

## Type 633-AC



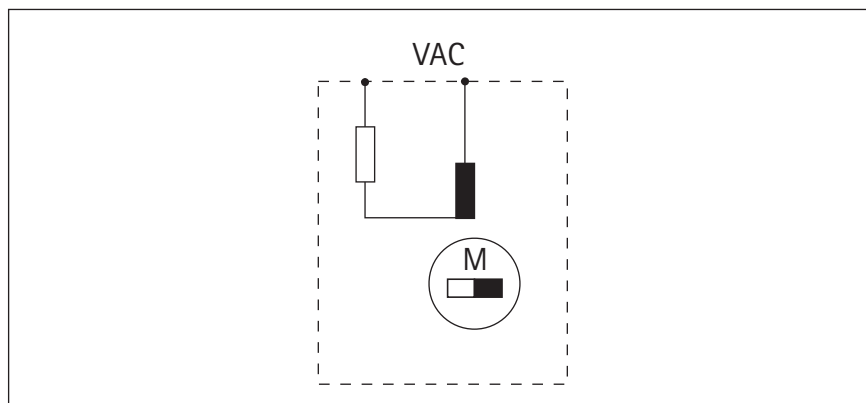
### TECHNICAL DATA

## Time Counter mini "h", AC Version

- Miniature dimensions
- Low power consumption
- Quiet operation
- Protection class IP 65

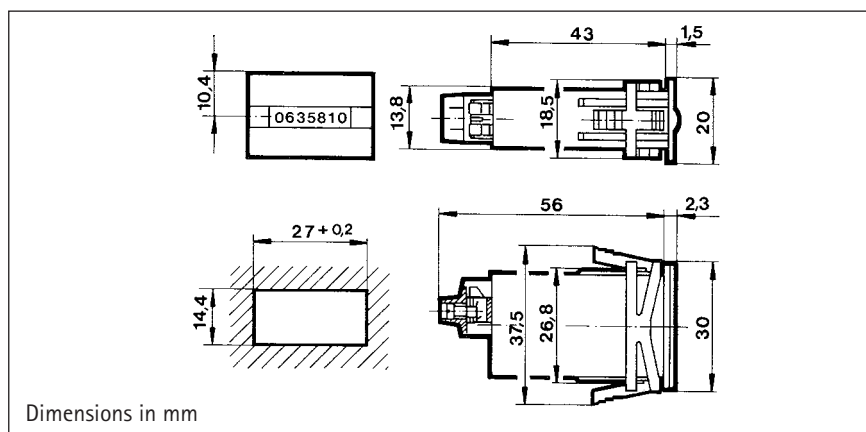
|                             |                                                                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Display                     | 6-digit, 0 ... 99999.9 h                                                                                                                                 |
| Digit height                | 4 mm, visual                                                                                                                                             |
| Supply voltage Vop          | acc. to order information, tolerance + 10 %                                                                                                              |
| Power consumption           | 24 V 0.08 VA, 115 V 0.56 VA, 220 V 1 VA                                                                                                                  |
| Operating temperature       | - 10 ... + 50 °C                                                                                                                                         |
| Storage temperature         | - 25 ... + 70 °C                                                                                                                                         |
| Humidity                    | 75 %, without condensation                                                                                                                               |
| El. connection              | depending on version<br>screw terminal connection for cables up to 2.5 mm <sup>2</sup><br>or 250 mm long connecting cable, AWG 28<br>or AMP 2.8 x 0.8 mm |
| Mounting                    | with clamping frame                                                                                                                                      |
| Mounting position           | horizontal figure wheel shaft                                                                                                                            |
| Protection class (DIN 4050) | Version .8: front IP 66, connections IP 40 (touchproof)                                                                                                  |
| Vibro stability             | 30 m/s <sup>2</sup> (10 - 500 Hz) acc. to IEC 068-2-6                                                                                                    |
| Shock stability             | 800 m/s <sup>2</sup> (6 ms) acc. to IEC 068-2-27                                                                                                         |
| General design              | acc. to DIN VDE 0700; insulation group C (VDE 0110),<br>protection class II                                                                              |
| Noise level                 | approx. 40 dB (distance 25 cm)                                                                                                                           |
| Reset                       | none                                                                                                                                                     |

### CONNECTION DIAGRAM

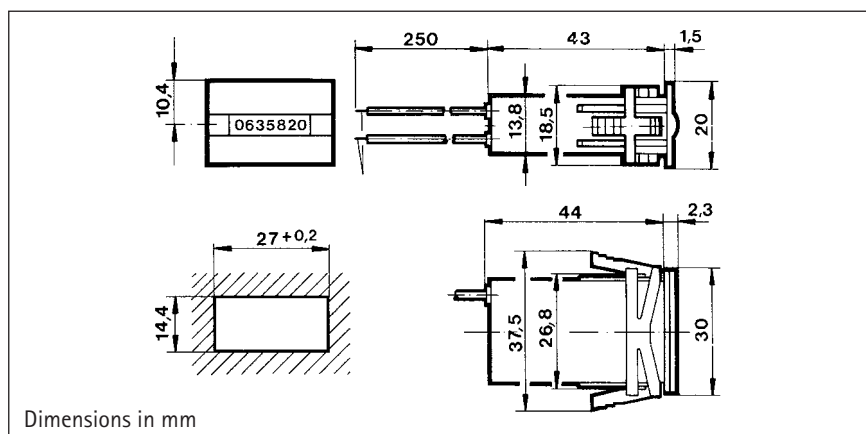


## DIMENSIONS

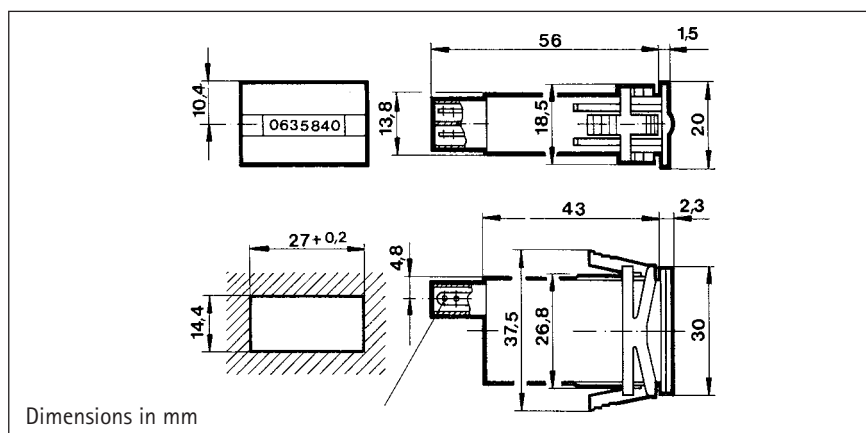
### Screw terminals



### Connecting cable



### AMP connector



## ORDER INFORMATION

### Counter

| Voltage     | Screw terminals | Connecting cable |
|-------------|-----------------|------------------|
| 24 V 50 Hz  | 0 633 811       | 0 633 821        |
| 115 V 50 Hz | 0 633 813       | 0 633 823        |
| 115 V 60 Hz | 0 633 814       | 0 633 824        |
| 220 V 50 Hz | 0 633 815       | 0 633 825        |

Other voltages on request

### Accessories

panel frame 24x36 mm (insert dimensions 22 x 36 mm) Ordering code 1 405 674

# Time Counters mini "h", Type 633-DC DC Version



Type 633.0



Type 633.7



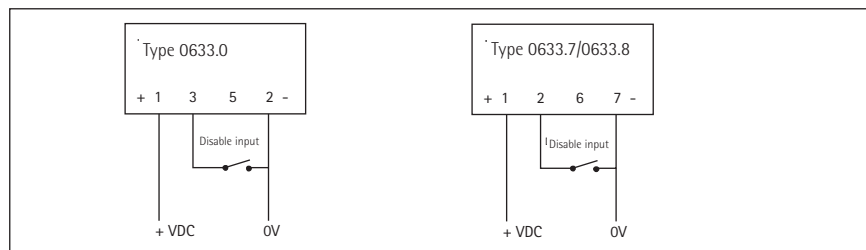
Type 633.8

- High shock resistance
- Miniature dimensions
- Low power consumption
- Electrical connections in standard grid
- Suitable for PCB mounting
- Machine-solderable and washable versions available
- Protection class IP 65

## TECHNICAL DATA

|                                |                                                                          |
|--------------------------------|--------------------------------------------------------------------------|
| Display                        | 7-digit, 0 ... 99 999.99 h                                               |
| Digit height                   | 4 mm, visual                                                             |
| Supply voltage V <sub>op</sub> | acc. to order information, tolerance + 10 %                              |
| Power consumption              | approx. 30 mW                                                            |
| Residual ripple                | < 1 %                                                                    |
| Operating temperature          | - 10 ... + 60 °C                                                         |
| Storage temperature            | - 40 ... + 70 °C                                                         |
| El. connection                 | versions .0 solder pins, .7 and .8 wiring posts Ø 0.6 mm                 |
| Mounting                       | versions .0 on PCB, .7 with wiring posts, .8 with catch spring           |
| Mounting position              | horizontal figure wheel shaft                                            |
| Protection class (DIN 4050)    | IP 66, versions .7 and .8 only at front, connections IP 00               |
| Vibro stability                | 30 m/s <sup>2</sup> (10 - 500 Hz) acc. to IEC 068-2-6                    |
| Shock stability                | > 3500 m/s <sup>2</sup> acc. to IEC 068-2-27                             |
| General design                 | acc. to DIN VDE 0700; insulation group C (VDE 0110), protection class II |
| Weight                         | approx. 10 g                                                             |
| Time error                     | with disable per switching cycle 0.488 ms                                |
| Reset                          | none                                                                     |

## CONNECTION DIAGRAM



Activation: The counter is connected to 0 V and + VDC.  
The counter is switched off by connecting Pin 2 with Pin 7 or Pin 3.



# Miniature Time Counter Type 633-DC for 35 mm DIN Rail Attachment

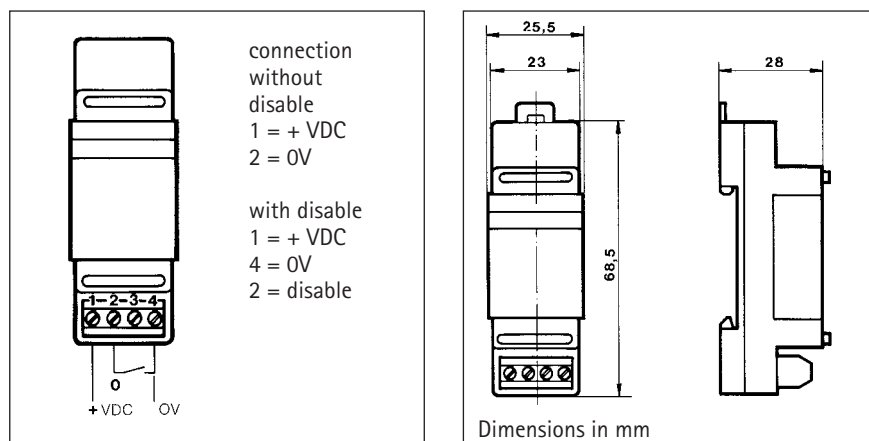


## TECHNICAL DATA

- Miniature size
- Low power consumption
- Screw terminal connection
- Suitable for switch cabinet installation
- Snap-on attachment for 35 mm DIN rail

|                             |                                                                          |         |
|-----------------------------|--------------------------------------------------------------------------|---------|
| Display                     | 7-digit, 0 ... 99999.99 h                                                |         |
| Digit height                | 4 mm, visual                                                             |         |
| Supply voltage $V_{op}$     | acc. to order information, tolerance + 10 %                              |         |
| Current consumption         | during pulse                                                             | voltage |
|                             | 35 mA                                                                    | 5 VDC   |
|                             | 17 mA                                                                    | 12 VDC  |
|                             | 9 mA                                                                     | 24 VDC  |
| Residual ripple             | < 1 %                                                                    |         |
| Operating temperature       | 0 ... + 60 °C                                                            |         |
| Storage temperature         | - 40 ... + 70 °C                                                         |         |
| Protection class (DIN 4050) | IP 10                                                                    |         |
| Vibro stability             | 30 m/s <sup>2</sup> (10 - 500 Hz) acc. to IEC 068-2-6                    |         |
| Shock stability             | > 3500 m/s <sup>2</sup> acc. to IEC 068-2-27                             |         |
| General design              | acc. to DIN VDE 0700; insulation group C (VDE 0110), protection class II |         |
| Weight                      | approx. 40 g                                                             |         |
| Time error                  | with disable 0.488 ms per switching cycle                                |         |
| Reset                       | none                                                                     |         |

## CONNECTION DIAGRAM DIMENSIONS



## ORDER INFORMATION

|                                        |           |
|----------------------------------------|-----------|
| Time counter for supply voltage 5 VDC  | 0 633 531 |
| Time counter for supply voltage 12 VDC | 0 633 532 |
| Time counter for supply voltage 24 VDC | 0 633 533 |