

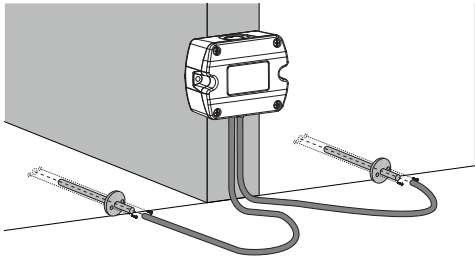
QUICK GUIDE

EE600 - Differential Pressure Sensor

Find this document and further product information on our website at www.epluse.com/ee600.

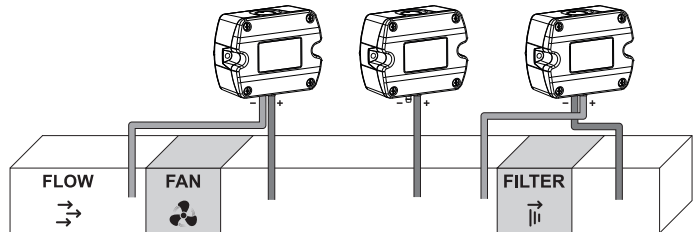
Installation

Pressure Connection



Use a Ø7.5 mm drill for installing the pressure connection nipples into the duct.

Installation Examples



User Interface - LED Indication

Green LED

- Flashing (1s interval) = EE610 operates normally, the measured data is within the selected measuring range
- One flash (2s) = Confirms adjustment or return to factory settings
- Off = No power supply or electronics failure
- Fast flashing (0.2 s interval) = Auto-zero is executed, first time 10 s after start/reset

Red LED

- Flashing (1s interval) = The measured data is out of the selected range (overload or reversed pressure connection)
- One flash (2s) = Indicates the failure of the attempt to adjust zero point or span point, or to return to factory adjustment

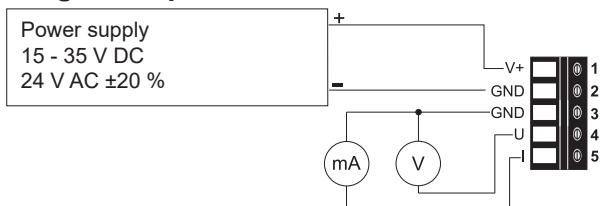
Connection Diagram



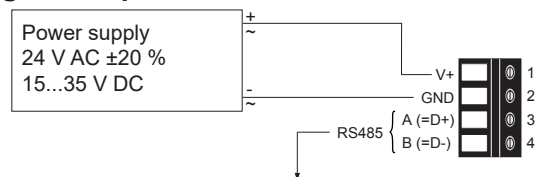
Important note:

The manufacturer cannot be held responsible for personal injuries or damage to property as a result of incorrect handling, installation, wiring, power supply and maintenance of the device.

Analogue Output



Digital Output



EE600 with Analogue Output

S1	S2	MR ¹⁾	S3	S4	Time	S5	S6	Unit	S7	DPB ²⁾	S8	Output	S9	Setting ³⁾
0	0	100 %	0	0	50 ms	0	0	Pa	0	on	0	0 - 10 V/4 - 20 mA	0	DIP switch
1	0	75 %	1	0	500 ms	1	0	mbar	1	off	1	0 - 5 V/0 - 20 mA	1	PCS10
0	1	50 %	0	1	2 s	0	1	inch WC						
1	1	25 %	1	1	4 s	1	1	kPa						

1) Measuring range 2) Display backlight 3) These and further settings can be changed with PCS10 via USB configuration adapter (HA011066) while DIP switch S9 = 1. Only available with version with 10 DIP switches.

INFORMATION

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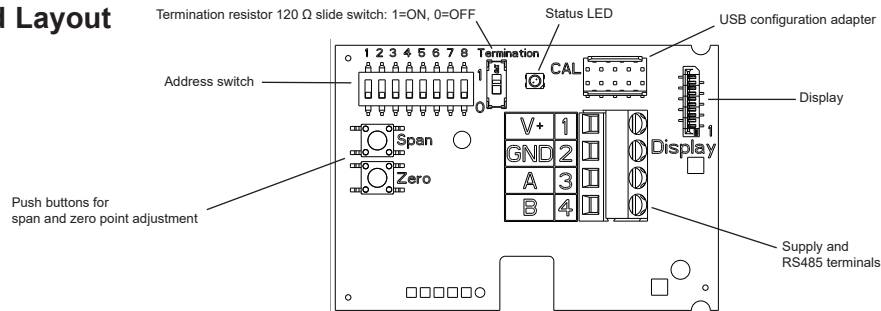


LG Linz Fn 165761 t • VAT No. ATU44043101
 Place of Jurisdiction: 4020 Linz • DVR0962759

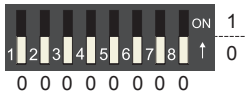
EE600 with RS485 Interface

The bus termination shall be realized with 120 Ω resistor (slide switch on board).

Electronics Board Layout



Address Setting



Address setting via Software

All DIP switches at position 0 → address has to be set via Software (via PCS10 Product Configuration Software or via protocol BACnet/Modbus). Default address 43.
 Example: Address is set via configuration software.



Address setting via Dip-Switch

Setting the DIP switches to any other address than 0, overrules the default address (43) or the address set via Software.
 Example: Address set to 3 (0000 0011 binary).

Communication Settings

	BACnet		Modbus	
	Factory settings	Selectable values	Factory settings	Selectable values
Baud rate	As ordered per type number	9600, 19200, 38400, 57600, 76800	As ordered per type number	9600, 19200, 38400
Data bits	8	8	8	8
Parity	None	None	Even	None, odd, even
Stop bits	1	1	1	1, 2
Address	43	0...127	43	1...247

BACnet Protocol

The EE600 PICS (Product Implementation Conformance Statement) is available on the website at www.epluse.com/ee600.

The recommended settings for multiple devices in a BACnet MS/TP network are 38400, 8, None, 1.

Address and Baud rate can be set via:

1. PCS10, Product Configuration Software and the USB configuration adapter cable HA011066.
2. BACnet protocol, see the PICS.

Modbus Protocol

The recommended settings for multiple devices in a Modbus RTU network are 9600, 8, even, 1.

Address, Baud rate, parity and stop bits can be set via:

1. PCS10, Product Configuration Software and the USB configuration adapter cable HA011066.
2. Modbus protocol in the register 60001 (0x00) and 60002 (0x01).

See Application Note Modbus AN0103 (available on www.epluse.com/ee600).

The measured parameters are saved as a 32 bit floating point value and as 16 bit signed integer value, see the Modbus register map below.

Modbus Register Map

FLOAT32				INT16				
Parameter	Unit	Register number ¹⁾ [DEC]	Protocol Address ²⁾ [HEX]	Parameter	Unit	Scale ³⁾	Register number ¹⁾ [DEC]	Protocol Address ²⁾ [HEX]
Read register: function code 0x03 / 0x04				Read register: function code 0x03 / 0x04				
Differential pressure	mm H ₂ O	1211	0x4BA	Differential pressure	mm H ₂ O	10	4106	0x1009
Differential pressure	mbar	1213	0x4BC	Differential pressure	mbar	100	4107	0x100A
Differential pressure	Pa	1215	0x4BE	Differential pressure	Pa	1	4108	0x100B
Differential pressure	kPa	1217	0x4C0	Differential pressure	kPa	1000	4109	0x100C
Differential pressure	inch WC	1219	0x4C2	Differential pressure	inch WC	100	4110	0x100D
Air velocity	m/s	1041	0x410	Air velocity	m/s	100	4021	0xFB4
Air velocity	ft/min	1043	0x412	Air velocity	ft/min	1	4022	0xFB5
Volume flow	m ³ /h	1055	0x41E	Volume flow	m ³ /h	1	4028	0xFBB
Volume flow	l/s	1057	0x420	Volume flow	l/s	1	4029	0xFBC
Volume flow	m ³ /s	1059	0x422	Volume flow	m ³ /s	1000	4030	0xFBD
Volume flow	ft ³ /min	1181	0x49C	Volume flow	ft ³ /min	1	4091	0xFFA
Filter monitoring	%	1075	0x432	Filter monitoring	%	10	4038	0xFC5
Level indicator	cm	1077	0x434	Level indicator	cm	10	4039	0xFC6
Level indicator	inch	1079	0x436	Level indicator	inch	10	4040	0xFC7

1) Register number starts from 1 2) Protocol address starts from 0 3) 1xx is scale. E.g. for 1:100, reading of 2550 is equivalent to 25.5