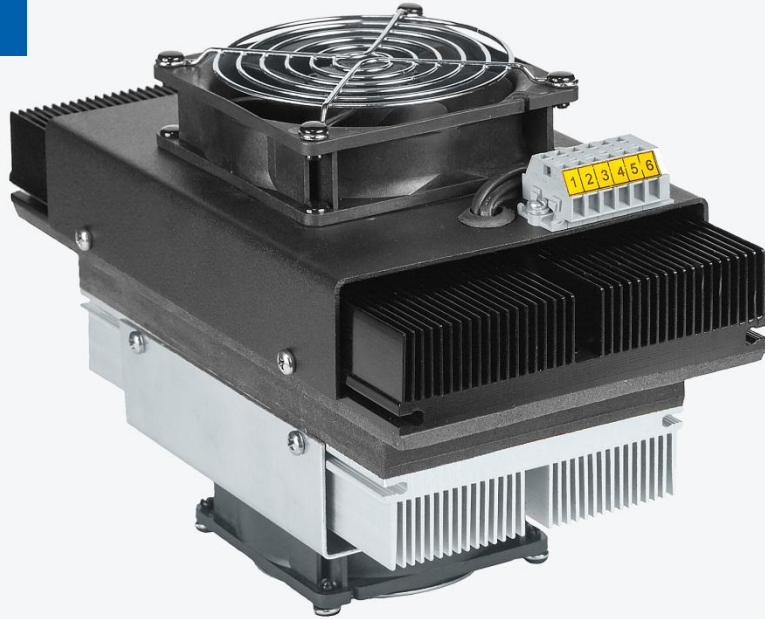




## CASCADE SERIES

*Thermoelectric assembly Air-to Air*

**TA-AA-70-12-CS**

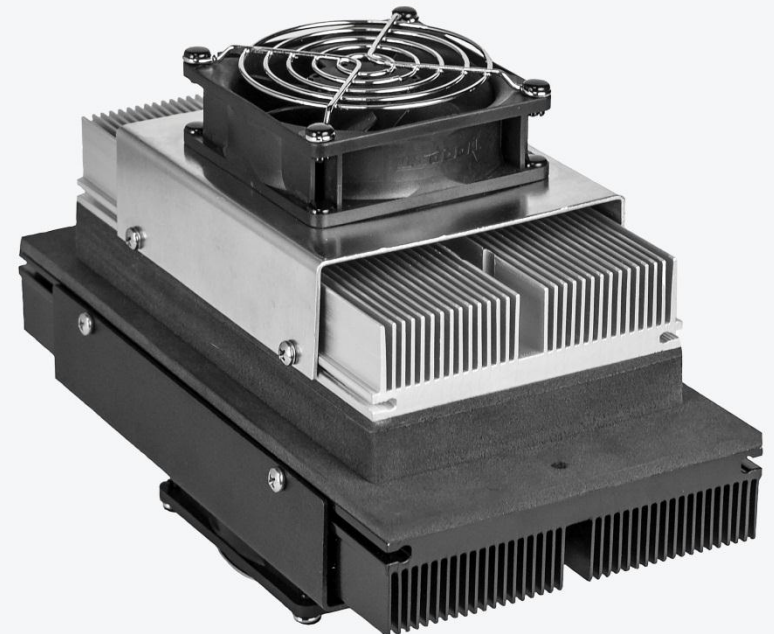


### **Features**

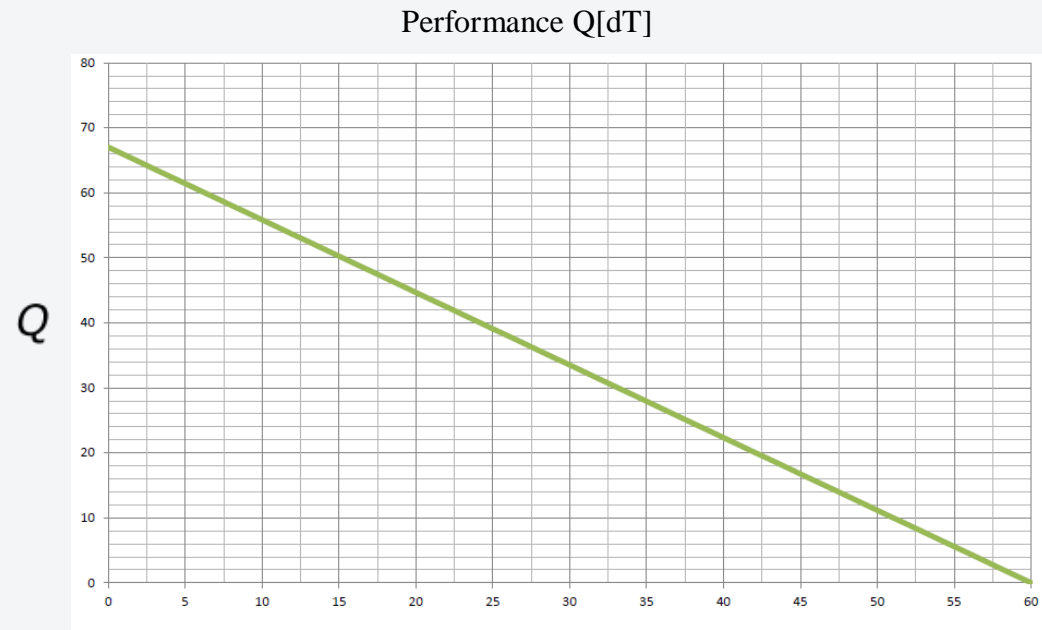
- Low current consumption.
- low noise pressure.
- Compact design.
- Small weight.
- Precise temperature control.
- Ease of installation and connection.
- DC operation of 10V or 14V voltage.
- Various positioning in space.
- Environmentally friendly solid state heat exchange operation with no CFC refrigerants.

### **Applications**

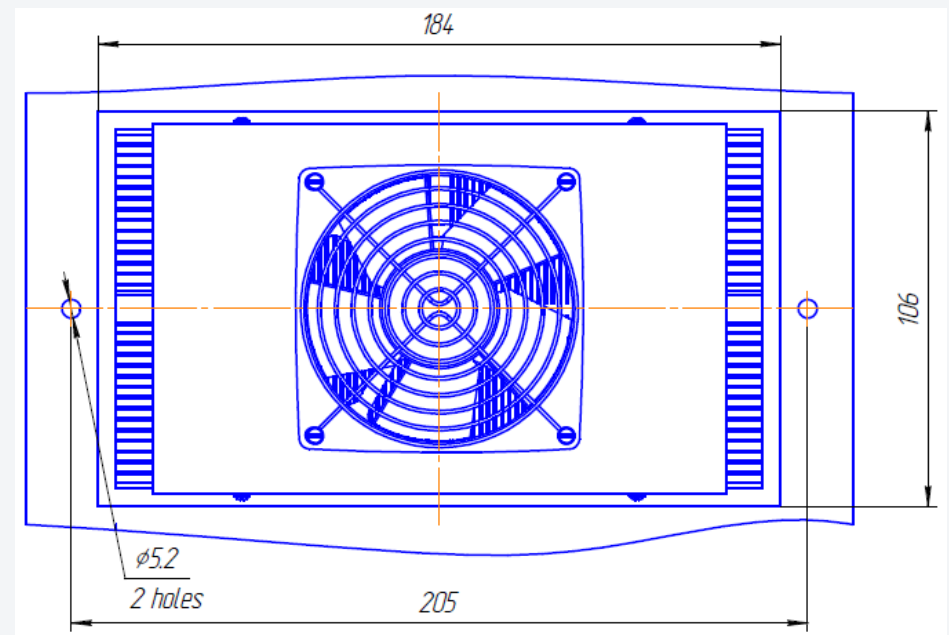
- Photonics laser systems.
- Thermostat of biological assays.
- Medical diagnostics.
- Industrial measuring instrument.
- Analytical devices.
- Food and beverage cooling
- Others.



Type	TA-AA-70-12-CS
Voltage (nominal /maximal)	12/14 VDC
Amperage $\pm 10\%$ (nominal/starting)	10.6A/15.2A (at 12VDC)
Max ripple	5%
Cooling capacity at $dT = 0^{\circ}\text{C}$ and nominal voltage . <sup>1</sup>	67W
Operating temperature of the heatsinks on the inner and outer side, not more than <sup>2</sup>	85°C
Temperature range (external /internal)	-40°C to +60°C/-20°C to +60°C
Fans lifetime (at temperatures not higher than +40°C) and nominal voltage	$\geq 60,000$ hours
Sound level (distance 1m.)	39dB(A)
Mode of operation	long-term
Protection of heatsinks	Anodizing film thickness of 10-20 microns
Overheat protection	by demand the customer ( Additional option )
Type of connector	Terminal block with cage clamps
Weight $\pm 3\%$	2.6kg



$dT$   
 $dT^{\circ}\text{C} = T^{\circ}\text{ ambient} - T^{\circ}\text{ internal}$   
 Q – cooling capacity, Watts  
 at ambient air temperature +35°C and nominal voltage  
 MOUNTING SCHEME



1-Cooling capacities at 12 VDC and 14 VDC are rated external temperatures of +35°C to + 50°C.

2-Possibility of increase to 150°C - Additional option.

**NOTE!** A method of transferring heat - forced convection.

Not recommended to reduce airflow external and internal side.

Contact us for more information  
 e-mail: [info@crystalltherm.com](mailto:info@crystalltherm.com).

+7-495-664-24-31 , +7-495-519-88-52 , +7-495-519-00-69  
 Fax: +7-495-515-40-94

# MECHANICAL DRAWING

