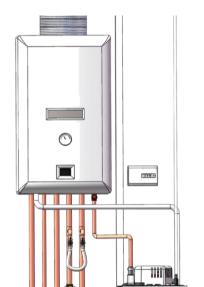


# **Pressure Safe System**

**Pressure Release Valve Safety System** 



# Safety first

The **pump** collects condensates. Thanks to the **diffuser** reducing the pressure, it also allows the safe discharge of the pressure relief valve inside the property.

Sauermann® part #: PS1800SCUN23

The pump safety switch can detect if filling loop is left open, or a failure of plate-to-plate heat exchanger, or a failure of the pressure release valve.

If a failure occurs, the pump sends a signal to the **regulation box**. The regulation box closes the **solenoid valve** and stops cold water entering the boiler.

The heating stays on, hot water is stopped. A red light is activated informing the end user he must call contractor to solve the problem and reset the installation.

## **AVANTAGES**

#### Safe installation

- No risk of house floods.
- No risk of heating system shutting down due to frozen PRV discharge pipes.
- Notices failures and informs when contact with the contractor is needed.

#### Easy and quick installation

- No long expensive copper pipe runs.
- No ladder work, no drilling through wall

## • Preserve the environment

- No water loss.
- No energy loss.

#### KIT CONTENTS

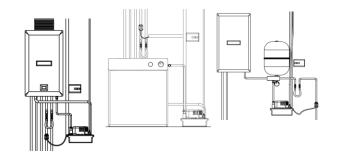


- A. Regulation box including 2 strain reliefs and 4 screws
- B. Solenoid valve with 2 m cable bare ends (L,N,G)
- C. Diffuser
- D. SI1800: centrifugal pump with tank of 2,0 I:
  - Check valve
  - > Power cable : 2 m bare ends (L,N,G)
  - > Safety switch cable: 2 sleeved wires 1,5 m bare ends
- E. **PVC Tubing:** 10 mm ID, 5m long
- F. Ø10 to 10 mm (3/8" to 3/8") **straight connector** for clear tubing Ø10mm extension
- G. 2 bags of 2 screws + 2 rawl plugs
- H. Ø int. 15-20-24-32-40 mm (Ø int. 5/8"-3/4"-1"- 1"<sup>1</sup>/<sub>4</sub> -1"<sup>1</sup>/<sub>2</sub>) inlet adaptor for PVC pipe
- I. Condensate self-sealing evacuation connector, Ø 10 mm int.
- J. Ø10 to 20 mm (3/8" to 3/4") outlet adaptor for rigid tubing Ø20 mm

## **APPLICATIONS**

#### for Gas Condensing Boilers and electric boilers:

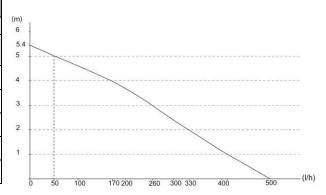
- heating only or heating and hot water (combi)
- wall mounted or floor mounted
- in domestic use : suitable for expansion vessels ≤12l



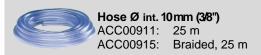
#### **WARNING:**

- <u>Commercial use</u>: carefully verify **expansion vessel size If** >12I, do not connect the Pressure Release Valve to the pump
- Boilers incorporating a store of hot water > 15l.

ACTUAL FLOW RATES (I/h)				
	Total tube length (Ø int. 10 mm, 3/8")			
Vertical Discharge head	5 m	10 m	20 m	30 m
1 m	380	300	240	190
2 m	310	260	200	150
3 m	240	200	145	110
4 m	150	130	80	60
5 m	30	20	0	0



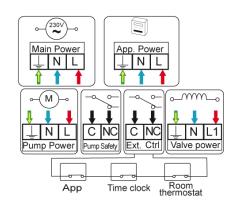
#### RECOMMANDED ACCESSORIES





Check valve For replacement Ø ext. 10 mm (3/8") ACC00925

TECHNICAL SPECIFICATION				
Pressure Safe System				
Safety standards	CE - EAC - UKCA			
RoHS directive	Compliant			
WEEE directive	Compliant			
VVEEE directive Compilant				
Weight (including box)	3.8 kg			
Packaging	L400xW200xH215 mm			
Pallet quantity	60 pieces – 5 levels of 12 pumps			
Pump SI 1800 & Diffuser				
Max. flow rate	500 l/h			
Max. discharge head	5 m			
Max pressure	5.4 m (flowrate=0)			
Sound level in application at 1m(3.3ft): ≤ 45 dBA (Measured in Sauermann acoustic lab, pump operating with water)				
Mains supply	230V~ 50Hz - 70 W - 0.67A			
Detection levels	On: 53mm, Off: 42mm,			
	Safety : 64mm			
Safety switch	NC 4 A resistive – 250V			
Max. condensate temperature 65°C, 80°C in short peak				
Max. condensate acidity	pH > 2.5 (Gas condensing boilers)			
Thermal protection (overheating)	105°C (auto-reset)			
Operating conditions	30%: 3s ON – 7s OFF			
Protection	IP20			
Regulation box				
Mains supply	230V~ 50Hz - 10A max.			
	3G0,75 à 1,5mm <sup>2</sup> according to local			
Power cable (not supply)	code, Ø ext. 6,5-8mm			
Pump power	230V~ 50Hz - 70 W – 0.8A max.			
Boiler power	230V~ 50Hz - permanently wired - 1,5			
(App. Power)	A max. (resistive), 100 000 cycles			
Solenoid valve power	230V~ 50Hz - 0.8A max. – NO			
External controls relay	NC contact - volt free – 1,5A (resistive)			
(Ext. Ctrl.)	250V ~ max – 100 000 cycles			
Protection	IP20			
Regulation box dimensions	L130xW88xH25 mm			
Solenoid valve				
Mains supply	230V~ 50Hz - 13 W - 20VA peak			
Solenoïd valve power (included)	3G0,75mm <sup>2</sup> – 2m long – IP65 DIN plug			
Valve type	2 ways – Normaly Open (Closes water flow when powered)			
Fluid	Water only(NBR seals)			
Operating pressure	0,3 – 10bar			
Kv (flowrate)	12 l/min – Ø int. 10mm			
max. temperature	65°C, 90°C in short peak			
Protection	IP65			
Ports dimensions	G 1/2" - brass – H 65mm			









Non-contractual document. We reserve the right to modify the characteristics on our products without prior notice.