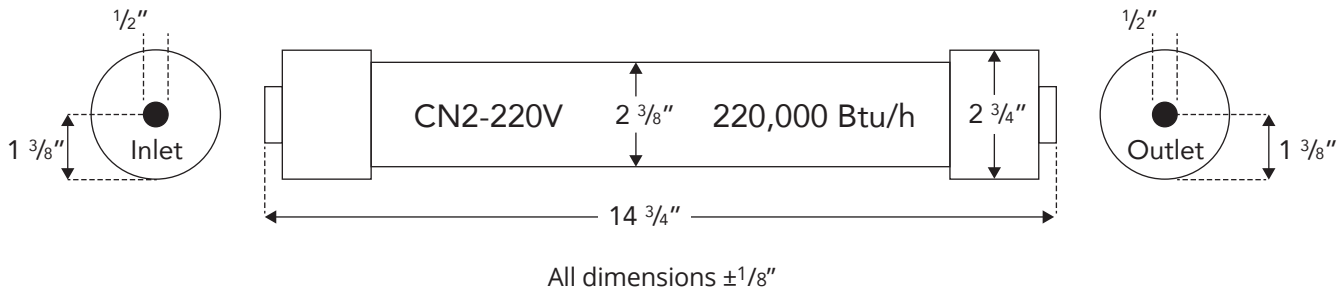




## Neutra-Safe® Vertical/Horizontal Condensate Neutralizer

### CN2-220V

#### Installation, Operation and Maintenance Manual



#### ⚠ WARNING ⚠

- Neutra-Safe condensate neutralizers should only be installed by a qualified professional.
- Read all instructions 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 neutralizer. All condensate drain lines must have a gas trap before entering the neutralization unit. Failure to comply could result in substantial property damage, severe personal injury or death.
- Neutra-Safe neutralizers 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, severe personal injury or death.

#### IMPORTANT

- All piping should be in accordance with relevant building and mechanical codes, as well as any local, state or federal regulations.
- Do not connect more than one appliance to each neutralizer.
- Neutralizer should be installed below all traps and condensate outlets.
- Do not use pipe dope on threaded fittings—use only Teflon tape. Neutra-Safe Model CN2-220V may be installed in the vertical or horizontal position. **Refer to page 2 for installation diagrams.**
- It is recommended that the neutralizer be installed before the condensate pump.
- All condensate traps should be primed before commencing operation of the appliance.
- Neutra-Safe condensate neutralizer media should be replaced at least annually or when pH falls below local regulations.

#### MOUNTING OPTIONS

- It is recommended that Neutra-Safe condensate neutralizers be installed as close as possible to the outlet of the gas trap. **Refer to page 2 for installation diagrams.**
- Use brackets provided for mounting neutralizer.

#### LIMITED WARRANTY

All Neutra-Safe 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.

## INSTALLATION

1. Neutra-Safe condensate neutralizers include built-in unions with ½" NPT tappings at either end.
2. Apply **TEFLON TAPE ONLY** to the threads of provided PVC socket adaptors and attach to neutralizer.

### **\*DO NOT OVER TIGHTEN\***

Over tightening can crack the end cap and create a leak. If over tightening should occur, replacement end caps and lock rings are available for purchase. Over tightening is not covered under warranty.

3. Identify suitable location for assembled condensate neutralizer. Observe direction of flow as indicated on neutralizer.
4. Position and secure the mounting brackets.
5. Prime and glue PVC pipe to fittings.  
**Note: If using flexible tubing, be sure to use hose clamps at barb fittings.**  
**Note: It is recommended that PVC pipe be used wherever possible as this will reduce any risk of tube kinking.**  
CN2-220V includes: (2) - ½" MPT x FPT 90's  
(2) - ½" MPT x Slip Adaptors  
(2) - ½" MPT x ¾" Slip Adaptors  
(2) - Snap in brackets  
**This allows many combinations for both vertical and horizontal installations.**
6. Route PVC pipe or tubing to drain or pump, maintaining a pitch of ¼" per foot.
7. If the condensing appliance does not have provisions for air admittance after the internal condensate trap, it may be necessary to add an atmospheric vent in the drain line before the neutralizer.
8. Fill condensate trap with water until flow is established through neutralizer.
9. Observe neutralizer during boiler operation to ensure unrestricted condensate flow.

## MAINTENANCE

1. All service items should be undertaken by a qualified professional.
2. Visually inspect unit for signs of leaking or damage.
3. Neutralizer media should be replaced at least once a year or when pH falls below local regulations. Neutralizer efficiency can only be determined by measuring pH level of condensate outflow with a quality pH meter.
4. Unscrew unions at both ends of neutralizer. If necessary, rotate cartridge to release O-ring.
5. Remove cartridge and dispose of old media. Rinse inside of cartridge. Add replacement media. Replacement media kit #22RCK-S.
6. Check to make sure that O-rings are in place before reinstalling cartridge. Stainless steel screen must be on inlet of cartridge when reinstalling. **Do not over-tighten. (see above)**
7. Prime flue gas trap with a minimum of 1 gallon of water.
8. Observe neutralizer during boiler operation to ensure unrestricted condensate flow.

**NOTE: Caution do not lose the O-rings at either end of cartridge.**

