

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.

Preset counters

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

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 ...

Further versions, fully assembled (on request)

Counter with lockable reset

BVa 15.21 vs



Counter with transparent cover

Dv BVa 15.31
lockable



Dvs BVa 15.31
key lockable



Type / Counting mechanism

| Voltage | Type max. | Pulse frequency min. | Pulse on time min. | Pulse interval | Pulse ratio | On-time approx. | Power consump. ripple max. | Permi. residual (non-condensing) | Operating temp. |
|-------------|-----------|----------------------|--------------------|----------------|-------------|-----------------|----------------------------|----------------------------------|------------------------------------|
| V DC | 1 | 25 Hz | 24 ms | 16 ms | 3 : 2 | 100 % | 3 W | 48 % | -10°C ... +60°C [+14°F ... +140°F] |
| V AC | a | 18 Hz | 27.7 ms | 27.7 ms | 1 : 1 | 100 % | 3 VA | – | -10°C ... +55°C [+14°F ... +131°F] |

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|--|--|--------------------------|----------------------------------|
| Accessories | | | |
| Dimensions in mm [inch] | | | |
| Order-No. | | | |
| Front bezel type F2B | For cut-out 54 x 54 [2.13 x 2.13], with screw mounting for plug-in counters BVa 15.0x in socket box type 946.1 | beige black | G007503 G007504 |
| Socket box type 946.1 | Für Zähler BVa 15.01, can be used for plug-in connections, in front bezel F2B | black | G008439 |
| Sealing cover type K2, IP65 | For front bezel 75 x 60 [2.95 x 2.36] with screw mounting, for elektrom. counters and via adapter front bezel T008860 for counters 48 x 48 [1.89 x 1.89] | grey black | G008302 G008303 |
| Mounting frame with cut-out 50 x 50 [2.36 x 2.36] via separate adapter also for 45 x 45 [1.77 x 1.77] | For snap-on mounting on 35 [1.38] top-hat DIN rail, for counters 48 x 48 [1.89 x 1.89], 53 x 53 [2.09 x 2.09] and 55 x 55 [2.17 x 2.17] | chromated | G300003 |
| DIN rail mount SR 3 | For snap-on mounting on 35 [1.38] top-hat DIN rail | | G300002 |
| Replacement parts | | | Order-No. |
| Transparent cover, IP65 | Type 2 Dv, suitable for Dv BVa 15 and Dv HVa 15 Type 2 Dvs, suitable for Dvs BVa 15 and Dvs HVa 15 | lockable key lockable | G008141 G008151 |
| Key for key-locking zero reset | | | G050265 |

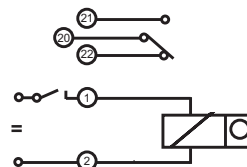
Suitable gaskets as well as further accessories can be found in the accessories section or in the accessories area of our website at: www.kuebler.com/accessories.

| Technical data | | | |
|---|------------------------|---|--|
| Electrical connection | counter | tinned tabs \varnothing 1.6 mm [0.063"] with push-on connectors socket box tinned plated tabs 0.8 x 2.8 mm [0.032 x 0.11"] | |
| Rated voltages | counting mechanism | 12 / 24 / 48 / 115 V DC \pm 10 % 24 / 48 / 115 / 230 V AC \pm 10 % | |
| Height of figures | counter preset | 4.5 mm [0.18"] 4 mm [0.16"] | |
| Colour of housing | grey black | Art.-No. x.xxx.xx0.xxx Art.-No. x.xxx.xx1.xxx | |
| Colour of figures | counter preset | white on black yellow on black | |
| Counting mechanism shaft | | stainless steel | |
| Mounting position | | any | |
| Service life | | approx. 100 x 10 ⁶ pulses | |
| Protection | | IP40 (front side) | |
| Weight | | approx. 130 g [4.59 oz] | |
| Test voltage | | 2000 V, effective | |
| Switching contact | | 1 change over contact (micro switch), release in 2nd half-step on the preset number | |
| Loading (max) (with resistive load.) | AC DC | 250 V AC 2.0 A 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 % | | | |

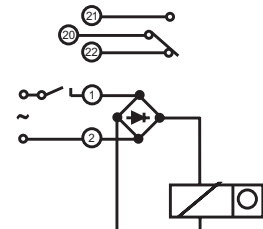
| Options | | |
|--|-------------------------------|---|
| Key-locking zero reset | Housing grey Housing black | Art.-No.: 2.1X0.XX6.XXX Art.-No.: 2.1X0.XX7.XXX |
| Lockable transparent cover (IP65) | | Dv BVa counter with front bezel 3 Art.-No.: 2.1X0.7XX.XXX |
| Key lockable transparent cover (IP65)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

Connection diagrams

DC



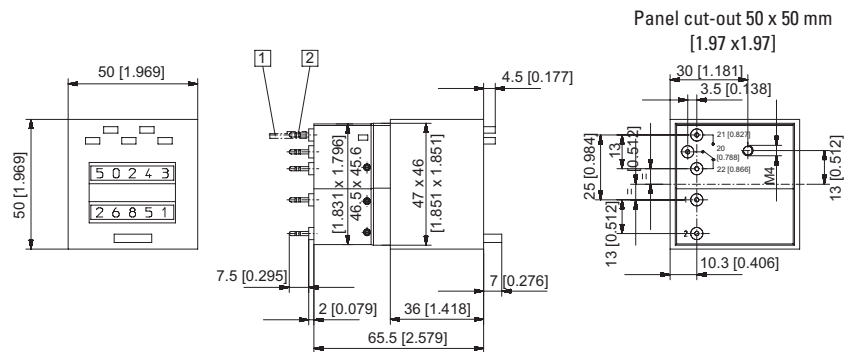
AC



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Standard counters **Adding, 5 digits (AC+DC)** **BVa 15**

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

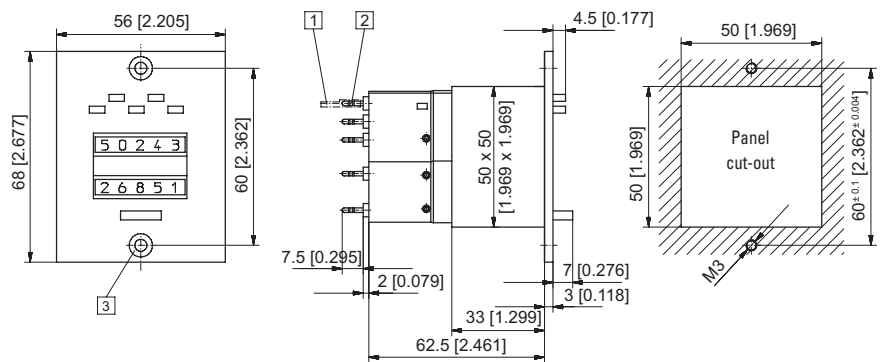


1) Push-on connector \varnothing 1.5 [0.059] tinned 2) Round pin \varnothing 1.6 [0.063] tinned
Colour of housing grey (standard)

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

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 [0.059] tinned 2) Round pin \varnothing 1.6 [0.063] tinned 3) Countersinking Af3 DIN 74
Colour of housing grey (standard)

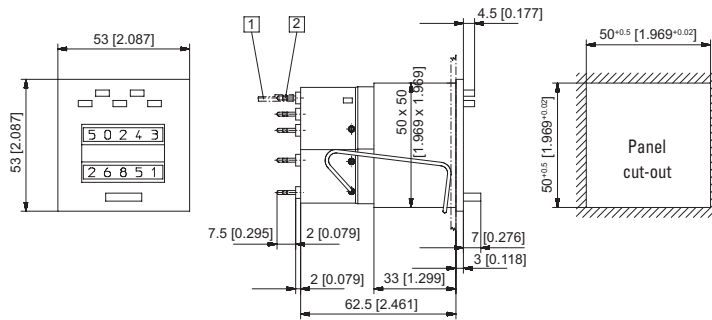
| Type | Voltage | Display | Art.-No. | | |
|------------------|------------|----------|----------------------|----------------------|----------------------|
| | | | 24 V | 115 V | 230 V |
| BVa 15.11 | DC (25 Hz) | 5 digits | 2.100.110.033 | – | – |
| | AC (18 Hz) | | 2.100.110.061 | 2.100.110.064 | 2.100.110.066 |

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

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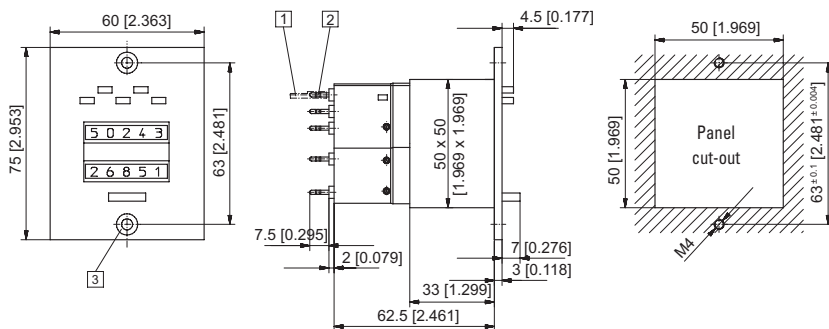
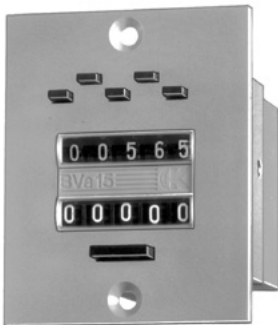
With mounting clips
Type BVa 15.21



1 Push-on connector \varnothing 1.5 [0.059] tinned 2 Round pin \varnothing 1.6 [0.063] tinned
Colour of housing grey (standard)

| Type | Voltage | Display | Art.-No. | | |
|---|------------|----------|---|----------------------|------------------------------------|
| | | | 24 V | 115 V | 230 V |
| BVa 15.21 | DC (25 Hz) | 5 digits | 2.100.210.033 ¹⁾ | – | – |
| | AC (18 Hz) | | 2.100.210.061 | 2.100.210.064 | 2.100.210.066 ¹⁾ |
| 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 [0.059] tinned 2 Round pin \varnothing 1.6 [0.063] tinned 3 Countersinking Af3 DIN 74
Colour of housing grey (standard)

| Type | Voltage | Display | Art.-No. | | |
|---|------------|----------|---|----------------------|----------------------|
| | | | 24 V | 115 V | 230 V |
| BVa 15.31 | DC (25 Hz) | 5 digits | 2.100.310.033 | – | – |
| | AC (18 Hz) | | 2.100.310.061 | 2.100.310.064 | 2.100.310.066 |
| 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 | | |