

Installation & Maintenance Instructions

D-LUX-N/O

Digital timer controlled condensate drain



10/14

GENERAL OPERATION

The D-LUX-N/O has a normally open valve construction, combined with an extreme low wattage coil (approximately 1 Watt). It offers you a "fail safe" drain solution that will automatically open in situations of power failure or power shutdown.

The D-LUX-N/O is ideal for compressors, dryers, filters and all other components of a compressed air system that require a fail safe solution.

The D-LUX timer offers solutions for a wide range of applications due to its flexible programmability.

SAFETY INSTRUCTIONS

SAFETY AND 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 to drain condensate from compressed air systems. Usage of this product in conditions not specified in this manual or in 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.

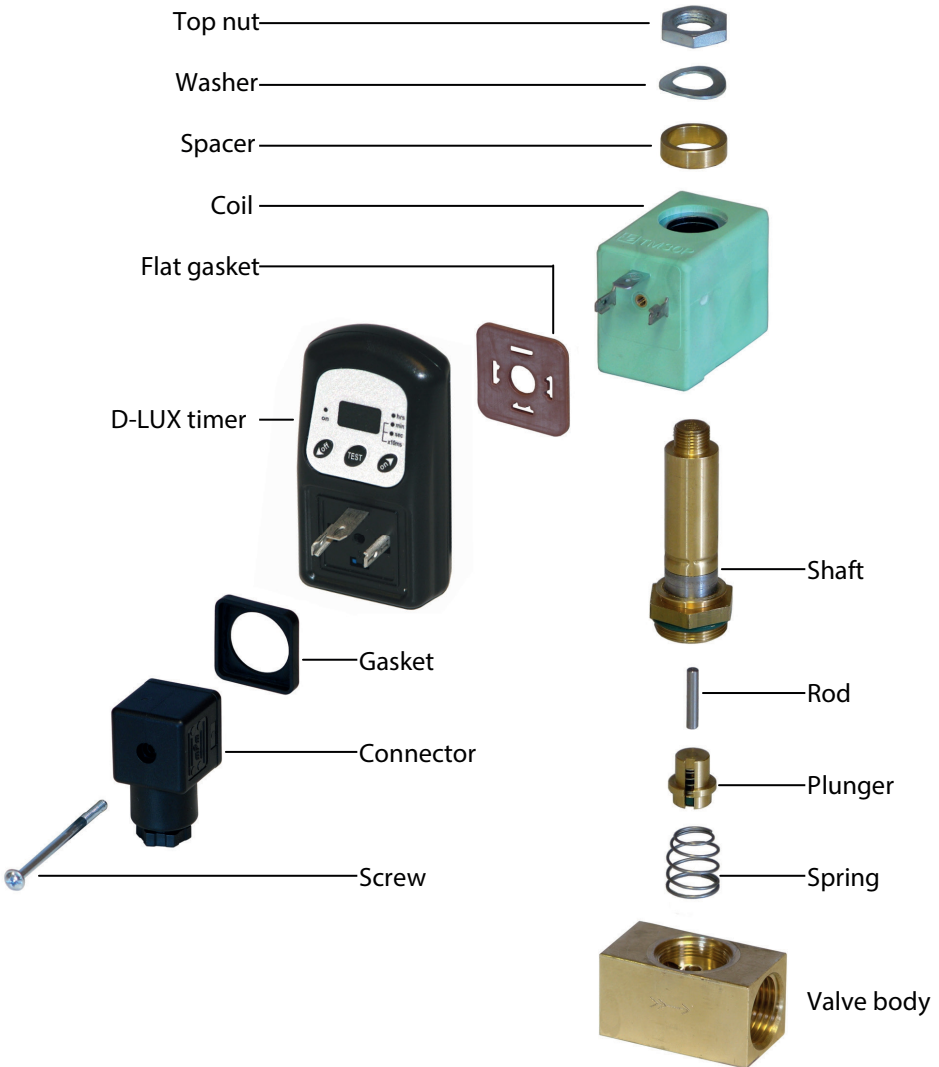
SAFETY & WARNING INSTRUCTIONS

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 depressurise the compressed air system 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.

EXPLODED VIEW - IDENTIFY ALL COMPONENTS DIAGRAM

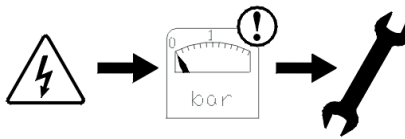


INSTALLATION INSTRUCTIONS

IMPORTANT NOTICE

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

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

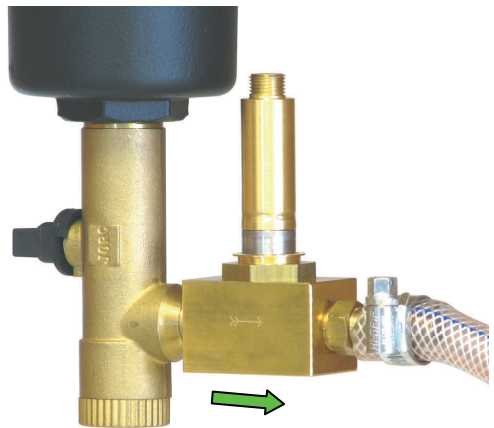


2. Depressurise the system before installation or maintenance is carried out!

3. The drain is shipped fully assembled! Disassemble the drain before installation by unscrewing the bolt in the connector and the top nut above the coil (see page 3 for an exploded view).



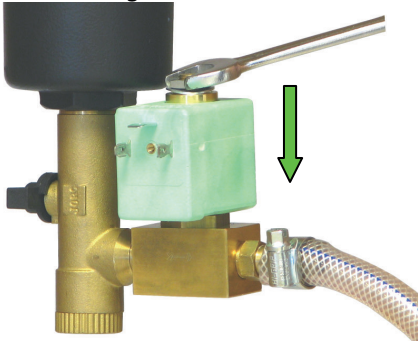
4. Locate a suitable condensate draining point on your compressed air system and connect your valve as illustrated below. Connect the outlet to an oil/water separator.



- Make sure the arrow on the valve body complies with the flow direction of the condensate.
- Do not use the valve shaft as lever!

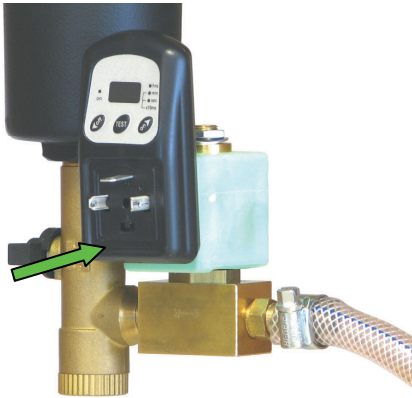
INSTALLATION INSTRUCTIONS

5. Slide the coil on to the valve shaft and replace the washer and top nut. Tighten the top nut (max. torque 1Nm) using a 14 mm wrench.

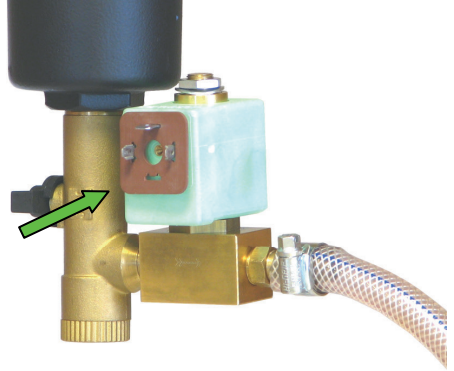


The coil can be rotated 360° around the valve, you can align the coil as desired.

7. Mount the timer on to the coil as illustrated below, you can mount the timer up-right or upside-down.



6. Place the flat gasket over the coil connection pins.



Make sure there is no debris between the gasket and the coil

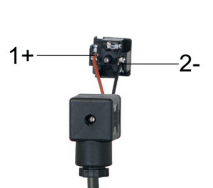
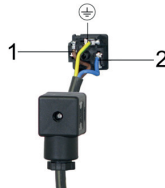
8. Connect your power cable to the connectors as shown below.

Alternate Current (AC) wiring diagram

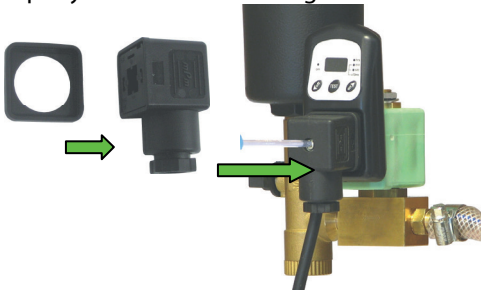
Direct Current (DC) wiring diagram

1. Phase/Main
2. Neutral
- ⊕ Ground/Earth

- 1+ Positive (Must be on 1!)
- 2- Negative



9. Place the connector gasket on the connector, plug the connector on the timer as illustrated below and tighten the screw (max. torque 1Nm). Make sure both gaskets are secured properly to ensure IP65 rating.

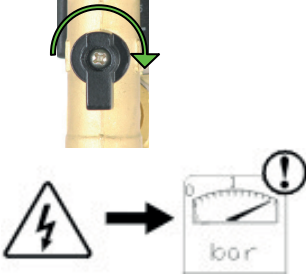


10. After double checking that the power supply corresponds with the voltage specified on the coil, you can switch it ON.

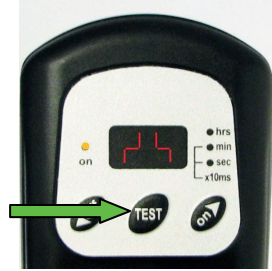


INSTALLATION INSTRUCTIONS

11. Slowly open the ballvalve to restore normal system pressure.



12. Press the TEST button to check the valve function.



13. The drain is now at full system pressure and will periodically discharge any condensate it receives from your compressed air system fully automatic and continuous.

You can now alter the ON and OFF time if required.

The D-LUX-N/O DRAIN will start with its pre-set time setting of 3 sec. ON and 30 min. OFF.

14. Time setting options;
The ON and OFF time of the D-LUX timer can be programmed anywhere between 10ms and 99h.

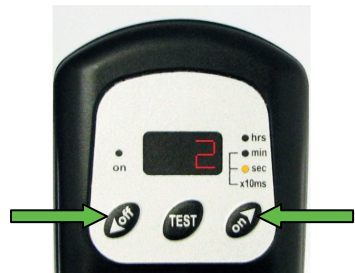
The set time will be indicated by the LED display on the right side of the Digital display.



15. To change the ON time, simply press the right 'on/arrow up' button and 'on' will appear briefly on the display.



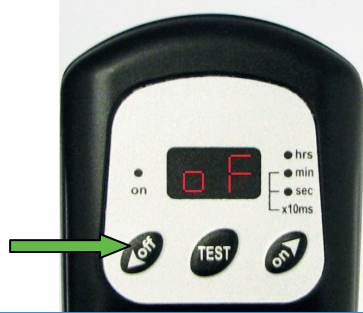
16. You can now press the left 'off/arrow down' button for decreasing the time or the right 'on/arrow up' button to increase the time.



INSTALLATION INSTRUCTIONS

17. 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.

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



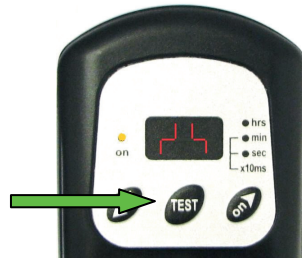
19. You can now press the left 'off/arrow down' button for decreasing the time or the right 'on/arrow up' button to increase the time.



20. 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.

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

22. Press the TEST button to check the valve function.

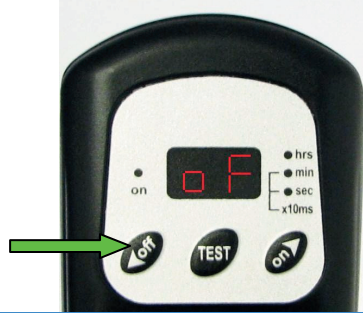


Your D-LUX-N/O DRAIN is ready for operation!

INSTALLATION INSTRUCTIONS

17. 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.

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



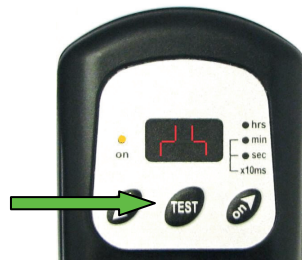
19. You can now press the left 'off/arrow down' button for decreasing the time or the right 'on/arrow up' button to increase the time.



20. 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.

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

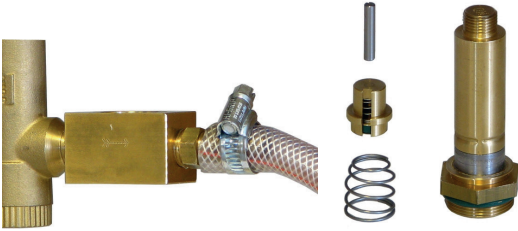
22. Press the TEST button to check the valve function.



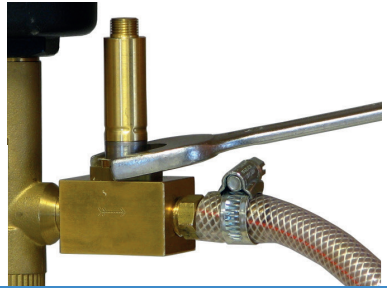
Your D-LUX-N/O DRAIN is ready for operation!

CLEANING INSTRUCTIONS

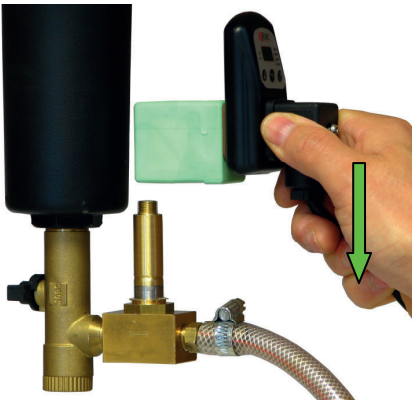
7. Clean all the valve parts, body and shaft.



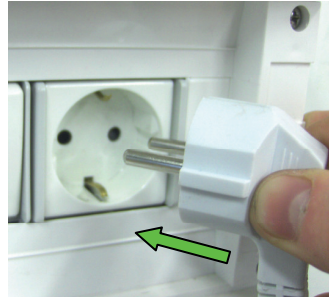
8. Reassemble the inner parts and shaft. Screw the shaft assembly back on to the valve body using a 23 mm wrench (max. torque 10Nm).



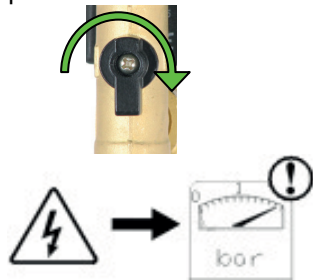
9. Reposition the coil, timer and connector assembly on to the valve, replace the washer and top nut and tighten the top nut (max. torque 1Nm) using a 14 mm wrench.



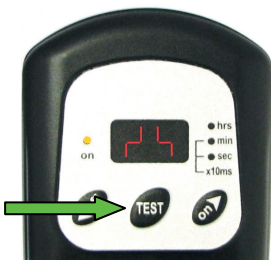
10. Switch ON the electrical supply.



11. Open the ball valve to restore normal system pressure.



12. Press the TEST button to check the valve function.



Your D-LUX-N/O DRAIN is now ready for operation!

CHANGING THE TIMER FUNCTION

The D-LUX-N/O DRAIN is able to perform the following functions:

- Function 'A' start with the ON time and then the OFF time, etc.
- 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.
- Function 'E' start with OFF time then ON time and then switches OFF indefinite.
- Function 'F' start with ON time then OFF time and then switches ON indefinite.

The D-LUX-N/O DRAIN 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 easy steps:

1. Disconnect the unit from the power supply.
2. Press and hold down the (TEST) button.
3. Connect the unit to the power supply.
4. Release the TEST button after 'A' appears on display if the unit is being programmed for the first time. If the function has already been changed then the last set function will appear on display (A/ B/C/ D/ E or F).
5. Use (off/arrow down) and (on/arrow up) to select the function (A/ B/ C/ D/ E or F).
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 6-7).

RETURNING TO THE FACTORY SETTINGS

Factory settings of each timer: 3sec. ON time, 30min. 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:

1. Disconnect the unit from the power supply.
2. Press and hold down (off/arrow down) and (TEST) buttons.
3. Connect the unit to the power supply.
4. Release the buttons after 'P' appears on the display.
5. Then 'A' appears on the display do not press anything.
6. After a few seconds the unit will resume operation with factory settings.
7. Change the preset ON and/or OFF times if required(see pages 6-7).

TECHNICAL SPECIFICATIONS

Maximum compressor capacity	Any size
Pressure range	0 - 16 bar (higher pressure available, check markings on valve body)
Supply voltage options	12 - 230 VAC/DC 50/60Hz. (Check label on coil)
Medium temperature	1 - 55 °C
Ambient temperature	1 - 55 °C
Timer cycle range (On / OFF)	0,1 second to 99 hours (both ON and OFF)
Timer PCB	SMD technology, ensuring consistency in production
Timer cycle indication	Bright LED illumination, clear LED display
TEST feature	Yes
Valve type	2/2 way, Normally Open
Coil operating power	Approx. 1 Watt
Coil Peak power	10 Watt
Valve orifice	1.4 mm (check markings on valve body)
Valve seals	FPM
Inlet/outlet connections	1/4", 1/2" (BSP or NPT)
Inlet connection height	1 cm
Serviceable valve	Yes
Valve housing material	Brass
Power connection	DIN 43650-A
Environmental protection	IP65 (NEMA4)

CERTIFICATIONS

CE	Yes	
cUL us	Yes	
RoHS	Yes	
IP65	Yes	

DIMENSIONS (MM)

