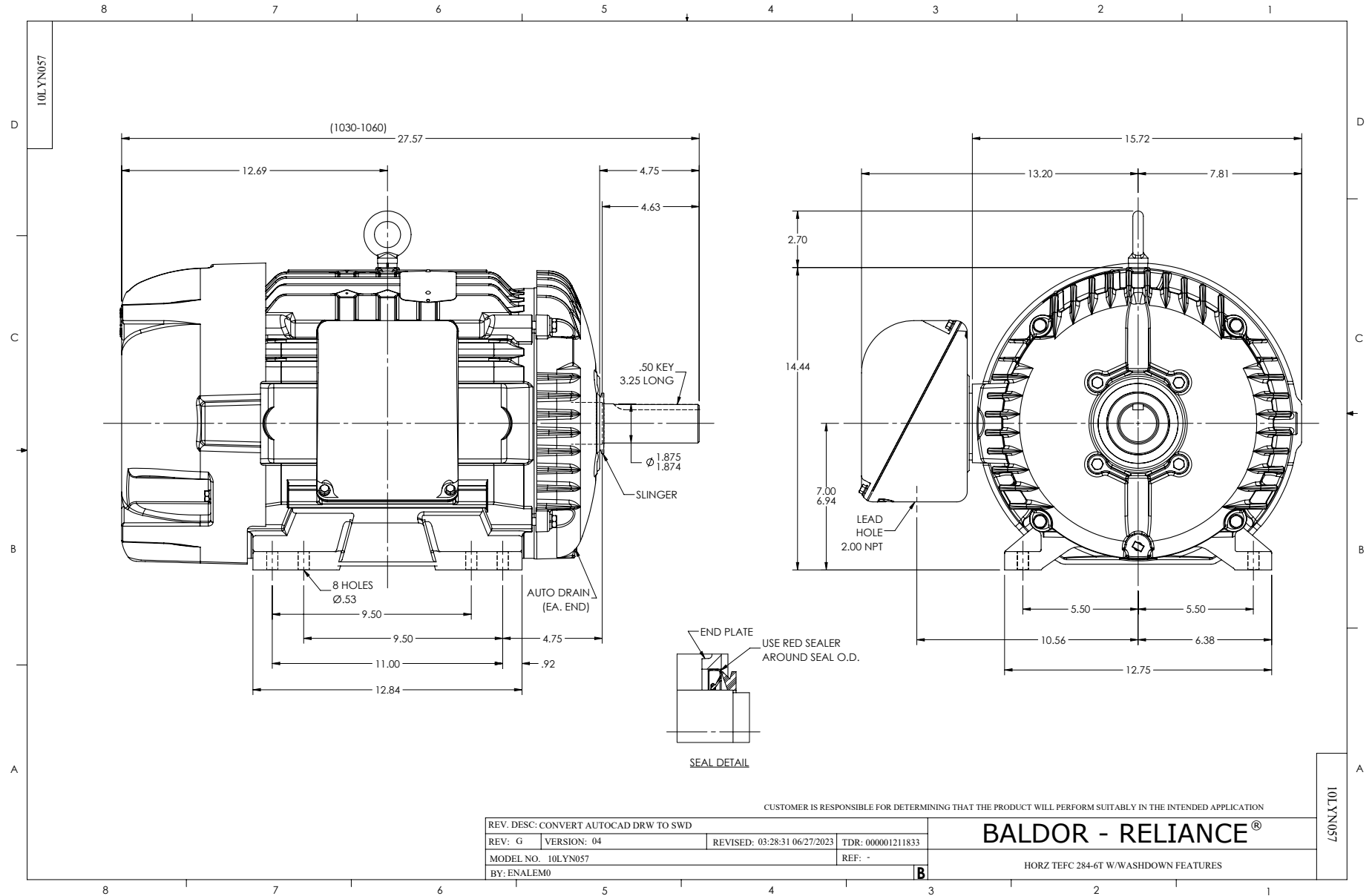
WINDING # 10WGZ392

Typical performance - not guaranteed values.

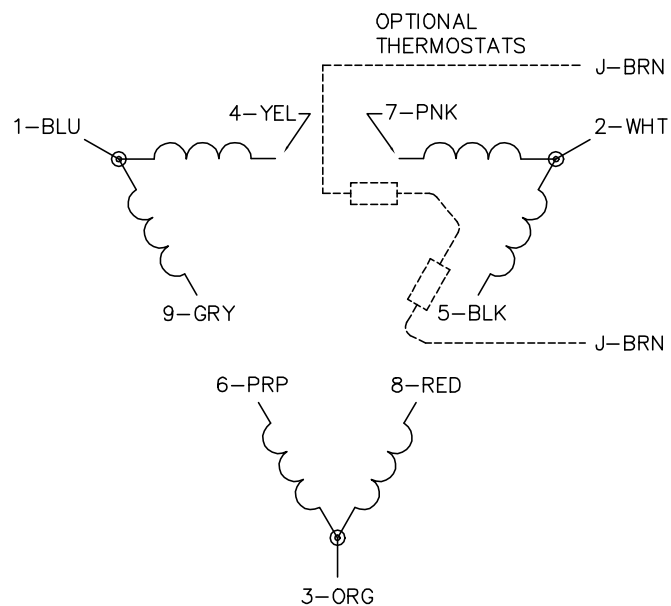
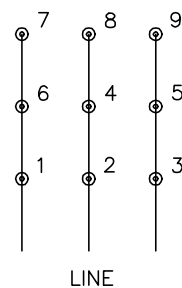
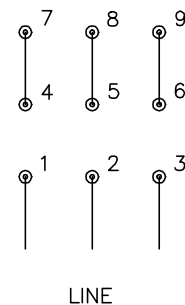
10 HP 3 PH 60 HZ 880 RPM 460 V 1046M

TORQUES (LB-FT): PO=169 PU=76.4 LR=137 LRA=80





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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