



TA-AA-600-48-HF

***Outdoor Air-to-Air Thermoelectric Assembly
(Peltier cooler)***

- *Industrial measuring instruments*
- *Analytical devices*
- *Outdoor telecom box and shelter*
- *Outdoor displays and kiosks*
- *Air conditioner for electronic cabinets*
- *Battery cabinets*
- *Others*

The product complies with the requirements of EU RoHS., limiting the content of harmful substances, adopted by the European Union.

Protective shroud of external side executes the following functions:

- *split up the incoming flow of "cold" and outgoing of "hot" air without lowering the cooling capacity*
- *it is an additional heat exchanger*
- *protects the unit from unauthorized access.*
- *presses flange to the wall cabinet, ensuring the tightness of the installation site.*
- *close the window for the installation of thermoelectric cooling assembly, thereby maintaining the aesthetic appearance of the equipment.*

The shroud is made of steel 1.5 mm thickness (on request can be made of steel 2 mm thickness or of aluminum 3mm thickness).

Protection from exposure to atmospheric corrosion is realised dip galvanized (Steel) and powder painting.



Type	TA-AA-600-48-HF
Voltage (nominal /maximal)	48/54 VDC
Amperage $\pm 10\%$ (nominal/starting)	11.7A/15.0A (at 48VDC)
Max ripple	5%
Cooling capacity at $dT = 0^{\circ}\text{C}$ and nominal voltage . ¹	584W
Heating ²	572W
Operating temperature of the heatsinks on the inner and outer side, not more than ³	85°C
Temperature range (external /internal)	-40°C to +60°C/-10°C to +60°C
Fans lifetime (at temperatures not higher than +40°C) and nominal voltage	$\geq 60,000$ hours
Sound level (distance 1m.)	65dB(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	by demand the customer (Additional option)
Degree of protection ⁴	IP55
Weight(without cover / with cover)	17 kg/ 23.5kg

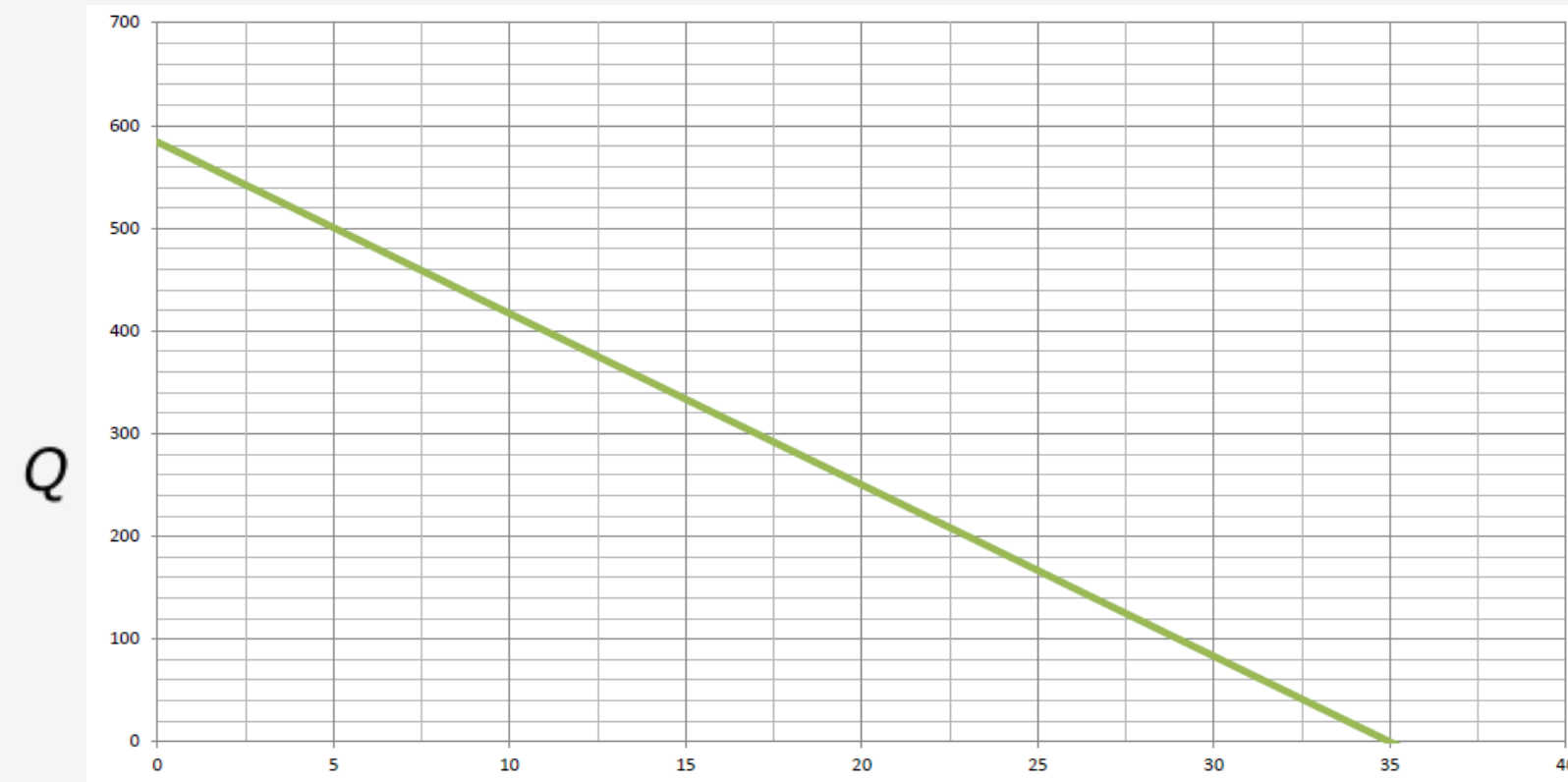
- 1-Cooling capacity is rated at ambient temperature +35°C.
- 2-Heating capacity is rated at external temperature of -40°C, nominal voltage, and $dT = -45^{\circ}\text{C}$.
- 3-Possibility of increase to 150°C - Additional option.
- 4-Upon request , can be IP68.

ALL PARMETERS WERE MEASSURED WITH A PROTECTIVE CASING

NOTE! A method of transferring heat - forced convection.

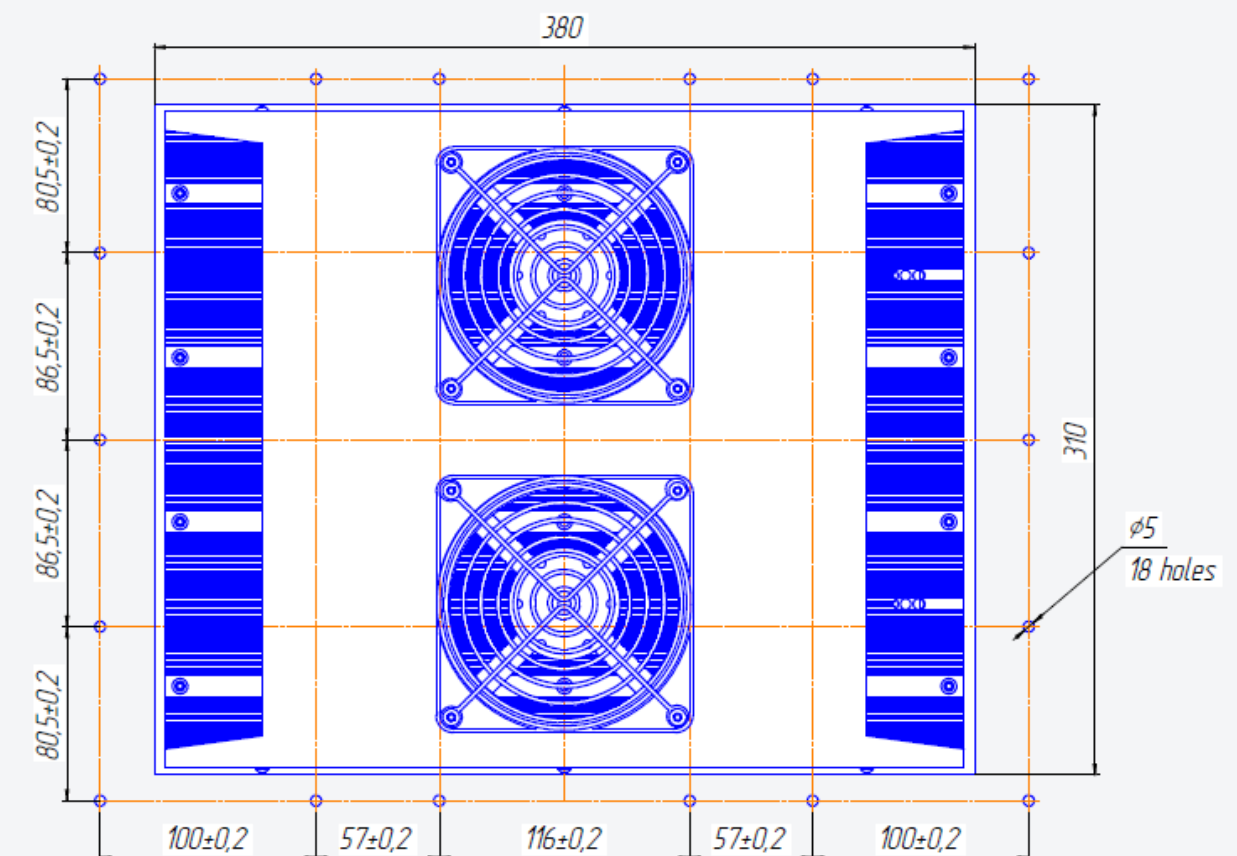
Not recommended to reduce airflow external and internal side.

Performance Q- ΔT



dT
 $dT^{\circ}\text{C} = T^{\circ}\text{ ambient} - T^{\circ}\text{ internal}$
 Q - cooling capacity, W.
 for ambient temperature +35 ° C and rated voltage

INSTALLATION SCHEME



Contact us for more information
 e-mail: info@crystalltherm.com.

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

Dimensions of the assembly

