



# **Instruction manual**

**Condensate pump  
with neutralizer**

**NTH330 XPH**



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# Preface

**Read carefully the instructions before installation and use of the pump NTH330 XPH**

## **1)Description and range of application of NH330 XPH**

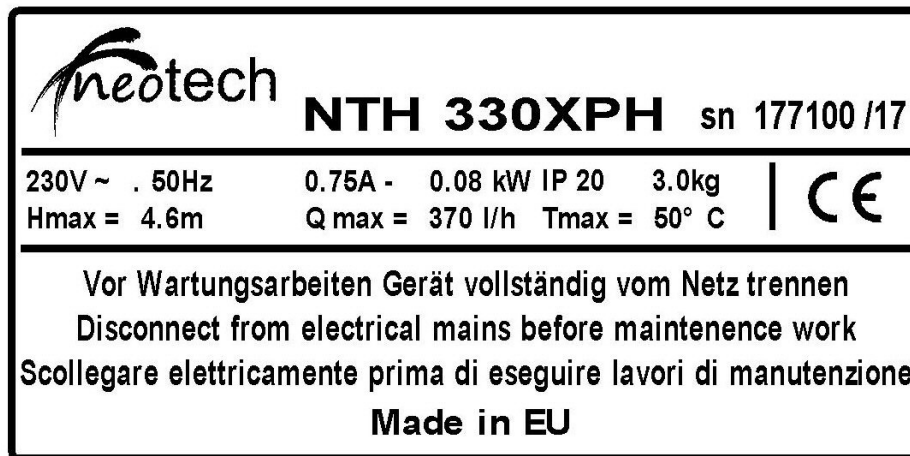
The pump NTH330 XPH has usede to remove and to neutralize the condensate from furnace burners, gas or oil condensino boilers . The neutralizer raise the pH value to permit to evacuate the acid condensate. The neutralizer bag has to be substituted periodically to have the correct neutralization. The design make this operation easy.

The NTH330 XPH cannot be used with oil residual into condensate water and it needs syponing to avoid the contact with acid gas.

## 2) Data tag and technical data

### a. Tag

The tag is applied on the cover of the pump



### b. Technical data

Electrical	
Power	80 W
Voltage	230 V ~ 50 Hz
Current	0.6 A
Protection class	IP 20
rpm	2780 min <sup>-1</sup>
Cable with plug	2 m

Hydraulics and mechanical	
Max. flow	370 l/h
Max. Head	4.5 m
Max. temperature	50°C
pH min.	2.8
Hose connection	porta gomma 9 mm
Weight	2.3 kg

Neutralizer	Lasting of neutralize effect				
	Boiler power	24 kW	28 kW	35 kW	50 kW
NEUTRALKIT05		1500 h	1250 h	1000 h	700 h

	NTH330 XPH
length	335 mm
wide	104 mm
height	135 mm

## 3) Scope of delivery

Power cable with plug 2m length, alarm cable 2m length, pipe adapter, tear strip, check valve, vibration dumpers and instructions. The pump has supplied with pipe (6m) to connect the check valve. Neutralizer kit also supplied.

## 4) installation and start-up

**!** **WARNING:** read carefully instructions before installation or maintenance!  
The installation may only be performed by a qualified person.

Check content for completeness and eventual damage prior to operation. Inform your dealer immediately in case of any deficiency.

**Never transport or remove the pump from the packaging by holding on to the cable!**

**⚡** An orderly grounded mains supply and residual current circuit-breaker of max. 30mA disconnecting all phases is required for the operation of the pump.

Already existing outlets are to be checked for the existence of a residual current circuit-breaker. Ensure that power cord is NOT plugged in when performing any type of work on the pump.

### a. Installation and inlet connection

The pump must be level (either on the floor or mounted on the wall) to ensure a proper operation.

**⚡** The pump must be installed ensuring that it can not tilt and that it is properly mounted!

The pump should be mounted close to the condensate drainage of the unit to be drained. The connections from the unit to the pump are not included. Please ensure to use corrosion-resistant and acid-resistant material when choosing the drainage pipes (e.g. PVC, PE, stainless-steel).

**!** **Condensate from condensing boilers is very aggressive and corrosive!**  
A 28mm plastic wastewater tube may directly be connected to the inlet (see figure 1). Other pipes or tubing with a smaller diameter can be used.



figure 1



figure 2

**!** Under no circumstances may pipes or tubes be inserted into the tank because this may lead to pump failure since the integrated float switch may be blocked!

Standard condensing boilers are equipped with a siphon trap. This must in all cases be filled with water prior to operation of the boiler and condensate pump. Failure to do so may result in acidic gases reaching the pump and therefore destroying it!

### b. Pressure connection

The pressure port is equipped with a check valve. PVC tubing with an inner diameter of 9mm is to be tightly connected to the pressure port, see figure 2.

The PVC-tubing is to be secured with a hose clamp (not supplied) avoiding any kinks, ties and connected to the drain pipe of the canalization.

In case of an installation in the basement below the level of backed-up water (locally defined; generally the upper edge of the street) it must be ensured that the pressure piping is lead above this level and then connected downward to the drain pipe.

**!** WARNING: In case of non-observance the basement may be flooded in the event of a flow back from the canalization!

### c. Signalling cable

In addition to the power cord (POWER), the pump is also equipped with a signalling cable (ALARM). See figure 3



figure 3

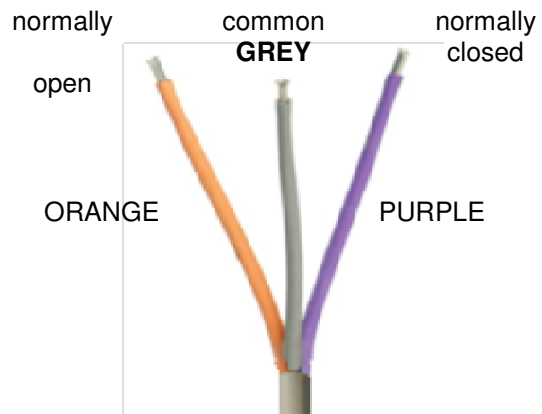


figure 4

The signalling cable (dry contact) must be used to either conduct a safety shutdown of the condensing boiler (COM and NO) or to activate an external low voltage alarm system (COM and NC). See figure 4 for contact configuration. To avoid water damages due to a defective pump this contact has to be contacted in any case otherwise all kind of claims will expire.

**!** Please refer to the instruction manual of the condensing boiler for the connection as a safety shutdown or to the manual of the alarm system for the connection as an alarm.

#### d. Neutralizer bag substitution

**!** **WARNING:** use protection to manage the bag, the acid condensate is corrosive and aggressive !

##### installation

1. Insert the bag inside the slot of the tank as shown on figure 5.
2. Be sure the bag has adapted to the slot. (figure 6)
3. Insert the cover as described on figure 7.
4. Close the cover using a light force at side, near the single hook of the tank. (figure 8)

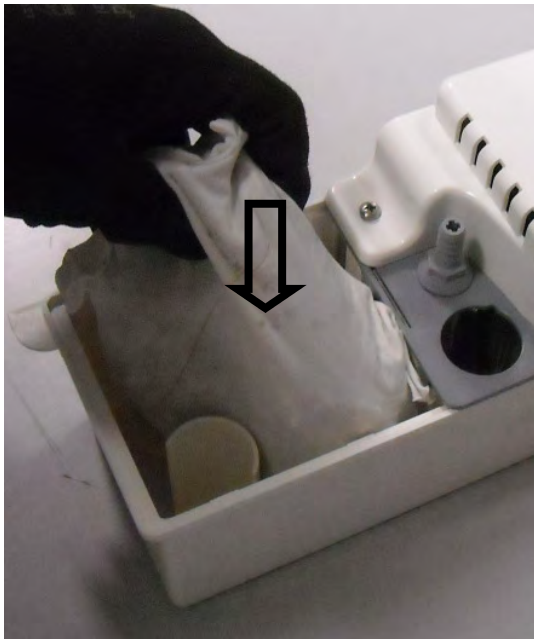


figure 5



figure 6

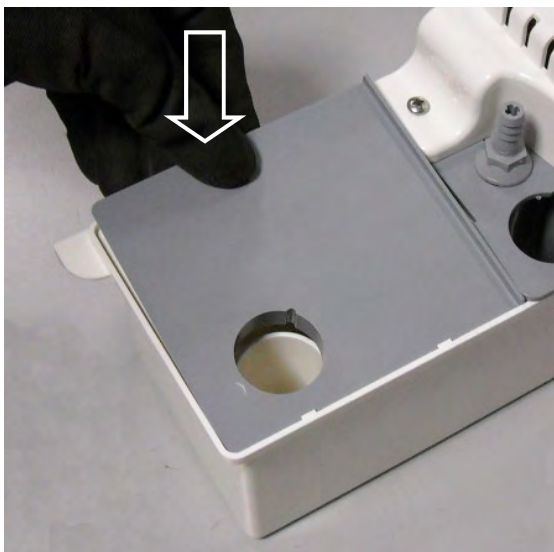


figure 7

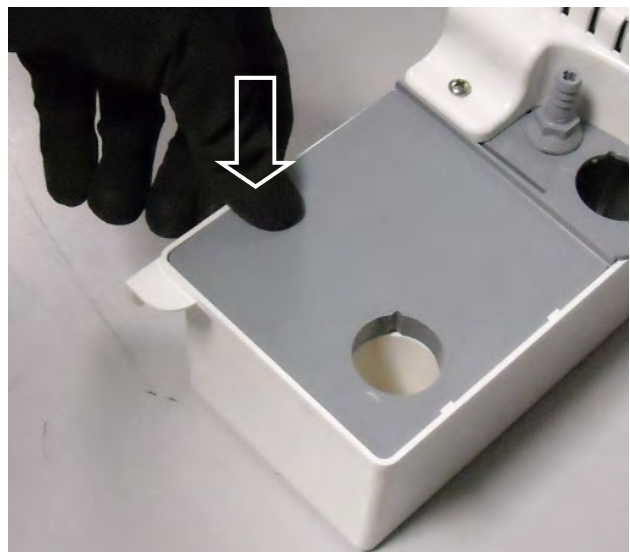



figure 8

### Substitution

1. Open polling with light force the side of the tank as figure 9.
2. Lift the cover and extract the bag. (figure 10 - 11)

 Manage the exhaust bag as local rules

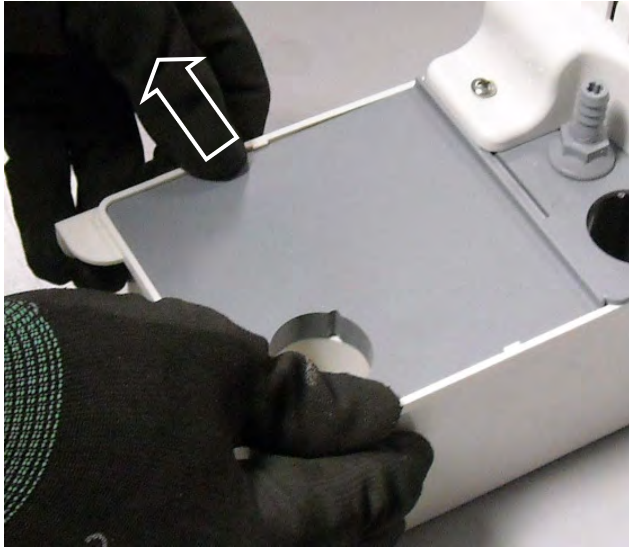


figure 9

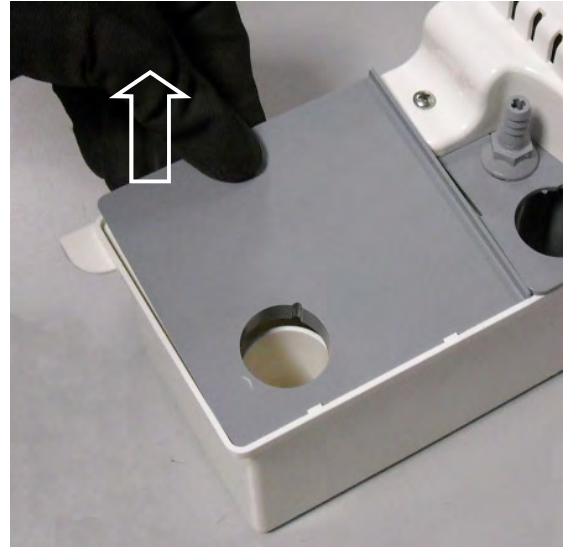


figure 10



figure 11



## 5) Limitazioni d'uso e operazioni pericolose

**!** **ATTENZIONE:** Questa pompa **non deve essere usata** per acqua sporca, in particolare i liquidi con particelle solide abrasive, o i liquidi **infiammabili ed esplosivi**

## 6) Maintenance

**!** **⚡** **WARNING:** Ensure that the power is disconnected before performing any service or maintenance!

The proper function of the pump, its wear parts and its product life are mainly dependant on regular servicing and maintenance of this unit. Particulates settle on the bottom of the tank in the course of time. This sediment can lead to pump clogging and block the float switch. It is therefore recommended to service the pump, piping, inlets and pressure port biannually and, if necessary, clean the respective areas and parts. This is especially necessary in connection with the general maintenance of the heating system prior to the start of the heating period. In the course of time and especially after longer standstill period particulates, at times highly acidic, can affect or destroy parts of the tank.

The upper part of the pump can be removed without the use of tools by carefully moving the 2 laces on the upper part of the pump outward (see figure 12). The upper part can then completely be removed and the float switch and the bottom part of the pump body as well as the tank (bottom part) are freely accessible. These parts can now be washed with warm water and mild soap. After cleaning, place the upper part on the lower (tank) part. A latching can be heard. Connect the pump to the mains and fill water into the tank through one of the inlets. After having filled the tank with about 0.6 l the system will start automatically and discharge the water into the canalization.

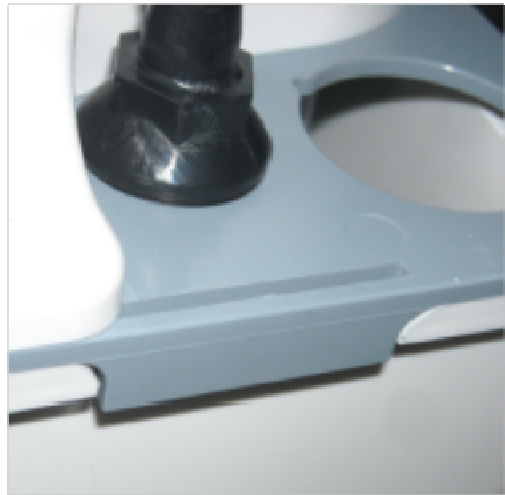


figure 12

**!** **⚡** **WARNING:** All points pertaining to installation and start up (see point 4) must be observed when pump is returned to service.

**WARNING:** Unit must be disconnected from the power source before servicing or performing pump maintenance!

## 7) Warranty

The warranty period for this product is 24 months from date of purchase. Proof of purchase must be provided.

Any material or manufacturing defect within this timeframe will be rectified or repaired free of cost. Any damage resulting from misuse, in particular non-observance of the instruction manual and excessive wear and tear is excluded from warranty.

Any unauthorized modifications or opening of the product will void the warranty.

## 8) Troubleshooting

NEUTRALIZER SLOT		
Problema	Probabile Causa	Rimedio
Low flow rate	Outlet piping clogged or kinked	Clean / remove kink
Overflow condensate	Delivery pipe clogged or kinked	Check the max head Clean / remove kink
PUMP		
Problema	Probabile Causa	Rimedio
Low flow rate	Outlet piping clogged or kinked	Clean / remove kink
	Check valve contaminated	Clean
	Head too large	Reduce head
Motor is idle or does not start	No voltage present	Check power supply
	Plug not plugged in	Plug in plug
	Pump blocked by mud or solids	Clean tank and pump body
	Defective motor	Replacement by qualified personnel
Motor running, pump does not deliver	Outlet piping clogged or kinked	Clean / remove kink
	Check valve contaminated	Clean
Pump does not operate automatically	Float switch contaminated	Clean
	Micro-switch defective	Replacement by qualified personnel
Alarm does not signalling	Floater clogged	Clean
	Micro-switch defective	Replacement by qualified personnel

## 9) Declaration of conformity CE


This declaration is valid for the following product: **NTH330 XPH**

We hereby declare that the product is in conformity with the provisions of the **Machinery Directive 89/392/CEE**

- directive 89/392/CEE 14 June 1989
- directive 73/23/CEE 19 February 1973
- directive 89/336/CEE 3 May 1989
- DIN 4716-2(2003-04)
- DIN EN 292-1(11.91)
- DIN EN 292-2(11.91)
- DIN EN 60204(11.98)
- DIN EN 50081-1(03.93)
- DIN EN 50082-2(02.96)

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