230 V - SWITCH MODULE

DESCRIPTION D063



Figure 1. The 230 V - Switch Module (Art. 063)



CENTRE FOR MICROCOMPUTER APPLICATIONS

http://www.cma-science.nl

Short description

The 230 V - Switch Module (063) is based on a 230 V solid-state-relay (SSR). The relay must be connected to the 230V mains by a Euro-connector at the rear of the module. The relay can supply devices up to 1150 W. The 230 V switch is controlled by a voltage of 3 V DC or more (up to 25 V).

Control of the module by the CoachLab or CoachLab II/II⁺ interface

To control the module via the outputs of CoachLab II/II⁺:

- Connect the left blue (–) socket of the module to the left blue socket of an output on CoachLab II/II⁺ (e.g. A1);
- Connect the right blue (+) socket of the module to the corresponding blue socket of an output on CoachLab II/II⁺ (e.g. A2).



Figure 2. Connecting the switch module to the CoachLab II⁺ interface.

To control the module via the outputs of CoachLab:

- Connect the left blue (–) socket of the module to the black socket of an output on CoachLab (e.g. 1);
- Connect the right blue (+) socket of the module to the blue socket of an output on CoachLab (e.g. 1).

In the Coach software the actuator icon *Relay (230 V)* should be placed on the same output of the CoachLab II+ panel or CoachLab panel on the screen as the real module is connected to the interface.

Notes:

- For CoachLab II/II⁺ it is undesired to connect the module between output A1 and the analog ground (black 4 mm socket) of inputs 3 and 4. Instead use the two connectors of an output pair (e.g. A1 and A2).
- When CoachLab's outputs are used it is necessary to connect the external mains adapter. The minimal required voltage is 3 V.
- The outputs of CoachLab II/II⁺ do not have any power when no actuator icon is connected to them.
- In Coach ONLY use the actuator 'Relay (230 V)'. When using the outputs of CoachLab/CoachLab II/II⁺, only 12 V can be used to control the switch module.
 NEVER use a power slider. Values other than 12 V will damage the switch module because the CoachLab or CoachLab II/II⁺ use pulse width modulation (PWM; effectively lowering the voltage by quickly switching on and of the 12V) for lower voltages on the outputs.

Technical data

230 V - circuit		
230 V supply	Voltage Frequency	230 V 50 Hz
Fuse	Voltage Current	250 V 5 A
230 V output	Voltage Current Power Frequency	230 V 5 A max 1150 W max 50 Hz
Control - circuit		
The control lines of the 230 V relay are optically separated from the 230V circuit	Control voltage	3 V min 25 V max
Current usage		at 5 V: 4 mA at 12 V: 15 mA
Connections		
230 V supply	Euro-connector	Rear
230 V output	Connector with ground	Тор
Control input (external)	4 mm wires	Blue/Blue socket
Dimensions		
Housing	13.6 cm x 6.2 cm x 5.8 cm	

Warranty

The 230V – Switch Module (063) is warranted to be free from defects in materials and workmanship for a period of 12 months from the date of purchase provided that it has been used under normal working conditions. This warranty does not apply if the actuator has been damaged by accident or misuse.

Note: This product is to be used for educational purposes only. It is not appropriate for industrial, medical, research, or commercial applications.