



Dial Thermostat

Models: VS05



INSTALLER / USER MANUAL

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Your benefit

For latest PDF installation guide please go to www.salus-controls.com

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1 x Installer / User manual



Fixing screws



VS05

Product Compliance & Safety Information

INTRODUCTION

Thank you for purchasing the SALUS room thermostat VS05. The VS05 is a 230V dial thermostat which offers simple temperature control of your heating system.

SALUS recommends that you use your VS05 with the SALUS KL10 wiring centre and VS10 digital room thermostat. The VS10 can be used as a group control thermostat to control groups of VS05's. Please see pages 6 and 7.



Product Compliance

This product is CE compliant and meets the following EC Directives Electro-Magnetic Compatibility directive 2004/108/EC Low voltage Directive 2006/95/EC



Safety Information

Use in accordance with the regulations. The SALUS VS05 is to be used for room control of hot water heating systems inside the house.



Installation

This product must be fitted by a competent person, and installation must comply with the guidance, standards and regulations applicable to the city, country or state where the product is installed. Failure to comply with the requirements of the relevant guidance, standards and regulations could lead to injury, death or prosecution.



Always isolate the AC mains supply before installing or working on any components that require 230V AC 50Hz supply.

We hope you enjoy this product...

Product Compliance & Safety Information



Sources of danger

The thermostat must be disconnected from mains supply before removing the cover.



230V AC



Emergency

Switch off the voltage to the individual thermostat wiring centre or complete system.



Installer parameter settings

The SALUS VS05 is equipped with installer parameters. See page 13.



For the installer

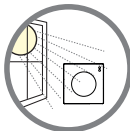
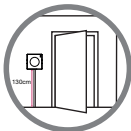
Please enter any parameter changes in the installer notes section.

Installation – Thermostat Mounting



Mounting position and installation

To ensure trouble free operation and efficient control, the unit is best positioned in a draft free area and at 130cm from the floor. Do not position the thermostat near any heat source, behind curtains, direct sunlight or an area of high humidity.



Not to be positioned on an exterior wall.

System Overview Grouping and Communication



Power and Switching Cable - used to power thermostats and drive output.



Grouping and Communication cable.



While the thermostats can function as standalone, installing this optional inexpensive communication cable allows the thermostats to communicate with the SALUS VS10 configured as a group control thermostat and used with the SALUS KL10 WC (both sold separately).



The VS05 will follow instructions from the VS10 bringing central control of features such as Time Control, Holiday & Party functions as well as Frost Control. The VS05 can leave or re-enter group control at the slide of a switch.



VS10 Group Control Thermostat
(sold separately)

System Overview Grouping and Communication

The maximum number of groups per KL10 wiring centre is two. The group selection communication cable must correspond to the group terminals on the KL10 WC. Please refer to note 5 and the KL10 installation guide.



Group 1 – For Example Down stairs



Group 2 – For Example upstairs



SALUS KL10 Wiring Centre

Installation – Thermostat Mounting

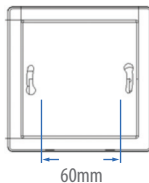


Gently remove front housing.



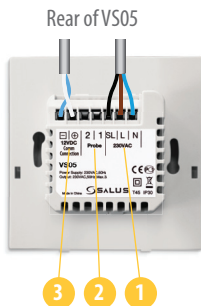
Wall Mounting

For wall mounting, mark and mount the rear case to the wall. The VS05 is suitable for wall boxes with a centre hole distance of:



Installation – Terminal Connections

Understanding your terminal connections



Power Terminals 230 Vac

Used for supplying power to the unit and switched output.



Sensor Terminals

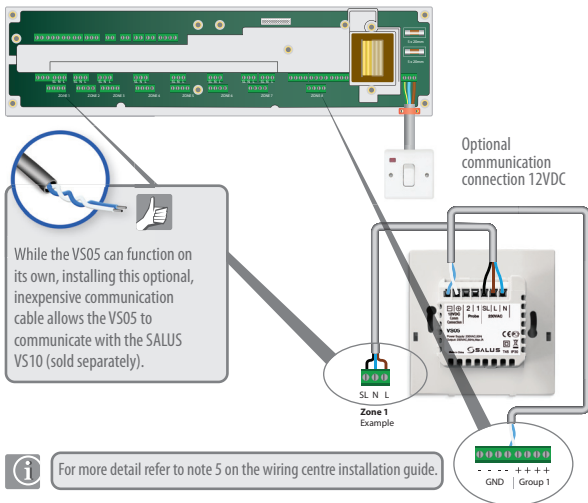
Can be used for external Air or Floor sensor.



Communication Terms 12VDC

Two wire twisted pair can be used for grouping functions between VS10 and VS05. Also required for Heat/Cool changeover.

Installation – Thermostat Connections



Installation – Terminal Connections



Check that the wiring is completed for:

- 1 Power Terminals
- 2 Sensor Terminals (if applicable)
- 3 Communication Terminals (optional but recommended)

You are ready to secure the rear housing to the wall box



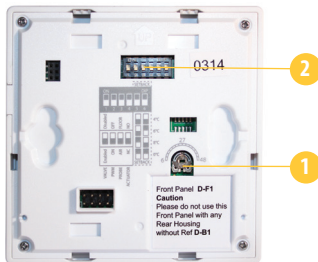
Please use the screws provided.



Ensure the orientation arrow is pointing upwards.



Installation

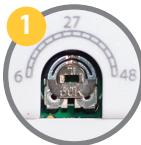


1 2 If any parameter settings need to be changed please refer to next page.



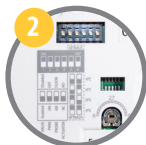
Fit the front housing to the rear housing as shown above.

Installation – parameter setting



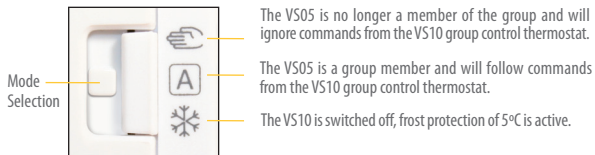
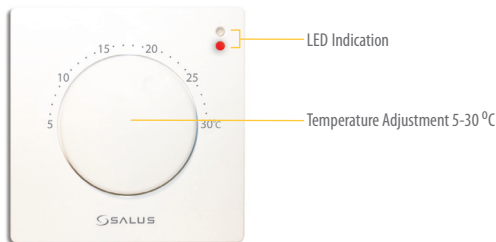
External sensor (optional)

If you are fitting an external sensor for air/floor sensing please select temp here. It can be set from 0-45°C and is preset at 27°C. Please note the dip switches **2** need to be set for the correct external sensor type, see below.



FUNCTION	DESCRIPTION	DEFAULT
Valve Exercising	If the installer setting is to enable the valve exercising the dial thermostat will additionally send 5 minute pulse on actuator once a week.	ENABLE
PWM	PWM output to drive actuator open/close.	ON
External sensor type	Air or floor.	AIR
Actuator type	Normally Closed or Normally Open.	NC
Reduced temp offset / Night setback	0, 4, 6 or 8 (only when used with VS10 and KL10).	4°C

User Interface



LED Indication - Group Member

Slide switch must be in  position to follow group control thermostat VS10, see page 14.



RED LED indicates that power is going to the thermostat in normal operation. The top LED will illuminate when room temperature falls below your required temperature.



Green LED means that the thermostat is calling for heat. The group control thermostat will be in one of the following modes:



1.       
2.       
3.       

VS10 group control thermostat display



For more details on VS10 please refer to VS10 manual



If you do not want a VS05 to follow the group control thermostat VS10 please select  or  see previous page.

LED Indication - Group Member

Slide switch must be in  position to follow group control thermostat VS10, see page 14.



To reduce annoyance factor, no LED is shown when the group control thermostat is in reduced temperature/night setback mode. See below.



To adjust reduced temperature offset please refer to page 13.

Amber LED means that the thermostat is calling for heat in reduced/night setback mode. The group control thermostat will be in one of the following modes:

-
-

VS10 group control thermostat display



For more details on VS10 please refer to VS10 manual



If you do not want a VS05 to follow the group control thermostat VS10 please select or see page 14.

LED Indication - Group Member

Slide switch must be in  position to follow group control thermostat VS10, see page 14.



Blue LED indicates the thermostat is in frost protection mode. Frost protection temperature is fixed at 5°C.



Green LED means that the temperature has fallen below the frost protection level the thermostat is calling for heat. The group control thermostat will be in one of the following modes:



-
-

VS10 group control thermostat display



For more details on VS10 please refer to VS10 manual



If you do not want a VS05 to follow the group control thermostat VS10 please select  or  see page 14.

LED Indication - Manual mode

To enter manual mode, slide the switch to the  position. The thermostat will not follow the group control thermostat VS10 and will no longer be part of the group. The VS05 will work as a stand alone thermostat.



RED LED indicates that power is going to the unit in normal operation. The top LED will illuminate when room temperature falls below your required temp.



Green LED means that the unit is calling for heat.



To return the VS05 to the group (if applicable) move the slide switch to



LED Indication -Permanent Frost Mode

To enter manual mode, slide the switch to the  position. The thermostat will not follow the group control thermostat VS10 and will no longer be part of the group. The VS05 will be in permanent frost protection.



Blue LED indicates the thermostat is in frost protection mode. Frost protection temperature is fixed at 5°C.



Green LED indicates the temperature has fallen below the frost protection level and the thermostat is calling for heat.



To return the VS05 to the group (if applicable) move the slide switch to



Technical Detail

MODEL	VS05
TYPE	Wired dial thermostat designed for 230V AC heating/cooling applications
TEMPERATURE	
Scale	Celsius
Tolerance	0.5 °C
Set Temperature range	5-30 °C
Frost Protection	5°C
CONTROL	ON-OFF control / PWM control
ENVIRONMENT RATINGS	
Operating Temperature	0°C to +50 °C
Storage Temperature	-20°C to +60 °C
Operating Humidity (non condensed)	5-95 %RH
POWER SOURCE	230Vac 50Hz
CONTROL SWITCH AND RATING	
Loading	Maximum 3A at SL terminal
Input	Comm Connection 12VDC
AGENCY APPROVED	CE





Warranty

SALUS Controls warrants that this product will be free from any defect in materials or workmanship, and shall perform in accordance with its specification, for a period of five years from the date of installation. SALUS Controls sole liability for breach of this warranty will be (at its option) to repair or replace the defective product.

Customer Name:

Customer Address:

..... Post Code:

Tel No: Email:

Engineers Company:

Tel No: Email:

Installation Date:

Engineers Name:

Engineers Signature:

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