



# Operating instructions

## Feeder unit

***ZE – ZZ***



Feeder units 60-1200 l/h

# Operating instructions      Feeder unit ZE - ZZ

## 1.0 Scope of delivery

Screws and dowel pins are included for the wall fastening.  
On placing the device on the floor, please use the transport fasteners.  
Operating instructions included.

## 2.0 Application

Anywhere, where oil should be pumped in 2-pipe systems. Today only, e.g. in case of cave tanks with completely visible pipe systems. The installation site is to be chosen as near as possible to the tank. Furthermore, it must be guaranteed that adjusting and control works can be effected. The unit must be installed absolutely horizontally.

The ZE-ZZ pumps the oil towards the burner and thus relieves the burner pump.

In order to install the ZE-ZZ suction pumps, the following preconditions have to be fulfilled.

- We recommend a tube diameter of :

ZE-ZZ 60	10 mm	ZE-ZZ 600	18 mm
ZE-ZZ 120	12 mm	ZE-ZZ 1200	22 mm
ZE-ZZ 320	15 mm		
- The distance between tank and unit should not be superior to 4 m vertically and 200 m horizontally.
- The distance between unit and burner is without any restrictions.

## 3.0 Hints

The unit could contain rests of test oil on delivery.

The ZE-ZZ should only be installed by professionals. That is why these operating instructions are reserved for professionals.

All correspondent orders as well as operating instructions given by the burner and boiler manufacturers have to be complied.

In order to avoid excessive gas/air precipitations, the vacuum should be lower than  $-0.4$  bar and not higher than  $-0.6$  bar.

The pipeline's cross section of suction and pressure line should comply with the connections of the unit. Do not reduce on the suction side; if necessary, the next higher nominal width can reduce the pipeline resistance reasonably. On the pressure side you can reduce the unit corresponding to the quantity required by the burner, if necessary.

## 4.0 Preparations

The ZE-ZZ pump can be mounted on the wall as well as be placed on the floor. The full weight of the device can amount to a total of 60 kg. Thus, the wall bearing capacity has to be verified in case of wall mounting.  
On using three-phase current systems, pay attention that the CEE socket's rotary field is clockwise.

## 5.0 Installation / Starting

For wall mounting do not completely screw in the supplied screws into the wall. Then hang the unit onto the screws and screw them in completely afterwards.

Fittings and conductions must be free from dirt and loose solids.

All connections and conductions must be mounted without strain and tight.

Open all barriers to the tank inside the suction line; open the ball valve on the pressure line.

Electric connections of the motor only by means of the motor protection switch with control lights (indication of the operations status).

On connecting the motors (according to motor circuit diagram) pay attention to the right sense of rotation (arrow on motor or pump).

On starting of the unit, please vent the filter and, if necessary, on the suction side. Only open the manometer's shut-off devices for control or adjusting works; otherwise always keep closed.

**The pumps must not run dry!**

## 6.0 Maintenance

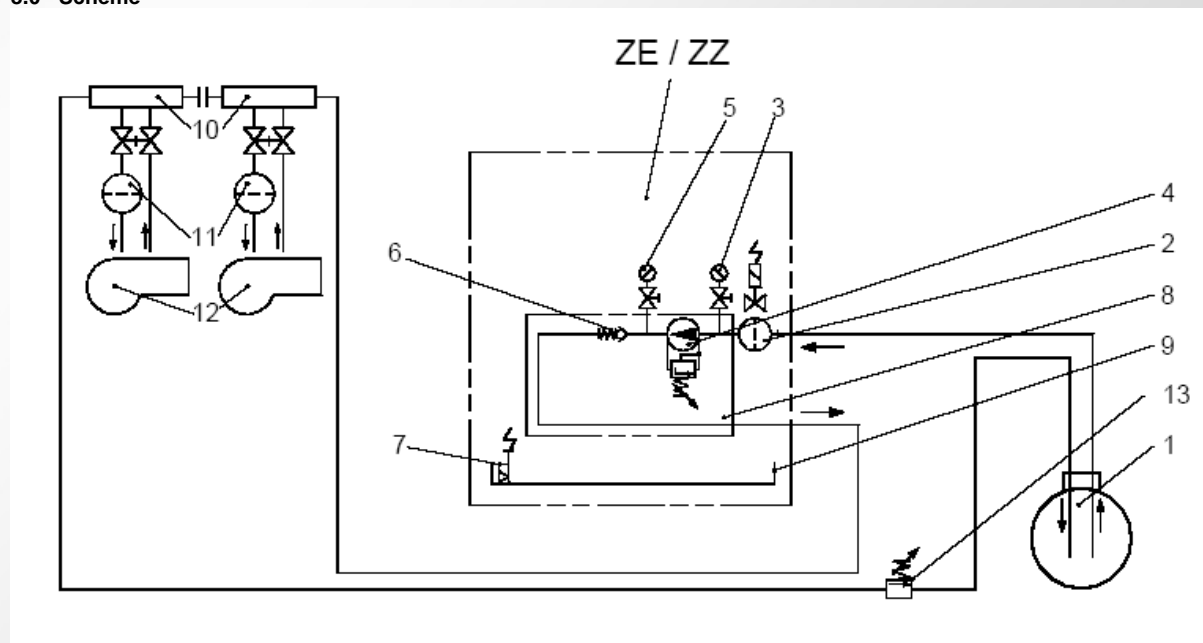
The filter has to be replaced regularly – once a year depending on the dirt. Only use SIKU filters 50-75 µm. Except for that the ZE/ZZ unit is maintenance-free.

Should in exceptional cases the replacement of parts be necessary, only original ZE/ZZ spare parts have to be used. Otherwise the flawless operation cannot be guaranteed.

## 7.0 Technical specifications:

Connections:	ZE-ZZ 60 – ZE-ZZ 120	suction:	3/8"
		pressure:	3/8"
	ZE-ZZ 320 – ZE-ZZ 1200	suction:	3/4"
		pressure:	3/4"
For fuel oil:		„EL“	
Weight empty:	ZE 60 - ZE 1200	39 – 48 kg	
	ZZ 60 - ZZ 1200	44 - 60 kg	
Measurements:		700 mm x 400 mm x 730 mm	
Fitting position:		Wall or floor (horizontally)	
System of protection:	Motor	IP 55	
Connection plug:	ZE-ZZ 60 – ZE-ZZ 320	230 V shock-proof plug	
	ZE-ZZ 600 – ZE-ZZ 1200	400 V CEE, 16 A	

## 8.0 Scheme



- |   |  |
|---|--|
| 1. Tank   | 8. Control block                                     |
| 2. Filter with solenoid valve                           | 9. Oil sump tray                                     |
| 3. Vacuum gauge with shut-off device                    | 10. OEG gas/air vent with ball valve shut-off device |
| 4. Internal gear pump (with overflow valve) with motor  | 11. Filter   |
| 5. Pressure gauge with shut-off device non-return valve | 12. Burner   |
| 6. Leakage alarm  | 13. Overflow valve on the return side                |