



TA-AA-300-24-HF-CHD

Application of outdoor Air-to-Air Thermoelectric Assembly (Peltier cooler) HF-CHD type

Thermal management and dehumidification for:

- *Industrial measuring instruments*
- *Analytical devices*
- *Outdoor telecom boxes and shelters*
- *Outdoor display and kiosks*
- *Electronic cabinets*
- *Battery cabinets*
- *Medical equipment*
- *Storage cabinets*
- *Others*

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



Multifunctional cover 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 cover 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-CHD
Voltage (nominal /maximal)	24/27 VDC
Amperage $\pm 10\%$ (nominal/starting)	14.7A/19.2A (at 24VDC)
Max ripple	5%
Cooling capacity at $\Delta T = 0^{\circ}\text{C}$ and nominal voltage . ¹	304W
Heating ²	391W
Heating ³	544W
Operating temperature of the heatsinks on the inner and outer side, not more than ⁴	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	Additional option
Type of connector	Terminal block with cage clamps
Outdoor part protection	IP68
Weight(Including protective cover)	15.3kg

1-Cooling capacity is rated at ambient temperature +35°C.

2-Heating capacity is rated at external temperature of -40°C, nominal voltage, and $\Delta T = -45^{\circ}\text{C}$.

3-Heating capacity is rated at external temperature of +15°C, nominal voltage, and $\Delta T = 0^{\circ}\text{C}$.

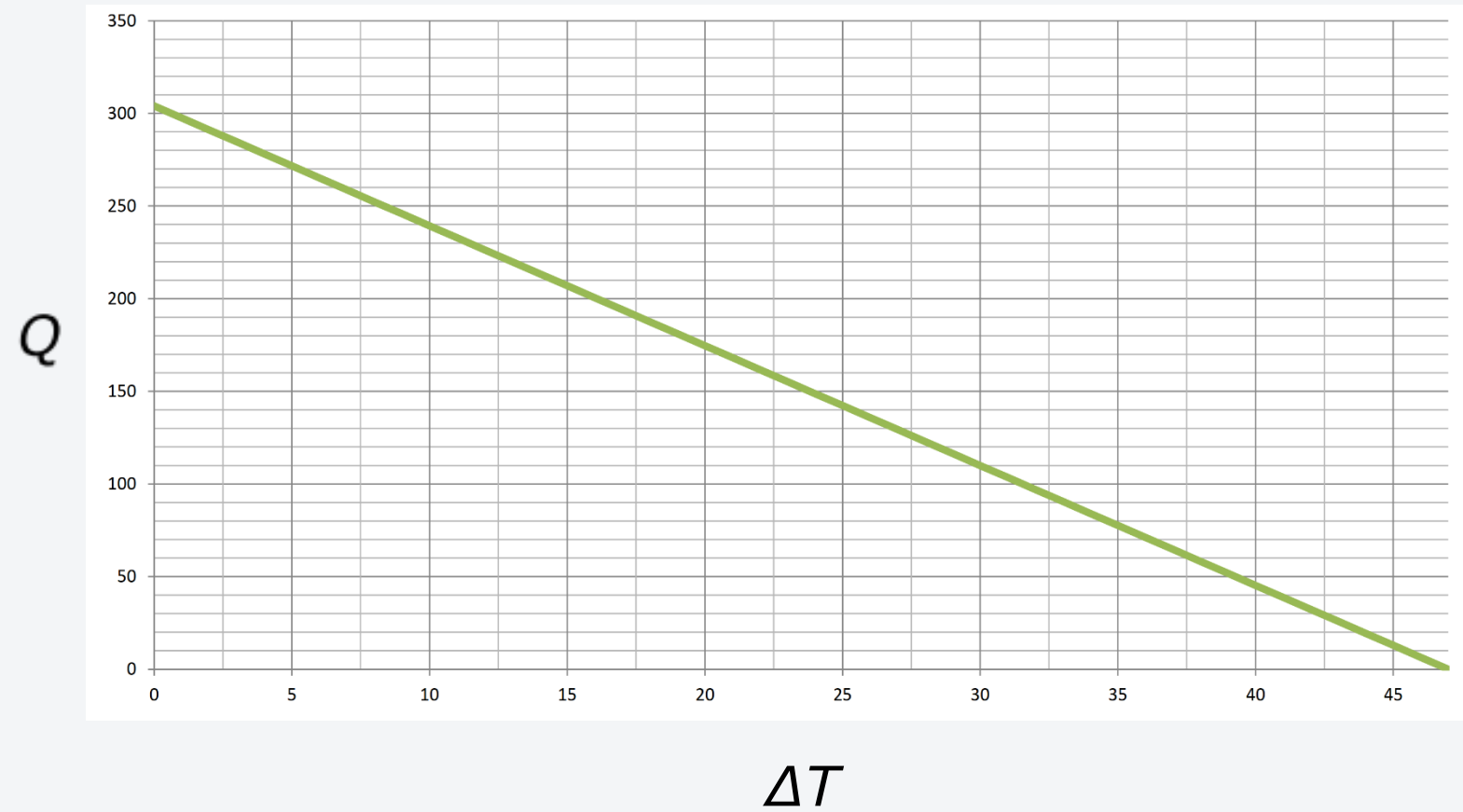
4-Possibility of increase to 150°C - Additional option.

ALL PARAMETERS WERE MEASURED WITH A PROTECTIVE COVER

NOTE! A method of transferring heat - forced convection.

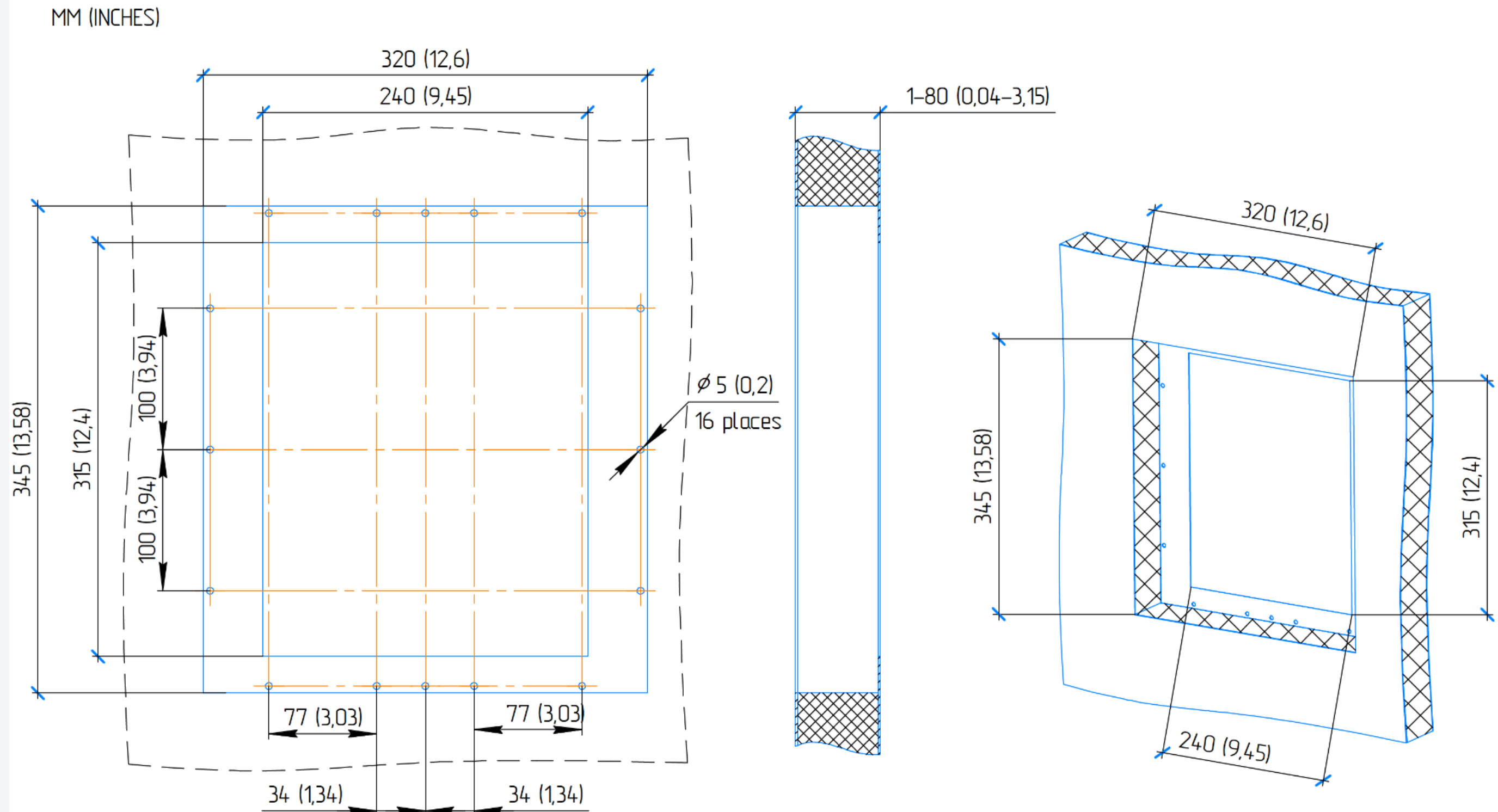
Not recommended to reduce airflow external and internal side.

Performance Q- ΔT



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

Mounting window

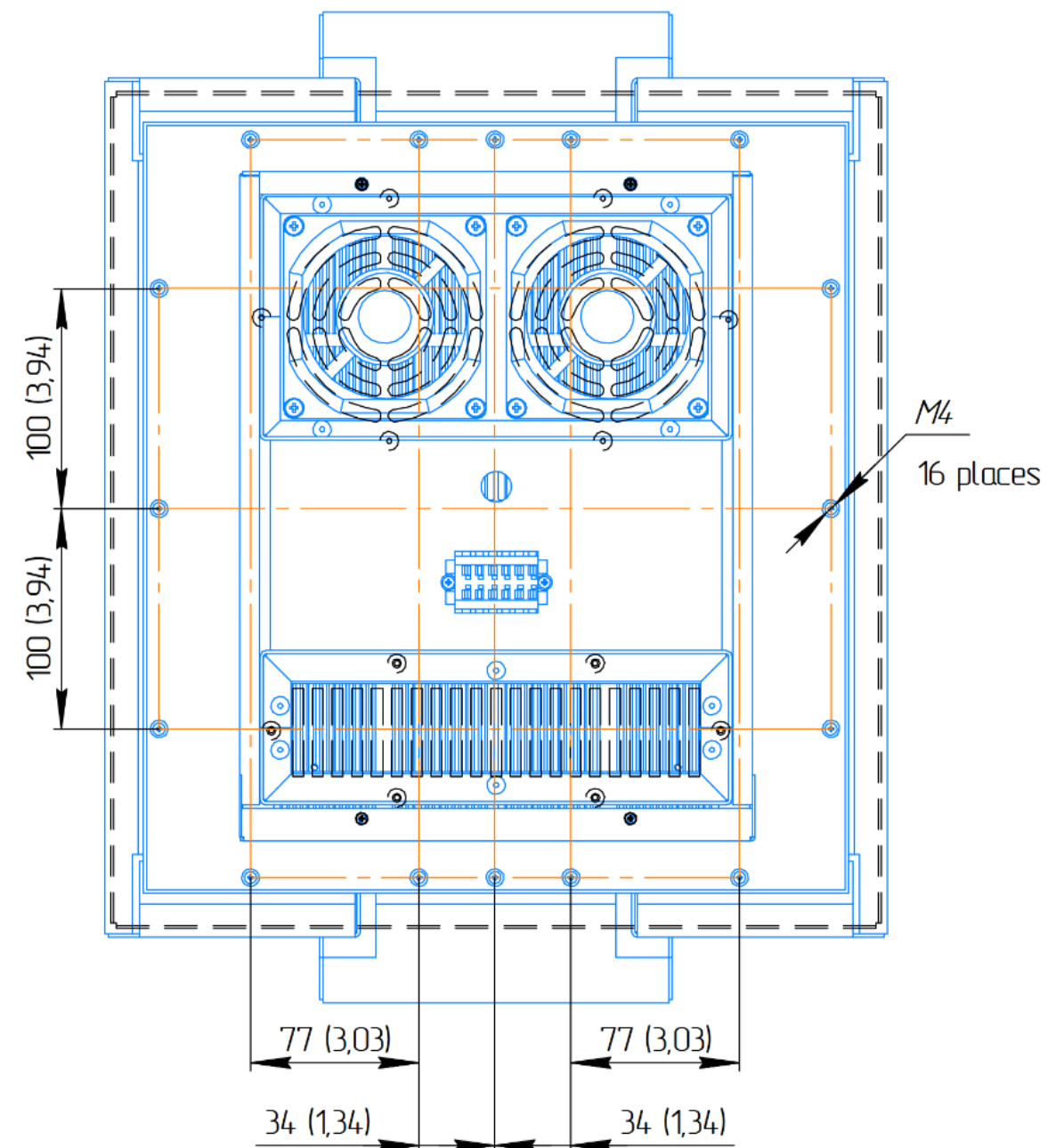
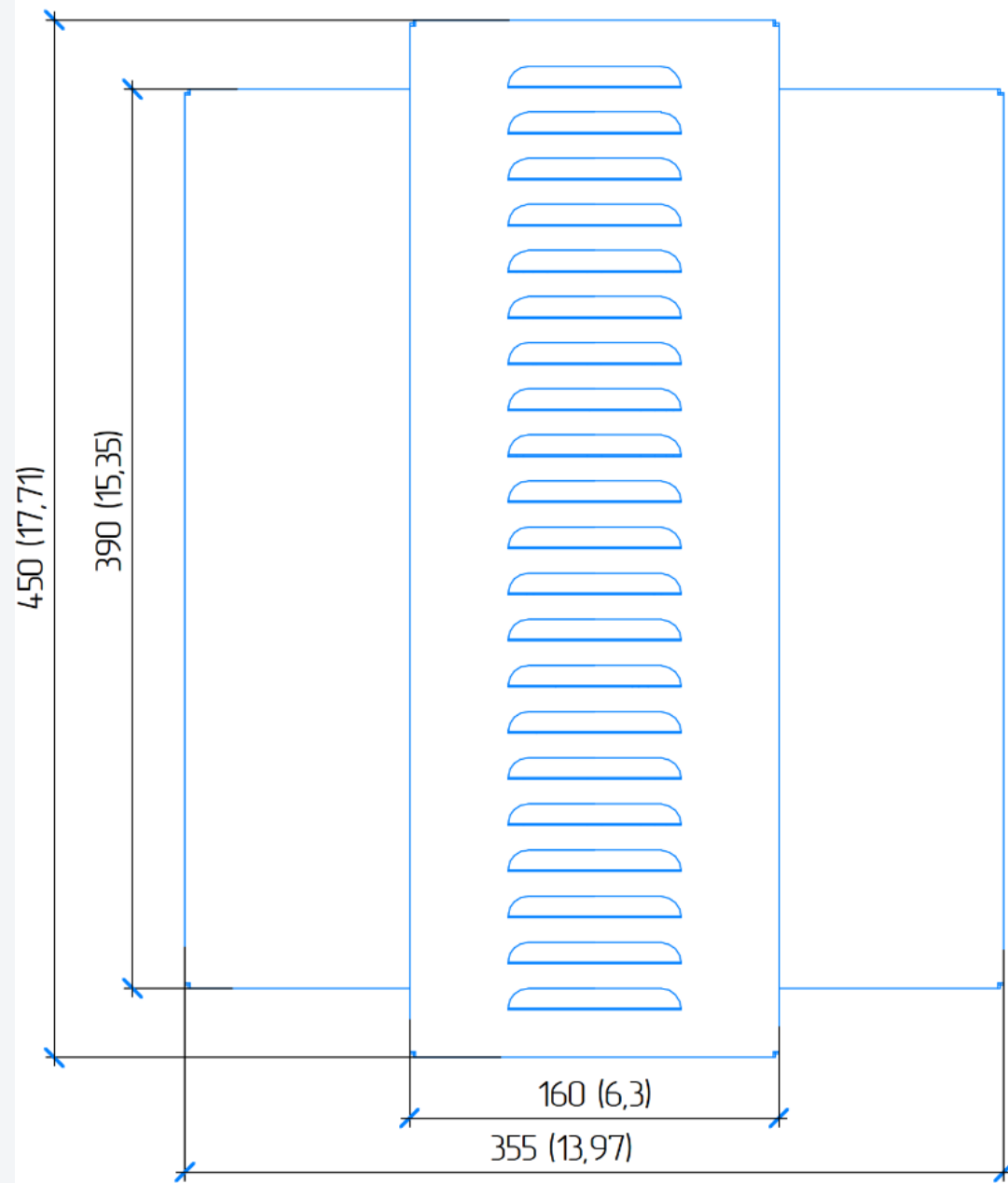
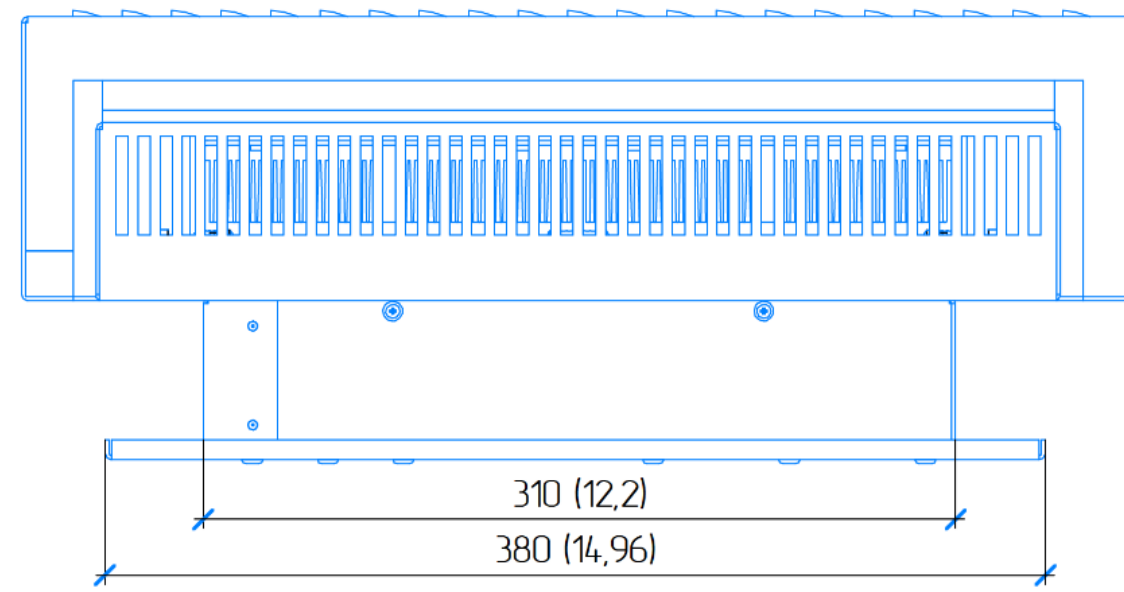
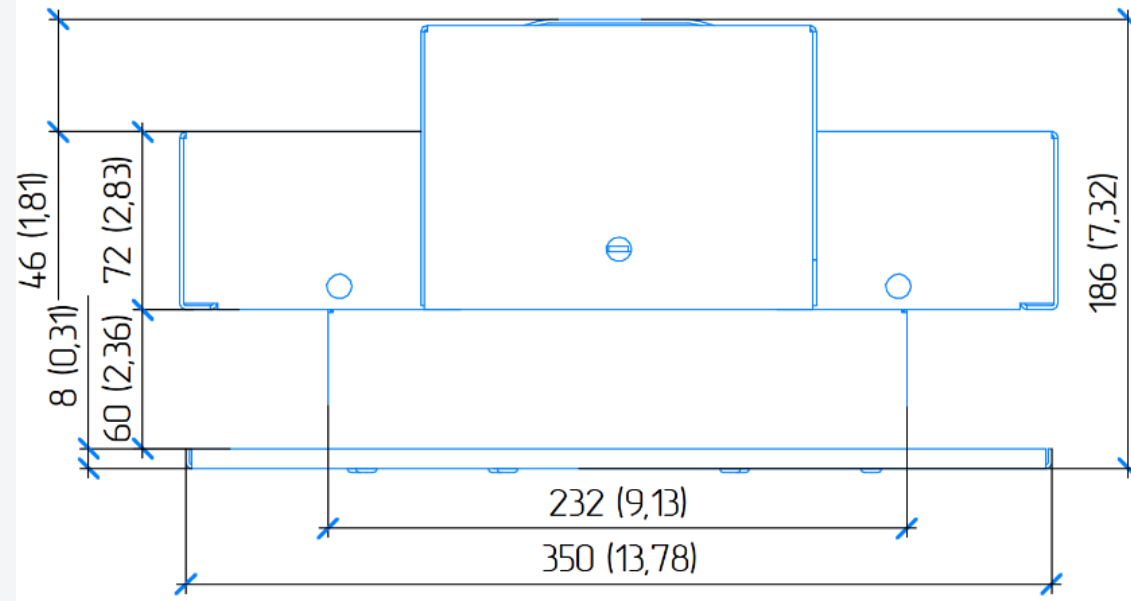


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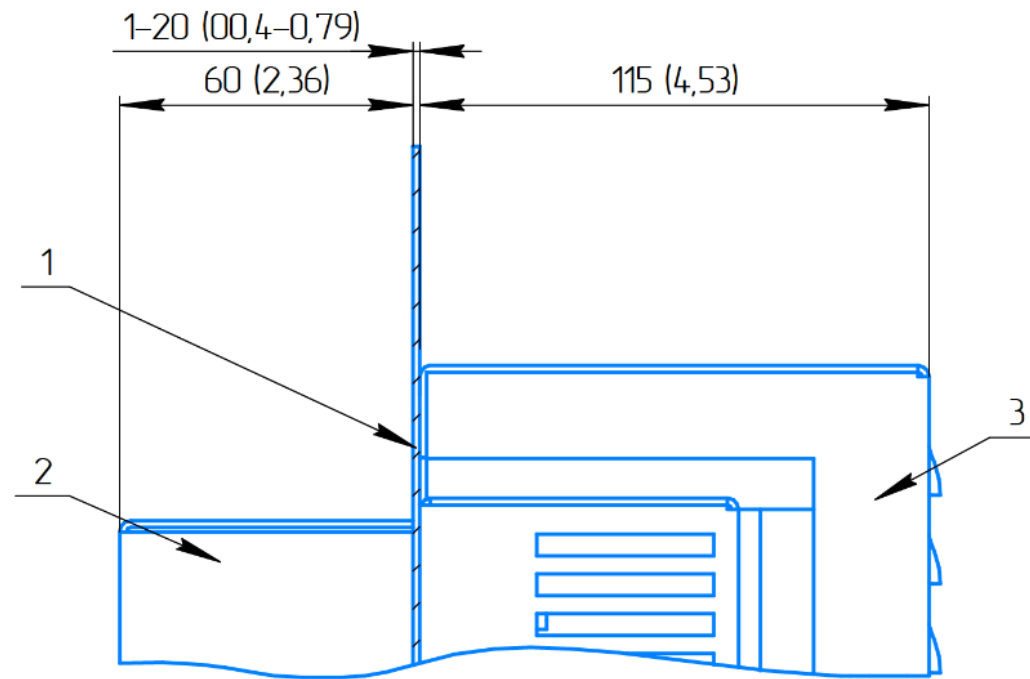
Dimensions of the assembly

MM (INCHES)

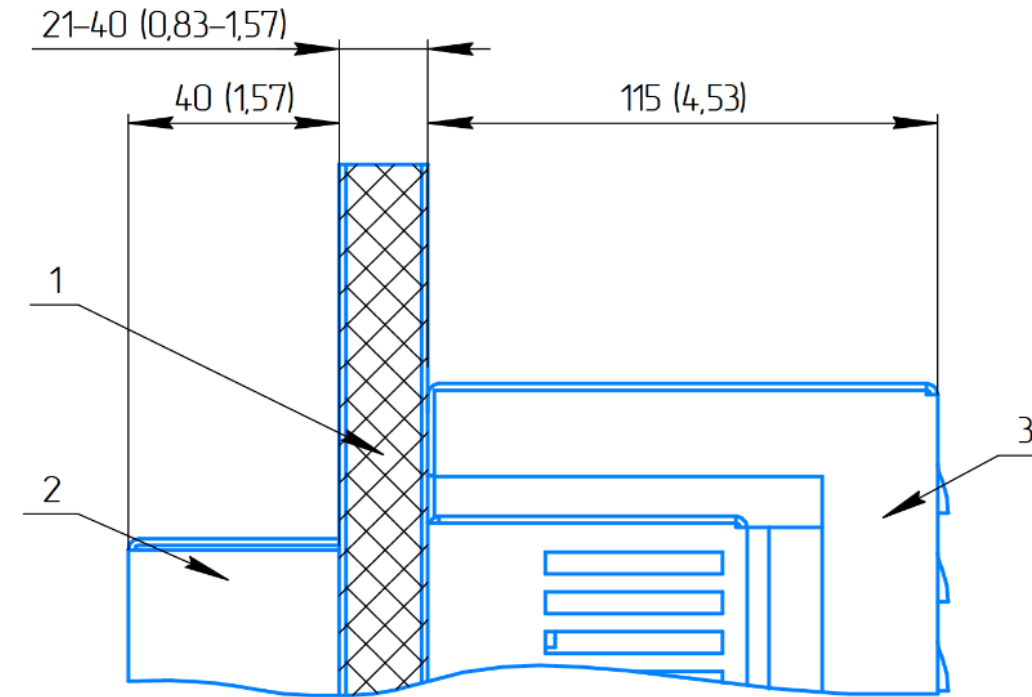


Cabinet wall thickness options

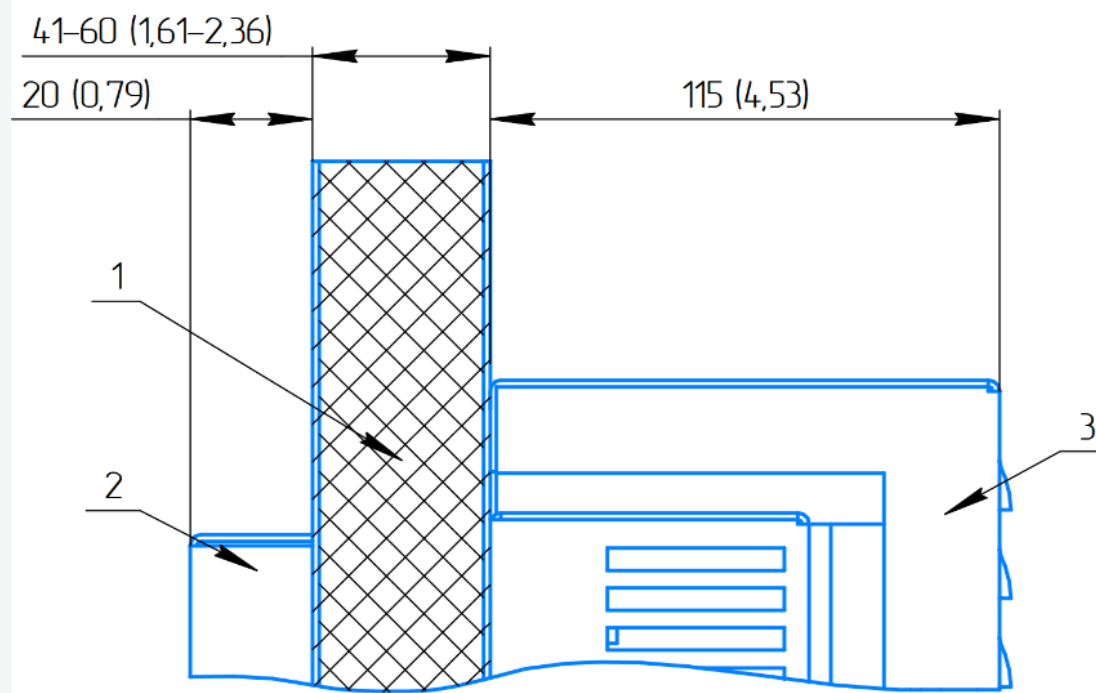
TA-AA-300-24-HF-CHD-X



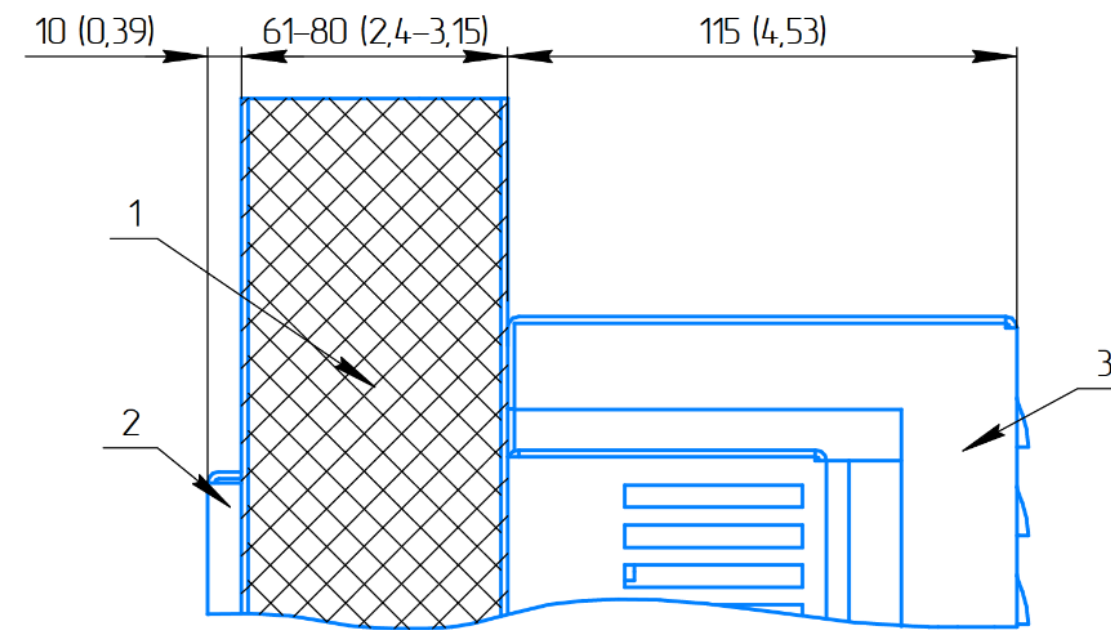
TA-AA-300-24-HF-CHD-XX



TA-AA-300-24-HF-CHD-XXX



TA-AA-300-24-HF-CHD-XXXX



- 1 - Cabinet wall
- 2 - Front panel of the inner heat exchanger
- 3 - Protective cover of the external heat exchanger

MM (INCHES)