Please Read And Save These Instructions

- Installation by anyone other than a qualified contractor voids the warranty.
- Product designed for residential installation only. Commercial installation voids warranty.
- Modification or alteration of product, parts, installation instructions or local safety codes voids warranty.
- Read our full warranty policy at the end of this document.

About the MHX3C Digital Humidistat

The MHX3C control provides low voltage control of most humidifiers. The humidistat uses a SPDT switch and is designed for wall mounting in the living area or mounting on the return air duct.

⚠ **WARNING!** Always TURN OFF POWER TO THE HVAC SYSTEM prior to installing or servicing the humidifier or humidistat. Improper operation can result in over or under humidification. Improper voltage can cause malfunction or damage to the control. All local building and electrical codes must be followed. The technical specifications for this product and the contents of the user manual are subject to change without notice.

⚠ **WARNING!** Do not set relative humidity too high during cold weather. Over humidification can result in condensation, structural damage and mold.

Breathe Healthier

Specifications

RANGE: 10% to 75% RH ELECTRICAL RATING: 30 VAC, 60 VA

The MHX3C can be configured for operation as a standard humidistat, high limit humidistat, or dehumidistat. When using this product as a standard humidistat terminals "NO" and "C" must be used. When using this product as a high limit humidistat terminals "NO" and "C" and must be used. When using this product as a dehumidistat terminals "NC" and "C" must be used. Use DHD3 Dial (GFI #7061) for the dehumidistat version.

MHX3C Locations

Wall or Duct Mount

FIG. 1
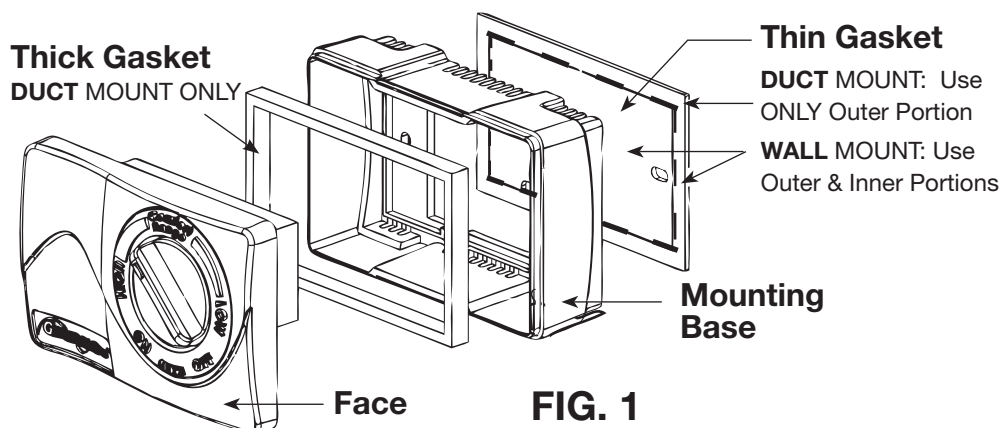
WALL MOUNTING INSTRUCTIONS - Humidistat/Dehumidistat Versions

1. Chose a location for the MHX3C about five feet above the floor on an inside wall with average room temperature and relative humidity conditions. Drill a small hole in the wall and run low voltage wiring to the location chosen. Pull about 6" of wire through the hole.
2. Gaskets: Use the entire thin mounting gasket (both inside and outside portions) to seal the wall opening or use foam tape to prevent drafts from affecting the humidistat operation. Do NOT install the thick gasket. (see FIG. 1)
3. Squeeze the top and bottom of the base to release the face of the humidistat.
4. Mount the base horizontally over the wires. Attach directly to the wall, using the two screws provided in the slotted holes.
5. Connect wires to screw terminals on the control assembly as shown in DIAGRAMS 1-5. Replace the face.

DUCT MOUNTING ON THE RETURN AIR - WALL BASE

Humidistat/Dehumidistat versions (optional)

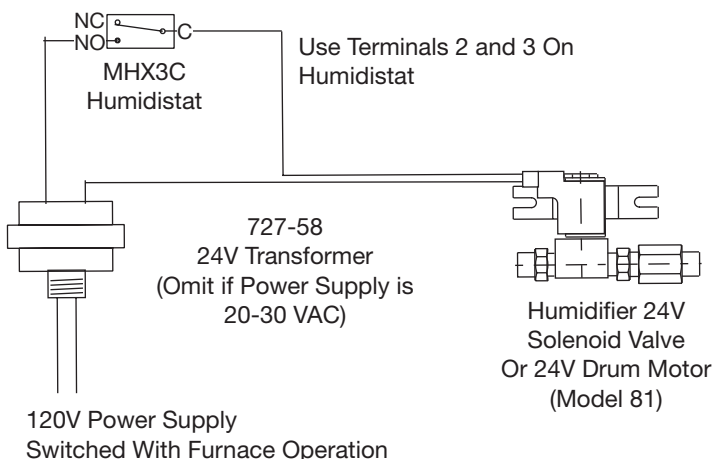Do not install the humidistat on the warm air duct or within 48" of UV light.

1. Locate the humidistat at least 24" upstream of the humidifier or bypass on the return air duct. Avoid areas of direct radiation like secondary heat exchangers in the fan compartment. Cut a square hole in the duct 2-1/4" wide and 1-3/4" tall.
2. Gaskets: Remove the inner portion of the mounting gasket and discard. Use the outer portion to seal between the plastic base and the duct. Place the thick gasket inside the wall mount base to seal off air entering through the vents. Line up the base with the cut out and accurately mark the holes thru the plastic duct mount plate. (see FIG. 1)
3. Remove the humidistat and drill four 3/32" mounting holes.
4. Place the outer portion of the mounting gasket on the plastic base and mount the base with four screws. Low voltage wire may enter the humidistat under the gasket.
5. Connect wires to screw terminals on the control assembly as shown in DIAGRAMS 1-5. Replace the face.
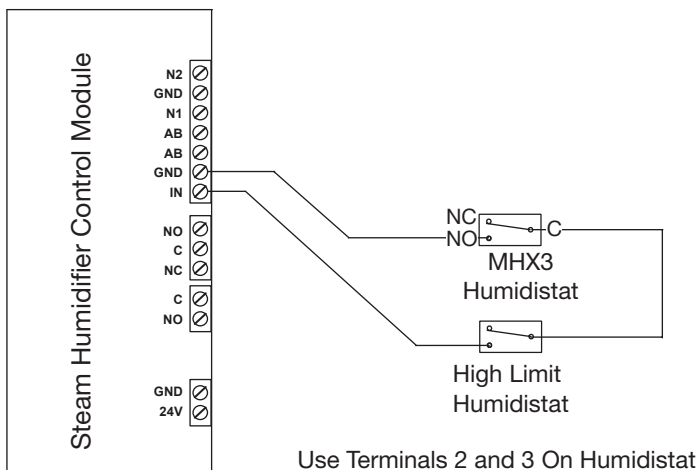
⚠️ **WARNING: ALL WIRING SHOULD COMPLY WITH LOCAL ELECTRICAL CODES.**

Wiring Diagrams

DIAGRAM 1: Wiring 24V Bypass Humidifier (Models 570, 900, 1042LH, 1099LHS, SL16)

NC
NO — C

MHX3C Humidistat

Use Terminals 2 and 3 On Humidistat

727-58 24V Transformer (Omit if Power Supply is 20-30 VAC)

Humidifier 24V Solenoid Valve Or 24V Drum Motor (Model 81)

120V Power Supply Switched With Furnace Operation

DIAGRAM 2: Wiring High Limit Humidistat With Elite Steam Humidifiers

Steam Humidifier Control Module

N2
GND
N1
AB
AB
GND
IN
NO
C
NC
C
NO
GND
24V

NC
NO — C

MHX3 Humidistat

High Limit Humidistat

Use Terminals 2 and 3 On Humidistat

DIAGRAM 3: Wiring 120V 1137/1000 Power Humidifiers With Furnace Supplied 120V

Humidifier Control Leads (Yellow Wires)

Humidifier Power Cord

Humidifier 24V Aux Power (Red Wires)

MHX3C Humidistat

NC
NO — C

(Not Used, Attach Wire Nuts to Each Lead) Do Not Touch Together!

G

L1   N

120V Switched With Furnace Heating Cycle
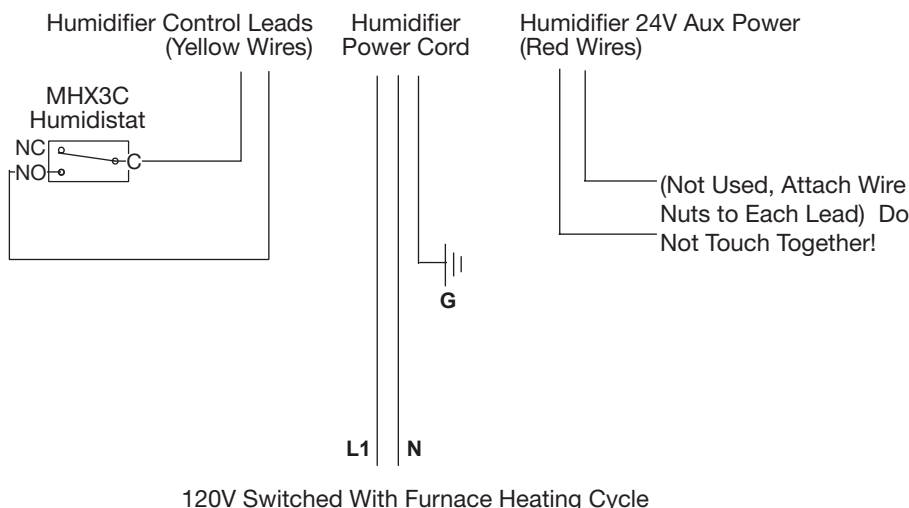
DIAGRAM 4: Dehumidifier

Dehumidifier

Use Terminals 2 and 1 For Dehumidistat

MHX3C Humidistat

NC
NO — C

DH
D
Y
W
C
G1
G2
S1
S2
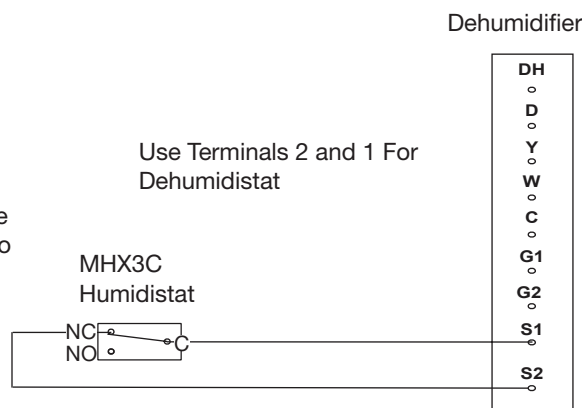
DIAGRAM 5: Wiring 120V 1137/1000 Power Humidifiers With Constant 120V Supply

Humidifier Control Leads (Yellow Wires)

Humidifier Power Cord

Humidifier 24V Aux Power (Red Wires)

NC
NO — C

MHX3C Humidistat

Relay

(Not Used, Attach Wire Nuts to Each Lead) Do Not Touch Together!

G

727-58 24V Transformer (Omit if Power Supply is 20-30 VAC)

L1   N

120V Switched With Furnace Heating Cycle

120V Constant Voltage
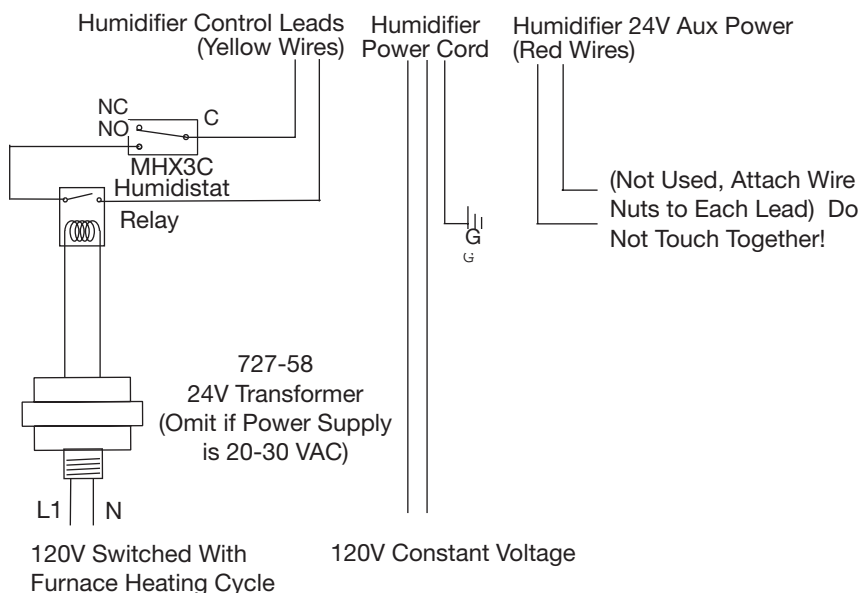
Optional Accessories

CRD3 Humidistat Dial GFI #7058

DHD3 Dehumidistat Dial GFI #7061

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Fresh Indoor Air Quality

Troubleshooting

Humidifier turns on and off repeatedly:
1. If mounted on wall, verify wire clearance hole in wall is sufficiently insulated to prevent drafts from affecting the humidistat.
2. If mounted on return air duct, verify humidistat is at least 24" upstream of humidifiers air discharge.

Humidifier operates continuously:
1. When the humidity in the home is less than the knob setting on the humidistat the stat will operate the humidifier until the humidity is higher. Reduce knob setting.
2. Verify function of solenoid valve.

No humidifier operation in "ON" mode:
1. Set the thermostat to operate both furnace burner and blower. Operation may be necessary for system power.
2. Verify terminals "NO" and "C" are used on the humidistat. These are the contacts for humidification.
3. Check voltage at terminals "NO" and "C". There should be no voltage for an Elite Steam or 1137/1000 power humidifier. Voltage should be 20-30 VAC from most others.
4. Verify humidifier operation by bypassing the humidistat.

Ideal humidity is not achieved:
1. Excess air infiltration. Seal sources of air loss.
2. Technical fault with humidifier. Check water supply, electrical connections and condition of the evaporator pad. Verify metering orifice at the solenoid valve is not obstructed.
3. Humidifier run time is too short. Switch water supply to hot water if appropriate (use copper tubing).
4. Humidifier is undersized. Switch water supply to hot water if appropriate (use copper tubing). Add additional unit(s) or replace existing unit with a larger unit.

Using the MHX3C

To adjust humidity using your MHX3C, simply turn the dial to the left or right. Turning to the left, towards the number 75, increases humidity output. Turning the dial to the right, or the number 10, decreases the humidity output.

After each adjustment, wait 2-3 days before adjusting again. This is how long it can take for new humidity levels to reach all areas of your home.

Ideal humidity is between 40 and 60%. See additional recommended settings to the right.

At Outside Temperature		Recommended Setting
-20°F	-29°C	15%
-10°F	-23°C	20%
0°F	-18°F	25%
+10°F	-12°C	30%
+20°F	-7°C	35%
+30°F	-1°C	40%

Limited Warranty

This humidistat is warranted to the consumer against defects in materials and workmanship for a period of one year from the date of installation. Defective parts will be repaired without charge except for removal, reinstallation and transportation costs. To obtain repair service under this limited warranty, the consumer must send the defective part to the manufacturer.

There are no express warranties covering this humidistat other than set forth above. The implied warranties of merchantability and fitness for a particular purpose are limited in duration to one year. The manufacturer assumes no liability in connection with the installation or use of this product, except as stated in this limited warranty. The manufacturer will in no event be liable for incidental or consequential damages.

Any questions pertaining to this limited warranty should be addressed to the manufacturer. USA: The manufacturer has elected not to make available the informal dispute settlement mechanism which is specified in the Magnuson-Moss Warranty Act.

USA: www.GeneralFilters.com
USA: Toll Free (866) 476-5101

Canada: www.CGFProducts.com
Canada: Toll Free (888) 216-9184

If you do not have on-line access, please mail a postcard with your name, phone number, email address, product purchased, model number, date of purchase, serial number, and contractor contact information to:

USA: **General Filters, Inc. 43800 Grand River Ave Novi, MI 48375**
Canada: **400 Midwest Road Toronto, ON, M1P 3A9 Canada**

⚠ WARNING: Turn off power before performing maintenance.
⚠ CAUTION: Maintenance should be performed only by a qualified contractor.