

Table 3-1. Ovation Module Choices (Cont'd)

Module Type	Channel	Electronic Module	Personality Module
Analog Input (± 1 V) (13 bit)	8	1C31113G04	1C31116G01
Analog Input (± 10 V) (13 bit)	8	1C31113G06	1C31116G01
Analog Input (± 5 V) (13 bit)	8	1C31113G05	1C31116G01
Analog Input (0 - 20 mA local powered) (13 bit)	8	1C31113G05	1C31116G03
Analog Input (0 - 20 mA remote powered) (13 bit)	8	1C31113G05	1C31116G02
Analog Input (4 - 20 mA local powered) (13 bit)	8	1C31113G05	1C31116G03
Analog Input (4 - 20 mA remote powered) (13 bit)	8	1C31113G05	1C31116G02
Analog Input (4 - 20 mA) (14 bit)	8	1C31224G01	1C31227G01
Analog Input (± 1 V) (14 bit)	8	1C31224G02	1C31227G02
Analog Input (4 - 20 mA) (14 bit High Speed (HS))	8	5X00070G01	1C31227G01
Analog Input (± 100mV, ± 250mV, ± 1V) (14 bit HS)	8	5X00070G02	1C31227G02
Analog Input (± 5V, ± 10V) (14 bit High Speed)	8	5X00070G03	1C31227G02
Analog Input (± 1mA, 2 wire local field powered) (14 bit HS)	8	5X00070G02	1C31227G03
Analog Input (± 1mA, 4wire field powered) (14 bit HS)	8	5X00070G02	1C31227G02
Analog Input (± 20mV, ± 50mV, ± 100mV Thermocouple) (14 bit HS)	8	5X00070G04	1C31227G04
Analog Output (0 to +10 V)	4	1C31129G02	1C31132G01
Analog Output (0 to +5 V)	4	1C31129G01	1C31132G01
Analog Output (0 to 20 mA w/diagnostics)	4	1C31129G03	1C31132G01
Analog Output (0 to 20 mA w/o diagnostics)	4	1C31129G04	1C31132G01
Analog Output (4 to 20 mA w/diagnostics)	4	1C31129G03	1C31132G01
Analog Output (4 to 20 mA w/o diagnostics)	4	1C31129G04	1C31132G01
Compact Contact Input w/Onboard 48 V aux	16	1C31234G01	Cavity Insert ²
Contact Input w/Onboard 48 V auxiliary	16	1C31142G01	1C31110G03
Digital Input (125 VAC/DC differential)	16	1C31107G02	1C31110G02
Digital Input (125 VAC/DC single ended)	16	1C31107G02	1C31110G01

Section 7. Analog Output Module

7-1. Description

The Analog Output Electronics Module uses low-power-drain 12-bit serial digital-to-analog converters (DACs) to provide four isolated output channels. The serial clock and data allow the four channels to be updated every 1.5 ms. The serial interface uses opto-isolators for high-voltage isolation.

The Analog Output Module is applicable for CE Mark Certified Systems.

Note

See [Section 3. I/O Modules](#) for environmental, installation, wiring, and fuse information.

7-2. Module Groups

7-2.1. Electronics Modules

There are four groups of Electronics modules for the Analog Output Module:

- 1C31129G01 provides voltage output range of 0 to 5 V DC.
- 1C31129G02 provides voltage output range of 0 to 10 V.
- 1C31129G03 provides voltage output range of 0 to 20 mA with diagnostics.
- 1C31129G04 provides voltage output range of 0 to 20 mA without diagnostics.

7-2.2. Personality Module

There is one Personality module group for the Analog Output Module:

- 1C31132G01 routes field signals from the Electronics module to the terminal block.

Table 7-1. Analog Output Subsystem

Range	Channels	Electronic Module	Personality Module
0-5 Volts DC	4	1C31129G01	1C31132G01
0-10 Volts DC	4	1C31129G02	1C31132G01
0-20 mA with Diagnostics (4-20 mA with Diagnostics can also be selected in the I/O Builder; card will be configured appropriately)	4	1C31129G03	1C31132G01
0-20 mA without Diagnostics (4-20 mA without Diagnostics can also be selected in the I/O Builder; card will be configured appropriately)	4	1C31129G04	1C31132G01

All Configurations are CE Mark Certified.

7-4. Analog Output Terminal Block Wiring Information

Each Personality module has a simplified wiring diagram label on its side, which appears above the terminal block. This diagram indicates how the wiring from the field is to be connected to the terminal block in the base unit. The diagram for the analog output Personality module is illustrated in [Figure 7-1](#). The following table lists and defines the abbreviations used in this diagram.

Abbreviation	Definition
	Earth ground terminals.
+I	Current output source terminal.
RSV	Reserved terminal. No connections allowed on these terminals.
SH	Shield terminal connection (for non-CE Mark certified systems).
+V	Voltage output source terminal connection.
PS+, PS-	Auxiliary power supply terminals.
-	Reference for voltage and current output.

Notes

1. Do **not** use unmarked terminal block locations.
2. Shield terminals (SH) are **not** connected in CE Mark systems.

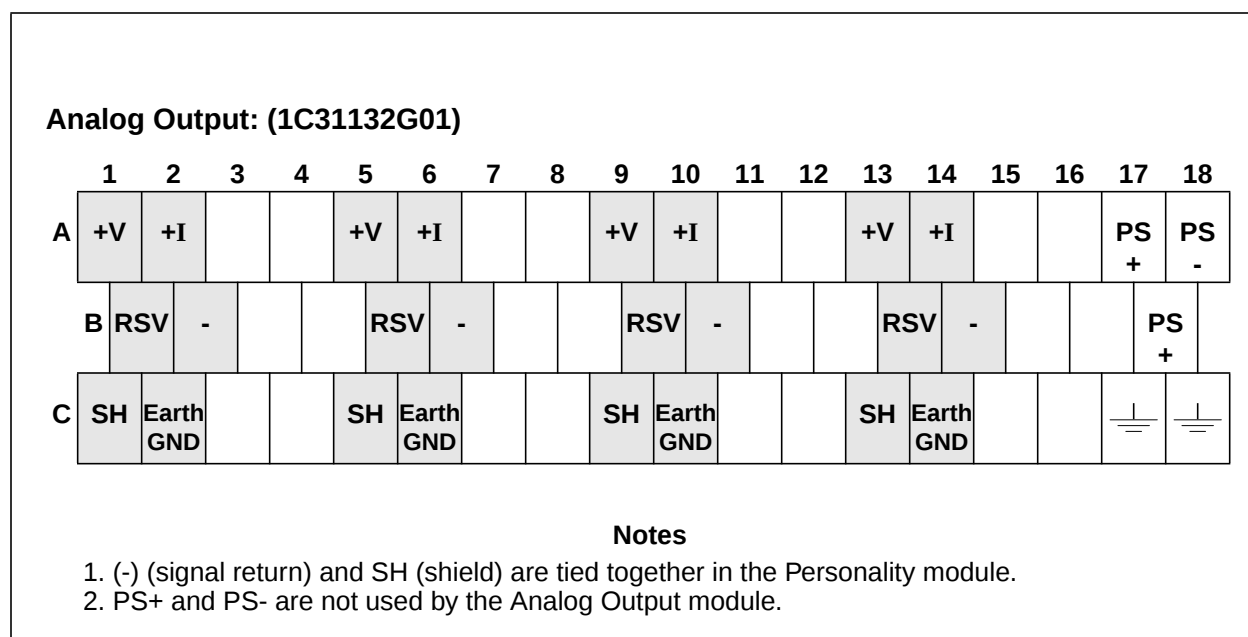


Figure 7-1. Terminal Block Connections for the Analog Output Personality Module