

Hour meters / timers, electromechanical

Micro timers	Many different installation options (DC)	HK 07 / AHK 07
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The micro timers of the HK 07 and AHK 07 families offer a particularly large number of variants and can be used in many different applications thanks to their wide voltage range from 4.5 to 35 V DC.

Available as panel, base and PCB mount versions, they can be used in many different fields of application. Thanks to their encapsulated housing, these non-resettable counters are extremely tamper-proof.

Characteristics

- 7-digit micro hour meter.
- High shock and impact resistance.
- Low power consumption; suitable for battery operation.
- Small dimensions – magnified large figures.
- Panel-mount counter with integrated spring clip.
- PCB-mount counter.
- Machine-solderable and wash-proof.
- Protection IP65.

Benefits

- Wide voltage range 4.5 ... 35 V DC.
- Count retention in case of power failure.
- Long service life.

Applications

General time measurement, maintenance intervals for measuring instruments (respiration units, oxygen, dialysis), small appliances, UV lamps, display panels in vehicles.

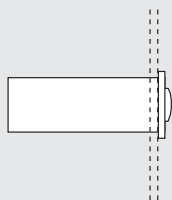
Hour meters / Timers

Type series

Fig.	Mounting options	Display	Protection	El. connection	Housing	Height of fig.	Type
1)	Panel mount with latch	front side	IP65, front side	flying leads	plastic	4 mm [0.16"]	HK 07.20
2)	PCB mount, lying	on the top	IP65, front side/on rear	solder pins	plastic	4 mm [0.16"]	HK 07.90
4)	PCB mount, upright	front side	IP65, front side/on rear	solder pins	plastic	4 mm [0.16"]	HK 07.92
5)	Base mount, upright	front side	IP40	flying leads	plastic	4 mm [0.16"]	AHK 07.00

Mounting options and position of the display

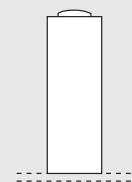
1) Panel mount
display front side



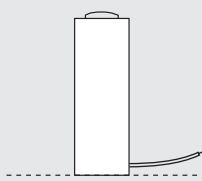
2) PCB mount, lying
display on the top



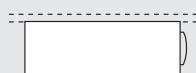
3) PCB mount, upright
display front side



4) Base mount, upright
display front side



Optional: PCB mount, hanging
display front side



Accessories	Dimensions in mm [inch]	Order no.
Gasket 32 x 15 [1.26 x 0.59]	for cut-out 27 x 13 [1.06 x 0.51], suitable for HK 07.20	N511058

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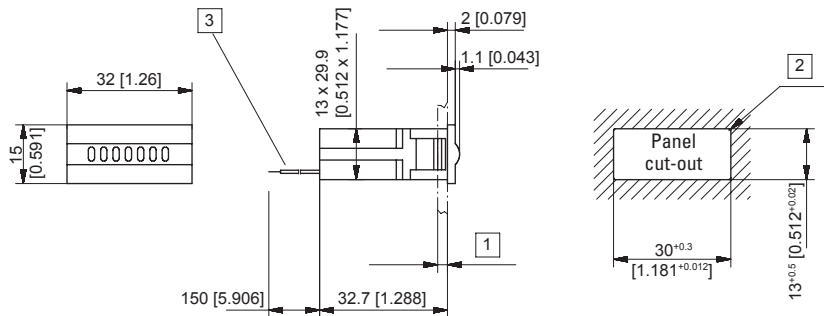
Technical data		
Electrical connection	panel mount	flying leads, AWG 22 (red +, black -) approx. 150 mm [5.91"], 6 mm [0.24"] stripped wire ends, tinned
	PCB mount	solder pins 0.4 x 1.2 mm [0.016 x 0.047"], tinned
Power consumption (every 36 s with a pulse length of 32 ms)		
	at $U_B = 5\text{ V DC}$	typ. 82 mW
	at $U_B = 12\text{ V DC}$	typ. 135 mW
	at $U_B = 24\text{ V DC}$	typ. 135 mW max. 170 mW
Rated voltage		4.5... 35 V DC
Residual ripple		< 1 %
Current consumption		< 1.5 mA (average)
On time		100 %
Pulse duration		32 ms; every 36 s = 0.01 h On-times < 36 s will not be counted
Number of digits		7: 99999.99 h
Accuracy		22.5 ppm at 25°C [77°F]

Height of figures	1.2 x 4.0 mm [0.047 x 0.16"]
Color of figures	white and red on black
Reset	no reset
Operating temperature	-10°C ... +60°C [+14°F ... +140°F] (non-condensing)
Mounting position	horizontal, other on request
Solderable and washproof versions	HK 07.90, HK 07.91, HK 07.92
Soldering temperature	265°C [+509°F], 3 s
Protection	up to IP65 depending on kind of type
EMC standards	EN 55011 class B EN 61000-6-2, EN 61000-6-3
Housing	plastic PC (Polycarbonate)
Weight	15 ... 18 g [0.53 ... 0.63 oz]

Options
HK 07.20 flat pin 0.8 x 2.8 mm [0.031 x 0.11"] (others on request)

Panel mount with latch / display front side

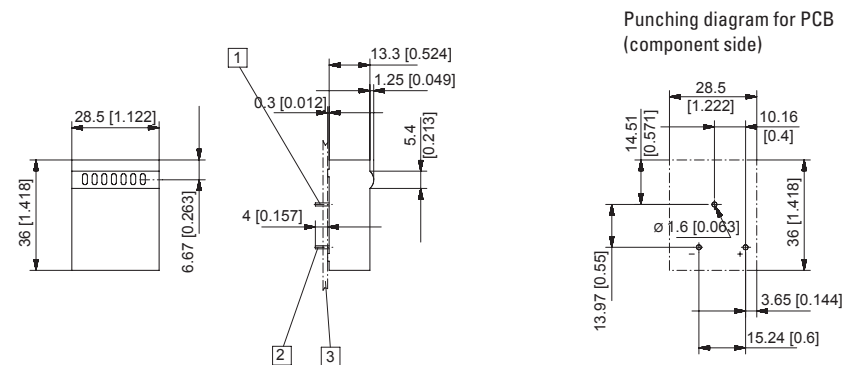
Type HK 07.20



Type	Display	Art. no.
		4.5 ... 35 V DC
HK 07.20	7 digits	3.100.200.383 ¹⁾
HK 07.20.35 with flat pins	7 digits	3.107.200.383 ¹⁾

PCB mount, lying / display on the top

Type HK 07.90



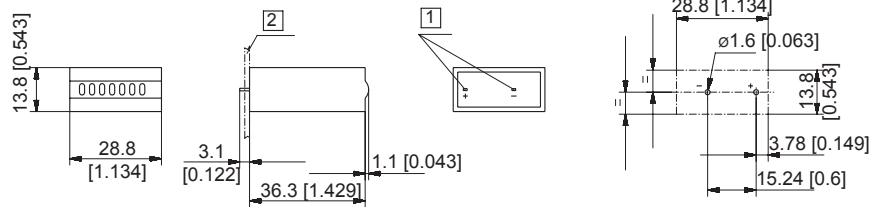
Type	Display	Art. no.
		4.5 ... 35 V DC
HK 07.90	7 digits	3.100.900.383

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Micro timers **Many different installation options (DC)** **HK 07 / AHK 07**

PCB mount, upright / display front side
Type HK 07.92

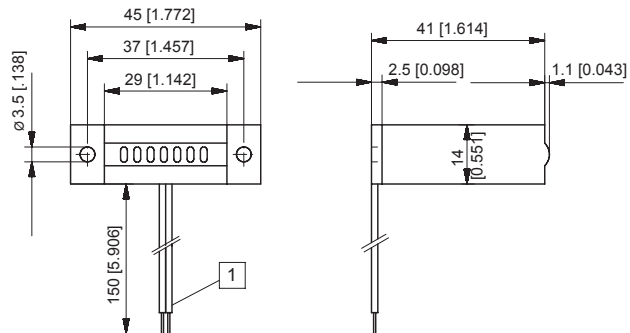
Punching diagram for PCB
(component side)



1) Electrical connection 0.4 x 1.2 [0.016 x 0.047] 2) PCB

Type	Display	Art. no.
HK 07.92	7 digits	3.100.920.383

Base mount, upright / display front side
Type AHK 07.00



1) Flying leads (red+ / black-)

Type	Display	Art. no.
AHK 07.00	7 digits	3.100.000.383 ¹⁾