



Operating manual

# Dispensing point Diesel Eco-Box II

Item no.: 110300001

Translation of the  
original operating manual  
GB

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(0,14 €/Min: on the German landline network, Mobile telephone max. 0,42 €/Min.)

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## 1. Safety instructions

The device is a state of the art piece of equipment and has been constructed according to recognised safety specifications. It is nevertheless possible that use of the device will present hazards to the operator or to third parties, or may damage the device or other property. It is therefore essential to act in accordance with these safety instructions, and in particular with those sections identified as warnings.

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### Warning notices and symbols

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In the operating manual, the following signs are used for highlighting important information.



**Special information for economical use of the equipment.**



**Special information or "dos and don'ts" for damage prevention.**



**Information or "dos and don'ts" for the prevention of damage to persons or equipment.**

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### Appropriate use

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The device may only be used if it is in perfect condition, and then only for its intended purpose, in compliance with all safety regulations, with an awareness of the potential risks, and according to the operating manual. Any faults that may impair the safety must be rectified immediately.



The device and its components are only to be used for handling the liquids listed and the purpose described. Using the machine for any other purpose would constitute inappropriate use. The manufacturer is not responsible for any loss arising as a result of this, the risk for this is borne only by the operating company.

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### Organisational measures

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This operating manual should always be kept readily available at the site of operation! Each person concerned with the assembly, commissioning, maintenance and operation of the equipment must have read and understood the entire operating manual. It is essential that the type plate and the warning notices attached to the device are observed, and are maintained in a fully readable condition.

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### Qualified personnel

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The operating, maintenance and assembly personnel must be appropriately qualified for their work. The areas of responsibility, competences and supervision of the personnel must be precisely regulated by the operating company. If the personnel do not have the required knowledge, they must be trained and instructed. The operating company must also ensure that the contents of the operating manual are properly understood by the personnel.

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### Waters protection

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The device has been designed to handle water hazardous substances. The regulations on the operating place (e.g. Water Resources Act WHG, = ordinance on installations for handling of substances hazardous to water VAWS) must be adhered to.

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## Hydraulics

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Only persons with special knowledge and experience with hydraulic systems may carry out work on hydraulic parts and equipment. All lines, hoses and screw joints should regularly be checked for leaks and visible external damage. Any damage must be rectified immediately. Any oil spurting out can cause injuries and fire.

The relevant safety regulations for the product must be followed when handling oils, greases or other chemical substances!

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## Maintenance and Service

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According to the regulations of the water resources law only authorized services may work on devices for flammable and/or water endangering substances. During such works, appropriate tools are to be used (avoid sparking). Before any kind of work on the device, all fuel lines are to be completely emptied and aerated.

Do not make any changes. Modifications or additions to the device which may affect the safety cannot be carried out without consent of the manufacturer. Exclusively genuine spare parts made by the manufacturer may be used.

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## Electric power

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Work on the electrical equipment may only be carried out by a qualified electrician or by trained persons under the guidance and supervision of a qualified electrician according to electro-technical guidelines. Machine or system components, on which inspection, maintenance or repair work is to be carried out must be de-energised.

## 2. Technical description

### 2.1 Description

The Diesel Eco-Box II is an electrically driven dispensing point suitable for heating and diesel oil in hazard class A III from overground tanks.

### 2.2 Appropriate Use

 **The Diesel Eco-Box II may not be operated with flammable and explosive liquids in hazard classes AI, AII and B. Liquids in hazard class A III may not be used if they are heated up above their flashpoint. Operation of the Diesel Eco-Box II is not permitted in areas at risk of explosion. There is a risk of explosion!**

 **The temperature range of the pumped liquid may not fall below -10°C or exceed +40°C.**

 **The electrical pumps are self-drawing. Continuing dry running can lead to destruction of the pump blades!**

 **Operation of the dispensing point without a base filter can lead to destruction of important components in the pump!**

 **The pump does not have a protective device against automatic start-up after an interruption to the supply voltage.**

### 2.3 Technical Data

Year of construction	See type label
Medium temperature	-10 - +40 °C
Environmental temperature	-20 - +40 °C
Connection thread	G 1"
Nominal pump pressure	1.5 bar
Overflow valve set at	1.8 bar
Nominal drawing height:	1.6 m
Nominal pump rate	55 l/min
Voltage	230 V 50 Hz
Nominal motor power	0.33 kW
Speed	2700 min <sup>-1</sup>
Protection class	IP 54

### 3. Assembly instructions

#### 3.1 Place of installation

The place of installation should be selected so that fault-free operation is guaranteed. Furthermore, it must be accessible for maintenance work.

#### 3.2 Assembly

1. Check all parts for any residues of packaging material before assembly.
2. Screw the dispensing hose with the outer thread G1" into the outlet on the left of the housing. Screw the other end of the dispensing hose into the rotating hose joint on the dispensing valve.
3. The suction side must be equipped with a tight fitting base filter.
4. Attention must be paid that the pre-mounted return hose (PU4), is inserted with the suction hose into the tank opening (lever protection).
5. If a base filter with suction hose is part of the scope of supply, then slide the supplied base filter onto the pipe of the suction hose as far as it goes and fix with the clip. Pay attention to the tight fit of the base filter (tighten the clip).
6. Connections are to be checked for tightness after assembly.



**The installation of a check valve in the suction line is prohibited unless pressure relief is provided.**

### 4. Operation

#### 4.1 Commissioning and recommissioning

**! Longer dry run periods (> 1min) are generally to be avoided otherwise the pump blades can be destroyed.**

1. Connect the voltage supply using the mains plug.
2. Hold the dispensing valve in a tank, in the container return flow or in a collection container. Open the dispensing valve on the dispensing lever until bubble-free delivery is achieved.
3. Suspend the dispensing valve in the holder. The motor switches off.

**! The dispensing point may only be operated under supervision.**

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## 4.2 Normal operation

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- ! **Avoid dry running (>1 min).**
- ! **With the dispensing valve closed and the pump filled with medium, it may be operated for a maximum of 1 minute otherwise it can lead to excessive heating and destruction of the pump blade.**
- ! **After the filling process, the dispensing valve must be placed back in the holder.**
- ! **The dispensing hose should not remain lying on the ground to avoid damages (e.g. due to being driven over).**
- ! **A defective hose can cause impurities.**
- ! **If leaks occur on the dispensing point and in the lines and dispensing valve, operation must be stopped immediately and the fault addressed.**
  1. Connect the voltage supply using the mains plug.
  2. Hold the dispensing valve in the filling container or insert in the vehicle tank and press up dispensing lever according to the required flow amount or lock in place with the fixing clip.

The automatic dispensing valve switches off automatically when the tank is filled. If the filling process should be stopped beforehand, release the dispensing lever or briefly raise and release the lever if it has been locked in place.
  3. Suspend the dispensing valve in the holder. The motor switches off.

**Also refer to the operating manual for the automatic dispensing valve A2010 and the operating manual for the counter Z 300.**



## 5. Error display – What to do if...

### ... the pump switches on and off in sequence?

- The pump is dry running and starting up after each time the pump chamber has cooled down. Switch the pump off and address the cause of dry running.

### ... the pump won't draw?

- The tank is empty.
- Check the suction line and all screw connections on the drawing side for leaks and reseal if necessary.

### ... the pump won't switch on?

- The mains plug is not plugged in.
- The cable is damaged.

### ... the delivery rate is too slow?

- The base filter is dirty.
- Very cold and viscose mediums are difficult to draw which results in slow delivery rates. The temperature range of the delivery liquid may be too low.

### ... the pump switches off during operation?

- The thermal overload protection on the electric motor has been triggered. It automatically resets after cooling down. The cause of overheating is to be addressed.

**! In cases of excessive noise development, further operation is only permitted after addressing the cause!**

## 6. Maintenance

The dispensing point is generally requires low care and maintenance. The mains plug must be disconnected at the beginning of any maintenance work.

### 6.1 Leak test

The unit and the other components in the system are to be regularly checked for leaks and damages and sealed if necessary.

### 6.2 Dispensing hose

Dispensing hoses can be simply replaced by loosening the screw connections.

### 6.3 Base filter

The filter is to be cleaned at regular intervals. To do this, disconnect the base filter from the suction hose then rinse it out and blow through with compressed air. Then mount the base filter as described in the assembly chapter.

### 6.4 Fuse

The motor on the dispensing point is protected with a thermal fuse in the motor coil that automatically resets after the motor has cooled down.

### 6.5 Cleaning the system

In case of any external dirt, carefully clean the device with suitable cleaning agents and do not use any aggressive detergents. Rinse with diesel to clean the inside parts and pipelines.

## 7. Disposal

The device is to be emptied completely and the liquids properly disposed of in case it is taken out of service.

The equipment is to be disposed of properly when taken permanently out of service:



- Return old metal for recycling.
- Return plastic parts for recycling.
- Return electronic waste for recycling.



**The water legal regulations are to be followed.**

## 8. Declaration of Conformity



### Konformitätserklärung Declaration of Conformity

Hiermit erklären wir, dass die Bauart  
*We herewith declare that the construction type*

Typ: **Diesel Eco-Box II**  
*Type:*  
Bezeichnung: **Zapfstelle**  
*Designation:* **Dispenser point**  
Artikel-Nr.: **110300001**  
*Item No.:*

in der von uns gelieferten Ausführung folgenden einschlägigen Bestimmungen entspricht:  
*in the form as delivered by us complies with the following applicable regulations:*

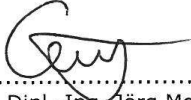
- Maschinenrichtlinie 2006/42/EG  
*Machinery safety 2006/42/EC*
- EMV-Richtlinie 2004/108/EG  
*Electromagnetic compatibility 2004/108/EC*

Angewendete harmonisierte Normen:  
*Applied harmonised standards:*

EN ISO 12100-1, -2 EN 60204-1

EG-Dokumentationsbevollmächtigter: Jörg Mohr Horn GmbH & Co. KG  
*EC official agent for documentation:* Munketoft 42  
24937 Flensburg

21.04.2011  
Datum  
*Date*

  
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