



Operating instructions

Pressurized tank unit

DE - DZ



For all burners with a
capacity of
600 – 12000

10.2003

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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

At all times when two-string systems are replaced by one-string systems.
The installation site is to choose as near as possible to the burners or conveyors. Furthermore, it must be guaranteed that adjusting and control works can be effected.

The DE-DZ pumps the oil towards the burner and thus relieves the burner pump.

In order to install the DE-DZ suction pumps, the following preconditions have to be fulfilled.

- We recommend a tube diameter of :

DZ 600	10 mm	DE-DZ 3200	18 mm
DZ 1200	12 mm	DE-DZ 6000	22 mm
		DE-DZ 12000	15 mm
- The distance between tank and unit should not be superior to about 3.5 m vertically and 10 m horizontally.
- The distance between unit and burner should not be superior to about 12 m vertically or 150 m horizontally.

3.0 Hints

The DE-DZ 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 reduce excessive gas/air evacuations, the vacuum should be inferior to $-0,4$ bar and not pass $-0,6$ bar.

The piping's cross section of suction and pressure line should correspond to the unit's connections. Do not reduce on the suction side; if necessary the next higher diameter can reduce the pipeline's resistance. On the pressure side of the unit it is – if necessary – possible to reduce according to the required quantity.

4.0 Preparations

The DE-DZ 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 84 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 Switch points

Safety switch point	ca. 2,0 bar (Lack of oil and safety shut-off valve)
Pump on	ca. 2,5 bar
Pump off	ca. 4,0 bar
Max pump pressure	ca. 6.0 bar (adjusted at the overflow valve)

6.0 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; close the ball valve on the pressure side for a first pressure increase of the unit.

Put the electrical plug into the socket. Switch on the pump control.

In case connection to three-phase current: Immediately check the motor's sense of rotation (direction sign on the motor). In case of the wrong rotation sense, immediately switch off the suction unit and change the main connection of the pump.

In order to increase the pressure, push the „Enter“-button of the pump control until the pressure of the unit exceeds 2 bar. Thereafter the unit continues running independently. Open the ball valve on the pressure side of the DE-DZ.

Open all barriers to the tank inside the suction line. Open the pressure gauge's shut-off devices only for control and adjusting works, otherwise keep them closed.

The pumps must not run dry!

7.0 Maintenance

The filter has to be replaced regularly – at least once a year depending on the dirt; Only use SIKU filters 50-75 µm. bias of the diaphragm vessel 1,5 bar; check annually and fill up if necessary. Except for that the DE/DZ is maintenance-free.

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

8.0 Technical specifications:

Connections: DE-DZ 3200 - DE-DZ 12000 suction: 3/4"
burner: 3/4"

DZ 600 - DZ 1200 suction: 3/8"
burner: 3/8"

For fuel oil: „EL“

Weight empty: DE 3200 - DE 12000 52 - 54 kg

DZ 600 - DZ 12000 48 - 66 kg

Measurements: 700 mm x 400 mm x 730 mm (L x D x H)

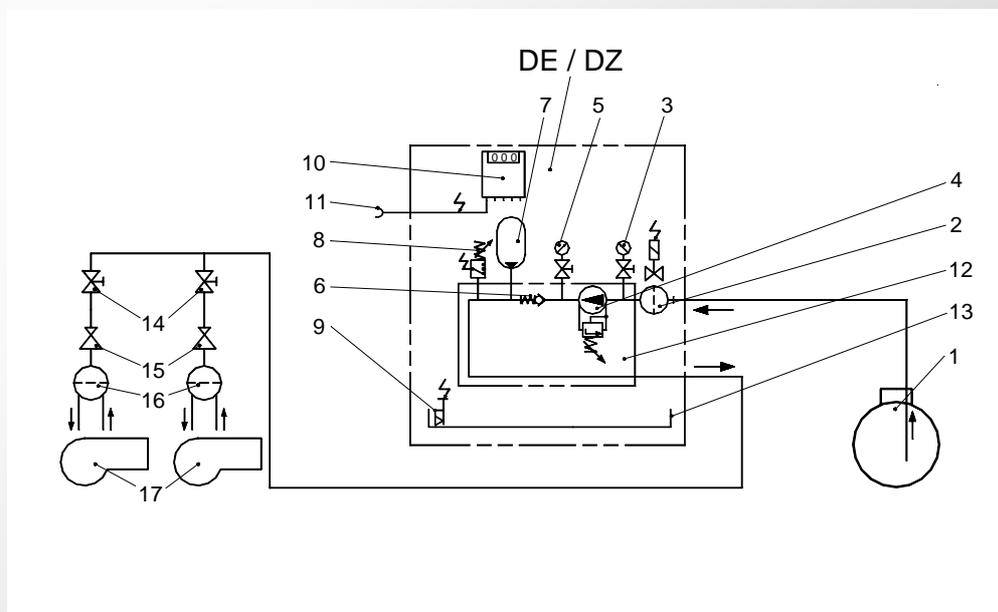
Fitting position: Wall or floor (horizontally)

System of protection: Motor IP 55

Connection plug: DZ 600 - DE DZ 3200 230 V shock-proof plug

DE DZ 6000 - DE DZ 12000 400 V CEE, 16 A

9.0 Scheme



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|--|-----------------------------------|-----------------------------|
| 1. Tank | 7. Oil-resistant diaphragm vessel | 13. Oil catch basin |
| 2. Filter with solenoid valve | 8. Pressure transducer | 14. Ball valve |
| 3. Vacuum gauge with shut-off valve | 9. Leakage detector | 15. Pressure reducer |
| 4. Internal gear pump (with overflow valve) with motor | 10. Digital control | 16. Filter with return feed |
| 5. Pressure gauge with shut-off device | 11. Electrical connector plug | 17. Burner |
| 6. Check valve | 12. Control block | |