

SplusS 814x-MB Humidity Temperature And Pressure Sensor



SplusS 814x-MB Humidity Temperature And Pressure Sensor Instruction Manual

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SplusS

SplusS 814x-MB Humidity Temperature And Pressure Sensor



Product Specifications

- **Power Supply:** < 0.2 W / 24 V DC typical
- **Unit System:** SI (default), Imperial
- **Data Points:** Modbus (RTU-Mode), Address range 0...247 adjustable
- **Baud Rate:** 9600, 19200, 38400 Baud
- **Signal Filtering:** 4 s / 32 s for Temperature / Humidity, 0 s / 1 s / 10 s for Pressure
- **Temperature Range:** See table
- **Pressure Type:** See table

Product Usage Instructions

Mounting and Installation

1. Ensure the power supply matches the specified requirements.
2. Mount the device using the plastic mounting flange included in the delivery package.
3. Connect the device using the provided connection set.
4. Secure the cable connection using the plastic cable gland (M16 x 1.5).

Data Configuration

Set the bus address and parameters (such as baud rate and parity) using the DIP switches on the device.

Sensor Calibration

Perform manual or automatic zero-point calibration for pressure measurements as needed.

Display and Controls

The device features LEDs for internal status indication, a reset button, and offset adjustment controls for pressure readings.

Frequently Asked Questions (FAQ)

- **Q: What is the default unit system for the device?**

A: The default unit system is SI, but it can also be set to Imperial.

- **Q: How do I calibrate the sensors on the device?**

A: You can perform manual or automatic zero-point calibration for pressure measurements.

- **Q: What is included in the delivery package?**

A: The delivery package includes the device, mounting flange, connection set, and plastic cable gland for installation.

Operating and Mounting Instructions

Multifunctional duct sensors and measuring transducers for humidity, temperature, pressure, differential pressure and volume flow, incl. mounting flange and connection set, calibratable, with Modbus connection

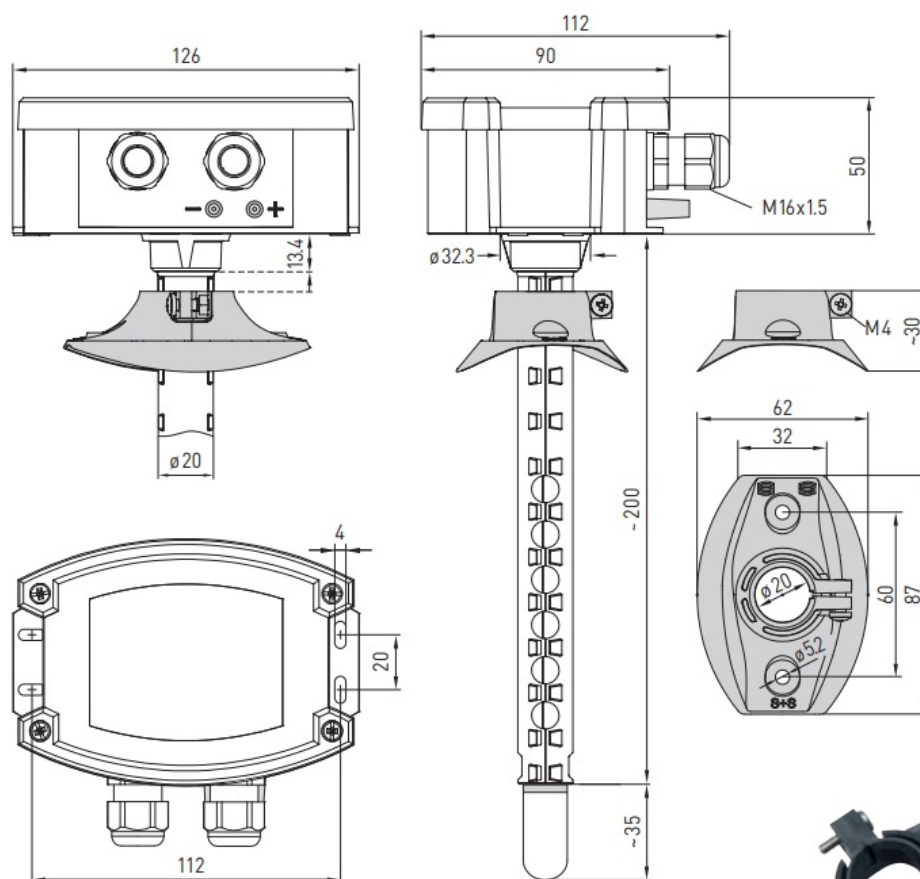


Humidity & Temperature & Pressure Type 814x-MB

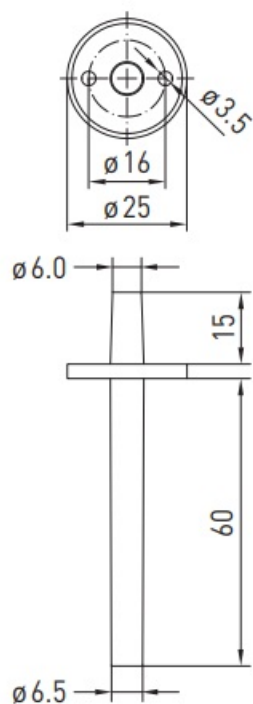
Dimensional drawing

Plan coté

[mm]



Dimensional drawing



- Anschluss-Set (im Lieferumfang enthalten)
- Connection set (included in the scope of delivery)
- Kit de raccordement (compris dans la livraison)



SF -K

Kunststoff -Sinterfilter

Plastic sinter filter

Fitre fritté en matière synthétique



Type 814x-MB

Maintenance-free microprocessor-controlled Type 814x-MB (Series) with Modbus connection, in an impact-resistant plastic housing with quick-locking screws, connection nozzles for pressure hose (Ø 6 mm / 0.236 in), plastic sinter filter (exchangeable), to exactly detect the relative humidity (0...100% RH) and the temperature (–35...+80 °C / –31...+176 °F) in ducts and to measure the differential pressure (max. ± 7000 Pa / ± 28 inWC) in air. International system of units SI (default) can be switched to Imperial (via Modbus). Incl. mounting flange and connection set ASD-06 (2 m / 78.74 in connecting hose, two pressure port nipples, screws).

The pressure sensor is applied to measure positive, negative or differential pressure in clean air and gaseous media. It is used in the clean room, medical and filter technology, ventilation and air conditioning ducts, spray booths, large-scale catering facilities, for filter monitoring and level measurement or for triggering frequency converters.

A long-term stable, digital humidity and temperature sensor and a pressure sensor with piezoresistive measuring element guarantee exact measurement results. These measurands are used to internally calculate the following parameters that can be retrieved via Modbus: temperature, relative humidity, dew point, absolute humidity, mixture ratio, enthalpy (ignoring atmospheric air pressure), differential pressure, volume flow, air density.

Innovative Modbus sensor with galvanically separated RS485-Modbus-interface, selectable bus termination resistance, DIP switch for setting the bus parameters and bus address in current-free state, internal LEDs for telegram status display, two separate push-in terminals. The sensor is factory-calibrated; an environmental precision adjustment by an expert is possible.

TECHNICAL DATA

Power supply:	24 V AC ($\pm 20\%$) and 15...36 V DC
Power consumption:	< 0,2 W / 24 V DC typical
System of units:	SI (default) or Imperial (switchable via Modbus)
Data points:	differential pressure [Pa] [inWC], volume flow [m ³ /h] [CFM], temperature [°C] [°F] relative humidity [%RH], dew point [°C] [°F], absolute humidity [g/m ³] [gr/ft ³], mixing ratio [g/kg] [gr/lb], enthalpy [kJ/kg] [Btu/lb], air density [kg/m ³] [lb/ft ³]

HUMIDITY & TEMPERATURE

Sensors:	digital humidity sensor with integrated temperature sensor , low hysteresis, high long-term stability
Sensor protection:	plastic sinter filter, Ø 16 mm / 0.63 in, L = 35 mm / 1.38 in, exchangeable
Measuring range, humidity:	0...100 %RH
Operating range, humidity:	0...95 %RH (without dew formation)
Deviation in humidity:	typically $\pm 2.0\%$ (20...80 %RH) at +25 °C / +77 °F, otherwise $\pm 3.0\%$
Measuring range, temperature:	-35...+80 °C / -31...+176 °F
Deviation in temperature:	typically ± 0.2 K at +25 °C / ± 0.4 °F at +77 °F

PRESSURE

Type of pressure:	differential pressure
Pressure connection:	with connection nozzles for pressure hose Ø 6 mm / 0.236 in
Measuring range, pressure:	-500... +500 Pa / -2.0...+2.0 inWC or -7000...+7000 Pa / -28... +28 inWC depending on the type of device, see table
Accuracy, pressure:	Type 8148 (500 Pa / 2.0 inWC): typically ± 13 Pa at +25 °C / ± 0.05 inWC at +77 °F Type 8147 (7000 Pa / 28 inWC): typically ± 105 Pa at +25 °C / ± 0.12 inWC at +77 °F compared to the calibrated reference device
Above- / below-pressure:	max. ± 50 kPa / ± 200 inWC
Zero point offset:	$\pm 10\%$ of final value
Hysteresis:	0.3% of final value
Linearity:	$< \pm 1\%$ of final value
Temp. drift values:	$\pm 0.1\%$ per °C / °F
Long-term stability:	$\pm 1\%$ per year
Medium:	clean air and non-aggressive, non-combustible gases
Media contacting parts:	Brass, Ni, thermoset plastic, Si, epoxy, RTV, BSG, UV silicone gel
Media temperature:	-20...+50 °C / -4...+122 °F (temperature-compensated 0...+50 °C / +32...+122 °F)

Bus protocol:	Modbus (RTU mode), address range 0... 247 adjustable
Baud rate:	9600, 19200, 38400 Baud
Signal filtering:	4 s / 32 s at temperature / humidity 0 s / 1 s / 10 s at pressure
Ambient temperature:	−30...+70 °C / −22...+158 °F
Electrical connection:	0.2 - 1.5 mm ² / 24 - 16 AWG, via push-in terminal
Cable connection:	cable gland, plastic (M 16 x 1.5; with strain relief, exchangeable, max. inner diameter 10.4 mm / 0.41 in)
Housing:	plastic, UV-resistant, material polyamide, 30 % glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016)
Housing dimensions:	126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in (Tyr 2)
Protective tube:	PLEUROFORM™ , material: polyamide (PA6), with torsion protection, Ø 20 mm / 0.79 in, NL = 235 mm / 9.25 in (optional 100 mm / 3.94 in), v _{max} = 30 m/s (air)
Process connection:	via mounting flange made of plastic (included in the scope of delivery)
Protection class:	III (according to EN 60730)
Protection type:	IP 65 (according to EN 60529) housing only! (PLEUROFORM IP 30)
Standards:	CE-conformity, electromagnetic compatibility according to EN 61326, EMC Directive 2014 / 30 / EU

ACCESSORIES see table

Switchable system of units

Measurements / Data points	SI (default)	→	Imperial
Differential pressure	[Pa]	→	[inWC]
Volume flow	[m ³ /h]	→	[CFM]
Temperature	[°C]	→	[°F]
Humidity	[% RH]	→	[% RH]
Dew point	[°C]	→	[°F]
Absolute humidity	[g/m ³]	→	[gr/ft ³]
Mixture ratio	[g/kg]	→	[gr/lb]
Enthalpy	[kJ/kg]	→	[Btu/lb]
Air density	[kg/m ³]	→	[lb/ft ³]

Measuring ranges	SI (default)	→	Imperial
Type 8148	−500...+500 Pa	→	−2.0...+2.0 inWC
Type 8147	−7000...+7000 Pa	→	−28...+28 inWC
Type 814x	−35...+80 °C	→	−31...+176 °F
Type 814x	0...100 % RH	→	0...100 % RH
Alternative parameters are calculated internally.			

Type 814x – MB

Measuring transducers for humidity, temperature, pressure, differential pressure and volume flow

Measuring ranges	Humidity	Temperature	Type	Output	Danfoss Part Number
Pressure					
± 500 Pa / 2.0 inWC					
−500 ... +500 Pa −2.0 ... +2.0 inWC	0...100% RH	−35...+80°C −31...+176°F	Type 8148-MB with automatic zero point calibration	Modbus	134B9408
± 7000 Pa / 28 inWC					
−7000 ... +7000 Pa −28 ... +28 inWC	0...100% RH	−35...+80°C −31...+176°F	Type 8147-MB without automatic zero point calibration	Modbus	134B9409
Note: System of units SI (default) or imperial (can be changed via Modbus).					

ACCESSOIRES

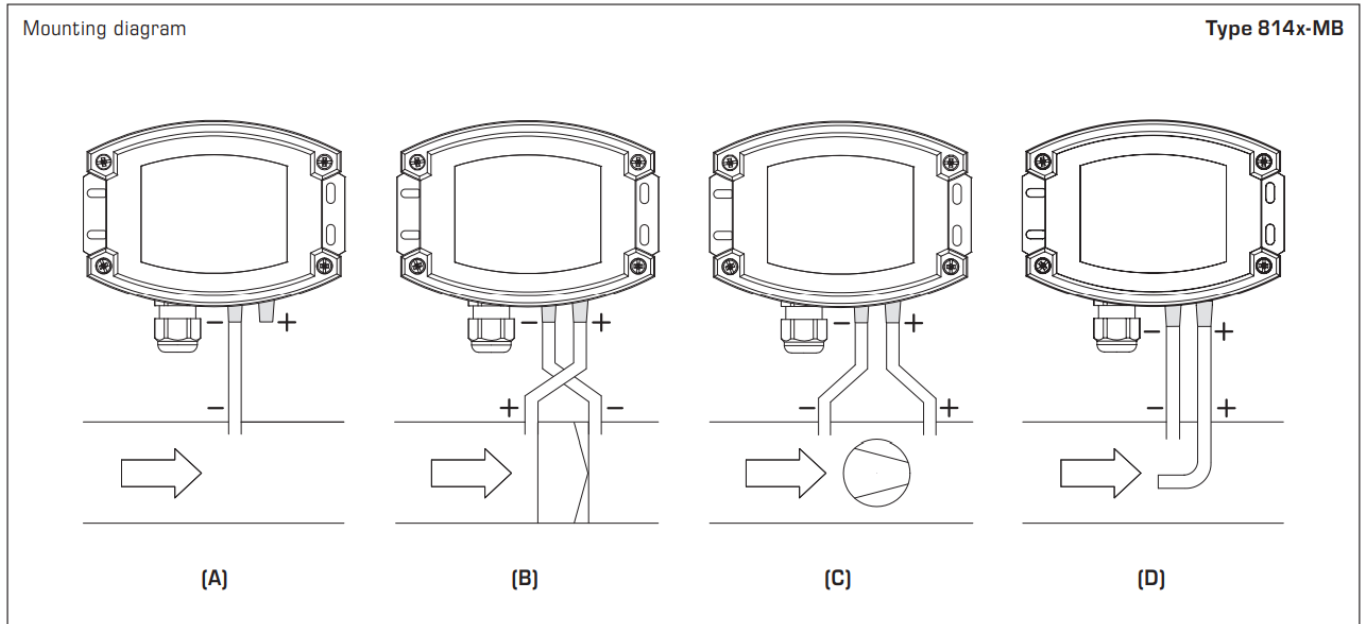
ASD-06

Connection set (included in the scope of delivery), consisting of 2 connection nipples (straight) made of ABS, 2 m / 78.74 in PVC hose (soft, UV-resistant) and 4 screws

MFT-20-K

Mounting flange, plastic (included in the scope of delivery)

Type 814x-MB



TYPES OF MONITORING:

Pressure connections at the pressure switch are marked with

P1 (+) for higher pressure and
P2 (–) for lower pressure.

- **(A) Below-atmospheric pressure**

- P1 (+) is not connected, but open to the atmosphere
- P2 (–) connected to inside of duct

- **(B) Filter**

- P1 (+) connected upstream of filter
- P2 (–) connected downstream of filter

- **(C) Ventilator**

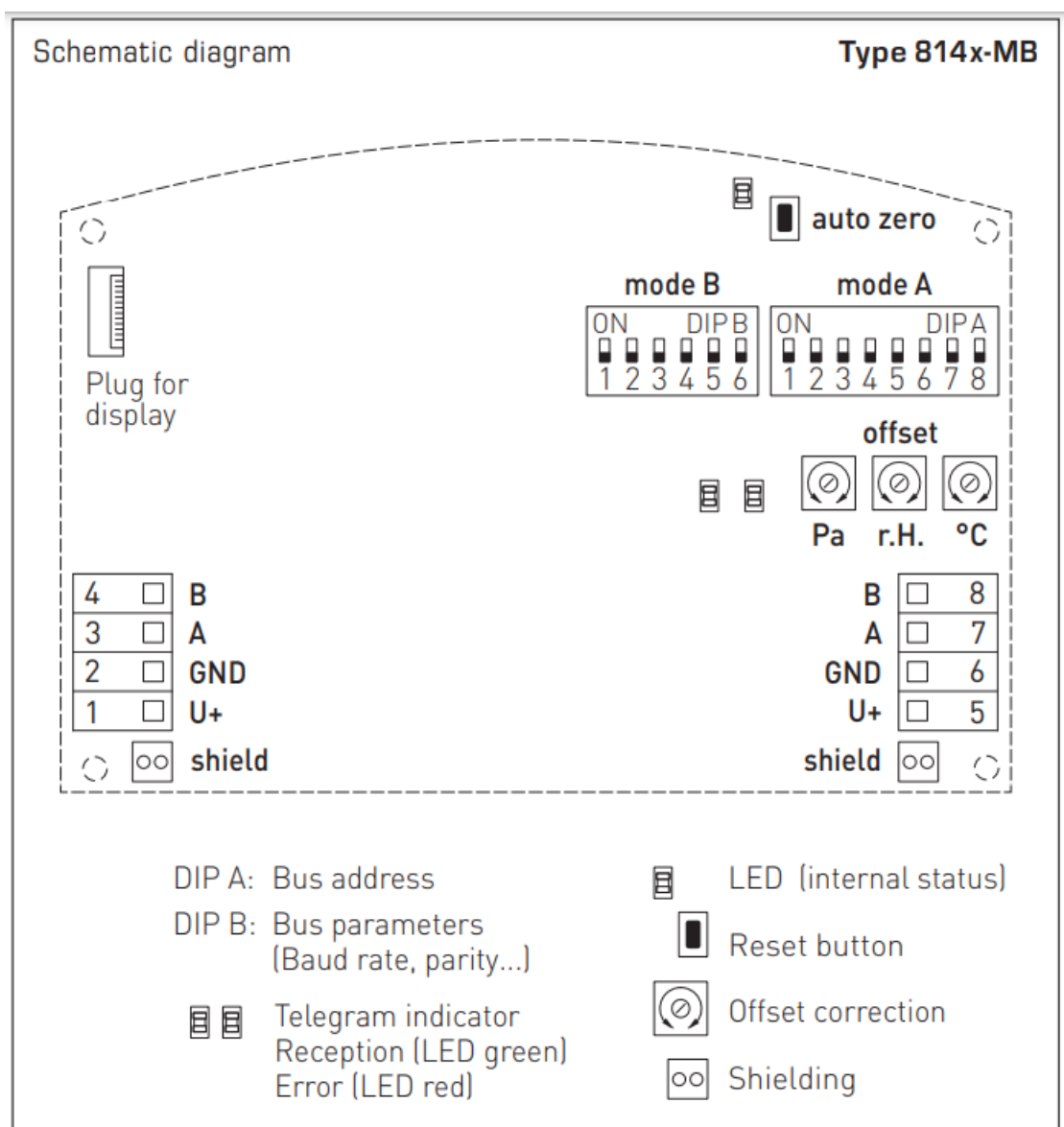
- P1 (+) connected downstream of ventilator
- P2 (–) connected upstream of ventilator

- **(D) Volume flow**

- P1 (+) dynamic pressure, connected in flow direction
- P2 (–) static pressure, connected free of dynamic pressure components

Conversion table for pressure values

Unit =	bar	mbar	Pa	kPa	inWC
1 Pa	0.00001 bar	0.01 mbar	1 Pa	0.001 kPa	0.00401865 inWC
1 kPa	0.01 bar	10 mbar	1000 Pa	1 kPa	4.01865 inWC
1 bar	1 bar	1000 mbar	100000 Pa	100 kPa	401.865 inWC
1 mbar	0.001 bar	1 mbar	100 Pa	0.1 kPa	0.401865 inWC
1 inWC	0.0980665 bar	98.0665 mbar	9806.65 Pa	9.80665 kPa	1 inWC



Manual zero point calibration (Pressure)

1. The device must be operative for at least 60 minutes before zero point setting is started.
2. Connect the two pressure inputs each P (+) and P (–) with a hose (differential pressure between the connections = 0).
3. To set the zero point, press the “auto zero” pushbutton for 10 seconds without interruption.

By pressing the pushbutton, a countdown of approx. 10 seconds is started. The yellow LED is blinking.

After the countdown period has elapsed, zero point calibration takes place. This is indicated by continuous LED light.

Note:

When releasing the pushbutton during countdown, zero point setting is immediately aborted!

Automatic zero point calibration (Pressure)

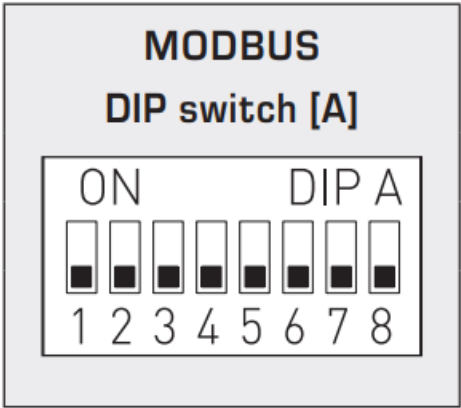
- A zero point calibration is carried out cyclically via an internal valve.
- The cycle time can be set between 15 minutes and 24 hours using the Register 4×0025.
- During the automatic calibration, the output value remains at its last pressure value.

Manual setting of the offset

- The sensors are pre-set and calibrated at the factory.
- Each measuring channel has a separate offset potentiometer for subsequent adjustment of the measurement.
- The adjusting range is ± 10 % of the measuring range (humidity / pressure) and approx. ± 5 K / 0.9 °F (temperature).

BUS ADDRESS

Bus address (binary coded, value selectable from 1 to 247)							
DIP 1	DIP 2	DIP 3	DIP 4	DIP 5	DIP 6	DIP 7	DIP 8
128	64	32	16	8	4	2	1
O N	O N	OFF	OFF	OFF	OFF	OFF	O N
Example shows 128 + 64 + 1 = 193 as Modbus address.							



The device address in the range of 1 to 247 is set at DIP switch [A].
For switch positions 1 to 8 see the table on the back!
Address 0 is reserved for broadcast messages.
Addresses greater than 247 must not be assigned and are ignored by the device. The DIP switches are binary-coded with the following values:

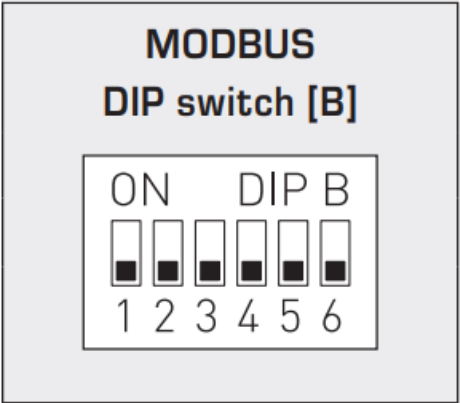
- DIP 1 = 128 DIP 1 = ON
- DIP 2 = 64 DIP 2 = ON

- DIP 3 = 32 DIP 3 = OFF
- DIP 4 = 16 DIP 4 = OFF
- DIP 5 = 8 DIP 5 = OFF
- DIP 6 = 4 DIP 6 = OFF
- DIP 7 = 2 DIP 7 = OFF
- DIP 8 = 1 DIP 8 = ON

The switch positions shown here result in the Modbus address 128 + 64 + 1 = 193

BUS PARAMETERS

Baud rate (selectable)	DIP 1	DIP 2
9600 baud	O N	OFF
19200 baud	O N	O N
38400 baud	OFF	O N
Reserved	OFF	OFF



Parity (selectable)	DIP 3
EVEN (numbered)	O N
ODD (numbered)	OFF

Parity check (on / off)	DIP 4
Active (1 stop bit)	O N
Inactive (no parity) (2 stop bits)	OFF

8N1 mode (on / off)	DIP 5
Active	O N
Inactive (default)	OFF

Bus termination (on/off)	DIP 6
Active	O N
Inactive	OFF

The baud rate (speed of transmission) is set at DIP switches 1 and 2 of DIP switch block [B].
Selectable are 9600 baud, 19200 baud, or 38400 baud – see table!

- Parity is set at DIP switch 3 of DIP switch block [B].
 - Selectable are EVEN or ODD – see table!
 - Parity check is activated via DIP switch 4 of DIP switch block [B].
 - Selectable are active (1 stop bit), or inactive (2 stop bits), i.e. no parity check – see table!
- The 8N1 mode is activated via DIP switch 5 of DIP switch block [B].
- The functionality of DIP switch 3 (parity) and DIP switch 4 (parity check) of DIP switch block [B] is therefore deactivated. Selectable are 8N1 active or inactive (default) – see table !.
 - Bus termination is activated via DIP switch 6 of DIP switch block [B].
 - Selectable are active (bus termination resistance of 120 Ohm), or inactive (no bus termination) – see table!

COMMUNICATION INDICATOR

Communication is indicated via two LEDs. Error-free received telegrams are signaled by the green LED lighting up, regardless of the device address. Faulty telegrams or triggered Modbus exception telegrams are depicted by the red LED lighting up.

DIAGNOSTICS

An error diagnostic function is integrated

TELEGRAMS

Function 04 Read Input Register

Register	Parameter		Data Type	Value	Range
3x0001	Differential pressure	Without filtering	Signed 16 Bit	-5000...+5000 -7000...+7000 -2000...+2000 -2813...+2813	-500.0...+500.0 Pa -7000...+7000 Pa -2.000...+2.000 inWC -28.13...+28.13 inWC
3x0002	Differential pressure	Filtering 1 s	Signed 16 Bit	-5000...+5000 -7000...+7000 -2000...+2000 -2813...+2813	-500.0...+500.0 Pa -7000...+7000 Pa -2.000...+2.000 inWC -28.13...+28.13 inWC
3x0003	Differential pressure	Filtering 10 s	Signed 16 Bit	-5000...+5000 -7000...+7000 -2000...+2000 -2813...+2813	-500.0...+500.0 Pa -7000...+7000 Pa -2.000...+2.000 inWC -28.13...+28.13 inWC
3x0004	Temperature	Sampling 4 s	Signed 16 Bit	-350... +800 -310...+1760	-35.0... +80.0 °C -31.0...+176.0 °F
3x0005	Temperature	Filtering 32 s	Signed 16 Bit	-350... +800 -310...+1760	-35.0... +80.0 °C -31.0...+176.0 °F
3x0006	Relative humidity	Sampling 4 s	Signed 16 Bit	0...1000	0.0...100.0 %RH
3x0007	Relative humidity	Filtering 32 s	Signed 16 Bit	0...1000	0.0...100.0 %RH
3x0008	–				
3x0009	–				
3x0010	Volume flow (high byte)	Computed value	Unsigned 16 Bit	0...99 0...99	Value* 10000 m³/h Value* 10000 CFM
3x0011	Volume flow (low byte)	Computed value	Unsigned 16 Bit	0...9999 0...9999	0...9999 m³/h 0...9999 CFM
3x0012	Dew point	Computed value	Signed 16 Bit	0... 500 320...1220	0.0... +50.0 °C +32.0...+122.0 °F
3x0013	Absolute humidity	Computed value	Signed 16 Bit	0...800 0...349	0.0...80.0 g/m³ 0.0...34.9 gr/ft³
3x0014	Mixing ratio	Computed value	Signed 16 Bit	0... 800 0...5600	0.0... 80.0 g/kg 0.0...560.0 gr/lb
3x0015	Enthalpy	Computed value	Signed 16 Bit	0...850 0...360	0.0...85.0 kJ/kg 0.0...36.0 Btu/lb
3x0016	Air density	Computed value	Unsigned 16 Bit	500...1600 312... 998	0.500...1.600 kg/m³ 31.2 ... 99.8 lb/ft³

Function 05 Write Single Coil

Register	Parameter			Data Type	Value	Range	
0x0001	Auto zero (Differential pressure)			Bit 0	0 / 1	OFF – ON	
0x0002	System of units	SI	→	Imperial	Bit 1	0 / 1	SI (Default) –
	Differential pressure	[Pa]	→	[in WC]			Imperial
	Volume flow	[m ³ /h]	→	[CFM]			
	Temperature	[°C]	→	[°F]			
	Relative humidity	[% RH]		[% RH]			
	Dew point	[°C]	→	[°F]			
	Absolute humidity	[g/m ³]	→	[gr/ft ³]			
	Mixing ratio	[g/kg]	→	[gr/lb]			
	Enthalpy	[kJ/kg]	→	[Btu/lb]			
	Air density	[kg/m ³]	→	[lb/ft ³]			

Function 06 Write Single Register & Function 16 Write Multiple Register

Register	Parameter	Data Type	Value	Range
4×0023 *	k value	Unsigned 16 Bit	1...2000	1...2000
4×0024	Function type **	Unsigned 8 Bit	1...3	1...3
4×0025 *	Auto zero time	Unsigned 16 Bit	15...1440	15...1440 min
4×0026 *	Height above sea level	Signed 16 Bit	−500...5000	−500...5000 m

Note* (Register 4×0023, 4×0025, 4×0026)

The computed coefficients for the volume flow display are **not** saved in the permanent memory and are lost at zero voltage. They must be reset when the communication begins.

Selection of the function type ** (Register 4×0024)

Type 1:

Rosenberg, Comefri,
Gebhardt Nicotra

$$V = k \cdot \sqrt{\frac{2 \cdot \Delta p}{\rho}}$$

Type 2:

Ziehl-Abegg,
EBM Papst

$$V = k \cdot \sqrt{\Delta p}$$

Type 3:

Fläkt Woods

$$V = \frac{3600}{k} \cdot \sqrt{\Delta p}$$

V = Volume flow [m³/h]

k = k factor

Δp = Differential pressure of the static pressures [Pa]

ρ = Air density [kg/m³]

Function 08 Diagnostics

The following sub function codes are supported

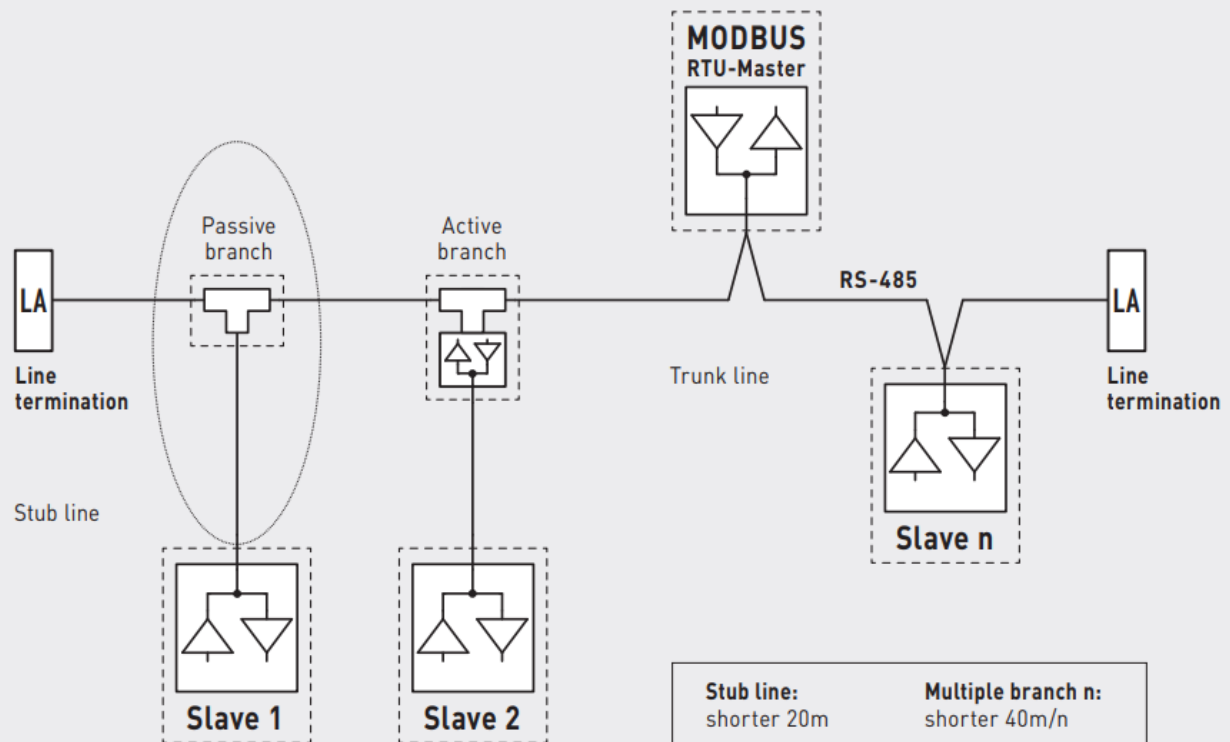
Sub Function Code	Parameter	Data Type	Answer
00	Echo of transmission data (Loopback)		Echo data
01	Restart Modbus (Reset listen-only mode)		Echo telegram
04	Activation listen-only mode		No answer
10	Delete counter		Echo telegram
11	Counter bus telegrams	Unsigned 16 Bit	All valid bus telegrams
12	Counter communication errors (Parity, CRC, frame errors, etc.)	Unsigned 16 Bit	Faulty bus telegrams
13	Counter exception telegrams	Unsigned 16 Bit	Error counter
14	Counter slave telegrams	Unsigned 16 Bit	Slave telegrams
15	Counter telegrams without answer	Unsigned 16 Bit	Broadcast messages (address 0)

Function 17 Report Slave ID

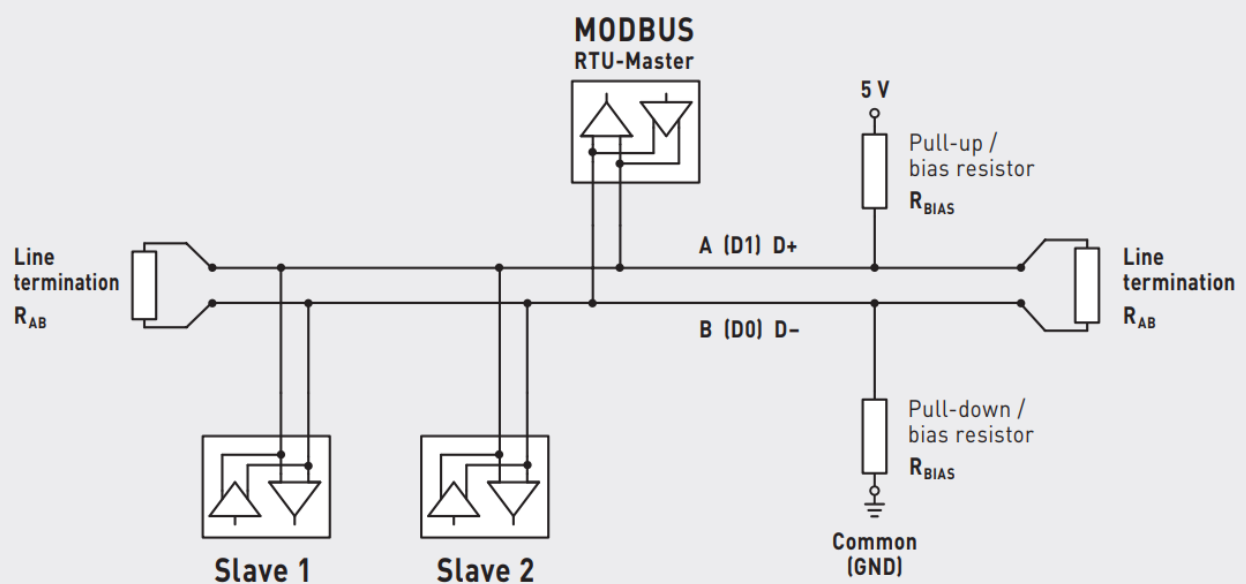
Composition of answer telegram

Byte No.	Parameter	Data Type	Answer
00	Number of bytes	Unsigned 8 Bit	6
01	Slave ID (device type)	Unsigned 8 Bit	18 = Type 814x
02	Slave ID (device class)	Unsigned 8 Bit	30 = Pressure Transmitter
03	Status	Unsigned 8 Bit	255 = RUN, 0 = STOP
04	Version number (release)	Unsigned 8 Bit	1...9
05	Version number (version)	Unsigned 8 Bit	1...99
06	Version number (index)	Unsigned 8 Bit	1

General layout of bus structure



Bus topology with terminating and bias resistors



- Terminating resistor may only be installed at the ends of the bus line.
- In networks with repeaters not more than two line terminations are allowed.
- Line termination at the device can be activated via DIP switch 6.
- The bias resistors for bus level definition in the resting state are usually activated at the Modbus master / repeater.
- The maximum number of subscribers per Modbus segment is 32 devices.
- When the number of subscribers is greater, the bus must be subdivided into several segments separated by repeaters. The subscriber address can be set from 1 to 247.

- For the bus line, a twisted-pair cable data line / power supply line and copper mesh wire shield must be used. Therefore, the line capacitance should be less than 100 pF / m (e.g. Profibus cable).

Installation and Commissioning

Notes on installation:

Mounting shall take place while observing all relevant regulations and standards applicable for the place of measurement (e.g. such as welding instructions, etc.). Particularly the following shall be regarded:

- VDE / VDI directive technical temperature measurements, measurement set – up for temperature measurements.
- The EMC directives must be adhered to.
- It is imperative to avoid parallel laying of current-carrying lines.
- We recommend to use shielded cables with the shielding being attached at one side to the DDC / PLC.

Before mounting, make sure that the existing thermometer's technical parameters comply with the actual conditions at the place of utilization, in particular in respect of:

- Measuring range
- Permissible maximum pressure, flow velocity
- Installation length, tube dimensions
- Oscillations, vibrations, shocks are to be avoided (< 0.5 g)

Attention! In any case, please observe the mechanical and thermal load limits of the protective tubes according to DIN 43763 or according to specific S+S standards!

Flange mounting:

In case of flange mounting, screws in the flange part must be equally tightened. The lateral pressure screw must clamp securely, otherwise the feeler shaft might slip through.

Notes on commissioning:

This device was calibrated, adjusted and tested under standardised conditions.

When operating under deviating conditions, we recommend performing an initial manual adjustment on-site during commissioning and subsequently at regular intervals.

Commissioning is mandatory and may only be performed by qualified personnel!

General notes

Our "General Terms and Conditions for Business" together with the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry" (ZVEI conditions) including supplementary clause "Extended Retention of Title" apply as the exclusive terms and conditions.

In addition, the following points are to be observed:

- Devices must only be connected to safety extra-low voltage and under dead-voltage condition. To avoid damages and errors at the device (e.g. by voltage induction) shielded cables are to be used, laying parallel with current carrying lines is to be avoided, and EMC directives are to be observed.
- This device shall only be used for its intended purpose. Respective safety regulations issued by the VDE, the states, their control authorities, the TÜV and the local energy supply company must be observed. The

purchaser has to adhere to the building and safety regulations and has to prevent perils of any kind.

- No warranties or liabilities will be assumed for defects and damages arising from improper use of this device.
- Consequential damages caused by a fault in this device are excluded from warranty or liability.
- These devices must be installed and commissioned by authorised specialists.
- The technical data and connecting conditions of the mounting and operating instructions delivered together with the device are exclusively valid. Deviations from the catalogue representation are not explicitly mentioned and are possible in terms of technical progress and continuous improvement of our products.
- In case of any modifications made by the user, all warranty claims are forfeited.
- This device must not be installed close to heat sources (e.g. radiators) or be exposed to their heat flow.
- Direct sun irradiation or heat irradiation by similar sources (powerful lamps, halogen spotlights) must absolutely be avoided.
- Operating this device close to other devices that do not comply with EMC directives may influence functionality.
- This device must not be used for monitoring applications, which serve the purpose of protecting persons against hazards or injury, or as an EMERGENCY STOP switch for systems or machinery, or for any other similar safety-relevant purposes.
- Dimensions of enclosures or enclosure accessories may show slight tolerances on the specifications provided in these instructions.
- Modifications of these records are not permitted.
- In case of a complaint, only complete devices returned in original packing will be accepted.

These instructions must be read before installation and commissioning and all notes provided therein are to be regarded!

134r0065/002;1: Frozen :29-Jan-2024

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Bus address, binary coded

1	00000001	51	00110011	101	01100101	151	10010111	201	1100100 1
2	00000010	52	00110100	102	01100110	152	10011000	202	1100101 0
3	00000011	53	00110101	103	01100111	153	10011001	203	1100101 1
4	00000100	54	00110110	104	01101000	154	10011010	204	1100110 0
5	00000101	55	00110111	105	01101001	155	10011011	205	1100110 1
6	00000110	56	00111000	106	01101010	156	10011100	206	1100111 0
7	00000111	57	00111001	107	01101011	157	10011101	207	1100111 1


8	00001000	58	00111010	108	01101100	158	10011110	208	1101000 0
9	00001001	59	00111011	109	01101101	159	10011111	209	1101000 1
10	00001010	60	00111100	110	01101110	160	10100000	210	1101001 0
11	00001011	61	00111101	111	01101111	161	10100001	211	1101001 1
12	00001100	62	00111110	112	01110000	162	10100010	212	1101010 0
13	00001101	63	00111111	113	01110001	163	10100011	213	1101010 1
14	00001110	64	01000000	114	01110010	164	10100100	214	1101011 0
15	00001111	65	01000001	115	01110011	165	10100101	215	1101011 1
16	00010000	66	01000010	116	01110100	166	10100110	216	1101100 0
17	00010001	67	01000011	117	01110101	167	10100111	217	1101100 1
18	00010010	68	01000100	118	01110110	168	10101000	218	1101101 0
19	00010011	69	01000101	119	01110111	169	10101001	219	1101101 1
20	00010100	70	01000110	120	01111000	170	10101010	220	1101110 0
21	00010101	71	01000111	121	01111001	171	10101011	221	1101110 1
22	00010110	72	01001000	122	01111010	172	10101100	222	1101111 0
23	00010111	73	01001001	123	01111011	173	10101101	223	1101111 1
24	00011000	74	01001010	124	01111100	174	10101110	224	1110000 0
25	00011001	75	01001011	125	01111101	175	10101111	225	1110000 1
26	00011010	76	01001100	126	01111110	176	10110000	226	1110001 0
27	00011011	77	01001101	127	01111111	177	10110001	227	1110001 1
28	00011100	78	01001110	128	10000000	178	10110010	228	1110010 0

29	00011101	79	01001111	129	10000001	179	10110011	229	1110010 1
30	00011110	80	01010000	130	10000010	180	10110100	230	1110011 0
31	00011111	81	01010001	131	10000011	181	10110101	231	1110011 1
32	00100000	82	01010010	132	10000100	182	10110110	232	1110100 0
33	00100001	83	01010011	133	10000101	183	10110111	233	1110100 1
34	00100010	84	01010100	134	10000110	184	10111000	234	1110101 0
35	00100011	85	01010101	135	10000111	185	10111001	235	1110101 1
36	00100100	86	01010110	136	10001000	186	10111010	236	1110110 0
37	00100101	87	01010111	137	10001001	187	10111011	237	1110110 1
38	00100110	88	01011000	138	10001010	188	10111100	238	1110111 0
39	00100111	89	01011001	139	10001011	189	10111101	239	1110111 1
40	00101000	90	01011010	140	10001100	190	10111110	240	1111000 0
41	00101001	91	01011011	141	10001101	191	10111111	241	1111000 1
42	00101010	92	01011100	142	10001110	192	11000000	242	1111001 0
43	00101011	93	01011101	143	10001111	193	11000001	243	1111001 1
44	00101100	94	01011110	144	10010000	194	11000010	244	1111010 0
45	00101101	95	01011111	145	10010001	195	11000011	245	1111010 1
46	00101110	96	01100000	146	10010010	196	11000100	246	1111011 0
47	00101111	97	01100001	147	10010011	197	11000101	247	1111011 1
48	00110000	98	01100010	148	10010100	198	11000110		
49	00110001	99	01100011	149	10010101	199	11000111		
50	00110010	100	01100100	150	10010110	200	11001000		

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Documents / Resources

	<p>SplusS 814x-MB Humidity Temperature And Pressure Sensor [pdf] Instruction Manual 814x-MB Humidity Temperature And Pressure Sensor, 814x-MB, Humidity Temperature And Pressure Sensor, Temperature And Pressure Sensor, Pressure Sensor, Sensor</p>
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References

- [S+S Regeltechnik | Ihr sensorik Partner](#)
- [User Manual](#)

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