



# OPERATION AND SAFETY INSTRUCTIONS Vortex Cooler™ System - NEMA 4

MODELS :727, 737, 747\*, 757, 767, 787, 797\* 787-35H, 797-35H, 7875, 7975\* (\* add FBSP for 230V)

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

#### INTRODUCTION

A Vortex Cooler™ 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 in the Vortex Cooler.

#### **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. For assistance in selecting a compressed air line size, contact your local authorized distributor or ITW Vortec.

#### **INSTALLATION AND OPERATION**

Vortex Coolers must be installed in a vertical position on a flat surface to maintain the NEMA 4 rating of the cabinet. When supplied with 80 PSIG compressed air pressure the cabinet will be pressurized up to 16" water gauge. When a thermostat is supplied with a Vortex Cooler System, the thermostat must be installed <u>inside</u> the cabinet to maintain the NEMA 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 liquid tight conduit.

#### **MAINTENANCE**

Vortex Cooler Systems have no moving parts and can be disassembled for cleaning.

#### WARRANTY

Compressed air products manufactured by ITW Vortec will be replaced or repaired if found to be defective due to manufacture within two years from the date of invoice. ITW Vortec 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 Vortex Cooler at compressed air pressures above 150 PSIG (10.3 Bar).
  - 2. Do not operate a Vortex Cooler 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 VORTEX COOLER TO REGISTER 30 PSIG (2 BAR) ON A TEST GAUGE.

#### LIT0160

For information contact your local authorized distributor or:

ITW Vortec An Illinois Tool Works Company 10125 Carver Road Cincinnati, Ohio 45242-4798 513-891-7474 **800-441-7475** www.itwvortec.com

Fax 513-891-4092 techsupport@vortec.com

### **Assembly**

Vortex Cooler requires (1) 1-1/2 knock out for mounting through cabinet wall. Thermostat (if supplied) must be mounted inside cabinet to maintain NEMA 4 rating.

