

## TZ-FLOWTRAP

## FLOWMATIC AUTOMATIC TRAP PRIMER



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## Safety & Proper Usage

To ensure safe and enduring performance of this product, you must comply strictly with the instructions enclosed herein. Non-compliance with instructions or improper handling of the product will void your warranty! This product is designed for use exclusively with types of fluids or gasses as stated in its documentation. Usage of this product in conditions not specified in the product documentation or contrary to the instructions hereby provided is considered IMPROPER. The manufacturer will not be held liable for any damages resulting from improper use of the product.

### Attention

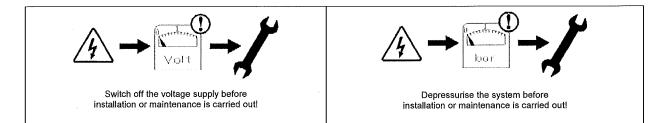
- Observe valid and generally accepted safety rules when planning, installing and using this product.
- Take proper measures to prevent unintentional operation of the product or damage to it.
- Do not attempt to disassemble this product or lines in the system while they are under pressure.
  - Always turn off the voltage supply before working on the system.

It is important that personnel use safe working practices and observe all regulations and legal requirements for safety when operating this product. When handling, operating or carrying out maintenance on this product, personnel must employ safe engineering practices and observe all local health & safety requirements & regulations. International users refer to regulations that prevail within the country of installation. Most accidents which occur during the operation and maintenance of machinery are the result of failure to observe basic safety rules or precautions. An accident can often be avoided by recognising a situation that is potentially dangerous. Improper operation or maintenance of this product could be dangerous and result in an accident causing injury or death. The manufacturer cannot anticipate every possible circumstance which may represent a potential hazard. The **WARNINGS** in this manual cover the most common potential hazards and are therefore not all-inclusive. If the user employs an operating procedure, an item of equipment or a method of working which is not specifically recommended by the manufacturer he must ensure that the product will not be damaged or made unsafe and that there is no risk to persons or property.

PLEASE NOTE:

YOUR WARRANTY WILL BE INVALIDATED IF THE EQUIPMENT HAS NOT BEEN INSTALLED OR MAINTAINED IN ACCORDANCE WITH THESE INSTRUCTIONS.

## Safety



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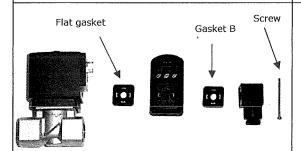
# **INSTALLATION INSTRUCTIONS** (Part 1 of 3)

## **IMPORTANT NOTICE**

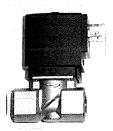
Before installing this product make sure it complies with your request and that it suits your application!



Unpack the unit and visually inspect for any transport damage incurred after leaving our factory



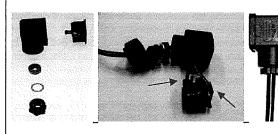
Remove the connector and timer from the solenoid valve



Install the solenoid valve according to the general engineering practices and observe all local health & safety requirements & regulations



Connect the D-Lux timer back on to the coil as illustrated and make sure the flat gasket is securely in place



Remove the protection cap from the connector and connect your power cable as shown

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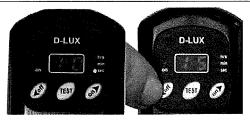
## **INSTALLATION INSTRUCTIONS** (Part 2 of 3)



The D-Lux will start with its pre-set time setting of 10 sec ON and 30 sec OFF. The display will start counting down the ON time (10, 9, 8, etc.) and the SEC led will be flashing. When the ON time reaches 0 sec it will jump to the OFF time and starts counting down the OFF time (30, 29, etc.)

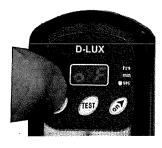


When the unit is installed correctly, and when it is operational, you can change the pre-set values to anything ranging from 0.1 sec to 99 hrs. To change the ON time, simply press the right 'on/arrow up' button and 'on'will appear briefly on the display.

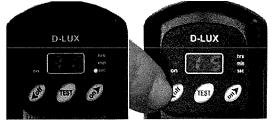


The previously set ON time will appear on the display (10) and the 'sec' led will be on. You can now press the left 'off/arrow down' button for decreasing the time or the right 'on/arrow up' button to increase the time. The sec, min of hrs led will highlight the time bracket (i.e 1-99 sec or 1-99 min or 1-99 hrs)

If the desired ON time is set, then simply don't press any buttons and after a few seconds the display will start flashing illustrating that the new time is being saved. Once the new time is saved, the unit will start operating with the new time setting.



To change the OFF time simply press the left 'off/arrow down' button and 'off'will appear briefly on the display.



The previously set OFF time will appear on the display (30) and the sec led will be on. You can now press the left 'off/arrow down' button for decreasing the time or the right 'on/arrow up' button to increase the time. The sec, min of hrs led will highlight the time bracket (i.e 1-99 sec or 1-99 min or 1-99 hrs)

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# **INSTALLATION INSTRUCTIONS** (Part 3 of 3)

If the desired OFF time is set, then simply don't press any buttons and after a few seconds the display will start flashing illustrating that the new time is being saved. Once the new time is saved, the unit will start operating with the new time setting.

The unit is now fully programmed to your desired time settings and will work fully automatically.



You can press the TEST button anytime to check the valve operation or to manually activate the valve to discharge any condensate. When the test (middle) button is pressed, a flowing pattern is diplayed indicating that the test function is in process.

After releasing the test button the unit will resume to normal operation.

## CHANGING THE TIMER FUNCTION

The D-LUX is able to perform the following functions:

- start with the ON time and then the OFF time, etc. Function 'A'
- Function 'C' start with the OFF time and then the ON time, etc.
- Function 'B' single shot, starts with the ON time and then switches OFF indefinite
- Function 'D' single shot, starts with the OFF time and then switches ON indefinite

The D-LUX is factory set to the function 'A'. However, should you need a different function you can always change it. To do so please follow these ease steps:

- Disconnect unit from the power supply.
- Press and keep pressed down the (TÉST) button. 2.
- 3.
- Connect to the power supply.

  Release the button after 'A' appears on display if the unit is being programmed for the first time. If the function has already (A/B/C or D). 4.
- 5. Use (off/arrow down) and (on/arrow up) to select the function (A/B/C or D).
- 6. When the function is selected do not press anything and after a few seconds the unit will resume operation with the new function setting.
- 7. Change the pre-set ON and/or OFF times if required (see pages 2-4).

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# **Returning To The Factory Settings**

Factory settings of each timer: 10s ON time, 30s OFF time, function 'A'.

No matter how you change the settings you can always reset all settings to factory settings.

To do so please follow these easy steps:

- Disconnect unit from the power supply.
- Press and keep pressed down (off/arrow down) and (TEST) buttons. 2.
- 3.
- Connect to the power supply.
  Release the buttons after 'P' appears on the display. 4.
- Then 'A' appears on the display do not press anything.
- After a few seconds the unit will resume operation with factory settings.
- Change the presset ON and/or OFF times if required (see pages 2-4).

## **Test Button**

You can press the test button anytime during operation to check the valve operation or to manually activate the valve to discharge the condensate. When the test (middle) button is pressed a flowing pattern will be displayed indicating test function and valve is activated. After releasing the test button the unit will resume operation.

# **Description of Normal Operation**

The function of the electronic drain valve is to drain condensate from air compressors, air dryers, condensate separators and air filters.

# **Operating the Drain**

- Ensure drain is installed in accordance with this manual.
- Switch on power supply. The ON LED will indicate that the valve is OPEN.  $\Rightarrow$
- Ensure air pressure is between minimum 0 bar g (0 psi g) and maximum 16 bar g (230 psi g).  $\Rightarrow$
- Test solenoid valve operation by pressing the test button.
- Set the required ON time and OFF time.
- Drain operation will now be fully automatic.

## Installation Notes

#### Α. **UNPACKING**

Although the manufacturer takes every precaution with packaging, it is advisable after carefully removing the product from its box and packing material to carry out a thorough visual inspection for any sign of transit damage incurred after leaving our factory.

#### DIRECT CONNECTION TO THE COMPRESSED AIR SYSTEM OR PRESSURE VESSEL $\cdot$ В.

- Make sure that no solid matter (e.g. sealing compound residue) gets into the unit during the installation.
- Make sure that the pipeline is thoroughly clean.
- Use quality sealing compound only!
- Use a proper tool for fixing the unit to your pipe work!
- Never use the unit as a lever.
- The unit can be mounted in any position (but recommended is upright).
- Ensure ALL outlet pipe work / fittings have a minimum internal diameter of 4.5 mm or greater.
- One drain is required for each pressure vessel being drained.
- Only use the correct threaded adapters.

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## C. POWER SUPPLY / ELECTRICAL CONNECTION

**Power Supply** 

Please ensure voltage of drain model supplied correctly matches the supply voltage of the installation site. (Refer to the label on the coil). The method of electrical connection and cable used should be appropriate for the regulations and conditions that prevail in the country of use.

BROWN = Neutral

BLUE = Phase

YELLOW/GREEN = Earth (Must be connected)

D. DISPOSAL OF CONDENSATE Condensate produced by the compressed air system should be disposed of in a responsible manner and in accordance with laws and regulations that prevail in the country of installation. We suggest you install a PURO Condensate Cleaner after each compressed air draining point (please refer to the PURO Condensate Cleaner installation manuals for more details).

## **Maintenance**

Depressurise the unit (exhaust all compressed air from the unit) and switch off electrical supply before carrying out any work or maintenance on the unit!

- The electronic drain valve is maintenance free. However, we recommend replacing wearing valve parts every two years. You can obtain service kits from your dealer. We also recommend you test the electronic drain valve every time the compressed air system is checked, by pressing the TEST-switch on the timer.

# **Timer Technical Specifications**

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Interval Time T2(1)
Discharge Time T1(1)
Manual Test Switch

Supply Voltage (2)

Current Consumption
Switching current

Operating Temperature Environmental Protection

Case Material Connection Indicators 0.1 seconds - 99 hours 0.1 seconds - 99 hours

Yes

 $10\text{-}48VADC \text{ or } 48\text{-}115 \text{ VADC or } 115V - 240VADC \pm 10\% 50/60Hz$ 

Approx. 5.5 mA

Max. 1 A

-10°C to +50°C

IP 65 NEMA 4

ABS Plastic FR Grade

DIN 43650A ISO 4400/6952

Yellow, valve open (ON)

Yellow, time bracket indication (min, sec, hrs)

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