

Pulse counters, electronic

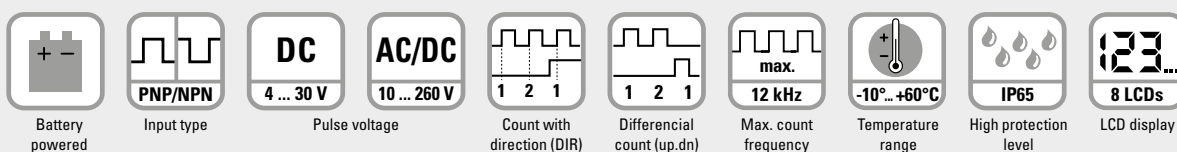
LCD pulse counters

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.



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 can be enabled via "Reset Enable" input.
- 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
6 = with

b Input type: Cnt.Dir¹⁾ / UP.DN²⁾ – count direction or differential counting

Input type	INP A				INP B			
0 = Cnt.Dir ¹⁾ / UP.DN ²⁾	0 ... 0.7 V DC	count	NPN	7 kHz	0 ... 0.7 V DC	count / direction	NPN	7 kHz
1 = Cnt.Dir ¹⁾ / UP.DN ²⁾	4 ... 30 V DC	count	PNP	12 kHz	4 ... 30 V DC	count / direction	PNP	12 kHz
3 = UP.DN ²⁾	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 (6.0000.A110.0503) 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 (6.0000.A080.0503) 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

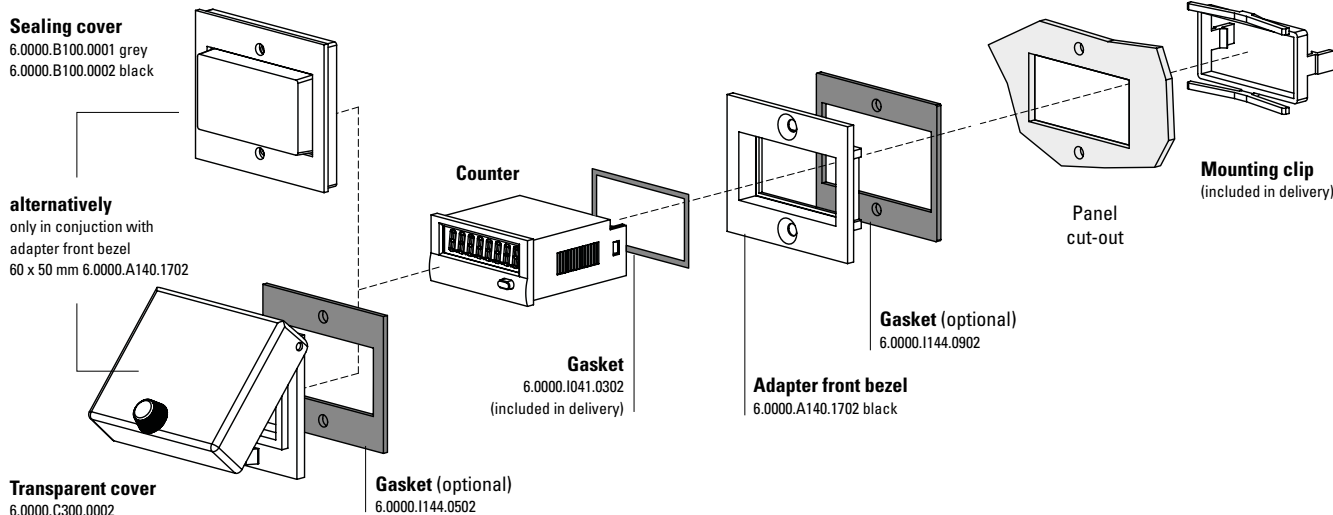
1) Counting input with counting direction input.

2) One adding and one subtracting counting input (differential mode).

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Accessories / Mounting examples



		Type / size	Description		Order no.	suitable gasket
Adapter front bezel		53 x 28 mm [2.09 x 1.10"]	for cut-out 50 x 25 mm [1.97 x 0.98"] to cut-out 45 x 22.2 mm [1.77 x 0.94"]	black anthracite	6.0000.A080.0502 6.0000.A080.0503	6.0000.I082.0502
		56 x 40 mm [2.20 x 1.57"]	for cut-out 50 x 25 mm [1.97 x 0.98"] to cut-out 45 x 22.2 mm [1.77 x 0.94"] screw mounting	black anthracite	6.0000.A110.0502 6.0000.A110.0503	6.0000.I113.0502
		72 x 36 mm [2.83 x 1.42"]	for cut-out 68 x 33 mm [2.68 x 1.30"] to cut-out 45 x 22.2 mm [1.77 x 0.94"]	black and silver anodised as set	6.0000.A210.1802	—
		60 x 50 mm [2.36 x 1.97"]	for cut-out 54 x 29 mm [2.13 x 1.14"] to cut-out 45 x 22.2 mm [1.77 x 0.94"] screw mounting	black	6.0000.A140.1702	6.0000.I144.0902
		48 x 48 mm [1.89 x 1.89"]	for cut-out 45 x 45 mm [1.77 x 1.77"] to cut-out 45 x 22.2 mm [1.77 x 0.94"]	black	6.0000.A040.0402	—
Sealing cover IP65		K1	only in conjunction with adapter front bezel 60 x 50 mm 6.0000.A140.1702	transparent / grey transparent / black	6.0000.B100.0001 6.0000.B100.0002	—
Transparent cover IP65		1 Dv (mounted on bezel)	cover lockable, for cut-out 54 x 29 mm [2.13 x 1.14"], only in conjunction with adapter front bezel 60 x 50 mm 6.0000.A140.1702	transparent / black	6.0000.C300.0002	6.0000.I144.0502
Gasket counter			48 x 24 mm (for installation in adapter front bezel) 49 x 25 mm		6.0000.I041.0302 6.0000.I063.0302	
Mounting frame		cut-out 50 x 25 mm [1.97 x 0.98"]	via adapter 6.0000.A080.0503 for snap-on mounting on 35 mm [1.38"] top-hat DIN rail	chromated	6.0000.F300.0006	—
Enclosure blind		48 x 24 mm [1.89 x 0.94"]	for cut-out 45 x 22.2 mm [1.77 x 0.94"] and cut-out 50 x 25 mm [1.97 x 0.98"]	anthracite	6.0000.H100.0003	—

incl. in delivery

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Technical data

General technical data	
Display	LCD, 8 digits, 8 mm [0.32"] high
Backlighting	external electrical source 24 V DC $\pm 20\%$, 50 mA
Modes	counting direction (count and direction input) or differential counting
Display range	-9999999 ... 99999999, with overflow display
Reset	manual and electrical
Working temperature	-10 °C ... +55 °C [+14 °F ... +131 °F] (non-condensing)
Operating temperature	-10 °C ... +60 °C [+14 °F ... +140 °F] (non-condensing)
Storage temperature	-20 °C ... +70 °C [-4 °F ... +158 °F]
Relative humidity	< 85 % (non-condensing)
Altitude	up to 2000 m [6562']

Electrical characteristics	
Supply voltage	internal lithium battery approx. 8 years at 20 °C [68 °F]
Device safety	designed to protection class 2 application area pollution level 2

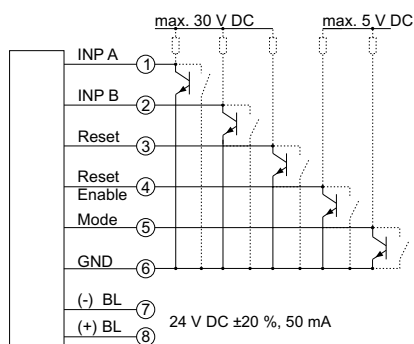
Mechanical characteristics	
Housing	dark grey RAL 7021
Protection	IP65 (front side)
Weight	approx. 50 g [1.76 oz]

Counting inputs	
Counting input of the DC-versions (max. 30 V DC)	
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
Counting input of the high voltage versions (10 ... 260 V DC/AC)	
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
Counting direction switching (only DC-version)	
mode	count direction / difference
contact input	open collector NPN (switching at 0 V DC)
switching level – NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC
Reset input (only DC and high voltage)	
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
Electrical reset key locking (only DC and high voltage)	
contact input	open collector NPN (switching at 0 V DC)
switching level – NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC

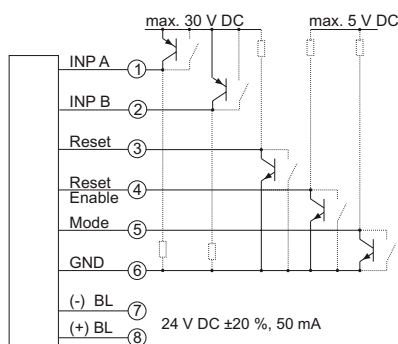
Approvals	
UL compliant in accordance with	File no. E128604
CE compliant in accordance with	
EMC Directive	2014/30/EU
RoHS Directive	2011/65/EU
Low Voltage Directive	2014/35/EU

Terminal assignment

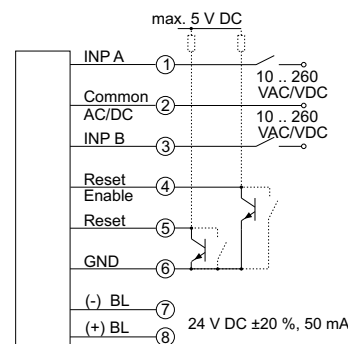
DC type: 6.131.012.8x0



DC type: 6.131.012.8x1



AC type: 6.131.012.8x3



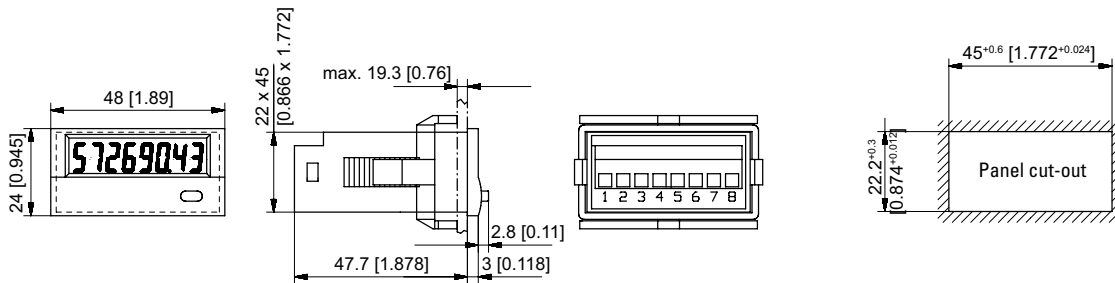
BL = backlighting

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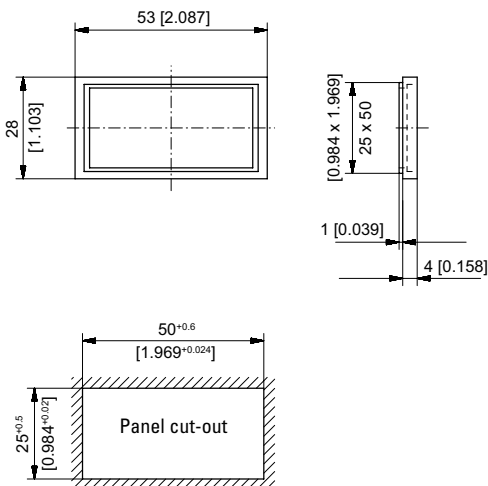
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Dimensions

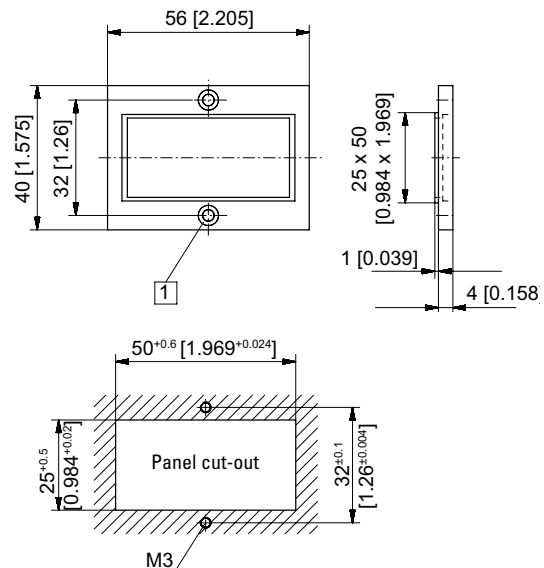
Dimensions in mm [inch]



Front bezel for clip mounting (included in delivery)



Front bezel for screw mounting (included in delivery)



1 Countersinking Af3, DIN 74