

# Beverage Dispensing Technology

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## Operating manual

### Party Keg BT 40



The device described in this manual may only be put into operation provided the operators are suitably trained and the operating and maintenance personnel have studied the instructions closely.

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## 1.00 Safety Instructions

### 1.10 Assembly/start-up

Place the device on an even, dry and clean surface. Make sure the connecting cable leads directly to the socket. The connecting cable must never be bent or squashed.

Always use genuine tubes or approved beverage tubes for beer supply.

Ensure sufficient ventilation of the device! Do not store objects underneath appliance!

Pay special attention to the following safety precautions:

- Operating temperature range +10 to +40 degrees Celsius
- Do not allow dirt (dust, fibres, etc.) to get inside the device
- Only connect to the prescribed supply voltage
- Protect appliance against damp penetration, in particular against penetrating liquids.
- Observe the hazard warnings and safety instructions on the electrical components and in this manual
- Observe the warnings and service instructions in this manual

### 1.20 Safety Instructions

The device described in this manual may only be operated and connected by suitably trained personnel. Adjustments, maintenance and repair work on the open or live device may only be performed by a specialist.

As with all technical equipment, this device is only guaranteed to work properly and safely provided the generally applicable safety precautions and the specific safety instructions in this manual are observed during operation and service.

Serious damage to persons and property can be caused by:

- Improper use
- Incorrect installation or operation
- Unauthorised removal of the necessary protective coverings or housing
- Unauthorised opening of the device during operation

### 1.21 Safety risks

If a safety risk is considered to exist for any reason, the device must be taken out of operation and suitably marked in order to prevent it from being started up again inadvertently by a third party. Also notify the customer service department.

Examples of safety risks include failure to operate in the prescribed manner or visible signs of damage.

### 1.22 Safety directives

The device may only be operated with a properly connected PE conductor.

### 1.30 Spare parts

Assemblies or components may only be replaced with identical spare parts.

### 1.40 Transportation/storage

Any damage discovered after delivery must be reported immediately to the transport company. If necessary, take suitable measures to prevent the device from being put into operation. The device may only be stored in a dry, dust-free environment at a temperature between 0 and 60 degrees.

### 1.50 Electrical connection

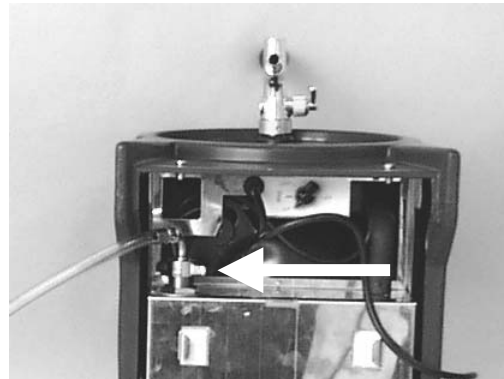
Electrical tasks may only be carried out once:

- The electrical system has been disconnected from the voltage supply and prevented from being switched on again accidentally
- The absence of voltage has been checked
- You have make sure that additional monitoring and protective devices for the control system are correctly installed.

Observe all applicable rules and regulations during connecting.

### 1.51 Beer connection

The beer connection is connected via an adapter with a 5/8" thread on the underside of the device.



### 1.52 Operation

Should the device deviate in any way from its normal operation, always take it out of operation if in doubt and mark it suitably in order to prevent it from being started up again by a third party. Also notify the customer service department.

### 1.60 Service

All service instructions contained in the manual concerning servicing work must be observed without fail.

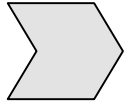
## 2.00 Proper use

Selbach beverage chillers and beverage pumps are designed for dispensing chilled drinks. These appliances are utilised in, among other things, catering and for recreational purposes.

Selbach beverage chillers are licensed only for the above-mentioned field of application and therefore unsuitable for cooling down hot liquids, chemicals or the like.

### 3.00 Commissioning

- Protect the CO<sub>2</sub> cylinder from toppling over by means of a cylinder holder.
- Screw the cylinder pressure reducer to the CO<sub>2</sub> cylinder.
- Connect the tank connection parts to the beverage tank.
- Open the carbonic acid stopcock.
- Set pressure reducer to the required pressure.
- Set desired temperature at the thermostat.
- Connect to network.



**Never operate the appliance when toppled over!**

### 3.10 Connecting

Ensure connection tightness for all connections, in particular compressed gas carrying parts (such as pressure reducer, admission tube, back pressure gas tube, interim pressure governor). Do not allow particles of dirt to enter the gas and beer lines.

Never operate the compressed gas cylinders without pressure reducer and ensure that they are positioned upright at all times and protected against toppling over. Only in this manner can you ensure that none of the liquid CO<sub>2</sub> flows through the pressure reducer resulting in extremely high pressures being built up that may cause the keg to detonate (**risk of fatal injury!**).

Clean the tap head every time you exchange a keg.

Push the tap head, with the beer and CO<sub>2</sub> lines connected, up to the end stop above the seal.



Push the lever down. This opens the valves for beer and CO<sub>2</sub> and you can now start pouring draught beer. If the tap head is fitted with a stopcock you will have to open it after placing and close it before removing the tap head.



To remove the tap head, push the lever up and remove the tap head from the seal. Afterwards reattach the protective cap.



### 3.20 Pouring draught beer

The art of pouring draught beer requires to produce a nice smooth head on top of the beer and to lose a small amount of the beer's own CO<sub>2</sub> at the same time. This can only be achieved by brisk pumping. For a tried and tested pouring method, please follow the instructions below.

Observe the following rules:

Rinse the glass with **fresh, cold** water.

Hold the pre-rinsed glass under the **fully open** tap at an angle that allows the beer to run down the side of the glass.

Allow the **half filled** glass to stand for about 1 minute.

Then top up the rest. Generally speaking, the beer tap spout should **not** be dipped into the beer as this causes a leak or escape of carbon dioxide.

After another pause of about **1 minute** apply a head by applying a quick opening and closing action.

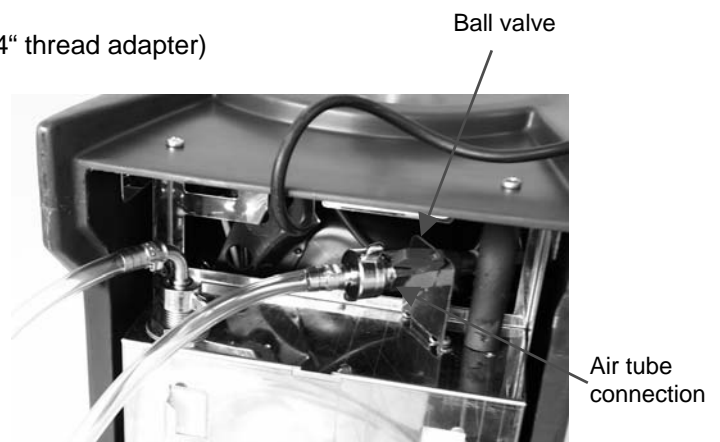
The pouring process described above requires a mere 3 minutes and guarantees premier quality. Slower pouring of draught beer robs the beer of its freshness.

### 3.30 Commissioning

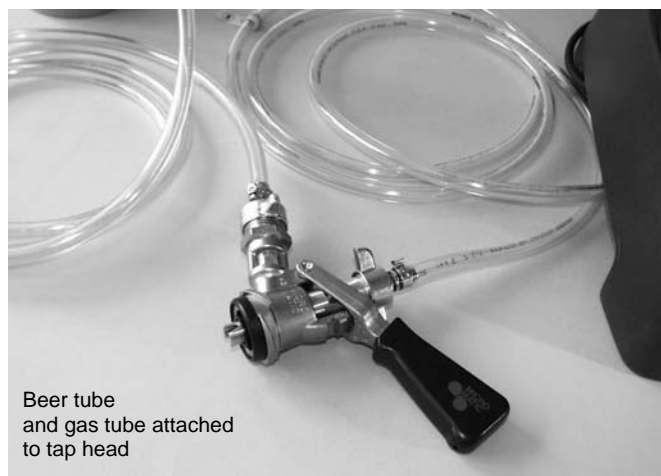
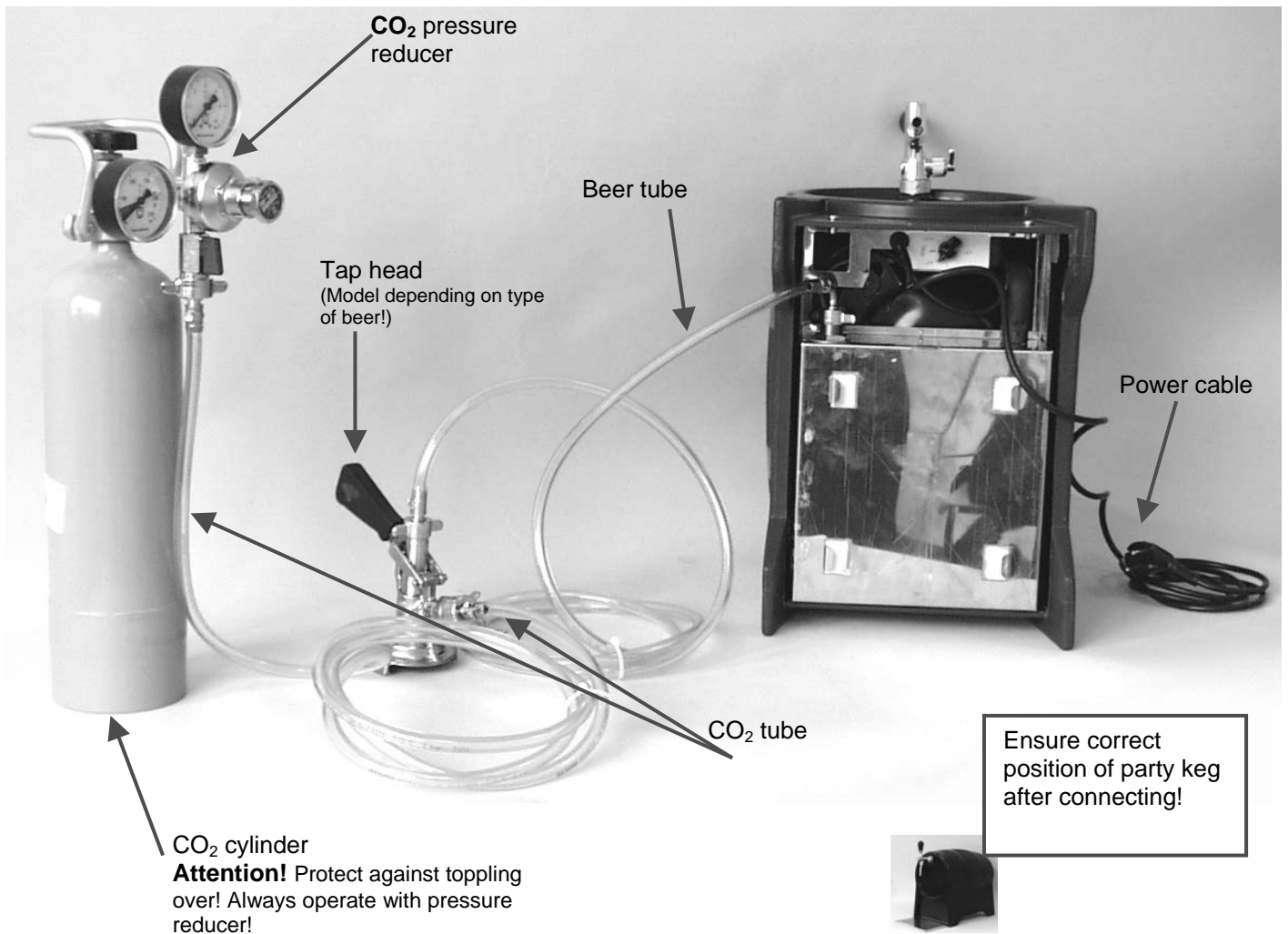
#### **Model with membrane pump**

- Connect air connection valve to appliance (3/4" thread adapter)
- Open ball valve
- Connect tank connection parts to beverage tank.
- Set desired temperature at the thermostat.
- Connect to network.

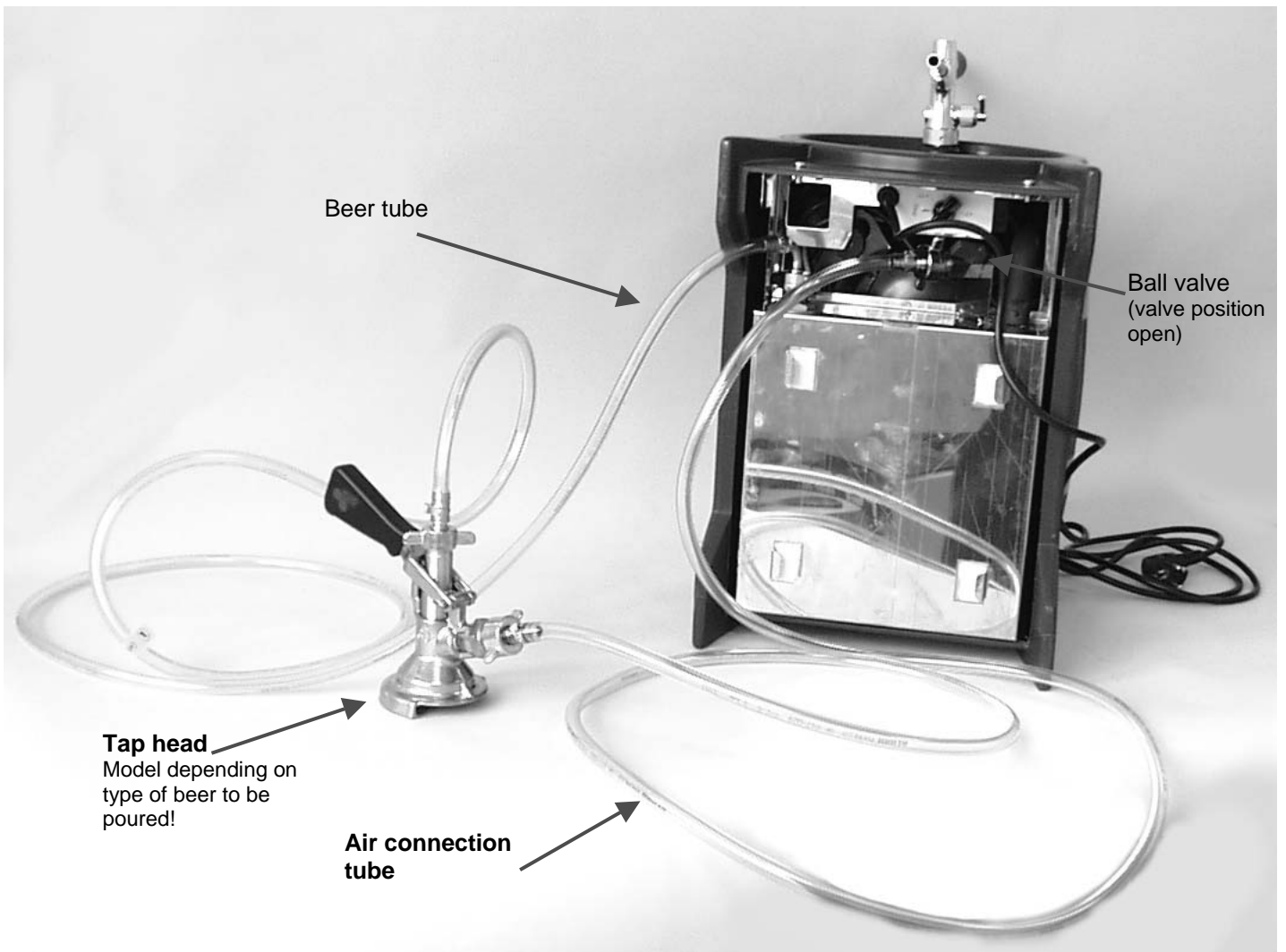
Once the operation temperature has been reached the appliance will be ready for operation. (unit switches off)



### 3.40 Tubing diagram



3.41 Tubing diagram party keg with membrane pump





## 4.00 Shut-down

- Close CO<sub>2</sub> cylinder and CO<sub>2</sub> stopcock at pressure reducer. (Model without membrane pump only)
- **Draw mains plug.**
- Detach tank connection parts from beverage tank.
- Employ specialist staff for having the appliance emptied and cleaned.
- Detach beverage tubing.

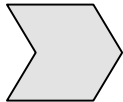
## 5.00 Temperature adjustment

The temperature is adjusted via a thermostat at the lower side of the device.

## 6.00 Maintenance

### 6.10 Opening appliances

To open the appliances, unscrew the beer tap and remove the four lateral fastening screws. To open the appliance, lift the synthetic cover.



**Never operate the appliance without the cover in place.**

### 6.20 Cleaning the beverage pump

The minimum requirements for cleaning of beverage pumps are stipulated in DIN 6650-6. Basically cleaning is stipulated "as and when needed". "Need" depends on output, type of beer, bar breaks and type of appliance. Based on these factors, the common practise of cleaning the tubing system every 7 days must be considered as sufficient in only a few cases. Listed below are notes on possible ways of cleaning as well as their frequency.

Everywhere inside the beer pump where parts alternately come into contact with beer and air, germs may grow that as a result of their being present everywhere in the ambient air. Therefore it is necessary to keep these areas of the beer pump clean by daily cleaning (in particular the tap and drip pan). A germ-free operation of the beer pump is impossible. However, regular thorough cleaning can prevent that germs multiply and thus impair product quality (smell and taste) and result in cloudiness. Germ-infested tubing may contaminate a connected keg that previously has left the brewery in an originally sealed and biologically immaculate condition. It is of course also necessary to keep the area surrounding the beer pump in a spotlessly clean condition.

#### Methods of line cleaning

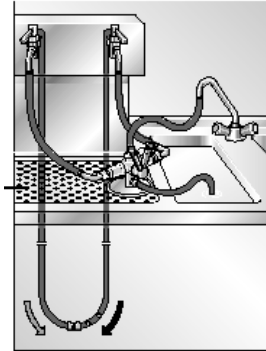
Deposits are formed inside the beer line due to precipitation of minerals, hop resins and proteins present in beer (beer scale). These deposits form a coating on all surfaces of the beer pump coming into contact with beer (tubes, taps, tap heads). Viewed under a magnifier, these deposits look like sandpaper and in the long run will become equally hard. These coatings will turn into a breeding place for micro organisms if not removed regularly.

Mineral deposits require removal with the help of acidic detergents whereas hop resins require dissolving and removing with alkaline detergents. Mechanical means (see below) may be used to cope up to a certain point with both components.

## Mechanical cleaning:

For the part of the appliance containing the tube, sponge balls are pushed in alternate flow direction through the line with the help of cold water. However, this requires that the tube has an even diameter and does not contain any interfering fixtures.

*Schematic view  
of mechanical  
cleaning*



Mechanical Bevi  
cleaning device



Comprehensive cleaning set  
for mechanical cleaning

Frequent use removes deposits forming inside the beer line substantially by means of mechanical friction. Mechanical cleaning can remove germs from the line, however, does nothing to inhibit their growth. For that reason, at certain intervals chemical cleaning is also required.

Store balls safely at a place where they are protected against contamination. DIN 6650 stipulates the single use of cleaning balls as micro organisms may grow inside the damp sponge.

Only use mild detergents and a damp cloth for cleaning.

The water cooling element and water-conducting components may only be cleaned with beverage dispenser approved detergents.

**Do not allow any moisture to get inside the device.**

## 7.00 Troubleshooting

Defect/ fault	Possible cause	Corrective measures
<ul style="list-style-type: none"> <li>• <b>Appliance not starting</b></li> </ul>	<ul style="list-style-type: none"> <li>• Network connection not detected</li> <li>• Thermostat switched off</li> <li>• Thermostat not switching on</li> <li>• Starting device at compressor defective</li> <li>• Compressor fault (winding-to-frame short circuit)</li> </ul>	<ul style="list-style-type: none"> <li>• Establish network connection</li> <li>• Switch on thermostat</li> <li>• Replace thermostat*</li> <li>• Replace starting device *(relay and condenser)</li> <li>• Replace compressor<sup>2</sup></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Appliance running but not cooling</b></li> </ul>	<ul style="list-style-type: none"> <li>• Thermostat defective</li> <li>• Liquefier contaminated</li> <li>• Liquefier fan failure</li> <li>• Leak in cooling system</li> <li>• Compressor fault</li> </ul>	<ul style="list-style-type: none"> <li>• Replace thermostat*</li> <li>• Clean liquefier</li> <li>• Replace fan*</li> <li>• Remove leak, evacuate and fill with refrigerant (R134a)<sup>2</sup></li> <li>• Replace compressor<sup>2</sup></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Appliance does not turnoff</b></li> </ul>	<ul style="list-style-type: none"> <li>• Thermostat defective</li> <li>• Leak in cooling system</li> </ul>	<ul style="list-style-type: none"> <li>• Replace thermostat*</li> <li>• Remove leak, evacuate and fill with refrigerant (R134a)<sup>2</sup></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Beverage developing too much froth</b></li> </ul>	<ul style="list-style-type: none"> <li>• Beverage dispensing temperature too high</li> <li>• Advance pressure too high</li> <li>• Beverage germ-infested or afterwards carbonated</li> </ul>	<ul style="list-style-type: none"> <li>• Appliance must reach operating temperature</li> <li>• Regulate advance pressure</li> <li>• Connect new beverage</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Not enough froth in beverage</b></li> </ul>	<ul style="list-style-type: none"> <li>• Beverage dispensing temperature too low</li> <li>• Advance pressure too low</li> </ul>	<ul style="list-style-type: none"> <li>• Readjust thermostat</li> <li>• Regulate advance pressure</li> </ul>

If you are unable to rectify a fault, please notify the responsible service department.

\*This type of work must be carried out by electrical experts!

<sup>2</sup>This type of work must be carried out by refrigeration experts

## 8.00 Spare parts list

Articles	Item No.
Metal compensation tap chrome	23-0158-0000
Metal compensation tap gilded	23-0158-0008
Drip pan VA 245/170/11	41-0124-0000
Membrane pump assembly	50-0269-0000
Air connection tube	26-0629-0000
Thermostat	50-0133-0000
Thermostat button	50-0103-0000

Please use original spare parts only

## 8.10 Accessories

Articles	Item No.
Tap head for flat fitting	22-0413-0000
Tap head for basket fitting	22-0412-0000
Combination tap head	22-0414-0000
Pressure reducer	22-0415-0000
Open-ended spanner for pressure reducer	91-0101-0000
CO <sub>2</sub> tube G 3/4"	26-0629-0000
Beer tube G 5/8"	26-0545-0000
CO <sub>2</sub> cylinder, 2 kg	22-0152-0000

## 9.00 Data about noise emission

70 dB (A) details as per EN 292 part 2 A1

Detail "70 dB(A)" sufficient for levels lower than or equal to 70 dB (A)

## 9.10 Technical data

Tension	240 V 50 Hz
Power	1.6 A
Rating	190 W
Coolant	190g R 134a
Pump readiness	5 min.
Pump performance	40 l/h at delta t 10 K
Cooling performance	465 W
H / W / D in mm	408/308/410
Weight	24 kg