

# RESISTIVE AMPLIFIER RELAY RXM 2851



- For highly resistive medium
- Input adjustable from 4.7 to 100 M $\Omega$
- Adjustable sensitivity from the front
- Selectable mode function
- Function: ON/OFF detection between 2 electrodes

## PRINCIPLE

The RXM detects the virtual resistance of the medium to control the level height. It applies between 2 electrodes (or 1 electrode and the tank wall) a continuous current of 12 V

The high resistance range allows a height level detection of media such as:

- Glycerin ( $\approx$  1 MW),
- Molasses ( $\approx$  1 MW),
- Alumina sulphate (100 MW)
- Distilled water
- And in some applications with sand, silt, etc.

The RXM detects the appearing resistance depending of medium properties but also of geometry of installation.

## SENSITIVITY

The maximum of sensitivity is equivalent to the maximum of the medium resistance for which the relay can works in the conditions of process:

- Adjustable with strap on the PCB
- Fine adjustment with a potentiometer
- Maximal value of 100 M $\Omega$
- Standard value of 4.7 M $\Omega$

## PROBE

Probe types and models available for the RXM correspond to all resistive level probes of our catalogue files 540-01, 541-01, 543-01. Please choose in correspondence with process conditions: medium, pressure, temperature...

## CODES NUMBER AND REFERENCE

| Code    | References | Designation                                 |
|---------|------------|---|
| 533 100 | RXM 2851   | Relais RXM from 4,7 M $\Omega$ - 230V /50Hz |



**BAMO MESURES**

22, Rue de la Voie des Bans - Z.I. de la Gare - 95100 ARGENTEUIL

Tél : (+33) 01 30 25 83 20 - Web : [www.bamo.fr](http://www.bamo.fr)

Fax : (+33) 01 34 10 16 05 - E-mail : [info@bamo.fr](mailto:info@bamo.fr)

Resistive amplifier relay  
**RXM 2851**

07-06-2008

533 I1 01 B

**NIV**

**533-01/1**

## TECHNICAL FEATURES

|                      |   |
|----------------------|---|
| Power supply:        | single phase 230 V - 50 / 60Hz                              |
| Consumption:         | < 10 VA   |
| Response:            | 3 seconds as a maximum, or quicker depending of sensitivity |
| Maximal temperature: | 65°C  |
| Cable length:        | no maximum to specify, please ask us for over 200 meters    |
| Output relay:        | SPDT – switching power 750 W / 380 V / 4A                   |
| Housing:             | Composite material  |
| Mounting:            | DIN rail  |

## GENERAL INFORMATION

The RXM 2851 accept a connection to one probe for one level control only.

The level detection electrode must be wired to the connector 4.

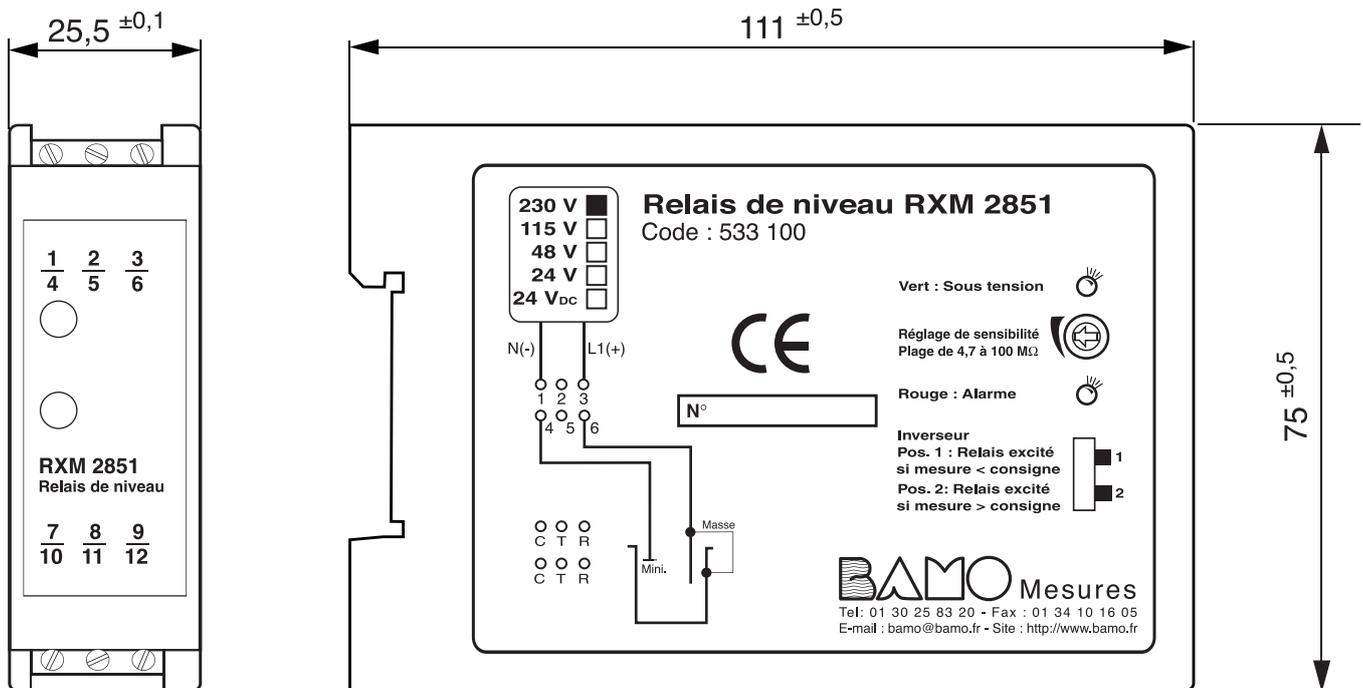
The reference, electrode or tank wall, must be wired to the connector 6.

The relay switches on when the medium touches the electrode: the NO contact closes and the NC contact opens.

The relay will be back to normal position when the medium does not touch the electrode.

Status of relay output: configuration on site

Standard safety status: the relay switches on when the medium is in contact with the electrode.



**Test of relay:** Disconnect the probe (the green LED is still lighting)  
Shunt between N° 4 and N° 6, the relay switch ON  
- The red LED is lighting when DIP switch is on position 1  
- The red LED is off when DIP switch is on position 2

**BAMO MESURES**

22, Rue de la Voie des Bans - Z.I. de la Gare - 95100 ARGENTEUIL

Tél : (+33) 01 30 25 83 20 - Web : [www.bamo.fr](http://www.bamo.fr)

Fax : (+33) 01 34 10 16 05 - E-mail : [info@bamo.fr](mailto:info@bamo.fr)

Resistive amplifier relay  
**RXM 2851**

07-06-2008

533 I1 01 B

**NIV**

**533-01/2**