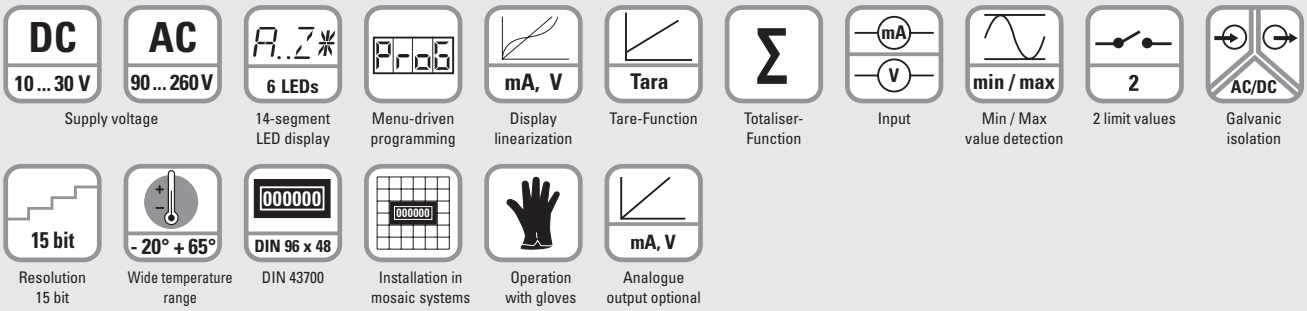
LED process controller | For analogue input signals | Codix 565

pending

The process controller Codix 565 with totaliser function displays V and mA analogue input signals 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.

NEW: with optional analogue output



Supply voltage | 14-segment LED display | Menu-driven programming | Display linearization | Tare-Function | Totaliser-Function | Input | Min / Max value detection | 2 limit values | Galvanic isolation

Resolution 15 bit | Wide temperature range | DIN 43700 | Installation in mosaic systems | Operation with gloves | Analogue 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
- 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 totaliser function for totalising 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 totaliser values
- Analogue 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 = Analogue [1)]

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

(c) *Supply voltage*
0 = 90 ... 260 V AC [1)]
3 = 10 ... 30 V DC [1)]

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

Delivery specification:
- Process device
- Panel mounting clip
- Gasket
- Multilingual operating instructions
- One sheet of self-adhesive symbols
- Quick-start guide

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

LED process controller | For analogue input signals | Codix 565

Accessories

Mounting frame with cut-out 92 x 45 mm	for snap-on mounting on 35 mm top-hat DIN rail, for counters 96 x 48 mm	**G300005**

Further accessories can be found in the accessories section or in the accessories area of our website at: www.kuebler.com/accessories

General technical data

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

Electrical characteristics

Supply voltage	AC supply	90 ... 260 V AC / max. 9 VA 50 / 60 Hz 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 supply voltage	AC supply	24 V DC ±15 %, 30 mA 15 V DC ± 1 %, 25 mA
	DC supply	15 V DC ± 1 %, 25 mA
EMC Noise immunity		EN 61000-6-2 with shielded signal and control cables
EMC Noise emission		EN 55011 Classe B
Device safety	designed to Protection Class 2 Application area	EN 61010 part 1 Pollution level 2

Mechanical characteristics

Housing		Panel mount housing to DIN 43700, RAL 7021
Dimensions		96 x 48 x 102 mm
Panel cut-out		92 +0,8 x 45 +0,6 mm
Installation depth		approx. 92 mm incl. terminals
Weight		approx. 180 g 200 g with analogue output
Protection		IP65 (from front)
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 / XYZ 3 times in each direction
	acc. to EN 60068-2-29	10G / 6 ms / XYZ 2000 times in each direction

Connections

Supply voltage and outputs	Plug-in screw terminal, 8-pin, RM5,00, Core ø max. 2,5 mm²
Signal and control inputs	Plug-in screw terminal, 9-pin, RM 3,50, Core ø max. 1,5 mm²

Measuring signal inputs

Sampling rate	10 readings/sec

Voltage input

Progr. ranges	0 ... 10 V, 2 … 10 V, ± 10 V
Meas. range	-10,5 ... +10,5 V
Resolution	< 0,4 mV (±15 bit)
Measuring accuracy at 23°C (% of range)	typ. 0,02 % / max. ≤ 0,05 %
Temperature drift	< 100 ppm / K
Input resistance	1 MΩ
Max. voltage	± 30 V

Current input

Progr. ranges	0 ... 20 mA, 4 … 20 mA
Meas. range	-0,5 ... 21 mA
Resolution	1 µA (> 14 bit)
Measuring accuracy at 23°C (% of range)	typ. 0,02 % / max. ≤ 0,05 %
Temperature drift	< 100 ppm / K
Input resistance	22 Ω + PTC 25 Ω
Voltage drop	approx. 1,8 V at 20 mA
Max. current	60 mA

Control inputs MPI 1 / MPI 2

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

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

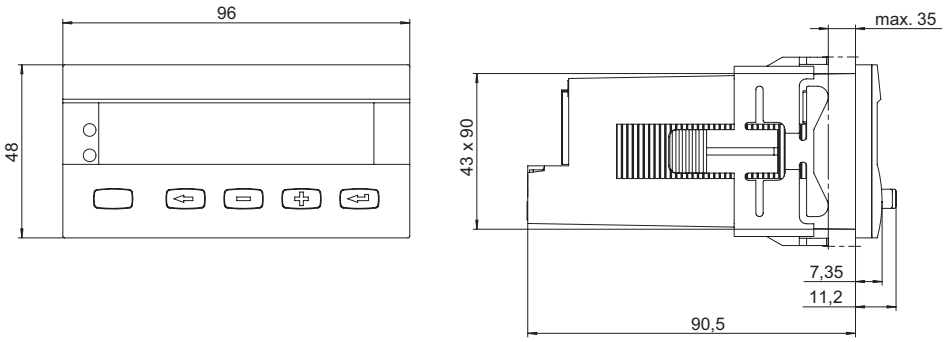
Analogue output (optional - only for DC version)

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
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

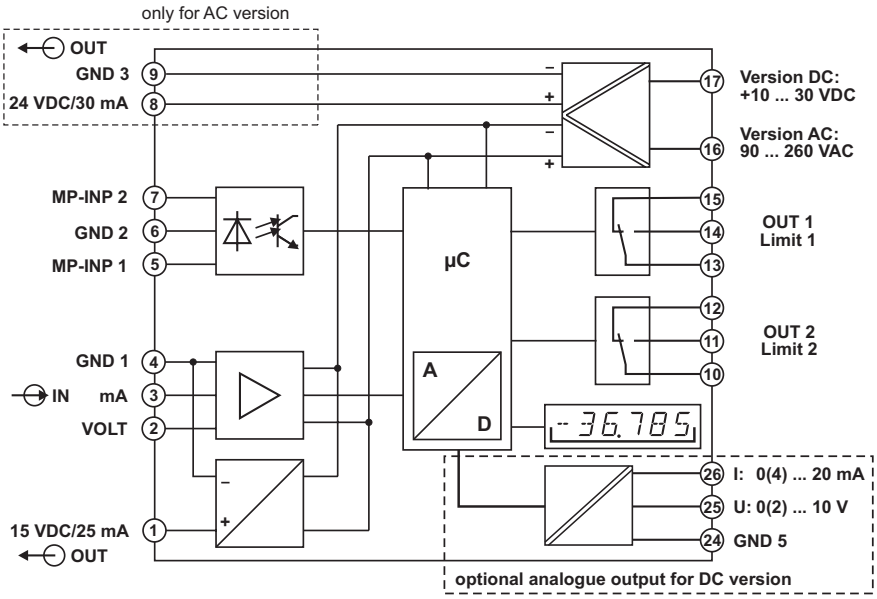
LED process controller | For analogue input signals | Codix 565

Dimensions

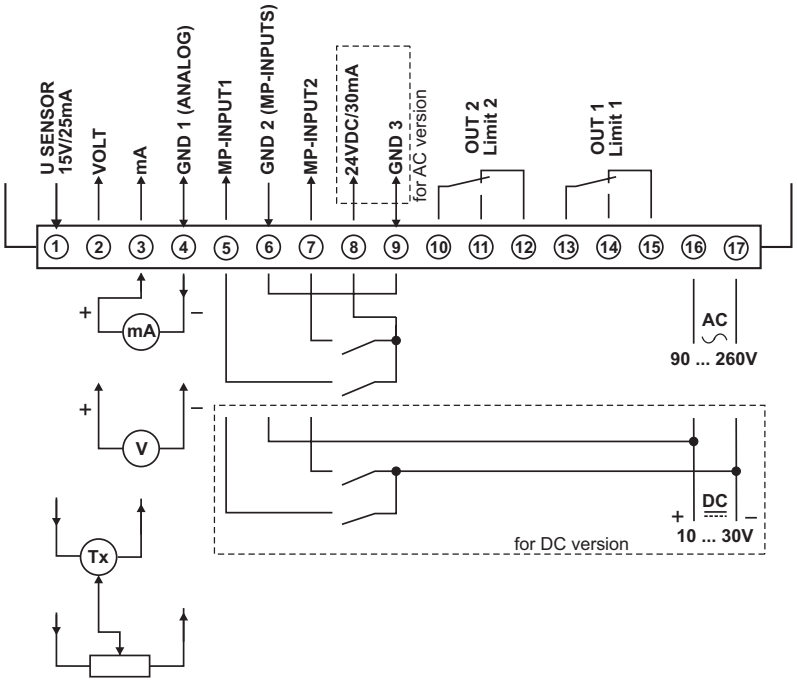
Panel cut-out
92 mm $^{+0,8}$ x 45 mm $^{+0,6}$



Block diagram



Terminal assignment



Rear side view