

# ABB BALDOR RELIANCE III

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## Customer information packet

### CECP4106T

20HP, 3540RPM, 3PH, 60HZ, 256TC, 0944M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                           |
| <b>Frame</b>                          | 256TC                                                          |
| <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>             | 20.000 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>               | 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>    | 6                                                              |
| <b>Current @ Voltage</b>              | 48.000 A @ 208.0 V<br>44.000 A @ 230.0 V<br>22.000 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>         | 91.7 %                                                         |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | AM         |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 09J540     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 09WGY799   |
| <b>Layout</b>       | 09LYJ540   |
| <b>Eff. date</b>    | 06-12-2024 |
| <b>CD Diagram</b>   | CD0180     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#12       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 01-18-2011 |

|                                      |                                    |
|--------------------------------------|------------------------------------|
| <b>Feedback Device</b>               | <b>NO FEEDBACK</b>                 |
| <b>Front Face Code</b>               | <b>Standard</b>                    |
| <b>Front Shaft Indicator</b>         | <b>None</b>                        |
| <b>Haz Area Temp Code</b>            | <b>T3</b>                          |
| <b>Heater Indicator</b>              | <b>No Heater</b>                   |
| <b>High Voltage Full Load Amps</b>   | <b>22.0 a</b>                      |
| <b>Insulation Class</b>              | <b>F</b>                           |
| <b>Inverter Code</b>                 | <b>Inverter Duty</b>               |
| <b>KVA Code</b>                      | <b>J</b>                           |
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b>       |
| <b>Locked Bearing Indicator</b>      | <b>Locked Bearing</b>              |
| <b>Max Speed</b>                     | <b>5400 rpm</b>                    |
| <b>Motor Lead Exit</b>               | <b>Ko Box</b>                      |
| <b>Motor Lead Quantity/Wire Size</b> | <b>9 @ 12 AWG</b>                  |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>                |
| <b>Motor Standards</b>               | <b>NEMA</b>                        |
| <b>Motor Type</b>                    | <b>0944M</b>                       |
| <b>Mounting Arrangement</b>          | <b>F1</b>                          |
| <b>Number of Poles</b>               | <b>2</b>                           |
| <b>Overall Length</b>                | <b>25.28 IN</b>                    |
| <b>Power Factor</b>                  | <b>92</b>                          |
| <b>Product Family</b>                | <b>Super-E Chemical Processing</b> |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                        |
| <b>Pulley Face Code</b>              | <b>C-Face</b>                      |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>                    |
| <b>Rodent Screen</b>                 | <b>None</b>                        |
| <b>Service Factor</b>                | <b>1.15</b>                        |
| <b>Shaft Diameter</b>                | <b>1.625 IN</b>                    |
| <b>Shaft Extension Location</b>      | <b>Pulley End</b>                  |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>          |
| <b>Shaft Rotation</b>                | <b>Reversible</b>                  |
| <b>Shaft Slinger Indicator</b>       | <b>Shaft Slinger</b>               |
| <b>Speed</b>                         | <b>3540 rpm</b>                    |
| <b>Speed Code</b>                    | <b>Single Speed</b>                |

|                            |                     |
|----------------------------|---------------------|
| Starting Method            | Direct on line      |
| Thermal Device - Bearing   | None                |
| Thermal Device - Winding   | None                |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1          | None                |
| Winding Thermal 2          | None                |

**Nameplate**
**NP3995ABEL**

|                           |  |                               |    |       |         |                  |               |              |        |      |      |                       |         |      |      |        |  |           |  |      |  |      |  |
|---------------------------|--|-------------------------------|----|-------|---------|------------------|---------------|--------------|--------|------|------|-----------------------|---------|------|------|--------|--|-----------|--|------|--|------|--|
| CAT #                     |  | CECP4106T                     |    |       |         | SER              |               |              |        | CC   |      | 010A                  |         |      |      |        |  |           |  |      |  |      |  |
| SPEC                      |  | 09J540Y799G1                  |    |       |         | RATING           |               | 40C AMB-CONT |        |      |      |                       |         |      |      |        |  |           |  |      |  |      |  |
| HZ                        |  | VOLTS                         |    | AMPS  |         | RPM              |               | HP           |        | CODE |      | SF                    |         | DES  |      | PF     |  | NEMA NOM. |  | EFF  |  |      |  |
| 60                        |  | 230/460                       |    | 44/22 |         | 3540             |               | 20           |        | J    |      | 1.15                  |         | A    |      | 92     |  | %         |  | 91.7 |  | %    |  |
|                           |  |                               |    |       |         |                  |               |              |        |      |      |                       |         |      |      | %      |  |           |  | %    |  |      |  |
| PH                        |  | 3                             | CL | F     | MAX RPM | 5400             | MAX CORR KVAR |              |        | 6.61 |      | USABLE AT 208V        |         |      |      |        |  | N/A       |  |      |  |      |  |
| IP55                      |  | FR                            |    | 256TC |         | ENCL             | TEFC          |              | DE BRG |      | 6309 |                       | ODE BRG |      | 6309 |        |  |           |  |      |  |      |  |
| GREASE                    |  | POLYREX EM                    |    |       |         |                  |               |              |        |      |      | MTR WT                |         | 333  |      | LBS    |  |           |  |      |  |      |  |
| USABLE AT                 |  | 50HZ 15HP 190/380V 40.8/20.4A |    |       |         |                  |               |              |        |      |      | SF1.0                 |         |      |      |        |  |           |  |      |  |      |  |
|                           |  |                               |    |       |         |                  |               |              |        |      |      |                       |         |      |      |        |  |           |  |      |  |      |  |
|                           |  |                               |    |       |         |                  |               |              |        |      |      |                       |         |      |      |        |  |           |  |      |  |      |  |
| CL I DIV 2 GRPS A,B,C,D   |  |                               |    |       |         | CL I ZONE 2 GRPS |               |              |        |      |      | IIA,IIB,IIC           |         |      |      | TEMP T |  | 200       |  | C    |  |      |  |
| 1.0 SF ON PWM INVERTER    |  |                               |    |       |         | POWER            |               | INV TEMP CL  |        | 200  |      | C                     |         |      |      |        |  |           |  |      |  |      |  |
| CHP                       |  | 60-90                         |    | HZ    |         | 1.5:1            |               | CT           |        | 6-60 |      | HZ                    |         | 10:1 |      | VT     |  | 3-60      |  | HZ   |  | 20:1 |  |
| SPACE HEATER LEADS H1-H2: |  |                               |    |       |         | TIE LIKE NUMBERS |               |              |        |      |      | TOGETHER              |         |      |      |        |  |           |  |      |  |      |  |
| V                         |  |                               |    | A     |         |                  |               | W            |        |      |      | MAX SPACE HEATER TEMP |         |      |      |        |  |           |  |      |  |      |  |

Typical performance - not guaranteed values

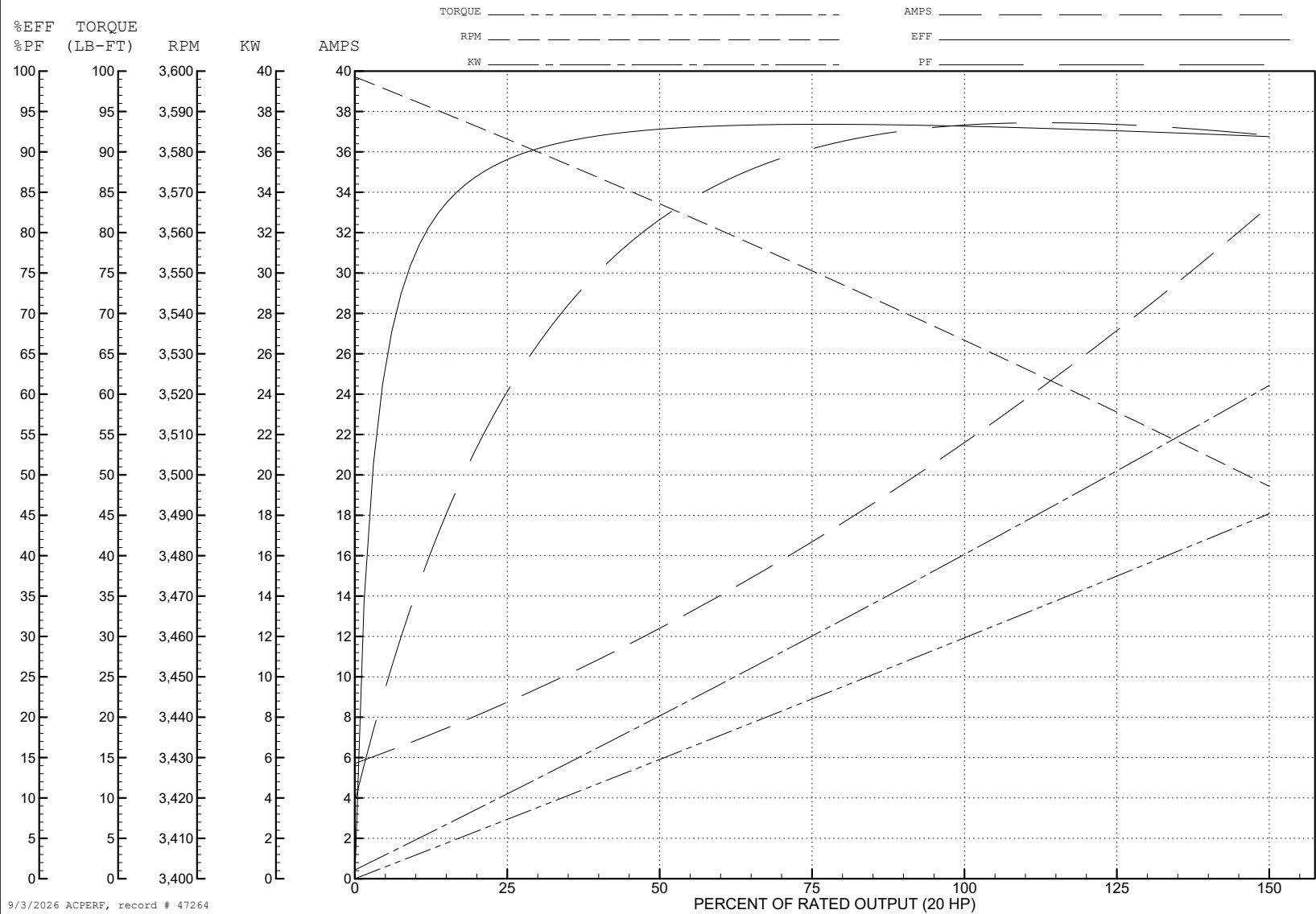
ABB Motors and Mechanical Inc.

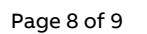
WINDING # 09WGY799

Typical performance - not guaranteed values.

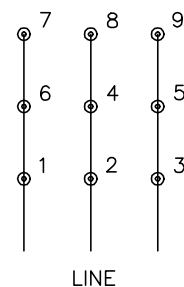
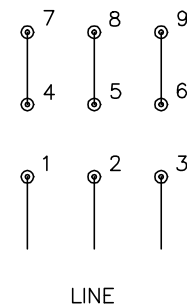
20 HP 3 PH 60 HZ 3540 RPM 460 V 0944M

TORQUES (LB-FT): PO=121 PU=49.4 LR=62.2 LRA=183





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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