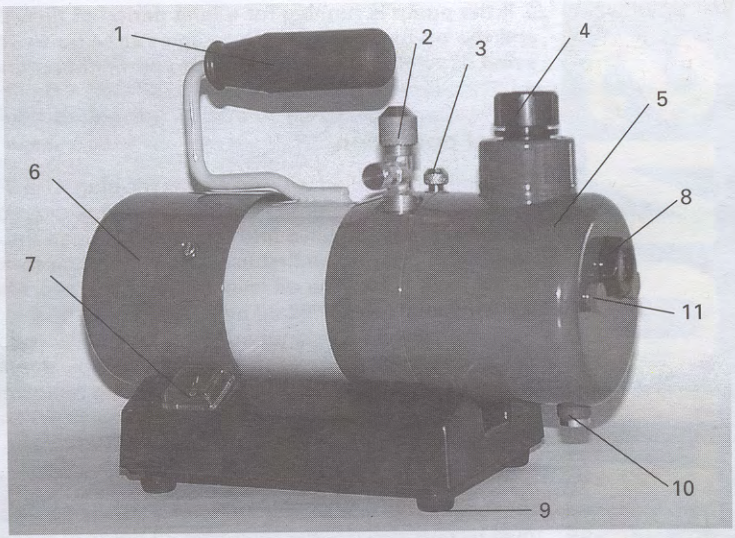
INSTRUCTIONS



1 Handle
2 Intake fitting
3 Gas ballast valve
4 Oil mist separator
5 Oil basin
6 Impeller cover
7 Switch
8 Oil sight glass
9 Rubber pad
10 Oil drain plug
11 Screw for oil basin

Instructions for Vacuumpump RL-4

Description

Type of pump: Oil flooded rotary vane vacuum pump. The motor and pump housing is air cooled by an impeller fan during operation. An oil mist seperator is fitted on the exhaust side to assure the back streaming of the oil into the circuit. A gas ballast valve is fitted to avoid condensation of vapour inside the pump. The electric motor is protected by a thermal protection switch. This switch turns off the pump automatically when the motor gets overheated. After a cooling down period of approximately 20 minutes the pump will switch on again.

Use / Application

This vacuum pump is constructed for the evacuation of Refrigeration and Airconditioning systems for commercial use. The pump shall be used by a trained professional only.

Refrigeration Service Products and Components

REFCO

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INSTRUCTIONS

⚠ **If the pump is running for a long period of time the motor housing and the oil basin may reach temperatures up to 75° C. In this case avoid direct skin contact and wear appropriate protection.**

Initial operation

The pump is supplied without an electric plug. Use 3 prong plugs (with earthing) only. The pump is being shipped without oil. The oil provided (DV-44) must be filled into the pump through the oil mist seperator connection prior to the first use. The oil level must reach the middle of the oil sight glass. The oil level must be checked while the pump is in the horizontal level.

Use of gas ballast valve; evacuate condensable vapours with open gas ballast valve and vacuum pump on working temperature.

Service / Oil change

The most important service factor of a vacuum pump is the oil. The oil must be changed no later than after 20 hours of service. Cloudy or contaminated oil must be changed immediately. Change of oil is absolutely necassary after evacuating a strongly contaminated system.

⚠ **Contaminated oil can damage the vacuum pump.**

Change of oil:

- Run the pump to working temperature.
- Unscrew the oil mist separator.
- Unscrew the oil drain plug and drain oil.
- Remount oil mist separator.
- Run the pump for 5 seconds -with open intake fitting- to push out possible oil residue off the vacuum stages.
- Unscrew the oil mist separator again to drain oil residues.
- Remount oil drain plug.
- Fill in new oil to mid-level of the oil sight glass.
- Remount oil mist separator.

⚠ **If the oil is strongly contaminated we recommend to change the oil again after 30 minutes run time, to assure that all contamination is being flushed out.**

For best performance of the RL-4 vacuum pump we recommend using vacuum pump oil supplied by REFCO; DV-44, DV-45, DV-46.

The waste oil has to be disposed of by the user of the pump according to local regulations.

⚠ **Service other than oil change must be carried out by a specialized workshop or by REFCO.**

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INSTRUCTIONS

Warranty

During the warranty period of 12 months all repairs must be made by REFCO. REFCO will refuse warranty if unothorized repairs made to the unit during the 12 month period or unsuitable vacuum pump oil is used.

Technical data

Capacity	65 l/min (3,9 m_/h)
Endvaccum with closed gas ballast valve (at 20°C)	0.020 mbar (15 micron)
Minimal oil temperature for start of pump	+2° C
Connections of intake fitting	1/4"SAE + 3/8" SAE
Gas ballast valve	Yes
Oil mist separator	Yes
Backflow protection for oil	Yes
Oil capacity	250 ml
Protection	IP 54
Power source	220/240 V ~ 50/60 Hz
Capacity of motor / Max. Leistungsaufnahme	140 W / 310 W
Dimensions (LxWxH)	260x120x220 mm
Weight	6.7 Kg

Spare parts

Handle	RL-4-104	4495692
Oil basin screw with gasket	RL-4-309	4496753
Oil basin	RL-4-3	4495854
O-Ring for oil basin	RL-4-106	4495749
Magnet (inside oil basin)	RL-4-307	4495862
Oil sight glass with gasket	RL-4-301	4495455
Counter nut for oil sight glass	RL-4-302	4495463
Oil drain plug with gasket	RL-4-310	4496761
Oil mist filter with gasket	RL-4-303	4495471
Gas ballast valve	RL-4-306	4495170
Rubber pad	RL-4-407	4495994
Capacitor	RL-4-406	4496036
Switch	RL-4-415	4496770
Vacuum stage complet	RL-4-2	4495803
Vane set	RL-4-204	4496788

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