

Cost Comparison of Cabinet Coolers vs. Freon Air Conditioners

	AiRTX Stainless Steel BTU Model 70325	Freon Air Conditioner 1500 BTU
Initial Unit Cost	\$465.00 (20 year life) \$23.25/year	\$1800.00 (5 year life) \$360.00/year
Installation	\$50.00/hour \$2.50/year	\$50.00/hour \$10.00/year
Maintenance	No Maintenance	4 hours/year for changing freon, cleaning and replacing filters, leak checks \$200.00/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 \$72.00/year
Total Operation Cost	\$313.75/year	\$642.00/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.

 $The \ recommended \ thermost at \ setting \ is \ 90^{\circ}F \ (32^{\circ}C). \ This \ setting \ is \ within \ the \ safe \ operating \ limits \ of \ most \ components \ and \ reduces \ condensation \ on \ the \ outside \ of \ the \ cabinet \ during \ hot \ humid \ weather.$

Temperature swings create connector stress, while excess heat dries circuit boards and results in the life spans of the control being cut in half for every $20^{\circ}F(10^{\circ}C)$ over normal operating temperatures of $100^{\circ}F(38^{\circ}C)$.

 $The \textit{Stainless Steel Cabinet Coolers are very inexpensive insurance against premature \textit{replacement of a \$2000 to \$3000 \textit{electronic circuit board.}}$

Standard NEMA ENCLOSURES

Enclosure Rating	NEMA - National Electrical Manufacturers Association (NEMA Standard 250) Electrical and Electronic Manufacturers Association of Canada (EEMAC)	
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.	
Туре 4х	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.	
Type 12	Enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt, and dripping noncorrosive liquids	