LCD hour meters | Adding counter / service timer, 99999.99 h (DC) | Codix 141 / 143



The Codix 141 / 143 is a simple externally powered hour meter with 7-digit LCD display for PNP, NPN input signals, optionally factory-programmable.

Codix 141: Standard timer
Codix 143: Service timer



Functional

- Direct display of the total time.
- Pressing the key displays the preset service value and its pre-signal.
- Preset value output as a text on the display and on the transistor output.
- Pre-signal for the service intervals as a text on the display.
- Manual or electrical reset of the display or of the service intervals.
- Fast PNP or damped NPN control via separate inputs.

User-friendly

- Supply voltage 10 ... 30 V DC.
- Values stored in EEPROM.
- Fixed pre-programmed service intervals, e.g.: service at 5000.00 h (service), pre-signal at 4900.00 h (pre-service), blinking text message on the display (service or pre-service).
- Multifunction reset key, lockable via a separate input.
- Can also be reset to its delivery condition.
- Factory programmable.

Order code Standard timer

6.141 . 012 . 300

Further options on request [1]
- Multiplier
- Decimal point
- Other options

Delivery specification
- Counter
- Mounting clip
- Gaskets
- Instruction manual, multilingual

Stock types
6.141.012.300

Order code Service timer

6.143 . 011 . 300 . XXXX (a) . XX (b)

(a) *Option 2* [1]
Service preset
005K [2] = 5000.00 h

(b) *Option 1* [1]
Pre-warning, display text, *further options*
00 [2] = Pre-warning at 100.00 before the preset service value. Display shows text PrESErV with pre-warning and text SErViCE with preset service value.

Further options on request [1]
- Multiplier
- Decimal point
- Other options

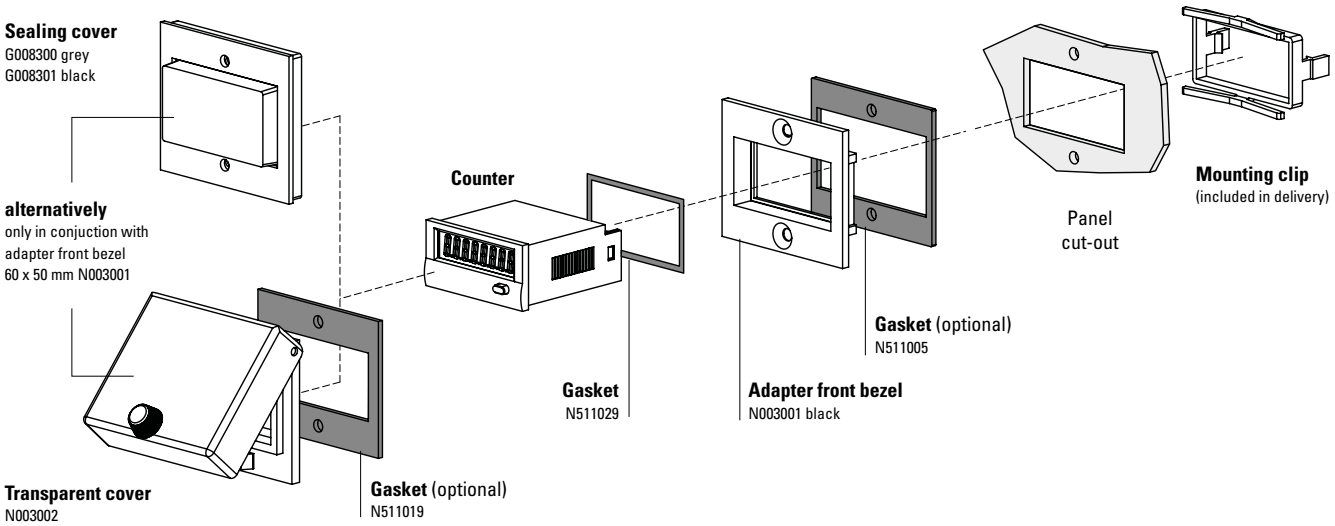
Delivery specification
- Counter
- Mounting clip
- Gaskets
- Instruction manual, multilingual

1) The option 1 - 3 can be programmed according to customer needs.
Please note: The min. order quantity for custom versions is 10 pcs with an extra charge, or 200+ pcs with no extra charge.
2) Standard variant without additional charge.

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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	**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 conjuction 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 conjuction 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**	–

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Technical data

General technical data

Display	LCD, 7 digits, 8 mm [0.31“] high
Undervoltage	display for U_B < 8 V: PO-FAIL and data backup
Counting range	0 ... 99999.99 h decimal point 0.00 (further on request)
Data backup	EEPROM
Operating temperature	-20 °C ... +65 °C [-4 °F ... +149 °F] (non-condensing)
Storage temperature	-25 °C ... +75 °C [-13 °F ... +167 °F]

Electrical characteristics

Supply voltage	10 ... 30 V DC, max. 25 mA
Start delay	500 ms

Mechanical characteristics

Housing	front panel mount, DIN 43700 48 x 24 mm [1.89 x 0.94“] dark grey Ral 7021
Connections	8-pole screw terminals, pitch 5.08 mm [2.00“]
Cleaning	the front side should be cleaned using only a soft cloth moistened with water
Weight	40 g [1.41 oz]
Protection	IP65 (front side) IP20 (rear side)
Vibration resistance acc. to EN 60068-2-6	10 ... 55 Hz / 1 mm [0.04“] / 30 min
Shock resistance acc. to EN 60068-2-27	100 G: 2 ms 10 G: 6 ms

Inputs

Input A		static PNP input
Input B		static NPN input
Reset key enable input		static NPN input
Reset		edge-triggered NPN input (min. 20 ms)
Input resistance		10 kOhm
Switching level	LOW HIGH	0 ... 2 V DC 3.5 ... 30 V DC
Switching threshold		approx. 2.7 V DC

Additional data for Codix 143 (service timer)

Output	NPN transistor output, open collector
Output voltage	max. 30 V DC
Output current	max. 50 mA

Approvals

CE compliant in accordance with

EMC Directive	2014/30/EU
RoHS Directive	2011/65/EU

Display and inquiry mode service timer

If the reset key is not released by means of the activation input of pin 6, pressing the key makes the following functions available to the user.

Press 1x: The text “SErViCE“ is displayed

Press 2x: The following service value is displayed

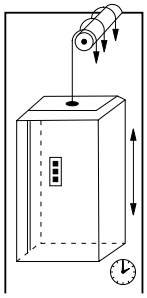
Press 3x: The text „PrESErV“ is displayed

Press 4x: The following preservice value is displayed

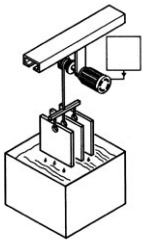
Press 5x: The current value is displayed

For the service timers, the values counted remain stored, the service values are incremented by the stored preset value when resetting. E.g. service value 5000.00 h, counter count when resetting 5100.00 h, new service value 10100.00 h.

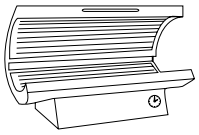
Applications



Operating time and service interval



Total time and service interval



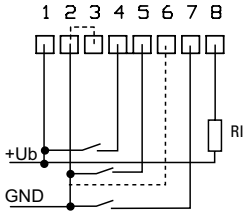
Service interval and total time of the UV lamps

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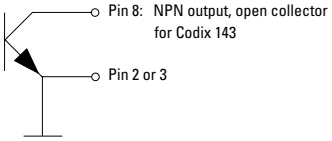
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Terminal assignment

PIN	Description	Standard timer	Service timer
Supply voltage			
1	$+U_B$	10 ... 30 V DC	10 ... 30 V DC
2	0 V DC, GND	GND	GND
Inputs			
3	0 V DC, GND	GND	GND
4	Fast counting input	INP PNP	INP PNP
5	Slow counting input	INP NPN	INP NPN
6	Reset enable input	RESET MANUAL ENABLE	RESET MANUAL ENABLE
7	Reset input	RESET	RESET
Output			
8	NPN output	n.c.	OUT

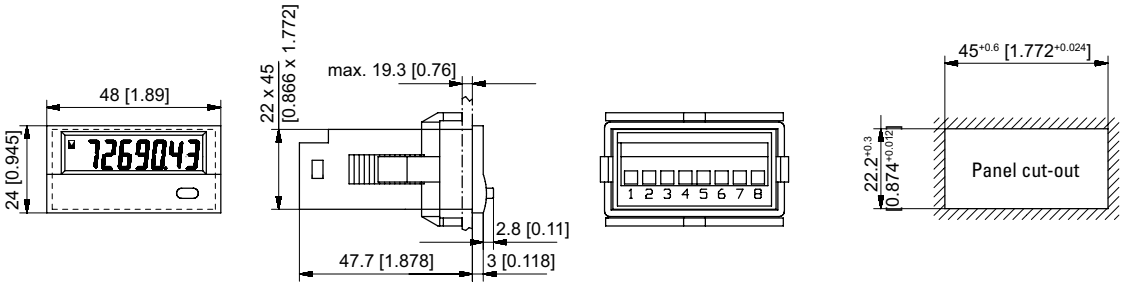


Output 8 is only used with Codix 143 as a NPN output



Dimensions

Dimensions in mm [inch]



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