Condensate Pump model: NTH14 - E800

INSTRUCTION MANUAL

1. Description and range of application

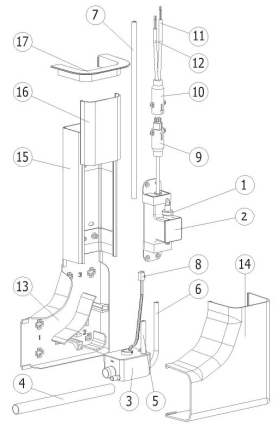
Fully automatic condensate removal pump designed to remove condensate air conditioning units and chillers where drainage by gravity is not possible.

2. Technical Data

- Motor power output P2 = 11 Watt
- Voltage 230 V – 50 Hz
- Operational voltage: 230 V – 50 Hz
- Max. flow: 11 l/h
- Max. head:22 m WS
- Max. liquid temperature: 50° C
- ¼" connection with 6 mm hose connector
- Weight overall system: 2.3kg
- Cable with plug connector, length 2.0 m.
- Protection class IP20

3. Scope of delivery

Pos.	Descrizione	note
1	PUMP	
2	DUMPING BRACKET	
3	VASCA	
4	INLET PIPE	50cm
5	VENT	10cm
6	PUMP-TANK PIPE	30cm
7	DELIVERY PIPE	110cm
8	QUICK PLUG SENSOR CABLE	
9	MALE CONNECTOR	
10	FEMALE CONNECTOR	
11	POWER CABLE	200cm
12	SIGNAL CABLE	200cm
13	ELBOW	
14	ELBOW CAP	
15	DUCT 80X60	80cm
16	DUCT CAP	80cm
17	WALL DUCT	
	INSTRUCTIONS	
	CABLE TIE	



4. Installation and start up

WARNING: Read instructions completely prior to installing, operating or servicing the pump! 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. 30 mA 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 pump is disconnected from the mains when performing any type of work on the pump.

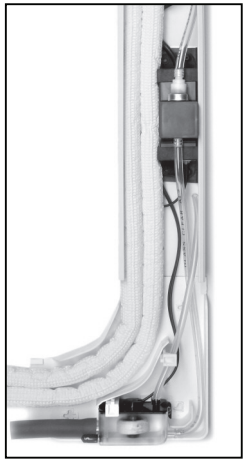
4.1 Installation and connection

Depending on the individual installation the unit may be installed either on the right or left hand side of the air conditioning unit. To ensure a flawless operation the assembly bracket, respectively the reservoir tank must be installed horizontally. The unit should be installed as closely as possible to the condensate drain. The connecting feeding tube is to be fitted accordingly and connected to the inlet of the reservoir in a kink-free manner.
The duct is to be cut to the required length, attached to the assembly bracket and secured using screws and rawl plugs. Cut out required area in false ceiling for installation of required pipes and cables.

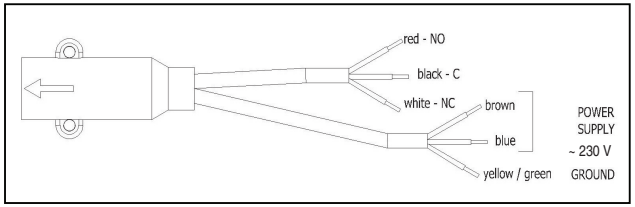
4.2 Internal connection and signalling cable

Besides being connected electrically, the water collecting reservoir and the pump must be connected with a hose (internal intake tube) as well. The system is therefore equipped with a special electrical connection. This cable will ensure proper power supply as well as signalling. The signalling cable (dry contact) can be used to either conduct a safety shutdown of the air conditioning unit or to activate an external low voltage alarm system (max 5A).

Please refer to the instruction manual of the air conditioning unit for the connection as a safety shutdown or to the manual of the alarm system for the connection as an alarm.



- Contact configuration -



4.3 Pressure connection and venting

PVC tubing with an inner diameter of 6 mm is to be tightly connected to the pressure port and channel the tube to an appropriate drain avoiding kinking. In order to prevent siphoning the end of the discharge tube must be higher (+0.5m) than the water level in the tray of the air conditioning unit.

WARNING: Consequence of non-observance may be dry-run or destruction of pump.

Furthermore it must be ensured that the water collecting reservoir is vented. The vent tube must also be installed kink-free in the duct and also not be squeezed by the refrigerant pipes.

4.4 Testing

A test-run should be performed after all connections have been made professionally to ensure water tightness and a flawless operation. For this purpose the water collecting reservoir should be carefully fed with clean water until the pump turns on and discharges the water. This process should be repeated 2-3 times.

5. Limitation of use and improper operation:

WARNING: This pump **may not to be used** for waste water, in particular

- liquids containing solids
- liquids with abrasive content
- as well as **flammable and explosive** liquids.

Pump system (pump unit and tank) is only for indoor installation with absolutely dry ambiance.
Protection against environmental humidity is required !

6. Maintenance

WARNING:Ensure that the NTH14 - E800 is disconnected from the mains 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. A regular visual inspection of the transparent water collecting reservoir should therefore be conducted. This can be very easily be done by removing the cover of the assembly bracket. It is therefore recommended to service the pump, tubing, inlets and pressure port biannually and, if necessary, clean the respective areas and parts. .
After that the unit should be rinsed 2-3 times by using clean water.

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

8. Troubleshooting

Problem	Probable cause	Remedy
Low flow rate	Discharge tube clogged or kinked	Clean / remove kink
	Inlet tube clogged or kinked	Clean / remove kink
	Head to large	Reduce head
Motor is idle or does not start	No voltage present	Check power supply
	Plug not plugged in	Connect plug and connector
	Pump blocked by mud or solids	Clean tank and pump body
	Defective motor	Replacement by qualified personnel
	Defective electronics	Replacement by qualified personnel
Motor running, pump does not deliver	Outlet tubing clogged or kinked	Clean / remove kink
	Leakage on the intake side, pumps pump draws air	Check suction hose, eliminate leakage
Pump does not operate automatically	Float switch contaminated	Clean
Pump makes noise	Pump running dry, "siphoning"	Remedy siphoning, ensure that end of discharge tube is higher than the water level in the tray of the air conditioning unit

9. Declaration of conformity

This declaration is valid for the following product:
Device type: Condensate-Pump NTH14 - E800

CE

We hereby declare that the product is conformed to the **Low-Voltage Directive (2006/95/EG)**.
The following norms have been taken as a reference with respect to the electromagnetic compatibility: **2004/108/EG**

This declaration is made by:
Steelpumps srl
Via Sicilia
56035 Lari (PI)

Lari, 22/4/2014

Luca Pinori Technical manager

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