PRODUCT DATA

COMPACT P - CTS602 HMI BY NILAN





COMPACT P PREVENTATIVE MAINTENANCE INSTRUCTIONS

















Domestic

Passive Heat Recovery Active Heat Recovery Ventilation < 300 m³/h Comfort Heating Comfort Cooling Sanitary Hot Water Production Heating

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Service and maintenance

General information

A ventilation unit from Nilan can last for many years if it is properly serviced and maintained. Ventilation units are often hidden away, and they are therefore rarely given attention in everyday life. But just as you maintain your car, your ventilation unit will need servicing regularly to keep it functioning properly.

If appropriate service and maintenance are not carried out, the ventilation unit may get damaged. It can also result in increased energy consumption and a poorer indoor climate. Less air will run through the unit even if the fans are running faster. But the ventilation unit does not operate well with dirty filters, a clogged up heat exchanger and dusty fans.

You can set an alarm in your calendar on your phone that will notify you when your ventilation unit is due a service. Alternatively, you can make a service appointment with your local Nilan dealer or service company.

Regular maintenance

Operation of the ventilation unit

The control panel should be positioned where you will see it regularly. This will allow you to observe the operation of the ventilation unit and it will ensure that you notice potential alarms.

You can also ensure that the unit operates as intended. It is unnecessary to adjust the settings and the unit continuously. The control system will automatically regulate the operation. However, initially it may be necessary to finetune, for example, room temperature. But once that is done, you should not keep readjusting it.

The temperature for the domestic hot water should be at milmum 51° C, to minimize the risk of legionella. Are you, for example, a large family and therefore has a larger hot water consumption, the temperature may need to be set higher.

Filters

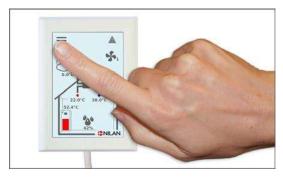
The primary purpose of the filters is to protect the ventilation unit and especially the heat exchanger and the fans that could otherwise become damaged by dust and dirt.

Dirty filters result in a poorer indoor climate and a higher energy consumption. Dirty filters must therefore be replaced. Dirty filters can also affect the humidity control system in the ventilation unit so it no longer works as intended.

The factory setting of the control system is set to 90 days, which will suit most installations. But if you live in a city close to a heavily congested road, you may need to replace the filters more often. Conversely, if you live in a rural setting, you may not need to replace filters quite as often.

The standard filters in the ventilation unit are ISO Coarse > 90% (G4). If you install a pollen filter ISO ePM1 50-65% (F7), you will not need to replace the pollen filter as often, as its filter area is larger. It may then only be necessary to replace the pollen filter every second or third time, depending on its condition.

Illustration of filter change



1. Before opening the door, turn off the unit on the user panel under "Operation" in the settings menu..



3. Remove the two filters from the unit



5. Remove the filter sheet from the filter frame.



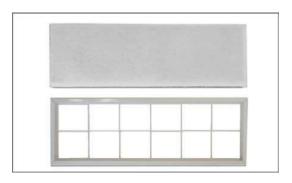
7. Press the filter sheet firmly in place and carefully push it to the sides of the filter frame. The filter is placed back in the unit with filter mat upward



2. Turn the thumb screws in the door at the top right of the unit and open the door.



 $4.\,lt$ is advisable that you vacuum the filter chambers for potential dirt and dust



 $6.\,Keeping\,the\,smooth\,side\,facing\,downwards,\,place\,the\,new\,filter\,sheet\,in\,the\,filter\,frame$



8. In the ALARM menu on the control panel, press the alarm symbol at the top right and reset the alarm here. Turn on the unit again.

Service

General cleaning

The ventilation unit should be cleaned on the inside once a year. Dust can slip through the filters and mix with dampness from the extract air.



WARNING

Stop the ventilation unit on the control panel and switch off the power supply for the unit before opening its front door.

You may want to remove dust with a vacuum cleaner before wiping the ventilation unit inside. For this, use a slightly damp cloth with a mild soap solution. Be careful around potentially sharp edges. Be careful not to get water into the electrical control system.

The ventilation unit should also be cleaned on the outside using a slightly damp cloth and a mild soap solution.

The ceiling valves

Over time a ring may develop round the inlet valves. This is a natural process and is due to dust in the room air, not to defective filters or failure to change filters.

As very few painted ceilings are washable, you are recommended to vacuum round the valve and then wipe the area with a damp cloth.

It is a good idea to dismantle and clean the valves when necessary. The valves have been set by the installer for a specific airflow, so it is important not to rotate them, as this will change the setting and unbalance the ventilation system.

Water trap

When the ventilation unit in cold periods runs with high heat recovery, condensation of the exhaust air takes place. It is important that there is free drainage form the condensate tray so that the water can drain out. If not, it will at some point run out of the unit door and cause major water damage.



ATTENTION

Iff the cooling function is deactivated, check your condensate drain every autumn befor the cold sets in. (Condensation typically takes place at an outdoor temperature $< 10 \, ^{\circ}$ C)

Procedure:

- 1. Pour water into the condensate tray
- 2. Close the ventilation unit door
- 3. Switch on the ventilation unit and let it run for 10 min.
- 4. Open the door of the ventilation unit and check that the water has run out and not back into the condensate tray
- 5. If the water has run out everything is ok
- 6. If the water has not run out, check the water strap and the entire drain for where it has stopped

Heat exchanger

The counterflow heat exchanger is a central part of the ventilation unit. It heats up the cold outdoor air with energy from the warm extract air. To maintain a high level of heat recovery, it is important that the heat exchanger is not clogged with dirt.

Experience indicates that it should not be necessary to lift out and clean the heat exchanger every year. However, if it appears to be dirty, you should lift it out and clean it.

The easiest way to clean the counterflow heat exchanger is in the shower. Use lukewarm water and rinse it well from both sides. Allow it to drip off before remounting it in the ventilation unit.

Checking the sacrificial anode

An electrically monitored anode has been mounted for protecting the hot water tank. When it is time to change the anode, a warning will appear on the control panel display.

Check the sacrificial anode to ensure that the electrical monitoring is undamaged.

Checking the safety valve

The safety valve for the domestic hot water should have an annual function check to ensure it is functional at all times.

The function check must be carried out by a trained plumber.

Check the air intake and outlet

It is important for operation of the unit that air can freely move through the air intake and outlet.

If roof stacks have been fitted to the air intake and outlet, check that they are not blocked with birds' nests, leaves or other dirt which can hamper air passage.

If, instead of roof stacks, grilles have been mounted in facades or eaves, check that they are not clogged with leaves or dirt. Grilles are particularly likely to become clogged.

Check ventilation ducts

It is important for operation of the unit that there is free air passage through the ventilation ducts.

After some years of operation, dirt will attach itself to ventilation ducts or tubes, and accumulations may lead to higher pressure drop in the ducts, leading to higher power consumption. It is therefore important to clean out the ducts when too much dirt has collected.

After attending to the inlet and outlet valves, it will be advisable to have them adjusted again, to ensure optimum operation of the ventilation system.

However, it will not be necessary to clean ducts more than every few years.

The heat pump

The heat pump must be inspected in accordance with applicable laws and regulations, such that it is kept in good condition and meets safety and environmental requirements.

The installer is obliged to inform the owner/user about applicable laws and regulations.



Typical maintenance checklist



Apt. / House No:		Client Name:	
Date / Time:		Service Technician Name:	
Heat Pump Unit:		Serial Number:	
Chec	klist AFTER 12 months service:	- Compact P	
•	External check of Compact P for water (Note; water booster, expansion vesse supplied by others and any water leak NOTE:	r leaks. el and safety valve are	Yes ☑ No ☑
•	 Wall mounted Air Intake & Outlet Grilles will be checked to ensure Yes No there is no blockage. (Note: apartment will have intake air intake/discharge at high level will be viewed from ground level only to check for blockage) 		
	Filter chamber cleaning and change of filters		
	Water trap and condensate drain flush through		
 Functionally check back up panel heaters are operating and in AUTO mode. 			Yes 🛭 No 🗈
	 Check back up heaters on Hot Water Tank in AUTO mode. 		
	 Check display settings have not been altered / re-set if necessary 		Yes ☑ No ②
	Record Space Heating Temp on displa	ydeg. C	Yes 🛭 No 🗈
	Record DHW Temp on display	deg. C	Yes 🛭 No 🗷
•	Photos must be taken of units and an	y works carried out (agreed with client	
	before hand)		Yes 🛭 No 🗈
	Internal cleaning of Compact P ventila	ation chamber (condenser/evaporator)	Yes 🛭 No 🗈
•	Heat pump refrigerant circuit will be o	thecked for any signs of leakage	Yes ☑ No ☑
with t		nced above has been inspected by me, in report above and that I am satisfied that / checked.	
Signe	d by Technician:		44
Name	in Block Capitals:		-
Tonon	t or accurate confirmed visit		