

**LCD pulse counters**      **With count direction DC or difference counter AC+DC (battery)**      **Codix 131**



The Codix 131 is a simple battery powered pulse counter with difference or count direction input, 8-digit LCD display, optional backlighting, for NPN, PNP and high voltage applications.



Pulse counters

Battery powered	Pulse counter/totaliser	Pulse voltage 4 ... 30 V	10 ... 260 V	Count with direction (DIR) 1 2 1	Differential count (up, dn) 1 2 1	Max. count frequency 12 kHz	Temperature range -10°... +60°C	High protection level IP65	LCD display 8 LCDs

### Powerful

- High quality LCD display with 8 mm high figures.
- Count direction, adding and subtracting via count direction or difference input.
- Battery life approx. 8 years.
- Optional display backlighting.
- Count frequency max. 12 kHz.
- High protection level IP65.

### Simple

- Screw terminals, RM 5 mm.
- Reset key lockable via the input 'Reset Enable'.
- For positive and negative counting edges, depending on version.
- High voltage version for 10 ... 260 V AC/DC voltage pulses.
- Large 8-digit LCD display with 8 mm high figures.

### Order code

6.131 . 012 . 8XX  
a b

**a** Backlighting  
 5 = without <sup>1)</sup>  
 6 = with

**b** Count input (input type: count) – single-channel, adding or subtracting counting

	Input type	INP A			INP B				
0 <sup>1)</sup> =	Cnt.Dir <sup>2)</sup> / UP.DN <sup>3)</sup>	0 ... 0,7 V DC	count	NPN	7 kHz	0 ... 0,7 V DC	count / direction	NPN	7 Hz
2 <sup>1)</sup> =		4 ... 30 V DC	count	PNP	12 kHz	4 ... 30 V DC	count / direction	PNP	12 Hz
3 =	UP.DN <sup>3)</sup>	10 ... 260 V AC/DC	count	AC/DC	30 Hz	10 ... 260 V AC/DC	count	AC/DC	30 Hz

#### Delivery specification

- Pulse counter
- Mounting clip
- 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"]
- Gasket
- Instruction manual, multilingual

1) Stock types  
 2) Counting input with counting direction input  
 3) One adding and one subtracting counting input (differential mode)

# Pulse counters, electronic

## LCD pulse counters With count direction DC or difference counter AC+DC (battery) Codix 131

Accessories	Dimensions in mm [inch]	Order-No.
<b>Adapter front bezel, 72 x 36 [2.83 x 1.42]</b>	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 anodised	<b>162704 Set</b>
<b>Adapter front bezel, 48 x 48 [1.89 x 1.89]</b>	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	<b>T008883</b>
<b>Adapter front bezel, 60 x 50 [2.36 x 1.97]</b>	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	<b>N003001</b>
<b>Transparent cover, lockable, IP65</b>	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]	<b>N003002</b>
<b>Sealing cover type K1, IP65</b>	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]	<b>G008301</b>
<b>Mounting frame</b> 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	<b>G300004</b>

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](http://www.kuebler.com/accessories).

### Technical data

General technical data	
<b>Display</b>	LCD, 8 digits, 8 mm [0.32"] high
<b>Backlighting</b>	external electrical source 24 V DC $\pm 20\%$ , 50 mA
<b>Modes</b>	adding or subtracting (selectable) counting direction differential counting
<b>Display range</b>	-9999999 ... 99999999, with overflow display
<b>Reset</b>	manual and electrical
<b>Working temperature</b>	-10°C ... +55°C [+14°F ... +131°F] (non-condensing)
<b>Operating temperature</b>	-10°C ... +60°C [+14°F ... +140°F] (non-condensing)
<b>Storage temperature</b>	-20°C ... +70°C [-4°F ... +158°F]
<b>Altitude</b>	up to 2000 m [6562']

Electrical characteristics	
<b>Power supply</b>	internal lithium battery approx. 8 years at 20°C [68°F]
<b>EMC</b>	Emitted interference EN 55011 class B Immunity to interference EN 61000-6-2
<b>Device safety</b>	Designed to EN 61010 part 1 Protection class 2 Application area Pollution level 2
<b>UL approval</b>	File-No.: E128604

Mechanical characteristics	
<b>Housing</b>	dark grey RAL 7021
<b>Protection</b>	IP65 (front side)
<b>Weight</b>	approx. 50 g [1.76 oz]

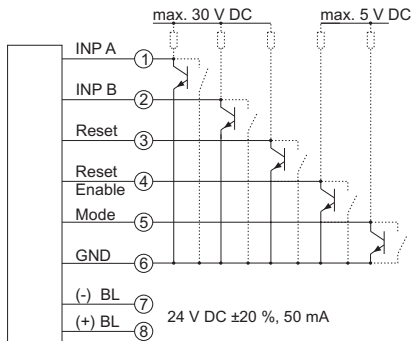
Counting inputs	
<b>Counting input of the DC-versions (max. 30 V DC)</b>	
Fast counting input	max. 12 kHz (PNP), 7 kHz (NPN)
Switching level NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 30 V DC
Switching level PNP	LOW 0 ... 0.7 V DC HIGH 4 ... 30 V DC
<b>Counting input of the high voltage versions (10 ... 260 V DC/AC)</b>	
A subtracting	optocoupler input max. 30 Hz
B adding	min. pulse time 16 ms
Switching level	LOW 0 ... 2 V AC/DC HIGH 10 ... 260 V AC/DC
<b>Counting direction switching (only DC-version)</b>	
Mode	see order table
Contact input	open collector NPN (switching at 0 V DC)
Switching level – NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC
<b>Reset input (only DC and high voltage)</b>	
Minimum pulse time	DC 50 ms High voltage 16 ms
Contact input DC – NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 30 V DC
<b>Electrical reset key locking (only DC and high voltage)</b>	
Contact input	open collector NPN (switching at 0 V DC)
Switching level – NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC

# Pulse counters, electronic

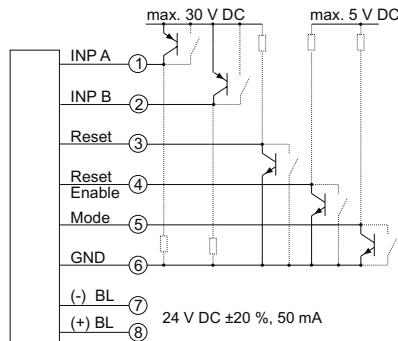
## LCD pulse counters With count direction DC or difference counter AC+DC (battery) Codix 131

### Terminal assignment

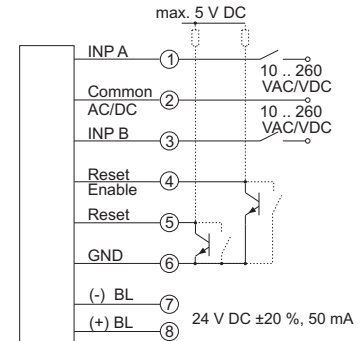
DC type: 6.131.012.8x0



DC type: 6.131.012.8x1



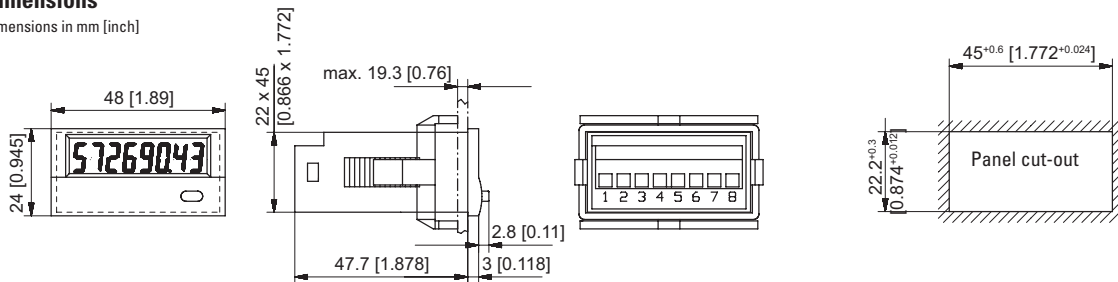
AC type: 6.131.012.8x3



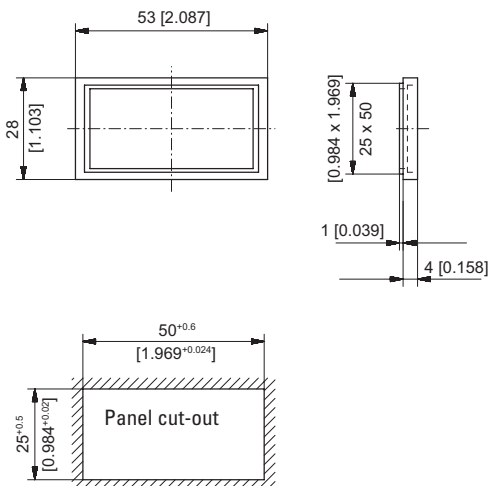
BL = backlighting

### Dimensions

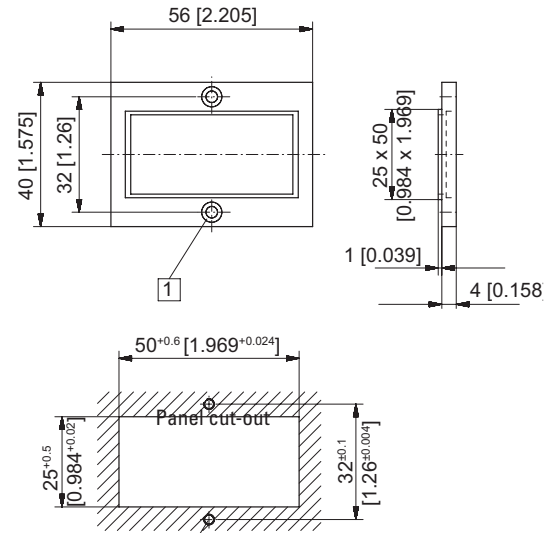
Dimensions in mm [inch]



### Front bezel for clip mounting (included in delivery)



### Front bezel for screw mounting (included in delivery)



1 Countersinking Af3, DIN 74