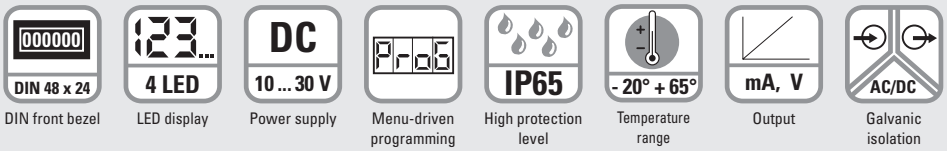
LED setpoint adjuster | Standard signal output for mA or V, also time-controlled (DC) | Codix 533

The setpoint adjuster Codix 533 triggers a standard analog signal or a freely programmable signal sequence from 0 ... 12 V or from 0 ... 24 mA.

The setpoint adjuster is a real innovation, opening up new application potentials in process technology and automation.



DIN front bezel | LED display | Power supply | Menu-driven programming | High protection level | Temperature range | Output | Galvanic isolation

Innovative

- Function of a digital time controller with analog output.
- Manual functions with direct input or stepped incremental output of the setpoint.
- 4-digit, 8 mm high top-quality LED display.
- Physical variables output / 0 ... 12 V or 0 ... 24 mA analog signals.
- Units of display can be freely programmed and displayed – no conversion of the specified output value required.
- Ideal for simulation runs without the need for expensive, time-consuming running-in of processes.

Powerful

- Simpler to run processes than with a PLC or process controller.
- Everything can be programmed easily by means of 2 keys and the text menu.
- Digital setting - no additional DIP switches or potentiometers.
- Display allows simple monitoring of the specified setpoint output.
- User-friendly display form as direct digital value.
- 3 separate functions integrated as standard in the Codix 533.
- High accuracy of < 0.2% of the final value.

Order no.

Setpoint adjuster **6.533.012.300** 1)

Delivery specification
- Setpoint adjuster
- Mounting clip
- Gasket
- Front bezel for screw mounting (T008181) 56 x 40 mm [2.20 x 1.57"], panel cut-out 50 x 25 mm [1.97 x 0.98"]
- Front bezel for clip mounting (T008180) 53 x 28 mm [2.09 x 1.10"], panel cut-out 50 x 25 mm [1.97 x 0.98"]
- 1 set of self-adhesive symbols
- Instruction manual, multilingual

1) Stock types

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LED setpoint adjuster | Standard signal output for mA or V, also time-controlled (DC) | Codix 533

Accessories	Dimensions in mm [inch]		Order no.
Adapter front bezel, 72 x 36 [2.83 x 1.42]	for cut-out 68 x 33 [2.68 x 1.30] to cut-out 45 x 22.2 [1.77 x 0.87], for counters 48 x 24 [1.89 x 0.94], as set	black and silver anodized	**162704 Set**
Adapter front bezel, 48 x 48 [1.89 x 1.89]	for cut-out 45 x 45 [1.77 x 1.77] to cut-out 45 x 22.2 [1.77 x 0.87], with clip mounting for counters 48 x 24 [1.89 x 0.94]	black	**T008883**
Adapter front bezel, 60 x 50 [2.36 x 1.97]	for cut-out 54 x 29 [2.13 x 1.14] to cut-out 45 x 22.2 [1.77 x 0.87], with screw mounting and gasket for counters 48 x 24 [1.89 x 0.94]	black	**N003001**
Transparent cover, lockable, IP65	for cut-out 54 x 29 [2.13 x 1.14], for screw mounting to front bezel F1B or adapter front bezel N003001, for counters with cut-out 50 x 25 [1.97 x 0.98] or 45 x 22.2 [1.77 x 0.87]		**N003002**
Sealing cover type K1, IP65	suitable for front bezel 60 x 50 [2.36 x 1.97], for screw mounting of electromech. counters and via adapter front bezel N003001 for counters 48 x 24 [1.89 x 0.94]		**G008301**
Mounting frame with cut-out 50 x 25 [2.36 x 1.97] via separate adapter also for 45 x 22.2 [1.77 x 0.87]	for snap-on mounting on 35 [1.38] top-hat DIN rail, for counters 53 x 28 [2.09 x 1.10] and via separate adapter (T008180) for counters 48 x 24 [1.89 x 0.94]	chromated	**G300004**

Suitable gaskets, other accessories and installation examples for optional accessories can be found in chapter accessories or in the accessories section under: www.kuebler.com/accessories.

Technical data

General technical data

Display	4 digits, red 7 segment LED display; 8 mm [0.32“] high
Data backup	EEPROM
Operating temperature	-20°C ... +65°C [-4°F ... +149°F] (non-condensing)
Storage temperature	-25°C ... +85°C [-13°F ... +185°F]

Mechanical characteristics

Housing	front panel mount 48 x 24 mm [1.89 x 0.94“] acc. to DIN 43700; RAL 7021, dark grey
Protection	IP65 (front side)
Weight	approx. 50 g [1.76 oz]
Connections	screw terminal, pitch 5.08 mm [2“], 7 pin

Electrical characteristics

Power supply	10 ... 30 V DC, galvanically isolated with integrated reverse polarity protection
Power consumption	max. 1 W
Test voltage	500 V, 50 Hz, 1 min.
EMC standard	EN 55011 class B EN 61000-6-2, EN 61000-6-3 EN 61326-1
UL approval	file E128604

Standard signal outputs / control input

Current output	load	0 ... 24 mA, increment 10 µA 20 mA: ≤ 500 Ohm > 20 mA: ≤ 400 Ohm
Voltage output	load	0 ... 12 V, increment 10 mV ≥ 2 kOhm
Control input	HIGH	4 ... 30 V DC
Hold (HIGH active)	LOW	0 ... 2 V DC
Accuracy		< 0.2% of the full scale value ±0.02 %/$K_{Ambient}$

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LED setpoint adjuster | Standard signal output for mA or V, also time-controlled (DC) | Codix 533

3 operating modes programmable

Manual direct input (Setp)

- Fast adjustment and manual approach to the desired setpoint value.
- Setpoint value can be specified directly during operation via the keys in V or mA.
- Output of the value 3 seconds after the last key actuation.

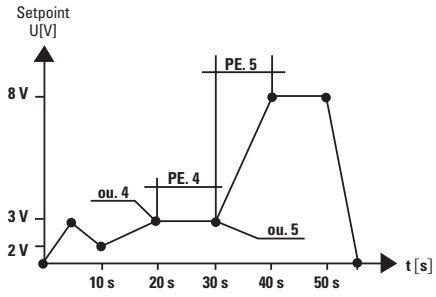
Manual ramping function (Man)

- Possibility of a stepped, incremental approach to the desired setpoint value using the keys on the front.
- Input of the minimum and maximum setpoint values and the increment by key actuation in the programming level.
- During operation the device starts with the minimum setpoint value – the right key is used to increase the value by the amount of the increment; the left key decreases the value.
- The programmed maximum value cannot be exceeded.

Automatic ramping function (Auto)

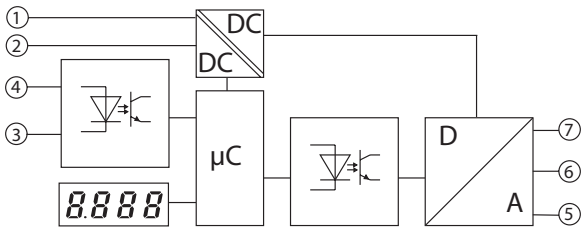
- Function of a digital time based controller with analog output. Setpoint values can be programmed and carried out for process sequences, either cyclic or time dependent: irrigating, dosing, lubricating, filling, venting, mixing.
- With max. 20 current or voltage values.
- Cyclically limited (time) or unlimited.

Example of an automatic ramping function



Example with 8 points	
ou. 1	0 V
PE 1	5 s
ou.2	3 V
PE 2	5 s
ou. 3	2 V
PE 3	10 s
ou. 4	3 V
PE 4	10 s
ou. 5	3 V
PE 5	10 s
ou. 6	8 V
PE 6	10 s
ou. 7	8 V
PE 7	10 s
ou. 8	0 V
PE 8	5 s

Block diagram



Inputs

1	2	3	4
10 ... 30 V DC	GND_1	GND_2	Hold

Outputs

5	6	7
0 ... 24 mA (Iout)	GND_3	0 ... 12 V DC Uout)

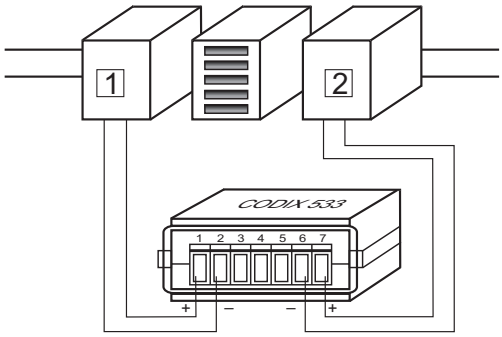
Terminal assignment

Inputs

1	2	3	4
10 ... 30 V DC	GND_1	GND_2	Hold

Outputs

5	6	7
0 ... 24 mA	Analog GND_3	0 ... 12 V DC



1 Power supply
2 Analog input

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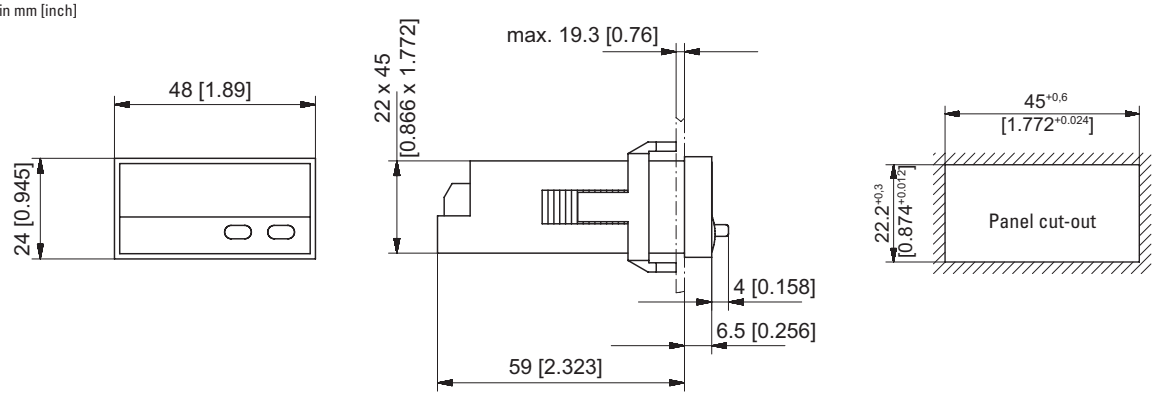
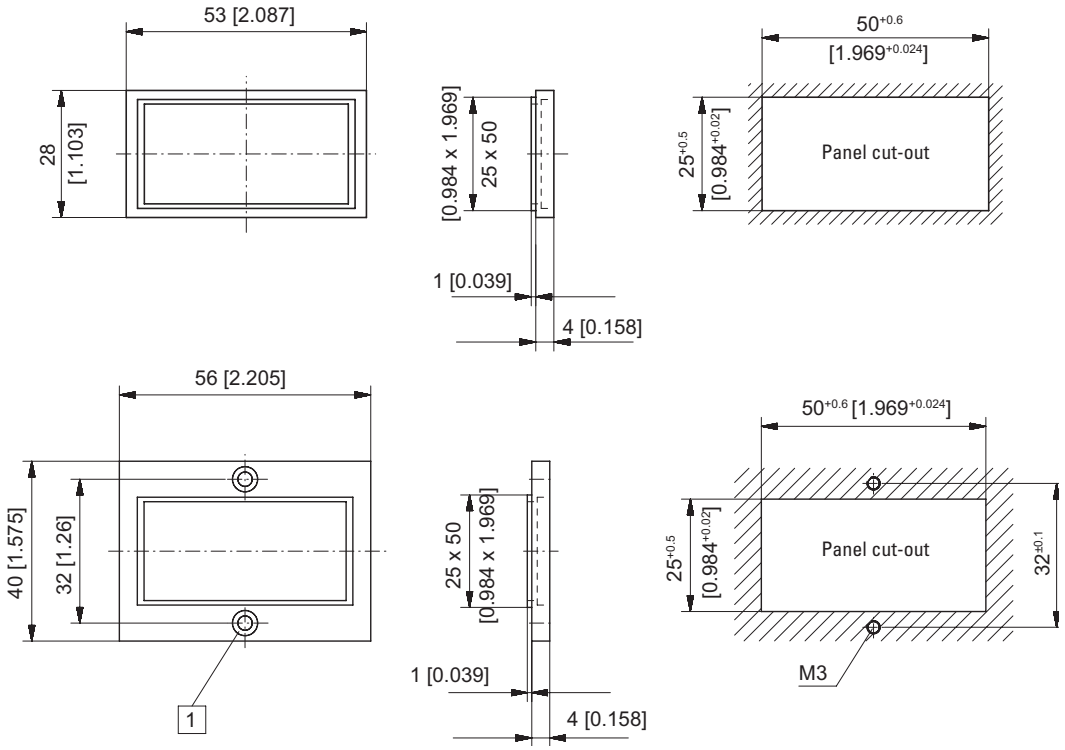
LED setpoint adjuster | Standard signal output for mA or V, also time-controlled (DC) | Codix 533

Dimensions

Dimensions in mm [inch]



Front bezel



1 Countersinking Af3, DIN 74

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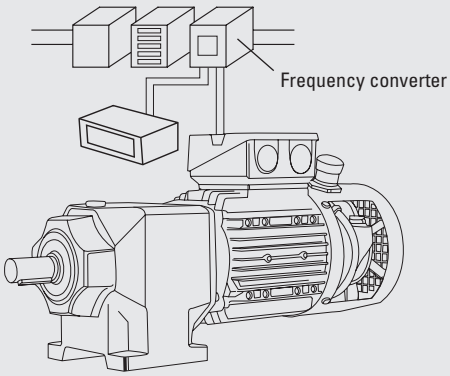
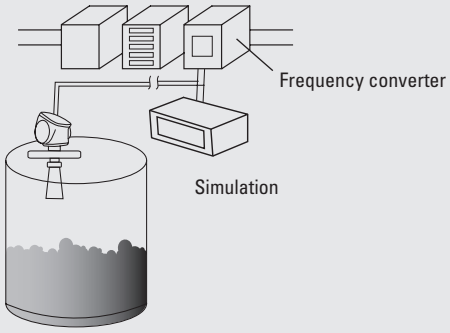
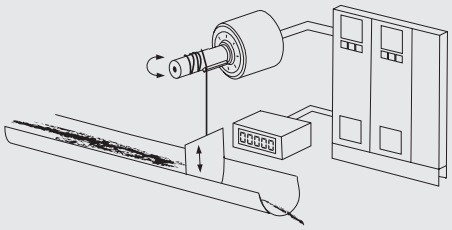
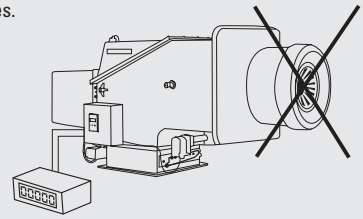
LED setpoint adjuster | Standard signal output for mA or V, also time-controlled (DC) | Codix 533

Areas of application / Applications

	Simple control (fixed installation) in plants, machines and devices	For use in set-up mode of plants, machines and devices
	Time-based ramping up or down of:	Manual (direct) specification or time-based or manual setting (ramping up or down) of:
	Rotary speeds (e.g. frequency converter), flow rates, temperatures, positions, pressure and fill levels. In short: all physical quantities that can be represented with analog standard signals.	
Applications	Simple time controller with standard signal output	
	Commissioning, running-in processes or rotary speed control of motors through setpoint setting. 	Calibration of filling levels and flow rates: the setpoint adjuster simulates the output signals of a level or flow sensor for configuring a control. 
	Control of simple, time-based processes by means of an analog signal, e.g. ramping control for locks and sluices 	Alignment for temperature-based processes without having to heat up the plant: the setpoint adjuster can simulate various processes for test purposes. 
Solution with different modes	2 operating modes are provided for that purpose: - Manual ramping function - Automatic ramping function	The following operating modes are provided for that purpose: - Manual direct input - Manual ramping function - Automatic ramping function
Advantages	Instead of using an expensive, complex and difficult-to-use PLC, our setpoint adjuster can handle this task as a standalone device. The user saves costs and the task can be performed in a flexible and quick way, even without any prior knowledge.	The setpoint adjuster simulates the sensor signal that is read by the physical process, e.g. the rise of the temperature, the filling of tank plants. Expensive and complex running-in of processes can be replaced with the simulation performed by the setpoint adjuster.
	The output signal can be displayed directly or scaled in any desired unit. The user always sees the exact progress. An easy-to-use device with three selectable modes is available.	

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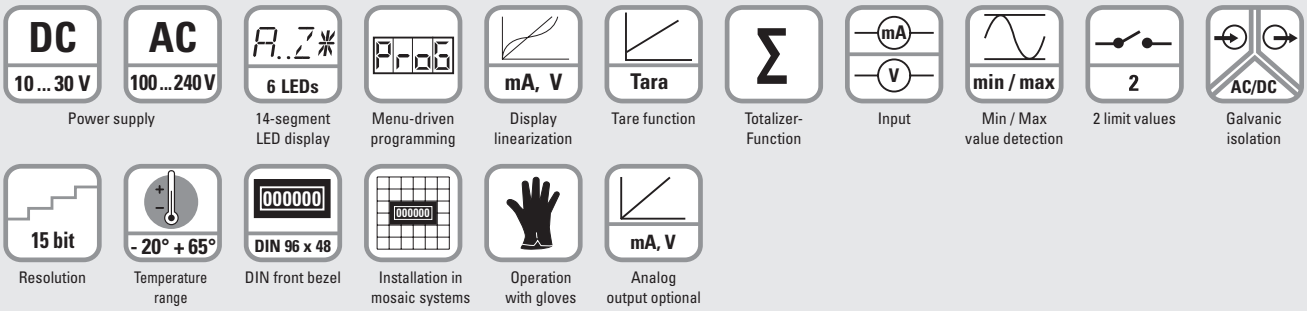
LED process controllers | For standard signal inputs (AC+DC) | Codix 565

The process controller Codix 565 with totalizer function displays V and mA standard signal inpus in high resolution. In addition it can monitor and control 2 limit values.

These fast displays set new standards when it comes to user friendliness. Their easy-to-read 14-segment LED display, easy-to-understand running help texts and a practical quick-start guide eliminate the need to wade through time-consuming full instruction manuals.

With optional analog output.



User-friendly

- Practical quick-start guide for setting the parameters and operating the device.
- Help text as running text.
- Easy-to-read 14-segment LED display, 6 digits 14 mm [0.55] high.
- Simple programming via 4 keys on the front.
- One front key as well as 2 additional inputs can be programmed for specific applications.
- Customer-specific characteristic (linearization) curve via 12 control points for all measurement signal inputs.
- MIN/MAX memory function, individually resettable.

Powerful

- Sampling rate of 10 readings per second.
- Time-controlled totalizer function for totalizing the measured values. Can be reset separately.
- 2 relay outputs (changeover contacts) for limit monitoring with hysteresis and ON/OFF delay function for current measured or totalizer values.
- Analog output for the current measured value, MIN-value, MAX-value or totalizer value.
- Auxiliary sensor power supply 15 V DC / 25 mA, also for 2-wire transmitters.
- Inputs and outputs galvanically isolated .
- Digital filter (first-order) for smoothing display fluctuation with unstable input signals.
- Tare function.

Order code

6.565 . 010 . X0X
(a) (b) (c) (d)

(a) *Input type*
5 = standard signal input [1)]

(b) *Outputs*
0 = relays [1)]

(c) *Power supply*
0 = 100 ... 240 V AC, ± 10% [1)]
3 = 10 ... 30 V DC [1)]

(d) *Further outputs (optional)*
0 = none [1)]
9 = analog output (only for DC version)

Delivery specification:
- Process device
- Mounting clip
- Gasket
- Instruction manual, multilingual
- 1 sheet of self-adhesive symbols
- Quick-start guide

Practical quick-start guide for setting the parameters and operating the device.

The guide can be affixed directly to the front of the unit and can be removed and re-applied as required.

1) Stock types.

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LED process controllers | For standard signal inputs (AC+DC) | Codix 565

Accessories	Dimensions in mm [inch]		Order no.
Mounting frame with cut-out 92 x 45 [3.62 x 1.77]	for snap-on mounting on 35 [1.38] top-hat DIN rail, for counters 96 x 48 [3.74 x 1.89]	grey	**G300005**

Suitable gaskets as well as further accessories can be found in the accessories section or in the accessories area of our website at: www.kuebler.com/accessories.

Technical data

General technical data

Display	6-digit, 14 segment LED
Digit height	14 mm [0.55"]
Display range	-199999 … 999999, with leading zero blanking
Data retention	> 10 years, EEPROM
Operation	5 keys
Operating temperature	-20°C ... +65°C [-4°F ... +149°F] (non-condensing)
Storage temperature	-25°C ... +75°C [-13°F ... +167°F]
Relative humidity (non-condensing)	R.H. 93 % at +40°C [+104°F]
Altitude	up to 2000 m [6562']

Electrical characteristics

Power supply	AC supply	100 ... 240 V AC / max. 9 VA 50 / 60 Hz, tolerance ±10% ext. fuse protection: T 0.1 A
	DC supply	10 ... 30 V DC / max. 3.8 W with galvanic isolation and reverse polarity protection ext. fuse protection: T 0.4 A
Mains hum suppression		50 Hz or 60 Hz, programmable
Sensor power supply	AC supply	24 V DC ±15 %, 30 mA 15 V DC ± 1 %, 25 mA
	DC supply	15 V DC ± 1 %, 25 mA
EMC standards		EN 55011 class B EN 61000-6-2, EN 61000-6-3 with shielded signal and control cables
Device safety	designed to	EN 61010 part 1
	protection class	2 (front side)
	application area	pollution level 2
	overvoltage category	II
UL approval		file E128604

Mechanical characteristics

Housing	Panel mount housing to DIN 43700, RAL 7021
Dimensions	96 x 48 x 102 mm [3.78 x 1.89 x 4.02"]
Panel cut-out	92 +0.8 x 45 +0.6 mm [3.62 +0.032 x 1.77 +0.024"]
Installation depth	approx. 92 mm [3.62"] incl. terminals
Weight	approx. 180 g [6.34 oz]
with analog output	200 g [7.06 oz]
Protection	IP65 (front side)
Housing material	Polycarbonate UL94 V-2
Vibration resistance acc. to EN 60068-2-6	10 ... 55 Hz / 1 mm / XYZ 30 min in each direction
Shock resistance acc. to EN 60068-2-27	100G / 2 ms / XYZ 3 times in each direction
acc. to EN 60068-2-29	10G / 6 ms / XYZ 2000 times in each direction

Connections

Power supply and outputs	Plug-in screw terminal, 8-pin, RM 5.00, core ø max. 2.5 mm² [AWG 13]
Signal and control inputs	Plug-in screw terminal, 9-pin, RM 3.50, core ø max. 1.5 mm² [AWG 15]

Measuring signal inputs

Sampling rate	10 readings/sec

Voltage input

Input signal	0 ... 10 V, 2 … 10 V, ± 10 V
Measuring range	-10.5 ... +10.5 V
Resolution	< 0.4 mV (±15 bit)
Measuring accuracy at 23°C [73°F] (% of range)	typ. 0.02 % / max. ≤ 0.05 %
Temperature drift	< 100 ppm/$K_{Ambient}$
Input resistance	1 MΩ
Max. voltage	± 30 V

Current input

Input signal	0 ... 20 mA, 4 … 20 mA
Measuring range	-0.5 ... 21 mA
Resolution	1 µA (> 14 bit)
Measuring accuracy at 23°C [73°F] (% of range)	typ. 0.02 % / max. ≤ 0.05 %
Temperature drift	< 100 ppm/$K_{Ambient}$
Input resistance	22 Ω + PTC 25 Ω
Voltage drop	approx. 1.8 V at 20 mA
Max. current	60 mA

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LED process controllers | For standard signal inputs (AC+DC) | Codix 565

Control inputs MPI 1 / MPI 2

Quantity		2 optocouplers
Function		programmable
Switching levels	LOW	< 2 V
	HIGH	> 4 V (max. 30 V)
Pulse length		> 100 ms

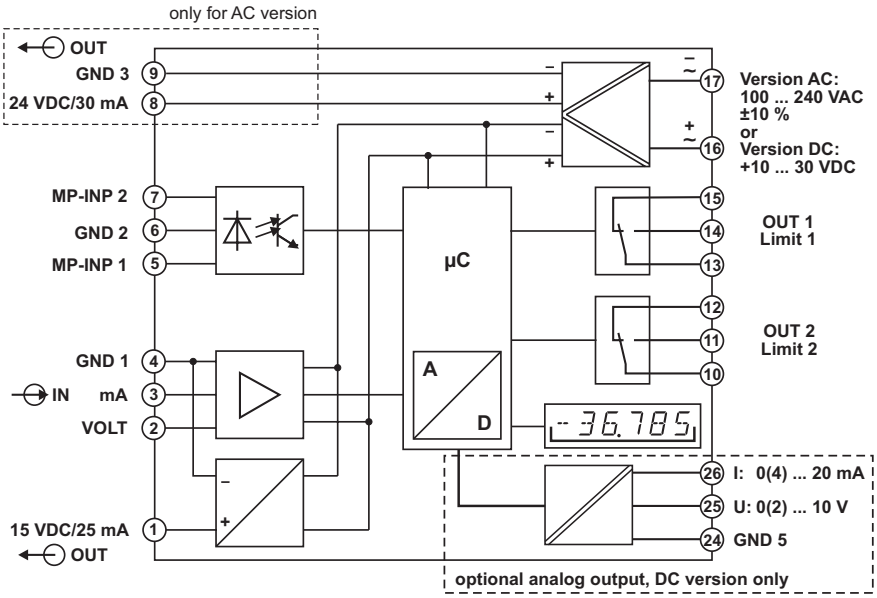
Analog output (optional - only for DC version)

Output ranges		0 (4) ... 20 mA / 0 (2) ... 10 V
Load	current output	≤ 500 Ω
	voltage output	≥ 2000 Ω
Resolution		15 bit
Update time (basic device measuring rate)		100 ms
Temperature drift		≤ 100 ppm/$K_{Ambient}$
Accuracy		±0.1% of the output range high value
Output ripple		≤ 10 mV
Isolation voltage		500 V AC for 1 minute or 1 kV DC for 1 second

Alarm outputs

Relays		changeover contacts
Switching voltage	max.	250 V AC / 125 V DC
	min.	5 V AC / 5 V DC
Switching current	max.	5 A AC / 5 A DC
	min.	10 mA DC
Switching capacity	max.	1250 VA / 150 W

Block diagram



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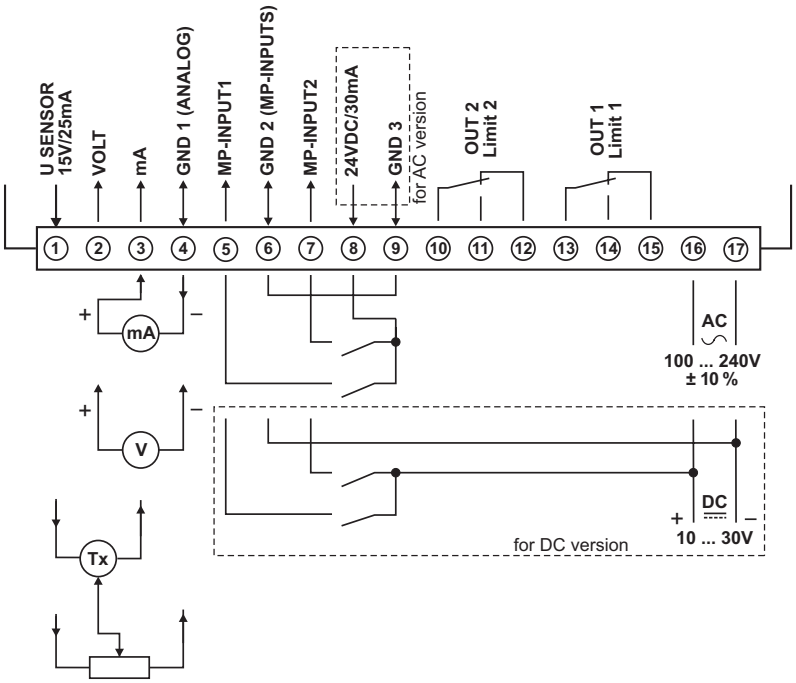
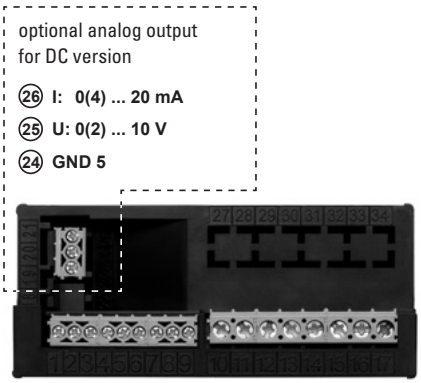
LED process controllers | For standard signal inputs (AC+DC) | Codix 565

Terminal assignment

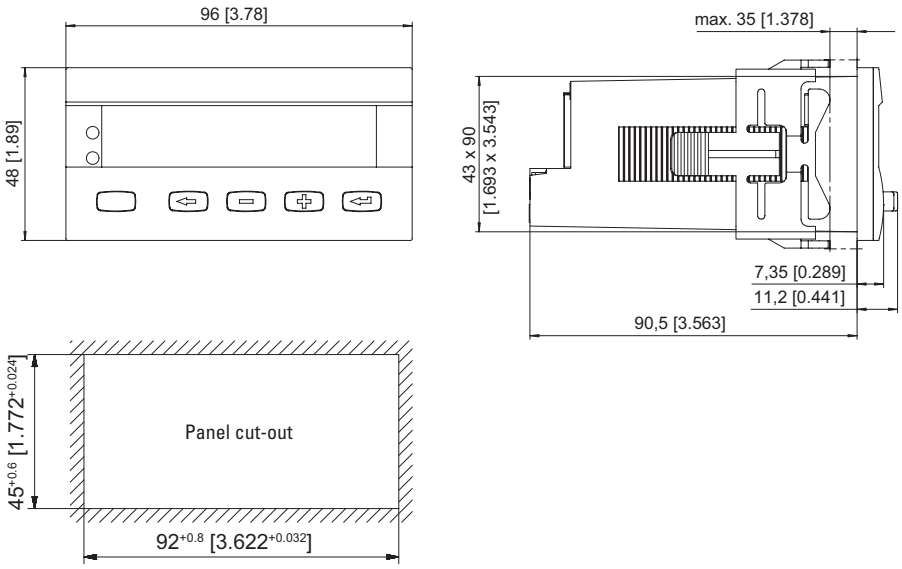


Rear side view



Dimensions

Dimensions in mm [inch]



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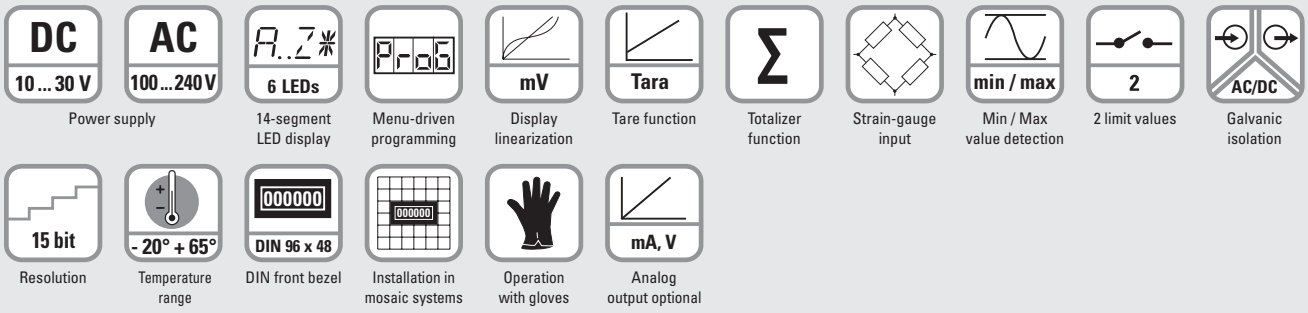
LED strain-gauge controllers | For strain-gauge inputs (AC+DC) | Codix 566

The process controller Codix 566 with totalizer function displays measured values from all common strain-gauge inputs in high resolution. In addition it can monitor and control 2 limit values.

These fast displays set new standards when it comes to user friendliness. Their easy-to-read 14-segment LED display, easy-to-understand running help texts and a practical quick-start guide eliminate the need to wade through time-consuming full instruction manuals.

With optional analog output.



Power supply | 14-segment LED display | Menu-driven programming | Display linearization | Tare function | Totalizer function | Strain-gauge input | Min / Max value detection | 2 limit values | Galvanic isolation

Resolution | Temperature range | DIN front bezel | Installation in mosaic systems | Operation with gloves | Analog output optional

User-friendly

- Practical quick-start guide for setting the parameters and operating the device.
- Help text as running text.
- Easy-to-read 14-segment LED, 6-digit display, 14 mm high.
- Simple programming via 4 keys on the front.
- One front key as well as 2 additional inputs can be programmed for specific applications.
- Customer-specific characteristic (linearization) curve via 12 control points for all measurement signal inputs.
- MIN/MAX memory function, individually resettable.

Powerful

- Sampling rate of 10 readings per second.
- Application-specific characteristic curves via 12 measurement points.
- Manual totalizer function for totalizing the measured values. Can be reset separately.
- 2 relay outputs (changeover contacts) for limit monitoring with hysteresis and ON/OFF delay function for current measured or totalizer values.
- Analog output for the current measured value, MIN-value, MAX-value or totalizer value.
- Auxiliary sensor power supply 10 V DC / 30 mA for powering 350 Ω bridges.
- Inputs and outputs galvanically isolated.
- Digital filter (first-order) for smoothing display fluctuation with unstable input signals.
- Tare function.

Order code

6.566 . 010 . X0X

(a) (b) (c) (d)

(a) *Input type*
6 = Strain-gauge inputs [1]

(b) *Outputs*
0 = relays [1]

(c) *Power supply*
0 = 100 ... 240 V AC, ±10 % [1]
3 = 10 ... 30 V DC [1]

(d) *Further outputs (optional)*
0 = none [1]
9 = analog output [1] (only for DC version)

Delivery specification:
- Process device
- Mounting clip
- Gasket
- Instruction manual, multilingual
- 1 sheet of self-adhesive symbols
- Quick-start guide

Practical quick-start guide for setting the parameters and operating the device.

The guide can be affixed directly to the front of the unit and can be removed and re-applied as required.

1) Stock types.

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LED strain-gauge controllers | For strain-gauge inputs (AC+DC) | Codix 566

Accessories	Dimensions in mm [inch]		Order no.
Mounting frame with cut-out 92 x 45 [3.62 x 1.77]	for snap-on mounting on 35 [1.38] top-hat DIN rail, for counters 96 x 48 [3.74 x 1.89]	grey	**G300005**

Suitable gaskets as well as further accessories can be found in the accessories section or in the accessories area of our website at: www.kuebler.com/accessories.

Technical data

General technical data

Display	6-digit, 14 segment LED
Digit height	14 mm [0.55“]
Display range	-199999 … 999999, with leading zero blanking
Data retention	> 10 years, EEPROM
Operation	5 keys
Operating temperature	-20°C ... +65°C [-4°F ... +149°F] (non-condensing)
Storage temperature	-25°C ... +75°C [-13°F ... +167°F]
Relative humidity (non-condensing)	R.H. 93 % at +40°C [+104°F]
Altitude	up to 2000 m [6562‘]

Electrical characteristics

Power supply	AC supply	100 ... 240 V AC / max. 9 VA 50 / 60 Hz, tolerance ±10 % ext. fuse protection: T 0.1 A
	DC supply	10 ... 30 V DC / max. 3.8 W with galvanic isolation and reverse polarity protection ext. fuse protection: T 0.4 A
Mains hum suppression		50 Hz or 60 Hz programmable
Sensor power supply	AC supply	24 V DC ±15 %, 30 mA 10 V DC ±1 %, 30 mA
	DC supply	10 V DC ±1 %, 30 mA
EMC standard		EN 55011 class B EN 61000-6-2, EN 61000-6-3 with shielded signal and control cables
Device safety	designed to protection class application area overvoltage category	EN 61010 part 1 2 (front side) pollution level 2 II
UL approval		file E128604

Mechanical characteristics

Housing	Panel mount housing to DIN 43700 RAL 7021
Dimensions	96 x 48 x 102 mm [3.78 x 1.89 x 4.02“]
Panel cut-out	92 +0.8 x 45 +0.6 mm [3.62 +0.032 x 1.77 +0.024“]
Installation depth	approx. 92 mm [3.62“] incl. terminals
Weight with analog output	approx. 180 g [6.34 oz] 200 g [7.06 oz]
Protection	IP65 (front side)
Housing material	Polycarbonate UL94 V-2
Vibration resistance acc. to EN 60068-2-6	10 - 55 Hz / 1 mm / XYZ 30 min in each direction
Shock resistance acc. to EN 60068-2-27	100 G / 2 ms / XYZ 3 times in each direction
acc. to EN 60068-2-29	10 G / 6 ms / XYZ 2000 times in each direction

Connections

Power supply and outputs	Plug-in screw terminal, 8-pin, RM 5.00, core ø max. 2.5 mm² [AWG 13]
Signal and control inputs	Plug-in screw terminal, 9-pin, RM 3.50, core ø max. 1.5 mm² [AWG 15]

Control inputs MPI 1 / MPI 2

Quantity		2 optocouplers
Function		programmable
Switching levels	LOW	< 2 V
	HIGH	> 4 V (max. 30 V)
Pulse length		> 100 ms

Measuring signal inputs

Sampling rate	10 readings/sec
Input resistance	1 MΩ
Max. measuring signal range	approx. ±35 mV
Max. voltage	±10 V

Sensitivity ranges: 3.3 – 3.0 – 2.0 mV / V

Resolution	±15 bit
Measuring accuracy at 23°C (% of range)	typ. 0.05 % / max. ≤ 0.1 %
Temperature drift	< 100 ppm/$K_{Ambient}$

Sensitivity ranges: 1.5 – 1.0 mV / V

Resolution	±14 bit
Measuring accuracy at 23°C (% of range)	typ. 0.1 % / max. ≤ 0.2 %
Temperature drift	< 100 ppm/$K_{Ambient}$

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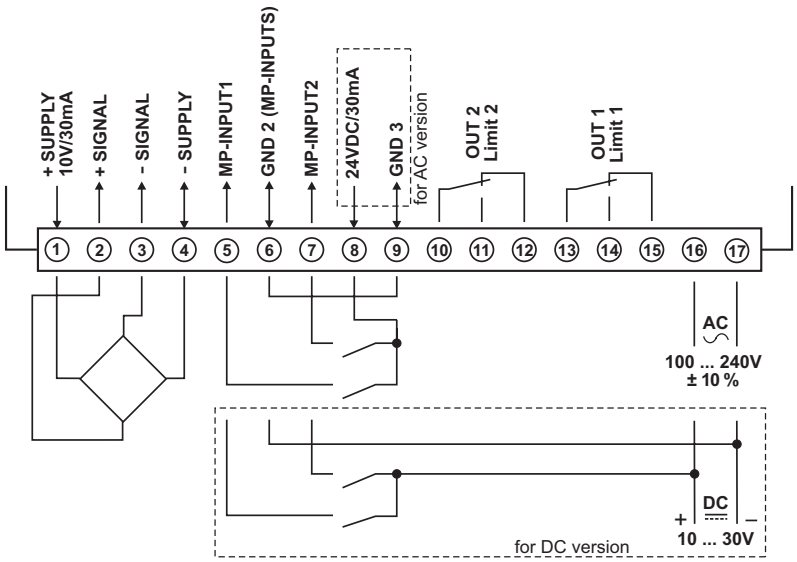
LED strain-gauge controllers | For strain-gauge inputs (AC+DC) | Codix 566

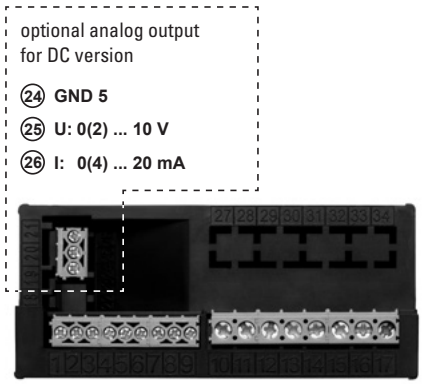
Analog output (optional - only for DC version)		
Output ranges		0 (4) ... 20 mA / 0 (2) ... 10 V
Load	current output voltage output	≤ 500 Ω ≥ 2000 Ω
Resolution		15 bit
Update time (basic device measuring rate)		100 ms
Temperature drift		≤ 100 ppm/$K_{Ambient}$
Accuracy		±0.1 % of the output range high value
Output ripple		≤ 10 mV
Isolation voltage		500 V AC for 1 minute or 1 kV DC for 1 second

Alarm outputs		
Relays		changeover contacts
Switching voltage	max. min.	250 V AC / 125 V DC 5 V AC / 5 V DC
Switching current	max. min.	5 A AC / 5 A DC 10 mA DC
Switching capacity	max.	1250 VA / 150 W
Pull-in time		approx. 10 ms

Terminal assignment



Rear side view



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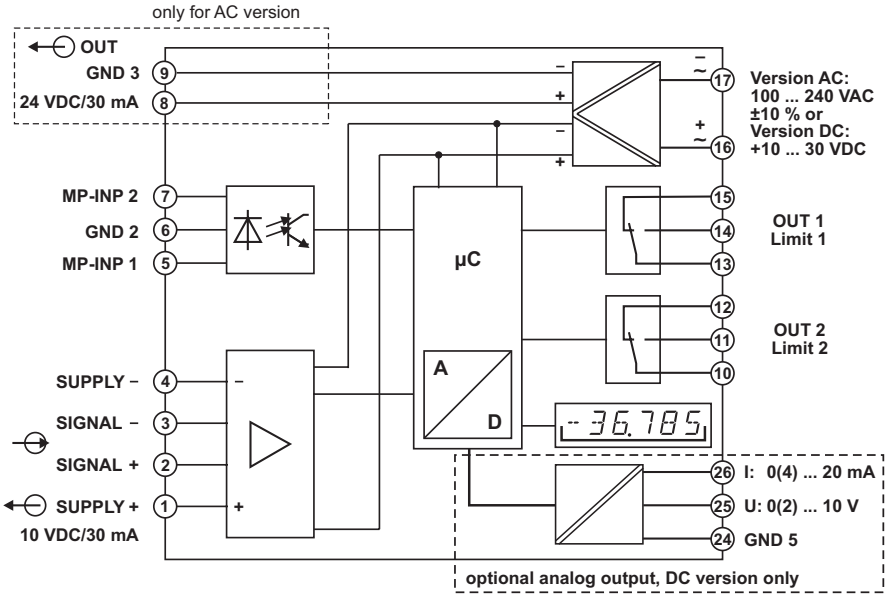
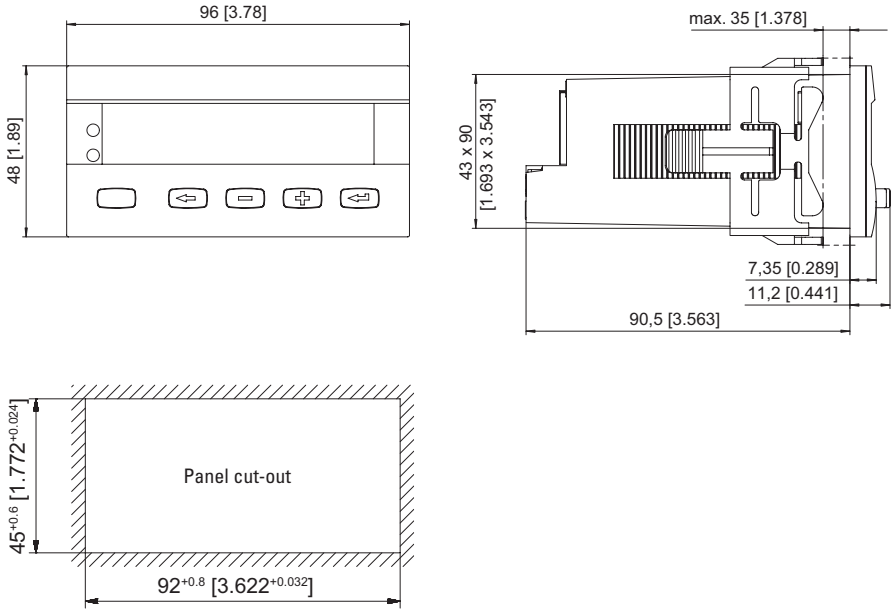
LED strain-gauge controllers | For strain-gauge inputs (AC+DC) | Codix 566

Block diagram



Dimensions

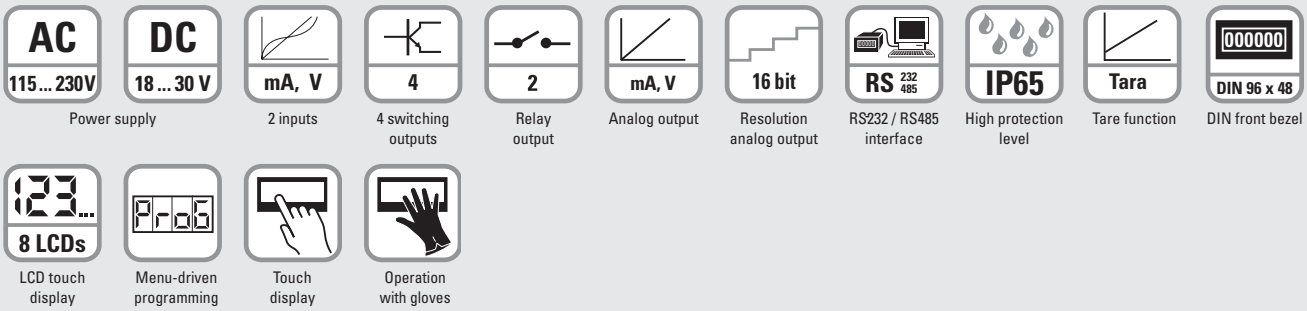
Dimensions in mm [inch]



LCD touch process controllers | 2 standard signal inputs + analog and switching outputs | 573T

The process controller with 2 analog inputs can be used in both single channel mode as well as in dual channel. In dual channel mode, all arithmetic operations are available for displaying the sum total, difference, ratio or the product. Inputs and outputs can be scaled separately.

Can be used as a simple process signal converter, process controller (ON/OFF controller) or for complex measuring tasks, where the relationship between two values, one to the other, must be monitored, calculated or further processed in a higher-level controller.



Innovative

- 2 separate freely scalable analog inputs ±10 V and 0/4 ... 20 mA, resolution 16 bit.
- Tare function – the unit can be set to 0 for any input voltage.
- Programmable linearization: with up to 24 control points, input via key-pad or via the teach-in function.
- Averaging measurement over 2 to 16 measuring cycles, for use with serious fluctuations of the input signals.
- Easy to programme - the desired display value is simply keyed-in for a specific input signal.
- Fast 1 ms sampling rate per channel alternating.
- Serial interface RS232 or RS485 for reading data in and out.

Compact and multifunctional

- Up to 3 display values in one device, display 1, display 2 + display calculated based on 1 and 2.
- AC and DC power supply in one device.
- Simple menu-driven programming via touch disply, as well as tare or teach-in key.
- Can be used as a simple process signal converter, process controller (ON/OFF controller) or for complex measuring tasks where the relationship between two values, one to the other, must be monitored, calculated or further processed in a higher-level controller.
- Mathematical operation of the measured values of inputs 1 and 2. The result can also if required be multiplied, divided or added to an offset value, in order to obtain the desired display value.
- Analog output 0/4 ... 20 mA or ±10 V.
- 4 fast PNP switching outputs (reaction time < 1 ms), with switching hysteresis, step or tracking preset.
- Programmable display refresh time.

Order code

6.573T	.	01	X (a)	.	X (b)	0 (c)	X (d)

(a) *Relay outputs*
0 = 2 relay outputs
2 = without output

(b) *Power supply*
3 = 18 ... 30 V DC
E = 18 ... 30 V DC + 115 ... 230 V AC

(c) *Further options*
0 = none

(d) *Electrical outputs*
0 = none
1 = RS232, 4 switching outputs
2 = RS232, 4 switching outputs, analog output
3 = RS485, 4 switching outputs

Delivery specification
- Display 573T
- Gasket
- Mounting kit
- Manual German/English

Stock types
6.573T.012.301
6.573T.012.302
6.573T.010.302
6.573T.010.E02

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LCD touch process controllers | 2 standard signal inputs + analog and switching outputs | 573T

Accessories			Order no.
Mounting frame with cut-out 92 x 45 [3.62 x 1.77]	for snap-on mounting on 35 [1.38] top-hat DIN rail, for counters 96 x 48 [3.74 x 1.89]	grey	**G300005**
OS6.0 software for parameter setting	can be downloaded at www.kuebler.com		

Suitable gaskets as well as further accessories can be found in the accessories section or in the accessories area of our website at: www.kuebler.com/accessories.

Technical data

General technical data

Display	LCD touch display, 13 mm high 8 decades + sign
Operating temperature	-20°C ... +60°C [-4°F ... +140°F] (non-condensing)
Storage temperature	-25°C ... +70°C [-13°F ... +158°F]
Altitude	up to 2000 m [6562']

Electrical characteristics

Power supply		18 ... 30 V DC, with reverse polarity protection (rated voltage 24 V DC) 115 ... 230 V AC, 50/60 Hz (option)
Current consumption DC		100 mA, without load
Power consumption AC		approx. 3 VA, without load
Auxiliary power supply (for encoder)		
	AC supply	24 V DC ±15 %, 150 mA (up to +45°C) 80 mA (from +46°C)
	DC supply	U_B - 1 V, 250 mA
Reference output		
	output voltage	10 V DC
	accuracy	±0,1 %
	load	max. 10 mA / ≥ 1 kOhm
EMC standards		EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61326-3-2
Device safety	designed to	EN 61010 part 1
	protection class	2
	application area	pollution level 2

Mechanical characteristics

Housing	ABS UL94–V-0
Weight	approx. 200 g
Protection	IP65 (front side) IP20 (rear side)
Terminals	max. 1.5 mm²

Inputs

2 analog inputs		0 ... 20 mA, 4 ... 20 mA -10 ... +10 V
	input resistance current	Ri = 120 Ohm
	input resistance voltage	Ri = 50 kOhm
	measuring time per channel	min. 1 ms (programmable)
	resolution	16 bit (15 bit + sign)
	accuracy	±0.1 % ±1 digit
3 control inputs (Cnt 1 - 3)		PNP
	input frequency	max. 10 kHz
	input level	HTL: Low 0 ... 3 V / High 9 ... 30 V
	load	max. 2 mA / Ri > 15 kΩ / 470 pF

Outputs (option)

4 switching outputs		5 ... 30 V DC/200 mA (PNP)
	reaction time	< 1 ms
Interface		RS232 or RS485 Drivecom Protokoll / Modbus / Printer 9600 ... 38400 Baud
Analog output		-10 ... +10 V (max. 2 mA) or 0 ... 20 mA, 4 ... 20 mA (max. 270 Ω)
	resolution	16 bit (15 bit + sign)
	accuracy	±0.1 %
	reaction time	< 1 ms
Relay output		2 changeover contacts (potential free) max. 250 V AC / 3 A / 750 VA max. 150 V DC / 2 A / 50 W
	reaction time	< 20 ms

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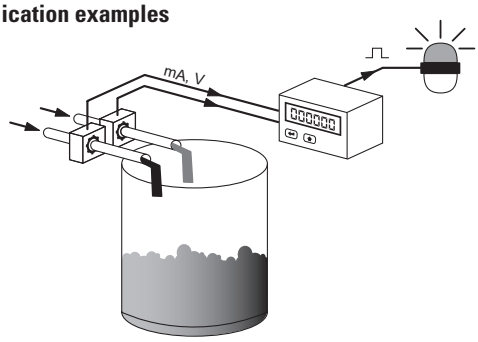
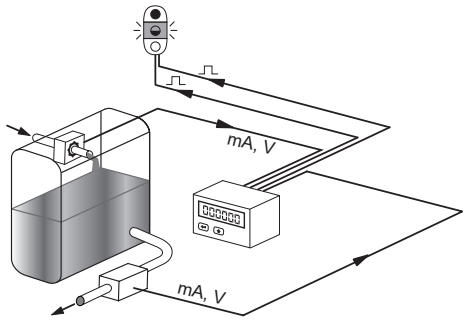
LCD touch process controllers | 2 standard signal inputs + analog and switching outputs | 573T

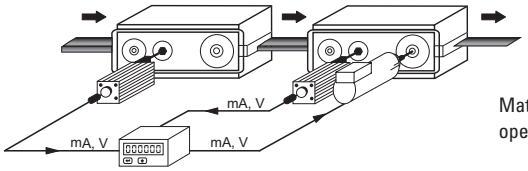
Application examples



Monitoring of mixing ratios and display of flow rate



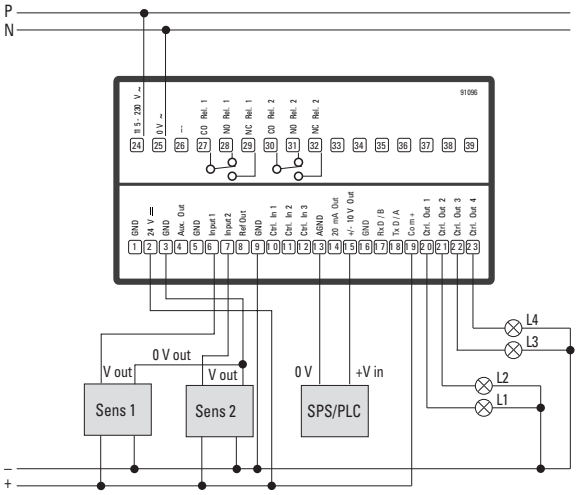
Level monitoring and adjustment, display of inflow and outflow



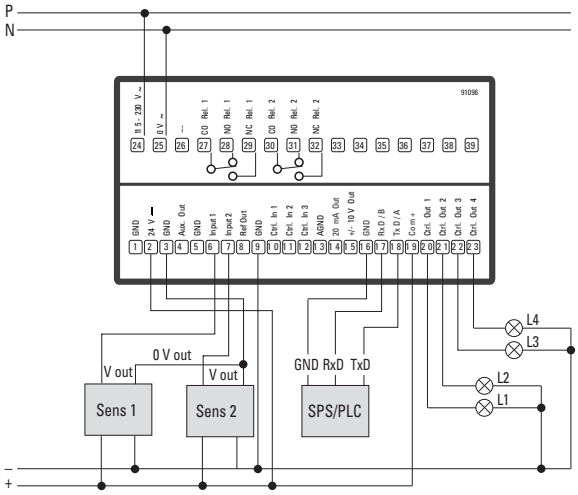
Material stretching, as well as monitoring of synchronous operation, with display of individual speeds

Connection example

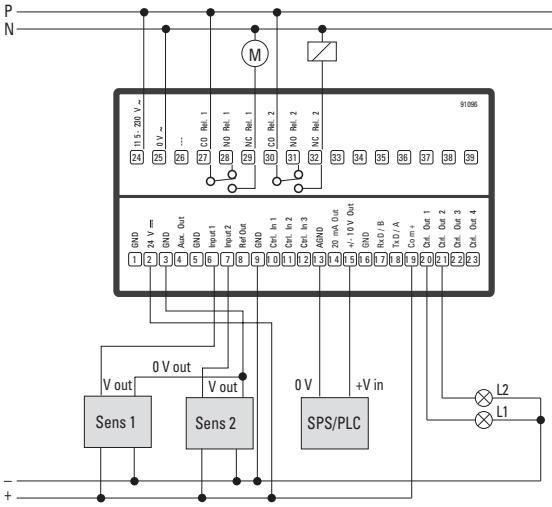
Analog input, analog output, switching outputs



Analog input, switching outputs, interface RS232



Analog input, analog output, load output (relay), switching outputs



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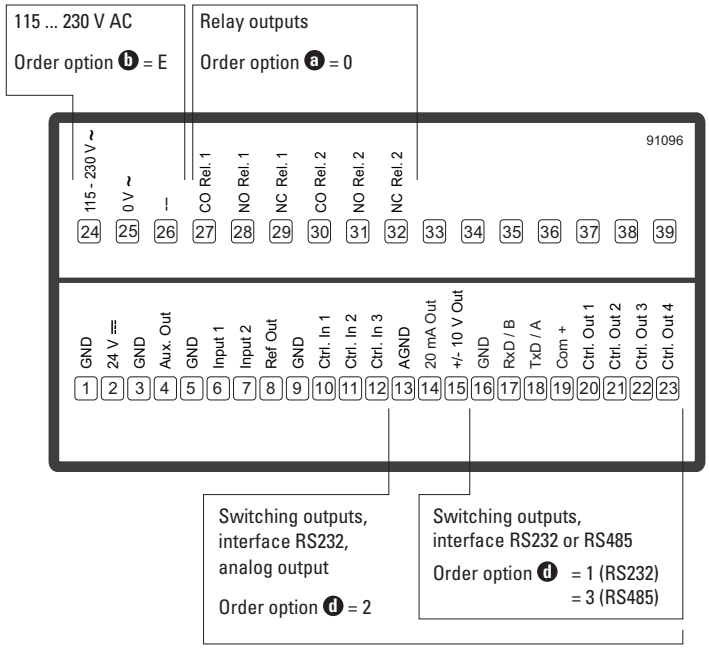
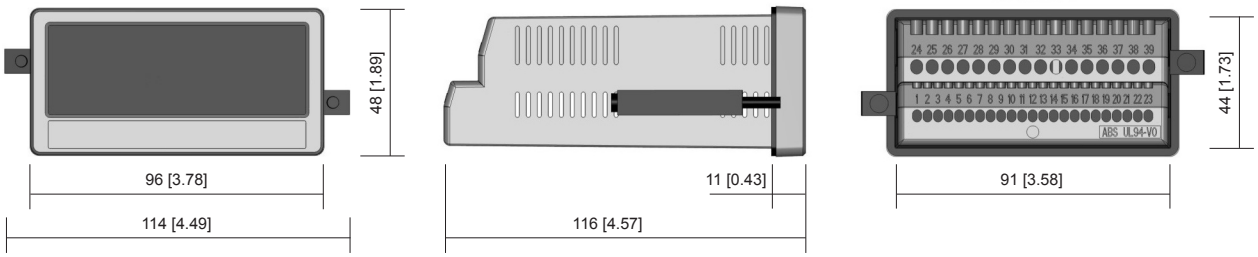
LCD touch process controllers | 2 standard signal inputs + analog and switching outputs | 573T

Terminal assignment



Dimensions

Dimensions in mm [inch]



Panel cut-out
92 x 45 mm [3.62 x 1.77"]

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