NL

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Manual

Water bath cooler

WBK1550s

Van West Koeltechniek bv
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Manual controller (available upon request)

Icons


General indication for: IMPORTANT, CAUTION or NOTE


Warning for possible damage to the device or injury


Warning for electricity and or power hazards

Rights

This manual has been compiled with all possible care, but Van West Koeltechniek bv cannot take accountability for any errors in this document or its consequences.
Van West Koeltechniek bv reserves the right to change parts at any time without prior or direct notification to the customer. The content of this manual can also be changed without prior warning.
This manual is valid for the device in standard version. Van West Koeltechniek bv can therefore not be held responsible for any damage resulting from specifications deviating from the standard version of the device delivered to you.
For information regarding adjustment, maintenance or repair not provided in this manual, please contact the technical service of the supplier.

Intended use

☞ This appliance may only be used for cooling tap water or a mixture of tap water with Pekasol L. Use for other purposes is impermissible and can be dangerous. The manufacturer cannot be held responsible for damage caused by use for purposes other than those indicated here or due to incorrect operation.

Safety instructions

☞ This device complies with the prescribed safety regulations. Incompetent use may cause injury to persons and material damage. Read this manual carefully before you use this device. This is safer for you and prevents damage to the device. Read the order of the actions to be performed. Always store this manual in the vicinity of the appliance.

Installation

Make sure that the device is undamaged and complete. The content of the packaging consists of: cooler and power cable.

- The cooler is designed for an ambient temperature between 10ºC and 32ºC.
- The cooler must have been in normal position for at least 6 hours before switching on to prevent damage from wet stroke. See image on the front page for normal position.
- Position the cooler spirit level on a firm and stable underground
  Leave 25cm around the cooler for air circulation.
- Connect the cooler to an earthed wall socket that is protected by an earth leakage circuit breaker

Remove the gray cap (image 1) on the lid and fill the tank with tap water or a tap water/glycol mixture until it runs out of the overflow. Because the tank is seen as an "open container" we advise to renew the content every 3 years.
Pekasol L is a monopropylene glycol with inhibitors to prevent corrosion.
This product is mainly used in the "food industry".

Image 1. Opening and lid of the tank

☞ The cooler can be selected as a direct or an indirect cooling system.
Directly: the water mixture of the cooler is circulated through a system circuit and exchanges heat here.
Indirectly: the water mixture is provided with serpentines. A separate medium flows through the serpentines and exchanges heat.

☞ With a direct system it is possible that the cooler and pump switch off because the mixture level is too low. The red fault light will then turn on. The external circuit has used this water or there is a leak that may need repair. Fill the system again until mixture comes out of the overflow.
Reset see chapter: Use.

⚠ Connecting the cooler to a drinking water network must be carried out according to local regulations. The NEN1006 prescribes a non-return valve when installing on the water supply network used for drinking water. A controllable non-return valve (backflow protection type EA) must be installed to prevent possible backflow into the water supply network. When used as a drinking water cooler, we recommend using polyethylene hoses to prevent the formation of flavours.

Connect the cooler to the circuit to be cooled. Plug both plugs into the connectors on the control panel (Image 2) of the cooler and connect the cooler to a grounded outlet. Set the main switch (green) to “I” and it should light up together with the controller. The pump and/or stirrer starts immediately. The cooling starts with a delay and will start cooling until the set temperature is reached.
The controller is already programmed. See paragraph parameter settings.

Image 2. Control panel

Use

When the mixture level in the tank is too low or the pressure in the cooling system is too high, the cooler will shut off and the red indicator light will light up.
There is a potential free contact provided for an external fault signal.
If the fault has been rectified, it can be reset by setting the main switch to "0" and after 10 seconds again on "I". The cooler works again until the desired temperature is reached. Note: with normal function, the pump will always run.

⚠ When used as a drinking water cooler, it is recommended to flush the device before commissioning or after a long standstill period. Similar to a standard drinking water tap.

Maintenance

Always disconnect the cooler from the power supply during maintenance.

⚠ The cooler must always be disconnected from the voltage during maintenance.

⚠ Always contact a qualified technician for electrical and / or cooling problems.

⚠ To clean the jacket, only use a clean, light wet cloth. Do not use chemical cleaners.

☞ Spare-parts: orders must contain the cooling model type and serial number of the cooler. These details are stated on the machine plate of the cooler

Every 3 months:
Check the liquid conditions in the tank on: level, protection limit and possible bacterial growth.
Check the air-cooled condenser. If there is pollution clean it by using compressed air or a soft brush and/or a vacuum cleaner. Make sure that you don’t damage the aluminium fins.

Every 12 months:
According to the F-Gas Regulation the service interval is dependent on the equivalent volume in tonnes of CO^2 based on the amount of refrigerant. The minimum number of inspections is once a year for systems with 5 to 50 tCO^2. The WBK1550s contains 0.6 tCO^2, so it is officially not required to perform inspection. We advise to carry out an annual inspection (preventive maintenance).
See also article 20 of the General Terms and Conditions of the NVKL (25/2015).

Technical data

Dimensions WxDxH	: 450x490x840mm (pump included)
Mass	: 42kg
Volume Tank	: 50 litres (gross)
Power supply	: 230Volt – 50/60Hz.
Electric power	: 600W
Cooling power	: 1280W

(For indication: 1.0kW = bath:5°C / amb:32°C & 1.5kW = bath:10°C / amb:20°C)

Parameter settings Controller ERC211

R00 : 5	A03 : 45	A75 : 255	O15 : 0.1
R01 : 3	A12 : 60	C01 : 3	O23 : 0
R02 : 2	A13 : 22	C02 : 2	O61 : AP1
R03 : 20	A14 : 0	C04 : 0	O67 : no
R04 : 0	A27 : 30	C70 : yes	P73 : no
R05 : °C	A37 : 80	O01 : 15	P76 : no
R09 : 0	A54 : 85	O02 : off	
R12 : 1	A72 : no	O03 : 0	
R13 : 0	A73 : 195	O05 : 23	
R40 : 0	A74 : 195	O06 : pt1	

Problem solver

There is no cooling, check:

* Is there voltage > Green switch on (**I**) and it lights up?
  No ↘ Possible causes:
  - Connectors not plugged correctly
  - Automatic fuse in the distribution box
  - Glass fuse in connector defective
    (spare fuse is placed next to it, Picture 3)

Picture 3. Glass fuse in connector

* Is there a error > Is the red light on?
  Yes > 1 A high pressure fault in the cooling system.
  ↘ Possible causes:
  - Ambient temperature too high
  - Contaminated condenser
  - Defective fan

  > 2 Too low water level in the tank.
  ↘ Locate and correct leakage.
  - Follow chapter "use".

⚠ If the operation of the device cannot be realized, contact a qualified technician.

Guarantee

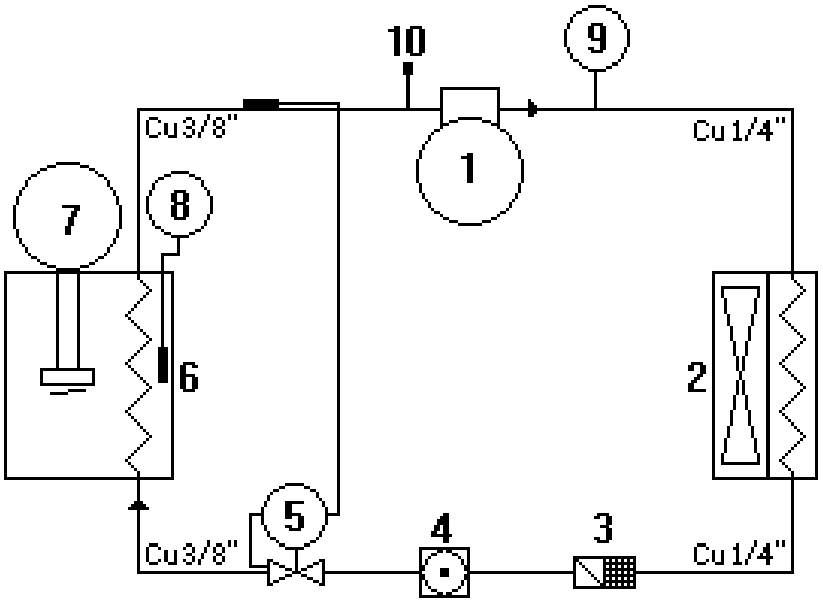
The warranty applicable to this device are part of the General Terms and Conditions of offer, sale, delivery, payment, installation, repair, and maintenance of the Netherlands Association of Refrigeration Engineering and Air Treatment Companies **NVKL**, filed with the registry of the District court in The Hague on 18 February 2015 under number 25/2015.

Disposal of used electrical and electronic equipment

The waste bin symbol on the product indicates that this device should not be treated as household waste. Disposal must be made according to local regulations or it must be delivered at the recycling point of electrical and electronic equipment (WEEE). For more information please contact your local recycling authority.

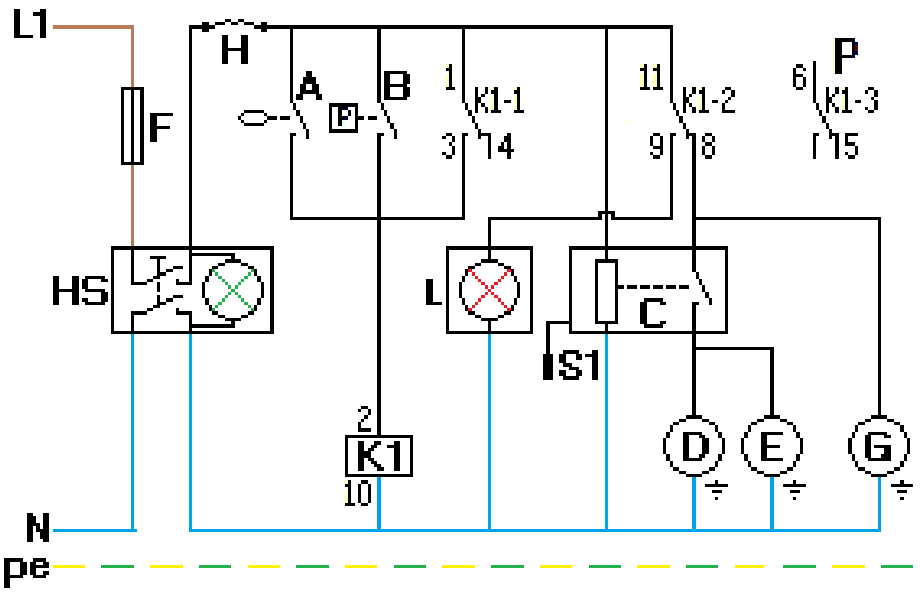
C-scheme

1	Compressor	6	Evaporator
2	Condenser	7	Pump - stirrer
3	Filter-dryer	8	Temp. sensor
4	Sight glass	9	Pressure switch HP
5	Expansion valve	10	Fill connection1/4”



E-scheme

A	Level switch	H	Loop through contact
B	Pressure switch HP	HS	Main switch
C	Controller	K1	Relay
D	Compressor	L	Signal lamp
E	Fan	P	Potential free contact
F	Fuse 6.3AT	S1	Sensor Pt1000
G	Pump a/o stirrer		



EC Declaration of Conformity

According to Annex II, Paragraph 1A of the Machinery Directive

We

Van West Koeltechniek bv
Spoorstraat 7
8084 HW 't Harde
The Netherlands

Declare under our sole responsibility that:

Water bath cooler WBK1550s

Complies with the provisions of the following directives:

2006/42 / EC Machinery Directive
2014/68 / EC Pressure Equipment Directive
2014/30 / EC EMC Directive

And declare, for as far as relevant, that the following standards have been applied:

EN IEC 60204-1 2018
EN 378-2 2016

The product is classified PED compliance module:

Article 4, Paragraph 3

Technical data:

Power supply	: 230V – 50/60Hz.
Electric power	: 600W
Installation type	: direct expansion
Refrigerant	: R134a - 420gr. / 0.6tCO^2
Design pressure	: 16bar
Test pressure	: 18bar

Signature:

Name	: Mr. L.G. Blauw
Position	: Managing director
Date	: 01-01-2021
Signature	: