

Hour meters / timers, electronic

LCD hour meters

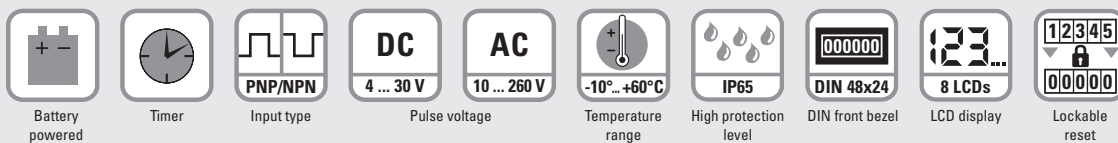
Max. time range 9999 h 59 min 59 sec or 9999999.9 sec

Codix 135



The Codix 135 is a simple battery-powered hour meter for PNP, NPN and high-voltage applications.

Its 8-digit LCD display with optional backlighting can display various time ranges.



Powerful

- High quality LCD display with 8 mm high figures - optional display backlighting.
- Time range up to 9999999.9 seconds or 9999h99m99s programmable via control input.
- Battery lifetime 8 years.
- High voltage versions for 10 ... 260 V AC/DC voltage pulses, thus to be connected directly via contactors, relays and motors.
- Very high accuracy: 100 ppm.

Simple

- Screw terminals, RM 5 mm.
- Reset key lockable via the input 'Reset Enable'.
- According to version for PNP, NPN switching level or high voltage version for 10 ... 260 V AC/DC switching voltage.
- Accumulated time is always readable thanks to battery powering.
- High protection level IP65.

Order code

6.135 . 012 . 8XX
a b

a Backlighting

5 = without ¹⁾
6 = with

b Input type: measurement of short times

Input type	INP A		INP B	
0 = adding ¹⁾	—		0 ... 0.7 V DC	NPN
1 = adding ¹⁾	—		4 ... 30 V DC	PNP
3 = adding ¹⁾	10 ... 260 V AC/DC	AC/DC	10 ... 260 V AC/DC	AC/DC

Delivery specification

- Timer
- 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

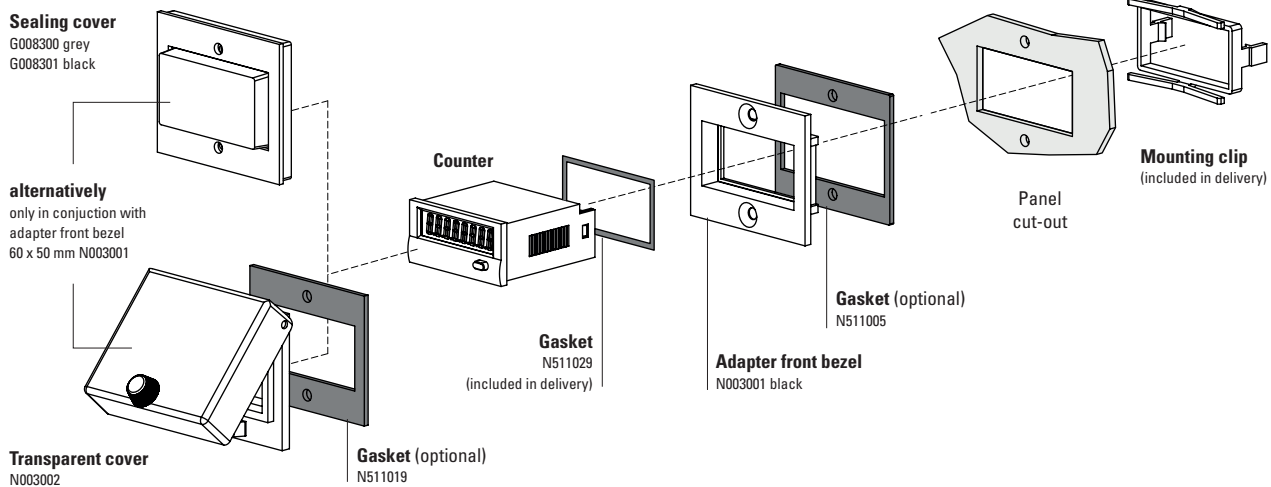
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Accessories / Mounting examples



		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"]	grey black anthracite	T008164 T008165 T008180	N511015
		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	T008161 T008181	N511045
		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	162704Set	—
		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	N003001	N511005
		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	T008883	—
Sealing cover IP65		K1	only in conjunction with adapter front bezel 60 x 50 mm N003001	transparent / grey transparent / black	G008300 G008301	—
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 N003001	transparent / black	N003002	N511019
Gasket counter			48 x 24 mm (for installation in adapter front bezel) 49 x 25 mm		N511029 N511034	
Mounting frame		cut-out 50 x 25 mm [1.97 x 0.98"]	via adapter T008180 for snap-on mounting on 35 mm [1.38"] top-hat DIN rail	chromated	G300004	—
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	G003836	—

incl. in delivery

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Technical data

General technical data

Display	LCD, 8-digits, 8 mm [0.31"] high
Backlighting	external electrical source 24 V DC $\pm 20\%$, 50 mA
Counting direction	adding
Display range	see next page
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]
EMC standards	EN 55011 class B EN 61000-6-2, EN 61000-6-3
Device safety	Designed to Protection class Application area EN 61010 part 1 2 pollution level 2
UL approval	file E128604

Mechanical characteristics

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

Count input

A. Timer inputs DC versions (max. 30 V DC) INP B

Timer input	NPN or PNP	depending on the type (see table)
Switching level	NPN	LOW: 0 ... 0.7 V DC HIGH: 3 ... 30 V DC
	PNP	LOW: 0 ... 0.7 V DC HIGH: 4 ... 30 V DC
Counting start	NPN	for LOW signal at the timer input
	PNP	for HIGH signal at the timer input

B. Timer inputs high voltage versions (10 ... 260 V DC/V AC) INP A

Timer input	optocoupler input
Min. pulse time	16 ms
Switching level	LOW: 0 ... 2 V DC/V AC HIGH: 10 ... 260 V DC/V AC
Counting start	for HIGH signal at the timer input

C. Time range change (Mode)

Contact input	NPN	open collector (switching at 0 V) LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC
Time range		depending on the circuit (s. order inform.)

D. Reset input for DC and high voltage

Min. pulse time	DC	50 ms
	High voltage	16 ms
Contact input DC	NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 30 V DC
High voltage input		10 ... 260 V AC/DC

E. Reset locking input (for DC and AC)

Electrical reset key locking		
Input not active		reset key locked
Contact input		open collector NPN (switching at 0 V)
Switching level	NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC

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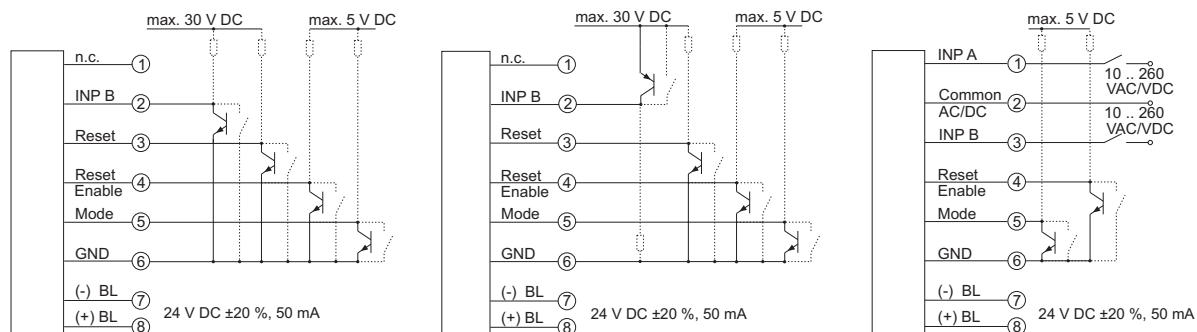
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Terminal assignment

DC type: 6.135.012.8x0

DC type: 6.135.012.8x1

AC type: 6.135.012.8x3



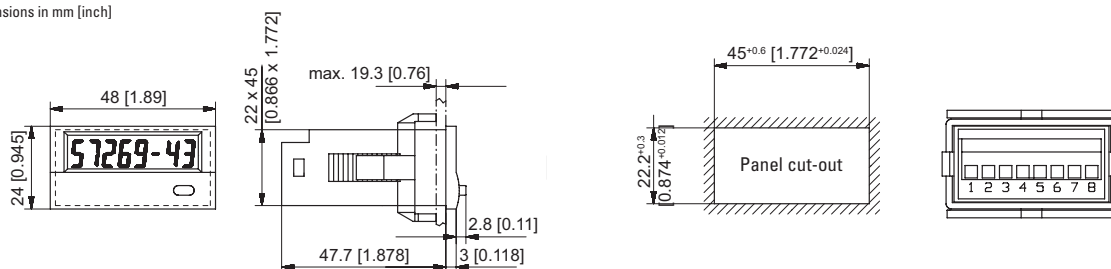
BL = backlighting

Display and time ranges

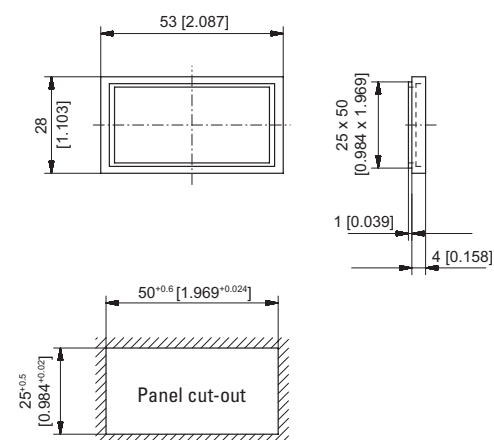
time range	display
9999h 59m 59s	
9999999.9 s	

Dimensions

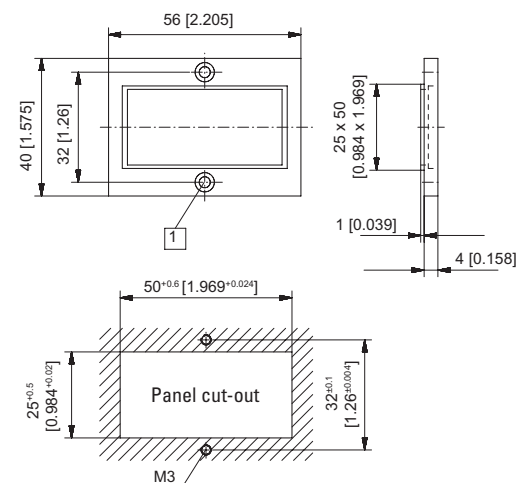
Dimensions in mm [inch]



Front bezel for clip mounting (included in delivery)



Front bezel for screw mounting (included in delivery)



① Countersinking Af3, DIN 74