

Codix 850/851



Your benefit

- multifunctional, i.e. all usual measuring signals can be connected directly (voltage, current, thermocouples, resistance thermometers, resistance)
- flexible limit value monitoring (2 limit values)
- HART® communication socket for sensor parameters setting
- LC display and keys for on-site operation for model 851
- programmable input characteristic curve with up to 36 control points

More advantages

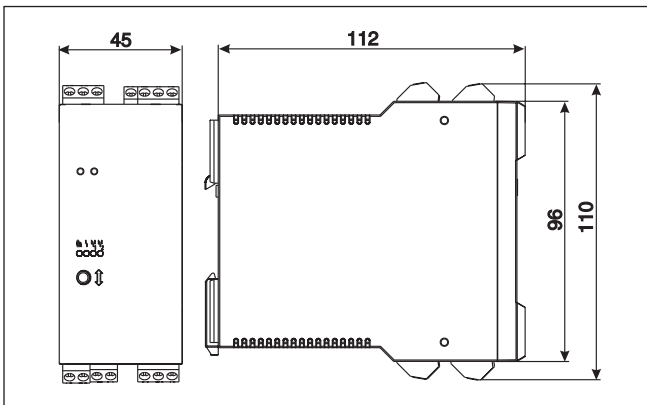
- programmable via PC or keys
- integrated measuring transducer power supply
- RS232 interface for parameter setting and measured values output
- analog output with scale factor for current or voltage of the linearised input

Technical data

Supply voltage:	18 ... 36 V DC (galvanically isolated)
Power consumption:	max. 4 VA
Display:	5-digit LCD-Display; height 6 mm, LED's to indicate limit values, operation and fault conditions
Fuses:	AC: 315 mA slow blow; DC: 1 A slow blow
Data backup:	EEPROM
Housing:	plastic PC/ABS, UL94 V0
Ambient temperature:	-10 ... +50 °C
Storage temperature:	-30 ... +70 °C
EMC:	according to EC EMC directive 89/36/EEC
Interference emissions:	EN 61 000-6-4/EN 55011 Class B
Interference resistance:	EN 61000-6-2
Protection:	IP 20
Weight:	app. 280 g

Interface:	RS 232, 3.5 mm stereo socket on housing front side
Connection:	coded, plug on screw terminal, solid core 1.5 mm ²
Inputs:	0 ... 1 V, 0 ... 20 V, ±100 mV, ±10 V 0 ... 20 mA, 4 ... 20 mA, ±20 mA Pt100, Ni100, potentiometers, thermocouples T, E, J, K, N, R, S, B
Accuracy:	0.05 % FSD
Internal resistance:	voltage : 1 MΩ ; current: 5 Ω
Outputs:	0 ... 20 mA, 4 ... 20 mA, 20 ... 4 mA, 20 ... 0 mA 0 ... 10 V, fault behaviour acc. to NAMUR NE43
Resolution:	D/A: current 13 bits, voltage 15 bits
Limit value contacts:	optional 2 relays, each with 1 change-over contact 250 V AC/30 V DC, 5 A

Dimensions:

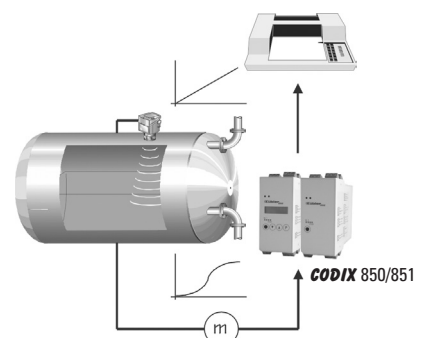


Fields of application:

- Appliances
- Electrical cabinets and laboratory equipment
- Temperature display/monitoring
- Process acquisition/monitoring
- Process control
- Signal matching/conversion

Example: Linearisation of the characteristic curve of a container

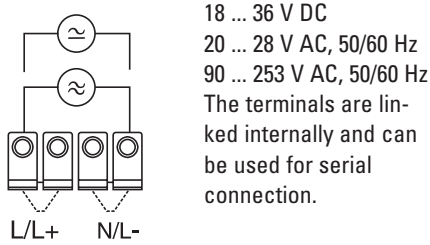
Our process controllers linearise the relationship between the fill-up level h and the volume V of the container. This can be set exactly thanks to 24 or 32 control points. The devices 850/851 can output the linearised values as current or as voltage values (e.g. 4 ... 20 mA) and thus offer in addition the function of a voltage transformer.



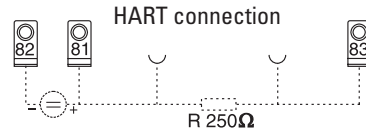
Codix 850/851

Connections

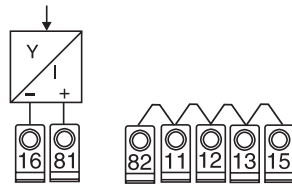
Supply voltage and outputs



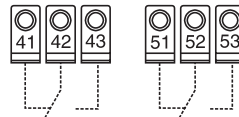
Measuring transducer (internal circuit)



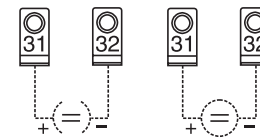
Measuring transducer 2-wire sensor



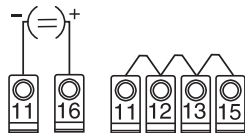
Relays (internal circuit)



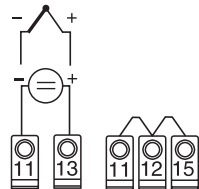
Relays (internal circuit)



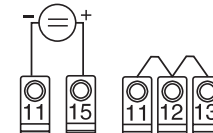
Current input ±20 mA, 0/4 ... 20 mA



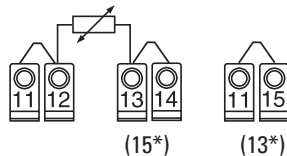
Voltage input ±100 mV, thermocouples



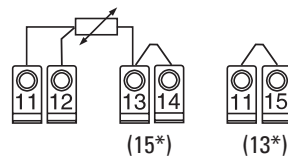
Voltage input ±10 V, 0 ... 1/10 V



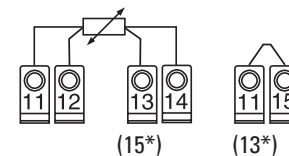
Resistance thermometers/potentiometers 2-wire



3-wire



4-wire



3*Connect Pt 500 and Pt 1000 to terminal 15, link 13 and 11

Order information:

Series	0 = CODIX 850 (without display) 1 = CODIX 851 (5-digit LCD, 3 keys)
Limit values	0 = 2 relays 2 = no limit values

0.85X.00X.XXX

Interface	05 = RS232 serial interface 95 = analog output and RS232 serial interface
Supply voltage	0 = 90 ... 253 V AC D = 18 ... 36 V DC and 20 ... 28 V AC

Please note:
The combination
0.850.002.X05 is not
available.

Advice:

The use of the PC-Software with RS 232 connection cable (to be ordered separately) is strictly required for all versions 0.850.XXX.XXX.
It is also recommended when using the 0.851.XXX.XXX versions to facilitate the device set up.
Order information:
N. 150.060 PC-Software including RS 232 connection cable