

Installation & Maintenance Instructions

TEC-11

Timer controlled condensate drain



02/09

GENERAL OPERATION

The TEC-11 removes condensate, automatically, from compressed air filters and i.e. small dental compressors.

The TEC-11 is designed for ALL compressed air filters, regardless of their capacity or size.

The TEC-11 incorporates a direct acting valve assembly and FPM seals to ensure a long life operation.

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.

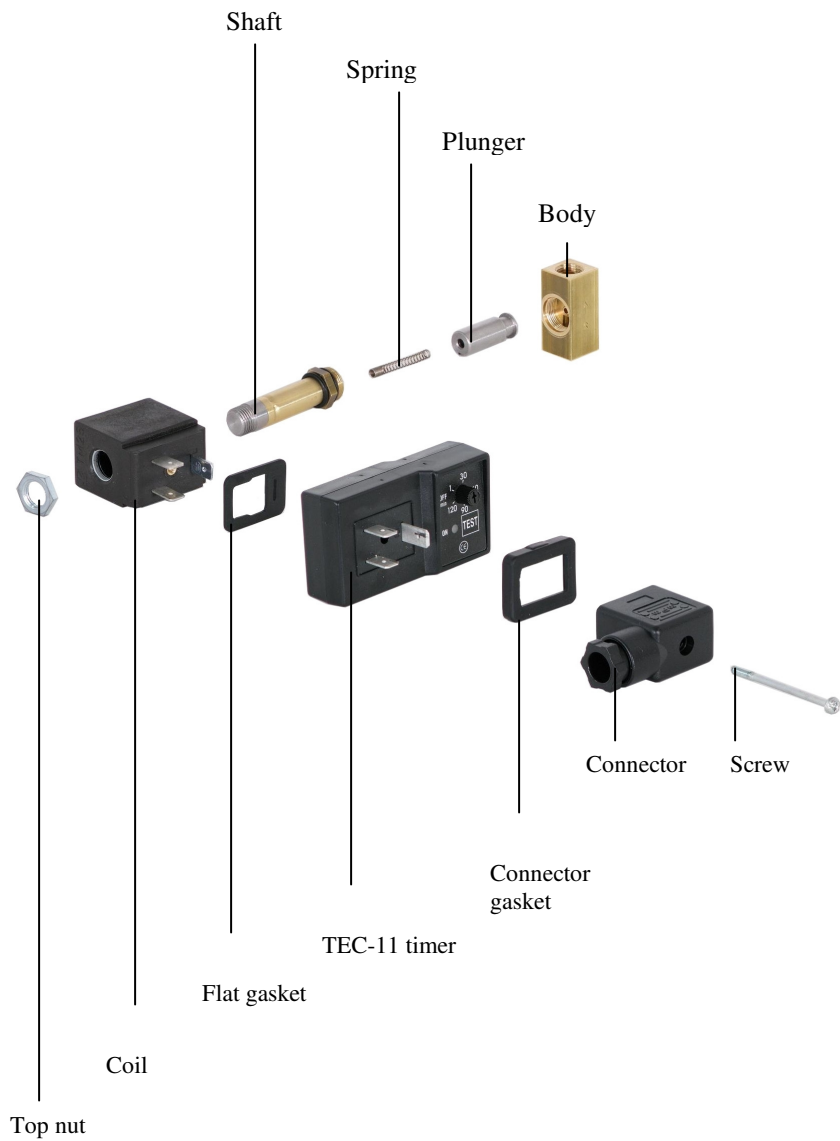
SAFETY & WARNING INSTRUCTIONS

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

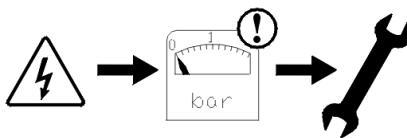


INSTALLATION INSTRUCTIONS

IMPORTANT NOTICE

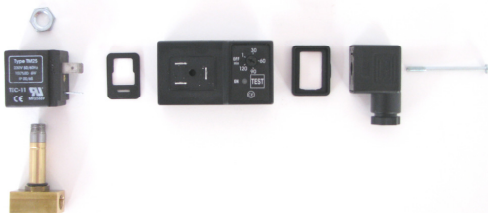
Before installing this product, make sure it complies with your request and that it suits your application!

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 screw in the connector and the top nut above the coil (see page 3 for an exploded view).



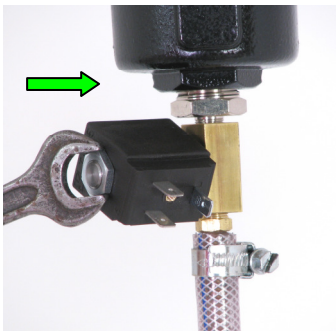
4. Locate a suitable condensate draining point on your compressor system and connect your valve as illustrated below. Connect the outlet to an oil/ water separator. We recommend using a JORC condensate cleaner.



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

INSTALLATION INSTRUCTIONS

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

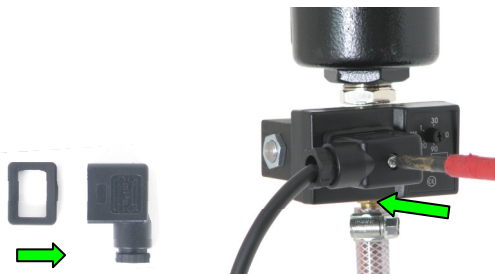


The coil can be rotated 360° around the valve, you can align the coil as desired.

7. Mount the timer on to the coil as illustrated below.



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

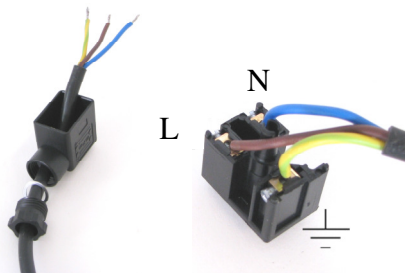


6. Place the flat gasket over the coil connection pins.

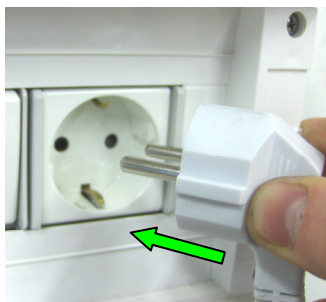


Make sure there is no debris between the gasket and the coil.

8. Remove the protection cap from the connector and connect your power cable to the connector as shown below.

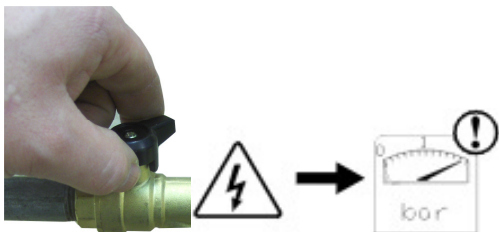


10. After double checking that the power supply corresponds with the voltage specified on the coil, you can switch it on.



INSTALLATION INSTRUCTIONS

11. Slowly open the ball valve in front of the filter 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 off time if required.

14. Adjust the OFF button to suit your system i.e. 20 min.

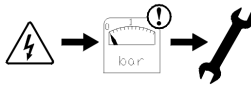


15. The ON time is pre set to 2 sec.

16. Your TEC-11 is now ready for operation!

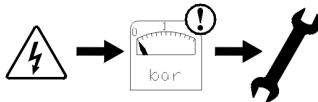
CLEANING INSTRUCTIONS

These instructions are for cleaning the TEC-11. If your TEC-11 requires maintenance, i.e. replacement of wearing components, please refer to our dedicated maintenance instructions (supplied with the service kit).

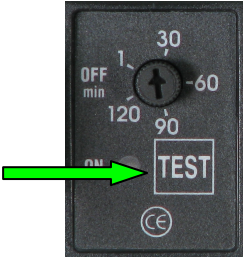


Depressurise the system before installation or maintenance is carried out!

1. Close the condensate supply, i.e. close the ball valve in front of the filter.



2. Press the TEST button to empty the unit of any residual condensate and to depressurise the TEC-11 valve.



3. Switch off the electrical supply.

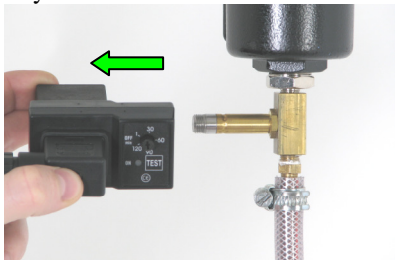


Make sure the power is switched OFF before continuing this cleaning operation !

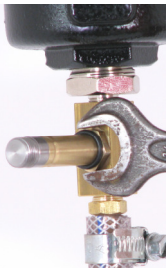
4. Unscrew the valve top nut using a 14 mm wrench.



5. Remove the connector, coil and timer assembly from the valve shaft.



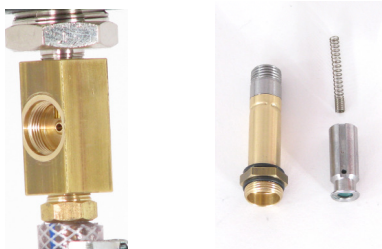
6. Unscrew the valve shaft using a 13 mm wrench.



Do not use the valve shaft as lever!

CLEANING INSTRUCTIONS

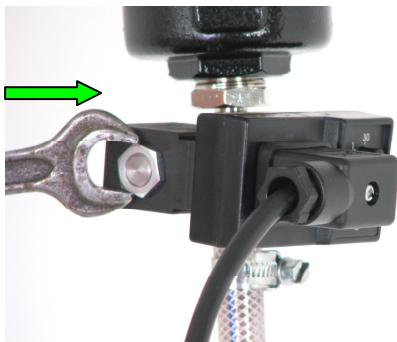
7. Clean all the valve parts, body and shaft.



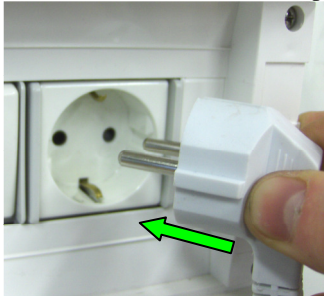
8. Reassemble the inner parts and shaft. Screw the shaft assembly back on to the valve body (max. torque 7Nm) using a 13 mm wrench.



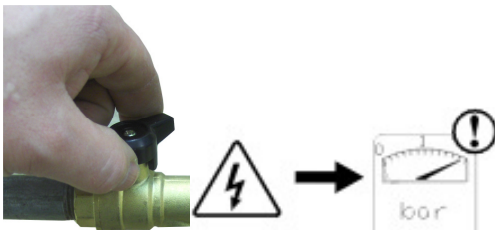
9. Reposition the coil, timer and connector assembly on to the valve, replace the top nut and tighten the top nut (max. torque 1Nm) using a 14 mm wrench.



10. Switch on the electrical supply.



11. Open the ball valve in front of the filter to restore normal system pressure.



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



13. Your TEC-11 is now ready for operation!

SERVICE CHART

Date	Description	Name

TECHNICAL SPECIFICATIONS

Interval Time (off time)	1 – 120 min.
Discharge Time (on time)	2 sec. (Fixed)
Supply voltage	12 – 380VAC/DC 50-60Hz (± 10%)
Current consumption	Approx. 7mA
Case Material	ABS plastic FR grade
Connection	DIN 43650B ISO 6952
Indicators	Yellow LED's, indicating on/off

Valve type	2/2-Way direct acting valve
Connections	1/8" or 1/4" BSP or NPT
Max. Pressure	0 – 16 BAR (21 bar optional)
Operating Temperature	2°C / 55°C ambient
Media Temperature	Max. 90°C
Valve body	Forged Brass, 2.0mm orifice
Insulation	Thermal group H
Environmental Protection	IP65

CERTIFICATIONS

CE	Yes
cULus	Yes
RoHS	Yes
IP65	Yes



DIMENSIONS (MM)

