

CASA Smart Modbus GW – Modbus gateway



Description

The Swegon CASA Smart control technique is possible to connect modbus field bus with CASA Smart Modbus Gateway.

Technical data

Outer dimensions

107 x 88 x 22 mm

Connections

Two RJ9 for the ventilation unit's system bus

Two Modbus RTU (RS485)

5 VDC for external power supply (Necessary when the Modbus gateway is connected to the ventilation unit with more than five meters modular cable.)

Modbus settings

Speeds: 9 600 / 19 200 / 38 400 bps

Addresses: 1– 247

Data bits: 8

Parity: None

Stop Bit: 1

Modbus bus termination: Yes

The bus speed and the ventilation unit addresses can be set with DIP switches. The buses can be terminated by connecting a jumper.

Application

The Modbus gateway can be used for collecting data from Swegon CASA Smart ventilation unit and control the unit functions. Basic idea is that the same information and control method can be used via Modbus gateway as with control panel.

For example, the following information can be viewed:

- The ventilation unit's operating status
- The current fan speed
- The rotation speeds of the fans
- The temperature sensor readings
- The supply air temperature setting
- The settings for the special functions
- Alarms
- Smart function measure and control values

Control options are available e.g. for the following functions:

- Control of the operating mode (Travelling/Home/Away/Boost)
- Smart function control
- The supply air temperature
- The Smart function settings
- Acknowledgement of alarms

Information can be viewed and functions controlled by means of the modbus registers. Basic operations register list is supplied with Modbus Gateway and full list can be viewed on Swegon internet pages.

Basic installation diagram of the product

The product should be installed near the ventilation unit.
If long cable (over 5 m) is used the supply voltage of Modbus Gateway might be too low. This causes status led to blink and unit might not working properly. This can be fixed by using external 5 V power supply.

Status led:

Green: Connections OK

Red: No connection to the ventilaiton unit

Orange: No modbus connection

Blinking led: Supply voltage too low

Termination of the Modbus bus (connection resistance)

Use termination when the Modbus Gateway is the last device on the bus.

