

# Thermoelectric Air Cooler

## Description and applications

The VOT series of thermoelectric air coolers is used for cooling air inside various types of cabinets, automatic power supplies and control units, electronic enclosures, foundry traveling cranes, passenger and freight elevators, and vehicle cabins. These coolers are ecologically clean devices utilizing the Peltier Effect. This technology is considered the most promising and is rapidly proving its advantages in comparison with conventional compression and absorption refrigerating systems for the above-described applications.



## Design Features

- Automatic control unit with digital temperature indicator provides for easy adjustment and maintenance of required operating mode.
- Automatic switching between Cooling and Heating modes.
- Condensed water removal from air cooler cold side.

## Main Advantages:

- the cooling effect is achieved while the direct current flows through the solid state semiconductor device (thermoelectric module);
- there are no chemically active and pressured coolants;
- can be used on moving vehicles;
- can operate at any climate;
- there are no moving parts (fans are the exception);
- low time delay;
- high reliability;
- low volume noise.



Model	Supply voltage	Maximum productivity in watts	Current consumption in Amps	Dimensions in mm	Mass in kilograms	Operating temperature range in degrees C
VOT-50-12DC-ZIV1	12DC	50	5,2	154x198x143	2,5	-10...+50
VOT-100-24DC-ZIV1	24DC	100	5,2	180 x374x154	6,0	-10...+50
VOT-100-24DC-ZIH1	24DC	100	5,2	374 x180x154	6,0	-10...+50
VOT-100-24DC-ZIH3	24DC	100	5,2	297x160x133	6,5	-20...+50
VOT-100-48DC-ZIH3	48DC	100	2,75	323x154x143	7,2	-20...+50
VOT-150-24DC-ZIV1	24DC	150	10,5	180 x498x154	8,6	-20...+50
VOT-150-24DC-ZIH1	24DC	150	10,5	498 x180x154	8,6	-20...+50
VOT-180-24DC-ZIV3	24DC	180	14,0	∅ 348, h259	10,0	-20...+50
VOT-200-24DC	24 DC	200	9,6	327x261x153	8,95	-20...+55
VOT-300-24DC	24 DC	300	14,4	457x261x153	12,9	-20...+55
VOT-400-24DC	24 DC	400	19,2	587x261x153	16,55	-20...+55
VOT-500-230DC-ZIV1	230AC	500	5,7	343 x989x 229	37,0	-20...+50
VOT-500-230DC-ZIH1	230AC	500	5,7	989 x343x229	37,0	-20...+50
VOT-100-24DC-LIH3 D	24DC	100	4,8	151,6x260,6x165	4	-20...+50
VOT-150-24DC-LIH3 D	24DC	150	6,5	156,6x309,6x165	5,6	-20...+50
VOT-300-24DC-LIH3 D	24DC	300	14,4	282x484x162	12,4	-20...+50
VOT-500-24DC-LIH3 D	24DC	500	24	262x682x172	20,1	-20...+50
VOT-500-230DC-ZIV1 D	230AC	500	5,1	1010x261x175	27	-20...+50
VOT-500-24DC	24 DC	500	24	717x261x153	20,9	-20...+55

\* Maximal cooling capacity  $\Delta T=0^{\circ}\text{C}$  and  $T_{\text{env}}=35^{\circ}\text{C}$

