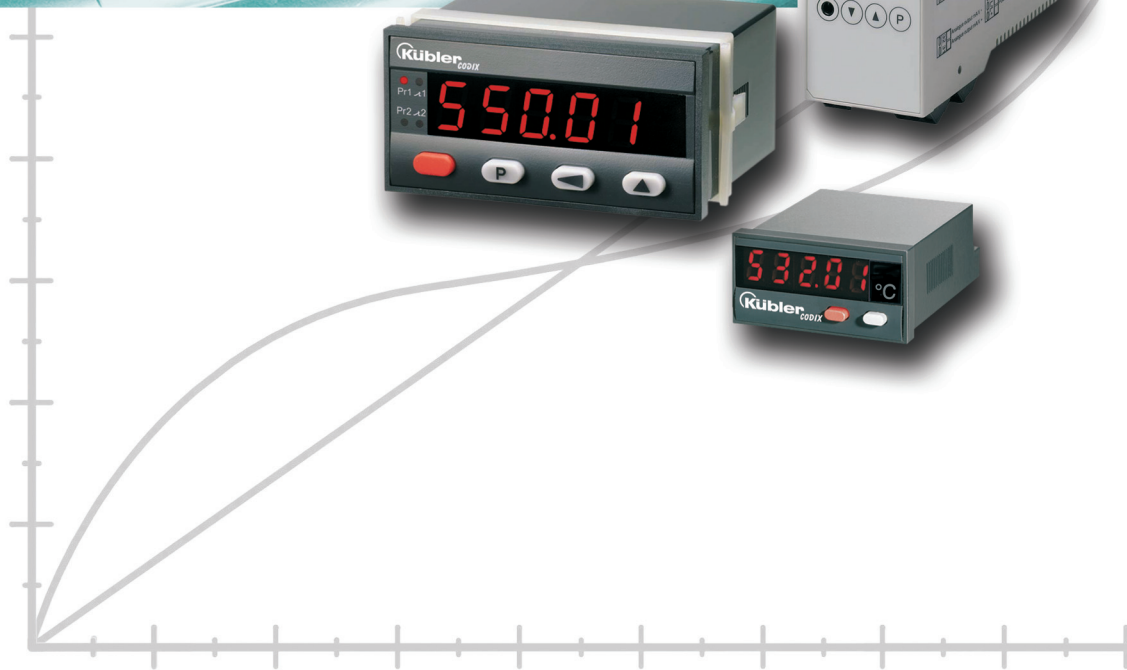


Process Technology



- Process displays
- Temperature displays
- Process controller
- Operating data display
- Accessories


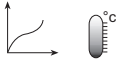





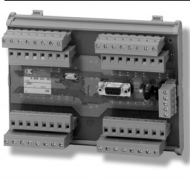


V
°F
mA
°C
bar



Overview

	Type	Inputs	Outputs	Additional functions	Page
	CODIX 529	 0 ... 20 mA, 4 ... 20 mA 0 ... 10 V, 2 ... 10 V	–	Display-Hold, Two adjustable characteristic curve end points MIN/MAX value detection	14
	CODIX 530 With integration function (totaliser)	 0 ... 20 mA, 4 ... 20 mA 0 ... 10 V, 2 ... 10 V	–	Display-Hold/Reset input, Two adjustable characteristic curve end points, Programmable mains hum suppression.	15
	CODIX 531 For temp. measurement with resistance-thermometer	 PT100, Ni100	–	Display-Hold, MIN/MAX value detection with data backup in case of PowerOff	16
	CODIX 532 For temp. measurement with thermocouples	 J, K, N thermocouples	–	Display-Hold, internal or external cold junction-compensation, MIN/MAX value detection Display in °C or °F	18
	CODIX 550	 0 ... 20 mA, 4 ... 20 mA 0 ... 10 V, 2 ... 10 V –10 ... +10 V	Option: serial interface RS232/422/485	Display-Hold, programmable input characteristic curve with 24 control points for voltage or mA ranges, MIN/MAX value detection.	20
	CODIX 551 For temperature measurement sensors in the mV range, PT100/1000 0 ... 400/4000 Ω	 Thermocouples Millivolt Resistance thermometers Pt100, PT1000	Option: serial interface RS232/422/485	Display-Hold, programmable input characteristic curve for mV/400/4000 Ω range MIN/MAX value detection	22
	CODIX 552 With integration function (totaliser)	 0 ... 20 mA, 4 ... 20 mA 0 ... 10 V, 2 ... 10 V –10 ... +10 V	Option: serial interface RS232/422/485	Display-Hold integration function (totaliser) resetting key programmable characteristic curve with 24 control points MIN/MAX value detection	24
	CODIX 553 With 2 limit values	 0 ... 20 mA, 4 ... 20 mA 0 ... 10 V, 2 ... 10 V –10 ... +10 V	Relays with - change-over contact or optocoupler Option: serial inter- face RS232/422/485	2 limit values, limit values resetting key, key lock input, programmable characteristic curve with 24 control points MIN/MAX value detection	26
	CODIX 554 For temperature measurement sensors in the mV range PT100/1000 0 ... 400/4000 Ω	 Thermocouples Millivolt Resistance thermometers PT100/1000	Relays with - change-over contact or optocoupler Option: serial interface RS232/422/485	2 limit values, limit values resetting key, key lock input, programmable characteristic curve with 24 control points MIN/MAX value detection	28
	CODIX 555 With integration function (totaliser), and 2 limit values	 0 ... 20 mA, 4 ... 20 mA 0 ... 10 V, 2 ... 10 V –10 ... +10 V	Relays with change-over contact or optocoupler Option: serial interface RS232/422/485	2 limit values, integration function (totaliser) resetting key, key lock input, programmable characteristic curve with 24 control points MIN/MAX value detection.	32

Overview

	Type	Inputs	Outputs	Additional functions	Page
	CODIX 850	 0 ... 20 mA, 4 ... 20 mA ±20 mA 0 ... 1 V, 0 ... 20 V, ±100 mV, ±10 V Resistance thermometers Thermocouples	0 ... 20 mA, 4 ... 20 mA 20 ... 4 mA, 20 ... 0 mA 0 ... 10 V optional 2 relays, each with a change-over contact	Measuring transducer power supply RS232 Interface HART® communication socket	34
	CODIX 851 With LCD-Display and control keys	 0 ... 20 mA, 4 ... 20 mA ±20 mA 0 ... 1 V, 0 ... 20 V, ±100 mV, ±10 V Resistance thermometers Thermocouples	0 ... 20 mA, 4 ... 20 mA 20 ... 4 mA, 20 ... 0 mA 0 ... 10 V optional 2 relays, each with a change-over contact	Measuring transducer power supply RS232 Interface HART® communication socket	34
	Reporter 670 Operating data display				36
	Reporter 680 Operating data display	8 parallel inputs for 100 texts	1 optocoupler-output Relays optional		36
	Reporter 690 Operating data display	8 parallel inputs for 100 texts Embedding of variable data for 99 values	1 optocoupler-output Relays optional	Additional options, e.g. 256 texts	36
	I/O extension module 806			16 or 31 input I/O extension modules	38
	Rail mounting frame, small			Accessory for our small CODIX 52X and 53X models to mount the displays in cabinets	39
	Software EzControl for fast setup and logging of the CODIX 55x			Connection accessories.	40

Process controllers

Universal and clearly legible!

The **CODIX** devices series of KÜBLER is the good solution if you need to display, control process values (e.g. temperature, pressure) or other analog measured values, or convert and adapt measured quantities. The **CODIX** 529-532 models, in their DIN 48 x 24 housing, are suitable for reduced mounting space.

If the device is to be operated with gloves, or if it must be legible from a great distance, choose the **CODIX**-Series 55X with a DIN 96 x 48 housing.

The **CODIX** 85X measuring transducers for cabinet mounting on top hat rails are multi-functional, they can be adapted to any application and configured via PC.



Fields of application of the KÜBLER-process controllers

- Fill-up level measurement
- Flow measurement
- Silos
- Rotational speed display for machines
- Cabinet cooling
- Wood working machines
- Bakery plants
- Drying plants/ovens
- Packaging machines
- Machine tools and plastic processing machines
- Chemical and pharmaceutical plants
- Food and drink processing machines
- Semiconductor industry
- Power supply and air conditioning
- Paper machines
- Glass production machines

Advantages of all process controllers

- Galvanic isolation
- Linearisation function with up to 32 control points
- The **CODIX** family concept means simple, standard operation
- Modern industrial design
- Delivery at short notice from our store
- Attractive price/performance ratio

Process controllers

Why process controllers with an analog input?

For many measuring operations, a digital signal acquisition is too inaccurate or too expensive. This is why analog signal acquisition is often used in industrial environments. This includes e.g. temperature, weight (mass), pressure, filling level, volume (flow), speed, acceleration, position and many others. The sensor signals are most often very small (in the mV or μ V range) The KÜBLER Process controllers amplify these signals, correct possible errors and send them to the display. The **CODIX** 850/851

process measuring transducers convert these signals into standard signals (e.g. 0 ... 10 V or 4 ... 20 mA). These signals can then be processed further and/or displayed. In addition, there is the possibility to transmit the standard signals for larger distances. Many sensors do not supply a linear output signal. The KÜBLER process displays linearise these signals with up to 32 control points, depending on the version.

Input signals and output signals

KÜBLER offers the following **input signal** ranges, according to the version:

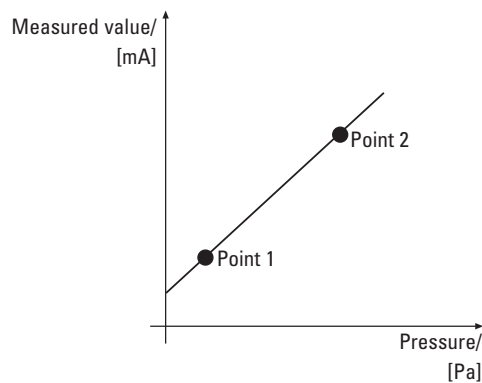
- 0 ... 20 mA
 - 4 ... 20 mA
 - ± 20 mA
 - ± 100 mV, ± 10 V
 - 0 ... 10 V DC
 - 2 ... 10 V DC
 - 0 ... 400 Ω
 - 0 ... 4000 Ω
 - PT1000, PT100, Ni100 for 2, 3, and 4 wire technique
 - Thermocouples B, E, J, K, N, R, S, T
- The 2 ... 10 V and 4 ... 20 mA signals have the advantage to perform in the same time a sensor monitoring. A 0 V or 0 mA signal may for instance mean that the sensor line is broken.

With the **CODIX** 850/851, KÜBLER offers the following **output signal** ranges for further processing:

- 0 ... 20 mA
- 4 ... 20 mA
- 20 ... 4 mA
- 20 ... 0 mA
- 0 ... 10 V, error behaviour according to NAMUR NE43, optocoupler or relay outputs in conjunction with adjustable limit values.

The 4 ... 20 mA and 20 ... 4 mA signals have the advantage to perform in the same time a sensor monitoring. A 0 V or 0 mA signal may for instance mean that the sensor line is broken.

Example



A digital display with analog input, e.g. **CODIX** 550 replaces or completes pressure gauges of a compressor.

The current signal of the pressure sensor is displayed as the pressure on the display.

Programming of the characteristic curve:

Point 1: 4 mA, 2.5 Pa

Point 2: 20 mA, 30 Pa

Minimum and maximum values are saved and can be read at any time. The displayed value is easy to modify, e.g. in atmospheres or bar instead of Pa, by modifying the points of the characteristic curve.

The integration function (totaliser)

The devices equipped with the integration function (totaliser) can calculate the integral, that is to say "totalize" the analog signal, using any period of time.

A typical field of application is the flow measurement. In this case, an analog sensor measures the flow quantity per time unit in a pipe and displays the momentary

flow value (e.g. litres per minute). The integration function (totaliser) calculates, from this constantly fluctuating quantity, a "total", that is to say it defines the absolute total quantity flown through the pipe (e.g. in litres).

Temperature measurement technique

Which temperature display/control is the good one for you?

The device must be chosen according to the temperature sensor used.

Pt and Ni resistance sensors:

The temperature measurement with resistance sensors uses the temperature sensitivity of metal resistances. A constant current is applied to the measuring resistance. The voltage drop at the resistance is measured. This drop represents the temperature measurement. KÜBLER offers the following devices for resistance sensors:

**CODIX 531, CODIX 551, CODIX 554
CODIX 850/851**

Thermocouple sensors

The temperature measurement with thermocouple sensors uses the thermoelectric effect. Thermocouples consist in two wires, soldered together punctually. The wires are

made of different metals.

The thermoelectric voltage appearing at the soldering point is measured, amplified and displayed by the KÜBLER display. KÜBLER offers the following devices for thermocouple sensors:

**CODIX 532, CODIX 551, CODIX 554
CODIX 850/851**

The **CODIX 551, CODIX 554** displays and the **CODIX 850/851** signal conditioners/process controllers suit as well for resistance sensors as for thermocouples.

Information about the 2, 3 or 4 wire technique

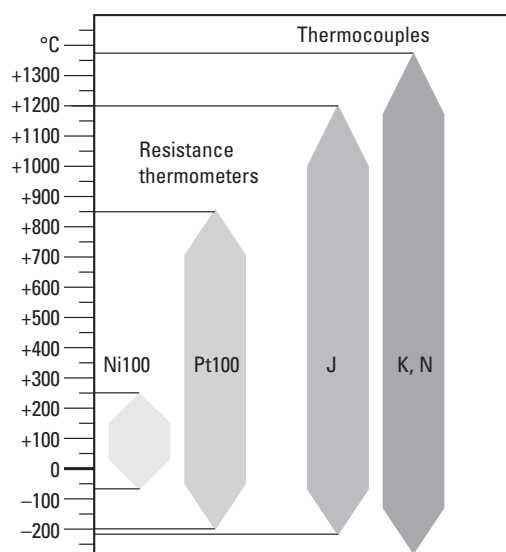
Unlike the thermocouples, which deliver a voltage, a resistance does not deliver any signal by itself. This means that it requires external energy from an electrical measuring circuit. This power source is generally a constant current source.

With the **2 wire circuit**, the measuring resistance is connected with the measuring device by means of two wires. The conductors are connected serially with the measuring resistance and lead to a higher total

resistance, and thus to a measuring error. With the **3 wire circuits**, an additional wire is connected to the resistance, resulting in two measuring circuits. The resistance of the conductors is compensated by means of internal circuits, provided all three conductors are identical.

With the **4 wire circuits**, the resistance of all conductors is compensated, even if they have different lengths.

Overview of the temperature measuring range



The opposite diagram shows an overview of the temperature range of the various sensors.

Advice:

- for Pt100 resistance sensors adhere to DIN IEC 751
- for Ni100 resistance sensors adhere to DIN 43760
- for thermocouple sensors adhere to DIN IEC 584.
- J: (Fe-CuNi)
- K: (Ni-CrNi)
- N: (NiCrSi-NiSi)

J: (Fe-CuNi)

These thermocouples are very common, economic and deliver a high thermoelectric voltage. Disadvantage: danger of corrosion. Iron becomes brittle with sulphurous gases.

K: (Ni-CrNi)

These thermocouples are very common,

show an excellent stability in time, but only a low thermoelectric voltage .

N: (NiCrSi-NiSi)

These thermocouples are not common, since they appeared only recently on the market. They can be used for very high temperatures and can replace elements out of noble metal.

Operating data display

Operating data display with the REPORTER series.

The 670/680/690 devices offer a flexible alternative for error indication by means of signal lights. They allow a case-dependent text display in any language.



Important application ranges:

- Air conditioning
- Packaging industry
- Wood processing
- Special machines
- Compressors
- Machine building
- Environment techniques
- Switchboard plants
- Surface treatment techniques.

Support

You will find comprehensive support pages on our home page: www.kuebler.com



Download our operating instructions from the support area of our home page

Visit our home page. To convince you of the easy programming and use of our products, we give you the possibility to **download the operating instructions before you buy** our products. You simply need Acrobat Reader to read and print our operating instructions.

The **CODIX 531/532** temperature displays are available in 5 languages (german, english, french, spanish and italian).

All operating instructions are available in 3 languages (german, english and french).

Personal advice:

Send an e-mail to sales@kuebler.com or call us: **+49 (0) 7720-3903-0**

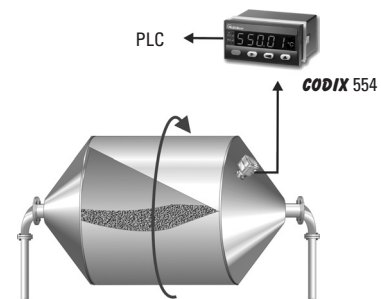
Our technical support team and our sales engineers will give you all information and advice you might need.



Application examples

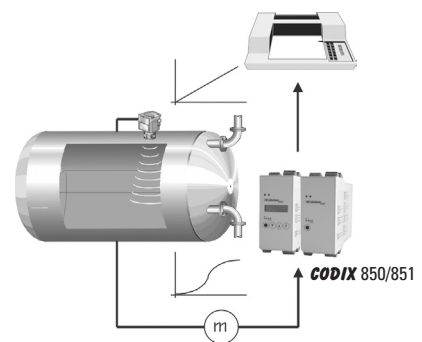
Temperature monitoring in a tubular furnace

When the process temperature is higher or lower than the set value, the heating of the oven is directly controlled by means of the relay outputs of the **CODIX 554** process controller. In case of very high power, the process controller can also drive a power contactor.



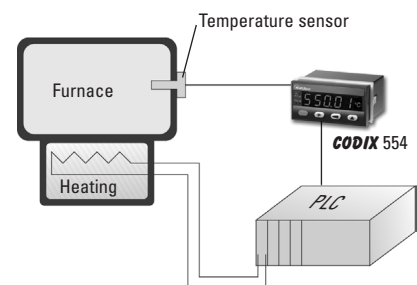
Linearisation of the characteristic curve of a container

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 of the **CODIX 850/851** series 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.



Control of the heating of a furnace

The furnace temperature is monitored thanks to a temperature sensor. When the temperature becomes higher or lower than a defined temperature, the **CODIX 554** sends an output signal to the PLC, which controls, among others, the heating of the furnace. The operator can read the temperature on the large LED Display.



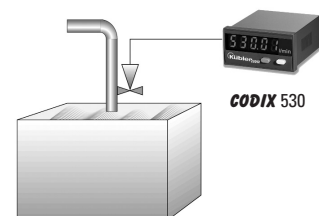
Measurement of the total throughput [m³] and of the flow [l/min]

Thanks to its double function, the **CODIX 530** measures the total throughput in [m³] and the momentary flow in [l/min]. The sensor delivers a current signal proportional to the flow:

0 mA => 0 l/min

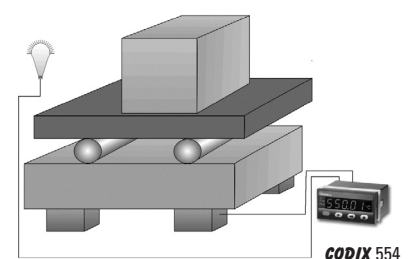
20 mA => 1000 l/min.

The total volume is calculated by the integration function (totaliser). Switching of the display is carried out by the front key.



Weight determination

A DMS measuring tape or a strain gauge measures the pressure of the item to be weighed. The voltage difference lies in the range of the mV. These are converted in the weight and displayed by a **CODIX 554**.



CODIX Series



Version	Process display	Process display	Temperature display PT100 and Ni100	Temperature display J, K and N
Series	CODIX 529	CODIX 530	CODIX 531	CODIX 532
Highlights	Compact, 5 digit display for analog and temperature inputs, microprocessor based technology, galvanic isolation of the supply voltage, low cost.		Sensor break detection, external or internal cold junction compensation	
Technical data	14 bit resolution, programmable characteristic curve			
Number of digits	5	5	5	5
Min/Max memory	yes	–	yes	yes
Integration function (totaliser)	–	yes	–	–
Display/digit height [mm]	LED/8	LED/8	LED/8	LED/8
Dimensions [mm]	DIN 48 x 24	DIN 48 x 24	DIN 48 x 24	DIN 48 x 24
Panel cut-out [mm]	45 x 22	45 x 22	45 x 22	45 x 22
Inputs	0 ... 20 mA, 4 ... 20 mA 0 ... 10 V, 2 ... 10 V	0 ... 20 mA, 4 ... 20 mA 0 ... 10 V, 2 ... 10 V	PT100, Ni100 resistance thermometers	J, K and N thermocouples
Control inputs	Display-Hold	Display-Hold/Reset	Display-Hold	Display-Hold
Supply voltage [V DC]	10 ... 30	10 ... 30	10 ... 30	10 ... 30
Page	14	15	16	18



Version	Process display	Temperature display	Process display
Series	CODIX 550	CODIX 551	CODIX 552
Highlights	Very bright, large display, DIN 96 x 48, large keys for easy operation even when wearing gloves, output for sensor power supply		
Technical data			
Number of digits	5	5	5
Min/Max memory	yes	yes	–
Integration function (Totaliser)	–	–	yes
Display/digit height [mm]	LED/14	LED/14	LED/14
Dimensions [mm]	DIN 96 x 48	DIN 96 x 48	DIN 96 x 48
Panel cut-out [mm]	92 x 45	92 x 45	92 x 45
Inputs			
0 ... 20 mA, 4 ... 20 mA,	yes	–	yes
0 ... 10 V, 2 ... 10 V	yes	–	yes
–10 ... + 10 V	yes	–	yes
0 ... 100 mV, –100 ... +100 mV	–	yes	–
0 ... 400 Ω, 0 ... 4000 Ω, PT100/1000	–	yes	–
Thermocouples	–	(B, E, J, K, N, R, S, T)	–
Control inputs	Display-Hold	Display-Hold	Display-Hold/Reset
Supply voltage [V DC]	10 ... 30	10 ... 30	10 ... 30
[V AC]	90 ... 260	90 ... 260	90 ... 260
Page	20	22	24

CODIX-Series



Version	Process controller	Temperature-controller	Process controller
Series	CODIX 553	CODIX 554	CODIX 555
Highlights	Very bright, large display, DIN 96 x 48, large keys for easy operation even when wearing gloves, sensor power supply output,		
Technical data			
Number of digits	5	5	5
Integration function (Totaliser)	–	–	yes
Display/digit height [mm]	LED/14	LED/14	LED/14
Dimensions [mm]	DIN 96 x 48	DIN 96 x 48	DIN 96 x 48
Panel cut-out [mm]	92 x 45	92 x 45	92 x 45
Inputs			
0 ... 20 mA, 4 ... 20 mA,	yes	–	yes
0 ... 10 V, 2 ... 10 V, –10 ... +10 V	yes	–	yes
0 ... 10 mV, –100 ... +100 mV	–	yes	–
0 ... 400 Ω, 0 ... 4000 Ω, PT100/1000	–	yes	–
Thermocouples	–	(B, E, J, K, N, R S T)	–
Control inputs	Reset, key	Reset, key	Reset, key
Limit values/outputs	2/relay or optocoupler-output	2/relay or optocoupler-output	2/relay or optocoupler-output
Supply voltage [V DC]	10 ... 30	10 ... 30	10 ... 30
(galvanically isolated) [V AC]	90 ... 260	90 ... 260	90 ... 260
Page	26	28	30

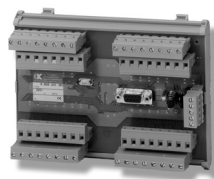


Version	Signal conditioner/ process controller	Signal conditioner/ process controller	The Highlights	
Series	850	851	Multifunctional measuring signal conditioners/process controllers, 32 programmable control points, suitable for all usual input quantities.	
Technical data				
Display/Number of digits	–/–	LCD/5	Designed for DIN-rail mounting, supplied with programming software, RS 232 interface	
Digit height [mm]	–	6		
Inputs				
0 ... 20 mA, 4 ... 20 mA, –20 ... +20 mA	yes	yes		
–100 ... +100 mV, –10 ... +10 V	yes	yes		
0 ... 1 V, 0 ... 10 V	yes	yes		
PT100/500/1000, 0 ... 400 Ω, 0 ... 4 kΩ	yes	yes		
Thermocouples	T, E, J, K, N, R, S, B	T, E, J, K, N, R, S, B		
Analog outputs (optional)				
0 ... 20 mA, 4 ... 20 mA,	yes	yes		
20 ... 4 mA, 20 ... 0 mA, 0 ... 10 V	yes	yes		
Limit value contacts (optional)	2 relays	2 relays		
Supply voltage [V DC]	18 ... 36	18 ... 36		
[V AC]	20 ... 28, 90 ... 253	20 ... 28, 90 ... 253		
Page	32	32		

Operating data display



Version	Operating data display 670	Operating data display with memory 680	Operating data display with memory 690
Series			
Highlights	Text display, indication of alarm conditions, process monitoring Serial or parallel control inputs, software configuration		
	Message transmission via serial Interface		Real time clock and diagnostic memory optional
Technical data			
Message memory	–(slave module)	100 texts	100 texts
Embedding of variable data	–	–	99
Dimensions [mm]	DIN 144 x 72	DIN 144 x 72	DIN 144 x 72
Panel cut-out [mm]	138 x 68	138 x 68	138 x 68
Inputs:			
Parallel	–	8	8
Binary	–	yes	yes
BCD	–	yes	yes
Supply voltage [V DC]	11 ... 30	11 ... 30	11 ... 30
Operating key	–	–	yes
Outputs	–	Optocoupler	Optocoupler
Serial interface	yes	yes	yes
Page	34	34	34



Version	Extension module for operating data display or PLC 806	The 806 extension module enables increasing the control inputs of the operating data acquisition or any PLC by 16 or 32 additional galvanically isolated inputs. It will accept any input voltage from 12 to 250 V AC/DC. Communication to the connected data display occurs via the serial interface.
Series	Extension of a PLC by 16 or 32 I/O's (galvanic isolation)	
Technical data		
Inputs	16/32	
Input voltage [V AC/DC]	12 ... 250	
Supply voltage [V DC]	11 ... 30	
Interface	Parallel	
Mounting	DIN rail mounting	
Page	37	

CODIX 529



Your benefit

- galvanic isolation with protection against incorrect polarity
- autom. MIN/MAX value detection
- freely programmable characteristic curve end points

Input range

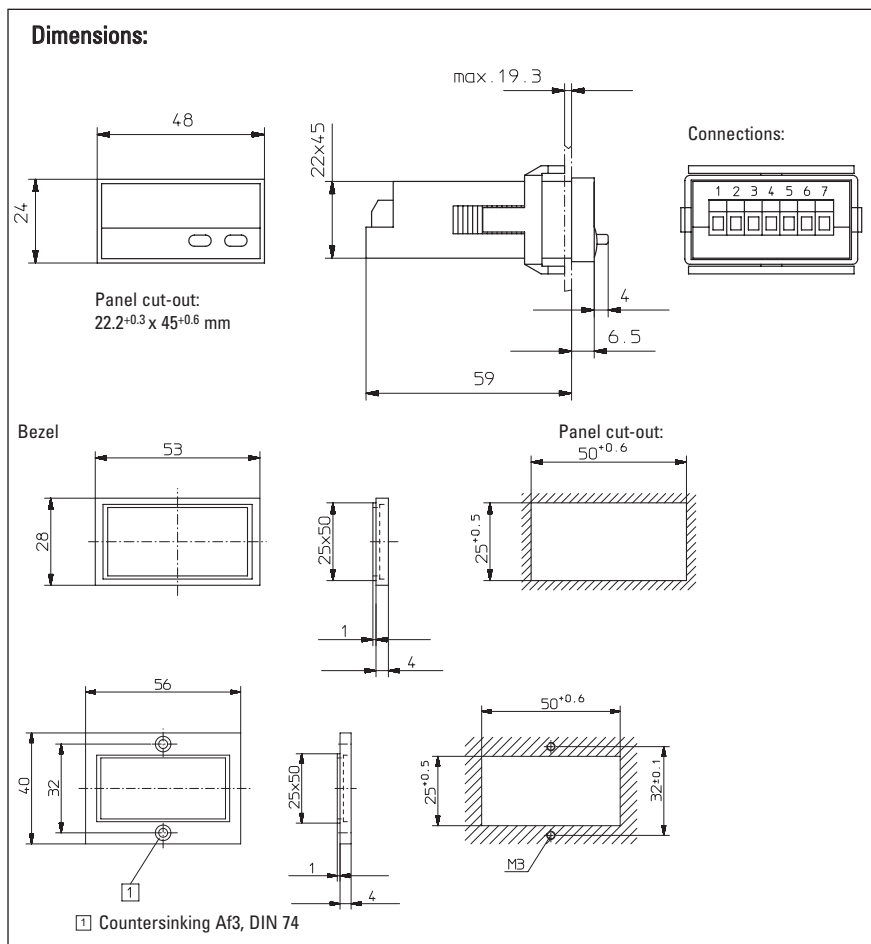
- 1 current measuring input,
- 1 voltage measuring input

More advantages

- compact display for analog standard signals
- display range -19 999 ... 99 999 with leading zeros suppression
- modern industrial design
- input for Display-Hold

Technical data

Supply voltage:	10 ... 30 V DC, galvanically isolated with integrated protection against incorrect polarity	Input current measurement:	0 ... 20 mA, 4 ... 20 mA voltage drop max 1.5 V DC
Current consumption:	max. 50 mA	Input voltage measurement :	0 ... 10 V, 2 ... 10 V input resistance app. 1 MΩ max. input signal level 30 V DC
Display:	5-digit display, red 7-segment LED's; height 8 mm	Control inputs:	High: 4 ... 30 V DC Low: 0 ... 2 V DC
Measuring rate:	2 measurements/second	Resolution:	14 bits
Data backup:	EEPROM	Accuracy:	< 0.1 % for the whole measuring range at an ambient temperature of 20 °C
Housing:	housing for control panel 48 x 24 mm acc. to DIN 43 700; RAL 7021, dark grey	Temperature drift:	< 70ppm/K _{Ambient}
Ambient temperature:	-10 ... +50 °C	Weight:	app. 50 g
EMC:	according to EC EMC directive 89/36/EEC	Connection technique:	screw terminal, pitch 5.08 mm, 7 poles
Interference emissions:	EN 61 000-6-4/EN 55011 Class B		
Interference resistance:	EN 61000-6-2		
Protection:	IP65 (front)		



Connections:

- 1 10 ... 30 VDC
- 2 GND
- 3 GND
- 4 Latch
- 5 0 (4) ... 20 mA
- 6 Analog GND
- 7 0 (2) ... 10 V DC

Delivery includes:

- Digital display
- Panel mounting clip
- Bezel for clip mount, panel cut-out 50 x 25 mm
- Bezel for screw mount, panel cut-out 50 x 25 mm
- Seal
- Tack dry symbols
- Multilingual operating instructions

Accessories see Page 37

Order Code:

CODIX 529: 6.529.012.300

CODIX 530 with totaliser



Your benefit

- compact display for analog measuring values and integration function (totaliser) with programmable factor
- galvanic isolation with protection against incorrect polarity
- Display Hold input
- freely programmable characteristic curve end points

Input range

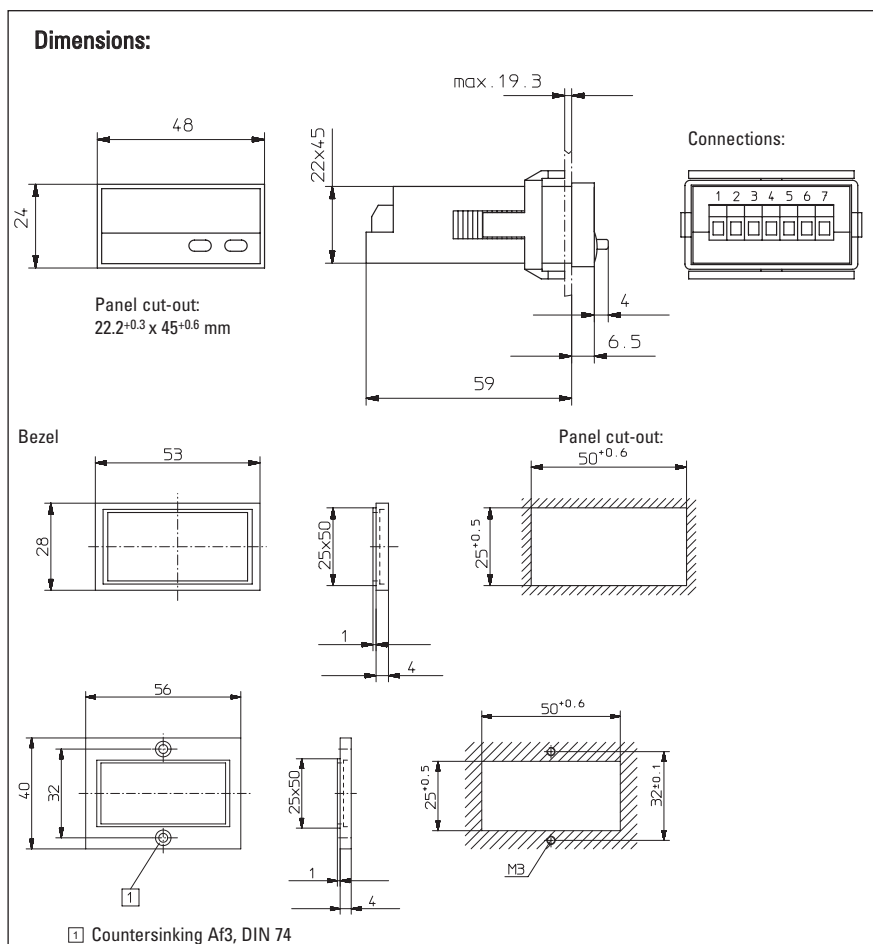
- 1 current measuring input, 1 voltage measuring input
- programmable Display Hold input (MPI) or integration function (totaliser) reset input

More advantages

- display range -19 999 ... 99 999 with leading zeros suppression
- modern industrial design
- programmable mains hum suppression

Technical data

Supply voltage:	10 ... 30 V DC, galvanically isolated with integrated protection against incorrect polarity	Input current measurement:	0 ... 20 mA, 4 ... 20 mA voltage drop max 1.5 V DC
Current consumption:	max. 50 mA	Input voltage measurement:	0 ... 10 V, 2 ... 10 V input resistance app. 1 MΩ max. input signal level 30 V DC
Display:	5-digit display, red 7-segment LED's; height 8 mm	Control inputs:	High: 4 ... 30 V Dc Low: 0 ... 2 V DC
Measuring rate:	1 measurement/second	Resolution:	14 bits
Data backup:	EEPROM	Accuracy:	< 0.1 % for the whole measuring range at an ambient temperature of 20 °C
Housing:	housing for control panel 48 x 24 mm acc. to DIN 43 700; RAL 7021, dark grey	Temperature drift:	< 70ppm/K _{Ambient}
Ambient temperature:	-10 ... +50 °C	Accuracy:	50 ppm
EMC:	according to EC EMC directive 89/36/EEC	Weight:	app. 50 g
Interference emissions:	EN 61 000-6-4/EN 55011 Class B	Connection technique:	screw terminal, pitch 5.08 mm, 7 poles
Interference resistance:	EN 61000-6-2		
Protection:	IP65 (front)		



Connections:

- 1 10 ... 30 VDC
- 2 GND
- 3 GND
- 4 MPI
- 5 0 (4) ... 20 MA
- 6 Analog GND
- 7 0 (2) ... 10 V DC

Delivery includes:

- Digital display
- Panel mounting clip
- Bezel for clip mount, panel cut-out 50 x 25 mm
- Bezel for screw mount, panel cut-out 50 x 25 mm
- Seal
- Tack dry symbols
- Multilingual operating instructions

Accessories see page 39

Order Code:

CODIX 530: 6.530.012.300

CODIX 531 for Pt100 and Ni100 resistance thermometers



Your benefit

- temperature display in °C or °F
- MIN/MAX value acquisition and data backup in case of Power Off
- galvanic isolation with protection against incorrect polarity
- screw terminal connection: pitch 5 mm
- Display Hold input

Input range

Resistance thermometer

More advantages

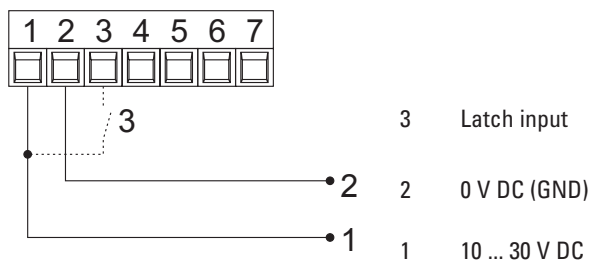
- compact and low-price temperature display
- easy programming and operation
- modern industrial design
- 5 measurements/second

Technical data

Supply voltage:	10 ... 30 V DC, galvanically isolated with integrated protection against incorrect polarity	Input:	Pt100-Resistance thermometer Ni100-Resistance thermometer with sensor breakage monitoring
Current consumption:	max. 40 mA	Control inputs:	High: 4 ... 30 V DC Low: 0 ... 2 V DC
Display:	5-digit display, red 7-segment LED's; height 8 mm	Supply current:	1 mA
Measuring rate:	5 measurements/second	Supply line:	2-wire: max 20 Ω, programmable 3-wire, 4-wire: max 20 Ω, no balancing required
Display refresh:	1 ... 2 times per second	Temperature ranges:	Pt100 acc. to DIN IEC 751: -199.9 °C ... +850.0 °C -327.8 °F ... +1562.0 °F Ni100 acc. to DIN 43760: -60.0 °C ... +250.0 °C -76.0 °F ... +482.0 °F
Data backup:	EEPROM	Resolution:	0.1°C (0.1°F) or 1°C (1°F)
Housing:	housing for control panel 48 x 24 mm acc. to DIN 43 700; RAL 7021, dark grey	Linearity error:	Pt100 < 0.1 % for the whole measuring range at an ambient temperature of 20 °C Ni100 < 0.2 % for the whole measuring range at an ambient temperature of 20 °C
Ambient temperature:	-20 ... +65 °C	Temperature drift:	0.1 K/K _{Ambient}
EMC:	according to EC EMC directive 89/36/EEC	Connection technique:	screw terminal, pitch 5.08 mm, 7 poles
Interference emissions:	EN 61 000-6-4/EN 55011 Class B		
Interference resistance:	EN 61000-6-2		
Protection:	IP65 (front)		
Weight:	app. 50 g		
Circuit type:	2-wire, 3-wire and 4-wire connection technique, programmable		

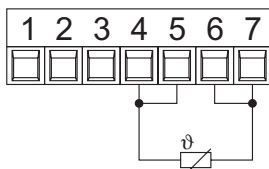
Electrical connection

Connection supply voltage and Latch input

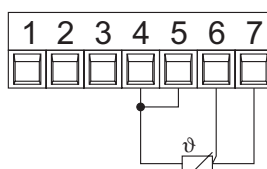


Resistance thermometer Pt100/Ni100

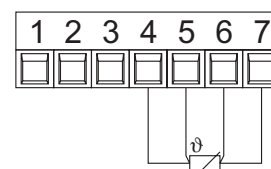
2-wire resistance thermometer



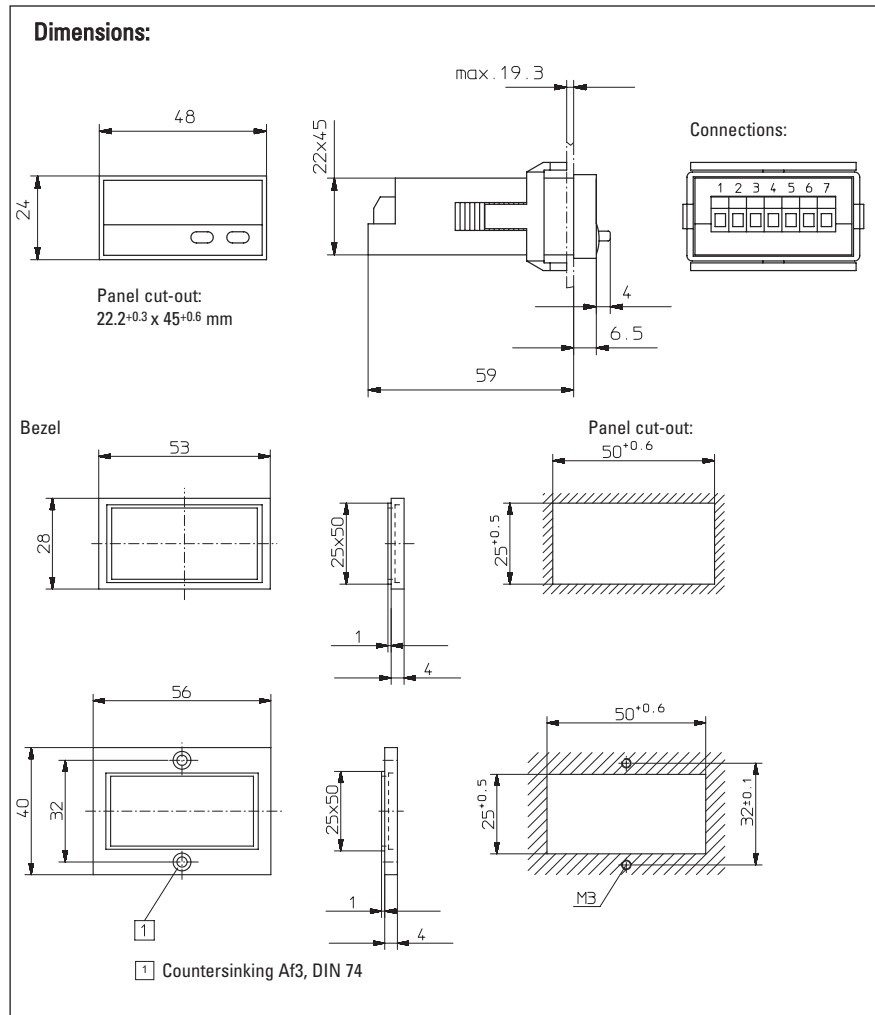
3-wire resistance thermometer



4-wire resistance thermometer



CODIX 531 for Pt100 and Ni100 resistance thermometers



Connections:

- 1 10 ... 30 V DC supply voltage
- 2 0 V DC (GND)
- 3 Latch input
- 4 Pt100/Ni100
- 5 Pt100/Ni100
- 6 Pt100/Ni100
- 7 Pt100/Ni100

Fields of application

- Cabinet cooling
- Bakery plants
- Drying plants/ovens
- Packaging machines
- Machine tools and plastic processing machines
- Chemical and pharmaceutical plants
- Food and drink processing machines
- Semiconductor industry
- Power supply and air conditioning
- Paper machines
- Glass production machines

Delivery includes:

- Digital display
- Panel mounting clip
- Bezel for clip mount, panel cut-out 50 x 25 mm
- Bezel for screw mount, panel cut-out 50 x 25 mm
- Seal
- Tack dry symbols
- Multilingual operating instructions

Accessories see page 39

Order Code

CODIX 531: 6.531.012.300

CODIX 532 for J, K and N thermocouples



Your benefit

- temperature display in °C or °F
- MIN/MAX value acquisition and data backup in case of Power Off
- galvanic isolation with protection against incorrect polarity
- screw terminal connection: pitch 5 mm
- Display Hold input

Input ranges

J, K, N thermocouples with external or internal cold junction compensation

More advantages

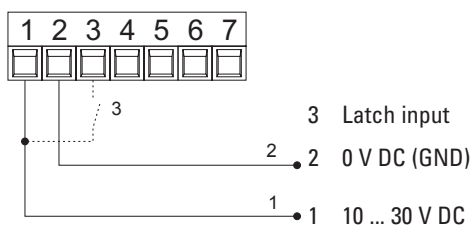
- easy programming and operation
- modern industrial design
- 5 measurements/second

Technical data

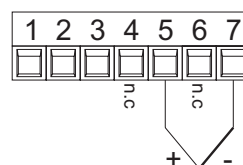
Supply voltage:	10 ... 30 V DC, galvanically isolated with integrated protection against incorrect polarity	Input:	Thermocouple sensor J (Fe-CuNi) K (Ni-CrNi) N (NiCrSi-NiSi) with sensor breakage monitoring
Current consumption:	max. 40 mA-	Temperature ranges:	according to DIN IEC 584
Display:	5-digit display, red 7-segment LED's; height 8 mm	J (Fe-CuNi)	-210.0 °C ... +1200.0 °C -346.0 °F ... +2192.0 °F
Measuring rate:	5 measurements/second	K (Ni-CrNi)	-200.0 °C ... +1372.0 °C -328.0 °F ... +2501.6 °F
Display refresh:	1 ... 2 times per second	N (NiCrSi-NiSi)	-200.0 °C ... +1300.0 °C -328.0 °F ... +2370.0 °F
Data backup:	EEPROM	Resolution:	0.1°C (0.1°F) or 1°C (1°F)
Housing:	housing for control panel 48 x 24 mm acc. to DIN 43 700; RAL 7021, dark grey	Linearity error:	< 0.4 % for the whole measuring range at an ambient temperature of 20 °C
Ambient temperature:	-20 ... +65 °C	Cold junction error:	±1.0 °C typ. ±3.0 °C
EMC:	according to EC EMC directive 89/36/EEC	Temperature drift:	0.1 K/K _{Ambient}
Interference emissions:	EN 61 000-6-4/EN 55011 Class B	Connection technique:	screw terminal, pitch 5.08 mm, 7 poles
Interference resistance:	EN 61000-6-2		
Protection:	IP65 (front)		
Weight:	app. 50 g		
Control inputs	High: 4 ... 30 V DC Low: 0 ... 2 V DC		

Electrical connection

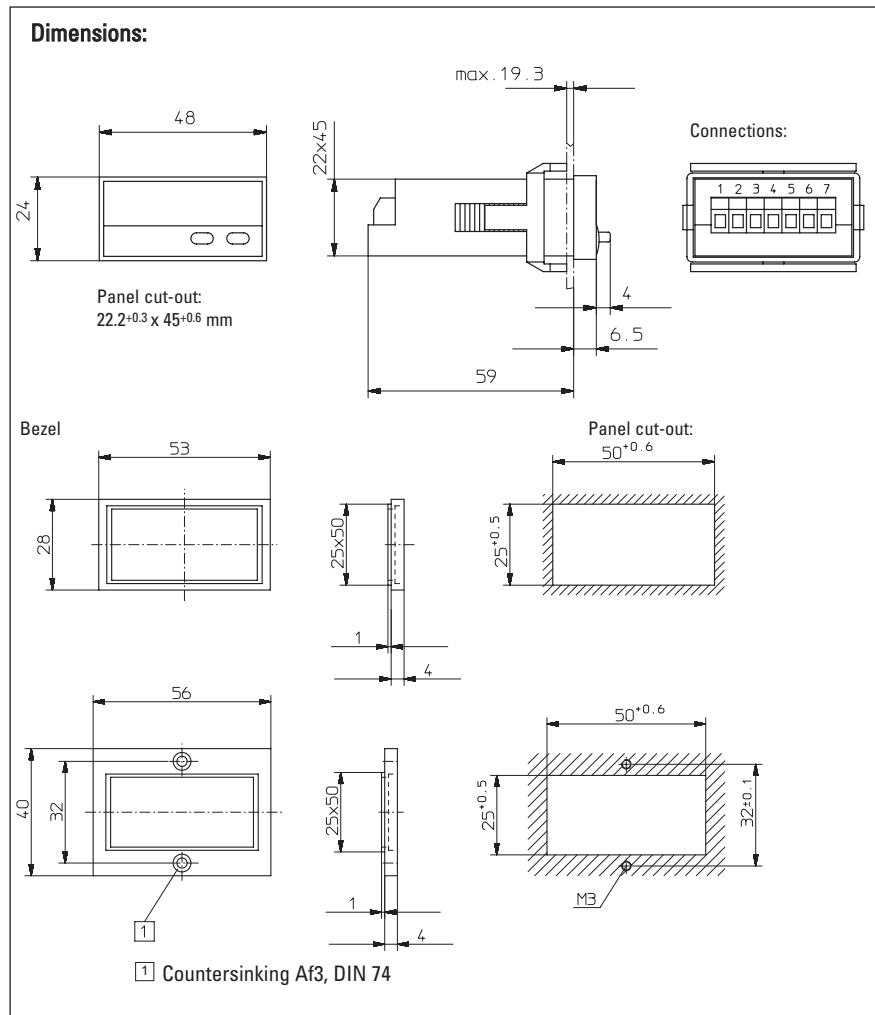
Connection supply voltage and Latch input



Thermocouple sensor



CODIX 532 for J, K and N thermocouples



Connections:

- 1 10 ... 30 V DC supply voltage
- 2 0 V DC GND
- 3 Latch input
- 4 n.c.
- 5 Thermocouple "+"
- 6 n.c.
- 7 Thermocouple "--"

Fields of application

- Cabinet cooling
- Bakery plants
- Drying plants/ovens
- Packaging machines
- Machine tools and plastic processing machines
- Chemical and pharmaceutical plants
- Food and drink processing machines
- Semiconductor industry
- Power supply and air conditioning
- Paper machines
- Glass production machines

Delivery includes:

- Digital display
- Panel mounting clip
- Bezel for clip mount, panel cut-out 50 x 25 mm
- Bezel for screw mount, panel cut-out 50 x 25 mm
- Seal
- Tack dry symbols
- Multilingual operating instructions

Accessories see page 39

Order Code:

CODIX 532: 6.532.012.300

CODIX 550



IP 65

Now available with serial interface and set-up software EzControl!

Your benefit

- Programmable input characteristic curve with up to 24 control points
- Display-Hold
- Very big keys for use with gloves
- very bright display
- Input range
0 ... 20 mA, 4 ... 20 mA; 0 ... 10 V
2 ... 10 V; ± 10 V

More advantages

- Auxiliary power supply output for measuring transducer/sensor
- optional serial interface

Technical data

Miscellaneous Data

Display	5 digit red LED 14.2 mm high
Display range	-19999 ... 99999, with leading zeros suppression
Out of Range Indication	Under-range uuuuu / Over-range ooooo
Data storage	EEPROM, 1 Million storage cycles or 10 Years
Test voltages	EN 61010 Part 1 ; overvoltage category 2, level 2
EMC	Interference emissions EN 50081-2 / EN 55011 Class B

Interference resistance	EN 61000-6-2
AC power supply	90 ... 260 V AC/max. 6 VA external fuse 100 mA/T
DC power supply	10 ... 30 V DC, max. 2 W, galvanically isolated with inverse polarity protection external fuse 250 mA/T
Mains Hum Filter	digital filter 50 Hz or 60 Hz, programmable

Measurement ranges

Current input (DC)	Ranges 0 ... 20 mA, 4 ... 20 mA
Resolution	2 μ A
Voltage drop	max. 2 V bei 20 mA
Max. current	50 mA
Voltage input(DC)	Ranges 0 ... 10 V, 2 ... 10 V, ± 10 V
Resolution	1 mV
Input resistance	> 2 M Ω
Max. voltage	± 30 V
Measuring speed	approx. 2 measurements/s
Linearity	< 0,1% ± 1 Digit for the whole measuring range at an ambient temperature of 20°C
Zero calibration	automatic
Temperature drift	100 ppm/K

Weight	approx. 220 g
Protection	IP 65 (front)
Ambient temperature	-20 ... +65 °C
Storage temperature	-40 ... +85 °C

Digital inputs

Input MPI*	Function of the inputs depending on set up
1. Function Display-Hold	to stop the instantaneous value

Auxiliary power supply output for measuring transducer/sensor

AC models	voltage output 10 V DC $\pm 2\%$, 30 mA and voltage output 24 V DC $\pm 15\%$, 50 mA
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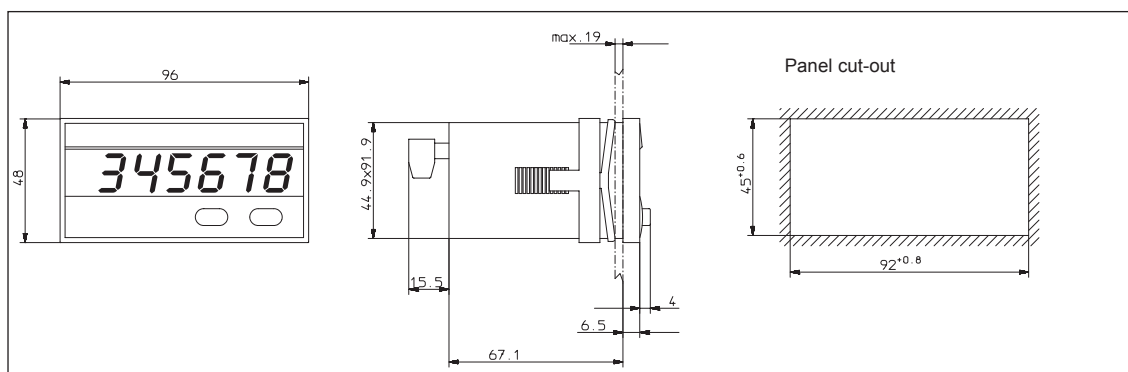
DC models	only voltage output 10 V DC $\pm 2\%$, 30 mA
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Interface

Available options	RS232, RS485, RS422
Baud rate	600, 1200, 2400, 4800, 9600, 19200 programmable
Address	00 ... 99 programmable

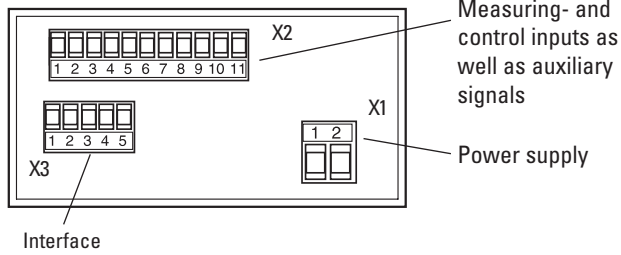
*Multi Purpose Input

Dimensions:

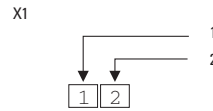


Connections:

Rear side view

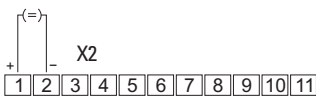


Power supply and alarm outputs



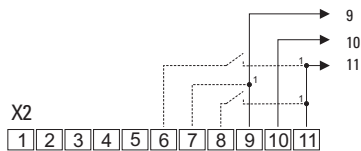
	DC version	AC version
1	10 ... 30 V DC	90 ... 260 V AC (N~)
2	GND4 (0 V DC)	90 ... 260 V AC (L~)

Current measurement



1	Current input (I) 0 ... 20 mA / 4 ... 20 mA
2	GND1 (Analog)

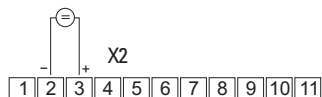
Control inputs and auxiliary power supply (U_{out})



1 Alternatively connect directly to DC supply (galvanic separation of control and measurement inputs)

9	GND3 (for U _{out})
10	U _{out} +10 V/30 mA
11	U _{out} +24 V/50 mA only for power supply 90 ... 260 V AC
8	MP-Input Display-Hold
7	GND2 (MPI)

Voltage measurement



2	GND1 (Analog)
3	Voltage input (U) 0 ... 10 V, 2 ... 10 V, -10 ... +10 V

Interface

X3 1 2 3 4 5

	RS232	RS485	RS422
1	GND	-	-
2	RxD	DO+/RI+	RI+
3	TxD	DO-/RI-	RI-
4	-	-	DO+
5	-	-	DO-

Serial interface

- For data transmission and documentation
- Connection for programmable logic controllers
- Programming via PC

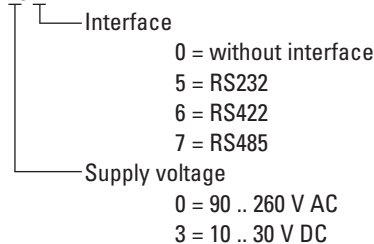
Delivery includes:

- Process display
- Screw terminal, 2-pole, RM 5.08
- Screw terminal, 11-pole, RM 3.81
- Screw terminal, 5-pole, RM 3.81(*)
- Clamping bracket
- Gasket
- Multilingual operating instructions
- 1 set of self-adhesive symbols

* only with the interface option

Order code:

6.550.012.X0X



CODIX 551 for thermocouples and sensors in mV range



Now available with serial interface and set-up software EzControl!

Your benefit

- programmable input characteristics curve with up to 24 control points for 0...400/4000 Ω, 0...100 mV and -100... +100 mV
- auxiliary power supply output for measuring transducer/sensor
- Display Hold input
- easy operation and programming thanks to large keys
- Inputs thermocouples millivolt, resistance thermometer with 2, 3 or 4-wire measurement
- optional serial interface

Technical Data

Display	5-digit display, red 7-segment LED's; height 14,2 mm
Display range	-19999 ... 99999, with leading zeros suppression
Out of range - Indication	Under-range uuuuu / Over range ooooo
Data storage	EEPROM, 1 Million storage cycles or 10 Years
Test voltage	EN61010 Part 1; overvoltage category 2, Test voltages level 2
EMV	Interference resistance EN61000-6-2
AC power supply	90 ... 260 V AC / max. 6 VA external fuse 100 mA/T
DC power supply	10 ... 30 V DC / max. 2 W/galvanically isolated/with inverse polarity protection external fuse 250 mA/T
Mains Hum Filter	digital filter 50 Hz or 60 Hz, programmable

Measurement ranges

Thermocouples	Ranges	Accuracy
Type B	400,0 °C ... 1820,0 °C	± 1,5 °C
E	-200,0 °C ... 1000,0 °C	± 0,5 °C
J	-210,0 °C ... 1200,0 °C	± 0,5 °C
K	-200,0 °C ... 1372,0 °C	± 0,5 °C
N	-200,0 °C ... 1300,0 °C	± 0,5 °C
R	-50,0 °C ... 1760,0 °C	± 1,0 °C
S	-50,0 °C ... 1767,0 °C	± 1,0 °C
T	-210,0 °C ... 400,0 °C	± 0,5 °C

Resolution	0,1 °C (0,1 °F)
Cold-junction-compensation	internal or external (programmable)

Input for resistance thermometers

Resistance thermometer	Ranges	Accuracy
Type Pt100	-200,0 °C ... 800,0 °C	± 1,0 °C
Pt1000	-200,0 °C ... 800,0 °C	± 1,0 °C

Resolution	0,1 °C (0,1 °F)
Type	2 wire, 3 wire and 4 wire technology, programmable

Current	800 µA at Pt100; 80 µA at Pt1000
---------	----------------------------------

Input for resistance

	Ranges	Accuracy
Resistance	0 ... 400 Ω	± 0,2 Ω
Resistance	0 ... 4000 Ω	± 2,0 Ω
Resistance	14 Bit	
Measurement mode	2 wire, 3 wire and 4 wire technology, programmable	
Current	800 µA at 400 Ω 80 µA at 4000 Ω	

Voltage measurement

	Ranges	Accuracy
Voltage	0 ... +100 mV DC	< 0,1% v. Mb ± 1 Digit
Voltage	-100 ... +100 mV DC	< 0,1% v. Mb ± 1 Digit
Resolution	14 bit	
Input resistance	> 2 MΩ	

Further data for measurement input

A/D transducer	Dual-Slope
Measuring speed	approx. 1 measurement/sec
Zero adjustment	automatically
Weight	ca. 220 g
Protection	IP 65
Ambient temperature	-20 ... +65 °C
Storage temperature	-40 ... +85 °C

Digital input

Input MPI*	Function of the input depends on set-up 1. Function: Display-Hold to stop the instantaneous value
Input KEY	Keypad lock-out of alarm settings

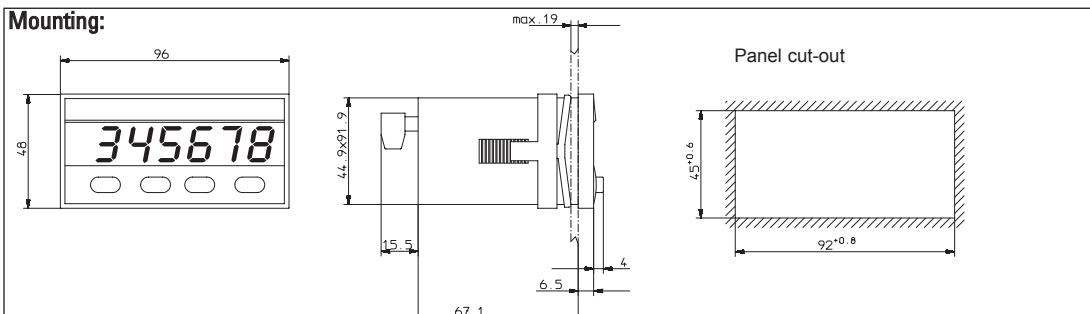
Auxiliary power supply output for measuring transducer/sensor

AC models	voltage output 10 V DC ±2%, 30 mA and voltage output 24 V DC ±15%, 50 mA
DC models	voltage output 10 V DC ±2%, 30 mA

Interface

Available options	RS232, RS485, RS422
Baud rate	600, 1200, 2400, 4800, 9600, 19200 programmable
Address	00 ... 99 programmable

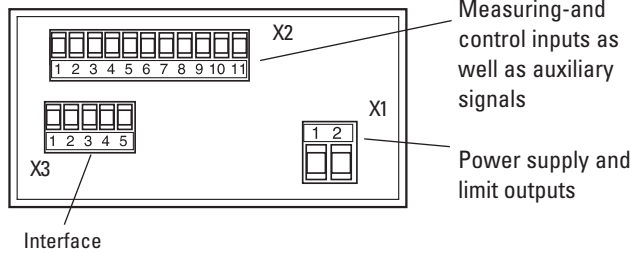
Mounting:



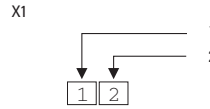
CODIX 551 for thermocouples and sensors in mV range

Electrical Connections

View of rear of unit



Power supply



	DC voltage	AC voltage
1	10 ... 30 V DC	90 ... 260 V AC (N~)
2	GND4 (0 V DC)	90 ... 260 V AC (L~)

Interfaces

X3 1 2 3 4 5

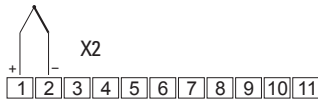
	RS232	RS485	RS422
1	GND	–	–
2	RxD	DO+/RI+	RI+
3	TxD	DO-/RI-	RI-
4	–	–	DO+
5	–	–	DO-

Serial interface

- For data transmission and documentation
- Connection for programmable logic controllers
- Programming via PC

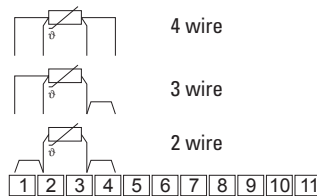
Inputs

Thermocouples

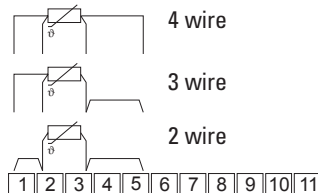


1	Positive leg of thermocouples
2	Negative leg of thermocouples

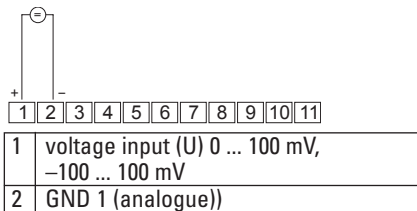
Resistance measurement
Pt1000 oder 0 ... 4000 Ω



Resistance measurement
Pt100 or 0 ... 400 Ω



Voltage measurement 0 ... 100 mV,
or –100 ... 100 mV



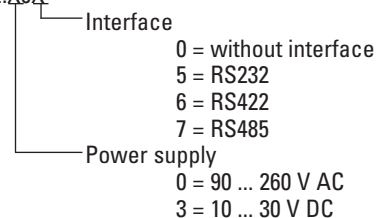
Delivery includes:

- Process display
- Screw terminal, 8-pole, RM 5.08
- Screw terminal, 11-pole, RM 3.81
- Screw terminal, 5-pole, RM 3.81(*)
- Clamping bracket
- Gasket
- Multilingual operating instructions
- 1 set of self-adhesive symbols

* only with the interface option

Order code

6.551.012.X0X



CODIX 552 with totaliser



Now available with serial interface and set-up software EzControl!

Your benefit

- Programmable input characteristic curve with up to 24 control points
- Integration function (totaliser) or limit values reset keys
- Display-Hold or reset input for the integration function (totaliser)
- Very big keys for use with gloves
- very bright display

Input range

- 0 ... 20 mA, 4 ... 20 mA; 0 ... 10 V
- 2 ... 10 V; ± 10 V

More advantages

- Auxiliary power supply output for measuring transducer/sensor
- optional serial interface

Technical data

Miscellaneous Data

Display	5 digit red LED 14.2 mm high
Display range	-19999 ... 99999, with leading zeros suppression
Out of Range Indication	Under-range uuuuu / Over-range ooooo
Data storage	EEPROM, 1 Million storage cycles or 10 Years
Test voltages	EN 61010 Part 1 ; overvoltage category 2, level 2
EMC	Interference emissions EN 50081-2 / EN 55011 Class B

Interference resistance	EN 61000-6-2
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AC power supply	90 ... 260 V AC/max. 6 VA external fuse 100 mA/T
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DC power supply	10 ... 30 V DC, max. 2 W, galvanically isolated with inverse polarity protection external fuse 250 mA/T
-----------------	--

Mains Hum Filter	digital filter 50 Hz or 60 Hz, programmable
------------------	---

Measurement ranges

Current input (DC)	Ranges 0 ... 20 mA, 4 ... 20 mA
Resolution	2 μ A
Voltage drop	max. 2 V bei 20 mA
Max. current	50 mA
Voltage input(DC)	Ranges 0 ... 10 V, 2 ... 10 V, ± 10 V
Resolution	1 mV
Input resistance	> 2 M Ω
Max. voltage	± 30 V

Measuring speed	approx. 2 measurements/s
-----------------	--------------------------

Linearity	< 0,1% ± 1 Digit for the whole measuring range at an ambient temperature of 20°C
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Zero calibration	automatic
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Temperature drift	100 ppm/K
-------------------	-----------

Weight	approx. 220 g
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Protection	IP 65 (front)
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Ambient temperature	-20 ... +65 °C
---------------------	----------------

Storage temperature	-40 ... +85 °C
---------------------	----------------

Digital inputs

Input MPI*	Function of the inputs depending on set up
------------	--

1. Function Display-Hold to stop the instantaneous value

2. Function Reset-Totalizer Resetting the Totalizer

Auxiliary power supply output for measuring transducer/sensor

AC models	voltage output 10 V DC $\pm 2\%$, 30 mA and voltage output 24 V DC $\pm 15\%$, 50 mA
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DC models	only voltage output 10 V DC $\pm 2\%$, 30 mA
-----------	---

Interface

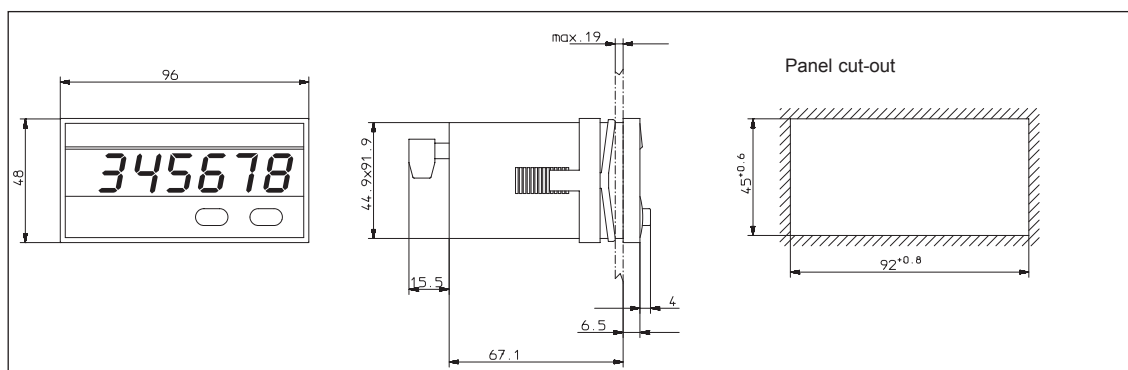
Available options	RS232, RS485, RS422
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Baud rate	600, 1200, 2400, 4800, 9600, 19 200 programmable
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Address	00 ... 99 programmable
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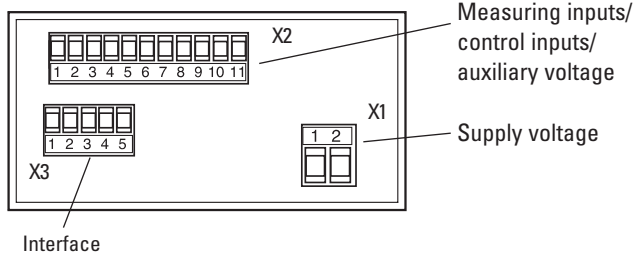
*MPI: Multi Purpose Input

Dimensions:

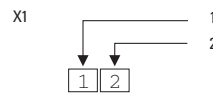


Connections:

Rear side view



Power supply



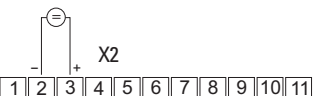
	DC version	AC version
1	10 ... 30 V DC	90 ... 260 V AC (N~)
2	GND4 (0 V DC)	90 ... 260 V AC (L~)

Current measurement



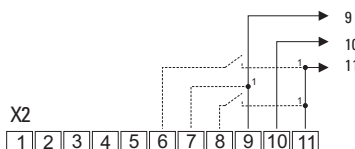
1	Current input (I) 0 ... 20 mA / 4 ... 20 mA
2	GND1 (Analog)

Voltage measurement



2	GND1 (Analog)
3	Voltage input (U) 0 ... 10 V, 2 ... 10 V, -10 ... +10 V

Control inputs and auxiliary voltage (U_{out})



1 Alternatively connect directly to DC supply (galvanic separation of control and measurement inputs)

9	GND3 (for U _{out})
10	U _{out} +10 V/30 mA
11	U _{out} +24 V/50 mA at 90 ... 260 V AC
8	MP-Input Display-Hold/Reset Totaliser
7	GND2 (MPI)

Interface

X3 1 2 3 4 5

	RS232	RS485	RS422
1	GND	-	-
2	RxD	DO+/RI+	RI+
3	TxD	DO-/RI-	RI-
4	-	-	DO+
5	-	-	DO-

Serial interface

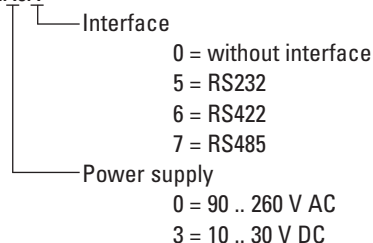
- For data transmission and documentation
- Connection for programmable logic controllers
- Programming via PC

Delivery includes:

- Process display
 - Screw terminal, 2-pole, RM 5.08
 - Screw terminal, 11-pole, RM 3.81
 - Screw terminal, 5-pole, RM 3.81(*)
 - Clamping bracket
 - Gasket
 - Multilingual operating instructions
 - 1 set of self-adhesive symbols
- * only with the interface option

Order code:

6.552.012.X0X



CODIX 553 with 2 limit values



Now available with serial interface and set-up software EzControl!

Your benefit

- Programmable input characteristic curve with up to 24 control points
- Display-Hold or reset input for the limit values
- Very big keys for use with gloves
- Input for key-lock
- very bright display

Input range

- 0 ... 20 mA, 4 ... 20 mA; 0 ... 10 V
- 2 ... 10 V; ± 10 V

Outputs

- 2 limit values with programmable hysteresis and programmable signal behaviour, relays with change-over contact or optocoupler

More advantages

- Auxiliary power supply output for measuring transducer/sensor
- optional serial interface

Technical data

Miscellaneous Data

Display	5 digit red LED 14.2 mm high
Display range	-19999 ... 99999, with leading zeros suppression
Out of Range Indication	Under-range uuuuu / Over-range ooooo
Data storage	EEPROM, 1 Million storage cycles or 10 Years
Test voltages	EN 61010 Part 1 ; overvoltage category 2, level 2
EMC	Interference emissions EN 50081-2 / EN 55011 Class B

Interference resistance	EN 61000-6-2
AC power supply	90 ... 260 V AC/max. 6 VA external fuse 100 mA/T
DC power supply	10 ... 30 V DC, max. 2 W, galvanically isolated with inverse polarity protection external fuse 250 mA/T
Mains Hum Filter	digital filter 50 Hz or 60 Hz, programmable

Measurement ranges

Current input (DC)	Ranges 0 ... 20 mA, 4 ... 20 mA
Resolution	2 μ A
Voltage drop	max. 2 V bei 20 mA
Max. current	50 mA
Voltage input(DC)	Ranges 0 ... 10 V, 2 ... 10 V, ± 10 V
Resolution	1 mV
Input resistance	> 2 M Ω
Max. voltage	± 30 V
Measuring speed	approx. 2 measurements/s
Linearity	< 0,1% ± 1 Digit for the whole measuring range at an ambient temperature of 20°C
Zero calibration	automatic
Temperature drift	100 ppm/K

Weight	approx. 220 g
Protection	IP 65 (front)
Ambient temperature	-20 ... +65 °C
Storage temperature	-40 ... +85 °C

Digital inputs

Input MPI*	Function of the inputs depending on set up
1. Function Display-Hold	to stop the instantaneous value
2. Function Reset	Reset the alarm value
Alarm Latch	

Outputs

Alarm 1/Alarm output 2

Relay output	with volt-free changeover contacts can be setup as normally closed or normally open
Switching voltage	250 V AC/300 V DC
Switching current	max. 3 A AC/DC, min. 30 mA DC
Switching power	2000 VA / 50 Ω

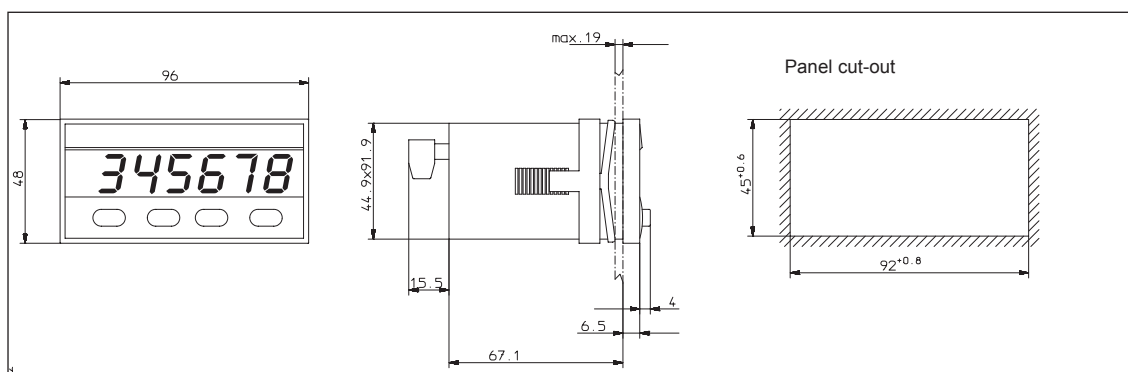
or NPN-optocoupler with open collector and open emitter

Switching power	30 V DC/15 mA
Auxiliary power supply output for measuring transducer/sensor	
AC models	voltage output 10 V DC $\pm 2\%$, 30 mA and voltage output 24 V DC $\pm 15\%$, 50 mA
DC models	only voltage output 10 V DC $\pm 2\%$, 30 mA

Interface

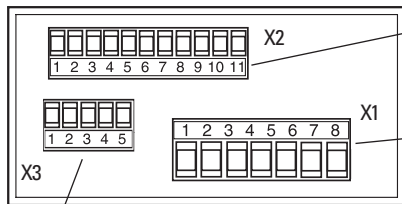
Available options	RS232, RS485, RS422
Baud rate	600, 1200, 2400, 4800, 9600, 19200 programmable
Address Purpose Input	00 ... 99 programmable

Dimensions:



Connections:

Rear side view

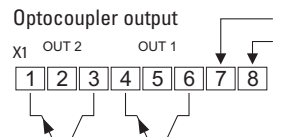
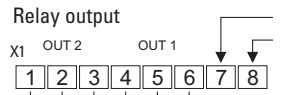


Measuring- and control inputs as well as auxiliary signals

Power supply and limit outputs

Interface

Power supply and alarm outputs



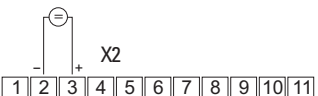
	DC version	AC version
7	10 ... 30 V DC	90 ... 260 V AC (N~)
8	GND4 (0 V DC)	90 ... 260 V AC (L~)

Current measurement



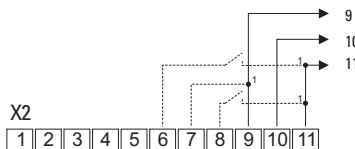
1	Current input (I) 0 ... 20 mA / 4 ... 20 mA
2	GND1 (Analog)

Voltage measurement



2	GND1 (Analog)
3	Voltage input (U) 0 ... 10 V, 2 ... 10 V, -10 ... +10 V

Control inputs and auxiliary power supply (U_{out})



1 Alternatively connect directly to DC supply (galvanic separation of control and measurement inputs)

9	GND3 (for U _{out})
10	U _{out} +10 V/30 mA
11	U _{out} +24 V/50 mA only for power supply 90 ... 260 V AC
8	MP-Input "Reset-Alarm-Latch/Display-Hold"
7	GND2 (KEY/MPI)
6	Keypad lock-out "Key"

Interface

X3 1 2 3 4 5

	RS232	RS485	RS422
1	GND	-	-
2	RxD	DO+/RI+	RI+
3	TxD	DO-/RI-	RI-
4	-	-	DO+
5	-	-	DO-

Application:

- Level measurement
- Flow measurement
- Pressure measurement
- Revolution measurement

Serial interface

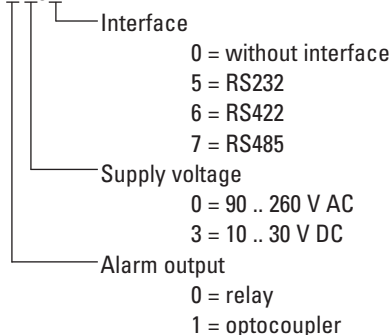
- For data transmission and documentation
- Connection for programmable logic controllers
- Programming via PC

Delivery includes:

- Process display
 - Screw terminal, 8-pole, RM 5.08
 - Screw terminal, 11-pole, RM 3.81
 - Screw terminal, 5-pole, RM 3.81(*)
 - Clamping bracket
 - Gasket
 - Multilingual operating instructions
 - 1 set of self-adhesive symbols
- * only with the interface option

Order code:

6.553.01X.X0X



CODIX 554 for temperature sensors and sensors in the mV range with 2 limit values



Now available with serial interface and set-up software EzControl!

Your benefit

- programmable input characteristics curve with up to 24 control points for 0...400/4000 W, 0...100 mV and -100... +100 mV
- auxiliary power supply output for measuring transducer/sensor
- SET key for limit values reset
- Display Hold input or limit values reset input
- easy operation and programming thanks to large keys
- Inputs
 - thermocouples
 - millivolt, resistance thermometer with 2, 3 or 4-wire measurement
- Outputs
 - 2 limit values with programmable hysteresis and programmable signal behaviour, relays with change-over contact or optocoupler
- Key-lock input
- optional serial interface

Technical Data

Display	5-digit display, red 7-segment LED's; height 14,2 mm	
Display range	-19999 ... 99999, with leading zeros suppression	
Out of range - Indication	Under-range uuuuu / Over range ooooo	
Data storage	EEPROM, 1 Million storage cycles or 10 Years	
Test voltage	EN61010 Part 1; overvoltage category 2, Test voltages level 2	
EMV	Interference resistance EN61000-6-2	
AC power supply	90 ... 260 V AC / max. 6 VA external fuse 100 mA/T	
DC power supply	10 ... 30 V DC / max. 2 W/galvanically isolated/ with inverse polarity protection external fuse 250 mA/T	
Mains Hum Filter	digital filter 50 Hz or 60 Hz, programmable	
Measurement ranges		
Thermocouples	Ranges	Accuracy
Type B	400,0 °C ... 1820,0 °C	± 1,5 °C
E	-200,0 °C ... 1000,0 °C	± 0,5 °C
J	-210,0 °C ... 1200,0 °C	± 0,5 °C
K	-200,0 °C ... 1372,0 °C	± 0,5 °C
N	-200,0 °C ... 1300,0 °C	± 0,5 °C
R	-50,0 °C ... 1760,0 °C	± 1,0 °C
S	-50,0 °C ... 1767,0 °C	± 1,0 °C
T	-210,0 °C ... 400,0 °C	± 0,5 °C
Resolution	0,1 °C (0,1 °F)	
Cold-junction-compensation	internal or external (programmable)	
Input for resistance thermometers		
Resistance thermometer	Ranges	Accuracy
Type Pt100	-200,0 °C ... 800,0 °C	± 1,0 °C
Pt1000	-200,0 °C ... 800,0 °C	± 1,0 °C
Resolution	0,1 °C (0,1 °F)	
Type	2 wire, 3 wire and 4 wire technology, programmable	
Current	800 µA at Pt100; 80 µA at Pt1000	
Input for resistance		
Resistance	Ranges	Accuracy
Resistance	0 ... 400 Ω	± 0,2 Ω
Resistance	0 ... 4000 Ω	± 2,0 Ω
Resistance	14 Bit	
Measurement mode	2 wire, 3 wire and 4 wire technology, programmable	
Current	800 µA at 400 Ω 80 µA at 4000 Ω	

Voltage measurement

	Ranges	Accuracy
Voltage	0 .. +100 mV DC	< 0,1% v. Mb ± 1 Digit
Voltage	-100 .. +100 mV DC	< 0,1% v. Mb ± 1 Digit
Resolution	14 bit	
Input resistance	> 2 MΩ	
Further data for measurement input		
A/D transducer	Dual-Slope	
Measuring speed	approx. 1 measurement/sec	
Zero adjustment	automatically	
Weight	ca. 220 g	
Protection	IP 65	
Ambient temperature	-20 ... +65 °C	
Storage temperature	-40 ... +85 °C	

Digital input

Input MPI*	Function of the input depends on set-up
1. Function: Display-Hold	to stop the instantaneous value
2. Function: Reset-Alarm Latch	Reset the alarm value
Input KEY	Keypad lock-out of alarm settings

Alarm 1/Alarm 2

Relais	with volt-free changeover contacts, can be setup as normally closed or normally open
Switching voltage	250 V AC/300 V DC
Switching current	max. 3 A AC/DC, min. 30 mA DC
Switching power	2000 VA / 50 W
	oder NPN-optocoupler with open collector and open emitter
Switching power	30 V DC / 15 mA

Auxiliary power supply output for measuring transducer/sensor

AC models	voltage output 10 V DC ±2%, 30 mA and voltage output 24 V DC ±15%, 50 mA
DC models	voltage output 10 V DC ±2%, 30 mA

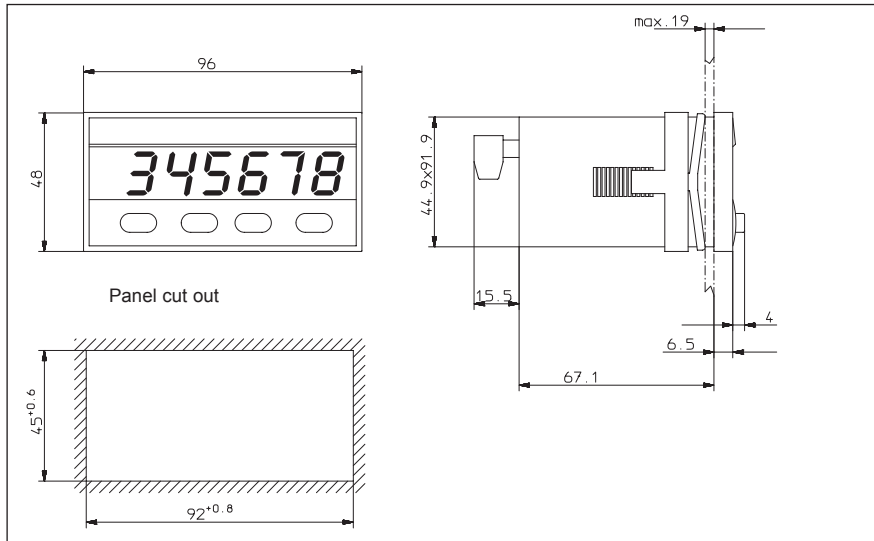
Interface

Available options	RS232, RS485, RS422
Baud rate	600, 1200, 2400, 4800, 9600, 19200 programmable
Address	00 ... 99 programmable

*Multi Purpose Input

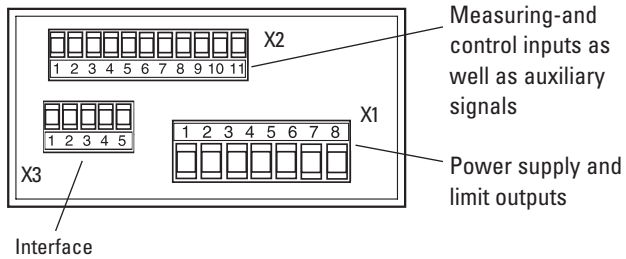
CODIX 554 for thermocouples and sensors in mV range with 2 limit values

Mounting:

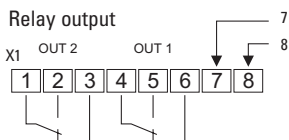


Electrical Connections

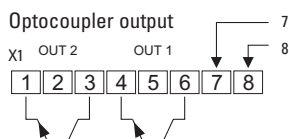
View of rear of unit



Power supply and alarm outputs



	DC voltage	AC voltage
7	10 ... 30 V DC	90 ... 260 V AC (N~)
8	GND4 (0 V DC)	90 ... 260 V AC (L~)



CODIX 554 for thermocouples and sensors in mV range with 2 limit values

Interfaces

X3 1 2 3 4 5

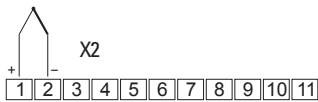
	RS232	RS485	RS422
1	GND	–	–
2	RxD	DO+/RI+	RI+
3	TxD	DO-/RI-	RI-
4	–	–	DO+
5	–	–	DO-

Serial interface

- For data transmission and documentation
- Connection for programmable logic controllers
- Programming via PC

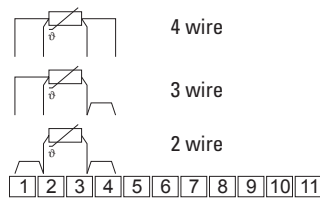
Inputs

Thermocouples

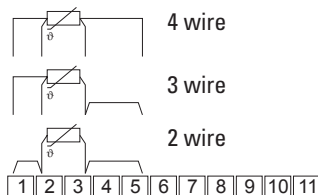


1	Positive leg of thermocouples
2	Negative leg of thermocouples

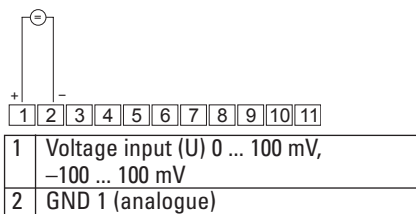
Resistance measurement Pt1000 or 0 ... 4000 Ω



Resistance measurement Pt100 or 0 ... 400 Ω



Voltage measurement 0 ... 100 mV, oder –100 ... 100 mV



Delivery includes:

- Process display
 - Screw terminal, 8-pole, RM 5.08
 - Screw terminal, 11-pole, RM 3.81
 - Screw terminal, 5-pole, RM 3.81(*)
 - Clamping bracket
 - Gasket
 - Multilingual operating instructions
 - 1 set of self-adhesive symbols
- * only with the interface option

Order code

6.554.01X.X0X

Interface

- 0 = without interface
- 5 = RS232
- 6 = RS422
- 7 = RS485

Power supply

- 0 = 90 ... 260 V AC
- 3 = 10 ... 30 V DC

Alarm output

- 0 = relay
- 1 = optocoupler

CODIX 554 for thermocouples and sensors in mV range with 2 limit values

CODIX 554

Kübler

Prozess-Steuergerät
für Thermoelemente,
Messwiderstände,
Widerstandsthermometer
und Sensoren im mV-Bereich
mit 2 Grenzwerten

Process Controller
for thermocouples
measuring resistors
resistance thermometers
sensors in mV range
with 2 alarms

Contrôle de process
pour thermocouples
résistances de mesure
thermomètres à résistance,
capteurs dans la plage des millivolts
avec 2 valeurs limite

Controlador de proceso
para termopares,
resistencias de medición,
termómetro de resistencia
y sensores en la zona de los mV
con 2 valores límite

deutsch
englisch
französisch
español

wir geben Impulse

Kübler

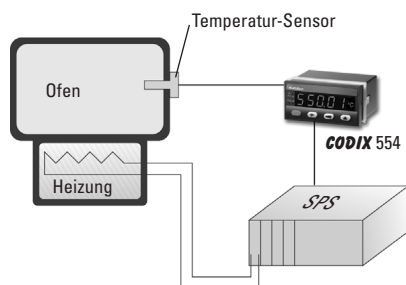
Bedienungsanleitung
Schnittstellen RS 232, RS 422 und RS 485
für CODIX 550 ... 555

User Manual
Interfaces RS 232, RS 422 and RS 485 of CODIX 550-555
(see page 13)

wir geben Impulse

You find more about our products in the Web.
Under http://www.kuebler.com/English/Support/bedienung_gb.htm
the operating instructions are available for the
free download.

Application:



CODIX 555 with totaliser and 2 limit values



Now available with serial interface and set-up software EzControl!

Your benefit

- Programmable input characteristic curve with up to 24 control points
- Integration function (totaliser) or limit values reset keys
- Display-Hold or reset input for the integration function (totaliser) or for the limit values
- Very big keys for use with gloves
- Input for key-lock
- very bright display

Input range

0 ... 20 mA, 4 ... 20 mA; 0 ... 10 V
2 ... 10 V; ± 10 V

Outputs

2 limit values with programmable hysteresis and programmable signal behaviour, relays with change-over contact or optocoupler

More advantages

- Auxiliary power supply output for measuring transducer/sensor
- optional serial interface

Technical data

Miscellaneous Data

Display	5 digit red LED 14.2 mm high
Display range	-19999 ... 99999, with leading zeros suppression
Out of Range Indication	Under-range uuuuu / Over-range ooooo
Data storage	EEPROM, 1 Million storage cycles or 10 Years
Test voltages	EN 61010 Part 1 ; overvoltage category 2, level 2
EMC	Interference emissions EN 50081-2 / EN 55011 Class B

Interference resistance	EN 61000-6-2
AC power supply	90 ... 260 V AC/max. 6 VA external fuse 100 mA/T
DC power supply	10 ... 30 V DC, max. 2 W, galvanically isolated with inverse polarity protection external fuse 250 mA/T
Mains Hum Filter	digital filter 50 Hz or 60 Hz, programmable

Measurement ranges

Current input (DC)	Ranges 0 ... 20 mA, 4 ... 20 mA
Resolution	2 μ A
Voltage drop	max. 2 V bei 20 mA
Max. current	50 mA
Voltage input(DC)	Ranges 0 ... 10 V, 2 ... 10 V, ± 10 V
Resolution	1 mV
Input resistance	> 2 M Ω
Max. voltage	± 30 V
Measuring speed	approx. 2 measurements/s
Linearity	< 0,1% ± 1 Digit for the whole measuring range at an ambient temperature of 20°C
Zero calibration	automatic
Temperature drift	100 ppm/K

Weight	approx. 220 g
Protection	IP 65 (front)
Ambient temperature	-20 ... +65 °C
Storage temperature	-40 ... +85 °C

Digital inputs

Input MPI*	Function of the inputs depending on set up
1. Function Display-Hold	to stop the instantaneous value
2. Function Reset	Reset the alarm value
Alarm Latch	
3. Function Reset-Totalizer	Resetting the Totalizer

Outputs

Alarm 1/Alarm output 2

Relay output	with volt-free changeover contacts can be setup as normally closed or normally open
Switching voltage	250 V AC/300 V DC
Switching current	max. 3 A AC/DC, min. 30 mA DC
Switching power	2000 VA / 50 Ω

or NPN-optocoupler with open collector and open emitter

Switching power: 30 V DC/15 mA

Auxiliary power supply output for measuring transducer/sensor

AC models voltage output 10 V DC $\pm 2\%$, 30 mA and voltage output 24 V DC $\pm 15\%$, 50 mA

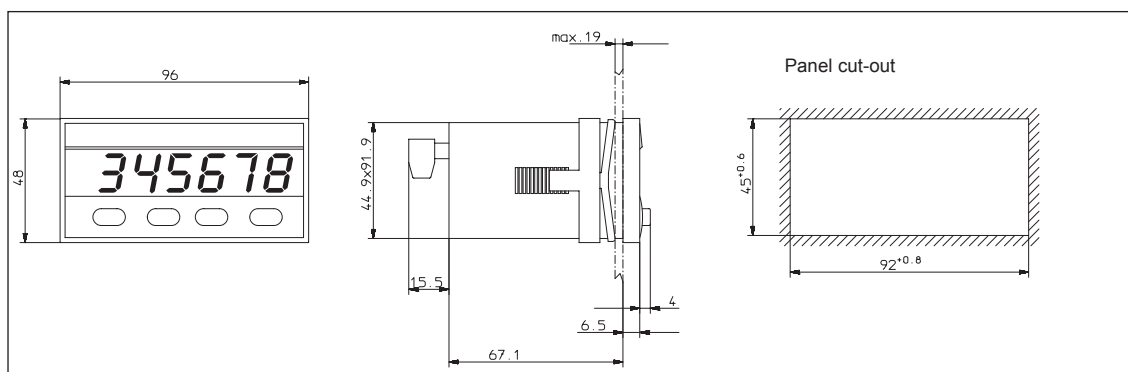
DC models only voltage output 10 V DC $\pm 2\%$, 30 mA

Interface

Available options	RS232, RS485, RS422
Baud rate	600, 1200, 2400, 4800, 9600, 19200 programmable
Address	00 ... 99 programmable

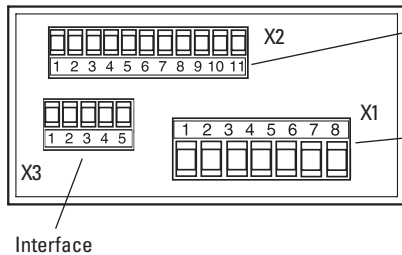
*MPI: Multi Purpose Input

Dimensions:



Connections:

Rear side view

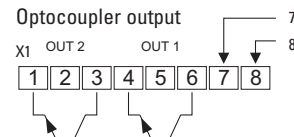
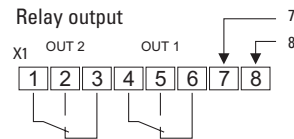


Measuring- and control inputs as well as auxiliary signals

Power supply and limit outputs

Interface

Power supply and alarm outputs



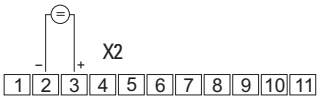
	DC version	AC version
7	10 ... 30 V DC	90 ... 260 V AC (N~)
8	GND4 (0 V DC)	90 ... 260 V AC (L~)

Current measurement



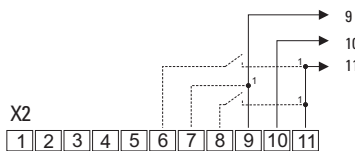
1	Current input (I) 0 ... 20 mA / 4 ... 20 mA
2	GND1 (Analog)

Voltage measurement



2	GND1 (Analog)
3	Voltage input (U) 0 ... 10 V, 2 ... 10 V, -10 ... +10 V

Control inputs and auxiliary power supply (U_{out})



1 Alternatively connect directly to DC supply (galvanic separation of control and measurement inputs)

9	GND3 (for U _{out})
10	U _{out} +10 V/30 mA
11	U _{out} +24 V/50 mA only for power supply 90 ... 260 V AC
8	MP-Input "Reset-Alarm-Latch/Display-Hold/Reset Totalisator"
7	GND2 (KEY/MPI)
6	Keypad lock-out "Key"

Interface

X3 1 2 3 4 5

	RS232	RS485	RS422
1	GND	-	-
2	RxD	DO+/RI+	RI+
3	TxD	DO-/RI-	RI-
4	-	-	DO+
5	-	-	DO-

Application:

- Level measurement
- Flow measurement
- Pressure measurement
- Revolution measurement

Serial interface

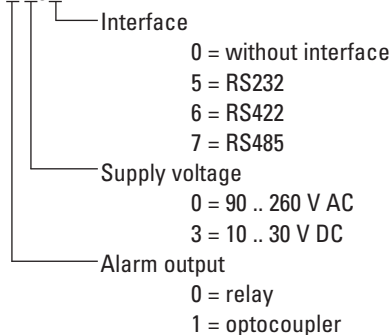
- For data transmission and documentation
- Connection for programmable logic controllers
- Programming via PC

Delivery includes:

- Process display
 - Screw terminal, 8-pole, RM 5.08
 - Screw terminal, 11-pole, RM 3.81
 - Screw terminal, 5-pole, RM 3.81(*)
 - Clamping bracket
 - Gasket
 - Multilingual operating instructions
 - 1 set of self-adhesive symbols
- * only with the interface option

Order code:

6.555.01X.X0X



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

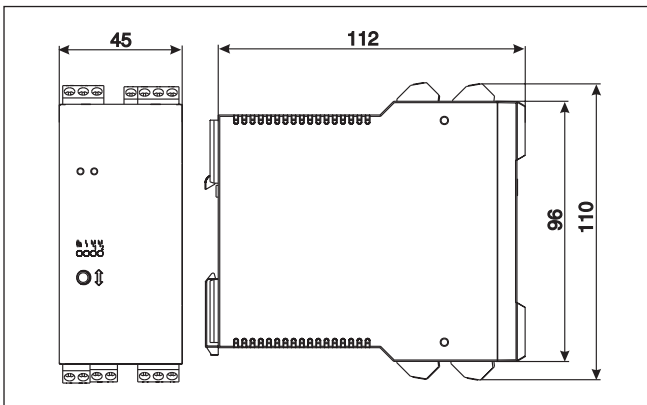
- programmable via PC or keys
- integrated measuring transducer power supply
- RS232 interface for parameter setting and measured values output
- analog output with scale factor for current or voltage of the linearised input

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:

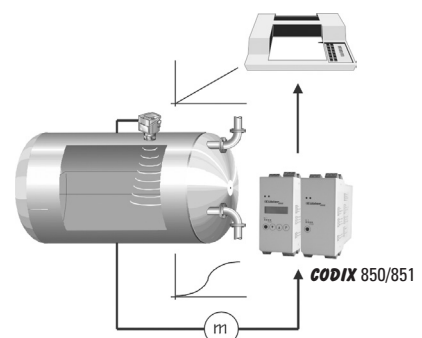


Fields of application:

- 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

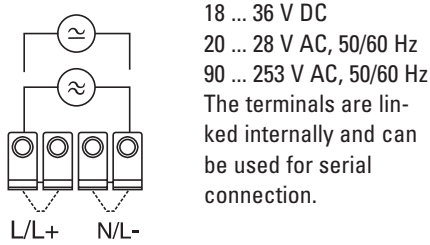
Our process controllers linearise the relationship between the fill-up level h and the volume V of the container. This can be set exactly thanks to 24 or 32 control points. The devices 850/851 can output the linearised values as current or as voltage values (e.g. 4 ... 20 mA) and thus offer in addition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



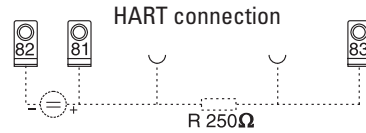
Codix 850/851

Connections

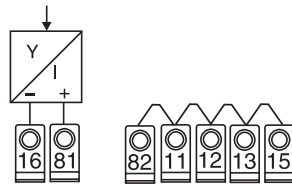
Supply voltage and outputs



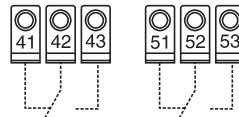
Measuring transducer (internal circuit)



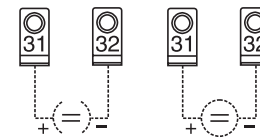
Measuring transducer 2-wire sensor



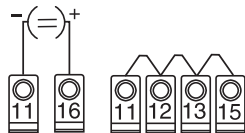
Relays (internal circuit)



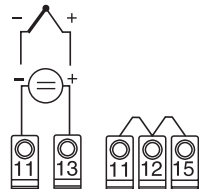
Relays (internal circuit)



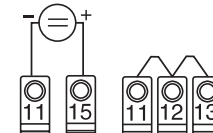
Current input ±20 mA, 0/4 ... 20 mA



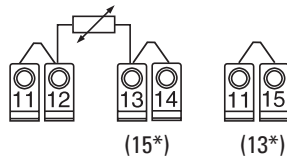
Voltage input ±100 mV, thermocouples



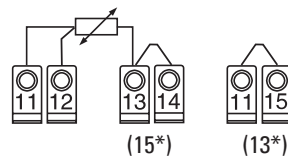
Voltage input ±10 V, 0 ... 1/10 V



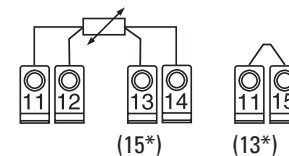
Resistance thermometers/potentiometers 2-wire



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

Reporter 670/680/690



- communication interface with text display
- text selection via parallel or serial interface (automatic baud rate detection)
- easy programming via PC
- alarm output
- easy operation
- DIN-Housing 144 x 72 mm

Reporter 670:

simple device to display texts

Reporter 680:

basic device for economical applications, with a memory capacity of 100 texts

Reporter 690:

extended possibilities of use.
Process data may be embedded in the text of the message.
Real time clock

Technical data

Type:	Reporter 670	Reporter 680	Reporter 690
Display:	Dual line LC-Display with 20 char.s each	Dual line LC-Display with 20 char.s each	Dual line LC-Display with 20 char.s each
Character size:	5 x 7 dot matrix, height 5.5 mm	5 x 7 dot matrix, height 5.5 mm	5 x 7 dot matrix, height 5.5 mm
Character set:	internat. PC 437 with spec. characters	internat. PC 437 with spec. characters	internat. PC 437 with spec. characters
Message memory:	–	EEPROM, non volatile	EEPROM, non volatile
Message memory capacity :	–	100, 2-line message texts with attributes	100, 2-line message texts with attributes
Embed. of variable data:	–	–	99 variables (9 characters each)
Inputs:	–	8 parallell inputs for max. 100 texts, binary or BCD 3 control signals	8 parallel inputs for max. 100 texts, binary or BCD 4 control signals (optional 9 inputs for max. 256 texts)
Message display modes:	Text positioning in both lines, absolute cursor positioning, monitor mode	Direct message (static), Cycle message queue	Direct message (static), Cycle message queue, First in/out and, last in/out message queue
Interface:	Serial interface RS 232 (optional RS422/ RS485), automatic baud rate detection	Serial interface RS 232 (optional RS422/ RS485), automatic baud rate detection	Serial interface RS 232 (optional RS422/ RS485), automatic baud rate detection
Key:	–	1 user programmable key	–
Output:	–	1 optocoupler output (optional: relays)	1 optocoupler output (optional: relays)
Supply voltage:	11 ... 30 V DC, max. 200 mA	11 ... 30 V DC, max. 200 mA	11 ... 30 V DC, max. 200 mA
EMC:	according to EC EMC directive 89/36/EEC	according to EC EMC directive 89/36/EEC	according to EC EMC directive 89/36/EEC
Interference emissions:	EN 61 000-6-4/EN 55011 Class B	EN 61 000-6-4/EN 55011 Class B	EN 61 000-6-4/EN 55011 Class B
Interference resistance:	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2
Operating temperature:	0 ... +50 °C	0 ... +50 °C	0 ... +50 °C
Storage temperature:	–20 ... +70 °C	–20 ... +70 °C	–20 ... +70 °C
Housing:	DIN 144 x 72 x 90 mm	DIN 144 x 72 x 90 mm	DIN 144 x 72 x 90 mm
Protection:	IP 65 front	IP 65 front	IP 65 front

Options for Reporter 680

- Fault indication display with 8 parallel inputs (24 V DC)
order code: 7.680.01X.3XX.503

Options for Reporter 690

- Real-time clock with battery backup, with diagnostic memory for 512 reports
order code: 6.690.01X.34X
- Real-time clock with battery backup, with diagnostic memory for 512 reports, memory extension to 256 message texts
order code: 6.690.01X.35X
- Fault indication display with 8 parallel inputs (24 V DC)
order code: 7.690.01X.3XX.503

Reporter 670/680/690

Delivery includes:

1 reporter 670, 680 or 690

Screw terminals:

670: 1 6-pole screw terminal;

680: 1 6-pole screw terminal and 1 11-pole screw terminal

690: 1 6-pole screw terminal and 1 14-pole screw terminal

1 Panel mounting clip

1 REPORTER programming software

1 Operating instructions

Order Code

Reporter 670: 6.670.012.3.XX

Interface
05 = RS 232
06 = RS 422
07 = RS 485

Order Code

Reporter 680: 6.680.01X.3.XX

Interface
5 = RS 232
6 = RS 422
7 = RS 485

Options
0 = none

Output
0 = relay
1 = optocoupler

Order Code

Reporter 690: 6.690.01X.3.XX

Interface
5 = RS 232
6 = RS 422
7 = RS 485

Options
0 = none
4 = real time clock with
battery backup for 512
reports

Output
0 = relay
1 = optocoupler

Accessories for Reporter

Cable to connect the Reporter with a PC via the RS 232 Interface, length 1.5 m
order code: N.140.075

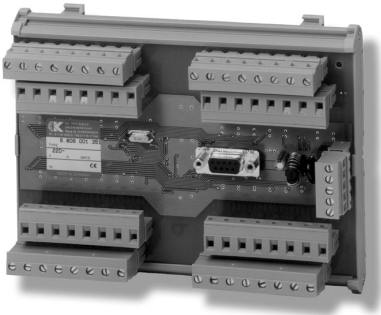
Interface converter RS 232 <=> RS 422
order code: N.150.000

Interface converter RS 232 <=> RS 485
order code: N.150.001

"report" programming software,
MS-DOS Version
order code: N.150.050

DOS enabler for Reporter
Auxiliary software to run the Reporter software under Windows 2000 and Windows NT
order code: N.150.070

Extension module 806



- inputs extension of the Reporter 670/680/690 or PLC control to 16 or 31 parallel, galvanically isolated inputs
- function like 16 to 31 signal lights, the corresponding message appears when an input is active (linkable)
- galvanically isolated optocoupler inputs for 12 ... 250 V AC/DC.

Technical data

Inputs:	16 or 31 parallel, galvanically isolated optocoupler inputs or 31 optocoupler inputs
Input signal level:	12 ... 250 V AC/DC
Supply voltage:	11 ... 30 V DC
Electrical connection:	screw terminals
Housing:	for snap-on fitting to 35 mm top hat rails or G rails
Dimensions:	171 x 126 x max. 73
Outputs:	9-pole Sub-D-connector

Order Code:

6.806.001.35X

Number of inputs
 0 = 16 inputs
 1 = 31 inputs
 3 = 31 inputs with a common optocouplerconnection

Accessories for extension module

Cable to connect the extension module with the Reporter 680:
 order code: G.201.510

Cable to connect the extension module with the Reporter 690:
 order code: G.201.505

DIN rail mounting frame



Mounting frame, small

- for panel-mounting of all counters, timers and process indicators, with DIN size 24 x 48 mm or 50 x 25 mm, such as **CODIX 52X**, **CODIX 53X**, **CODIX 13X** as well as electro-mechanical pulse counters and hour meters, such as H37, W17.50 etc.

Note:

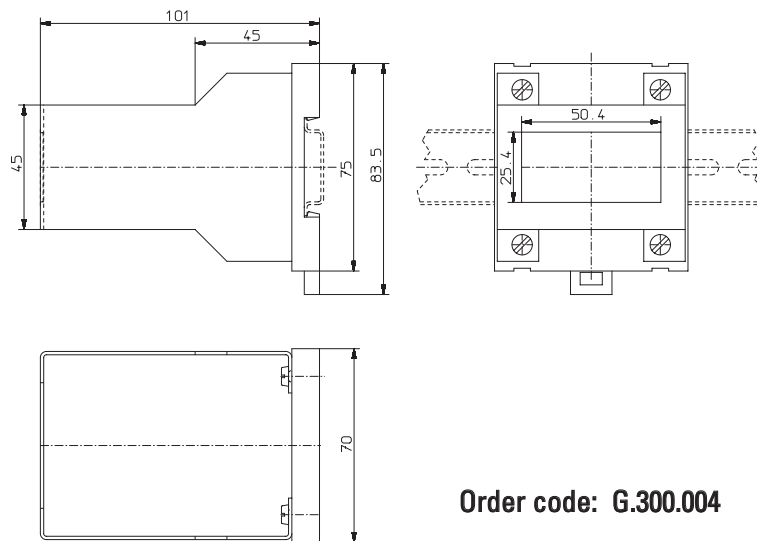
when mounting the DIN 24 x 48 mm units in the frame, please use the 50 x 25 mm frame adapter, which is provided with all electronic products.

- cut-out 25 x 50 mm
- for snap-on fitting to 35 mm top hat DIN rails
- construction: mounting frame for counter: chromated sheet steel
top hat DIN rail adapter: glass fibre reinforced polyamide

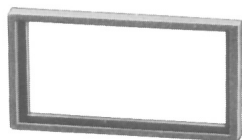
- applications include, for example, control cabinets

Order code: G.300.004

Dimensions (in mm)



Order code: G.300.004



Additional accessory:

Adapter frame 25 x 50 for size 22 x 45 mm
Counter contains this item.

Order code: T.008.180

EzControl



- Easy parameter software for counter type 716/717 and process displays 55x.
- Upload and download function
- Monitor- and terminal program for easy diagnostic functions
- Online display of the measurement values
- German and english.

EzControl software on CD

Order No.: N 150.080

Accessoires:

RS 232 interface cable to the counter

Order No.: N 140.076

RS 232 <=> RS 485/422 interface converter with power supply 90 ... 250 V AC (50 or 60 Hz) and cable to counter

Order No.: N 150.002

RS 232 <=> RS 485/422 interface converter with power supply and cable to counter for the US market (110 V AC)

Order No.: N 150.003

