



Installation and operating instructions

AUP 5-II - II. generation ceramics GOLEM urinal with automatic flushing system, 12 V

BASIC TECHNICAL SPECIFICATIONS

Supply voltage:	12V, 50Hz
Power input:	6 VA
Recommended power supply device:	ZAC 1/20 (max. 3 x AUP) ZAC 1/50 (max. 8 x AUP)
Water supply:	G 1/2"
Water pressure:	0.1 MPa to 1.0 MPa
Required water flow rate:	min. 12 litres/min
Flushing time:	3-16 s (value adjusted by the manufacturer: 6 s)
Outlet:	d = 50 mm
Usable ceramics:	any that can be used for a self-priming siphon (type HL 430-1L/50)
Weblink:	AUP 5-II

Flushing mechanism operation

- When the urinating begins, the urinal control electronics is activated, which is indicated by a flash of the LED indicator. After approx. 5 seconds, another (double) flash occurs indicating that the electronics was properly activated. Within 15 seconds the solenoid valve is opened and the urinal is flushed (a sufficient flushing of the urinal is indicated by a triple flash).
- The electronics does not detect passing the urinal or touching the urinal ceramics. This avoids unwanted flushing.
- If the urinal is not used for 24 hours it automatically runs a flushing cycle.

Building preparation for installation

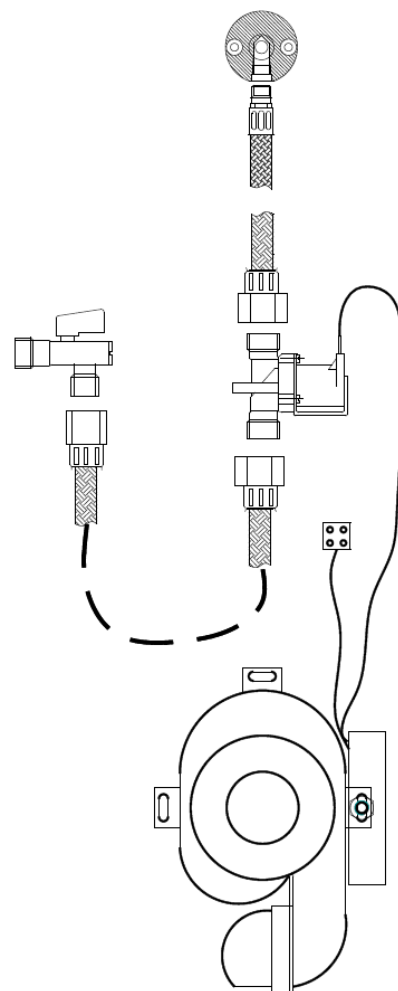
1. Facings finished.
2. Water inlet made using the 1/2" pipe with internal thread - based on the ceramics used.
3. The inlet to the urinal or a group of urinals must be equipped with a **filter** for removal of mechanical impurities and a **non-return flap** preventing from the back sucking-in.
4. Furthermore, it is **suitable to include a valve in the water inlet** of a larger group of urinals.
5. Outlet performed by a pipe with a diameter d = 50 mm - the height based on the ceramics used. The sewer system must be made so that the water in the siphon never runs dry. If the water from the siphon is drained, the electronics may not reaction a very short urination that only causes adding the liquid in the siphon.
6. CYKY 2Ax1.5 cable prepared for supplying the voltage 12 V, 50 Hz from the ZAC power supply. The minimum length of the free end of the cable is 300 mm. It must come from the wall into the free space behind the ceramics. It is suitable.

Installation

1. Prepare the ceramics anchoring points according to the ceramics manufacturer instructions.
2. This applies only for the product AUP 21. According to the ceramics type, mark the place on the wall where the water is to be fed to the ceramics. Mount a coupler with a packing and a hose in this position.



- Mount a solenoid valve with a hose on this hose. Based on the ceramics type, it is possible to mount the coupler on the wall or to mount it flush with the facings.
3. Equip the water with an angle valve with filter and connect the inlet hose with the solenoid valve so that the hose cannot be bent (the water flow direction through the valve must be maintained).
4. Connect the knife-type connectors to the valve (the polarity does not matter).
5. Connect the electric supply cable from the ZAC power supply (the polarity does not matter).
6. Mount the siphon with electronics on the ceramics. For easier installation use a suitable lubricant specified by the manufacturer of the sewer pipes. A possible siphon damage shall be prevented when it is forced against the wall. It is necessary to mount the siphon on the ceramics (do not fit it on the sewer drain in the wall) and shorten the siphon outlet pipe accordingly. CAUTION: The siphon must be pushed against the ceramics, not against the wall.
7. Open the angle valve.
8. Mount the ceramics with the siphon on the sewer on the wall and attach it on the anchorage screws.
9. Switch on the supply voltage - an automatic adjustment begins.
- Upon completion the installation, the gap between the ceramics and the wall must be filled up to avoid wetting or contamination of the electronics.



Setting

- The urinal is adjusted automatically after switching on the supply voltage - it shall be matched to the specific conditions. The urinal adjustment runs unattended. Throughout the complete adjustment, do not use the urinal or pour any liquid in it! The complete adjustment takes max. 2 minutes. When the supply voltage is connected, the urinal performs a long flushing cycle (water flow time approx. 20 seconds to supply the water and flush away any impurities) and then it remains idle for approx. 1 minute to set up the standby conditions. Then the urinal performs one more flushing cycle. Approx. 15 seconds after the second flushing cycle, the urinal can be used.
- If the water inlet was closed during the set-up period, the urinal is not adjusted and the complete cycle must be repeated.

User settings change

- The user can change the flushing time or lock the urinal in the non-operational state (e.g. during cleaning). For adjustment purposes a magnet may be used that needs to be touched to the electronics (the opposite side of the cable outlets). If the electronics has to be adjusted through ceramics (i.e. without removing the urinal from the wall), a strong magnet with the reach of at least 50 mm has to be used. This magnet may be purchased as an option - order no. 1190 1001 00. The magnet touch location must be tested based on the electronics location.

Flushing time adjustment

- Within 20 minutes from the supply voltage switching on, touch the magnet to the electronics. The electronics shall perform three flushing cycles shortly after each other (with 1 second interval). The magnet must be attached during that period. Then the water shall flow continuously - if the magnet is attached, the water flows. As soon as the magnet is removed, the water flow stops. The water flow time



is the newly adjusted flushing time. In an attempt to adjust the flushing time outside the range of 3 to 16 seconds, the original flushing time remains adjusted. If the new flushing time was adjusted, the urinal will be flushed with the newly adjusted time. If the new adjustment was not completed, the urinal does not flush.

Locking

- The urinal may be locked using the magnet e.g. for the cleaning purposes. After at least 20 minutes of operation (otherwise the electronics is switched to the time setting mode instead of locking) touch the magnet to the electronics. The water flows for 10 s. anytime during the water flow remove the magnet. The water flow stops (without additional flushing not to dilute the cleaning agent too much). Then the urinal is out of order for the next 15 minutes. It is possible to pour the cleaning agent now - it will not be flushed. After 15 minutes, a long flushing cycle is started automatically including the additional flush (disregarding the adjusted flushing time) and the urinal is ready to be used.

Key

- The flushing cycle consists of the flushing itself, and after a delay another short flush do fill the siphon with the water. This applies both for the adjustment and operation.

Note

- If the urine is not flushed from the siphon as expected (e.g. the angle valve is closed, etc.) or if the flushing cycle is not efficient (insufficient opening of the angle valve or undersized water inlet), the urinal repeats the flushing cycle 3 times more and then goes to standby. The next flushing cycles will be repeated each hour until the conditions are improved.

Test flushing

- If the test flushing is required, pour contents of the attached bag with table salt, or use a saline solution, into the urinal. At latest within 45 s, the flushing cycle is initiated.

Indication of the operating modes

- LED indicator (located directly on the electronics module)
 - 1 flash - electronics activated, the flushing cycle shall take place.
 - 2 flashes - the urine concentration in the siphon is not changing anymore, the flushing cycle countdown (15 seconds) has been started.
 - 3 flashes - after flushing, it indicates that the siphon is sufficiently clean and the flushing cycle will not be repeated.

Caution

- During the urinal installation, avoid spilling the water or lubricant on the electronics. In case of spilling or contamination it is necessary to clean and dry up the electronics. Only then connect the supply voltage and have the electronics adjusted.
- The automatic urinal may be connected only to ZAC power supply, otherwise the manufacturer does not accept any responsibility for reliable operation and for contingent damages caused by connecting it to another power supply.
- The electrical connection must be performed by the technician equipped with a relevant qualification and professional competence. Before putting into operation, it is necessary to perform the initial revision of the electrical equipment according to the current standards. Throughout the time of operation, the operator is obliged to carry out electrical equipment revisions.



The contents of the complete delivery of the automatic urinal including ceramics

1 pc - urinal ceramics acc. to the selected type	1 set - anchoring material acc. to the type of ceramics
1 pc – self-priming siphon with the electronics	2 pcs – flexible hose
1 pc – angle valve with filter	1 pc – solenoid valve
1 pc – bag with cooking salt	

Non-warranty failures and repairs

Defect	Cause	Rectification
Does not react after switching on the supply voltage (no flashes).	Supply voltage failure.	Check the power supply (the voltage on the connecting board must be within 12 V (-15+30%), 50 Hz. When the 230 V voltage is connected, the electronics is unrepairably destroyed.
When the supply voltage is connected, it flashes without flushing.	Plugged filter in the angle valve. The solenoid valve is not connected. The angle valve is closed. An improper power supply used - likely a switching power supply for halogen bulbs.	Clean the filter. Connect the valve. Open. Use the power supply recommended by the manufacturer - the valves do not switch at higher frequencies.
Water running continuously.	Dirt in the solenoid valve.	Clean the valve.
The urinal flushes two or more times after use.	Scale or urinary sediments in a siphon, or a plugged siphon (e.g. by a capsule). Too short flushing time (or a small water flow rate) adjusted with regards to the water volume in the siphon and ceramics - the siphon is not properly cleaned after flushing.	Clean the siphon using suitable chemical agents or mechanical tools. Adjust a correct (longer) flushing time or increase the water flow rate.
The urinal is flushed after using an adjacent urinal.	The sewage pipe (downstream the urinal connections) is clogged or plugged. When flushing, the water and urine mixture is not drained but extrudes from the adjacent urinals that detect this situation as if the urinals have been used.	Clean sewage pipes. When flushing several urinals, the water must be reliably drained. Between flushing and additional flush, the ceramics must be free of water to allow flowing the clean water in the siphon.

Maintenance and cleaning

- For cleaning ceramic urinals, use standard cleaning products for sanitary units.

Valve cleaning

- Unscrew three screws that hold the inductor. Remove the inductor and carefully extract a core's plastic cover (beware of losing the spring). Extract the membrane and clean the area below it. Check permeability of both holes in the membrane's plastic centre and reassembly the valve. When re-installing the valve in the urinal, it is necessary to observe the direction of water flow – it is marked by an arrow on the valve.