Campbell SCIENTIFIC

SDM-CD16ACA

16-Channel AC/DC Relay Controller

Greatly Expands Control Capacity

Use multiple modules for up to 256 control ports

Overview

The SDM-CD16ACA allows a Campbell Scientific datalogger to automatically activate external ac or dc devices such as motors, pumps, heaters, valves, and fans.

Benefits and Features

- Allows the data logger to automatically turn devices on or off when a threshold (for example, temperature or water depth) has been reached
- Includes LEDs that indicate when a port is active
- Provides a manual override for each port
- UL/CUL approved product
- Addresses up to 15 SDM-CD16 ACAs, allowing up to 240 ports to be controlled by one datalogger

Technical Description

The SDM-CD16ACA has a toggle switch that provides three positions: ON and OFF for manual override, and AUTO for data logger control.

- In the ON position, the common (COM) and normally open (NO) contacts are closed.
- In the OFF position, the normally open contact is open.
- In the AUTO position, the state of the relay is controlled by the SDM command issued through the data logger's control ports or SDM terminal.

SDM Operation

The SDM-CD16ACA is a synchronously addressed data logger peripheral. Data logger control ports 1, 2, and 3 are used to address the SDM-CD16ACA, then clock out the desired state of each of the 16 control ports. Up to 16 SDM-CD16ACAs may be addressed, making it possible to control a maximum of 256 ports from the first three data logger control ports.

Specifications

Function	Allows a data logger to automatically activate external ac or dc devices such as motors, pumps, heaters, valves, and fans.

Number of Channels	16
Operating Temperature	-40° to +55°C
Humidity	Non-condensing

Contact Operation	Single pole double throw (break before make)
Contact Material	Gold-clad silver
Coil Voltage	11 to 18 Vdc
Coil Resistance	360 Ω ±10%
Expected Life (contact closures)	Mechanical 10^7
Actuation/Release Time	~4 ms
Toggle Switch	❱ AUTO for data logger control ❱ ON/OFF manual override
Operating Voltage	12 Vdc nominal (11 to 18 Vdc)
Standards	Underwriters Laboratories (UL) listed product (E162021)

Dimensions	24.6 x 5.1 x 8.6 cm (9.7. x 2.0 x 3.4 in.)
Weight	0.8 kg (1.8 lb)

Individual Contact Ratings

Normally Open Rating	❱ 5 A (@ 30 Vdc) ❱ 5 A (@ 250 Vac) ❱ 5 A (@ 125 Vac)
Normally Closed Rating	❱ 1 A (@ 30 Vdc) ❱ 2 A (@ 250 Vac) ❱ 3 A (@ 125 Vac)

Current Drain @ 12 Vdc

Quiescent	6 mA
Per Active LED	45 mA (switch on or auto active)

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