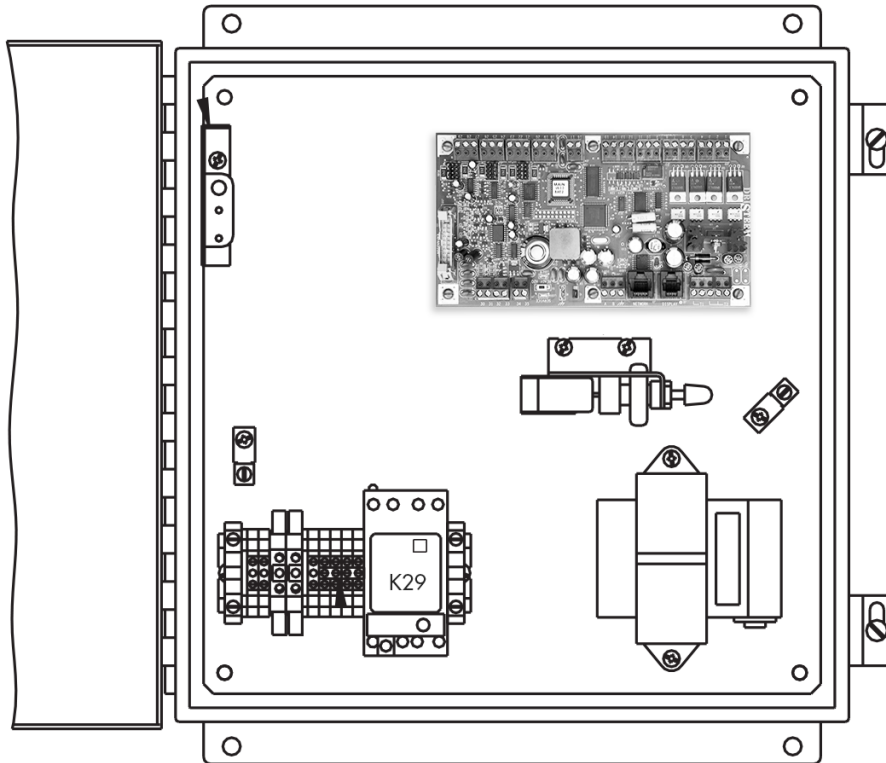


## Vapor-logic® version 3 to Vapor-logic version 6 Field Conversion Instructions: STS® Humidifiers

The drawing below depicts the Vapor-logic version 3 board orientation in an STS humidifier control cabinet.

Vapor-logic version 3 board in STS control cabinet



1. Leave the wires connected to the Vapor-logic version 3 board terminals. Use needlenose pliers to pull the terminals plugs off of the pins.
2. Remove the six screws holding the Vapor-logic version 3 board to the sub-panel, and remove the board. When removing the screws, take care to prevent the standoffs behind the board from falling down the subpanel and into other electrical components.

**Note:** The Vapor-logic version 6 board has adhesive-backed standoffs that adhere to the subpanel. For the best adhesion, make sure the subpanel surface is clean and dry. Proper Vapor-logic version 6 board orientation is shown in Figure 3-1.

3. Remove the adhesive backing paper from the standoffs, and press the Vapor-logic version 6 board onto the subpanel as close as possible to the original footprint of the Vapor-logic version 3 board.
4. See Figure 3-1. The Vapor-logic version 3 disconnections and Vapor-logic version 6 connections needed for this conversion are labeled.

### WARNING

#### Fire and electrical shock hazards

This page provides important safety instructions; it is intended to supplement — not replace — the humidifier's Installation, Operation, and Maintenance Manual (IOM). Read the IOM that was provided with the humidifier before performing service or maintenance procedures on any part of the system. Failure to follow all warnings and instructions could produce the hazardous situations described here and in the IOM, resulting in property damage, personal injury, or death.

If the IOM is missing, go to [www.dristeem.com](http://www.dristeem.com) to download a replacement.

Improper installation, adjustment, alteration, service, maintenance, or use can cause fire, electrical shock, and other hazardous conditions. These hazardous conditions could cause personal injury, property damage, or death.

To prevent hazardous conditions, read all warnings; lock all power disconnect switches in the OFF position before removing any access panels; and consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use only factory authorized and listed kits or accessories when modifying this product.

**Note:** If literature shipped with the humidifier is not available, historical literature is available at [www.dristeem.com](http://www.dristeem.com).

DriSteem® humidifiers are warranted according to the terms and conditions of the standard two-year Limited Warranty effective when the humidifier was purchased. See the literature that was shipped with the humidifier for warranty information.

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5. a. *If the steam valve is controlled by DriSteem:*

Disconnect wire #434 from Vapor-logic version 3 terminal **34**, and connect it to the Vapor-logic version 6 P19 terminal **STEAM**.

- b. *If the steam valve is pneumatic or electric and controlled by others, with humidifier freeze protection option (solenoid valve in steam supply to heat exchanger):*

Remove relay K29 from the subpanel, and

- Remove wire #405 from Vapor-logic version 3 terminal **5**
- Remove wire #406 from Vapor-logic version 3 terminal **6**
- Remove wire #405A from relay K29
- Remove wires #422 and #423 from relay K29 and Vapor-logic version 3 terminals **22** and **23**
- Remove wire #000 from relay K29

Connect the freeze protection solenoid wire (#406) to Vapor-logic version 6 P16 terminal **PV/CA**. Connect wire #405 to a DIN rail terminal **c**.

- c. *If the orange and yellow wires from the steam valve end switch connect to Vapor-logic version 3 terminal P15 (Electric steam valve):*

Remove the orange wire from DIN rail terminal **H**, and remove the yellow wire from Vapor-logic version 3 terminal **5** (the other ends of these wires are connected to the valve end switch). Connect the orange wire to a Vapor-logic version 6 terminal **24VAC**, and connect the yellow wire to Vapor-logic version 6 P15 terminal **PVsw**. Note that STS-800 humidifiers have two sets of orange and yellow wires.

- d. *Pneumatic steam valve:*

Remove wire #802 from relay K29 and from PE switch S29. Remove wire #801 from the PE switch and from DIN rail terminal **h**. Add two new wires for the PE switch:

- One from PE switch terminal **C** to Vapor-logic version 6 P15 terminal **24VAC**.
- One from PE switch terminal **N.O.** to Vapor-logic version 6 P15 terminal **PVsw**.

**Note:**

If none of the configurations above describe the steam valve control wiring of your STS humidifier, please call DriSteem Technical Support (800-328-4447) for assistance.

6. Disconnect the wires from Vapor-logic version 3 terminals **1** and **3**, and connect them to the following Vapor-logic version 6 P17 terminals: Connect wire #401 to **FILL**, and connect wire #403 to **DRAIN**.
7. Disconnect wires #402 and #404 from Vapor-logic version 3 terminals **2** and **4**. Tie them together, and pigtail them to a single common that goes to a DIN rail terminal **c**.

**There are no dedicated common terminals on the Vapor-logic version 6 board.** That is why, in this step, the Vapor-logic version 3 commons get tied together and pigtailed to a single wire connected to DIN rail terminal **c**. These terminals are rated for only two wires, so not all commons can be run back to them. See the gray text box in Figure 3-1.

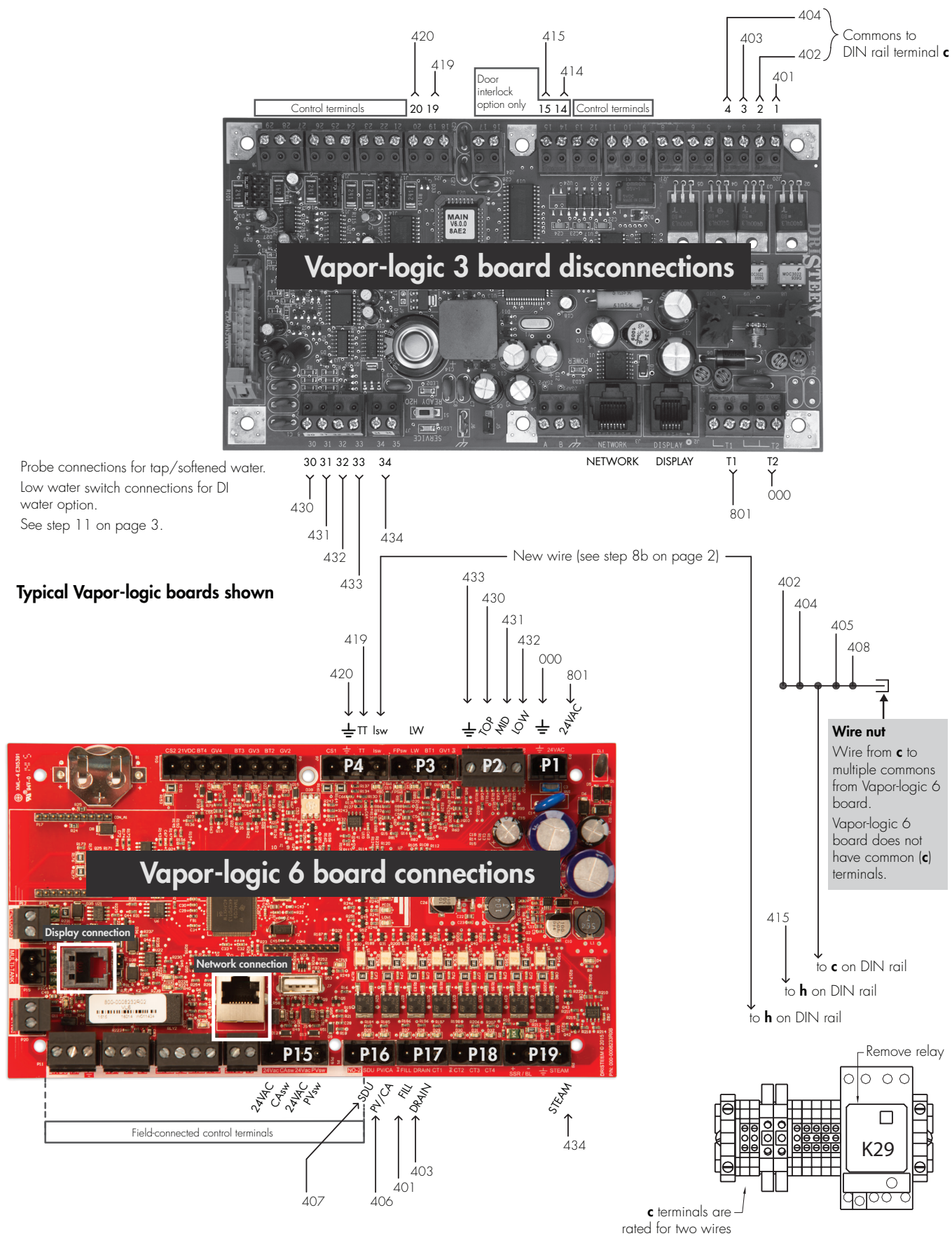
8. a. *If there is a door interlock switch (optional; see photo at right):*  
Disconnect wires #414 and #415 from Vapor-logic version 3 terminals **14** and **15**. Connect wire #414 to a DIN rail terminal **h**, and connect wire #415 to the Vapor-logic version 6 P4 terminal **lsw**.
- b. *If there is not a door interlock switch:*  
Connect a new wire to Vapor-logic version 6 P4 terminal **lsw**. Connect the other end of the wire to a DIN rail terminal **h**.

Door interlock switch in control cabinet



*Continued on back cover*

**FIGURE 3-1: VAPOR-LOGIC VERSION 3 BOARD DISCONNECTIONS AND VAPOR-LOGIC VERSION 6 BOARD CONNECTIONS**



### Expect quality from the industry leader

Since 1965, DriSteem has led the industry with innovative methods for humidifying and cooling air with precise control. Our focus on ease of ownership is evident in the design of the Vapor-logic controller. DriSteem also leads the industry with a Two-year Limited Warranty and optional extended warranty.

#### For more information

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9. Disconnect the wires from Vapor-logic version 3 terminals **19** and **20**, and connect them to the following Vapor-logic version 6 P4 terminals: Connect wire #419 to **T1**, and connect wire #420 to **T2**.
10. Disconnect wires #801 and #000 from Vapor-logic version 3 terminals **T1** and **T2**. If the terminals are not marked, see the photo at right. Connect the wires to the following Vapor-logic version 6 P1 terminals: Connect wire #801 to **24VAC** and wire #000 to **⏏**.
11. *If the humidifier uses tap/softened water:*  
Disconnect the wires from Vapor-logic version 3 terminals **30**, **31**, **32**, **33**, and connect them to the following Vapor-logic version 6 P2 terminals: Wire #430 to **TOP**, wire #431 to **MID**, wire #432 to **LOW**, and wire #433 to **⏏**.
12. *If the humidifier uses the Area-type fan option or the SDU option:*  
Disconnect the wires from Vapor-logic version 3 terminals **7** and **8**. Connect wire #407 to the Vapor-logic version 6 P16 terminal **SDU**. Connect wire #408 to a DIN rail terminal **c**.
13. The kit was shipped with a Vapor-logic version 6 keypad/display. Remove the Vapor-logic version 3 keypad/display and replace with the Vapor-logic 6 keypad/display. Reuse the mounting screws. Plug one end of the cable into the Vapor-logic version 6 keypad/display, and plug the other end into the Vapor-logic version 6 board display connection (shown in Figure 3-1).
14. External connections: Refer to the Vapor-logic version 3 wiring diagram and the Vapor-logic version 6 external connection requirements in the VL-1 wiring diagram shipped with the conversion kit.

Lower-right corner of Vapor-logic version 3 board

