

Dehumidifier

Operating Instructions



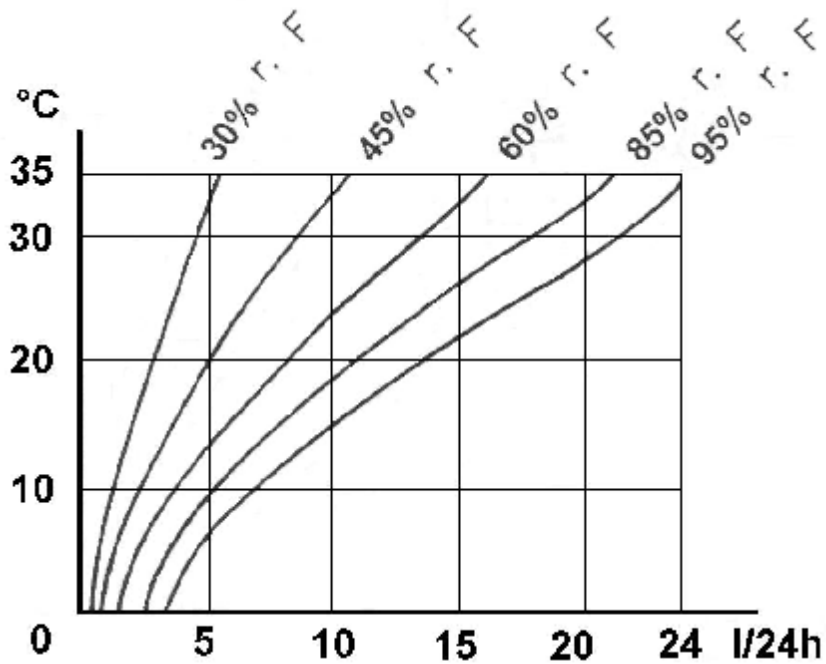
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⚠ Warning!

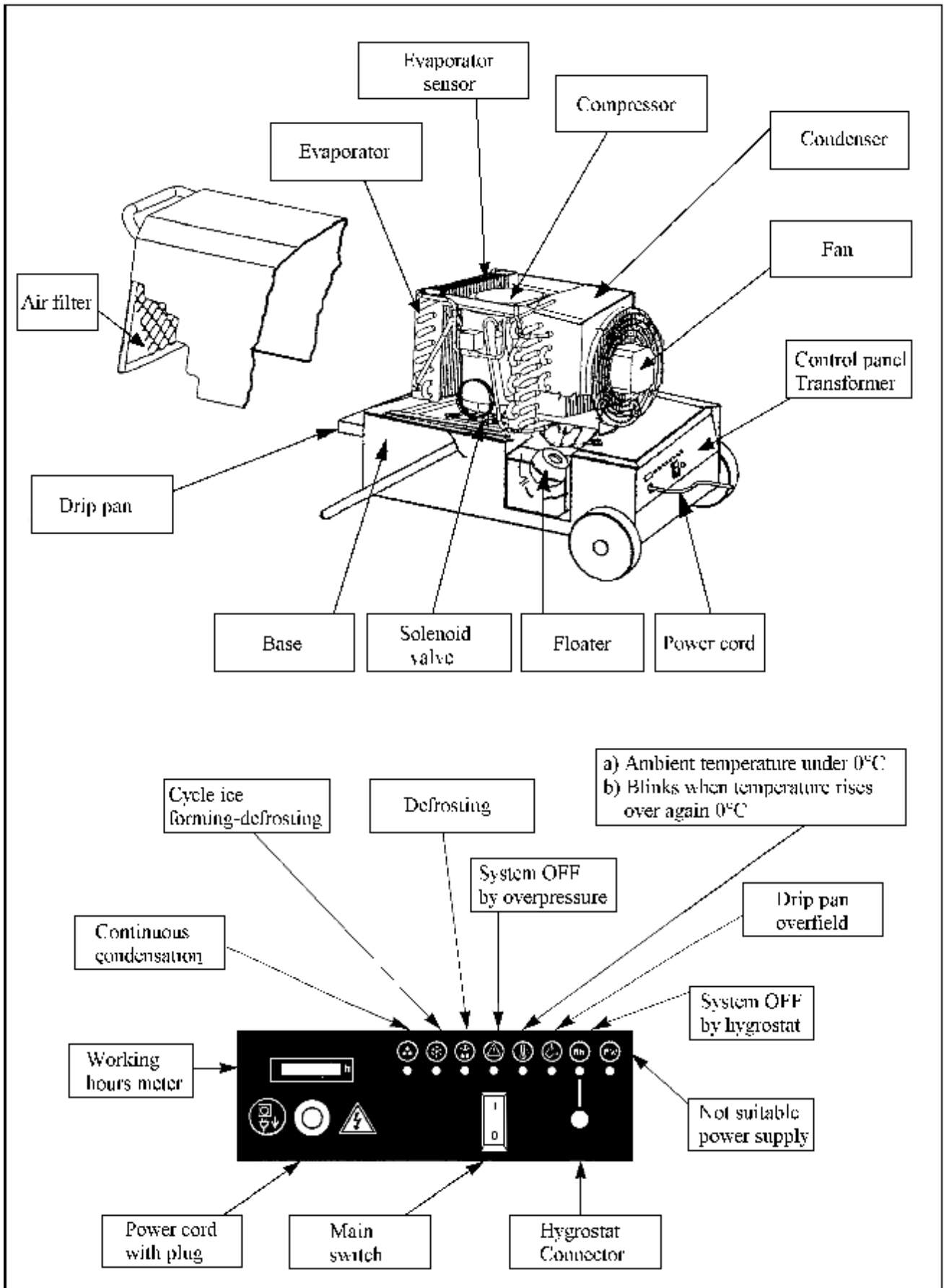
Keep the appliance in a standing position when moving it about, otherwise the compressor may be damaged.

Damage during transport

Your dealer must be notified of possible transport damage within 48 hours before the appliance is set into operation. The appliance is only to be started up after competent repair.



RD 2S
Dehumidifying capacity
Diagram

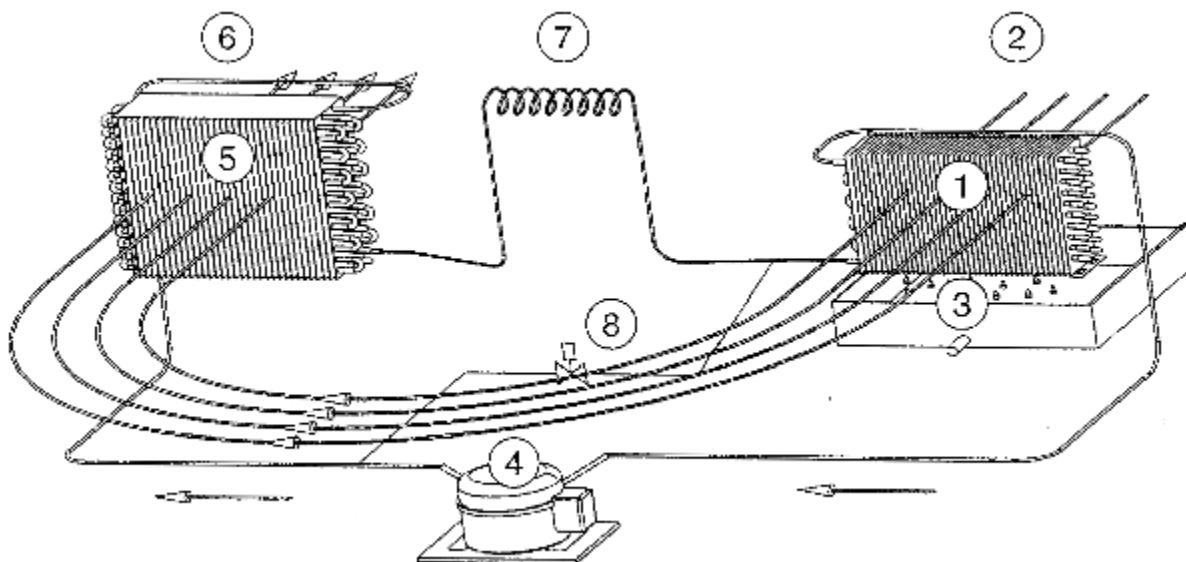


Method of operation
Dehumidifier

The device operates automatically. Used mode has been shown by indicators. Moist air in the room is drawn into the appliance and flows through the evaporator, where it is cooled. Water vapour in the air condenses on the evaporator cooling surfaces and falls as water droplets into the drip pan. The cool, dry air is reheated as it flows through the condenser.

When used correctly the consumption of energy is about 30% of that used by drying through heating.

Diagram
Refrigeration system



- Evaporator
- , Heat extraction from room air
- f Drip pan
- " Compressor
- ... Condenser
- † Heat transfer to room air
- ‡ Refrigerant metering coil
- ^ Solenoid valve

Preparations

The intake end of the dehumidifier must be at least 20 cm from any wall. The appliance must be horizontal and not be placed near a heat source or air intake.

The operating range is between 0 °C and 35 °C room temperature and minimum air humidity 30 %. The dried room must be closed - all windows and doors.

Warning!

If the appliance is used in a swimming pool or similar, it must be fitted with a circuit breaker.



Setting into operation

The dehumidifier is a "dual voltage" device equipped with the transformer, so it can be connected to the voltage 110 V and also to 220-240 V / 50 Hz. The dehumidifier is ready for use, immediately after the unit has been plugged in. After the unit has been switched on, it is automatically ready for voltage 220-240 V. In case of voltage 110 V the electronic relay automatically switches over after 2 sec. and the device will start working. In case the unit is switched on (main switch) before being plugged, the device will start also with a delay of 2 sec.

The device operates automatically.

In case that voltage is out of tolerance (it means lower or higher than 99 – 121 VAC or 204 – 264 VAC) device shut itself OFF and LED 7 „PW“ is flashing. When power meet back to tolerance LED 7 „PW“ lights constantly for 30 seconds and then device turn itself ON.

Connect mains plug to a socket with 16/Amp. fuse and earthing contact. Adjust appliance to desired room humidity level.

Turn main switch to ON.

The appliance is now ready for use.

How to set the automatic humidity control

1. Your DEHUMID can be equipped with an adjustable humidistat (hygrostat),(in option).
When the hygrostat is not connected, the appliance works also, but without automatic control (See also the point 5.).
2. The humidistat knob turns clockwise. The size of the room, the relative humidity and the temperature will influence your setting. Start it first by selecting the midway position.
3. One set in operation, the device works until the set humidity is reached. Then the unit will stop and start by itself. It is maintaining the humidity you have selected.
4. If you want to remove more moisture, rotate knob clockwise.
5. In extreme conditions, rotate the knob clockwise to final position. At this setting, your dehumidifier will operate continuously regardless of the amount of moisture in the air.

Defrost Control

Your Dehumidifier is equipped with an automatic defrost control unit working by hot-gas that guards against ice forming on refrigerations coils in low temperature or low humidity operation.



The compressor turns, the fan is off. After defrosting the device switches on again.

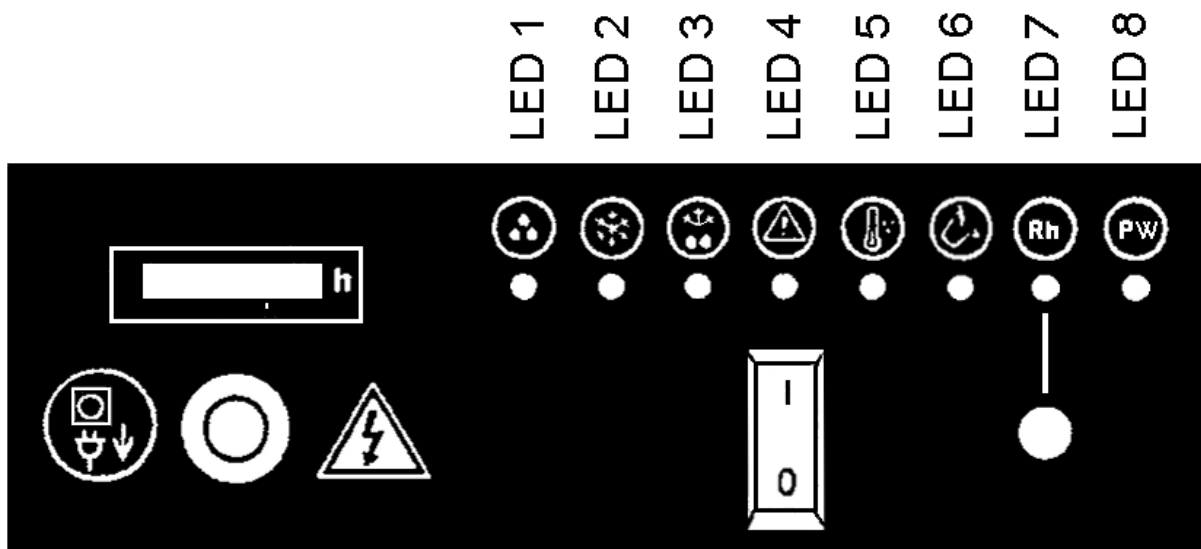


- a) Ambient temperature under 0 °C.
- b) Blinks when temperature rises over again 0 °C.
- c) Flashing will be stopped by momentary switching the unit off.

The device is equipped with an indication for eventual malfunction of the sensing elements, which control important values.

In case of a faulty sensing element, the device will turn off and the following LED diodes flash alternally:

- LED 2 and LED 7 sensing element malfunction of evaporator
- LED 4 and LED 7 sensing element malfunction of the aggregates maximum temperature
- LED 5 and LED 7 sensing element malfunction of the room temperature
- LED 8 sensing element for power supply (See also the point 6.)





Turn the main switch to OFF. With draw mains plug from socket.

Scope of application

To dehumidify the air in all rooms, cellars, living or professional localities (exception: stables).

As a security factor for stocking critical goods like paper, cardboard carton, foodstuff, coats etc.

As rust protection for metals.

To dry rooms and floor wet-cleaning, for paint and paper hanger's works. To dehumidify humid rooms like for example swimming pools.

To dry damages due to humidity (flood damage, inundation).

The recommended humidity for living rooms is about 50 % at 20 – 22 °C.

Important:

Temperature, humidity degree and operating conditions have influence on capacity of the appliance.

In winters with continuous frost, when the weather is dry or in summertime the air-humidity may be very low (30 %). In these cases the devices have only low or even no efficiency. If no means of humidity measurements are at hand, you can approximately check the humidity with the hygostat: the appliance must not be under tension! Turn slowly the knob of the hygostat anticlockwise. The flash above the knob shows approximately reached humidity - degree by a click sound.


Warning!

All work on the refrigeration system is to be done by specialised persons only!



Always unplug power supply plug before working on the electrical system.

All work on the electrical installation must be carried out by a qualified electrician.

Malfunction	Possible Cause	Remedy
The appliance is plugged in but compressor and evaporator fail to function	a) No current b) Hygrostat incorrectly set c) Technical fault in refrigeration system d) The electric voltage is out of allowed tolerance.	a) Check fuses and electrical connections b) Check hygrostat setting c) Contact after-sales service d) Check the load of the electric network.
Appliance runs but no condensation forms on evaporator.	a) Operating temperature range not reached or exceeded b) Operating air humidity range not reached c) Suction wall or blow-out wall obstructed d) Technical fault in refrigeration system	a) Use appliance in correct temperature range conditions or adjust room temperature accordingly b) Use appliance only at 30% humidity or above c) Allow adequate clearance of the appliance, clean or change the air-filter. d) Contact after-sales service

- Attention: *
- * By opening the access valve „Schröder“ refrigerant can be lost – it may be opened by specialized firms only.
 - * The refrigerant is to be removed by specialized firms only.

Warning!

Operation without delivery hose. The appliance switches off automatically when the maximum water level is reached in the drip pan.

Remove pan from base, empty and reinstall.

Drip pan is equipped with a mounted contact-nipple, the condensation-water can flow into an outlet which is situated below, without any survey in continuous duty.

Applicable models only



Cleaning

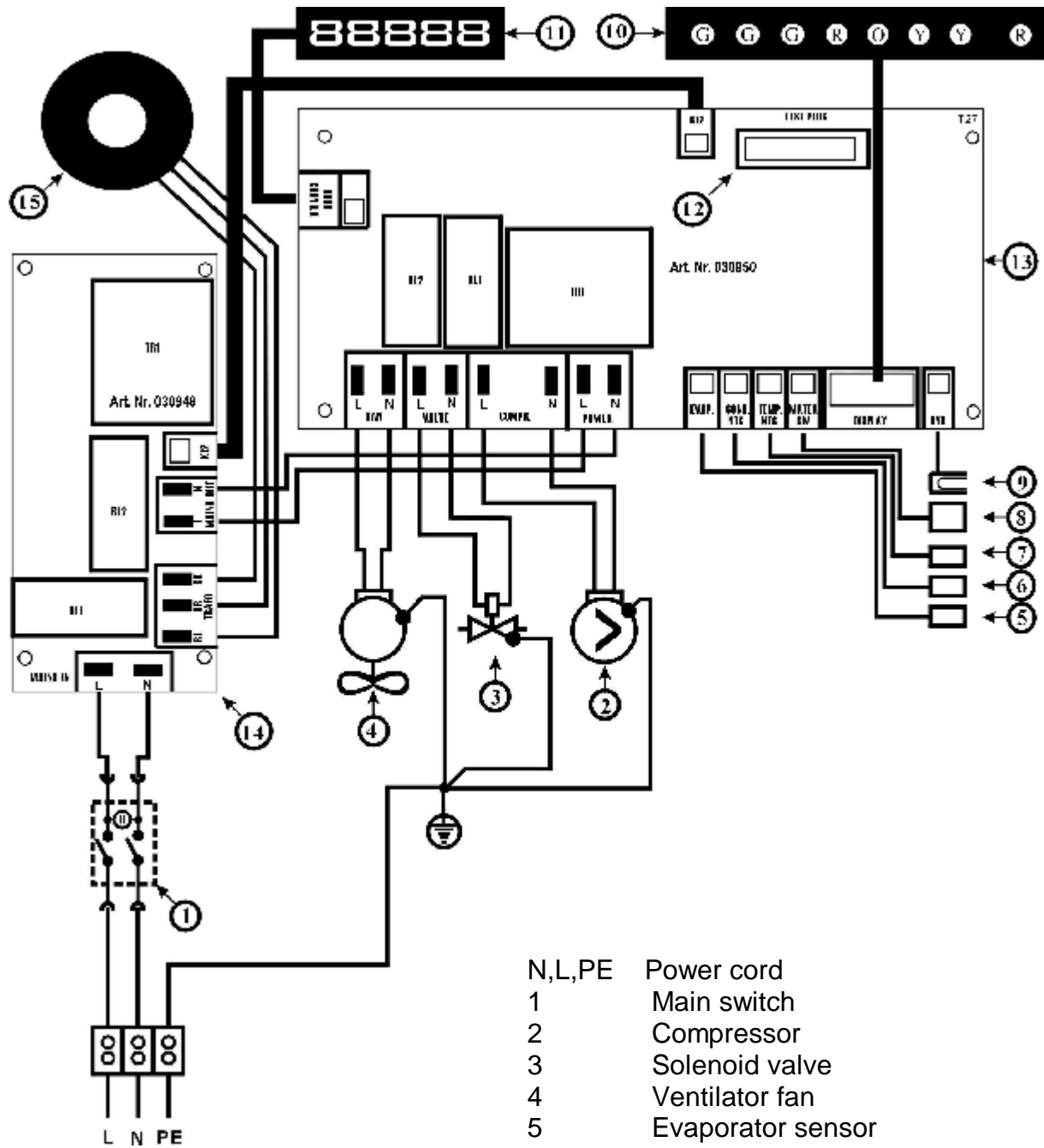


For cleaning, please use brush or compressed-air, don't use water or dissolvants.

Technical data	
Operating humidity range	30 – 95 %
Operating temperature range	0 - 35 °C
Dehumidifying capacity	24 l / 24 h
Nominal air delivery	140 m ³ / h
Electrical supply	110 /230 V / 50 Hz 600 W
Filling capacity	430 g R 407C
Basic size (W x D x H)	495 x 830 x 610 mm
Noise level (im 3m distance)	48,9 dB (A)
Weight	35 kg

Max. power input indicated. Power input changes in dependance on air humidity and ambient temperature.

Conection diagram RD 2S



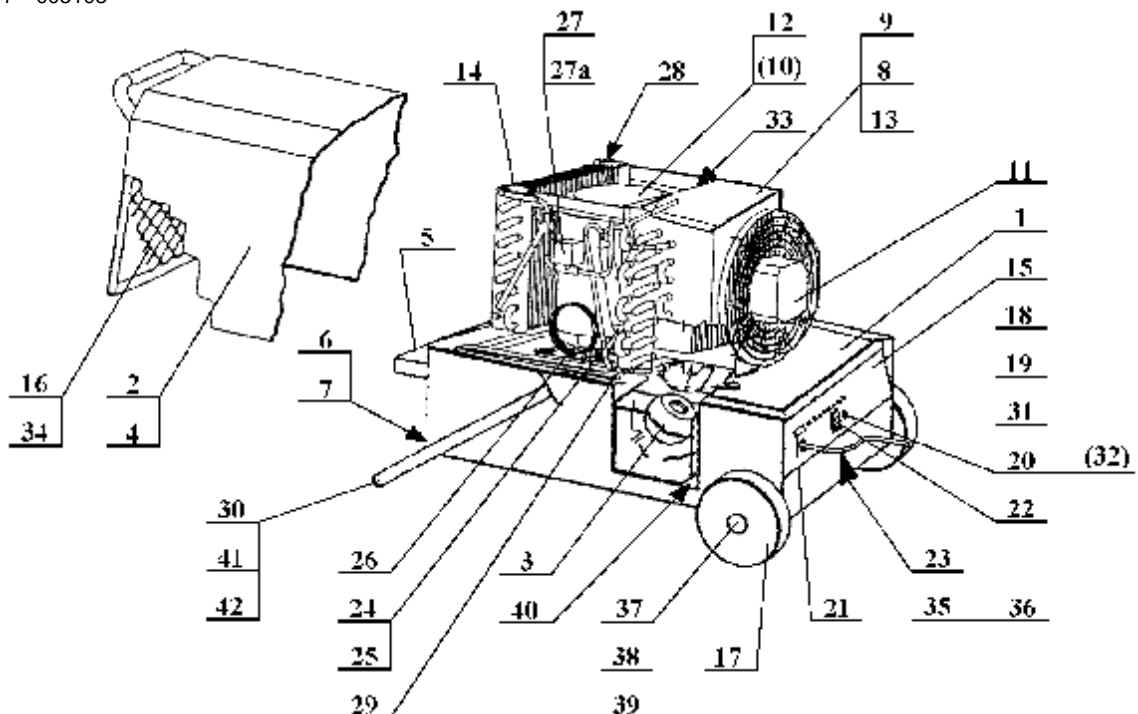
- N,L,PE Power cord
- 1 Main switch
- 2 Compressor
- 3 Solenoid valve
- 4 Ventilator fan
- 5 Evaporator sensor
- 6 Condenser sensor
- 7 Ambient temperature sensor
- 8 Sensor of floater position
- 9 Socket for hydrostat
- 10 LEDs
- 11 Hour meter
- 12 TEST-conector
- 13 Control panel
- 14 Supply voltage switching panel
- 15 Autotransformer 110/230 V

SPARE PARTS list

Symbol	Code	Description
1	030708	Base
2	030709	Cover
3	005095	Floater
4	030625	Line holder
5	005096	Drip pan
6	004744	Plug
7	004745	Nipple
8	022535	Condenser
9	023017	Condenser complete
10	023019	Complete refrigerating unit
11	004739	Fan (motor)
12	005120	Compressor
12a	031031	Starting capacitor 47 µF
12b	032492	Winding overheat protec.comp.
13	023015	Seal of condenser
14	022536	Evaporator
15	030950	Main PC-board
16	023016	Air filter
17	030710	Wheel
18	030948	PC-board transformer
19	030955	LED panel complete
20	022538	Socket for hygrostat
*21	035366	Working hours meter
22	004723	Main switch

Symbol	Code	Description
23	027757	Power cord with plug
23a	021165	Power cord
24	021166	Filter-drier
25	024776	Metering coil
26	030903	Maximum temperature sensor
27	005106	Solenoid valve
27a	024009	Solenoid coil
28	030959	Temperature sensor evaporator
29	030960	Sensor of floater position
30	030714	Protective frame
31	021132	Autotransformer
32	005148	Hygrostat whit cable and adapter
33	005110	Access Schrader valve
34	030715	Odour filter mat-set of 3 pieces
35	006584	Pipe union
36	006416	Lock - nut
37	030711	Cap
38	030712	Lock washer
39	030713	Wheel washer
40	030956	Ambient temperature sensor
41	030624	Spacer
42	030628	Plastic blind flange
	030716	Operating instructions

*till 06/04 - 005103



Guarantee

Any use, installation, maintenance that is not effected according to the rules as asserted in the technical manual, or unauthorized modifications on the original version as delivered from manufacturer leads to expiration of any right to warranty.

Furtheron our „Conditions of Sales and Delivery“ are valid.

Technical modification for product improvement are subject to change without notice.

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