



The weather station WS/S 4.1 is used for recording weather data. Four conventional sensors can be connected to the WS/S 4.1. The connection to the bus is established via the bus connection terminal at the front of the device. The device is ready for operation after connecting the mains voltage of 115...230 V AC and the bus voltage. The weather station WS/S 4.1 is parameterised via ETS2 V1.3 or higher.

Technical Data

Power supply	– Bus voltage – Power input, bus – Mains voltage U_s – Power consumption – Power input, mains – Leakage loss	21 ... 32 V DC < 10 mA 115 ... 230 V AC (+ 10 % – 15 %), 50/60 Hz max. 11 W, at 230 V AC 80/40 mA, at 115/230 V AC max. 3 W, at 230 V AC
Auxiliary voltage output for sensor supply	– Nominal voltage U_n – Nominal current I_n	24 V DC 300 mA
Inputs	– Number – Input signal/resolution/accuracy – Input resistance to voltage measurement – Input resistance to current measurement	4 independent sensor inputs 0 – 1 V/1 mV/+/- 2 % from upper limit of effect. range 0 – 5 V/5 mV/+/- 2 % from upper limit of effect. range 0 – 10 V/10 mV/+/- 2 % from upper limit of effect. range 1 – 10 V/10 mV/+/- 2 % from upper limit of effect. range 0 – 20 mA/20 μ A/+/- 2 % from upper limit of eff. range 4 – 20 mA/20 μ A/+/- 2 % from upper limit of eff. range 0 – 1000 ohm resistance/2.5 ohm/+/- 2 % from upper limit of effect. range PT100 in 2-conductor technology/0.1 K/+/- 1 K Floating contact interrogation (pulse width min. 100 ms) > 50 kohm 260 ohm
Connections	– EIB / KNX – Mains voltage – Supply for the sensors – Sensor inputs	Via bus connection terminal, screwless Via screw terminals Via screw terminals Via screw terminals
Connecting terminals	– Screw terminals – Tightening torque	0.2 ... 2.5 mm ² finely stranded 0.2 ... 4.0 mm ² single-core max. 0.6 Nm
Operating and display elements	– Programming LED – Programming button	For assignment of the physical address For assignment of the physical address
Type of protection	– IP 20	In accordance with DIN EN 60 529
Protection class	– II	In accordance with DIN EN 61 140
Temperature range	– Operation – Storage – Transport	– 5 °C...+ 45 °C – 25 °C...+ 55 °C – 25 °C...+ 70 °C
Environment conditions	– max. humidity	93%, without bedewing
Design	– DIN rail mounted device (MDRC) – Dimensions – Mounting depth in modules – Mounting depth	Modular installation device ProM 90 x 72 x 64.5 mm (H x W x D) 4, 4 modules at 18mm 64.5 mm

Installation	– On 35 mm mounting rail	In accordance with DIN EN 60 715
Mounting position	– As required	
Weight	– 0.2 kg	
Housing, colour	– Plastic, grey	
Certification	– EIB / KNX in accordance with EN 50 090-1, -2	Certificate
CE mark	– In accordance with EMC and low-voltage guidelines	

Application program	Number of communication objects	Max. number of group addresses	Max. number of associations
Weather data/1	50	100	100

Note ETS2 V 1.3 or higher is required for programming. When using ETS3, a file of type “.VD3” must be imported. The application program is stored in ETS2/ETS3 under ABB/Input/Weather station, 4-fold.

Circuit diagrams

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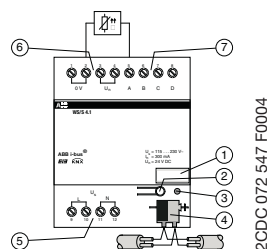


Fig. 2: Circuit diagram of a PT100 temperature sensor

2CDC 072 547 F0004

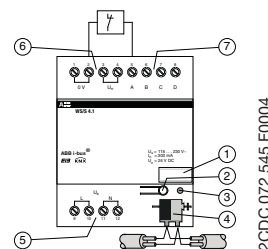


Fig. 3: Circuit diagram of a floating contact

2CDC 072 545 F0004

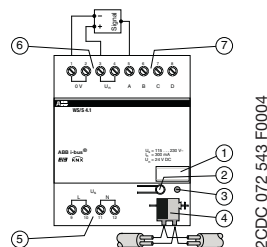


Fig. 4: Circuit diagram of a 3-conductor sensor with intrinsic supply

2CDC 072 543 F0004

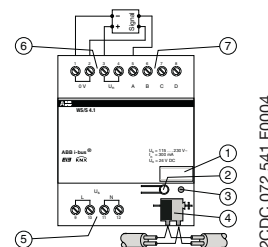


Fig. 5: Circuit diagram of a 4-conductor sensor with intrinsic supply

2CDC 072 541 F0004

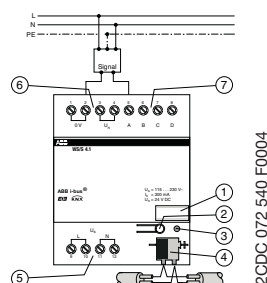
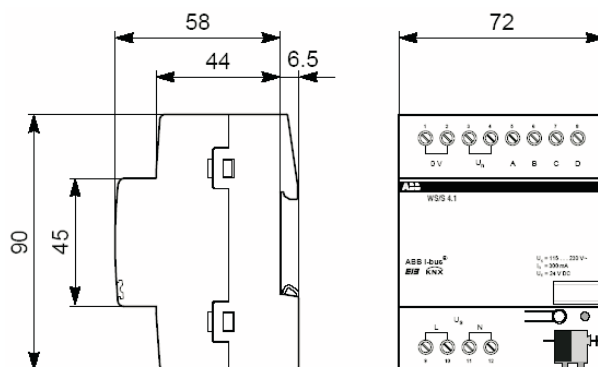


Fig. 6: Circuit diagram of a sensor with an external supply

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- 1 Label carrier
- 2 Programming button
- 3 Programming LED
- 4 Bus connection terminal
- 5 Power supply
- 6 Auxiliary voltage output to supply the sensors
- 7 Sensor inputs

Dimension drawing



2CDC 072 042 F0004

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Notes

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