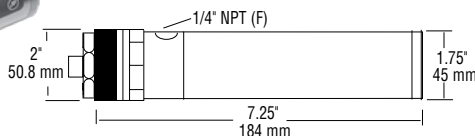


AiRTX POLAR STAINLESS STEEL CABINET COOLERS

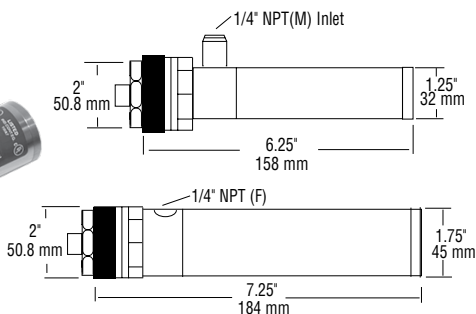


Freon Free - Low-Cost Cooling for Controls in Hot, Hazardous, Corrosive or Washdown Environments —

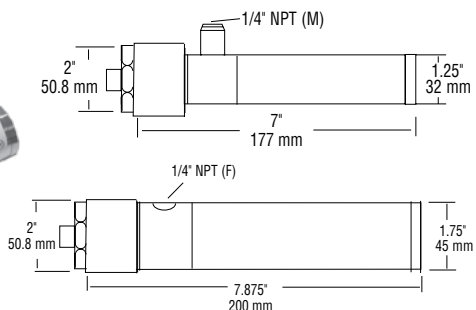
COOLING UP TO 5600 BTUH



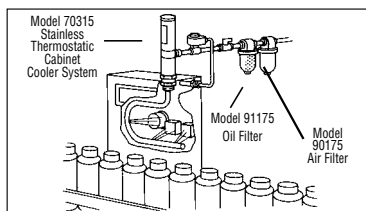
▲ Models 75008, 75015, 75025, 75035 Aluminum Cabinet Cooler



▲ Model 70008 Stainless Steel for NEMA 4/12 Cabinets and Models 70015, 70025, 70035 Stainless Steel



▲ 70008X Stainless Steel for NEMA 4x Cabinets and Models 70015x, 70025x, 70035x Stainless Steel



Bottling Plant

AiRTX Cabinet Cooling Systems are Stainless Steel, so washdown of these leak testing and production controls in a bottling operation is easy. NEMA cabinets can be secured without concern for heat build-up.

Thermostatic System Model 70335

1 of Model	70035	Stainless Steel Cooler
1 of Model	90301	Solenoid Valve
1 of Model	90300	Thermostat
1 of Model	90175	5 micron Auto Drain Filter
1 of Model	70000-14	8 ft Ducting Kit

Keep Factory-Floor Controls On-line in the worst possible conditions with up to 5600 BTU/H of Cooling

Dirt, moisture, hazardous or corrosive materials — a bad environment is the Achilles' heel of industrial electronic systems. And it's a real hazard when you have to open the cabinet door to prevent heat build-up.

Compressed-Air-Operated Stainless Cabinet Coolers for Hazardous Environments

Using a low-cost, reliable Vortex Tube, compressed-air-operated AiRTX Cabinet Coolers purge and cool electrical/electronic enclosures with filtered air that's 50°F / 27°C colder than your compressed air supply. A built-in relief valve lets hot air escape from the control enclosure, while the cooler supplies clean, cold air.

They mount — in minutes — in a standard electrical knock-out to maintain your NEMA 4, 4X, or 12 rating. A built-in, heavy-duty muffler makes the Cabinet Cooler extremely quiet for use in production areas.

Use Them Anywhere!

If you're an OEM, you'll find the fit and finish of our Cabinet Coolers a complement to your own equipment.

Thermostatic systems are highly recommended as they produce a truly maintenance free cooling system. No forgetting to turn it on or off, increasing or decreasing air supply on hot days, consuming compressed air when cooling is not necessary, and no thermal hot and cold changes. A constant 90°F (32°C) to provide the electronics with a long life.

For double wide cabinets up to 10'W x 6'H x 2'D or cabinets in extreme hot conditions above 150°F, order Model 70370 for 5600 BTU/H of Cooling.

AiRTX Polar Cabinet Cooler Advantages

- Higher BTU per CFM
- Greater cooling with the same air usage
- Available in Stainless Steel and Aluminum
- Wide range of Cooling (600-5600 BTUH)
- No vibration to affect CCTV cameras
- Thermostatically controlled units available
- Compact for cramped factory areas
- No maintenance, no moving parts
- Requires no electricity • No RF/EMI interference
- No fans or filters • Muffled for quiet operation
- Maintain NEMA 4, NEMA 4x, and NEMA12 integrity

Use Them For

- NC/CNC cabinets
- Industrial PCs
- PLCs
- Measuring instruments and recording devices
- Closed-circuit TV cameras
- Motor controls and relays

AiRTX *EASY MOUNT TURNKEY CABINET COOLING ENCLOSURE*



Easy installation:

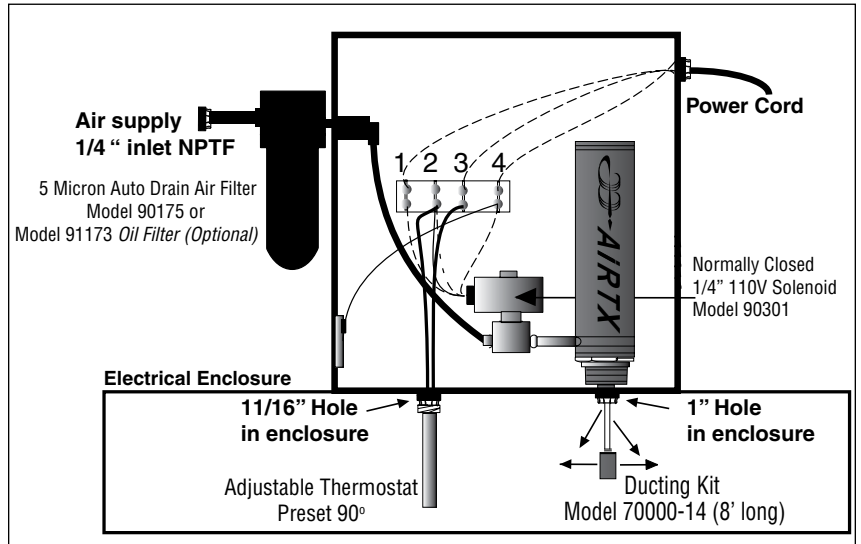
1. Attach power supply to inside panel for solenoid and thermostat operations.
2. Attach compressed air supply line for automatic drain air filter.
3. Drill 11/16" hole in cabinet for thermostat and 1" hole in cabinet for Control Cooler. Secure with thread nuts inside the cabinet.
4. Attach the dwelling kit to distribute the cold air throughout the cabinet

Cabinet Cooling Turnkey Enclosure

Model	Description
70308CC	600 BTU/H Thermostatic System
70315CC	1100 BTU/H Thermostatic System
70325CC	1800 BTU/H Thermostatic System
70335CC	2800 BTU/H Thermostatic System

AiRTX Easy Mount Turnkey Cabinet Cooling Enclosure Advantages

- Everything you need in One Package
- Easy to install
- Complete System for 600 to 2800BTU/Hs
- Great in dusty and wet environments



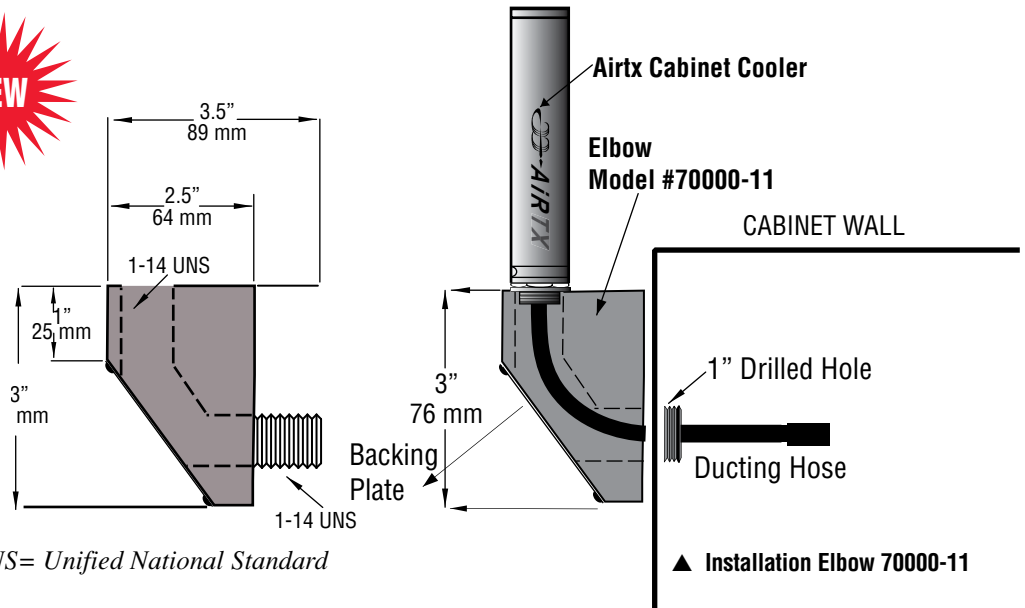
Thermostatic System includes: Cabinet Enclosure System, 5 micron Auto Drain, Filter #90175, Ducting Kit, Thermostat and 110V Solenoid Valve

AiRTX *MOUNTING ELBOW MODEL 70000-11*

The AiRTX Cabinet Cooler can be mounted in any place and work just as efficiently. The mounting Elbow is available for tight spaces and upright positioning. The Model 70000-11 is attached to the Cabinet wall through a 1" hole. O rings seal the mounting Elbow maintaining the integrity of a NEMA 4 or 12 Cabinet.



▲ Mounting Elbow Model 70000-11



UNS= Unified National Standard

Call the AiRTX Air Line
for Free Technical Support
1-800-307-7475

E-mail Us at
sales@airtx.com
Visit Our Website at
airtx.com

	AiRTX Stainless Steel BTU Model 70325	Freon Air Conditioner 1800 BTU
Initial Unit Cost	\$602.00 (20 year life) \$30.00/year	\$2000.00 (5 year life) \$400.00/year
Installation (one time cost)	\$50.00/hour \$2.50/year/20 years	\$50.00/hour \$10.00/year
Maintenance	No Maintenance	Maintenance 4 hours/year for charging freon, cleaning and replacing filters, leak checks \$200 per year
Operation	5 hours/day, 9 months/year Based on \$0.25/1000 cu. ft. of air \$288.00/year	7 hours/day, 9 months/year \$250.00/year
Total Operation Cost	\$320.50/year	\$850.00/year (Not including downtime for repairs)

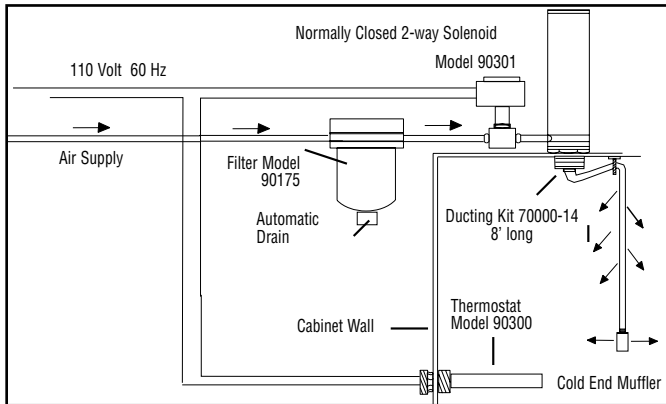
*Freon air conditioners must be deregulated by 65% at 90°F and 95% at 115°F. Therefore, the freon air conditioners must operate longer than the Cabinet Cooler or be oversized to provide the same amount of cooling during warmer weather when the ambient temperature is higher.

The recommended thermostat setting is 90°F (32°C). This setting is within the safe operating limits of most components and reduces condensation on the outside of the cabinet during hot humid weather.

Temperature swings create connector stress, while excess heat dries circuit boards and result in life spans of the controls being cut in half for every 20°F (10°C) over normal operating temperatures of 100°F (38°C).

The Cabinet Coolers are very inexpensive insurance against premature replacement of a \$2,000 to \$3,000 electronic circuit board.

Installation of Thermostatic Cabinet Cooler System



STANDARD NEMA ENCLOSURE RATING

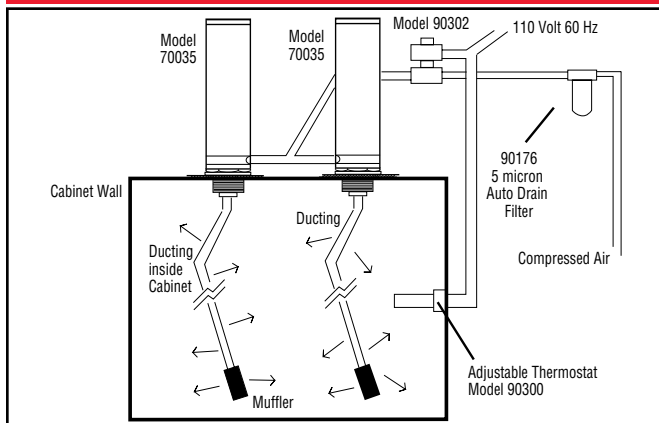
National Electrical Manufacturers Association (NEMA Standard 250) Electrical and Electronic Manufacturers Association of Canada (EEMAC)

NEMA Type 4 - Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, and hose directed water, undamaged by the formation of ice on the enclosure.

NEMA Type 4x - Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, and hose-directed water; undamaged by the formation of ice on the enclosure.

NEMA Type 12 - Enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt, and dripping noncorrosive liquids.

Installation of Double Wide Thermostatic Cabinet Cooler System



Double Wide System Components Model 70370 - 5600 BTU/H

2 of Model	70035	Cooler with Ducting Kit
1 of Model	90302	Solenoid
1 of Model	90300	Thermostat
1 of Model	90176	Auto Drain Filter

For double wide cabinets up to 10'W x 6'H x 2'D or cabinets in extreme hot conditions above 150°F, order Model 70370 for 5600 BTU/H of Cooling.

AiRTX POLAR STAINLESS STEEL CABINET COOLERS



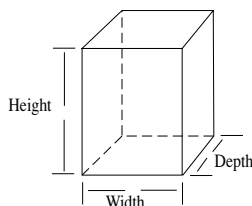
Cooling — Stainless Steel POLAR Cabinet Coolers Maintain NEMA 4, 4X and NEMA12 Integrity and are UL Listed

Determining Requirements for Sizing Correct Cabinet Cooler

1. Size the heat load area of the cabinet using the following formula:

$$(2 \times W + 2 \times D) \text{ Height} = \text{square feet of cabinet}$$

Example: 3' wide, 1' deep, 4' high = 32 square feet



2. Determine inside temperature reading for maximum hotter outside temperatures.

Example: If reading is taken on a 70°F day and the temperature reads 110°F, add 25°F if the electronics will be operating during a summer day temperature of 95°F or add more if it will get hotter.

3. 90°F (32°C) is a safe operating temperature for most electronics to reduce heat stress on the controls and drying of the wafer boards.

4. Subtract the temperature of 90°F as the desired temperature inside the operating cabinet from the temperature reading in step 2 to determine the temperature difference or Delta T.

5. Use the square area of your cabinet readings on the left side of the scale and match it with the temperature difference from step 4 on the top of the sizing chart.

6. The intersection of these two numbers give you the BTUs required to maintain the desired 90°F inside temperature.

7. Match the BTU reading with the proper AiRTX Cooler.

$$Kcal = BTU \times .2520$$

$$^{\circ}F = 9/5 (^{\circ}C + 32)$$

$$^{\circ}C = 5/9 (^{\circ}F - 32)$$

$$BTU = Watts \times 3.41$$

POLAR CABINET COOLER MODELS

NEMA TYPE 4, 12	NEMA TYPE 4, 4X	NEMA TYPE 4, 12	
Aluminum	SS	SS	Description
75008	70008X	70008	600 BTU/H Cooler and ducting kit, muffler
75108	70108X	70108	600 BTU/H Cooler with ducting kit, muffler and 5 micron auto drain filter
75308	70308X	70308	600 BTU/H thermostatic system includes: Cooler auto drain filter, ducting kit, muffler thermostat, solenoid valve
75105	70015X	70015	1100 BTU/H Cooler and ducting kit, muffler
75115	70115X	70115	1100 BTU/H Cooler with ducting kit, muffler and 5 micron auto drain filter
75315	70315X	70315	1100 BTU/H thermostatic system includes: Cooler, auto drain filter, ducting kit, muffler, thermostat, solenoid valve
75025	70025X	70025	1800 BTU/H Cooler and ducting kit, muffler
75125	70125X	70125	1800 BTU/H Cooler with ducting kit, muffler, and 5 micron autodrainfilter
75325	70325X	70325	1800 BTU/H thermostatic system includes Cooler, auto drain filter, ducting kit, muffler, thermostat, solenoid valve
75035	70035X	70035	2800 BTU/H Cooler and ducting kit, muffler
75135	70135X	70135	2800 BTU/H Cooler with ducting kit, muffler, and 5 micron auto drain filter
75335	70335X	70335	2800 BTU/H thermostatic system includes Cooler, auto drain filter, ducting kit, muffler, thermostat, solenoid valve
75370	70370X	70370	5600 BTU/H thermostatic system includes: 2 Coolers (Model 70035) auto drain filter, ducting kit, muffler, thermostat, solenoid valve

COOLING

Sizing Chart	BTU Requirements for Cooling					
	Square Feet	90°F	70°F	50°F	30°F	10°F
2'H x 2'W x 2'D	16	500	350	150	50	50
3'H x 3'W x 2'D	30	1100	800	450	150	100
4'H x 3'W x 1'D	32	1300	900	550	150	100
5'H x 3'W x 1'D	40	1600	1100	700	150	100
5'H x 4'W x 1'D	50	2200	1400	900	300	150
5'H x 4'W x 2'D	60	2600	1800	1100	500	200
5'H x 5'W x 2'D	70	3000	2100	1300	600	200
6'H x 4'W x 2'D	72	3100	2200	1400	700	200
6'H x 5'W x 2'D	84	3600	2600	1600	750	200
6'H x 6'W x 2'D	96	4200	3000	1900	900	200
7'H x 6'W x 2'D	112	4800	3500	2200	1000	200
7'H x 7'W x 2'D	126	5800	4100	2600	1300	250
8'H x 7'W x 2'D	144	6500	4600	2900	1450	300
8'H x 8'W x 2'D	160	7000	5200	3300	1650	350
8'H x 10'W x 2'D	192	8800	6400	5200	2100	450

Square Meters	50°C	39°C	28°C	17°C	6°C
1.49	126	88	38	13	13
2.79	280	202	113	38	25
2.97	330	227	139	38	25
3.72	405	280	176	38	25
4.65	555	353	227	75	38
5.60	655	454	280	126	50
6.50	756	530	328	151	50
6.69	781	555	353	176	50
7.80	907	655	403	189	50
8.92	1058	756	480	227	50
10.40	1210	882	554	252	50
11.71	1462	1033	655	328	63
13.38	1638	1159	730	365	76
14.86	1764	1310	832	416	88
17.84	2218	1612	1310	530	113