

# Zakład Mechaniki i Elektroniki ZAMEL sp.j.

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# DESCRIPTION

The device is used to detect the presence of conductive liquids (e.g. water) which is on the mounted flood sensor level (e.g. SZH-03). The system can be used to alarm there is water in undiserable places. It can also be used in controlling systems and in water control systems. The external flood sensor is galvanically separated, which makes its indefectibility and operating safety.

# **FEATURES**

- ى Supply voltage control indicator,
- ی power/relay supply indicator,
- external flood sensor galvanically separated,
- in series or in parallel sensors connection
- sensor's cable lengthening,
- د false sign resistant,
- voltage relay output max 16 A capacity,
- ع doublemodular casing,
- ح TH-35 DIN rail installation.

# **TECHNICAL PARAMETERS**

#### PZM - 10

Input (supply) terminals: L, N

Input rated voltage: 230 V~

Input voltage tolerance: from -15 to +10 %

Supply voltage control indicator: L

: LED green

Rated frequency:

Rated power consumption: 10 mA

Flood sensor terminal: I

: IN, IN

External sensor: exter

external (SZH-03)

Maximum lenght of sensor's cable: 500

500 m

Power/relay supply indicator: LED red

Output relay parameters: 1NO/NC 16 A / 250 V AC1 4000 VA

Number of terminal clamps: 7

Janips. 1

Section of connecting cables: from

from 0,2 to 2,50 mm<sup>2</sup>

Ambient temperature range: from -20 to +60 °C

Operating position: fre

,,,,,,,,,

Mounting: TH35 rail (PN-EN 60715)

Protection degree: IP20 (PN-EN 60529)

Protection class: II

Overvoltage category: II

Pollution degree: 2

e: 2 kV (PN-EN 61000-4-5)

Rated impulse withstand voltage: 2 Dimensions (height / width / depth): de

**APPEARANCE** 

Relay output clamps

(14, 11, 12)

doublemodular (35 mm) 90x35x66 mm

Weight: 199 g

Reference standards:

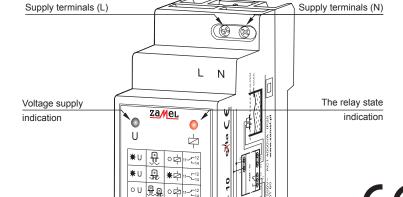
PN-EN 60730-1 PN-EN 60730-2-15

PN-EN 61000-4-2,3,4,5,6,11



The device is designed for one-phase installation and must be installed in accordance with standards valid in a particular country. The device should be

connected according to the details included in this operating manual. Installation, connection and control should be carried out by a qualified electrician staff, who act in accordance with the service manual and the device functions. Disassembling of the device is equal with a loss of guarantee and can cause electric shock. Before installation make sure the connection cables are not under voltage. The cruciform head screwdriver 3,5 mm should be used to instal the device. Improper transport, storage, and use of the device influence its wrong functioning. It is not advisable to instal the device in the following cases: if any device part is missing or the device is damaged or deformed. In case of improper functioning of the device contact the producer.



IN IN

PZM - 10

14 11 12

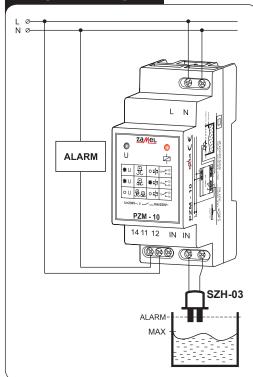
clamps (IN, IN)

### **MOUNTING, FUNCTIONING**

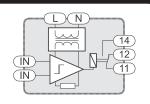
- Disconnect the power supply from the mains by the phase fuse, the circuit-breaker or the switch-disconnector that are joined to the proper circuit,
- Check if there is no voltage on connection cables by means of a special measure equipment,
- 3. Install PZM-10 device in the switchboard on TH-35 DIN rail,
- 4. Instal (SZH-03) flood sensor in a tank on the maximum liquid level,
- Connect the cables with the terminals according to installing diagram,
- 6. Switch on the power supply from the

After switching on power supply the system operates properly and, at the same, it controls external sensor's mode. In a situation the sensor's electrodes are flooded the system switches on the relay (11-14 contacts) and the LED red is on. When the liquid level drops below the installed sensor the relay is switched off (closed contacts 11-12) and the LED red is off. Output relay with one change-over contact uses the output depending on operation. The flood sensors can be connected in series or in parallel. During in series connection the relay operates if all sensors are flooded. During the in parallel connection the relay operates in case any of flooding any of the sensors.

#### CONNECTING



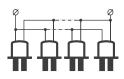
#### **INNER DIAGRAM**



### **SENSORS' CONNECTION**

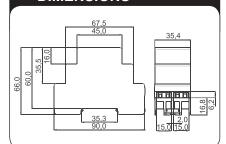


The relay operates if all sensors are flooded.



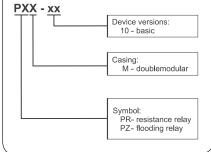
The relay operates in case any of flooding any of the sensors.

# **DIMENSIONS**

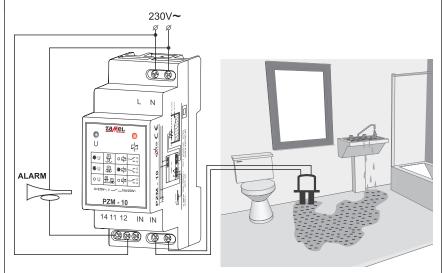


# **PRODUCT FAMILY**

PZM-10 resistance relay belongs to Pxx relay family.



# **EXAMPLE OF INSTALLATION**



# Typical use:

PZM-10 Flood relay operates as a signal system informing about uncontrolled water effluent which can flood the flat.

### **GUARANTEE CARD**

There is 24 months guarantee on the product

- 1. ZAMEL provides a two-year warranty for its products
- 2. The ZAMEL warranty does not cover:
- a) mechanical defects resulting from transport, loading / unloading or other circumstances,
- b) defects resulting from incorrect installation or operation of ZAMEL products,
- c) defects resulting from any changes made by CUSTOMERS or third parties, to products sold or equipment necessary for the correct operation of products sold,
- d) defects resulting from force majeure or other aleatory events for which ZAMEL is not liable.
- All complaints in relation to the warranty must be provided by the CUSTOMER in writing to the retailer after discovering a defect.
- ZAMEL will review complaints in accordance with existing regulations.
- Salesman stamp and signature, date of sale\_

5. The way a complaint is settled, e.g. replacement of the product, repair or refund, is left to the discretion of ZAMEL