



Instructions for installation and use

BSZA 01.1, .TV - Shower token machine for wall installation

BASIC TECHNICAL DATA

Usable tokens:	ZT 1
Supply voltage:	12 V, 50 Hz
Input:	6 VA,
Adjustable time of the water flow:	10 s to 42.5 min (with a step of 10 s)
Water pressure:	0.1 – 1 MPa
Maximum inlet water temperature:	60°C
Recommended voltage source:	ZAC 1/20, ZAC 1/36, ZAC 1/50

Link to website: [BSZA 01](#)

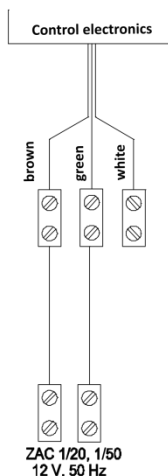
Token machine function

- The shower control enables two operations (modes) – paid and unpaid
- After switching on the power supply, the red indicator light blink 5 times. In the next step, the green indicator turn on. If paid control or unpaid control is selected, it is not indicated in any way.

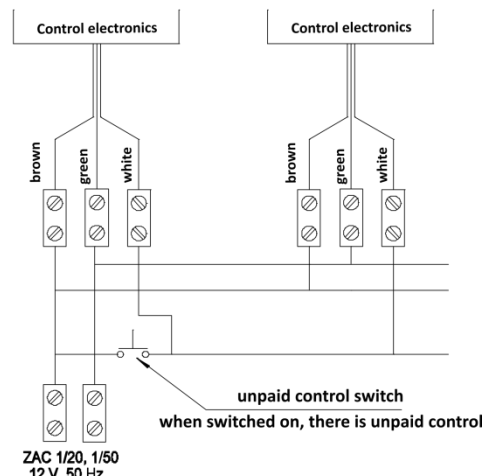
Paid control

- The BSZA 01 token machine is used for regulated water abstraction in the shower.
- When the token is inserted, the indicator flashes once and start blinking green. The control electronics are activated and after the pressing of the START/STOP button the electromagnetic valve opens the water supply. The light indicator starts to show the remaining water flow time. After the next press of the button START/STOP the electromagnetic valve is closed and the water stops flowing and the indicator turns orange. This cycle (opening and closing) can be repeated several times. The total time of opening of the electromagnetic valve is adjustable from 10 sec. up to 45 minutes (if we set lower time, it is set for 10 s). The indication of the remaining time of water flow is displayed by light indicator. If more than half of the time remains, it blinking green. If less than half the time remains, green / red blinking alternately. At the last minute, the light indicator blinking red and the water pulsating. When the total water flow time is expired, the indicator light turns green, the water stops flowing and the electronics return to the default state. The user must insert a new token if he wants to continue taking a shower. ZBSZA 01 does not sum up the tokens. In the event that there is any leftover time on the control, this is deleted after inserting a token and a new cycle is set.
- The temperature of the flowing water is set by the user using a thermostatic valve (.TV version). With the version .1 the water temperature is not adjusted - it depends only on the inlet water temperature.

PAID CONTROL



UNPAID CONTROL





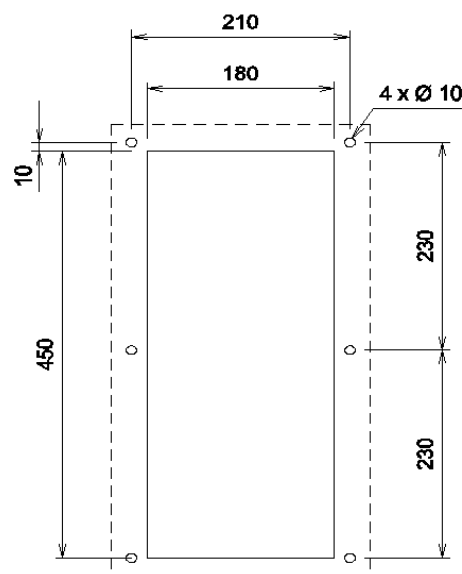
Unpaid control

- When pushing the piezo button, the indicator light starts blinking green, water is not flowing. The next time you press the button, the electromagnetic valve opens water supply and the light will start to indicate the remaining time. Manual control and indication are same as with the paid operation (mode). When the preset time of water flow has run out, the electromagnetic valve will be closed, water stops flowing and the adjustable pause will follow. This pause is indicated by orange light. When the pause ends, the light turns green – then the shower can be used again. Should the token be inserted during the pause, the pause will be stopped and the shower control will continue in operation according to the paid operation (mode).

Token machine installation

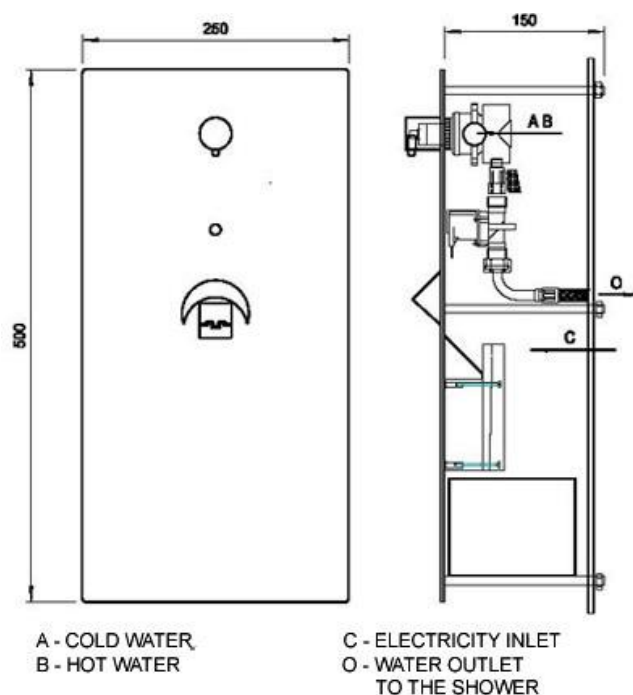
Construction readiness for installation

- The token machine is designed for wall mounting; the wall should be accessible from the back. This access must be properly secured - the chip tray is not locked from the back.
- Ready-to-use hot and cold water inlet terminated with 3/8" thread - e.g. an angle valve with filters (**strainer gasket 3/8"** - Package contents).
- It is recommended to locate the outlets within reach of the hoses. If this is not possible, the hoses can be extended as required.
- Cut a hole in the wall at the proper height as shown. The opening must be positioned so that the person taking shower can reach the button on the front panel.
- The problem with the possibility of taking unpaid hot water from the sink has been solved - e.g. by connecting the sink to cold water only.
- Equipped with a spout arm or outlet for a shower hose. If the SP 2 anti-vandal shower arm is used, its outlet must be at a height of approx. 1.8 m above the bottom of the bath.
- Connect the ZAC 1/20 power supply. The power supply must be connected to 230 V and must not be switched off (e.g. the lighting supply). The power supply must be connected via a voltage protector with tripping current of 30 mA



Assembly

- Remove the frame.
- Insert the slot machine into the prepared opening and secure it from behind with the frame and nuts.
- Connect the blue marked hose to the water inlet.
- Connect the unmarked hose to the outlet of the shower arm or to the hand shower.
- Connect the 12 V supply voltage from the ZAC 1/20 power supply. Polarity does not matter when wiring - the slot machine is powered by AC voltage
- Fill the gap between the machine cover and the wall with silicone filler to prevent water leakage.
- Turn on the power and the water.





8. Throw in a token and press the button on the front panel of the machine. Water starts flowing - adjust the desired water flow with the ball valve. (When using the SP 2 Shower Arm it is not necessary to adjust the flow rate, the arm contains a flow limiter).
Caution: Before connecting the hoses, it is necessary to flush the pipes to avoid clogging the strainers upstream the valve with dirt from the pipes.
9. Adjust the time of the water flow.

Settings

- Time setting can be done only when the automat is in "paid mode" and it is possible to carry it out only up to 20 minutes after switching on the power supply. In other cases it is necessary first to switch off and on the source of power supply and only then do the setting.
1. Switch the power supply off and on again after approx. 5 seconds - the indicator light flashes fast for 5 x red and then lights up green.
 2. Place the magnet to one of the marked places. The presence of a magnet is indicated by a blinking red light indicator.
 3. When the indicator is blinking, press the START/STOP button to start measuring time. The indicator light turns orange.
 4. After required period of time (= time of shower) place again the magnet to confirm the time. Then remove it again - individual pilot lights start lighting up in sequence. It is impossible to set the time shorter than 10 sec. If the time between first and second placing of the magnet is shorter than 10 sec, then the automat will be automatically set to 10 sec. The automat then blink the red indicator light 5 times. – signaling of saving set values.
 5. The automat switches to operation mode, the indicator light turns green. In case of unpaid control (mode) the pause cannot be set independently, it is set automatically for the same time as the water flow is.
 6. Setting of the pause time is the same procedure as setting the time of water flow, but must be proceeded in „unpaid mode“. If the time of pause is shorter than 10 seconds, it will be automatically adjusted to 0 sec (water can be turned on any time).

Maintenance and cleaning

- The device was made from the stainless steel of quality corresponding with ČSN 17 240 (AISI 304) standard and, therefore, it must not be operated in chemically-aggressive environment.
- **Preparations containing chlorine must not be used for its cleaning!!**
- Cleaning agents by WÜRTH are recommended:
 - Metal renewal agent - Order No. 893 121 1
 - Stainless steel spray treatment - Order No. 0893 121 – K.
- If corrosion has already occurred, it can be removed with a cleaner INNOSOFT B 570 from the company Emergo.

Cleaning of the valve

- If the **valve does not close**, contamination has probably built up under the diaphragm and the valve needs to be cleaned.
- Remove the three screws holding the coil. Remove the coil, carefully remove the plastic cap of the core (do not lose the spring). Remove the diaphragm, clean the area below. Check the throughput of both holes in the plastic centre of the diaphragm and reassemble the valve. When reassembling in the fitting (if the valve has been removed from the fitting) it is necessary to observe the direction of water flow through the valve. The valve does not close in the reverse direction. The direction of water flow through the valve is indicated by an arrow at the bottom of the valve.



- If the **token gets stuck** in the token track, the track may be dirty - soap residues etc. - the track needs to be cleaned.
- If the **machine is not working at all** and the indicator light is flashing orange, there is probably a token stuck in the sensor.
- If the **water temperature cannot be adjusted**, the supply hoses are reversed, or there is insufficient flow through one water inlet (valve insufficiently opened, clogged strainer....). Another option is that the hot water is being forced into the cold water at some point - a stuck or missing check valve
- Caution: The operator must ensure that in no case does the water in the solenoid valve freeze, otherwise it will be irreparably damaged.