

TA-AA-500-24-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.



Protective 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.

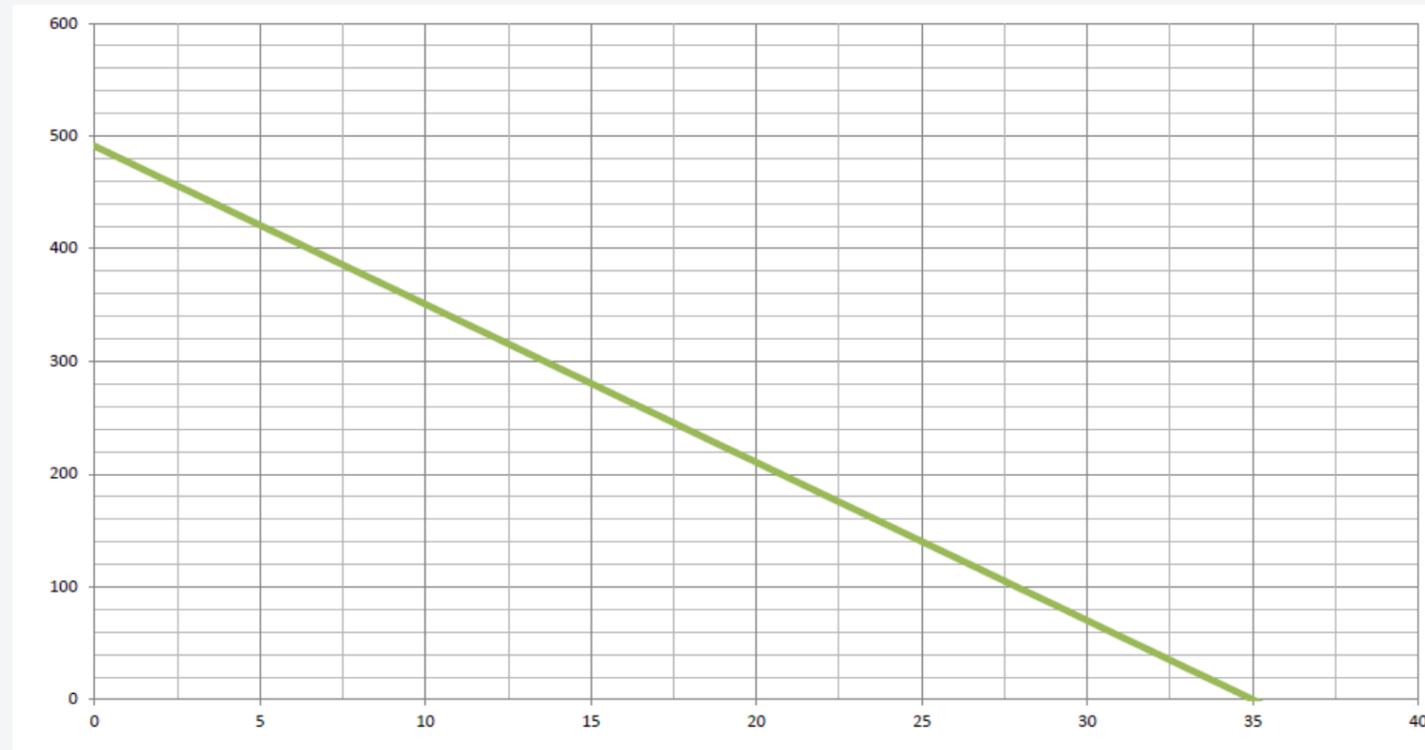
The shroud is made of steel 1.5 mm thickness (on request can be made of steel 2 mm thickness or of aluminum 3mm thickness).

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



Performance Q-ΔT

Q

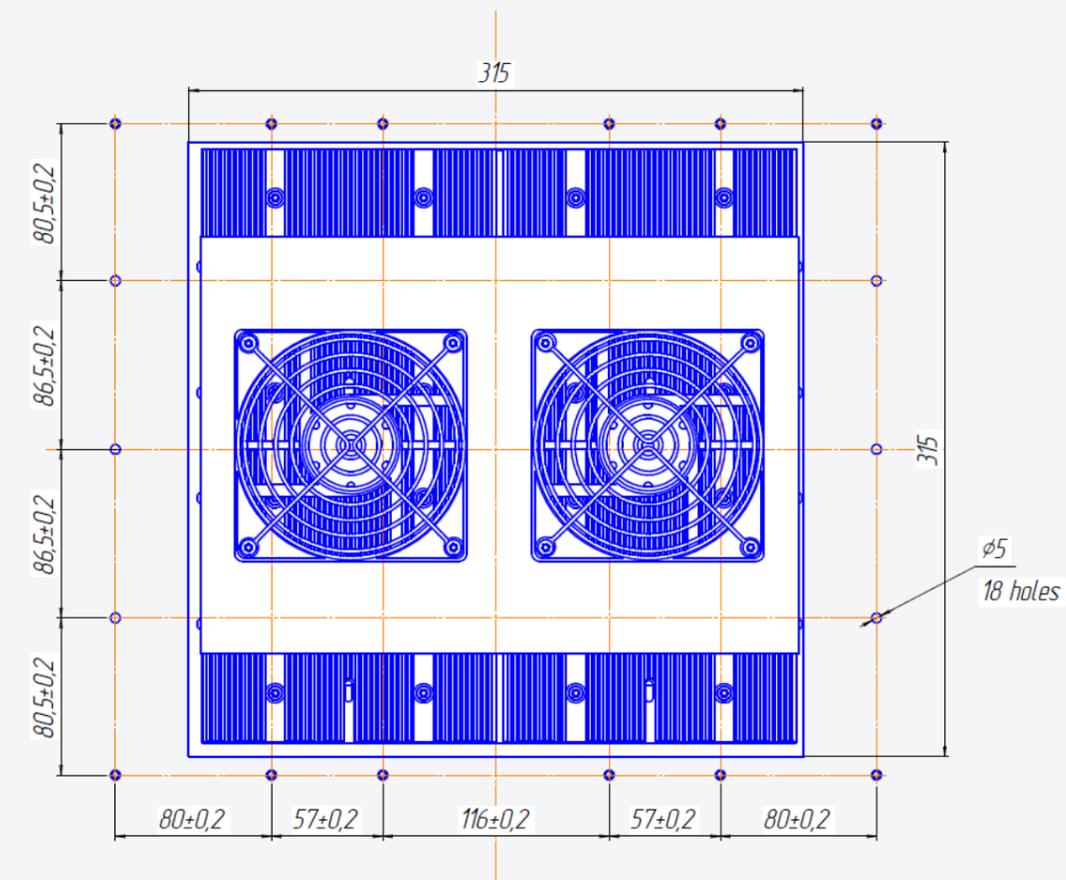


$$dT^{\circ}\text{C} = T^{\circ}\text{ ambient} - T^{\circ}\text{ internal}$$

Q - cooling capacity, W.

for ambient temperature +35 ° C and rated voltage

INSTALLATION SCHEME



Type

TA-AA-500-24-HF

Voltage (nominal /maximal)

24/27 VDC

Amperage ±10% (nominal/starting)

19.8A/25.8A (at 24VDC)

Max ripple

5%

Cooling capacity at dT = 0 °C and nominal voltage¹

491W

Heating²

484W

Operating temperature of the heatsinks on the inner and outer side, not more than³

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

≥60,000 hours

Sound level (distance 1m.)

65dB(A)

Mode of operation

Long term

Protection of heatsinks

Anodizing film thickness of 10-20 microns

Over temp thermostat

(option)

Type of connector

Terminal block with cage clamps

Degree of protection⁴

IP55

Weigh (without protective shroud / with shroud)

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°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.

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Dimensions of the assembly

