Time preset counters, electromechanical

Standard time preset counters | **Adding with mechanical reset (AC+DC)** | **HVa 15**

The time preset counters HVa 15 (with manual reset) have a robust construction.

They are used in harsh industrial environments as single counters or in combination, as a plug-in version, with other B, BVa, HB or HVa counters. They display the current counter value and the preset value.

Characteristics

- 5-digit adding time preset counter with stationary preset.
- Manual reset.
- Potential-free changeover contact (microswitch) when the preset time is reached.
- Contact remains switched until reset occurs.
- Counter without front bezel, for mounting in front bezel F2B; can be combined in 50 x 50 mm size.

Benefits

- Can be combined with the counters of the B, BVa, HB and HVa series.
- Counter value and preset value are constantly displayed.
- Versions with transparent cover, sealing cover, lockable zero reset.

Applications

Time control, automation.

Type series

Description	*Type*	*Options*
Mounting clip	**HVa 15.21**	· Lockable 0-reset · Housing: black (standard) Art. no. 3.30X.X17.XXX grey Art. no. 3.30X.X16.XXX · HVa 15.01 (without front bezel) - plugs into socket box 946.1 - DIN Rail mount SR 3 Housing black (standard) Art. no. 3.300.011.XXX grey Art. no. 3.300.010.XXX
Front bezel 3, with mounting holes	**HVa 15.31**	

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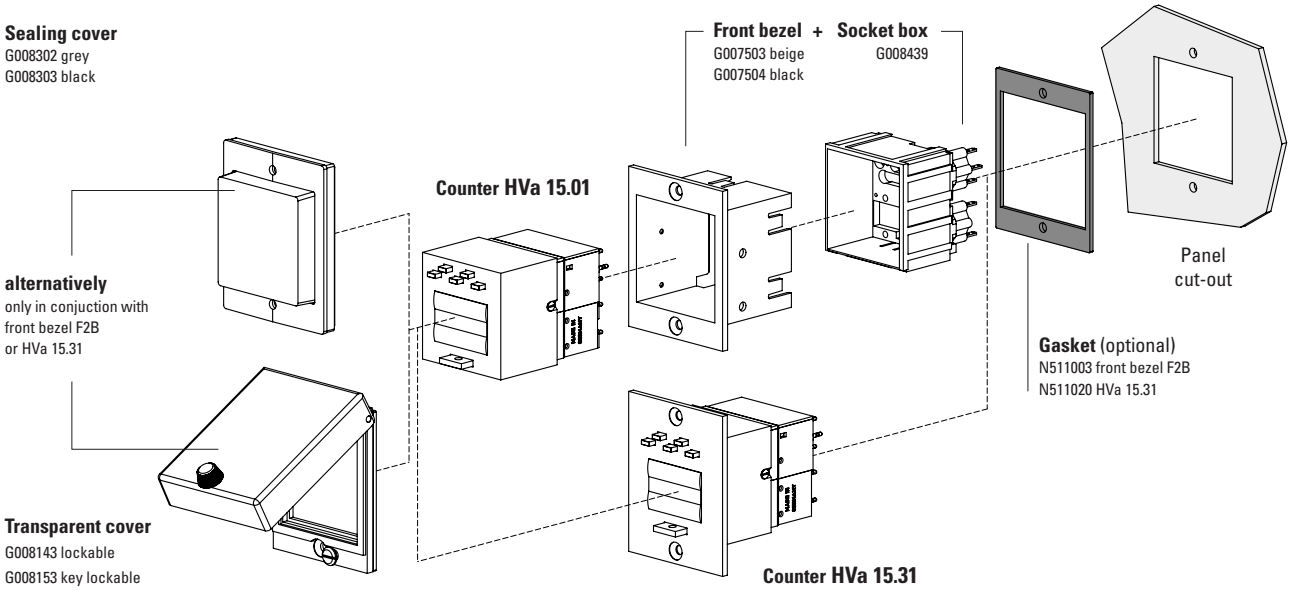
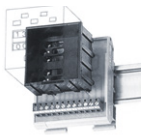
Accessories / Mounting examples



		Type / size	Description		Order no.	suitable gasket
Front bezel		**F2B**	for counter HVa 15.01 for cut-out 54 x 49 mm (only in conjuction with socket box G008439)	beige black	**G007503** **G007504**	**N511003**
Socket box		**946.1**	for plug-in connection in front bezel F2B	black	**G008439**	–
Sealing cover IP65		**K2**	for counter HVa 15.31 or for counter HVa 15.01 in conjuction with front bezel F2B	transp. /grau transp. /black	**G008302** **G008303**	–
Transparent cover IP65 with gasket		**2 Dv verriegelbar**	cover lockable for counter HVa 15.31 or for counter HVa 15.01 in conjuction with front bezel F2B	transp. /black	**G008143**	–
		2 Dvs verschließbar	cover key lockable for counter HVa 15.31 or for counter HVa 15.01 in conjuction with front bezel F2B	transp. /black	**G008153**	–
Gasket counter			58 x 58 mm [2.28 x 2.28“] 60 x 75 mm [2.36 x 2.95“]	HVa 15.21 HVa 15.31	**N511004** **N511020**	
DIN rail mount		**SR 3**	for snap-on mounting on 35 mm [1.38“] top-hat DIN rail		**G300002**	
Key for key-locking zero reset					**G050265**	

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Technical data

General technical data

Color of figures	hours	figures white on black
	1/10 and 1/100 h	figures red on white
preset	hours	figures yellow on black
	1/10 and 1/100 h	figures red on white
		(approx. 4 mm [0.16“] high)
Reset		manual
Mounting position		any
Operating temperature		-15 °C ... +50 °C [+5 °F ... +122 °F] (non-condensing)
Relative humidity at +30 °C [+86 °F]		≤ 80 % (non-condensing)
Altitude		up to 2000 m [6562’]
Gasket		oil and gasoline-resistant synthetic rubber, particularly suitable for use with acids and alkalis, very good age stability

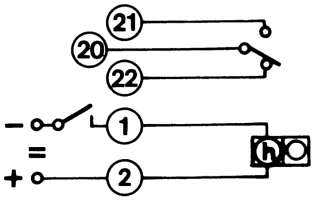
Mechanical characteristics

Protection		IP42 (front side)
	sealing cover K1	IP65 (front side)
	transparent cover Dv and Dvs	IP65 (front side)
Color of housing		black (standard)
EMC standards		EN 55011 class B EN 61000-6-2, EN 61000-6-3
Device safety	designed to	EN 61010 part 1
	protection class	2
	application area	pollution level 2

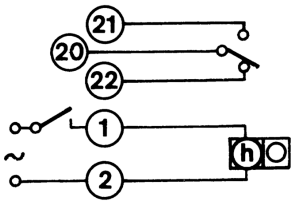
Electrical characteristics

Switching contact		1 changeover contact (micro switch) release at the preset time
	loading capacity at AC	max. 250 V, max. 2 A
	loading capacity at DC	24 V max. 2.0 A
	(ohmic load)	60 V max. 0.7 A
		115 V max. 0.4 A
		230 V max. 0.2 A
With inductive load, spark quenching is required reducing the max. current to 60 %		
Test voltage		2000 V AC, 50 Hz for AC counter
Electrical connection		tinned round pins ø 1.6 mm [0.063“], with push on connectors
Power consumption	10 ... 30 V DC	approx. 0.5 W
	36 ... 80 V DC	approx. 0.9 W
	100 ... 130 V DC	approx. 0.75 W
	20 ... 30 V AC, 50 Hz	approx. 0.3 VA
	42 ... 48 V AC, 50 Hz	approx. 0.25 VA
	100 ... 130 V AC, 50 Hz	approx. 0.6 VA
	187 ... 264 V AC, 50 Hz	approx. 1.2 VA
	360 ... 440 V AC, 50 Hz	approx. 1.65 VA
Rated voltages		
	AC (50 or 60 Hz)	20 ... 30/42 ... 48/100 ... 130/187 ... 264, 360 ... 440 V
	DC	10 ... 30/36 ... 80/100 ... 130
On time		100 %
Count mode		adding
Count range	AC	999.99 h
	DC	9999.9 h

Terminal assignment



DC, manual reset



AC, manual reset

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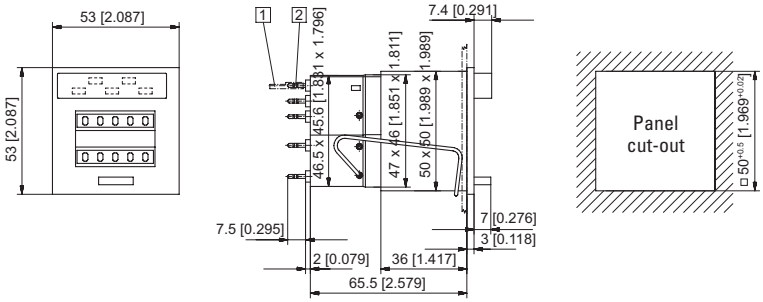
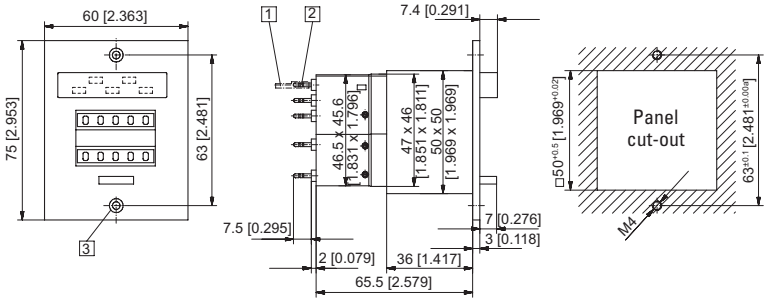
Mounting clip
Type HVa 15.21



1 Push on connector ø 1.5 [0.059] tinned 2 Round pin ø 1.6 [0.063] tinned

Type	Voltage	Art. no. 10 ... 30 V	20 ... 30 V	42 ... 48 V	100 ... 130 V	187 ... 264 V	360 ... 440 V
HVa 15.21	AC (50 Hz)		**3.300.211.071**	**3.300.211.072**	**3.300.211.074**	**3.300.211.075**	**on request**
	AC (60 Hz)		**3.300.211.081**	**3.300.211.082**	**3.300.211.084**	**3.300.211.085**	**on request**
	DC	**3.300.211.351**					

Front bezel 3, with mounting holes
Type HVa 15.31



1 Push on connector ø 1.5 [0.059] tinned 2 Round pin ø 1.6 [0.063] tinned 3 Countersinking Af4.,DIN 74

Type	Voltage	Art. no. 10 ... 30 V	20 ... 30 V	42 ... 48 V	100 ... 130 V	187 ... 264 V	360 ... 440 V
HVa 15.31	AC (50 Hz)		**3.300.311.071**	**3.300.311.072**	**3.300.311.074**	**3.300.311.075**	**on request**
	AC (60 Hz)		**3.300.311.081**	**3.300.311.082**	**3.300.311.084**	**3.300.311.085**	**on request**
	DC	**3.300.311.351**					

Dimensions in mm [inch]