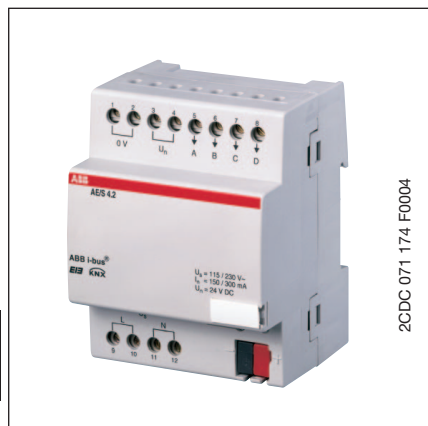




Analogue Input AE/S 4.2 is used to record analogue data. Four conventional sensors can be connected to AE/S 4.2. The connection to the bus is established using the enclosed bus connection terminal at the front of the device. The device is ready for operation after connecting the mains voltage of 115...230 V AC and the bus voltage. Analogue Input AE/S 4.2 is parameterised using ETS2 V1.3 or higher.

Technical Data

Power supply	– Bus voltage	21 ... 32 V DC
	– Power input, bus	< 10 mA
	– Mains voltage U _s	115 ... 230 V AC (+ 10 % – 15 %), 50/60 Hz
	– Power consumption	Max. 11 W, at 230 V AC
	– Power input, mains	80/40 mA, at 115/230 V AC
	– Leakage loss	Max. 3 W, at 230 V AC
Auxiliary voltage output to supply the sensors	– Nominal voltage U _n	24 V DC
	– Nominal current I _n	300 mA
Inputs	– Number	4 independent sensor inputs
	– Input signal/resolution/accuracy	0 – 1 V / 1 mV / +/- 2 % of the upper limit of the effective range (of ULE)
		0 – 5 V / 5 mV / +/- 2 % of ULE
		0 – 10 V / 10 mV / +/- 2 % of ULE
		1 – 10 V / 10 mV / +/- 2 % of ULE
		0 – 20 mA / 20 µA / +/- 2 % of ULE
		4 – 20 mA / 20 µA / +/- 2 % of ULE
		0 – 1000 ohm resistance / 2.5 ohm / +/- 2 % of ULE
		PT100 2-conductor technology
		– 30...+ 70 °C / 0.1 K / +/- 1 K of ULE
		PT100 2-conductor technology
		– 200...+ 800 °C / 1.5 K / +/- 10 K of ULE
Floating contact interrogation (pulse width min. 100 ms)		
– Input resistance to voltage measurement	> 50 kohm	
– Input resistance to current measurement	260 ohm	
Connections	– EIB / KNX	Via bus connection terminal, screwless
	– Mains voltage	Via screw terminals
	– Supply for the sensors	Via screw terminals
	– Sensor inputs	Via screw terminals
Connecting terminals	– Screw terminals	0,2 ... 2,5 mm ² finely stranded 0,2 ... 4,0 mm ² single-core
	– Tightening torque	Max. 0.6 Nm
Operating and display elements	– Programming LED	For assigning the physical address
	– Programming button	For assigning 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
Design	– DIN rail mounted device (MDRC) – Dimensions – Mounting width in modules – Mounting depth	Modular installation device, ProM 90 x 72 x 64.5 mm (H x W x D) 4, 4 modules at 18 mm 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	

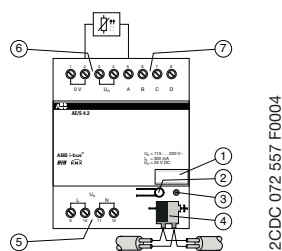
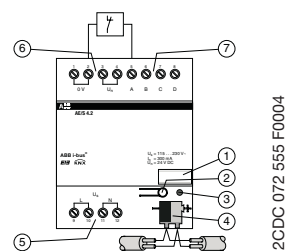
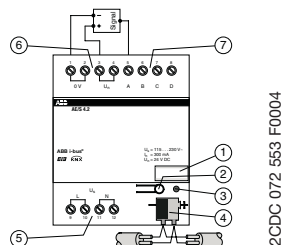
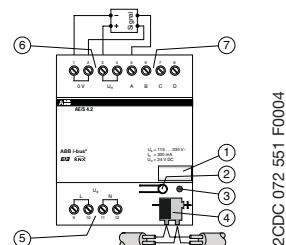
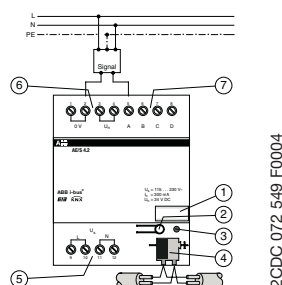
Application program	Number of communication objects	Max. number of group addresses	Max. number of assignments
Threshold value measurement/1	42	100	100

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/Analogue Input, 4-fold.

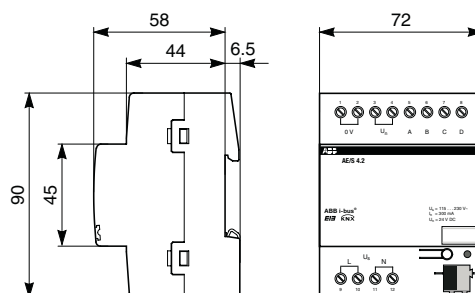
Circuit diagrams

5

Fig. 2: Circuit diagram of a
PT100 temperature sensorFig. 3: Circuit diagram
of a floating contactFig. 4: Circuit diagram of a
3-conductor sensor with intrinsic
supplyFig. 5: Circuit diagram of a 4-conductor
sensor with intrinsic supplyFig. 6: Circuit diagram of a sensor with an
external supply

- 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 072 039 F0004

5

