

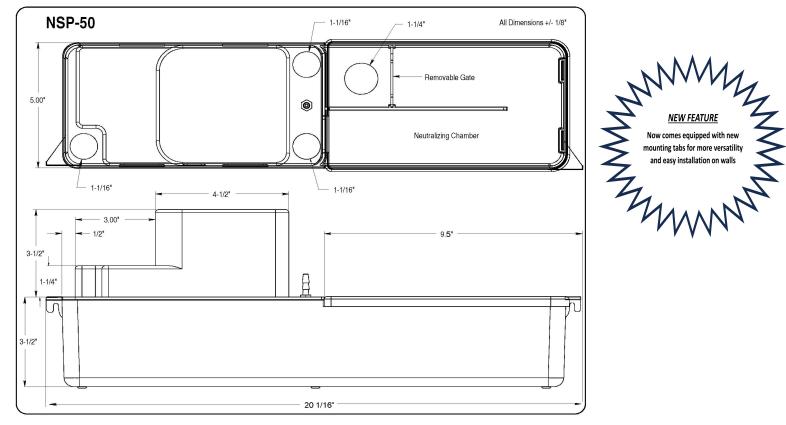
**Neutrasafe LLC** neutrasafe.com 421 Page Street, Suite 1 Stoughton, MA 02072

# NeutraSafe Condensate Neutralizing Pump

# NSP-50

Guideline capacity 500,000 BTU/h appliance input

Installation, Operation and Maintenance Manual



This combination condensate neutralizer and condensate pump features a Little Giant model VCMA-20ULS pump assembly mounted to NeutraSafe's patented serpentine flow neutralizing base.

Height dimensions are the same as the VCMA-20ULS assembly. The pump assembly can be unsnapped and rotated 180 degrees if needed. There is a separate inlet for acidic condensate in the clear cover portion of the base. Only acidic condensate should be introduced into this inlet. Air conditioner or dehumidifier condensate should be introduced into any of the three openings in the VCMA assembly.

Please follow all pertinent instructions on the enclosed Little Giant Pump manual along with all instructions in this manual.

## $\triangle$ warning $\triangle$

- NeutraSafe condensate neutralizing pumps should only be installed by a qualified professional
- Read all instructions including Little Giant Pump manual before installing. Perform steps in the order given. Failure to comply could result in substantial property damage, severe personal injury or death.
- Do not allow flue gases to vent through condensate neutralizing pump. All condensate drain lines must have a gas trap before entering
  the condensate neutralizing pump unit. Failure to comply could result in substantial property damage, personal injury or death
- Neutrasafe condensate neutralizing pumps should only be connected to a condensate outlet that is installed per the appliance manufacturer's instructions. Failure to comply could result in substantial property damage, personal injury or death.

### IMPORTANT

- All piping should be in accordance with relevant building and mechanical codes, as well as any local, state and federal regulations
- Multiple condensing appliances with a total BTU/h input capacity not to exceed 500,000 can be connected to the NSP-50. Installation
  instructions of each connected appliance must be followed.
- NeutraSafe condensate neutralizing pump should be installed in a level position below all traps and outlets.
- All condensate traps should be primed before commencing operation of the unit.
- NeutraSafe condensate neutralizing pump media sack should be replaced at least once a year or when pH falls below local regulations. **\*Do not remove media from sack. Install sack in the pump base.**
- NeutraSafe condensate neutralizing pumps should not be installed outdoors without proper freeze and UV protection.
- NSP-50 Neutralizing pump is equipped with a safety switch which can be used to shut down the appliance should the pump fail. Please follow instruction for safety switch in the VCMA manual.

#### **MOUNTING OPTIONS**

- It is recommended that the Neutra-Safe condensate neutralizing pump be installed as close as possible to the appliance outlet.
- Condensate Neutralizing pump must be mounted on a level surface capable of supporting the weight of the unit when full of condensate, or mounted to a wall with proper mounting hardware, and checked to ensure unit is level on wall.
- For mounting, distance between center-point of the two mounting tabs is 19 3/8". Do not over-tighten mounting hardware.

## INSTALLATION

- Inlet piping at the acidic condensate inlet should not extend more that 1/4" below the clear cover. Extending the pipe further into the inlet opening may necessitate an atmospheric vent being placed between the appliance and the neutralizing pump.
- 2. Before start-up, verify that the clear cover is seated correctly into place, and tabs are inserted into appropriate slots in base.
- 3. 3/8" vinyl, pex or other non-metallic tubing must be used for discharge piping to the drain. Be sure tubing is properly clamped to the pump outlet.
- 4. Pump assembly has a built-in check valve.
- 5. Check to verify that media sack is not blocking flow under the inlet gate of the base assembly.
- 6. Fill neutralizing pump with water to verify proper operation.

#### MAINTENANCE

- 1. All service should be undertaken by a qualified professional.
- 2. Visually inspect unit for signs of leaking or damage.
- 3. Neutralizing pump media should be replaced at least once a year or when pH falls below local regulations. Neutralizing pump efficiency can only be determined by measuring pH level of condensate outflow. The use of an electronic meter is suggested, as pH test strips can give misleading results due to the lack of TDS in the condensate, a distilled liquid.
- 4. Remove the clear cover and then remove the fabric sack from the base. If needed unsnap the pump assembly from the base and dump out and rinse the base. Reinstall pump assembly on to the base and carefully place a new media filled fabric sack into the flow channel. Replace clear cover making sure to snap securely into place and test operation with appliance running.

Recharge Kit # 50RCK-S for use with model # NSP-50

#### LIMITED WARRANTY

All NeutraSafe products are warranted against defects in materials and workmanship for **ONE YEAR**. The warranty does NOT cover issues that result from misuse, improper installation, and/or failure to replace the media.