



# OPERATION AND SAFETY INSTRUCTIONS VCool System - NEMA Type 4

## MODEL: VC-0916-004H, VC-1716-004H, VC-2516-004H

## IMPORTANT

## READ ALL INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THIS PRODUCT.

### INTRODUCTION

A VCool System is designed to use filtered compressed air to cool industrial control cabinets without the use of any refrigerants. Hot air in the cabinet is vented to the surroundings through a built in relief valve.

### COMPRESSED AIR SUPPLY

The compressed air supply must be filtered (5 micron maximum) to remove water and dirt. If oil is present in the compressed air supply, remove the oil using a 0.01 micron (maximum) air filter. Change filter elements as needed.

### INSTALLATION AND OPERATION

A VCool must be installed in a vertical position on a flat horizontal surface to maintain the NEMA Type 4 rating of the cabinet. When supplied with 80 PSIG compressed air pressure, the cabinet will be pressurized up to 16" water gauge. In order to maintain a lower cabinet pressure additional venting might be required. When a thermostat is supplied it must be installed <u>inside</u> the cabinet to maintain the NEMA Type 4 rating. The thermostat is preset to 90°F, but can be easily readjusted using the temperature indicator dial. All wiring must be installed in customer-supplied liquid tight conduit.

### MAINTENANCE

A VCool has no moving parts and can be disassembled for cleaning.

### WARRANTY

Pentair Technical Products Hoffman brand products will be replaced or repaired if found to be defective due to manufacture within one year from the date of invoice. Pentair Technical Products makes no specific warranty of merchantability or warrant of fitness for a particular purpose

## WARNING COMPRESSED AIR COULD CAUSE DEATH, BLINDNESS OR INJURY.

- 1. Do not operate a VCool at compressed air pressure above 150 PSIG (10.3 Bar).
- 2. Do not operate a VCool at line temperatures above 110°F (43° C).
- 3. Avoid direct contact with compressed air.
- 4. Do not direct compressed air at any person.
- 5. When using compressed air, wear safety glasses with side shields.

#### NOTE

THERE IS NO NEED TO LIMIT COMPRESSED AIR PRESSURE TO A MAXIMUM OF 30 PSIG (2 BAR). IT IS NOT POSSIBLE TO BLOCK THE FLOW OF AIR FROM A VCool TO REGISTER 30 PSIG (2 BAR) ON A TEST GAUGE.

## INSTALLATION

- 1. The VCool System requires a 1 1/2 knockout for mounting the VCool Cooler. The VCool Cooler must be mounted in a vertical orientation (with the blue cap up) to maintain the NEMA 4 rating.
- 2. The thermostat must be mounted inside the enclosure to maintain the NEMA 4 rating. Mount the thermostat on the supplied section of DIN rail and connect wiring as shown below.
- 3. The VCool is self venting no secondary relief vent is required.

