

# RM 1

*Technical notice*

**SECANT**  
DIN RAIL MODULE 

## DIN RELAY MODULE

### DESCRIPTION

The RM1 of the SECANT DIN module family allows to control various types of load by switching them ON/OFF. It can be driven locally by a high voltage momentaneous wall switch, by a low voltage momentaneous wall switch or by a delay-type of input.

It can be controlled remotely using the single-wire MNET network so as to connect it to more powerful controller such as the DPE.

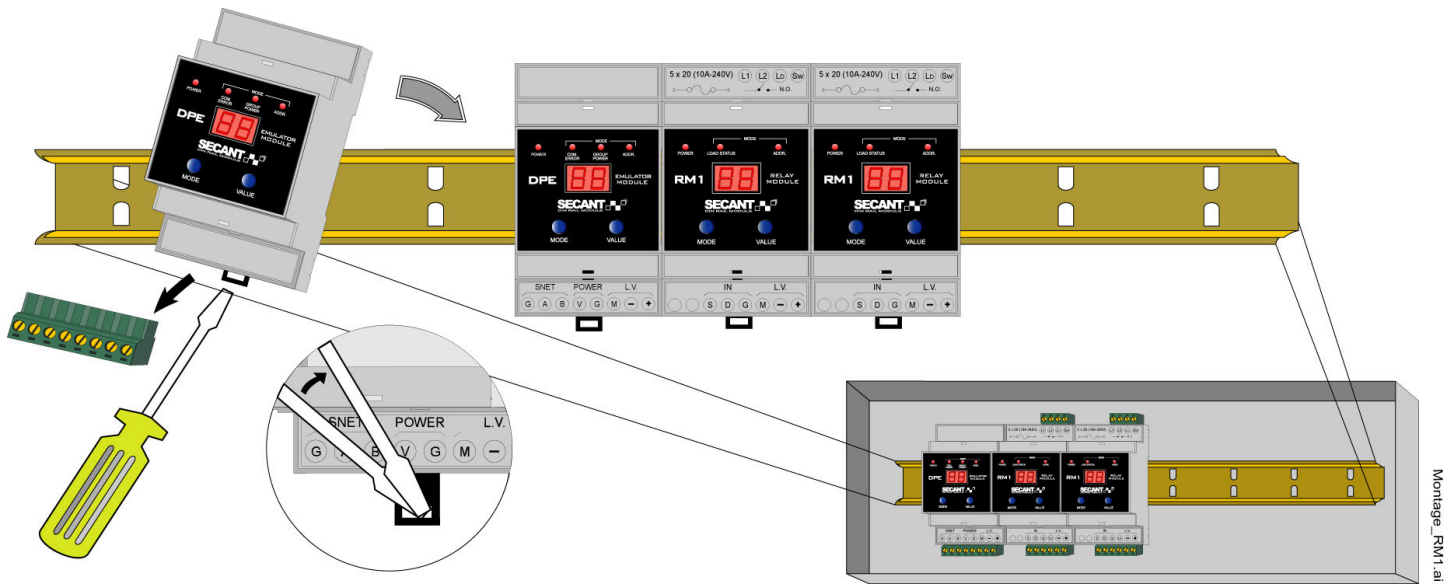
The RM1 is available in two versions, the **RM1-120** for a 120Vac power input and the **RM1-230** for a 230Vac power input

### TECHNICAL SPECIFICATIONS

		RM1-120	RM1-230
Power input	High voltage :	Voltage :	120 Vrms, 60Hz
		Current :	230 Vrms, 50Hz
	Low voltage :	10 Arms max	
		Voltage :	Nominal 12 Vdc, Maximum 14 Vdc
	Current :	70 mA max	
Output	Max authorized Power :	1200 W max	2300 W max
Inputs	Intensity:	High voltage :	1 mArms max.
		Low Voltage :	2 mArms max.
	Detector:	0-12 Vdc, 0,2 mA	
		0-12Vdc, 2,5 mA	
<b>Only use switches approved according to the electrical code in place</b>			
Types of load	Resistive and magnetic transformer		
Communication	Single-wire MNET: 12 Vdc max		
Protection	Fuse F1 10A 230Vac IEC 127-2 SHEET V		
Size	3M Format, 73 mm high, 53 mm wide, 90 mm long		
Material	Noryl UL 94 V-0; grey color RAL 7035		
Number of pole	1 N.O.		
Switching power	2300 W		
Pollution	2		
Operating temperatures	0 °C to 60 °C		
Storage temperatures	Minus 10 °C to 60 °C		
Operating overvoltage	2,5 KV		

## MODULE INSTALLATION

All SECANT modules are designed to be installed on a standard EN50022 DIN rail according to the DIN 43880 norm



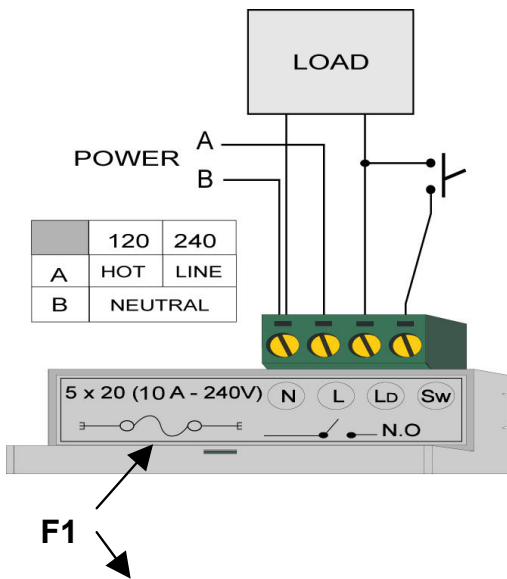
**NOTE :** mounting should be performed inside the electric cabinet

Vertical mounting only

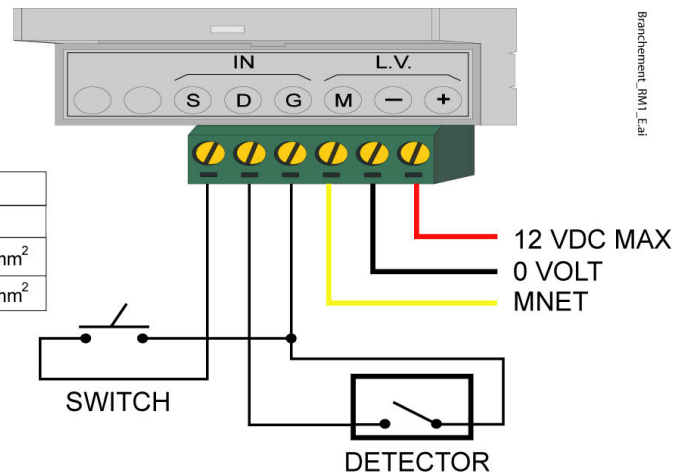
## CONNECTION SCHEMATICS

High voltage section

Low voltage section



Wire size			
	1 Wire	2 Wires	
Solid	4,15	1,02	mm <sup>2</sup>
Stranded	3,56	0,90	mm <sup>2</sup>



**In case of a short:**

Check load, power input and contact before replacing the fuse and turn power ON again.

**Electromagnetic compatibility :**

Take all necessary measures so as connected loads do not generate electromagnetic emissions.

**WARNING :**

Turn off breaker before getting to connection contacts.

## DISPLAY AND INDICATORS

The RM1 module has three lights located on top of the front face. From left to right, they are the following:

<b>POWER</b>	Low voltage input
<b>LOAD STATUS</b>	Shows that the value displayed on the double-digit display is the actual status of the load (00 if load is OFF and 01 if load is ON).
<b>ADDR.</b>	Shows that the value displayed on the double-digit display is the address of this module on the MNET network.

The RM1 module has two push-buttons, the *Mode* button and the button. These two buttons allows to modify the status of a few options.

Each time the *Mode* button is pressed, the module shows different data through its double-digit display. When necessary, it is possible to modify the information displayed by pressing the *Mode* buton.

### To modify the load status

Press the *Mode* buton until the *Load status* light is on. Then, press *Value* until the information displayed is correct.

### To modify the address of the module

Press *Mode* until the *ADDR.* light is on. Then, press *Mode* until the display shows the correct address (refer to the networking section of this notice for more information on how to use the RM1 on a network)

### Error codes

When the module detects a wrong operating status, it displays an error code. This code will flash until this wrong operating status desapears. Please note that the error code is displayed only when display is idle i.e. 30 seconds after being used with either the *Mode* or *Value* buttons the last time.

Errors currently detcted are as follows :

Code	Types
01	No load
03	Transmission error. The module does not receive any aknowledgement from a group controller such as the DPE). <b>If the RM1 module is not connected to any group controller, its address should be 0.</b>
04	Loss of high voltage power input

## NETWORKING

All SECANT DIN modules can be connected together through the single-wire network MNET. The networking use of SECANT DIN modules gives added functionality.

It is also possible to connect DM1 DIN module to a Cardio system through a DPE controller.

## CONFIGURATION

The RM1 module is pre-programmed as follows (out of factory):

General		Reaction	
Automatic shutoff delay :	No active	Active :	Yes
Status reestablishing after powering on again:	Yes	Status of reaction :	ON
		Length of reaction:	60 secondes
		Type of contact:	Normally open
Network			
Address:	0 (non active)		
Protected addressing :	No		

## INFORMATION

### To order

120 Vac relay:

RM1-120

230 Vac relay:

RM1-230

### Markings



EN60947-4-1 (1999)

EN60947-1 (1992) et A2 (1997)

### Documentation/References

For more information on this product and on any other product of the DIN module family, please refer to the following Internet site: [www.secant.ca](http://www.secant.ca).

## WARRANTY

SECANT Home Automation inc. warrants goods of its manufacture as being free of defective materials and faulty workmanship for a period of **1 YEAR**. If warranted goods are returned to SECANT during the period of coverage, SECANT will repair or replace without charge those items it finds defective. The guarantee does not apply to the defective products following an incorrect or abusive use.

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