

LCD Hour Meters – Codix 135



- Low-price and high efficiency
- Large 8-digit LCD display, height of the figures 8 mm [0.315"]
- Optional backlighting of the display
- Various time ranges from 0.1 second to 100,000 hours
- 0.1 second synchronisation makes it suitable for very short activation times
- High voltage versions for 10 ... 260 V AC/DC voltage pulses, can be connected directly via contactors, relays and motors
- Very high accuracy: 100 ppm
- Protection IP65
- Unified Codix design, matching the extensive Codix family
- Screw terminals, RM 5 mm [0.197"]
- Lifetime of the battery approximately 8 years
- Ambient temperature -10 ... +60 °C [14 ... 140 °F]
- Locking of the reset key
- Accumulated time always readable thanks to battery powered LCD display

Technical data

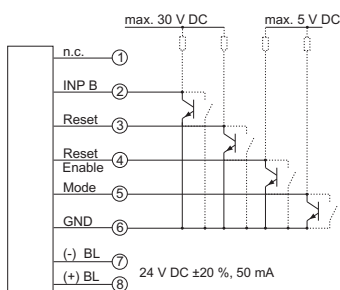
Power supply:	non-replaceable lithium battery: (lifetime approx. 8 years at 20 °C [68 °F])
Backlighting:	external electrical source 24 V DC +/-20 %, 50 mA
Display:	LCD, 8 digits, height of the figures 8 mm [0.315"]
Counting direction:	adding
Display range:	see next page
Reset :	manual and electrical
EMC:	Emitted interference: EN55011 class B Immunity to interference: EN61000-6-2
Device safety:	design to: EN61010 Part 1 protection: Class: 2 application area: Soiling Level 2
Housing:	dark grey RAL 7021
Operating temperature:	-10 ... +55 °C [14 ... 131 °F]
Ambient temperature:	-10 ... +60 °C [14 ... 140 °F]
Storage temperature:	-20 ... +70 °C [-4 ... 158 °F]
Altitude:	2000 m
Protection:	IP 65 front side
Weight:	approx. 50 g [1.764 oz]

Inputs

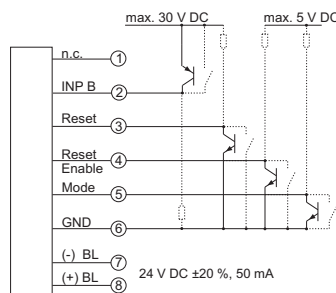
A. Timer inputs DC versions: (max. 30 V DC) INPB	
Timer input	NPN or PNP depending on the type (see table)
Switching level:	NPN: low: 0 ... 0.7 V, high: 3 ... 30 V DC PNP: low: 0 ... 0.7 V, high: 4 ... 30 V DC
Counting start:	NPN: for low signal at the timer input PNP: for high signal at the timer input
B. Timer inputs high voltage versions (10 ... 260 V DC/V AC) INPA	
Timer input:	optocoupler input, max. 30 Hz
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:	open collector (switching at 0 V) NPN: low: 0 ... 0.7 V, high: 3 ... 5 V DC
Time range:	depending on the circuit (see order information)
D. Reset Input (for DC and High voltage (INPB))	
Minimum pulse time:	DC: 50 ms, high voltage: 16 ms
Contact input DC:	NPN: Low: 0 ... 0.7 V, high: 3 ... 30 V DC
High voltage input:	10 ... 260 V DC/V AC
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, high: 3 ... 5 V DC

Connecting diagram:

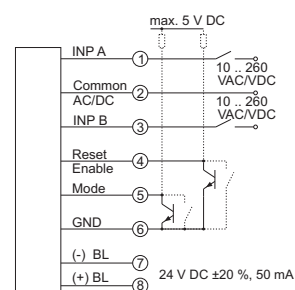
DC type:
6.135.012.8x0



DC type:
6.135.012.8x1

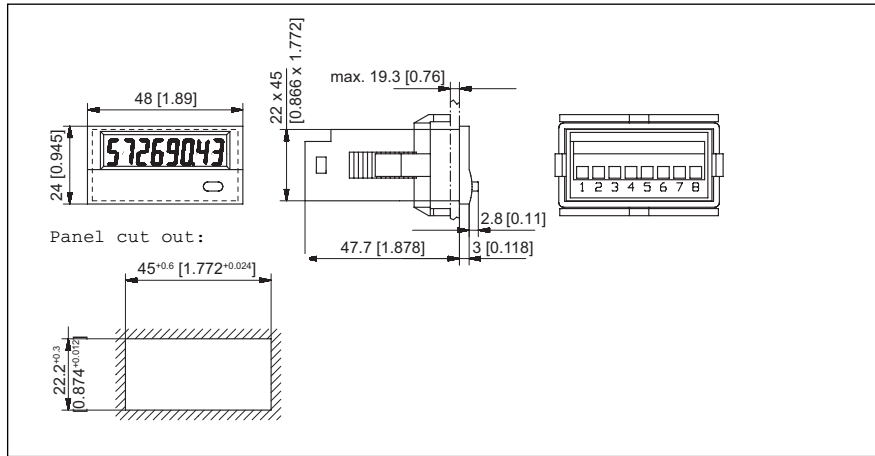


AC type:
6.135.012.8x3



BL = backlighting

Dimensions:

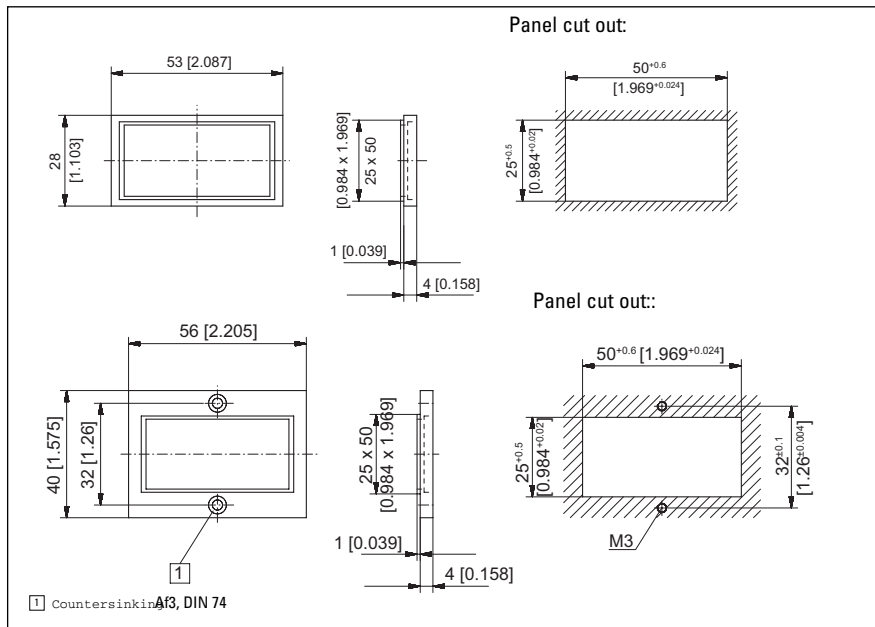


Display:

Time ranges and display

Time range	Display
9999h 59m 59s	
9999999.9s	

Frame dimensions:



Delivery specification:

- Digital display
- Panel mounting clip
- Bezel for screw mounting, panel cut out 50 x 25 mm [1.969 x 0.984]
- Bezel for clip mounting, panel cut out 50 x 25 mm [1.969 x 0.984]
- Gasket
- Operating instructions.

Order code:

Type	Mode	Time range	Inputs		
			INP A	INP B	
6.135.012.8x0*	Timer	9999 h 59 m 59 s / 9999999.9 s	-	0 ... 0,7 V DC	NPN
6.135.012.8x1*				4 ... 30 V DC	PNP
6.135.012.8x3*			10 ... 260 V AC/DC	AC/DC	10 ... 260 V AC/DC

X: 5 = without backlighting *
X: 6 = with backlighting

* standard stock model