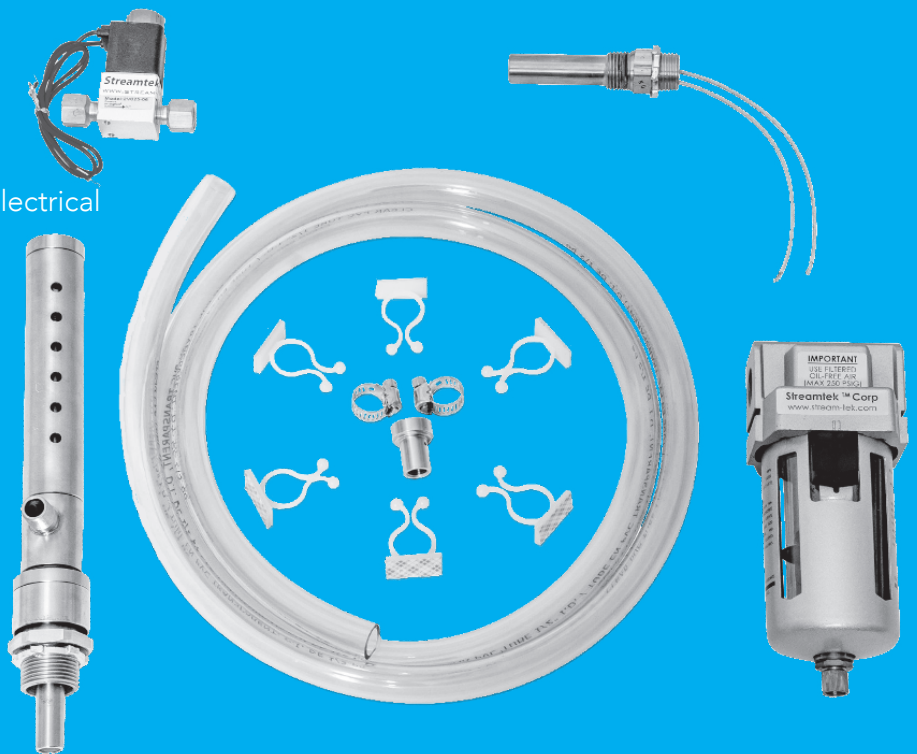


Cabinet Panel Cooler

Installation & Maintenance Guide

Cabinet Panel Coolers are an affordable, low maintenance, and easy to install alternative for thermal management of control panels and electrical cabinets. These panel cooling systems incorporate a vortex tube to produce cold air from compressed air – with no moving parts.



Version 1.0



CONTACT

ADDRESS

Supreme Air Products Corp,
5-2324 Hurontario Street
Suite 184,
Mississauga ON,
L5A 4K4, Canada

PHONE & FAX

US & Canada : 1-289-236-2001
Total Free: 1-800-470-7202

ONLINE

Sales Email: sales@supremeairproducts.com
Tech Email: support@supremeairproducts.com

Website: www.supremeairproducts.com

01 Recommended Hose Runs

** Do not use restrictive fittings such as quick couplings/connects. They can “starve” your Cabinet Panel Cooler bycausing excessive line pressure drop.

LENGHT OF RUN	SIZE OF PIPE/HOSE
1 - 25ft	Use 1/4" pipe or 3/8" air hose
26 - 50ft	Use 3/8" pipe or 1/2" air hose
51ft and above	Use 1/2" pipe or larger

02 Compressed Air Supply

ALWAYS USE a minimum 5 micron filter with a float type auto drain. All Supreme Air Products auto drain air filters are float actuated to eliminate the possibility of water flow into the enclosure, even during continuous operation. To prevent problems associated with oil, use a properly sized oil removal filter with at least a .3 micron rating. This should be installed downstream from automatic drain filter separator. Install ALL filters within 10 to 15 feet (3 to 4.6m) of the cooling unit.

NOTE: All Supreme Air Products Cabinet Panel Coolers are designed to use normal shop air supplies of 80 to 100 PSIG (5.5 to 6.9 BAR). Our *Adjustable Thermostat* paired with a Solenoid can drastically minimize your compressed air usage and should be used whenever possible.

03 Using the Supreme Air Products Cabinet Panel Cooler

Your Supreme Air Products Cabinet Panel Cooler MUST be mounted on the top only (vertically). The Supreme Air Products Cabinet Panel Cooler is very easy to install through a 1-1/8" diameter hole in the enclosure.

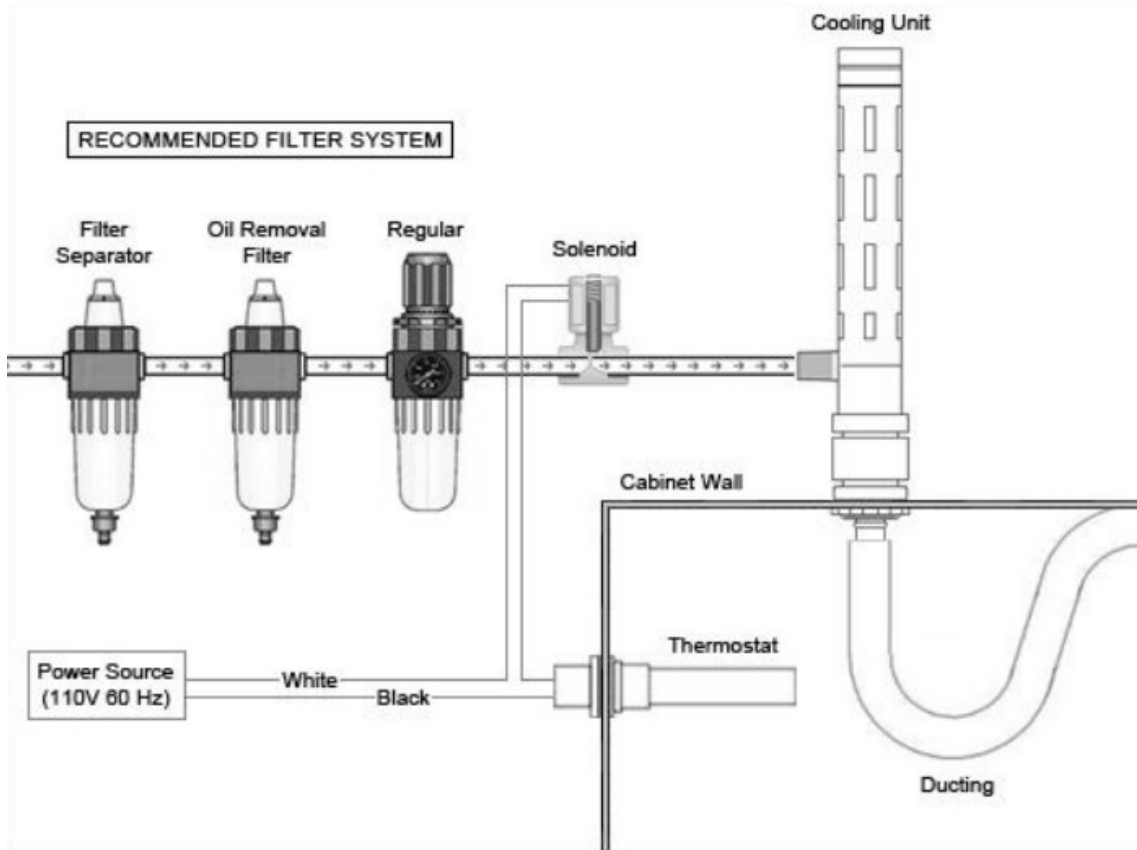
Close off all vents or other openings that may draw in surrounding air, this is especially important in warm or hot high humidity environments. Your Cabinet Panel Cooler incorporates a low pressure relief valve for both the cabinet air exhaust and vortex tube. This valve closes and seals when your cooler is not operating to maintain the integrity of your enclosure. Relocate any external fans inside the enclosure to help circulate the internal cooled air.

04 Thermostat / Solenoid Valve

The Supreme Air Products Cabinet Panel Cooler may be either run constantly or, can use on-off control with an adjustable thermostat and solenoid. The thermostat that is available from Supreme Air Products can be mounted on a bracket inside the enclosure or through the enclosure wall. The thermostat is not position sensitive and should be mounted in a hot area inside the enclosure. The thermostat should be connected to the hot line supplying the solenoid valve. It is normally open, and closed when actuated (when temperature rises). In turn, all Solenoids that are available from Supreme Air Products have a valve which is normally closed, and open when actuated. Please refer to Thermostat/Solenoid instructions for additional detailed information.

05 Application 06 Troubleshooting & Maintenance

05 Cabinet Panel Cooler Application



06 Troubleshooting & Maintenance

There are many factors that can cause the reduction in flow or force. Undersized airlines, restrictive fittings, or clogged filter elements are common areas to check. If you suspect below average performance, install a pressure gage at the inlet of the Cabinet Panel Cooler.

** For replacement or repair filter and regulator parts, contact Supreme Air Products Corp at phone: +1-289-236-2001 or email: sales@supremeairproducts.com.