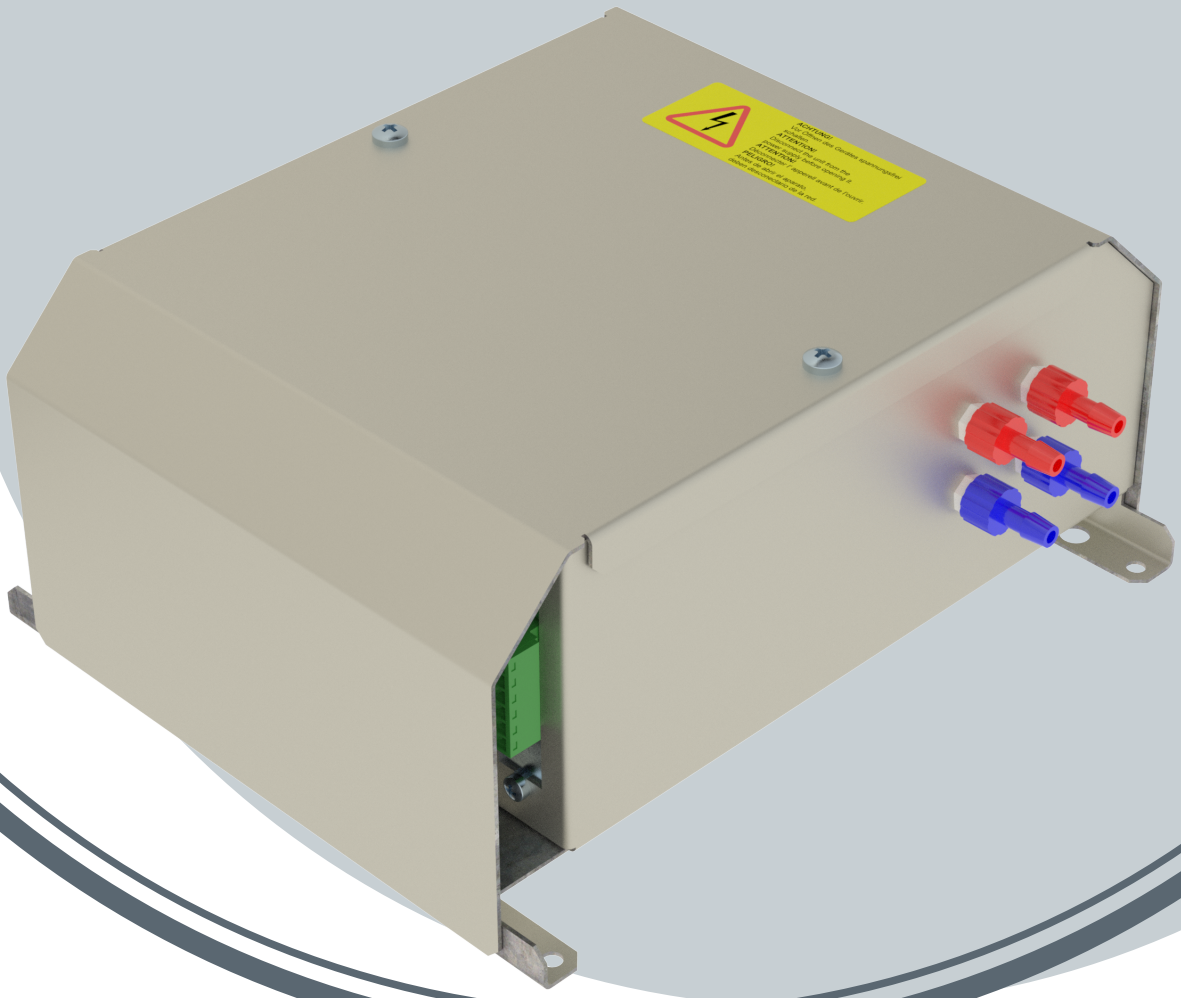

Modbus Datapoint Table
Fume Cupboard Monitor FM400

SCHNEIDER
SCHAKO Group

1 Modbus General Information

1.1 Register Types

The Modbus specification supports multiple register types. Most SCHNEIDER devices use the *Holding Register* and *Input Register* types. Every holding register can store a 16-bit word (for example, an integer value between 0 and 65535). This value can be read using function code 03 (”Read Holding Registers”) and can be modified using function code 06 (”Write Single Register”) as well as function code 16 (”Write Multiple Registers”).

The second important register type is the *Input Register*. Input registers are read-only and cannot be modified by a client. They represent the current state or a measurement from the device, and can be read using function code 04 (”Read Input Registers”).

1.2 Data Types

1.2.1 Scaled Integers

The interpretation of a register value is not defined by Modbus itself but must be determined using the data point table. Where possible, integer values are used—sometimes with a scaling factor—to fit them into the range of 0 to 65535. For example, most volumetric flow rates in m^3/h can be accurately represented using such an integer without any loss of resolution. In contrast, storing a face velocity in m/s without a scaling factor is impractical because these values are typically between 0 m/s and 1 m/s. In this case, a scaling factor of *0.001* applied to a register value of, for example, *526* yields

$$0.001\,m/s \times 526 = 0.526\,m/s.$$

1.2.2 Enumerations

Some values are not continuous but represent discrete states. For each possible value, a predetermined meaning is assigned. The range of values and their corresponding meanings are described in the Descriptions section.

1.2.3 Text

Modbus does not natively support text. However, it is common practice to represent text by encoding two ASCII characters per register and using consecutive registers for longer texts. Since this method is not very efficient, it is used sparingly. For example, Input Registers 1 through 3 encode the firmware version, providing enough space for six ASCII characters.

2 Modbus Data Point Table

Type	Index	Name	Resolution	Unit	Description
		End of Table			

3 Descriptions

The information and data contained in this documentation have been compiled to the best of our knowledge and in accordance with the current state of the art (subject to technical changes). The currently valid version applies. The proven properties of SCHNEIDER products are based on the use of the products recommended in this documentation. Diverging situations and individual cases are not taken into account, so that we cannot assume any warranty and liability.

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Do you have any questions? We look forward to your message:

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