

# ABB BALDOR RELIANCE III

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## Customer information packet

### CPX25246T

60M 4P XPFC HOR 256T TSTATS CP FEAT INV

Class - CLI GP C,D; CLII GP E,F,G

Division - Division I

**Specifications**

|                                       |                                                                                      |
|---------------------------------------|--------------------------------------------------------------------------------------|
| <b>Enclosure</b>                      | XPFC                                                                                 |
| <b>Frame</b>                          | 256TY                                                                                |
| <b>Frame Material</b>                 | Iron                                                                                 |
| <b>Frequency</b>                      | 50.00 Hz<br>60.00 Hz                                                                 |
| <b>Haz Area Class and Group</b>       | CLI GP C,D; CLII GP E,F,G                                                            |
| <b>Haz Area Division</b>              | Division I                                                                           |
| <b>Motor Letter Type</b>              | Three Phase                                                                          |
| <b>Output @ Frequency</b>             | 20.000 HP @ 60 HZ<br>15.000 HP @ 50 HZ                                               |
| <b>Phase</b>                          | 3                                                                                    |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                                                     |
| <b>Voltage @ Frequency</b>            | 190.0 V @ 50 HZ<br>230.0 V @ 60 HZ<br>380.0 V @ 50 HZ<br>460.0 V @ 60 HZ             |
| <b>Agency Approvals</b>               | CSA EEV<br>UL                                                                        |
| <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>              | 22.000 A @ 380.0 V<br>24.000 A @ 460.0 V<br>44.000 A @ 190.0 V<br>48.000 A @ 230.0 V |
| <b>Design Code</b>                    | A                                                                                    |
| <b>Drip Cover</b>                     | No Drip Cover                                                                        |
| <b>Duty Rating</b>                    | CONT                                                                                 |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | R          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 09M363     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 09WGT459   |
| <b>Layout</b>       | 09LYM363   |
| <b>Eff. date</b>    | 03-28-2025 |
| <b>CD Diagram</b>   | CD0180     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#10       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 02-12-2019 |

|                                      |                           |
|--------------------------------------|---------------------------|
| <b>Efficiency @ 100% Load</b>        | 93.0 %                    |
| <b>Electrically Isolated Bearing</b> | Not Electrically Isolated |
| <b>Enclosure Modification</b>        | Severe Duty Features      |
| <b>Feedback Device</b>               | NO FEEDBACK               |
| <b>Front Shaft Indicator</b>         | None                      |
| <b>Haz Area Temp Code</b>            | T3C                       |
| <b>Heater Indicator</b>              | No Heater                 |
| <b>High Voltage Full Load Amps</b>   | 22.0 a                    |
| <b>Insulation Class</b>              | F                         |
| <b>Inverter Code</b>                 | Inverter Duty             |
| <b>IP Rating</b>                     | IP55                      |
| <b>KVA Code</b>                      | J                         |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs     |
| <b>Locked Bearing Indicator</b>      | Locked Bearing            |
| <b>Max Speed</b>                     | 2700 rpm                  |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 10 AWG                |
| <b>Motor Lead Termination</b>        | Flying Leads              |
| <b>Motor Standards</b>               | NEMA                      |
| <b>Motor Type</b>                    | X0960M                    |
| <b>Mounting Arrangement</b>          | F1                        |
| <b>Number of Poles</b>               | 4                         |
| <b>Overall Length</b>                | 25.75 IN                  |
| <b>Power Factor</b>                  | 83                        |
| <b>Product Family</b>                | Hazardous Location Motor  |
| <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>RoHS Status</b>                   | ROHS NON-COMPLIANT        |
| <b>Service Factor</b>                | 1.00                      |
| <b>Shaft Diameter</b>                | 1.625 IN                  |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding        |
| <b>Shaft Rotation</b>                | Reversible                |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger             |

|                            |                            |
|----------------------------|----------------------------|
| Speed                      | 1470 rpm<br>1770 rpm       |
| Speed Code                 | Single Speed               |
| Starting Method            | Direct on line             |
| Thermal Device - Bearing   | None                       |
| Thermal Device - Winding   | Normally Closed Thermostat |
| Vibration Sensor Indicator | No Vibration Sensor        |
| Winding Thermal 1          | None                       |
| Winding Thermal 2          | None                       |

**Nameplate**

| NP2033XPSLEV |                            |        |   |              |         |                      |      |          |    |  |  |
|--------------|----------------------------|--------|---|--------------|---------|----------------------|------|----------|----|--|--|
| NO.          |                            |        |   |              |         | CC                   | 010A |          |    |  |  |
| S/N          |                            |        |   |              |         | TEMP CODE            | T3C  |          |    |  |  |
| SPEC.        | 09M363T459G1               |        |   |              |         | INV.TYPE             | PWM  |          |    |  |  |
| CAT.NO.      | CPX25246T                  |        |   |              |         | C HP FR              | 60   | C HP TO  | 90 |  |  |
| HP           | 20//15                     |        |   |              |         | CT HZ FROM           | 6    | CT HZ TO | 60 |  |  |
| VOLTS        | 230/460//190/380           |        |   |              |         | VT HZ FROM           | 6    | VT HZ TO | 60 |  |  |
| AMPS         | 48/24//44/22               |        |   |              | MAG CUR | 20.8/10.4//20.4/10.2 |      |          |    |  |  |
| RPM          | 1770//1470                 |        |   |              | MX RPM  | 2700                 |      |          |    |  |  |
| HZ           | 60//50                     | PH     | 3 | CL           | F       | NOM.EFF.             | 93   |          |    |  |  |
| SER.F.       | 1.00                       | DES    | A | SL HZ        | 1       | WK2                  | 2.62 |          |    |  |  |
| FRAME        | 256TY                      | RATING |   | 40C AMB-CONT |         |                      |      |          |    |  |  |
| BLANK        | 55C AMB AT 1.0SF, 60C RISE |        |   |              |         |                      |      |          |    |  |  |
|              | 1.15SF ON SINEWAVE         |        |   |              |         | NEMA MG-1 PT.5,IP55  |      |          |    |  |  |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA366140      | SA 09M363T459G1                          | 1.000 ea |
| RA355546      | RA 09M363T459G1                          | 1.000 ea |
| 09FN3001D01SP | EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO | 1.000 ea |
| WD1000B25     | GND LUG, BURNDY L125HP OR T&B L125HP-BB  | 1.000 ea |
| 10XN3118K12   | 5/16-18 X .75 GRADE 5, ZINC PLATED       | 1.000 ea |
| HW1001A31     | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 1.000 ea |
| MJ5000A09     | EFI KIT #1578 (400 ML CARTRIDGE OF EFI   | 0.200 ea |
| 09CB1003A01P  | KOBX, MACH 1.25 NPT GROUP C MTRS PRIMED  | 1.000 ea |
| 10XN3118K24   | 5/16-18 X 1.50" HEX HD, GRADE 5          | 4.000 ea |
| HW1001A31     | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 ea |
| WD1000B25     | GND LUG, BURNDY L125HP OR T&B L125HP-BB  | 1.000 ea |
| 10XN3118K12   | 5/16-18 X .75 GRADE 5, ZINC PLATED       | 1.000 ea |
| HW1001A31     | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 1.000 ea |
| HA2009A39     | SLINGER FOR GROUP E MTRS - 208 BRG.      | 1.000 ea |
| 80XN0632J10   | 6-32 X 5/8 SET SCREW, HEX SOC, CUP PT    | 2.000 ea |
| 10XN3816K28   | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5  | 4.000 ea |
| HW1001A38     | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 ea |
| HA2009A38     | SLINGER FOR GROUP E MTRS - 309 BRG.      | 1.000 ea |
| HA4017A08     | .125X3.50 GREASER EXTEN.                 | 1.000 ea |
| HA4017A02     | .125X2.50 GREASER EXTENS.F/S             | 1.000 ea |
| HW4019A01     | PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING | 1.000 ea |
| HW5100A08     | W3118-035 WVY WSHR (WB)                  | 1.000 ea |
| 09EP1707A26P  | PUEP MACH, NON-XP; EPOXY PRIMER          | 1.000 ea |
| 10XN3816K28   | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5  | 4.000 ea |
| HW1001A38     | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 ea |
| 80XN0632J10   | 6-32 X 5/8 SET SCREW, HEX SOC, CUP PT    | 2.000 ea |
| 10XN2520K36   | 1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P | 4.000 ea |
| 09FH1004A48P  | FAN COVER, MACH, W/GRSR, RLF & DRN HOLE  | 1.000 ea |
| 10XN2520K14   | 1/4-20 X .88 HEX GRD 5 (20001)           | 3.000 ea |
| HW1001A25     | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 3.000 ea |
| 09CB1502A01P  | CONDUIT BOX LID MACH. GROUP C MTRS W/EP  | 1.000 ea |

|                 |                                          |          |
|-----------------|------------------------------------------|----------|
| 84XN5013J24     | 1/2-13 X 1-1/2 HEX SOCKET HD CAP SCREW   | 6.000 ea |
| HW1001A50       | LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I | 6.000 ea |
| HW2501G25       | KEY, 3/8 SQ X 2.875                      | 1.000 ea |
| LB1081Z         | ALUM XP CAUTION LABEL (ZK PLANT ONLY-    | 1.000 ea |
| MJ5001A27       | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 qt |
| HA1025A03       | FELT WSH 2.1875 OD X 1.170 ID X .25 #321 | 8.000 ea |
| 09EP1700A70PP15 | FREP, MACH FOR GROUP C & GROUP E MTRS    | 1.000 ea |
| HA4051A00       | PLASTIC CAP FOR GREASE FITTING           | 1.000 ea |
| HW4500A20       | 1/8NPT SL PIPE PLUG                      | 1.000 ea |
| HW4505A02       | BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS | 1.000 ea |
| MJ1000A02       | GREASE, POLYREX EM EXXON                 | 0.080 lb |
| HW4500A03       | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 ea |
| HA4051A00       | PLASTIC CAP FOR GREASE FITTING           | 1.000 ea |
| HW4500A20       | 1/8NPT SL PIPE PLUG                      | 1.000 ea |
| HW4505A02       | BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS | 1.000 ea |
| HW2500A25       | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 ea |
| MG1025G29       | WILKOFAS, 789.229, DARK CHARCOAL GRAY    | 0.050 ga |
| 85XU0407S04     | 4X1/4 U DRIVE PIN STAINLESS              | 6.000 ea |
| LB1624          | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0181          | CONNECTION LABEL                         | 1.000 ea |
| NP2033XPSLEV    | SS XP INV UL CSA-EEV CC CL-I GP-C&D      | 1.000 ea |
| 40PA1005        | PACKAGING GROUP, 09 STD                  | 1.000 ea |
| MN416A01        | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |
| LD7020E09       | LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS  | 1.000 ea |

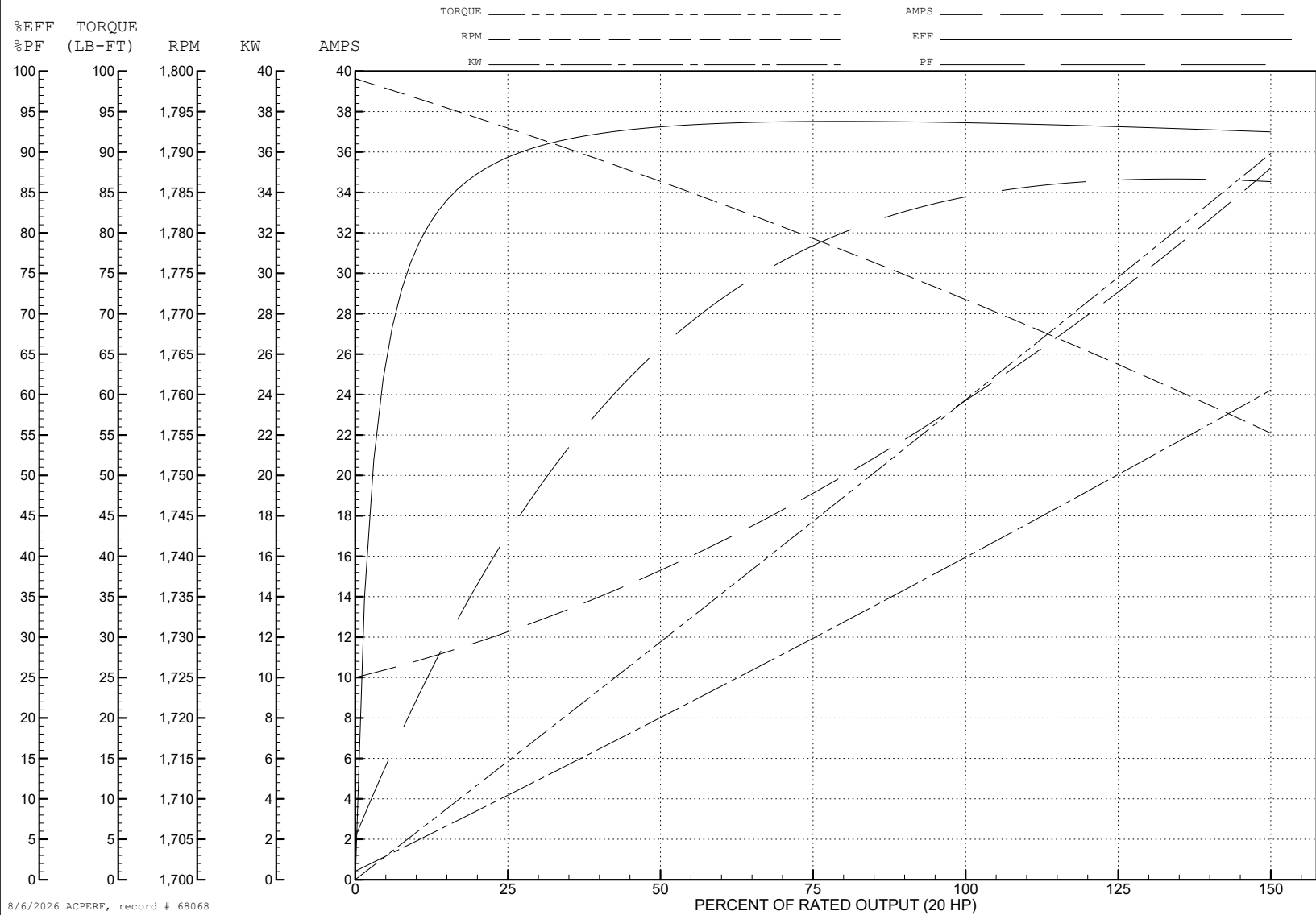
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

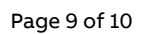
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

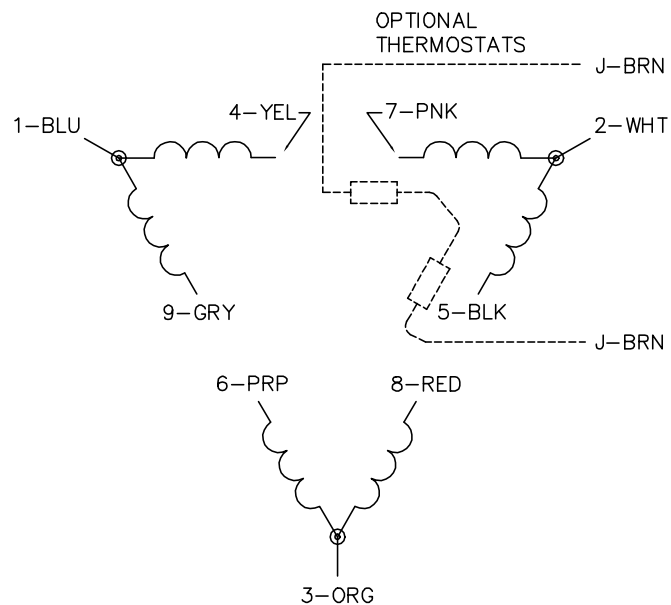
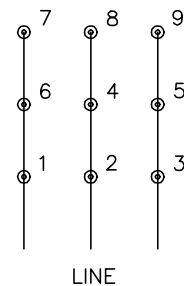
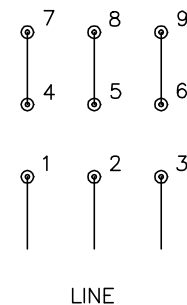
TORQUES (LB-FT): PO=232 PU=126 LR=141 LRA=198







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.

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

CD0180