

SFT Series Digital Fan Coil Unit Controllers

SFT series are elegant fan coil unit controllers with a large clear LCD screen. The units are operated with five high quality buttons. The SFT range of fan coil unit controllers is available with a range of models to suit most applications.

The SFT controllers can be extensively applied for residential, industrial and commercial environments. The Controllers have switching rating of up to 16A 230V making them suitable for both wet systems and electrical heating systems.

Depending on the model, the SFT controllers can operate using internal or external sensor and have 7 day time programme.

The SFT range has RS485 communication capability making them ideal for all commercial applications.



Features

- 24VAC Power Supply (230 VAC supply available)
- 2-Pipe FCU Systems
- Large Digital Display with Back-Light
- Flush Mounted for Sophisticated Look
- 5+2/7 Day Time Programme ("P"-models)
- Inside Temperature Display
- Celcius / Fahrenheit Display
- 12/24 Hour Time Mode
- Auto/Manual Fan Speed Programmable

Model Type	Model	Description
	SFT-A24-505	Digital 2-Pipe Fan Coil Unit Controller, 24Vac Power, Heating or Cooling (configurable), Modbus Communication
	SFT-A24-506	Digital 2-Pipe Fan Coil Unit Controller, 24Vac Power, Heating or Cooling (configurable), 3-Speed Fan Control, Modbus Communication
	SFT-A24-P505	Digital 2-Pipe Fan Coil Unit Controller, 24Vac Power, Heating or Cooling (configurable), Modbus Communication
	SFT-A24-P506	Digital 2-Pipe Fan Coil Unit Controller, 24Vac Power, Heating or Cooling (configurable), 3-Speed Fan Control, Modbus Communication

Technical Data		
Power Supply	A24 Models:	AC24V ± 10%z or DC24V
Fan Speed Output		3 x 3(1)A 230VAC SPST Relays
Control Valve		1 x 230VAC SPST Relay
Measurement Range		5..95°C
Accuracy		0.5°C/F
Working Temperature		0..70°C
Setpoint Range		5 to 95°C/F
Terminals		Max 2.5 mm ² (min 0.5mm ²)
Communication		RS485 Modbus RTU, up to 63 devices (logical address range 1..255) (extended range available on special order)
Modbus Settings		9600 baud, 8 Data Bits, None Parity, 1 Stop Bit
Color		White with glass panel
Housing		ABS Flame Retardant
Mounting		Flush Mounting (wall mounting using a separate box)
Dimensions		W86 x H86 x D14.5 mm
Weight		0.15kg

Environmental Conditions	Operating Temp	0..+50°C
	Humidity Limits	0..95% rH non-condensing
	Storage Temp	-20..+50°C, Humidity <95% rH
	Environmental Standards	IEC721-3-3, Climatic Conditions Class 3K5 EN 60730

Operating Instructions

MODE Buttonf

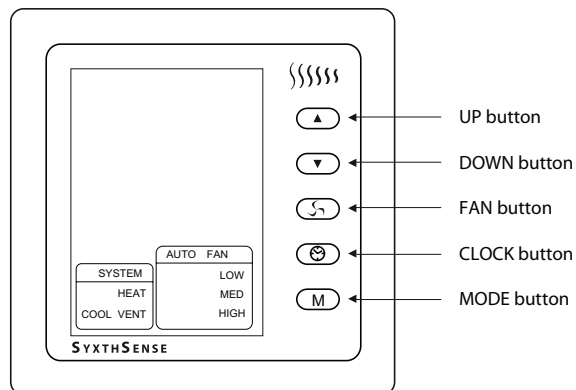
Pressing the MODE button the unit operating mode can be changed. The available options are: HEAT, VENT, COOL, OFF.

In HEAT position the controller operates in heating mode. When the temperature drops below the setpoint the valve output is switched ON.

In COOL position the controller operates in cooling mode. When the temperature increases above the setpoint the valve output is switched ON.

In VENT position the unit only runs the fan. It is not possible to change the setpoint or set the fan to operate in automatic mode. The required fan speed (LOW/MED/HIGH) is set by pressing the FAN button.

In OFF position the FAN and VALVE outputs are switched OFF. The controller provides low limit frost protection.



Temperature Setting

When the controller is ON, press UP or DOWN buttons to set the desired temperature.

Fan Speed Selection

Press the FAN button until the required fan speed is selected. In AUTO position the fan speed is modulated automatically.

The available options are LOW, MED, HIGH, AUTO

Setting Controller Time

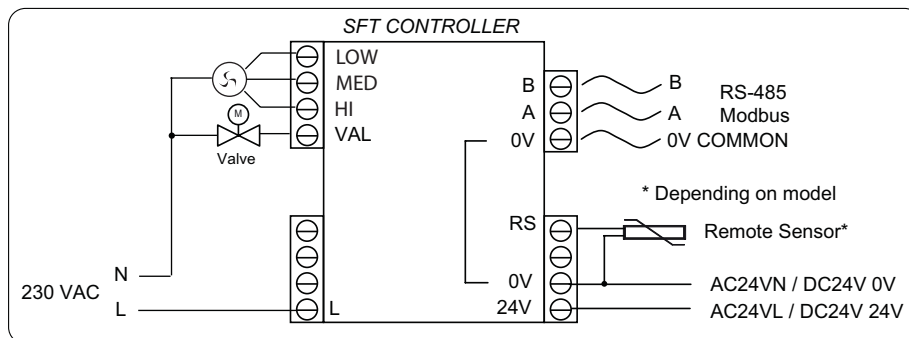
SETTING Controller TIME

When the Controller is ON, press the CLOCK button. The hours will flash. Press UP or DOWN buttons to set the desired hour.

Press CLOCK button again to set the minutes (time). The minutes will flash. Press UP or DOWN buttons to set the desired minutes.

Press CLOCK icon gain, and Weekday will flashe. Then press UP or DOWN buttons to set the correct weekday.

Wiring Details - 24VAC Versions



WARNING: The electrical wiring is to be carried out by qualified electricians and is required to comply with the local wiring and electrical regulations.

Advanced Parameter Settings

Advanced parameter settings are used to re-configure the SFT controller operation. Exact settings available depend on the model.

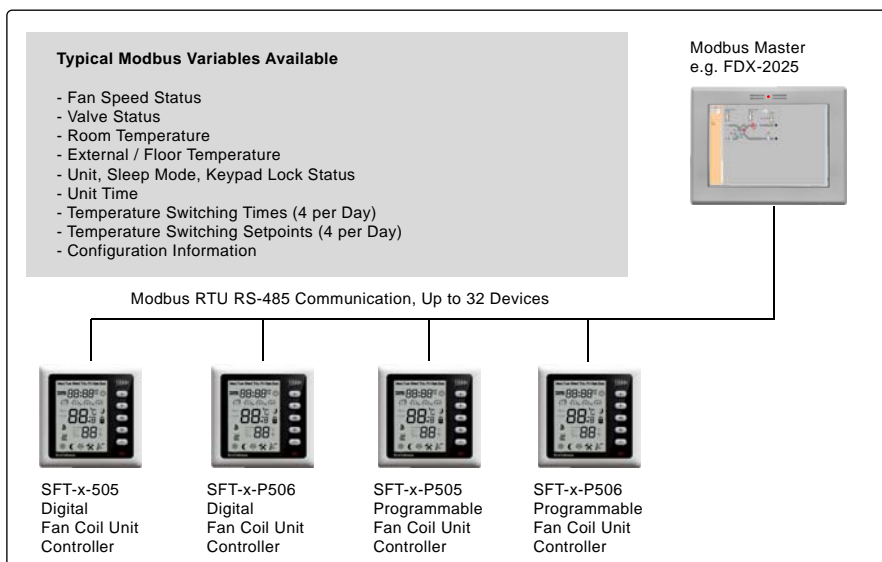
To enter the configuration mode, switch the controller OFF (from MODE button). Then press the FAN button continuously up to 10 seconds to display the first of the configuration parameters. To adjust the setting press UP or DOWN button until the required setting is displayed.

To advance to the next parameter press FAN button again. Continue until all required parameters have been set. At any time the configuration can be exited by pressing the MODE button, and the normal operation resumes.

WARNING: Use care when changing the advanced configuration parameters as these affect the operation of the thermostat.

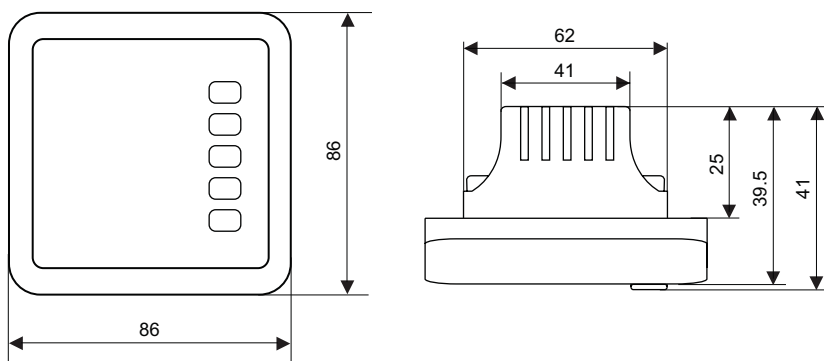
Parameter	Parameter Description	Available Settings	Default
P5	Thermostat Operation when power is Applied	0 - Thermostat OFF when power is applied 1 - Thermostat ON when power is applied	1
HL	Highest Setpoint Allowed	5..35 (The value of the highest setpoint that a user can program into the SFT. Any setpoint attempted to be higher than this setting will be returned to this value)	35
CL	Lowest Setpoint Allowed	5..35 (The value of the lowest setpoint that a user can program into the SFT. Any setpoint attempted to be lower than this setting will be returned to this value.)	5
CF	Unit Selection	C - Celcius display enabled F - Fahrenheit display enabled	C
HF	12/24 Time Mode	12 - 12 Hour Clock 24 - 24 Hour Clock	12
PP	Controller Mode	2P or 4P 2-pipe or 4-pipe application. Select always 2P mode.	4P
SL	Sleep Mode	0 - Disabled 1 - Enabled	
FA	Fan Mode Selection	da - fan keeps working when valve closes db - fan closes when valve closes	
FD	Fan Off Delay	0..5 minutes	0
AN	System Mode	A - Cool and Heat C - Cool H - Heat	1
SE	Sensor Selection	OU - External Sensor IN - Internal Sensor AU - Average Sensor OO - energy saving mode enabled when sensor is not connected OF - energy saving mode enabled when sensor is in short circuit	IN
FE	Defrost Function	0 - Disabled 1 - Enabled	1
CH	Energy Saving Heating Temperature	0..35°C	5
CC	Energy Saving Cooling Temperature	7..37°C	37
SP	Temperature Switching Hysteresis	1..3°C	1
FE	Pre-Operation	0 - Disabled 1 - Enabled	0
0C	Remote Sensor Offset	-4.5..+4.5°C	0
Ad	Modbus Slave Address	1..255	1
bd	Modbus Baud Rate	4k8/9k6/19k2	9k6
t5	Test Mode	Set to 2 to Activate Relay Test Mode	0

Modbus Networking Diagram



Dimensions

Please find the below diagrams for the Controller dimensions. The dimensions are in millimetres. The mounting hole center points are 60 mm apart.



Notes: In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice. The consumer is guaranteed against any lack of conformity for 24 months from the time of delivery, according to the European Directive 1999/44/EC. The full text of guarantee is available on request from the seller.