

Pulse counters, electromechanical

Micro counters **High shock resistance (DC)** **K46 / K47**



The micro adding counters K46 and K47 boast a very high level of shock resistance. As panel mount and PCB mount counters they can be used in a wide variety of applications.

The counters are non-resettable and are highly tamper-proof thanks to their sealed (potted) housings.

Characteristics

- 6-digit (K46) or 7-digit (K47) micro adding counters.
- Economical.
- Low power consumption; suitable for battery operation.
- Small dimensions, large optical figures.
- Different viewing possibilities.
- Panel mount with spring clips or PCB mount versions.

Benefits

- Machine solderable and washable.
- High shock resistance.
- Long service life.
- IP65 protection.
- Stores values if power fails.

Applications

General quantity counting, alarm systems, coin-operated machines, electricity meters, vending and slot machines, photocopiers, medical equipment, car washes

Type series

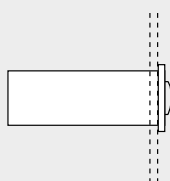
Fig.	Mounting options	Display	el. connection	IP protection	6 digits	7 digits
1)	Panel mount with latch	front side	flying leads	front side	K46.20	K47.20
2)	PCB mount, upright	front side	solder pins	front side/on rear	K46.80	K47.80
3)	PCB mount, lying	on the top	solder pins	front side/on rear	–	K47.90
4)	PCB mount, hanging	front side	solder pins	front side/on rear	–	K47.91
5)	PCB mount, lying	front side	solder pins	front side/on rear	K46.95	–

Order information

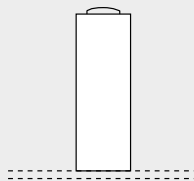
- Art. no. 1.7X0.XX0.0XX
- For options please give exact counter type, voltage and options e.g.:
K46.20 – 12 V DC/0 – temperature range -20 °C ... +70 °C [-4 °F ... +158 °F]

Mounting options and position of the display

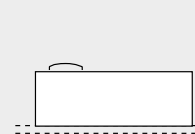
1) Panel mount
display front side



2) PCB mount, upright
display front side



3) PCB mount, lying
display on the top



4) PCB mount, hanging
display front side



5) PCB mount, lying
display front side



Optional: PCB mount, lying
display at the bottom



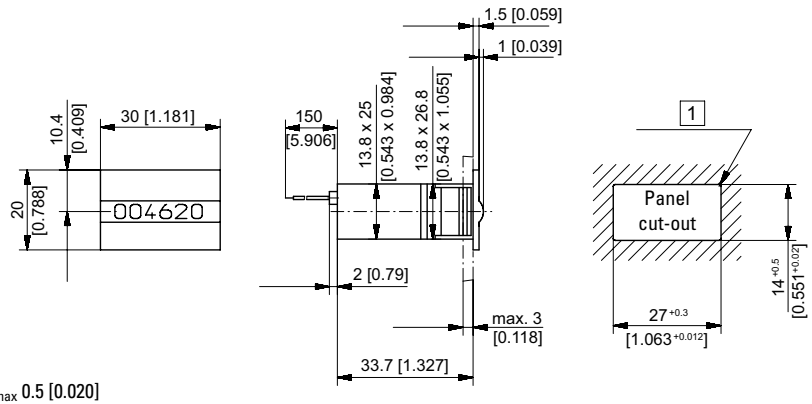
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Micro counters		High shock resistance (DC)	K46 / K47
Technical data			
Electrical connection	panel mount	flying leads, AWG 22 approx. 150 mm [5.91"], 6 mm [0.24"] stripped wire ends, tinned	
	PCB mount	solder pins ø 0.64 mm [0.025"]	
Power consumption	up to 12 V DC at 24 V DC	approx. 70 mW approx. 150 mW	
Rated voltage		1.5 / 3 / 4.5 / 5 / 6 / 12 / 24 V DC, -10 % / +20 %	
Counting frequency		max. 10 Hz (type 0)	
Pulse duration / pulse interval		min. 50 ms / min. 50 ms	
Cycle duration factor		100 %	
Number of digits		6 (K46), 7 (K47)	
Counting system		adding	
Height of figures (optical)	K46	4 x 1.7 mm [0.16 x 0.067"]	
	K47	4 x 1.25 mm [0.16 x 0.049"]	
Color of figures		white on black	
Reset		no reset	
Operating temperature		-10 °C ... +60 °C [+14 °F ... +140 °F] (non-condensing)	
Mounting position		horizontal, other on request	
Operating life		> 50 x 10 ⁶ pulses	
Soldering temperature		max. 265 °C [+509 °F], 3 s	
Protection		IP65 (K46.20, K47.20: only front side)	
Housing		PC (Polycarbonate)	
Weight		12 ... 14 g [0.42 ... 0.49 oz]	
Options			
K46.20, K46.80, K47.20, K47.80		flat pin 0.8 x 2.8 mm [0.032 x 0.11"] and push on connectors	
K46.20, K47.20		solder pins ø 0.64 mm [0.025"]	
Further options		<ul style="list-style-type: none"> - different voltages - counting frequency > 10 Hz - different color of figures - extended temperature range: -30 °C ... +85 °C [-22 °F ... +185 °F] or -20 °C ... +70 °C [-4 °F ... +158 °F] 	
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	

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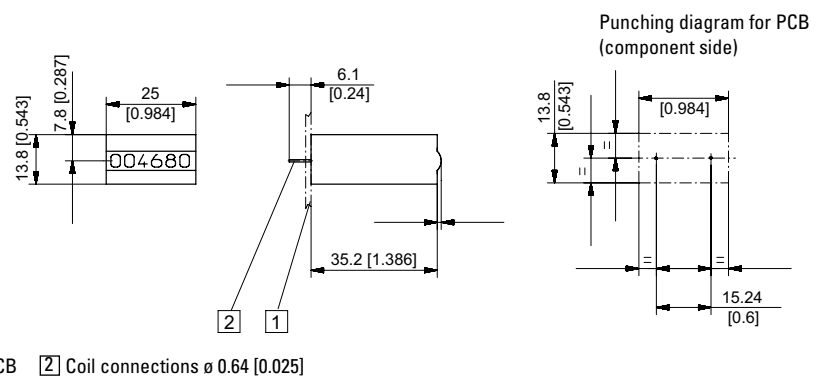
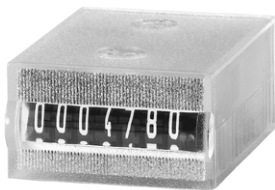
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**Panel mount
display front side
Type K46.20 / K47.20**



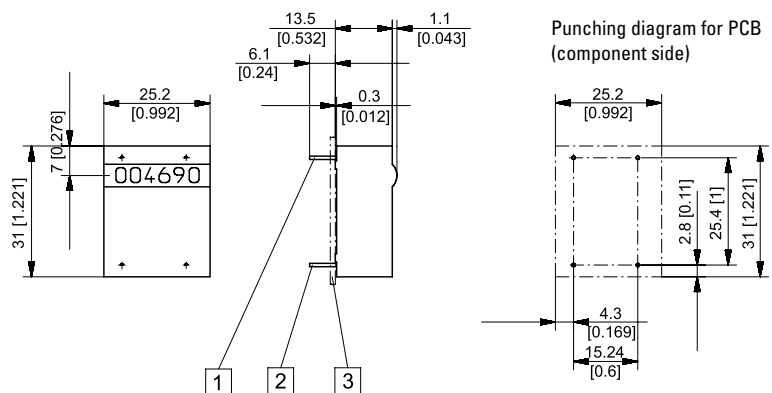
Type	Voltage	Display	Art. no.							
			3 V	4.5 V	5 V	6 V	12 V	24 V		
K46.20	DC (10 Hz) / 0	6 digits	on request	on request	on request	on request	1.700.200.012 ¹⁾	1.700.200.013 ¹⁾		
K47.20	DC (10 Hz) / 0	7 digits	1.710.200.006	1.710.200.008	1.710.200.009	1.710.200.010	1.710.200.012 ¹⁾	1.710.200.013 ¹⁾		

**PCB mount, upright
display front side
Type K46.80 / K47.80**



Type	Voltage	Display	Art. no.							
			3 V	4.5 V	5 V	6 V	12 V	24 V		
K46.80	DC (10 Hz) / 0	6 digits	on request	on request	on request	on request	1.700.800.012	1.700.800.013		
K47.80	DC (10 Hz) / 0	7 digits	1.710.800.006	1.710.800.008	1.710.800.009	1.710.800.010	1.710.800.012	1.710.800.013		

**PCB mount, lying
display on the top
Type K47.90**



Type	Voltage	Display	Art. no.							
			3 V	4.5 V	5 V	6 V	12 V	24 V		
K47.90	DC (10 Hz) / 0	7 digits	1.710.900.006	1.710.900.008	1.710.900.009	1.710.900.010	1.710.900.012	1.710.900.013		

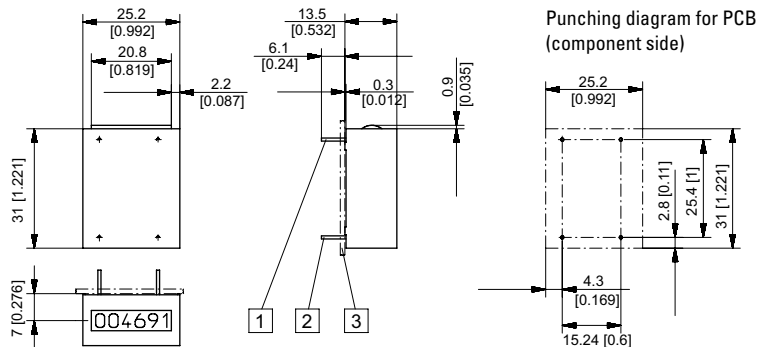
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Micro counters

High shock resistance (DC)

K46 / K47

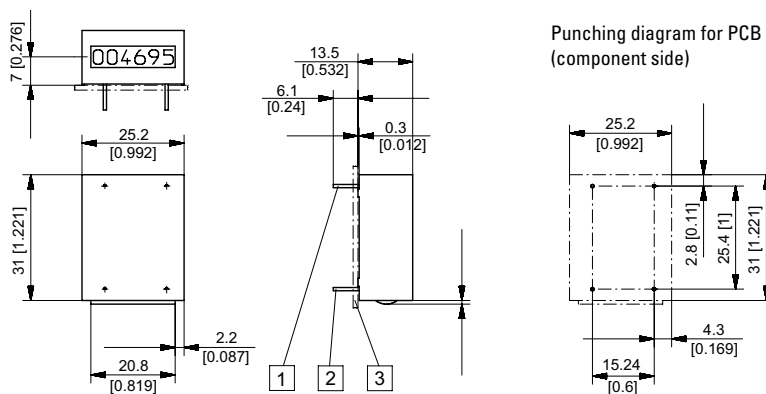
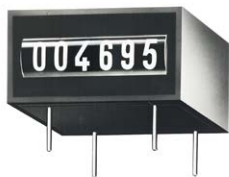
**PCB mount, hanging
display front side
Type K47.91**



1 Mounting pin without el. function \varnothing 0.64 [0.025] 2 Coil connections \varnothing 0.64 [0.025] 3 PCB

Type	Voltage	Display	Art. no.						
			3 V	4.5 V	5 V	6 V	12 V	24 V	
K47.91	DC (10 Hz) / 0	7 digits	1.710.910.006	1.710.910.008	1.710.910.009	1.710.910.010	1.710.910.012	1.710.910.013	

**PCB mount, lying
display front side
Type K46.95**



1 Mounting pin without el. function \varnothing 0.64 [0.025] 2 Coil connections \varnothing 0.64 [0.025] 3 PCB

Type	Voltage	Display	Art. no.						
			3 V	4.5 V	5 V	6 V	12 V	24 V	
K46.95	DC (10 Hz) / 0	6 digits	on request	on request	1.700.950.009	on request	1.700.950.012	1.700.950.013	