



TA-AA-300-24-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.

Multifunctional shroud of external side executes the following functions:

- *split up the incoming flow of "cold" and out coming of "hot" air without lowering the cooling capacity*
- *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 realized dip galvanized (Steel) and powder painting.



Type	TA-AA-300-24-HF
Voltage (nominal /maximal)	24/27 VDC
Amperage $\pm 10\%$ (nominal/starting)	13A/16,4A (at 24VDC)
Max ripple	5%
Cooling capacity at $dT = 0^{\circ}\text{C}$ and nominal voltage . ¹	294W
Heating ²	292W
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.)	57dB(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)	9.2 kg/ 13.5kg

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 PARAMETERS WERE MEASURED WITH A PROTECTIVE CASING

NOTE! A method of transferring heat - forced convection.

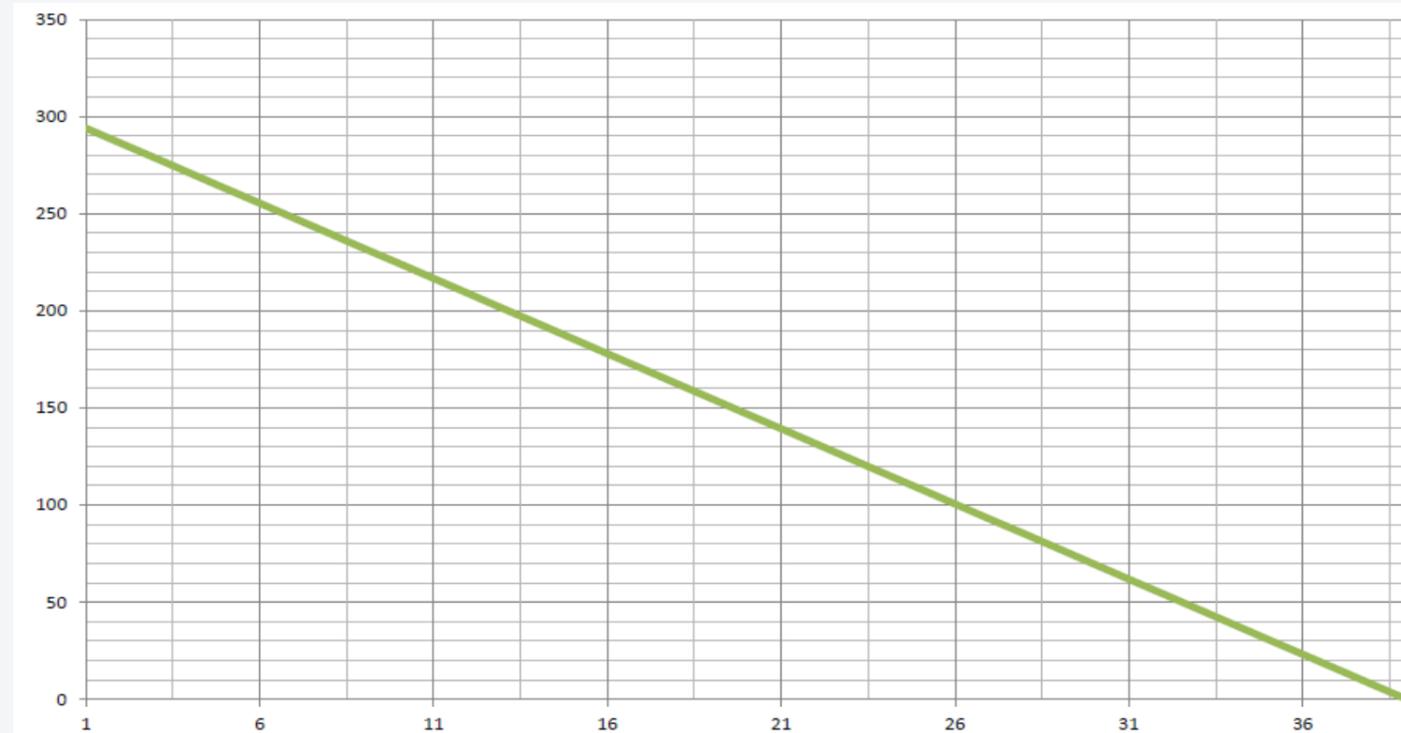
Not recommended to reduce airflow external and internal side.

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Performance Q- ΔT

Q



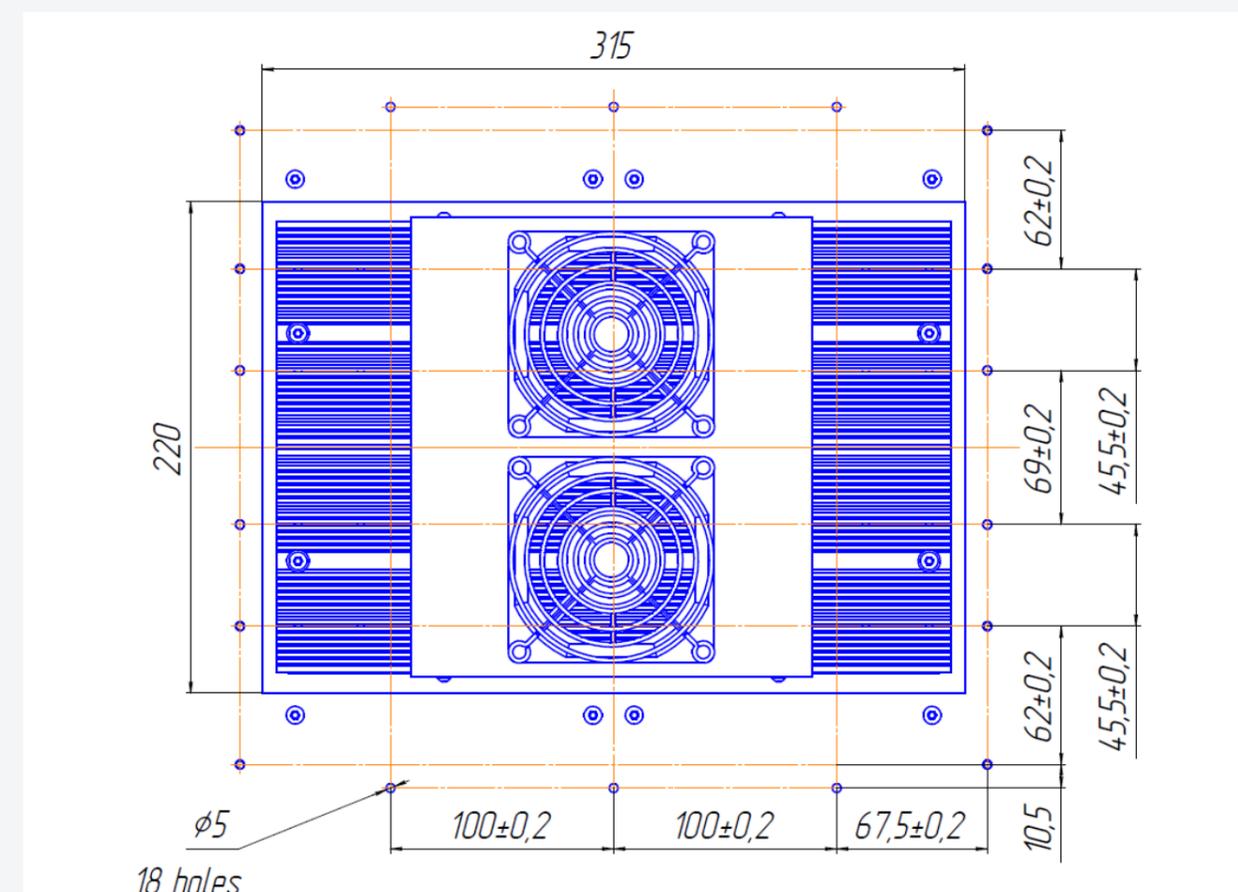
dT

$dT^{\circ}\text{C} = T^{\circ}\text{ ambient} - T^{\circ}\text{ internal}$

Q - cooling capacity, W.

for ambient temperature +35 ° C and rated voltage

INSTALLATION SCHEME



Dimensions of the assembly

