# FRIGID-X™ PANEL COOLER

**SMART N CLEVER™**
**MORE THAN INTELLIGENT**

**Prevent downtime due to overheating electric and electronic control panels and cabinets. FRIGID-X™ Panel Coolers maintain NEMA Type 12 (IP 52), NEMA Type 3R (IP 14) and Patented\* NEMA Type 4-4X (IP 66) integrity and are ULC Listed.**

## WHAT ARE THEY - REASONS TO USE

Frigid-X™ Panel Cooler and Cabinet Enclosure Cooler for electronic control panels provide a low cost method of both purging and cooling electrical and electronic control panels by using a stainless steel vortex tube to create cold air from ordinary compressed air. Unlike many competitors - all of our coolers are stainless steel, not just the vortex tube, for longer life and flexible use. Frigid-X™ Panel Coolers are compact and can be installed in minutes through a standard electrical knockout. There are virtually no moving parts. Cabinet Enclosure Cooler - Frigid-X™ series are ideal for all NEMA Type 12 (IP 52), NEMA Type 3R(IP 14) and Patented\* NEMA Type 4-4X (IP 66) rated panels.
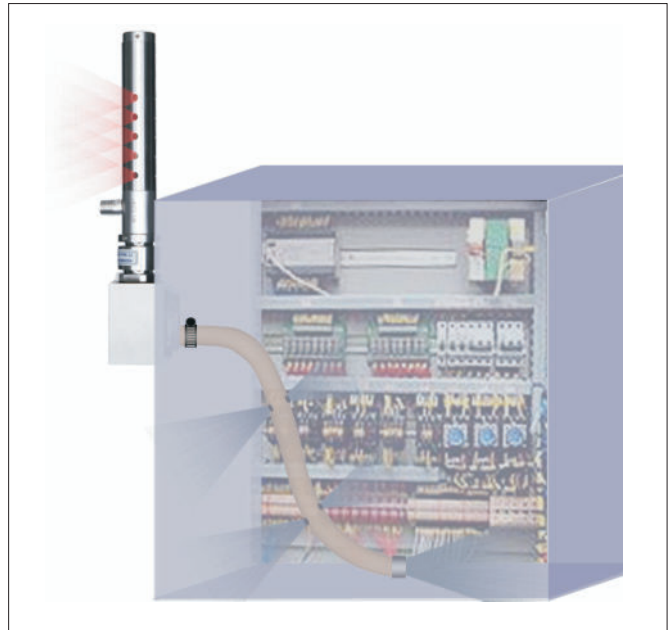
## FRIGID-X™ PANEL COOLER ADVANTAGES :

▸ No moving parts.
▸ Quiet
▸ Eliminate fans and blowers and filters
▸ Low in cost compared to most others
▸ Superior design and performance
▸ Maintenance free operation
▸ Made of durable stainless steel and metal arts -no cheap plastic parts
▸ Cooling capacities to 2800 BTU/Hr per unit.
▸ Maintain NEMA 12, NEMA 3R and Patented\* NEMA 4-4X integrity (IP 52, IP 14 and IP 66)
▸ Control and stabilize the temperature and humidity Inside the enclosure
▸ No CFC's or HCFC's
▸ Mount in a standard electrical knockout
▸ Eliminate circuit drift, nuisance tripping and dirt Contamination
▸ Provide wash down protection ( Patented\*NEMA 4-4X (IP 66) )

**With every Panel Cooler you receive a Free Panel Cooler Temperature Warning Indicator Sticker. It will provide a dual qualitative warning level and danger level if the temperature inside your control cabinet is too high. Use on any control panels you wish to monitor. Extra stickers may be purchased from NexFlow - Part Number 69600.**

## WHY THE FRIGID-X™ PANEL COOLER OVER OTHERS :

All Metal Parts, Stainless Steel Body, Quiet, Tests Show Frigid-X™ Panel Cooler Constantly Quieter Than Competition! Our Standard units are good in ambient temperatures up to $150^{o}$ F ($67^{o}$ C). High temperatures units are available to $200^{o}$ F ($93^{o}$ C) and higher. Non Hazardous purge units are also available where constant flow is required to purge a control panel but maintain on-off operation to conserve energy. Contact Nex Flow™ or your local representative for details.

## FRIGID-X™ PANEL COOLER APPLICATIONS :

▸ Programmable controllers
▸ System Control Cabinets
▸ CCTV Cameras
▸ Motor Control Centers
▸ Relay Panels
▸ CNC Machine controls
▸ Computer Panels
▸ Laser Housing enclosure cooling
▸ Electronic scale cooling
▸ Modular Control Centers
▸ Food Service Equipment Controls

\*US patent number 8,616,010. Other countries: Patented or Patent Pending.

**FRIGID-X™ PANEL COOLER**

## FRIGID-X™ PANEL COOLER SYSTEM - HOW IT WORKS

Compressed air enters at point (A) into the vortex tube component of the panel cooler. The vortex tube splits the compressed air into a hot (B) and cold (C) stream of air. The hot air from the vortex tube is vented to the atmosphere at point (D) after being muffled to reduce noise. Hot air displaced from inside the control panel or cabinet is exhausted through point (E). Cold air enters into the panel (F) via the cold distribution hose (G). Holes (H) are punched into the hose kit to deliver the cold air inside the panel where required. A muffler (I) further reduces the noise level of the exhausting air.



**Leaving a control panel door open to let a fan blow dirty hot air on to the control is hazardous and even illegal in many jurisdictions.**



## FRIGID-X™ PANEL COOLER SELECTION

Nex Flow™ Frigid-X™ Panel Coolers are available with thermostat control (on-off units) or continuous operation. Continuous systems are best when constant cooling and/or a positive purge of the panel is required. On-off control saves air by activating the unit when the internal temperature approaches a critical level. The adjustable thermostat is factory set at 95 degrees F (35 degrees C). They are best used in applications where heat may fluctuate as in variable speed drives and where a continuous purge is not required. ALL OF OUR UNITS ARE STAINLESS STEEL for long life and flexible environments.
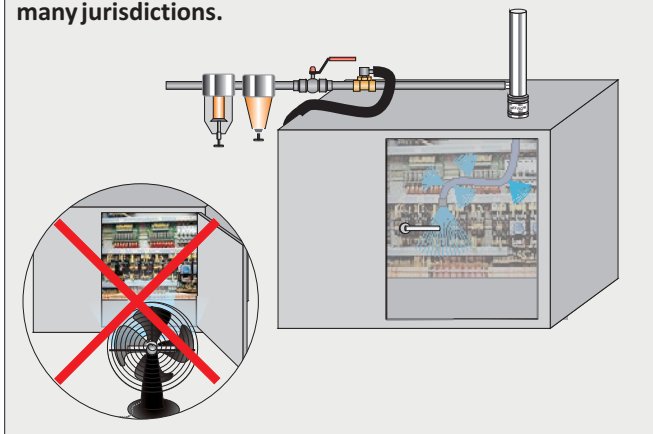
If a constant positive pressure is required with on-off control (Non-hazardous Purge Units) a special solenoid valve can be supplied to allow a small amount if air flow into the control panel when in the closed position. High temperature units for ambient in excess of $150^0$ F ($67^0$ C) to $200^0$ F ($93^0$ C) and higher are available.

When you find control panel doors open it is a sure sign that you need Frigid-X™ Panel Cooler. Open doors are not only dangerous but also creates dirt buildup on electronics shortening their life.

## FRIGID-X™ PANEL COOLER SYSTEMS VERSES OTHER OPTIONS

▸ Heat Pipes and air to air heat Exchangers cannot cool below ambient limiting cooling effect. Filters require Monitoring and change to prevent failure.

▸ Water cooled heat Exchangers use water which is not compatible with electrics. In addition scale buildup can cause reduced effectiveness over time and downtime for descaling.

▸ Refrigerant CFC or HCFC Heat Exchangers are more costly with higher installation cost and lower life expectancy Installation requires a floor drain for condensate. Machine vibration can cause loss of refrigerant and component failure. Average replacement cost of a compressor can be High. Filters require monitoring and change to prevent failure.

▸ Frigid-X™ Panel Cooler is low cost, with NEMA Type 12 (IP 52), NEMA Type 3R(IP 14 ) and Patented* NEMA Type 4-4X (IP 66) Models available. They are compact, easy and fast to install. Thermostatic control minimizes air use to only when needed

**Frigid-X™ Panel Coolers are approved by Underwriters Laboratory (ULC Component Recognized) to meet USA and Canadian Standards, and meet CE Regulations and necessary international standards.**



*US patent number 8,616,010. Other countries: Patented or Patent Pending.

## FRIGID-X PANEL COOLER SYSTEMS SPECIFICATIONS

| TYPE | MODEL | CAPACITY BTU/hr (Watts)* | Thermo-stat Control | Sound Level dBA |
|------|-------|-----|-----|-----|
| NEMA TYPE 12 (IP 52) | 61004A | 290 (85) | Not included | 64 |
| NEMA TYPE 12 (IP 52) | 61008A | 580 (170) | Not included | 66 |
| NEMA TYPE 12 (IP 52) | 61015A | 1100 (322) | Not included | 72 |
| NEMA TYPE 12 (IP 52) | 61025A | 1800 (527) | Not included | 73 |
| NEMA TYPE 12 (IP 52) | 61030A | 2100 (615) | Not included | 74 |
| NEMA TYPE 12 (IP 52) | 61040A | 2900 (849) | Not included | 76 |
| NEMA TYPE 12 (IP 52) | 63004A | 290 (85) | Included | 64 |
| NEMA TYPE 12 (IP 52) | 63008A | 580(170) | Included | 66 |
| NEMA TYPE 12 (IP 52) | 63015A | 1100 (322) | Included | 72 |
| NEMA TYPE 12 (IP 52) | 63025A | 1800 (527) | Included | 73 |
| NEMA TYPE 12 (IP 52) | 63030A | 2100 (615) | Included | 74 |
| NEMA TYPE 12 (IP 52) | 63040A | 2900 (849) | Included | 76 |
| NEMA TYPE 3R (IP 14) | 61004R | 290 (85) | Not included | 64 |
| NEMA TYPE 3R (IP 14) | 61008R | 580(170) | Not included | 66 |
| NEMA TYPE 3R (IP 14) | 61015R | 1100 (322) | Not included | 72 |
| NEMA TYPE 3R (IP 14) | 61025R | 1800 (527) | Not included | 73 |
| NEMA TYPE 3R (IP 14) | 61030R | 2100 (615) | Not included | 74 |
| NEMA TYPE 3R (IP 14) | 61040R | 2900 (849) | Not included | 76 |
| NEMA TYPE 3R (IP 14) | 63004R | 290 (85) | Included | 64 |
| NEMA TYPE 3R (IP 14) | 63008R | 580(170) | Included | 66 |
| NEMA TYPE 3R (IP 14) | 63015R | 1100 (322) | Included | 72 |
| NEMA TYPE 3R (IP 14) | 63025R | 1800 (527) | Included | 73 |
| NEMA TYPE 3R (IP 14) | 63030R | 2100 (615) | Included | 74 |
| NEMA TYPE 3R (IP 14) | 63040R | 2900 (849) | Included | 76 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61104X | 290 (85) | Not included | 64 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61108X | 580(170) | Not included | 66 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61115X | 1100 (322) | Not included | 72 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61125X | 1800 (527) | Not included | 73 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61130X | 2100 (615) | Not included | 74 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61140X | 2900 (849) | Not included | 76 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63104X | 290 (85) | Included | 64 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63108X | 580(170) | Included | 66 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63115X | 1100 (322) | Included | 72 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63125X | 1800 (527) | Included | 73 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63130X | 2100 (615) | Included | 74 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63140X | 2900 (849) | Included | 76 |

## RATINGS EXPLANATION

**NEMA TYPE 12 (IP 52)** Frigid-X™ Panel Cooler is dust tight and oil tight and used in general industrial environments.

**Patented* NEMA TYPE 4-4X (IP 66)** Frigid-X™ Panel Cooler is dust, oil-tight, spray resistant and used in environments where there are liquids and for food service and corrosive environments.

**NEMA TYPE 3R (IP 14)** Frigid-X™ Panel Cooler is used in outdoor service.



**MINI PANEL COOLER Models 60004 to 63008X**



**FRIGID-X™ PANEL COOLER Models 60015 to 63115X**
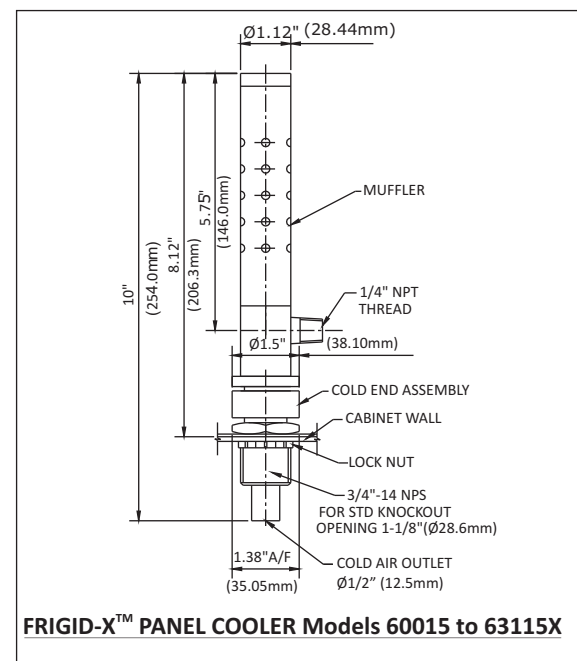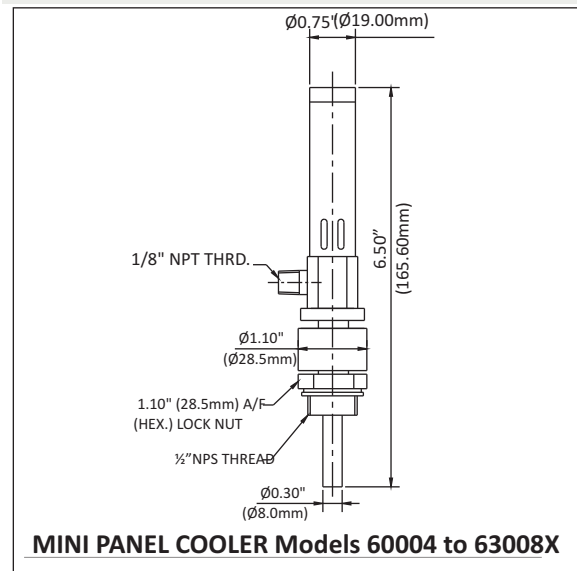
* A) The BTU/hr (wattage) is calculated with air at 100 PSIG (6.9 Bar) and 70°F (21°C)

  B) For temperatures of compressed air between 90°F (32°C) to 100°F (38°C) de-rate the cooling effect by 20% at 100°F (38°C) & above de-rate by 30%

*US patent number 8,616,010. Other countries: Patented or Patent Pending.

**FRIGID-X™ PANEL COOLER**

## FRIGID-X™ HOT AND COLD MUFFLING KITS

### Achieve additional noise level reduction utilizing the Frigid-X™ Hot end and Cold End Muffling Kits  Combined dbA  of up to 8 Decibels

**COLD END MUFFLING KIT**

The Cold End Muffling Kit consists of a silencer and all necessary fittings to connect to the Panel Cooler at the cold air outlet inside the electrical control panel. Depending on the capacity of the specific Panel Cooler, the dBA reduction offered by the Cold End Muffling Kit is 5 to 6 dBA. Easy to install. Can be installed with the silencer vertical or horizontal depending on the space.

**HOT END MUFFLING KIT & HEAT GUARD**

The Hot End Muffling Kit consists of an ABS Plastic sleeve with silencing material fitted over the hot end of the Panel Cooler, outside of the control panel. The dBA reduction offered by the Hot End Muffling Kit is 2 dBA. Easy to install just fit over the top of the Panel Cooler. In addition to noise reduction it offers additional protection from the hot end of the Panel Cooler.

| PART NO | DESCRIPTION |
|---------|-------------|
| 69501 | Cold End Muffler Kit for 60015A to 63140X |
| 69503 | Cold End Muffler Kit for 60004A to 63108X |

**Cold End Muffler kits for Models for Models 60015A to 63140X (Large Size) and 60004A to 63108X Panel Coolers (Small size)**

| PART NO | DESCRIPTION |
|---------|-------------|
| 69502 | Hot End Muffler Kit for 60015A to 63140X |
| 69504 | Cold End Muffler Kit for 60004A to 63108X |

**Hot End Muffler kits for Models for Models 60015A to 63140X (Large Size) and 60004A to 63108X Panel Coolers (Small size)**



Dimensional Drawing



Dimensional Drawing
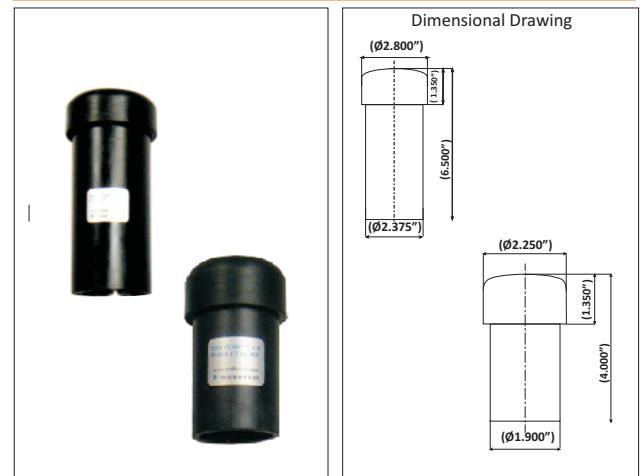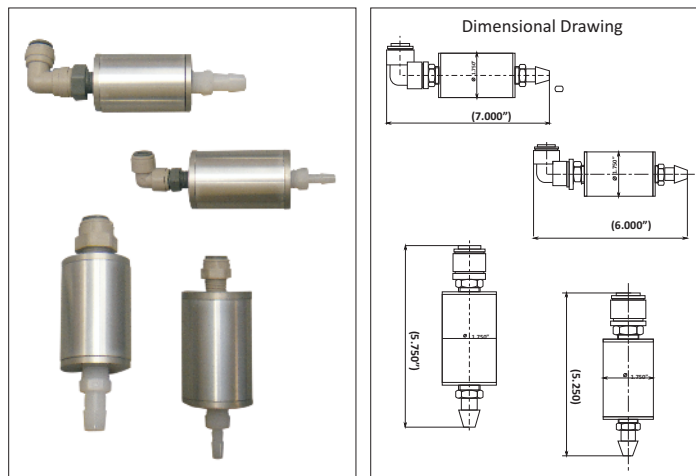
| PART NO | DESCRIPTION |
|---------|-------------|
| 69505 | Cold End and Hot End Combination  Muffler Kit for 60015A to 63140X |
| 69506 | Cold End and Hot End Combination  Muffler Kit for 60004A to 63108X |



**SMART N CLEVER™**
**MORE THAN INTELLIGENT**

## SILENT X-STREAM™ FRIGID-X™ PANEL COOLER   SMART N CLEVER™ MORE THAN INTELLIGENT

**Prevent Downtime due to overheating electric and electronic control panels and cabinets with Frigid-X™ Panel Coolers combined with the Hot and Cold End Muffling Kits for Quiet Operation Maintain NEMA Type 12 (IP 52), NEMA Type 3R (IP 14) and Patented\* NEMA Type 4-4x (IP 66) Integrity - ULC Listed**

### WHAT ARE THEY - REASONS TO USE COMBINED WITH THE HOT AND COLD END MUFFLING KITS, THE SILENT X-STREAM™ PANEL COOLER CAN REDUCE NOISE LEVELS TO 64 dBA OR MORE.

Frigid-X™ Panel Cooler and Cabinet Enclosure Cooler for electronic control panels provide a low cost method of both purging and cooling electrical and electronic control panels by using a stainless steel vortex tube to create cold air from ordinary compressed air. Unlike many competitors - all of our coolers are stainless steel, not just the vortex tube, for longer life and flexible use. Frigid-X™ Panel Coolers are compact and can be installed in minutes through a standard electrical knockout. There are virtually no moving parts. Cabinet Enclosure Cooler - Frigid-X™ series are ideal for all NEMA Type 12 (IP 52), NEMA Type 3R(IP 14 ) and Patented\* NEMA Type 4-4X (IP 56) rated panels.

### SILENT X-STREAM™ FRIGID-X™ PANEL COOLER ADVANTAGES :

▸ No moving parts.
▸ Put Extra Quiet
▸ Eliminate fans and blowers and filters
▸ Low in cost compared to most others
▸ Superior design and performance
▸ Maintenance free operation
▸ Made of durable stainless steel and metal arts -no cheap plastic parts
▸ Cooling capacities to 2800 BTU/Hr per unit.
▸ Maintain NEMA 12, NEMA 3R and Patented\* NEMA 4-4X integrity (IP 52, IP 14 and IP 66)
▸ Control and stabilize the temperature and humidity Inside the enclosure
▸ No CFC's or HCFC's
▸ Mount in a standard electrical knockout
▸ Eliminate circuit drift, nuisance tripping and dirt Contamination
▸ Provide wash down protection ( Patented\* NEMA 4-4X (IP 66) )

### WHY THE SILENT X-STREAM™ FRIGID-X™ PANEL COOLER OVER OTHERS:

The Panel Cooler itself is All Metal Parts, Stainless Steel Body, Extra Silenced using the Hot End Muffling Kt of ABS Plastic and Silencing material and a Cold End Silencer inside the Electrical Panel. Our Silent X-Stream units are good in ambient temperatures to 150 degrees F (67 degrees C.) Non-Hazardous purge units are also available where constant flow is required to purge a control panel but maintain on-off operation to conserve energy. Contact Nex Flow™ or your local representative for details.

### SILENT X-STREAM™ FRIGID-X™ PANEL COOLER APPLICATIONS:
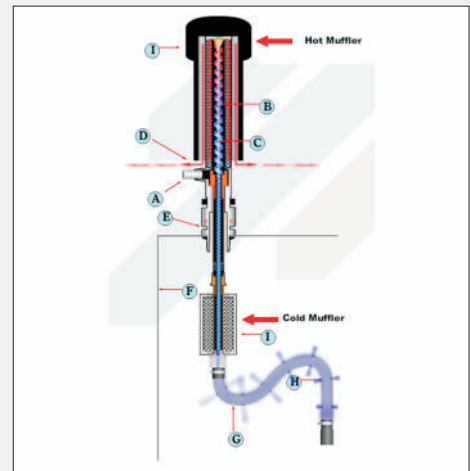
▸ Computer Rooms
▸ Environments where Cooler Panels are in close proximity to Personnel
▸ When General Noise Reduction ir Desired or Necessary

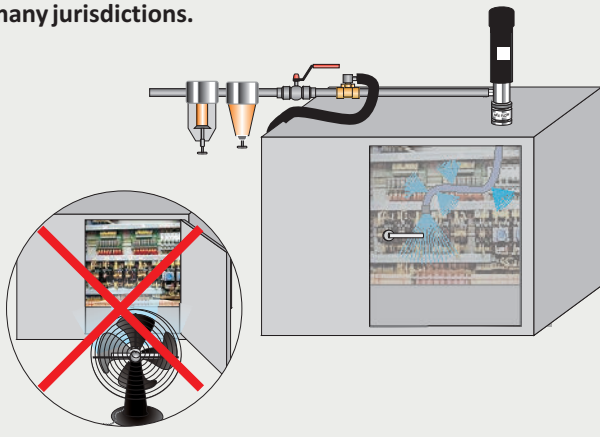\*US patent number 8,616,010. Other countries: Patented or Patent Pending.

## SILENT X-STREAM™ FRIGID-X™ PANEL COOLER SYSTEM - HOW IT WORKS

Compressed air enters at point (A) into the vortex tube component of the Panel Cooler. The vortex tube splits the compressed air into a hot (B) and cold (C) stream of air.  The hot air from the vortex tube is vented out of the metal sleeve and down the hot end muffler and out at (D) after additional muffling.   Hot air displaced from the inside of the control panel is exhausted through point (E).  Cold Air enters into the panel (F) via the Cold End Muffler and hose distribution kit (G). Holes (H) are punched are punched into the hose kit to deliver the cold air inside the panel where required.  A muffler (I) further reduces the noise level of the exhausting air.



**Leaving a control panel door open to let a fan blow dirty hot air on to the control is hazardous and even illegal in many jurisdictions.**



### SILENT X-STREAM™ FRIGID-X™ PANEL COOLER

Nex Flow™ Frigid-X™ Panel Coolers are available with thermostat control (on-off units) or continuous operation. Continuous systems are best when constant cooling and/or a positive purge of the panel is required.  On-off control saves air by activating the unit when the internal temperature approaches a critical level.  The adjustable thermostat is factory set at 95 degrees F (35 degrees C).  They are best used in applications where heat may fluctuate as in variable speed drives and where a continuous purge is not required.    ALL OF OUR UNITS ARE STAINLESS STEEL for long life and flexible environments.

If a constant positive pressure is required with on-off control (Non-hazardous Purge Units) a special solenoid valve can be supplied to allow a small amount if air flow into the control panel when in the closed position. High temperature units for ambient in excess of 150$^{0}$ F (67$^{0}$ C) to 200$^{0}$ F (93$^{0}$ C) and higher are available.

When you find control panel doors open it is a sure sign that you need Frigid-X™ Panel Cooler. Open doors are not only dangerous but also creates dirt buildup on electronics shortening their life.

### SILENT X-STREAM™ FRIGID-X™ PANEL COOLER

▶ Heat Pipes and air to air heat Exchangers cannot cool below ambient limiting cooling effect. Filters require Monitoring and change to prevent  failure.

▶ Water cooled heat Exchangers use water which is not compatible with electrics. In addition scale buildup can cause reduced effectiveness over time and downtime for descaling.

▶ Refrigerant CFC or HCFC Heat Exchangers are more costly with higher installation cost and lower life expectancy Installation requires a floor drain for condensate. Machine vibration can cause loss of refrigerant and component failure. Average replacement cost of a compressor can be High. Filters require monitoring and change to prevent failure.

▶ Frigid-X™ Panel Cooler is low cost, with NEMA Type 12 (IP 52), NEMA Type 3R(IP 14 ) and Patented* NEMA Type 4-4X (IP 66) Models available. They are compact, easy and fast to install. Thermostatic control minimizes air use to only when needed

**Frigid-X™ Panel Coolers are approved by Underwriters Laboratory (ULC Component Recognized) to meet USA and Canadian Standards, and meet CE Regulations and necessary international standards.**



*US patent number 8,616,010. Other countries: Patented or Patent Pending.

## SILENT X-STREAM™ FRIGID-X™ PANEL COOLER SYSTEMS SPECIFICATIONS

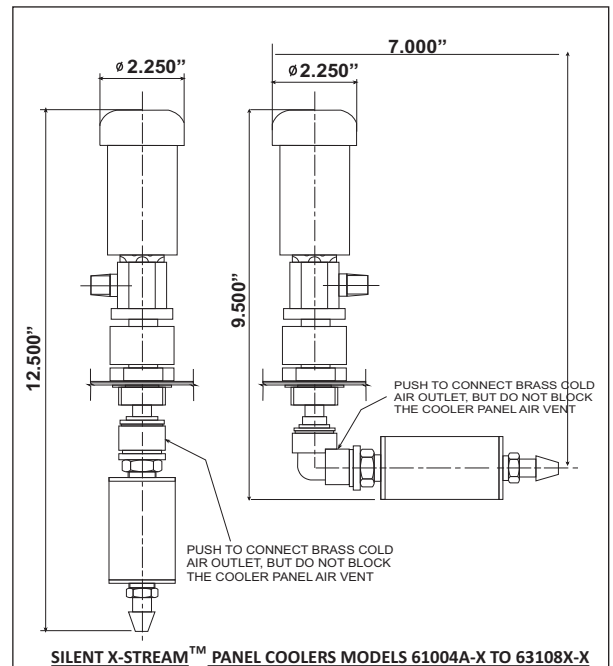| TYPE | MODEL | CAPACITY BTU/hr (Watts)* | Thermo-stat Control | Sound Level dBA |
|---|---|---|---|---|
| NEMA TYPE 12 (IP 52) | 61004A-X | 290 (85) | Not included | 64 |
| NEMA TYPE 12 (IP 52) | 61008A-X | 580 (170) | Not included | 66 |
| NEMA TYPE 12 (IP 52) | 61015A-X | 1100 (322) | Not included | 72 |
| NEMA TYPE 12 (IP 52) | 61025A-X | 1800 (527) | Not included | 73 |
| NEMA TYPE 12 (IP 52) | 61030A-X | 2100 (615) | Not included | 74 |
| NEMA TYPE 12 (IP 52) | 61040A-X | 2900 (849) | Not included | 76 |
| NEMA TYPE 12 (IP 52) | 63004A-X | 290 (85) | Included | 64 |
| NEMA TYPE 12 (IP 52) | 63008A-X | 580(170) | Included | 66 |
| NEMA TYPE 12 (IP 52) | 63015A-X | 1100 (322) | Included | 72 |
| NEMA TYPE 12 (IP 52) | 63025A-X | 1800 (527) | Included | 73 |
| NEMA TYPE 12 (IP 52) | 63030A-X | 2100 (615) | Included | 74 |
| NEMA TYPE 12 (IP 52) | 63040A-X | 2900 (849) | Included | 76 |
| NEMA TYPE 3R (IP 14) | 61004R-X | 290 (85) | Not included | 64 |
| NEMA TYPE 3R (IP 14) | 61008R-X | 580(170) | Not included | 66 |
| NEMA TYPE 3R (IP 14) | 61015R-X | 1100 (322) | Not included | 72 |
| NEMA TYPE 3R (IP 14) | 61025R-X | 1800 (527) | Not included | 73 |
| NEMA TYPE 3R (IP 14) | 61030R-X | 2100 (615) | Not included | 74 |
| NEMA TYPE 3R (IP 14) | 61040R-X | 2900 (849) | Not included | 76 |
| NEMA TYPE 3R (IP 14) | 63004R-X | 290 (85) | Included | 64 |
| NEMA TYPE 3R (IP 14) | 63008R-X | 580(170) | Included | 66 |
| NEMA TYPE 3R (IP 14) | 63015R-X | 1100 (322) | Included | 72 |
| NEMA TYPE 3R (IP 14) | 63025R-X | 1800 (527) | Included | 73 |
| NEMA TYPE 3R (IP 14) | 63030R-X | 2100 (615) | Included | 74 |
| NEMA TYPE 3R (IP 14) | 63040R-X | 2900 (849) | Included | 76 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61104X-X | 290 (85) | Not included | 64 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61108X-X | 580(170) | Not included | 66 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61115X-X | 1100 (322) | Not included | 72 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61125X-X | 1800 (527) | Not included | 73 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61130X-X | 2100 (615) | Not included | 74 |
| Patented*NEMA TYPE 4-4X (IP 66) | 61140X-X | 2900 (849) | Not included | 76 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63104X-X | 290 (85) | Included | 64 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63108X-X | 580(170) | Included | 66 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63115X-X | 1100 (322) | Included | 72 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63125X-X | 1800 (527) | Included | 73 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63130X-X | 2100 (615) | Included | 74 |
| Patented*NEMA TYPE 4-4X (IP 66) | 63140X-X | 2900 (849) | Included | 76 |

*US patent number 8,616,010. Other countries: Patented or Patent Pending.

## RATINGS EXPLANATION

**NEMA TYPE 12 (IP 52)** Frigid-X™ Panel Cooler is dust tight and oil tight and used in general industrial environments.

**Patented* NEMA TYPE 4-4X (IP 66)** Frigid-X™ Panel Cooler is dust, oil-tight,spray resistant and used in environments where there are liquids and for food service and corrosive environments.

**NEMA TYPE 3R (IP 14)** Frigid-X™ Panel Cooler is used in outdoor service.



ø2.800"  7.750"  ø2.800"

16.000"  12.750"

PUSH TO CONNECT BRASS COLD AIR OUTLET, BUT DO NOT BLOCK THE COOLER PANEL AIR VENT

PUSH TO CONNECT BRASS COLD AIR OUTLET, BUT DO NOT BLOCK THE COOLER PANEL AIR VENT

**SILENT X-STREAM™ PANEL COOLERS MODELS 61015A-X TO 63140X-X**



ø 2.250"  7.000"  ø 2.250"

12.500"  9.500"

PUSH TO CONNECT BRASS COLD AIR OUTLET, BUT DO NOT BLOCK THE COOLER PANEL AIR VENT

PUSH TO CONNECT BRASS COLD AIR OUTLET, BUT DO NOT BLOCK THE COOLER PANEL AIR VENT

**SILENT X-STREAM™ PANEL COOLERS MODELS 61004A-X TO 63108X-X**

* A) The BTU/hr (wattage) is calculated with air at 100 PSIG (6.9 Bar) and 70$^0$F (21$^0$C)

   B) For temperatures of compressed air between 90$^0$F (32$^0$C) to 100$^0$F (38$^0$C) de-rate the cooling effect by 20% at 100$^0$F (38$^0$C) & above de-rate by 30%

**FRIGID-X™ PANEL COOLER**

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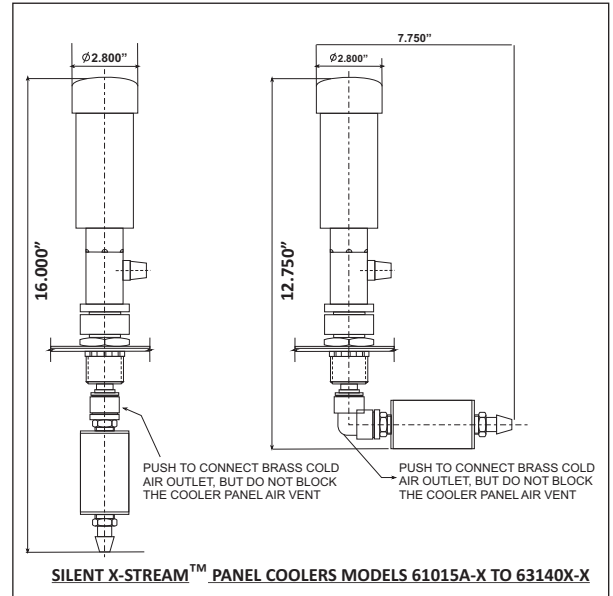
## THE NEW ELC ELECTRONIC CONTROL DIGITAL THERMOSTAT

The ELC (Electronic Control Digital Thermostat) is a way for precise control of one or two New Flow™ Frigid-X Panel Coolers. Far more accurate and elegant than using a standard thermostat and with flexible use.

## SPECIFICATIONS:

- **Supply voltage :** AC 120-240V
- **Sampling rate :** 4/ sec (almost double that of our nearest competitor)
- **Accuracy :** 0.2% of full scale (under 10% of a degree)
- **3 Outputs :** 2 Relay outputs and one with PID, 1 SSR output with PID to control external SSR
- -50$^{0}$C to +150$^{0}$C measuring range
- It has two Alarm settings for the two output relays so you can set two different temperatures to control two separate solenoids for two separate coolers (and can be used to control anything else electrical)
- Auto tune mode for quick set ups
- Patented* NEMA Type 4-4X Enclosure (ABS/PC), ULC approved- it is accepted anywhere in the world  Lexan door: U94-V-0
- Standard unit comes with one solenoid valve, but it can operate two units and also complete additional tasks.
- Fahrenheit or Centigrade and easily switchable back and forth
- It can be used in conjunction with the new PLCFC Optimization system for special applications such as cooling parts on a conveyor or in a tunnel, to control cooling and to index movement of the parts being conveyed (See Section A).

### ELC Electronic Control Digital Thermostat





**With every Panel Cooler you receive a Free Panel Cooler Temperature Warning Indicator Sticker. It will provide a dual qualitative warning level and danger level if the temperature inside your control cabinet is too high. Use on any control panels you wish to monitor. Extra stickers may be purchased from NexFlow - Part Number 69600.**



ELC
FOR PANEL COOLER
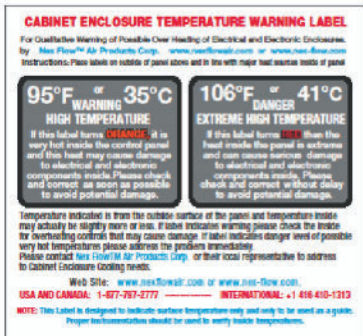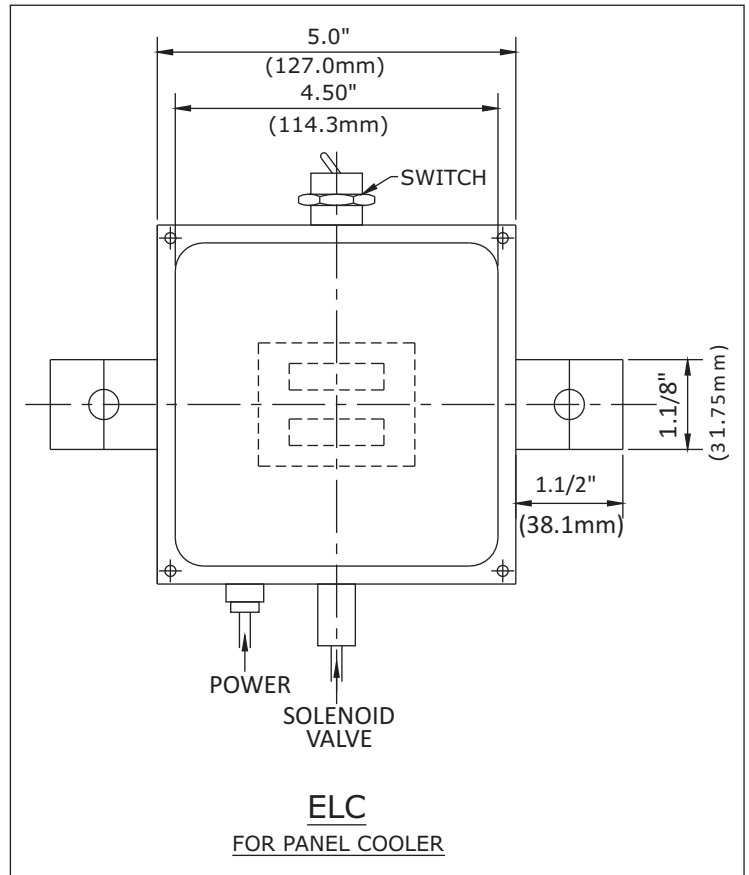
*US patent number 8,616,010. Other countries: Patented or Patent Pending.

## CALCULATING HEAT LOAD IN YOUR ELECTRICAL/ELECTRONIC PANEL ENCLOSURE:

### Useful terms and conversions :

▸ 1 BTU/hr = 0.293 watts

▸ 1 BTU/hr - 0.000393 horsepower

▸ 1 Watt = 3.415 BTU/hr

▸ 1 horsepower = 2544 BTU/hr

▸ 1 Watt = 0.00134 horsepower

▸ 1 Square Foot = 0.0929 square meters

▸ 1 Square Meter = 10.76 square foot

### Typical fan capacity :

▸ 4" fan: 100 CFM (2832 LPM)

▸ 6" fan: 220 CFM (6230 LPM)

▸ 8" fan: 340 CFM (9628 LPM)

▸ 10" fan: 550 CFM (15574 LPM)

Total heat load consists of the heat transfer from outside your panel and from the heat dissipated inside the control unit.

BTU/hr cooling effect from fan 1.08 x (temp. inside panel in $^0$F - temp. outside panel in degrees F) x CFM

Watts cooling effect from fan: 0.16 x (temp. inside panel in $^0$C - temp. outside panel in degrees C) x LPM

## CALCULATING BTU/hr OR Watts:

1. Determine the heat generated inside the enclosure. Approximations may be necessary. For example, if you know the power generated inside the unit, assume 10% of the energy is dissipated as heat.

2. For heat transfer from the outside, calculate the area exposed to the atmosphere except for the bottom of the control panel.

3. Choose the internal temperature you wish to have, and choose the temperature difference between it and the maximum external temperature expected.

4. From the conversion table that follows, determine the BTU/hr per square foot (or watts per square meter) for the temperature difference.

5. Multiply the panel surface area times the BTU/hr per square foot (or watts per square meter) to get the external heat transfer in BTU/hr or in watts.

6. Sum the internal and external heat loads calculated.

7. If you do not know the power used in the enclosure but you can measure temperatures, then measure the temperature difference between the outside at current temperature, and the present internal cabinet temperature.

8. Note size and number of any external fans. Provide this information to Nex Flow™ to assist in sizing the appropriate cooling system.

| Temperature Difference In $^0$F | BTU/hr/sq. Ft. | Temperature Difference In $^0$C | Watts/sq.meter |
|---|---|---|---|
| 5 | 1.5 | 3 | 5.2 |
| 10 | 3.3 | 6 | 11.3 |
| 15 | 5.1 | 9 | 17.6 |
| 20 | 7.1 | 12 | 24.4 |
| 25 | 9.1 | 15 | 31.4 |
| 30 | 11.3 | 18 | 39.5 |
| 35 | 13.8 | 21 | 47.7 |
| 40 | 16.2 | 24 | 55.6 |

**Example :**

The control panel has two frequency drives totaling 10 horsepower and one module rated at 100 watts. The maximum outside temperature expected is 105$^{0}$F or 40.5$^{0}$C. The area of the control panel exposed sides, except for the top is 42 square feet or 3.9 square meters. We want the internal temperature to be 95$^{0}$F or 35$^{0}$C.

Total internal power is 10 hp x 746 watts/hp - 7460 plus 100 watts = 7560 watts.

Assume 10% forms heat = an internal heat load of 756 watts

Total internal power is 10 hp x 2544 BTU/hp = 25440 BTU/hr plus 100 watts x 3.415 BTU/hr/Watt = 25782 BTU/hr

Assume 10% forms heat = an internal heat load of 2578 BTU/hr

External heat load: The temperature difference between the desired temperature and the outside is 10$^{0}$F or 5.5$^{0}$C. Using the conversions (and interpolating where necessary) we multiply the area by the conversion factor:

42 sq. ft x 3.3 - 139 BTU/hr or 3.9 sq. m x 10.3 = 40 Watts

Total Heat Load: 756 + 40 - 796 watts or 2578 + 139 - 2717 BTU/hr

You would use a Model 61040 for constant operation or a Model 63040 for one-off control. (Rated at 2900 BTU/hr or 849 Watts).

**Copy and FAX to +1-877-797-2660 international FAX: +1-416-410-1806**

NAME: _____

COMPANY:_____

TELEPHONE:_____

FAX: _____  EMAIL: _____

Please complete and FAX and an application engineer will respond within 24 hours

HEIGHT: _____ Inches or mm

WIDTH: _____ Inches or mm

DEPTH: _____ Inches or mm

Depth / Height / Width

EXTERNAL TEMPERATURE NOW: _____ F or C

MAX. EXTERNAL TEMPERATURE EXPECTED: _____ F or C

CURRENT INTERNAL TEMPERATURE: _____ F or C

MAXIMUM INTERNAL TEMPERATURE DESIRED: _____ F or C

RATING: ___ NEMA 12 (IP 52) ___ NEMA 4-4X (IP 66) ___ NEMA 3R(IP 14) ___ OTHER (Specify) _____

Check if applicable: ___ Free Standing ___ Wall Mounted
___ Vented to allow outside air to circulate inside
___ Not vented so outside air does not circulate inside
___ Has External fans ___ How many? ___Size of fan or SCFM/SLPM ea

**ACCESSORIES :**

| PART NO. | DESCRIPTION | PART NO. | DESCRIPTION |
|---|---|---|---|
| 69004 | Cold Air Distribution Kit for all all sizes except 580 BTU/hr capacity and smaller | 90044 | NEMA Type 12 (IP 52) Solenoid Valve and Thermostat Kit (240V, 50 / 60 hz) |
| 69005 | Cold Air Distribution Kit for 580 BTU/hr capacity and smaller | 90016 | NEMA Type 4-4X (IP 66)  and NEMA Type 3R (IP 12) Solenoid Valve and Thermostat Kit (120 V, 50 / 60 hz) |
| 90004 | Filter with auto drain, 43 SCFM (1359 SLPM), 1/4 " NPT | 90045 | NEMA Type 4-4X (IP 66)  and NEMA Type 3R (IP 12) Solenoid Valve and Thermostat Kit (240 V, 50 / 60 hz) |
| 90005 | Oil Removal Filter, 3/4 " NPT for all sizes, 37 SCFM (1048 SLPM), 3/8 " NPT | 90017 | Thermostat only |
| 90008 | Pressure Regulator c/w gauge, 50 SCFM (1416 SLPM), 1/4" NPT | 90038 | Electronic Temperature Control, (120V, 50 / 60 hz), 1/4 " NPT |
| 90015 | NEMA Type 12 (IP 52) Solenoid Valve and Thermostat Kit (120V, 50 / 60 hz) | 90039 | Electronic Temperature Control, (240V, 50 / 60 hz), 1/4 " NPT |
| 69600 | Panel Cooler Temperature Warning Indicator Stickers | | |

**IMPORTANCE OF FILTRATION, HOSE DISTRIBUTION KIT, SEALING & MOUNTING**

All Nex Flow™ Frigid-X™ Panel Cooler systems are supplied with a 5 micron filter c/w automatic float type drain and a hose distribution kit. The hose kit comes complete with a length of flexible vinyl clear tube which is used to direct the cold air to hot spots in the enclosure and to circulate the cold air.  Clamps to hold the tubing and a silencing muffler, also supplied, are supplied along with adhesive backed clips to hold the tubing in place. The hose kit and muffler further reduce noise levels but also act as an emergency trap for moisture should the filter fail or any reason, protecting your enclosure controls. The filter protects against moisture and in fact stops all moisture from entering the control panel. The air entering the panel goes from high pressure to near atmospheric conditions and will stabilize at 45% relative humidity. For this reason, Nex Flow™ Frigid-X™ Panel Cooler systems are usable for humidity control as well as cooling - truly an "air conditioner". If there is a potential for oil in the air lines our Model 90005 oil removal filter (to 0.3 micron) is recommended. Nex Flow™ Frigid-X™ Panel Coolers should be mounted on the top or side (using our side mount kits) but near the top as much as possible. All panel coolers should be mounted vertical as well.

**HOSE DISTRIBUTION KIT for Medium Size Panel Coolers Models 60015A to 63140X**



**HOSE DISTRIBUTION KIT for Small Size Panel Coolers Models 60004A to 63108X**
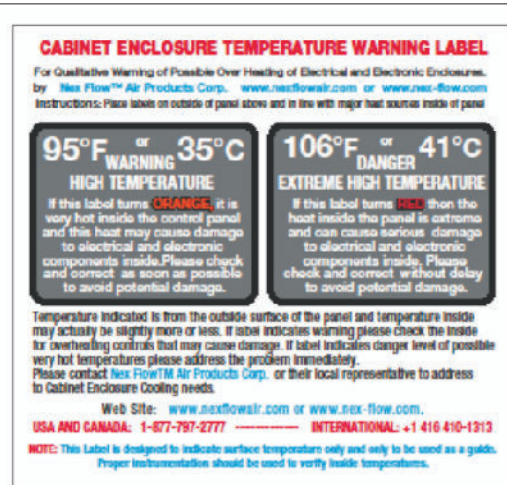




With every Panel Cooler you receive a Free Panel Cooler Temperature Warning Indicator Sticker. It will provide a dual qualitative warning level and danger level if the temperature inside your control cabinet is too high. Use on any control panels you wish to monitor. Extra stickers may be purchased from NexFlow - Part Number 69600.

## SOLENOID VALVE AND THERMOSTAT

**Nex Flow™ Frigid-X™** Panel Cooler systems are available with a standard 2-way normally closed solenoid valve and thermostat kit Model 90015 (120V) or Model 90016 (230V). This limits the flow of air only when required. The thermostat is factory set at 95 degrees F (35 C) and will normally hold +- 2 degrees F (1 C) inside the enclosure. It is rated 24V-240V, 50/60 hz. UL recognized and CSA approved.





**Thermostat and Solenoid Valve Kit :** The kit comes complete with a solenoid valve, thermostat and a resister. The resister is included should you encounter rapid temperature fluctuations in the control panel causing the solenoid to cycle on and off too quickly (chattering). The resister is installed (if needed) across the leads of the thermostat and prevents chattering by dampening the thermo switch sensitivity.
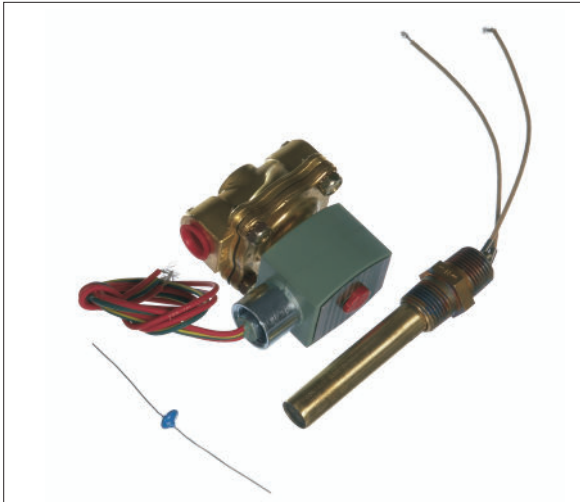
With every Panel Cooler you receive a Free Panel Cooler Temperature Warning Indicator Sticker. It will provide a dual qualitative warning level and danger level if the temperature inside your control cabinet is too high. Use on any control panels you wish to monitor. Extra stickers may be purchased from NexFlow - Part Number 69600.
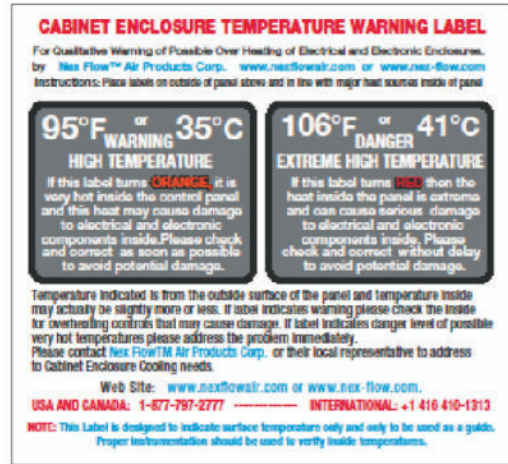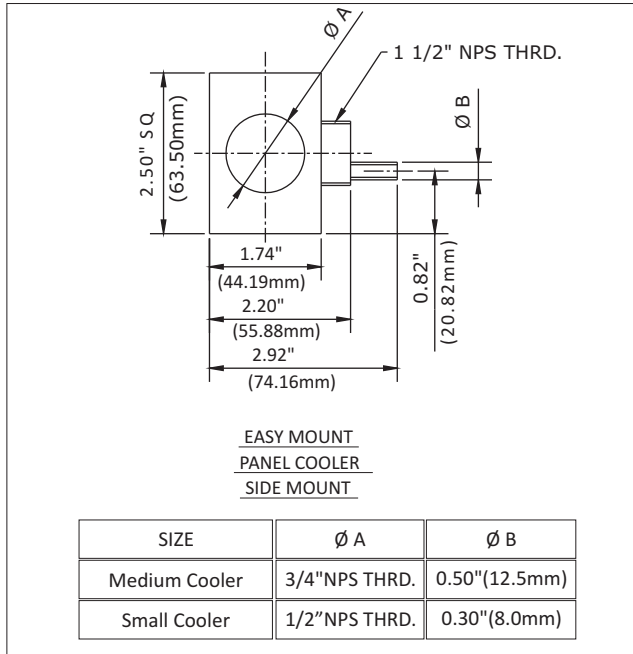




**Continuous cooling system with cooler, filter with auto drain and hose distribute Kit.**
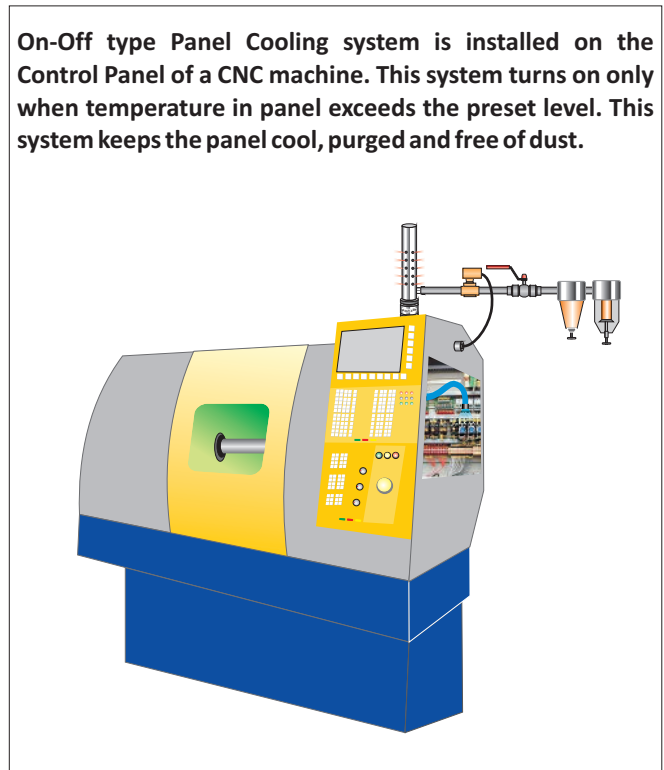
**ON-OFF PANEL COOLING SYSTEM with cooler, filter with auto drain and hose distribution kit, thermostat and solenoid valve.**

**FOR TIGHT SPACES - USE OUR SIDE MOUNT KITS**

The **Nex Flow™ Frigid-X™** Panel Cooler systems are normally mounted on the top of the enclosure but if space does not permit, you can utilize the Side Mount Kits. Made of stainless steel for NEMA 12(IP 52), NEMA 3R(IP 14) or Patented* NEMA 4-4X(IP 66) environments, they are designed for use with all **Frigid-X™ Panel Coolers**. Two sizes are available – one for coolers 8 SCFM and under capacity and the other for the larger size coolers. Slim design to minimize space even when mounted on the side of a panel.



EASY MOUNT
PANEL COOLER
SIDE MOUNT

| SIZE | Ø A | Ø B |
|---|---|---|
| Medium Cooler | 3/4"NPS THRD. | 0.50"(12.5mm) |
| Small Cooler | 1/2"NPS THRD. | 0.30"(8.0mm) |

**On-Off type Panel Cooling system is installed on the Control Panel of a CNC machine. This system turns on only when temperature in panel exceeds the preset level. This system keeps the panel cool, purged and free of dust.**





**Easy Mount Side Mount are available for the small & medium size Panel Coolers to allow mounting to the side of an enclosure if space prevents mounting on the top. It is a "plug and play" system**



**Just screw the Panel Cooler into the Easy Mount Side Mount which is first attached to the enclosure. Then attach hose kit to the brass connection on the side mount. Easy!!!**

*US patent number 8,616,010. Other countries: Patented or Patent Pending.

| PART NO. | DESCRIPTION |
|---|---|
| 69100 | Stainless steel easy mount side mount for all panel coolers models 60004A to 63018X |
| 69200 | Stainless steel easy mount side mount for all panel coolers models 60015A to 63140X |

**FRIGID-X™ PANEL COOLER**

### NEMA Type 12 (IP 52) Continuous Operation C/W Filter and Hose distribution kit

| PART NO. | COOLING CAPACITY |
|---|---|
| 61004A | 290 BTU/hr (85 W) |
| 61008A | 580 BTU/hr (170 W) |
| 61015A | 1100 BTU/hr (322 W) |
| 61025A | 1800 BTU/hr (527 W) |
| 61030A | 2100 BTU/hr (615 W) |
| 61040A | 2900 BTU/hr (849 W) |

### NEMA Type 12 (IP 52) On-off Operation C/W Filter, Hose distribution kit, Solenoid Valve & Thermostat

| PART NO. | COOLING CAPACITY |
|---|---|
| 63004A | 290 BTU/hr (85 W) |
| 63008A | 580 BTU/hr (170 W) |
| 63015A | 1100 BTU/hr (322 W) |
| 63025A | 1800 BTU/hr (527 W) |
| 63030A | 2100 BTU/hr (615 W) |
| 63040A | 2900 BTU/hr (849 W) |

### NEMA Type 12 (IP 52) Panel Cooler Only

| PART NO. | COOLING CAPACITY |
|---|---|
| 60004A | 290 BTU/hr (85 W) |
| 60008A | 580 BTU/hr (170 W) |
| 60015A | 1100 BTU/hr (322 W) |
| 60025A | 1800 BTU/hr (527 W) |
| 60030A | 2100 BTU/hr (615 W) |
| 60040A | 2900 BTU/hr (849 W) |

### NEMA Type 3R (IP 14) Continuous Operation C/W Filter and Hose distribution kit

| PART NO. | COOLING CAPACITY |
|---|---|
| 61004R | 290 BTU/hr (85 W) |
| 61008R | 580 BTU/hr (170 W) |
| 61015R | 1100 BTU/hr (322 W) |
| 61025R | 1800 BTU/hr (527 W) |
| 61030R | 2100 BTU/hr (615 W) |
| 61040R | 2900 BTU/hr (849 W) |

### NEMA Type 3R (IP 14) On-off Operation C/W Filter, Hose distribution kit, Solenoid Valve & Thermostat

| PART NO. | COOLING CAPACITY |
|---|---|
| 63004R | 290 BTU/hr (85 W) |
| 63008R | 580 BTU/hr (170 W) |
| 63015R | 1100 BTU/hr (322 W) |
| 63025R | 1800 BTU/hr (527 W) |
| 63030R | 2100 BTU/hr (615 W) |
| 63040R | 2900 BTU/hr (849 W) |

### NEMA Type 3R (IP 14) Panel Cooler Only

| PART NO. | COOLING CAPACITY |
|---|---|
| 60004R | 290 BTU/hr (85 W) |
| 60008R | 580 BTU/hr (170 W) |
| 60015R | 1100 BTU/hr (322 W) |
| 60025R | 1800 BTU/hr (527 W) |
| 60030R | 2100 BTU/hr (615 W) |
| 60040R | 2900 BTU/hr (849 W) |

### NEMA Type 4-4X (IP 66) Continuous Operation C/W Filter and Hose distribution kit

| PART NO. | COOLING CAPACITY |
|---|---|
| 61104X | 290 BTU/hr (85 W) |
| 61108X | 580 BTU/hr (170 W) |
| 61115X | 1100 BTU/hr (322 W) |
| 61125X | 1800 BTU/hr (527 W) |
| 61130X | 2100 BTU/hr (615 W) |
| 61140X | 2900 BTU/hr (849 W) |

### NEMA Type 4-4X (IP 66) On-off Operation C/W Filter, hose distribution kit, Solenoid Valve & Thermostat

| PART NO. | COOLING CAPACITY |
|---|---|
| 63104X | 290 BTU/hr (85 W) |
| 63108X | 580 BTU/hr (170 W) |
| 63115X | 1100 BTU/hr (322 W) |
| 63125X | 1800 BTU/hr (527 W) |
| 63130X | 2100 BTU/hr (615 W) |
| 63140X | 2900 BTU/hr (849 W) |

### Patented* NEMA Type 4-4X (IP 66) Panel Cooler Only

| PART NO. | COOLING CAPACITY |
|---|---|
| 60104X | 290 BTU/hr (85 W) |
| 60108X | 580 BTU/hr (170 W) |
| 60115X | 1100 BTU/hr (322 W) |
| 60125X | 1800 BTU/hr (527 W) |
| 60130X | 2100 BTU/hr (615 W) |
| 60140X | 2900 BTU/hr (849 W) |

**SMART N CLEVER™**
**MORE THAN INTELLIGENT**

**UPGRADE TO ELECTRONIC CONTROL (ELC)**

**Just add ELC to the Thermostatic Control part number and specify voltage (120 V or 240 V)**

*US patent number 8,616,010. Other countries: Patented or Patent Pending.

FRIGID-X™ PANEL COOLER

### NEMA Type 12 (IP 52) Continuous Operation C/W Filter and Hose distribution kit

| PART NO. | COOLING CAPACITY |
|---|---|
| 61004A-X | 290 BTU/hr (85 W) |
| 61008A-X | 580 BTU/hr (170 W) |
| 61015A-X | 1100 BTU/hr (322 W) |
| 61025A-X | 1800 BTU/hr (527 W) |
| 61030A-X | 2100 BTU/hr (615 W) |
| 61040A-X | 2900 BTU/hr (849 W) |

### NEMA Type 12 (IP 52) On-off Operation C/W Filter, Hose distribution kit, Solenoid Valve & Thermostat

| PART NO. | COOLING CAPACITY |
|---|---|
| 63004A-X | 290 BTU/hr (85 W) |
| 63008A-X | 580 BTU/hr (170 W) |
| 63015A-X | 1100 BTU/hr (322 W) |
| 63025A-X | 1800 BTU/hr (527 W) |
| 63030A-X | 2100 BTU/hr (615 W) |
| 63040A-X | 2900 BTU/hr (849 W) |

### NEMA Type 12 (IP 52) Panel Cooler Only

| PART NO. | COOLING CAPACITY |
|---|---|
| 60004A-X | 290 BTU/hr (85 W) |
| 60008A-X | 580 BTU/hr (170 W) |
| 60015A-X | 1100 BTU/hr (322 W) |
| 60025A-X | 1800 BTU/hr (527 W) |
| 60030A-X | 2100 BTU/hr (615 W) |
| 60040A-X | 2900 BTU/hr (849 W) |

### NEMA Type 3R (IP 14) Continuous Operation C/W Filter and Hose distribution kit

| PART NO. | COOLING CAPACITY |
|---|---|
| 61004R-X | 290 BTU/hr (85 W) |
| 61008R-X | 580 BTU/hr (170 W) |
| 61015R-X | 1100 BTU/hr (322 W) |
| 61025R-X | 1800 BTU/hr (527 W) |
| 61030R-X | 2100 BTU/hr (615 W) |
| 61040R-X | 2900 BTU/hr (849 W) |

### NEMA Type 3R (IP 14) On-off Operation C/W Filter, Hose distribution kit, Solenoid Valve & Thermostat

| PART NO. | COOLING CAPACITY |
|---|---|
| 63004R-X | 290 BTU/hr (85 W) |
| 63008R-X | 580 BTU/hr (170 W) |
| 63015R-X | 1100 BTU/hr (322 W) |
| 63025R-X | 1800 BTU/hr (527 W) |
| 63030R-X | 2100 BTU/hr (615 W) |
| 63040R-X | 2900 BTU/hr (849 W) |

### NEMA Type 3R (IP 14) Panel Cooler Only

| PART NO. | COOLING CAPACITY |
|---|---|
| 60004R-X | 290 BTU/hr (85 W) |
| 60008R-X | 580 BTU/hr (170 W) |
| 60015R-X | 1100 BTU/hr (322 W) |
| 60025R-X | 1800 BTU/hr (527 W) |
| 60030R-X | 2100 BTU/hr (615 W) |
| 60040R-X | 2900 BTU/hr (849 W) |

### NEMA Type 4-4X (IP 66) Continuous Operation C/W Filter and Hose distribution kit

| PART NO. | COOLING CAPACITY |
|---|---|
| 61104X-X | 290 BTU/hr (85 W) |
| 61108X-X | 580 BTU/hr (170 W) |
| 61115X-X | 1100 BTU/hr (322 W) |
| 61125X-X | 1800 BTU/hr (527 W) |
| 61130X-X | 2100 BTU/hr (615 W) |
| 61140X-X | 2900 BTU/hr (849 W) |

### NEMA Type 4-4X (IP 66) On-off Operation C/W Filter, hose distribution kit, Solenoid Valve & Thermostat

| PART NO. | COOLING CAPACITY |
|---|---|
| 63104X-X | 290 BTU/hr (85 W) |
| 63108X-X | 580 BTU/hr (170 W) |
| 63115X-X | 1100 BTU/hr (322 W) |
| 63125X-X | 1800 BTU/hr (527 W) |
| 63130X-X | 2100 BTU/hr (615 W) |
| 63140X-X | 2900 BTU/hr (849 W) |

### Patented* NEMA Type 4-4X (IP 66) Panel Cooler Only

| PART NO. | COOLING CAPACITY |
|---|---|
| 60104X-X | 290 BTU/hr (85 W) |
| 60108X-X | 580 BTU/hr (170 W) |
| 60115X-X | 1100 BTU/hr (322 W) |
| 60125X-X | 1800 BTU/hr (527 W) |
| 60130X-X | 2100 BTU/hr (615 W) |
| 60140X-X | 2900 BTU/hr (849 W) |

**SMART N CLEVER™**
**MORE THAN INTELLIGENT**

**UPGRADE TO ELECTRONIC CONTROL (ELC)**

**Just add ELC to the Thermostatic Control part number and specify voltage (120 V or 240 V)**

*US patent number 8,616,010. Other countries: Patented or Patent Pending.

**FRIGID-X™ PANEL COOLER**

## FRIGID-X™ Patented* NEMA 4-4X-316L (IP-66) 316L STAINLESS STEEL PANEL COOLER

All of the other Nex Flow™ FRIGID-X™ Panel Coolers are 303/304 stainless. The Patented NEMA 4-4X-316L (IP-66) FRIGID-X™ Panel Cooler is 316L stainless steel for all exposed areas, ideal for pharmaceutical grade applications and extreme corrosive environments where 303/304 stainless steel material is not adequate.

An Optional 316 stainless steel solenoid valve and thermostat kit is available for on- off control. Compressed air filtration is a must and is the responsibility of the customer in these special environments.

### Patented* NEMA TYPE 4-4X-316L (IP-66) PANEL COOLER ONLY

| MODEL | COOLING CAPACITY | SOUND LEVEL |
|-------|------------------|-------------|
| 60115X-316L | 1100 BTU/hr (322 W) | 72 dBA |
| 60125X-316L | 1800 BTU/hr (527 W) | 73 dBA |
| 60130X-316L | 2100 BTU/hr (615 W) | 74 dBA |
| 60140X-316L | 2900 BTU/hr (849 W) | 76 dBA |

### Patented* NEMA TYPE 4-4X-316L (IP-66) PANEL COOLER PLUS HOSE DISTRIBUTION KIT

| MODEL | COOLING CAPACITY | SOUND LEVEL |
|-------|------------------|-------------|
| 60115XD-316L | 1100 BTU/hr (322 W) | 72 dBA |
| 60125XD-316L | 1800 BTU/hr (527 W) | 73 dBA |
| 60130XD-316L | 2100 BTU/hr (615 W) | 74 dBA |
| 60140XD-316L | 2900 BTU/hr (849 W) | 76 dBA |

OPTIONAL THERMOSTAT AND 316 STAINLESS SOLENOID VALVE FOR ON OFF CONTROL!

### ACCESSORIES:

| MODEL | DESCRIPTION |
|-------|-------------|
| 69004 | Cold Air Distribution Kit for all sizes of 316 Stainless Panel Coolers |
| 90018-316 | NEMA 4-4X 316 Stainless Steel Solenoid Valve – 110V |
| 90024-316 | NEMA 4-4X 316 Stainless Steel Solenoid Valve – 220V |
| 90017 | Thermostat Only |
| 90045-316 | NEMA 4-4X 316 Stainless Steel Solenoid, 110V plus thermostat kit |
| 90016-316 | NEMA 4-4X 316 Stainless Steel Solenoid, 220V plus thermostat kit |



**FRIGID-X™ Patented* NEMA 4-4X-316L (IP-66) 316L STAINLESS STEEL PANEL COOLER WITH HOSE KIT**

**FRIGID-X™ Patented* NEMA 4-4X-316L (IP-66) 316L STAINLESS STEEL PANEL COOLER MOUNTED ON ELECTRICAL CONTROL PANEL**



**SMART N CLEVER™**
**MORE THAN INTELLIGENT**

*US patent number 8,616,010. Other countries: Patented or Patent Pending.