

# Preset counters, electromechanical

Standard counters

Adding, 5 digits (AC+DC)

BVa 15



The electromechanical preset counters BVa 15 (with manual reset) boast a robust construction. They are ideal for use in harsh industrial environments as stand-alone counters or as plug-in variants in combination with additional B, BVa, HB or HVa counters.

Display shows actual count and preset value.

## Characteristics

- 3- or 5-digit adding preset counter with stationary preset value
- Manual reset to zero
- Potential free changeover contact (microswitch) on reaching the preset
- Contact remains switched till a zero reset occurs
- Counters without front bezel fit into bezel F2B and can be combined in RM 50 x 50 mm

## Benefits

- Can be combined with counters of the B, BVa, HB and HVa series
- Count value and preset constantly visible
- Versions with transparent cover, sealing cover, zero reset key-lock

## Applications

Piece counting, automation

## Type series

### Description

(Reset manual)

Without front bezel, plugs into socket box

Front bezel 1, mounting holes

Mounting clip

Front bezel 3, mounting holes

### Further versions, fully assembled (on request)

Counter with lockable reset

Counter with transparent cover

### Order-No.

**BVa 15.01**

**BVa 15.11**

**BVa 15.21**

**BVa 15.31**

### Delivery specification

Counter complete with socket box

### Order information

- Art.-No.

- For special voltages, please give type, voltage and series e.g.: BVa 15.31, 12 V DC ...

### BVa 15.21 vs



### Dv BVa 15.31 lockable



### Dvs BVa 15.31 key lockable



## Type / Counting mechanism

Voltage	Type	Pulse frequency max.	Pulse on time min.	Pulse interval min.	Pulse ratio	On-time	Power consump. approx.	Permi. residual ripple max.	Operating temp. (non-condensing)
V DC	1	25 Hz	24 ms	16 ms	3 : 2	100 %	3 W	48 %	-10°C ... +60°C
V AC	a	18 Hz	27.7 ms	27.7 ms	1 : 1	100 %	3 VA	—	-10°C ... +55°C

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<b>Accessories</b>			
<b>Front bezel type F2B</b>	For cut-out 54 x 54 mm, with screw mounting	beige	<b>G007503</b>
	for plug-in counters BVa 15.0x in socket box type 946.1	black	<b>G007504</b>
<b>Socket box type 946.1</b>	Für Zähler BVa 15.01, can be used for plug-in connections, in front bezel F2B	black	<b>G008439</b>
<b>Sealing cover type K2, IP65</b>	For front bezel 75 x 60 mm with screw mounting, for elektrom. counters and via adpter front bezel T008860 for counters 48 x 48 mm	grey	<b>G008302</b>
		black	<b>G008303</b>
<b>Mounting frame with cut-out 50 x 50 mm</b> (via supplied adapter also for 45 x 45 mm)	For snap-on mounting on 35 mm top-hat DIN rail, for counters 48 x 48 mm, 53 x 53 mm and 55 x 55 mm	chromated	<b>G300003</b>
<b>DIN rail mount SR 3</b>	For snap-on mounting on 35 mm top-hat DIN rail		<b>G300002</b>
<b>Replacement parts</b>			
<b>Transparent cover, IP65</b>	Type 2 Dv, suitable for Dv BVa 15 and Dv HVa 15	lockable	<b>G008141</b>
	Type 2 Dvs, suitable for Dvs BVa 15 and Dvs HVa 15	key lockable	<b>G008151</b>
<b>Key for key-locking zero reset</b>			<b>G050265</b>

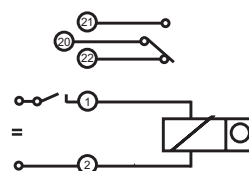
Suitable gaskets as well as further accessories can be found in the accessories section or in the accessories area of our website at: [www.kuebler.com/accessories](http://www.kuebler.com/accessories).

Technical data	
<b>Electrical connection</b>	counter: tinned tabs $\varnothing$ 1.6 mm with push-on connectors socket box: tinned plated tabs 0.8 x 2.8 mm
<b>Rated voltages</b>	counting mechanism: 12 / 24 / 48 / 115 V DC $\pm$ 10% 24 / 48 / 115 / 230 V AC $\pm$ 10%
<b>Height of figures</b>	counter: 4.5 mm preset: 4 mm
<b>Colour of housing</b>	grey: Art.-No. x.xxx.xx0.xxx black: Art.-No. x.xxx.xx1.xxx
<b>Colour of figures</b>	counter: white on black preset: yellow on black
<b>Counting mechanism shaft</b>	stainless steel
<b>Einbaulage</b>	any
<b>Service life</b>	approx. 100 x 10 <sup>6</sup> pulses
<b>Protection</b>	IP40 (front side)
<b>Weight</b>	approx. 130 g
<b>Test voltage</b>	2000 V, effective
<b>Switching contact</b>	1 change over contact (micro switch), release in 2nd half-step on the preset number
<b>Loading (max)</b> (with resistive Load.)	<b>AC</b> : 250 V AC 2.0 A <b>DC</b> : 24 V DC 2.0 A 60 V DC 0.7 A 115 V DC 0.4 A 230 V DC 0.2 A
Suitable spark quenching is required with inductive load, reducing the max. current to 60 %	

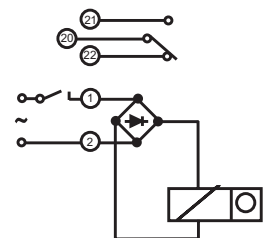
Options	
<b>Key-locking zero reset</b>	Housing grey: Art.-No.: 2.1X0.XX6.XXX Housing black: Art.-No.: 2.1X0.XX7.XXX
<b>Lockable transparent cover (IP65)</b>	Dv BVa counter with front bezel 3 Art.-No.: 2.1X0.7XX.XXX
<b>Key lockable transparent cover (IP65)</b>	Dvs BVa counter with front bezel 3 Art.-No.: 2.1X0.8XX.XXX
<b>Flexible sealing cover K2 (IP54)</b>	K2 BVa counter with front bezel 3 Art.-No.: 2.1X0.6XX.XXX
<b>Screw terminal connection</b>	Art.-No.: 2.XXX.XXX.XXX.023
<b>Flat pin connection 2.8 x 0.8 mm</b> (on request)	Art.-No.: 2.XX7.XXX.XXX

## Connection diagrams

DC



AC



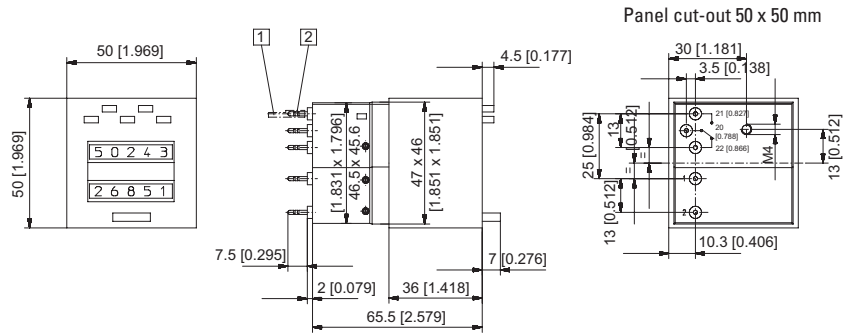
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Without front bezel,  
plugs into socket box type 946.1  
Type BVa 15.01

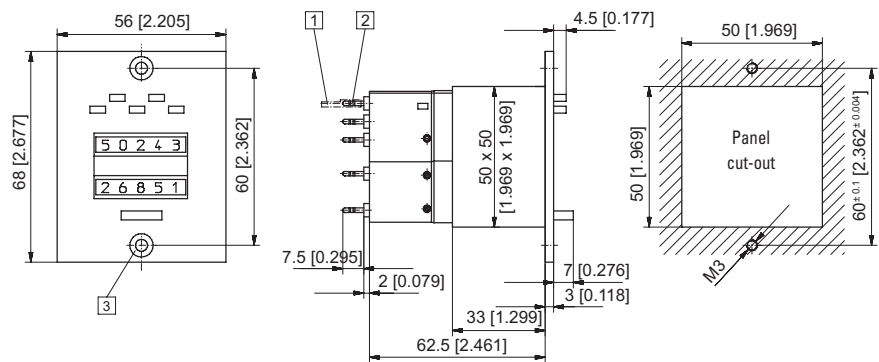


1] Push-on connector  $\varnothing$  1.5 tinned    2] Round pin  $\varnothing$  1.6 tinned  
Colour of housing grey (standard)

Type	Voltage	Display	Art.-No.		
			24 V	115 V	230 V
<b>BVa 15.01</b>	DC (25 Hz)	5 digits	<b>2.100.010.033</b>	–	–
	AC (18 Hz)		<b>2.100.010.061</b>	<b>2.100.010.064</b>	<b>2.100.010.066</b> <sup>1)</sup>

Colour of housing black: Art.-No. 2.1X0.011.XXX

Front bezel 1,  
with mounting holes  
Type BVa 15.11



1] Push-on connector  $\varnothing$  1.5 tinned    2] Round pin  $\varnothing$  1.6 tinned    3] Countersinking Af3 DIN 74  
Colour of housing grey (standard)

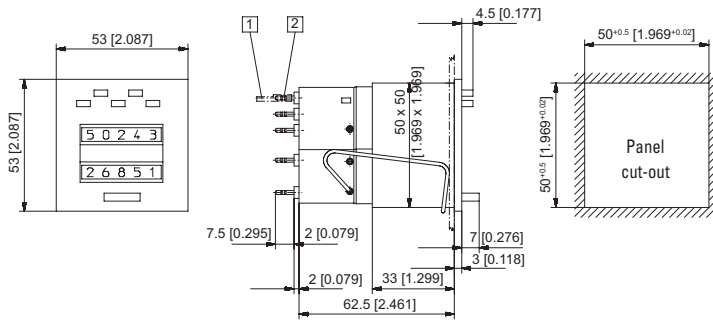
Type	Voltage	Display	Art.-No.		
			24 V	115 V	230 V
<b>BVa 15.11</b>	DC (25 Hz)	5 digits	<b>2.100.110.033</b>	–	–
	AC (18 Hz)		<b>2.100.110.061</b>	<b>2.100.110.064</b>	<b>2.100.110.066</b> <sup>1)</sup>

Colour of housing black: Art.-No. 2.1X0.111.XXX

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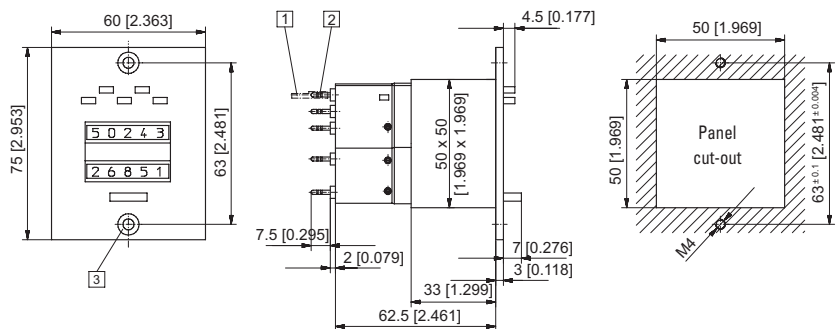
**With mounting clips**  
**Type BVa 15.21**



- 1) Push-on connector  $\varnothing$  1.5 tinned
  - 2) Round pin  $\varnothing$  1.6 tinned
- Colour of housing grey (standard)

Type	Voltage	Display	Art.-No.		
			24 V	115 V	230 V
<b>BVa 15.21</b>	DC (25 Hz)	5 digits	<b>2.100.210.033</b> <sup>1)</sup>	—	—
	AC (18 Hz)		<b>2.100.210.061</b>	<b>2.100.210.064</b>	<b>2.100.210.066</b> <sup>1)</sup>
Colour of housing black: Art.-No. 2.1X0.211.XXX			Further stock types: Art.-No. 2.100.211.033		

**Front bezel 3, with mounting holes**  
**Type BVa 15.31**



- 1) Push-on connector  $\varnothing$  1.5 tinned
  - 2) Round pin  $\varnothing$  1.6 tinned
  - 3) Countersinking Af3 DIN 74
- Colour of housing grey (standard)

Type	Voltage	Display	Art.-No.		
			24 V	115 V	230 V
<b>BVa 15.31</b>	DC (25 Hz)	5 digits	<b>2.100.310.033</b>	—	—
	AC (18 Hz)		<b>2.100.310.061</b>	<b>2.100.310.064</b>	<b>2.100.310.066</b>
Colour of housing black: Art.-No. 2.1X0.311.XXX			Further stock types: BVa 15.31.4sw 24 V DC / Art.-No. 2.107.311.013		