

Preset counters, electromechanical

Standard counters	Subtracting, 2 or 3 digits (AC+DC)	MVs 13
--------------------------	---	---------------



The electromechanical preset counters MVs 13 (with manual and manual/electrical reset) boast a robust construction with very small dimensions.

They are ideal for use in harsh industrial environments. The subtracting counters are set to a value via the front keys, the signal occurs when the count value reaches 0.

Characteristics

- 2- or 3-digit subtracting preset counter
- Manual or manual and electrical reset
- Potential free changeover contact (microswitch) on reaching zero
- Contact remains switched till reset occurs

Benefits

- Delivery complete with push-on connectors
- Very small dimensions
- Versions with sealing cover on request

Applications

Piece counting, batch quantities and automation

Type series

	3 digits manual reset	3 digits manual and electr. reset	2 digits manual reset	2 digits manual and electr. reset
Front bezel with mounting holes	MVs 13.11	MVs 13.13	MVs 13.11/2	MVs 13.13/2
Front bezel with mounting clip	MVs 13.21	MVs 13.23	MVs 13.21/2	MVs 13.23/2

Accessories	Dimensions in mm [inch]	Order-No.
Sealing cover type KV3, IP65	For front bezel 39 x 68 [1.54 x 2.68] , with screw mounting	transparent, grey transparent, black
		G008310 G008311

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.

Preset counters, electromechanical

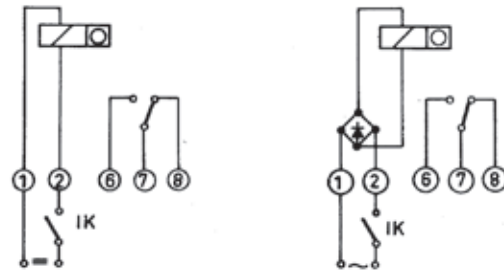
Standard counters **Subtracting, 2 or 3 digits (AC+DC)** **MVs 13**

Technical data	
Electrical connection	tinned flat pins 0.8 x 2.8 mm [0.032 x 0.11"] (with push on connectors)
Rated voltages	
count mechanism	12 / 24 / 48 / 115 / 230 V DC ±10 % 24 / 48 / 115 / 230 V AC ±10 %
reset magnet	24 / 48 / 115 / 230 V DC ±10 % 24 / 48 / 115 / 230 V AC ±10 %
Height of figures	4 mm [0.16"]
Colour of housing	similar to RAL 7001
Colour of figures	white on black
Counting mechanism shaft	stainless steel
Mounting position	any
Service life	approx. 100 x 10 ⁶ pulses
Protection	IP40 (front side)
Weight	approx. 150 g [5.29 oz], with electrical reset approx. 190 g [6.70 oz]
Test voltage	2000 V, effective
Switching contact	1 change over contact (micro switch), release in 2nd half-step exactly at zero
Load (max.)	
AC (with resistive load)	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
With inductive: suitable spark quenching is required on inductive load, reducing the max. current to approx. 60%	
Electrical reset	
On time	10% max. 40 seconds
Minimum pulse time	0.25 sec.
Power consumption	12 W at DC, 14 VA at AC

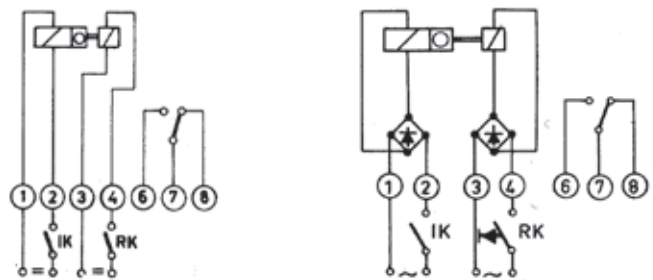
Options
Electrical reset only

Connection diagrams

Manual reset



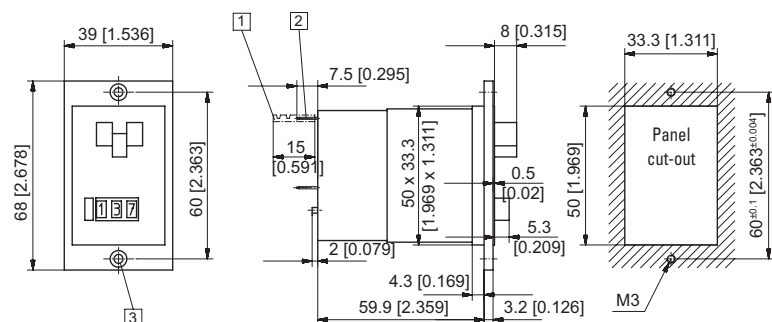
Manual and electrical reset



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 %	4 W	48 %	-10°C ... +45°C [+14°F ... +113°F]
V AC	a	18 Hz	22.2 ms	33.3 ms	2 : 3	100 %	4.5 VA	—	-10°C ... +45°C [+14°F ... +113°F]

Front bezel with mounting holes, manual reset

Type MVs 13.11, MVs 13.11/2



- 1 Push-on connector 0.8 x 2.8 [0.032 x 0.11] tinned
 - 2 Flat pin 0.8 x 2.8 [0.032 x 0.11] tinned
 - 3 Countersinking Af3 DIN 74
- Colour of housing grey (standard)

Voltage	Type / Art.-No.	MVs 13.11 (display 3 digits)			MVs 13.11/2 (display 2 digits)		
		24 V	115 V	230 V	24 V	115 V	230 V
DC (25 Hz)		2.300.110.033	—	—	2.310.110.033	—	—
AC (18 Hz)		2.300.110.061	2.300.110.064	2.300.110.066	2.310.110.061	2.310.110.064	2.310.110.066

Dimensions in mm [inch]

Preset counters, electromechanical

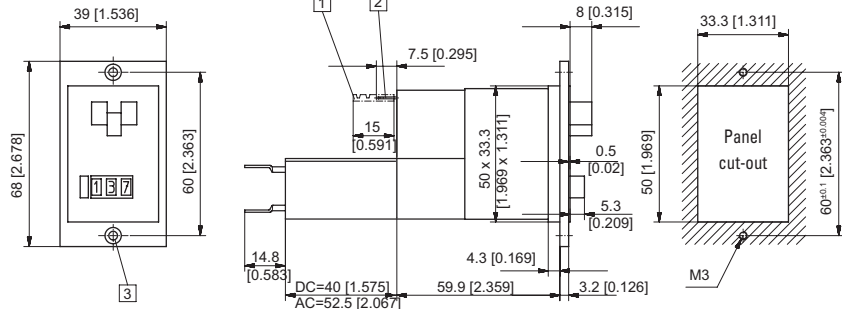
Standard counters

Subtracting, 2 or 3 digits (AC+DC)

MVs 13

Front bezel with mounting holes,
manual and electrical reset

Type MVs 13.13, MVs 13.13/2

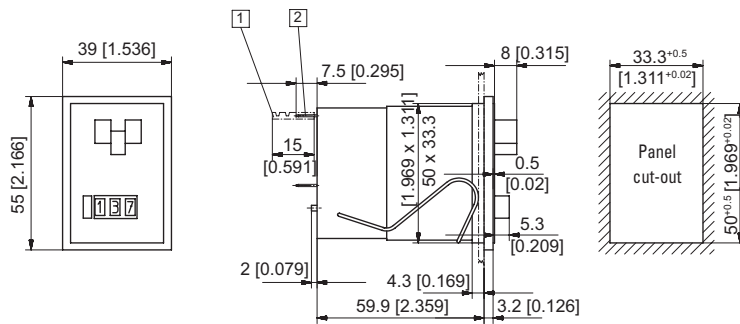


- 1 Push-on connector 0.8 x 2.8 [0.032 x 0.11] tinned
 - 2 Flat pin 0.8 x 2.8 [0.032 x 0.11] tinned
 - 3 Countersinking Af3 DIN 74
- Colour of housing grey (standard)

Art.-No.	Type	MVs 13.13 (display 3 digits)			MVs 13.13/2 (display 2 digits)		
		24 V	115 V	230 V	24 V	115 V	230 V
Colour of housing grey (standard)	DC (25 Hz)	2.300.130.033	–	–	2.310.130.033	–	–
	AC (18 Hz)	2.300.130.061	2.300.130.064	2.300.130.066	2.310.130.061	2.310.130.064	2.310.130.066

Front bezel with clip mounting,
manual reset

Type MVs 13.21, MVs 13.21/2



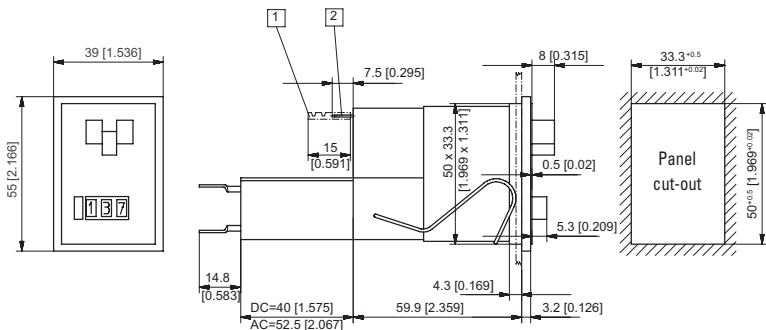
- 1 Push-on connector 0.8 x 2.8 [0.032 x 0.11] tinned
 - 2 Flat pin 0.8 x 2.8 [0.032 x 0.11] tinned
- Colour of housing grey (standard)

Voltage	Type / Art.-No.	MVs 13.21 (display 3 digits)			MVs 13.21/2 (display 2 digits)		
		24 V	115 V	230 V	24 V	115 V	230 V
DC (25 Hz)		2.300.210.033	–	–	2.310.210.033	–	–
AC (18 Hz)		2.300.210.061	2.300.210.064	2.300.210.066	2.310.210.061	2.310.210.064	2.310.210.066

Colour of housing black: Art.-No. 2.3X0.211.XXX

Front bezel with clip mounting,
manual and electrical reset

Type MVs 13.23, MVs 13.23/2



- 1 Push-on connector 0.8 x 2.8 [0.032 x 0.11] tinned
 - 2 Flat pin 0.8 x 2.8 [0.032 x 0.11] tinned
- Colour of housing grey (standard)

Voltage	Type / Art.-No.	MVs 13.23 (display 3 digits)			MVs 13.23/2 (display 2 digits)		
		24 V	115 V	230 V	24 V	115 V	230 V
DC (25 Hz)		2.300.230.033	–	–	2.310.230.033	–	–
AC (18 Hz)		2.300.230.061	2.300.230.064	2.300.230.066	2.310.230.061	2.310.230.064	2.310.230.066

Colour of housing black: Art.-No. 2.3X0.231.XXX

Dimensions in mm [inch]