

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.

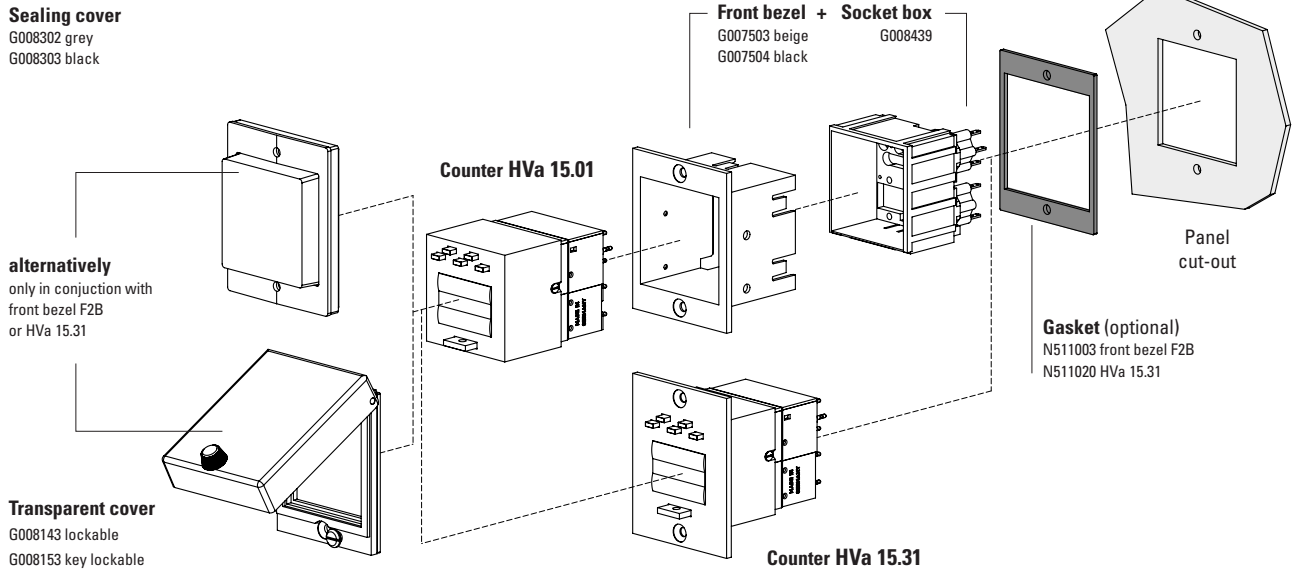
Type series

| Description | Type | Options |
|------------------------------------|------------------|---|
| Mounting clip | HVa 15.21 | · Lockable 0-reset |
| Front bezel 3, with mounting holes | HVa 15.31 | · 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 |

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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 conjunction 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 conjunction 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 conjunction 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 conjunction 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 HV a 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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|-------------------------------|--------------------------------------|--------|
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|-------------------------------|--------------------------------------|--------|

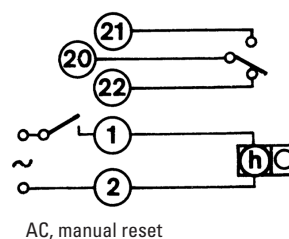
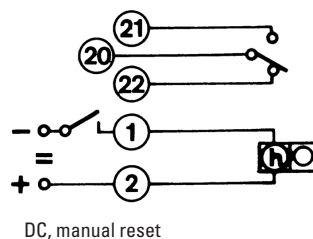
Technical data

| 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 (ohmic load) | 24 V max. 2.0 A |
| | | 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 |

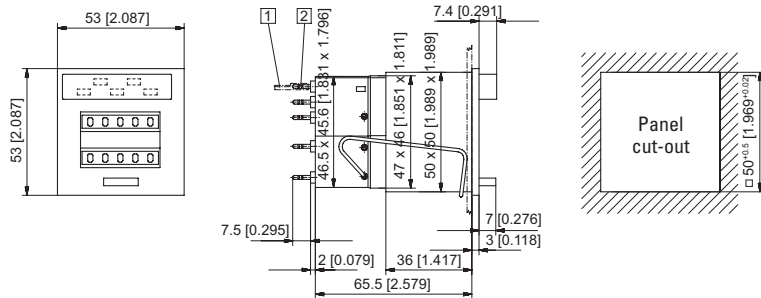
Terminal assignment



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

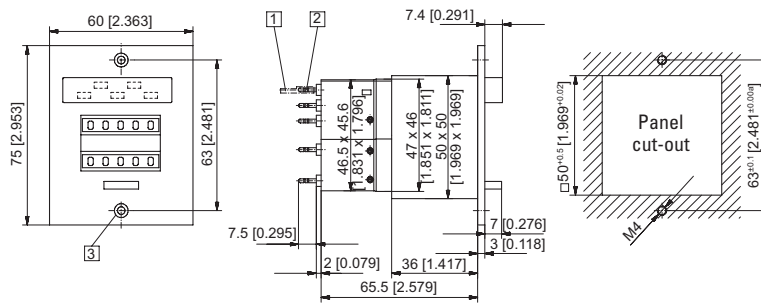
Mounting clip Type HVa 15.21



1 Push on connector \varnothing 1.5 [0.059] tinned 2 Round pin \varnothing 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 \varnothing 1.5 [0.059] tinned 2 Round pin \varnothing 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 | | | | | |