Dectron®
DRY-O-TRON

DEHUMIDIFIERS

Field Installation Manual

Dectron.com

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General Information

Document Scope

This manual provides instructions for field installed components required depending on the unit's options.

Additional information regarding installation, maintenance, and equipment commissioning and auxiliary devices is provided with the system and can also be obtained from the manufacturer.

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Schedule / Modify a Start-up:
Scheduling@DehumidifiedAirServices.com
Inquire about Warranty:
Warranty@DehumidifiedAirServices.com
Order Parts:
Parts@DehumidifiedAirServices.com
All Other Product Support:
Support@DehumidifiedAirServices.com

Operating Safety (Warnings, Cautions, and Notes)

FOR YOUR SAFETY: READ BEFORE PERFORMING ANY OPERATIONS, MAINTENANCE OR SERVICE TASKS!

Only qualified technicians should install, operate, maintain or service mechanical equipment including current dehumidification system.
Read this manual before performing any tasks to familiarize yourself with the equipment as well as with any potential hazards. Always exercise caution!

Beware of electrical power and high electrical voltage!

- Follow proper safety procedures – lockout, tagout, and other respective procedures
- Failure to follow safety procedures can result in serious injury or death

Beware of moving parts and hot surfaces!

- Make sure to stop all moving parts (fans, blowers, etc.) before accessing the equipment's internal compartments
- Be aware of hot surfaces (hot refrigeration, space heating pipes, coils, heaters, etc.)

Beware of pressures and chemicals!

- Operating equipment may contain glycol-based cooling media mixture under pressure!

The following warnings, cautions, and notes appear throughout this manual and referenced documentation whenever special care must be taken to avoid potential hazards that could result in equipment malfunction or damage, personal injury, or death.

⚠ WARNING
Indicates a potentially hazardous situation that could result in serious injury or death if handled improperly.

⚠ CAUTION
Indicates a potentially hazardous situation that could result in moderate injury or equipment damage if handled improperly.

Note
Indicates a situation that could result in equipment damage or improper/ineffective operation if handled improperly.

Attention: Installation and Service Contractors

⚠ **WARNING!** Any work (installation, start up, service, maintenance, repair, etc.) on any mechanical equipment (HVAC system, dry cooler, etc.) must be performed in accordance with manufacturer's recommendations as well as submittal documentation, local Codes and Regulations, and appropriate field practices. Failure to do so could result in personal injury, equipment damage or malfunction, and will void equipment warranty. Only qualified and properly trained individuals should perform tasks on this equipment.

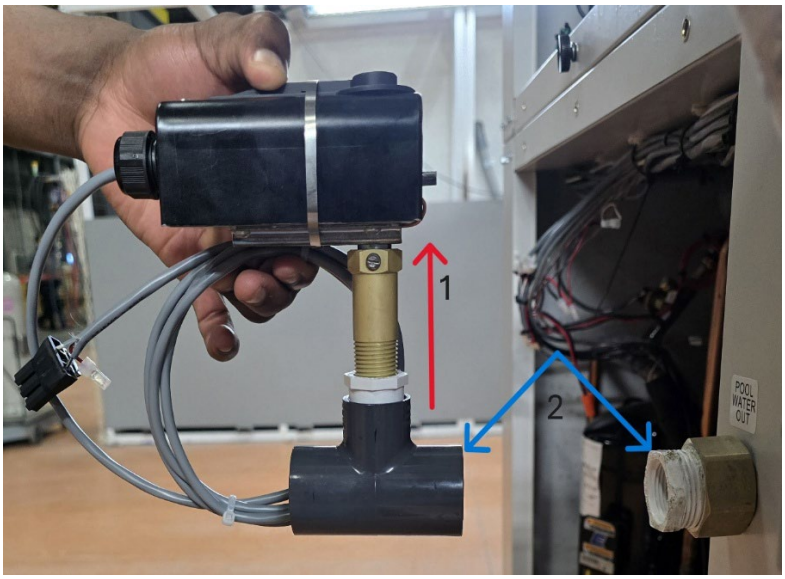
Attention: Maintenance Team

⚠ **CAUTION.** To ensure equipment longevity and proper and efficient operation, this mechanical equipment should be maintained properly and regularly. Failure to do so could negatively affect system performance. It could also lead to equipment damage, malfunction, premature wear and tear and may void equipment warranty.

Pool High Limit Controller

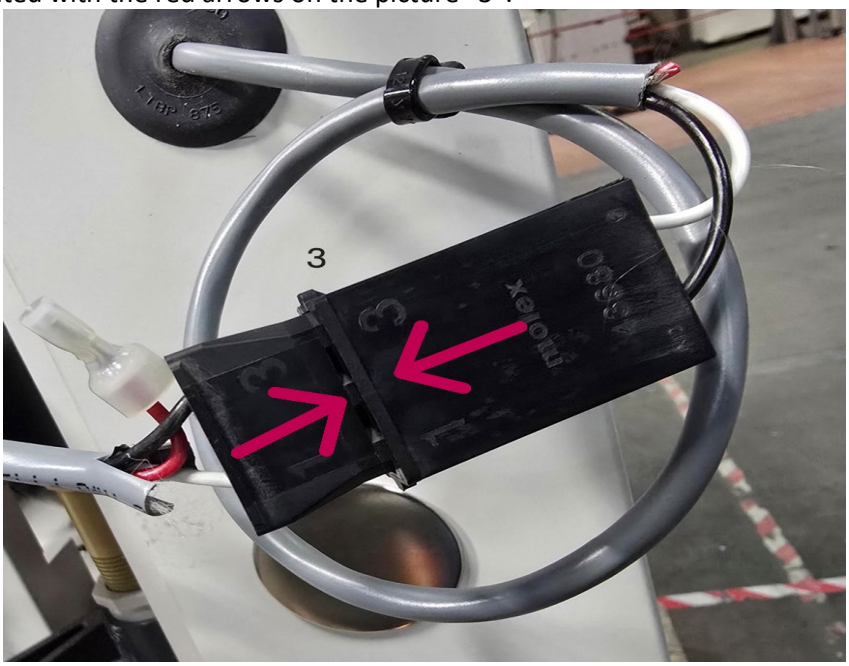
Piping Connection

Follow the orientation of the controller during assembly (as indicated by the red arrow on the picture “1”
Use an appropriate pipe to connect the pool High limit controller to the pool water OUT connection of the unit as indicated with the blue arrow “2”



Electrical connection

Connect the control wire (female part) of the high limit controller with the (male part) connector already wired on the unit as indicated with the red arrows on the picture “3”.

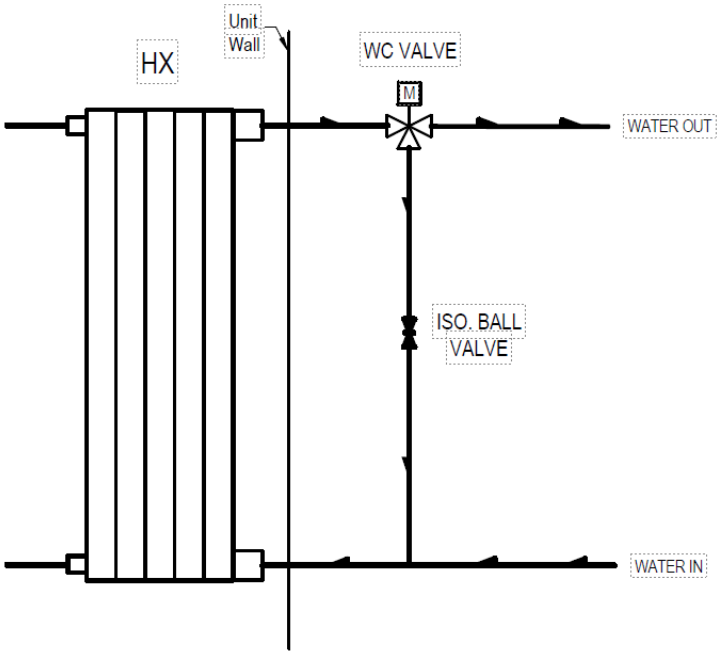


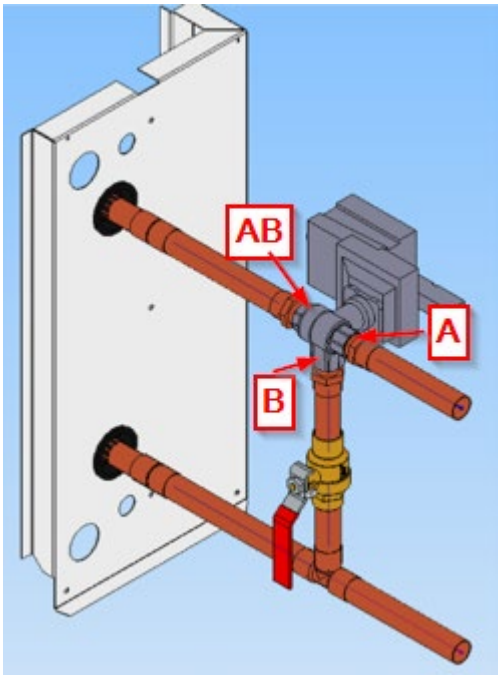
WATER-COOLED VALVE

Piping Connection

Follow picture below for proper connection. Valve must be installed whenever the unit is utilizing a third-party condenser loop of any kind

The valves are typically stamped/designated with ports “A”, “B”, and “AB”.

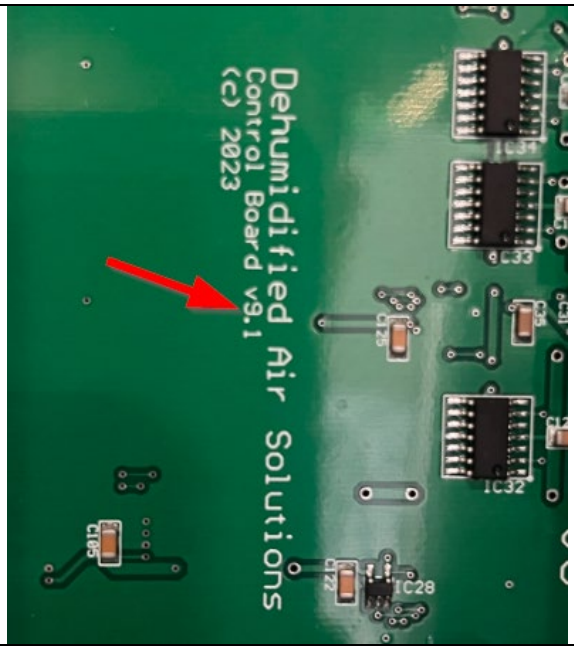
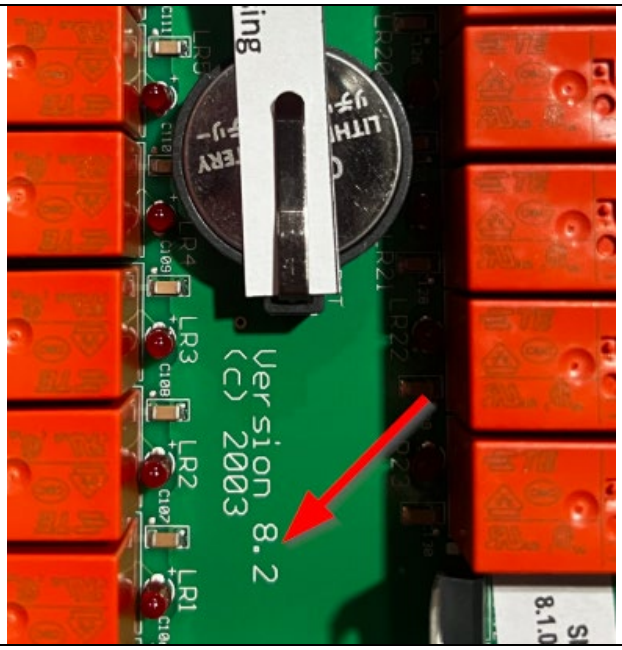




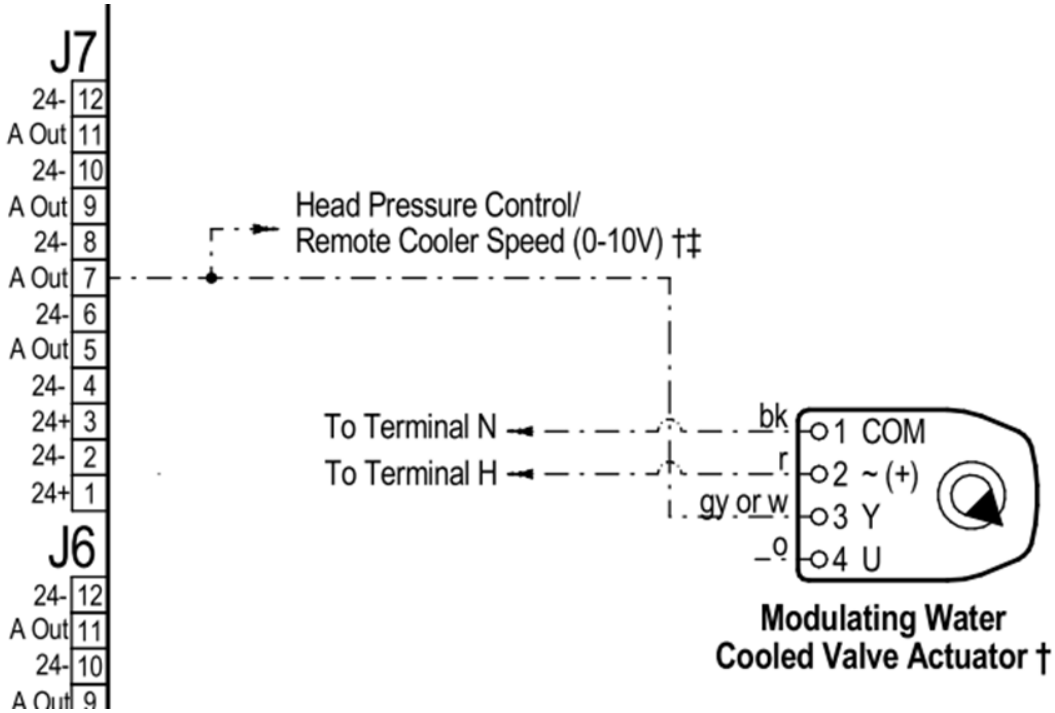
Electrical connections

Follow the proper electrical connection located on the field wiring diagram.

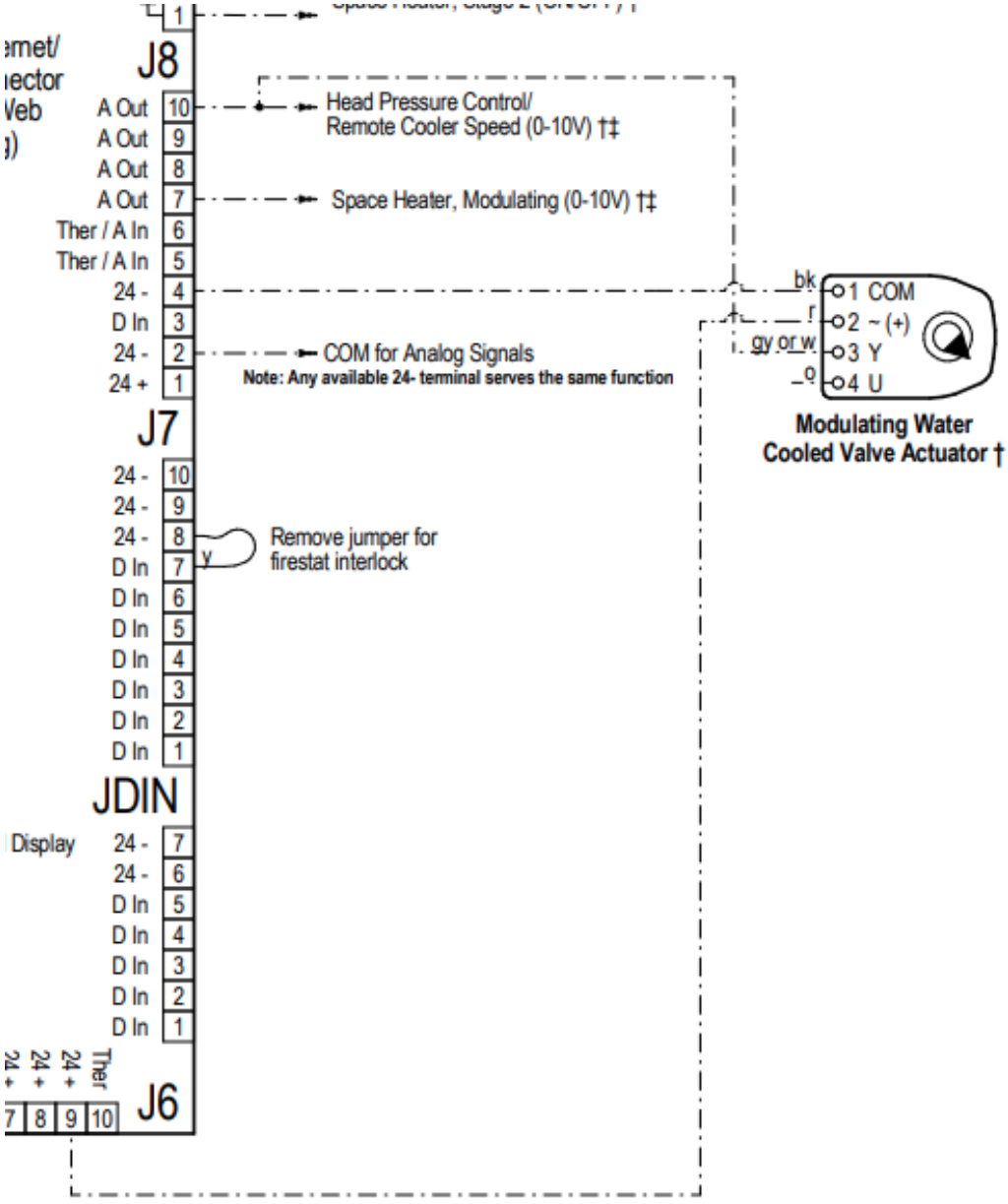
Validate if the board is version 8 or version 9

Version 9	Version 8
	

Version 9 Board



Version 8 Board



Pool Water Temperature Sensor

The dehumidifier normally requires constant waterflow through (to ensure proper automatic control over pool heating feature); however, if requested, it could be equipped with means to control auxiliary pump. This set up would also require a pool water temperature sensor to be installed in the external pool water manifold/piping.

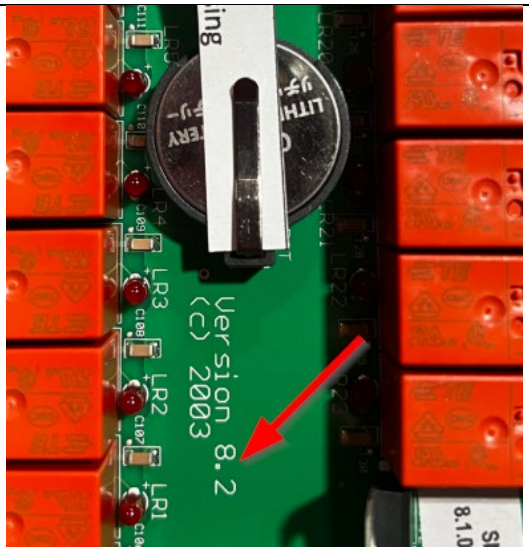
By default, full pool water flow should be established to the dehumidifier and remain present 24/7. However, should an auxiliary pump be used and flow to the dehumidifier be desired only when utilizing compressor circuit pool heating, the Smart Pump feature may be utilized.

To utilize the Smart Pump feature, a pool water temperature sensor must be installed within a temperature sensor well in the primary pool water piping and wired to the dehumidifier. The auxiliary pump enable circuit must also be wired to the dehumidifier. When used, the dehumidifier will enable the auxiliary loop pump supplying pool water flow to the dehumidifier only when the unit is operating in pool water heating mode.

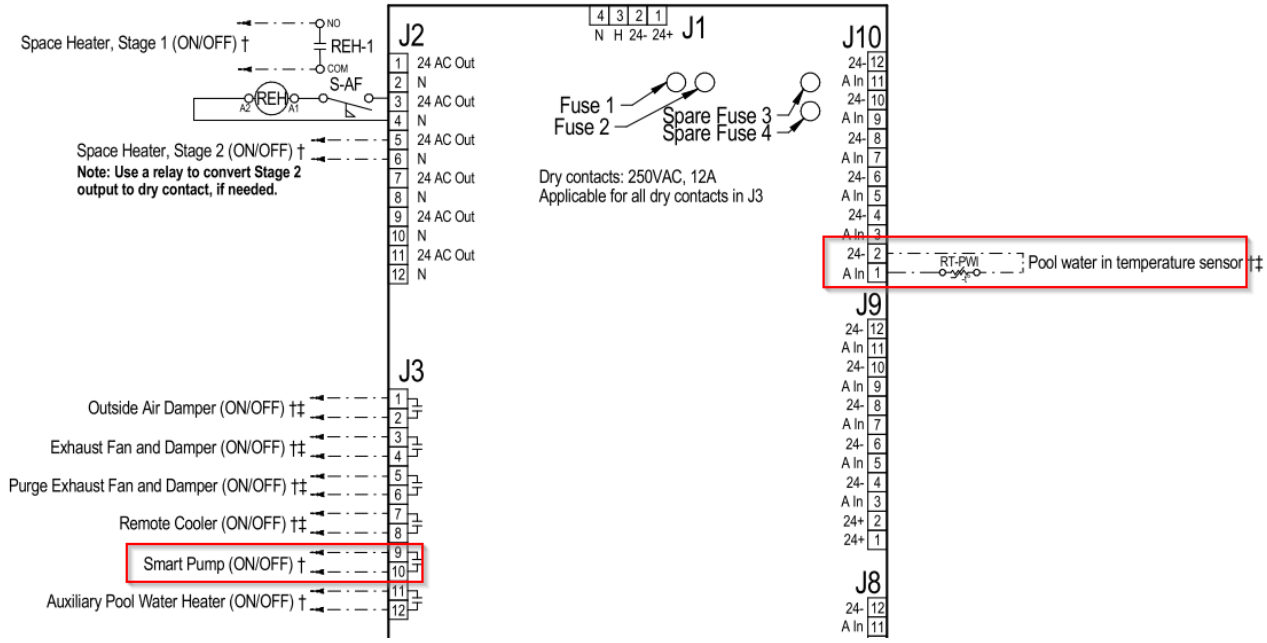
Electrical connection

Follow the proper electrical connection located on the field wiring diagram

Validate if the board is version 8 or version 9

Version 9	Version 8
	

Version 9 Board



Version 8 Board