

Operation and Maintenance Instructions

**Neutralization Box with Pump**  
with stainless-steel pre-filter and integrated pump



EN  
v.1.0

*Regulus*

## **Neutralization Box with Pump, stainless-steel pre-filter and integrated pump is necessary for neutralization of acid condensate from condensing boilers.**

### **TECHNICAL DATA**

Dimensions	400 x 300 x200 mm high
Net weight	20 kg
Operating weight	cca 24 kg
Connection in/out	diam. 38 mm
Max. flow rate	400 l/h
Max. head	3,7 m
Power consumption	75 W
Voltage	230 V AC, 50 Hz
Alarm	NC 4 A – 250 V
Noise	over 1 m 43 dBA
IP rating	IP X4
Thermal protection (overheating)	120 °C
Condensate temperature and acidity	65 °C (80°C in short term), pH > 2

### **DESCRIPTION AND APPLICATION**

Condensate originating from condensing boiler operation is acid, so it is advisable to neutralize it. When passing through the neutralization box, it flows through inert materials that act in several ways: they absorb nitrates and sulphates, increasing pH at the same time. The acidity can be checked using a litmus paper or a special pH measuring kit. Finally, the neutralized condensate is pumped away by the integrated pump.

### **INTEGRATED PUMP**

This pump is designed for operation with a condensing boiler and so it is suitable for strongly acid and hot condensate. It is installed in a protective case (IP X4) resistant to water splashing and acid vapours.

- Resistant to acid condensate
- High IP rating (IP X4)
- Resistant to clogging
- Removable tank 0.5l
- Compact design
- Low noise

Check valve / 2m cable with EU plug / 1m alarm cable (NC contacts) / installation kit, 2 screws and dowels / PVS pipe 10 mm. diam. 5m long / Adapter ACC02040 Ø 15/17-20-24/25-32-40 mm

**Suitable for boilers of up to 800 kW output.**

## APPLICATION

The manufacturer bears no responsibility for improper use; in such a case warranty becomes null and void.

## WARNING

Handle the filling with care, using suitable protective means (goggles, gloves, face mask). Pay attention to the powder; in case of accidental contact with eyes wash them with abundant water and consult a doctor.

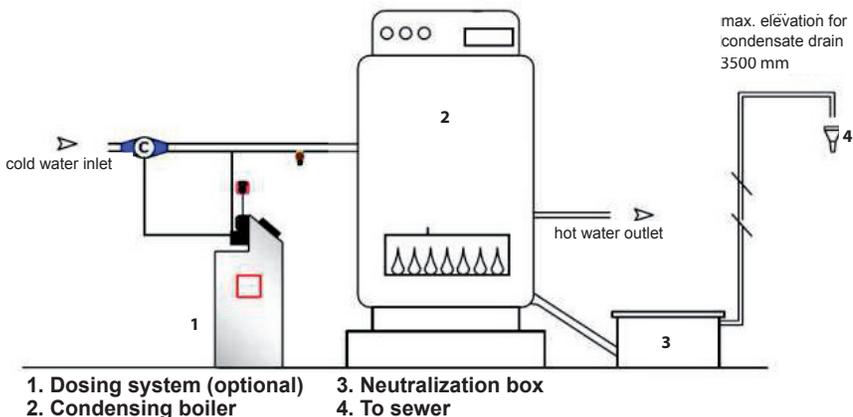
## INSTALLATION

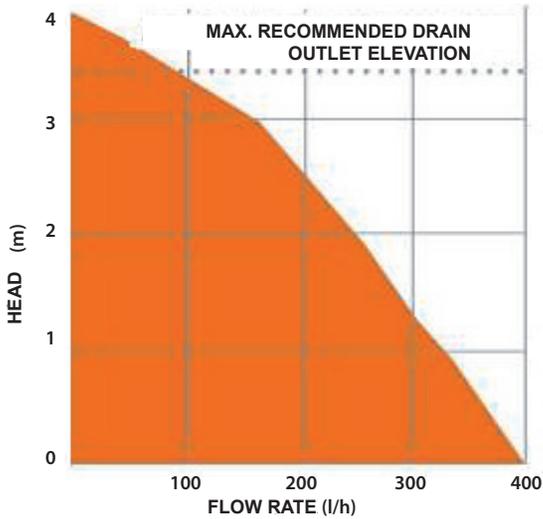
- Place the device on a floor, downstream the condensate flow.
- The condensate discharge point elevation shall not be more than 3.5m.
- Remove the lid and put the mixture in the box.
- Connect the hoses as shown by the symbols on the device.
- Connect the device to the mains
- Use a differential switch (to switch the pump off if damaged)
- If an extension power cable is used, its cross-sectional area shall be the same as of the original one; if it is longer than 20m, it shall be bigger
- If these instructions are not respected, motor winding can get damaged and the warranty will become null and void

### **SAFETY MEASURES FOR CONDENSATE DRAIN: RISK OF FREEZING**

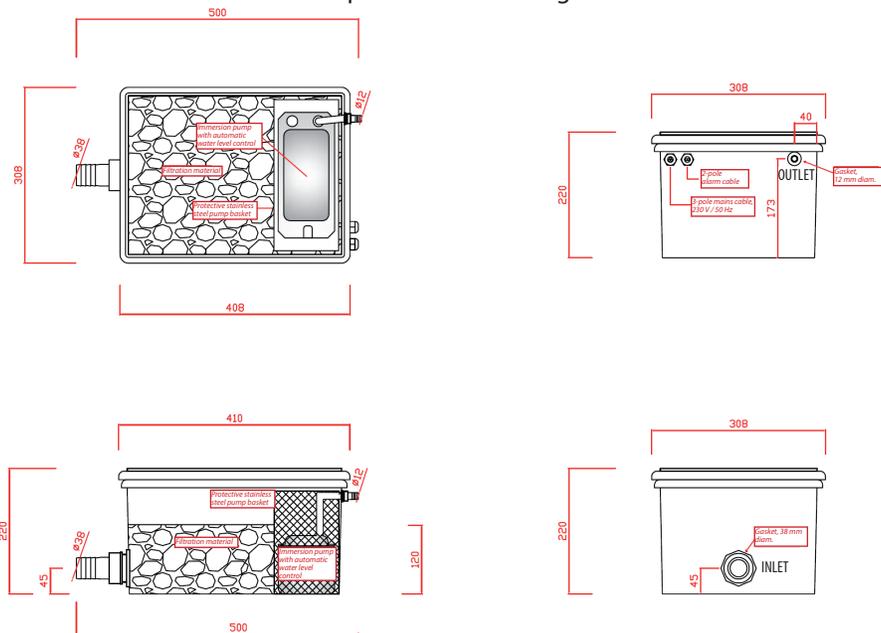
In order to avoid condensate freezing in the discharge pipe causing jamming which would result in boiler failure, the outdoor pipe shall be thermally insulated with weatherproof insulation. Condensate drain pipes running through unheated rooms like attic, cellar or garage are considered outdoor ones and shall be insulated as well.

## THE INNER INERT FILLING SHALL BE REPLACED ONCE A YEAR OR AS SOON AS EXHAUSTED FOR PROPER OPERATION





- Maintenance shall be performed by a specialist while respecting valid safety rules. The device shall be always disconnected from the mains.
- The device meets the requirements of EU regulations.



09/2015



**REGULUS spol. s r.o.**  
 Do Koutů 1897/3  
 143 00 Praha 4  
 CZECH REPUBLIC

<http://www.regulus.eu>  
 E-mail: [sales@regulus.eu](mailto:sales@regulus.eu)