



## TA-AA-200-48-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-200-48-HF-CHD                       |
| Voltage (nominal /maximal)   | 48/54 VDC                                 |
| Amperage $\pm 10\%$ (nominal/starting)   | 5.3A/6.9A (at 48VDC)                      |
| Max ripple   | 5%  |
| Cooling capacity at $\Delta T = 0^{\circ}\text{C}$ and nominal voltage . <sup>1</sup>          | 210W                                      |
| Heating <sup>2</sup>   | 278W                                      |
| Heating <sup>3</sup>   | 387W                                      |
| Operating temperature of the heatsinks on the inner and outer side, not more than <sup>4</sup> | 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.)   | 55dB(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  $\Delta T = 0^{\circ}\text{C}$ .

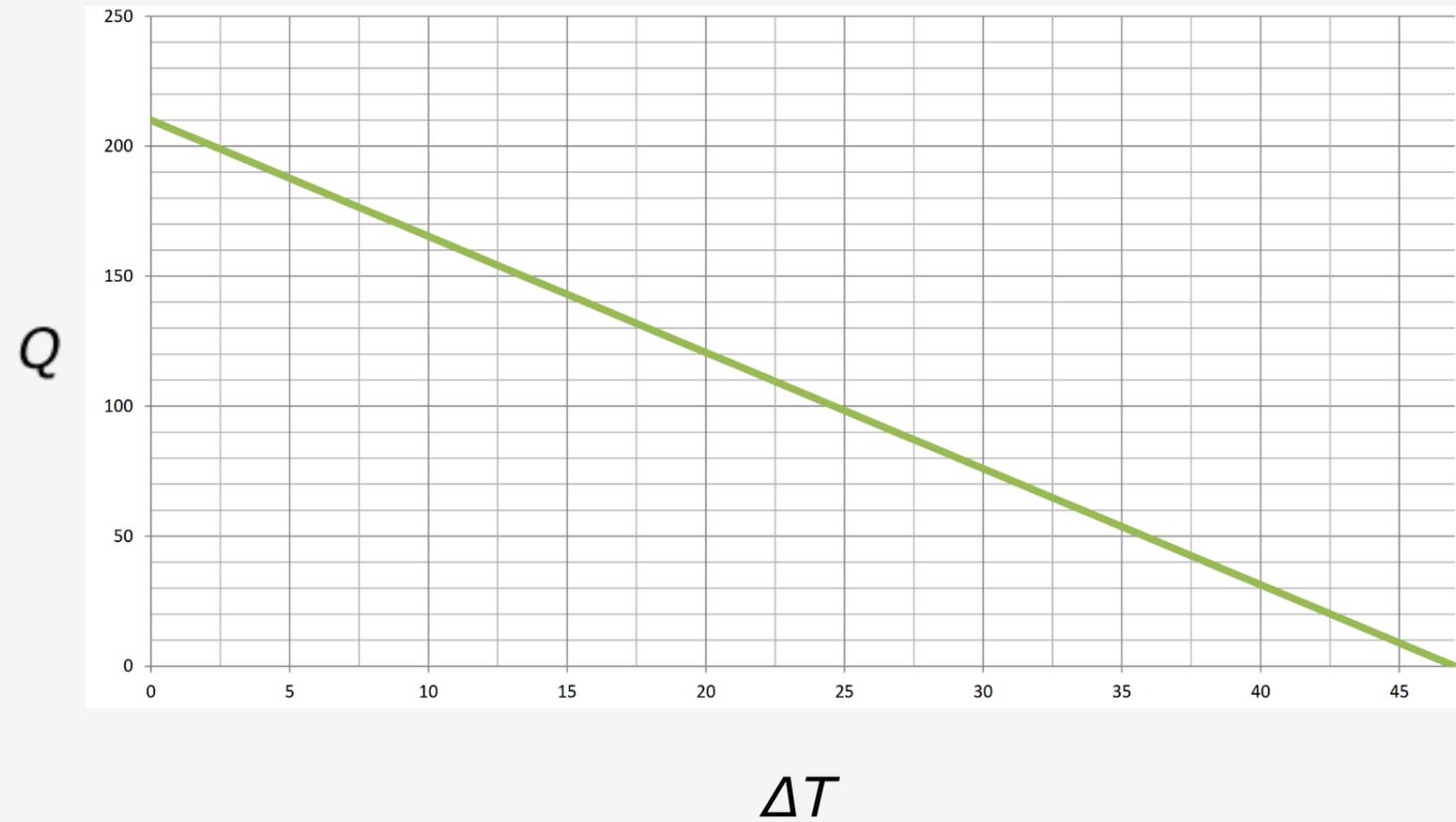
4-Possibility of increase to 150°C - Additional option.

**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.

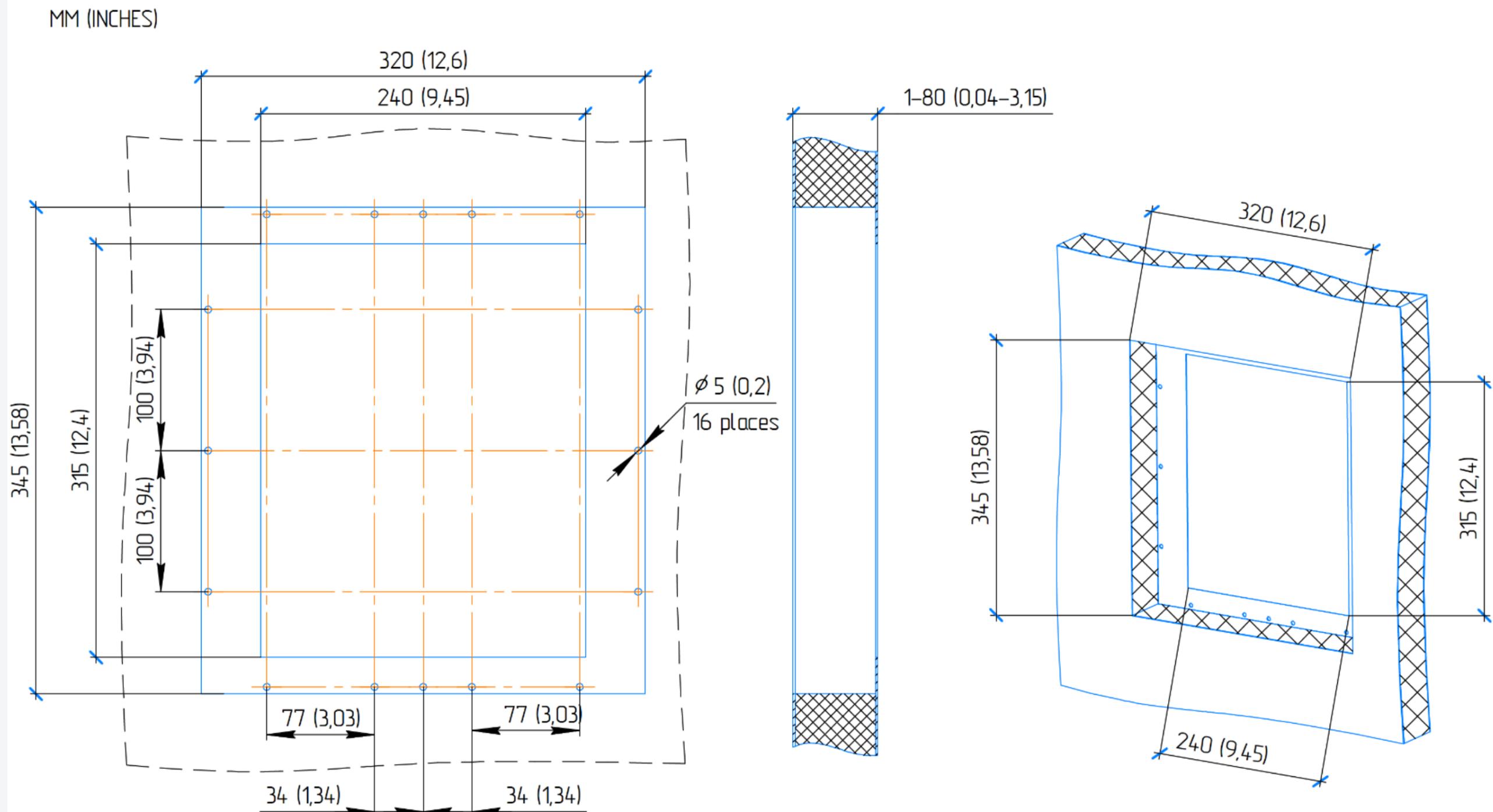
Performance Q- $\Delta T$



$$\Delta T(^{\circ}\text{C}) = T(^{\circ}\text{C}) \text{ ambient} - T(^{\circ}\text{C}) \text{ internal}$$

Q - cooling capacity, W.  
for ambient temperature +35 ° C and rated voltage

# Mounting window

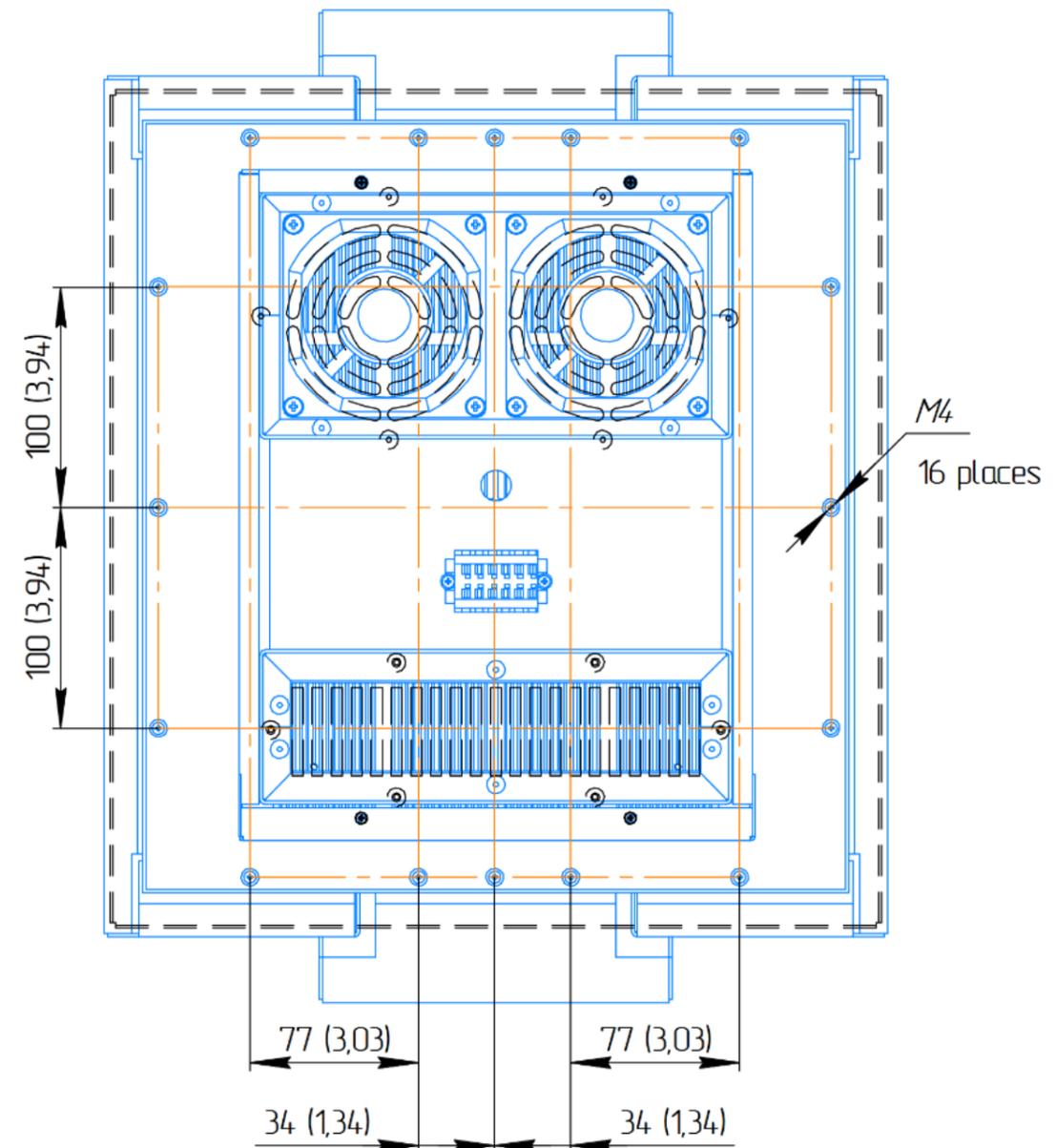
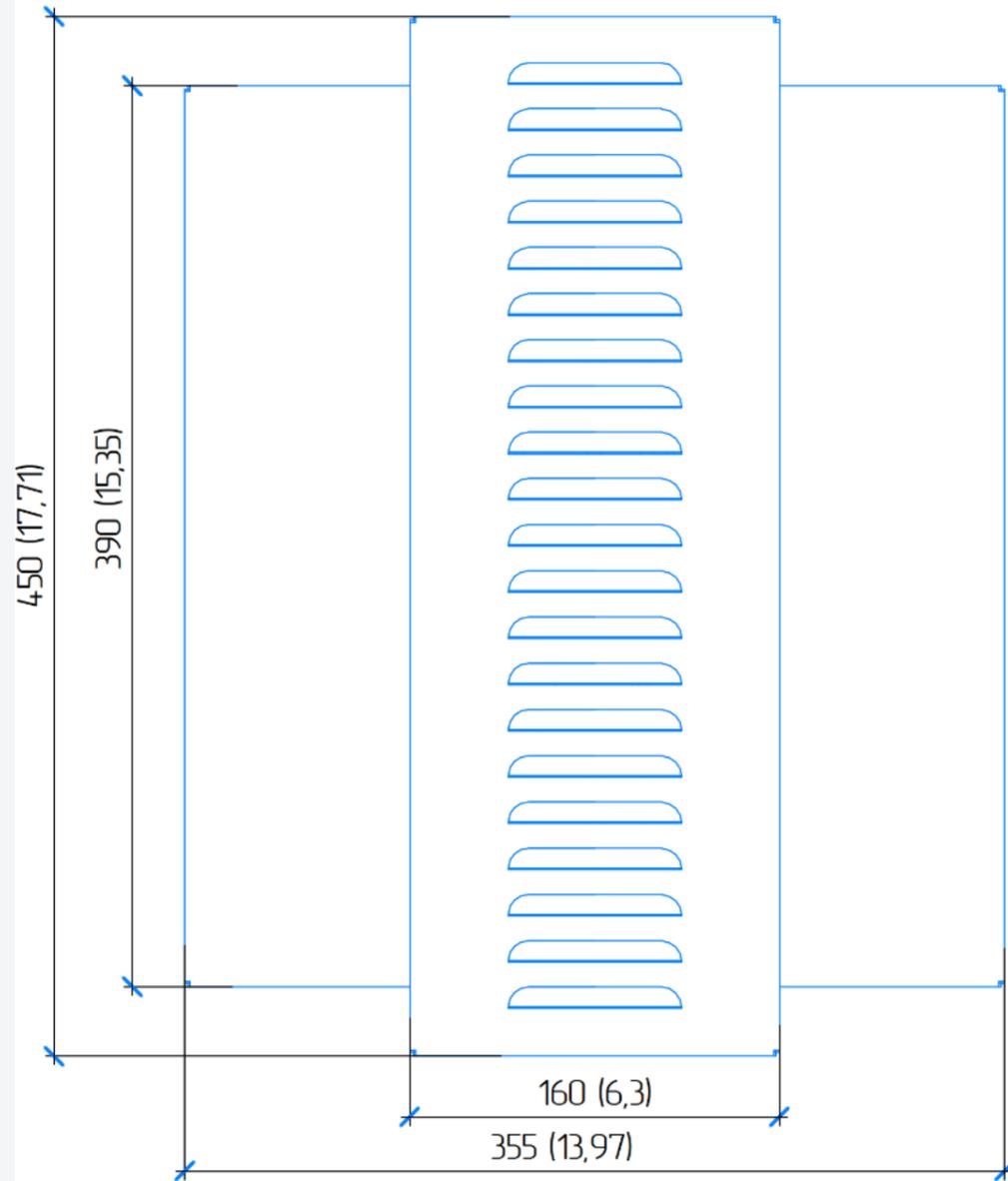
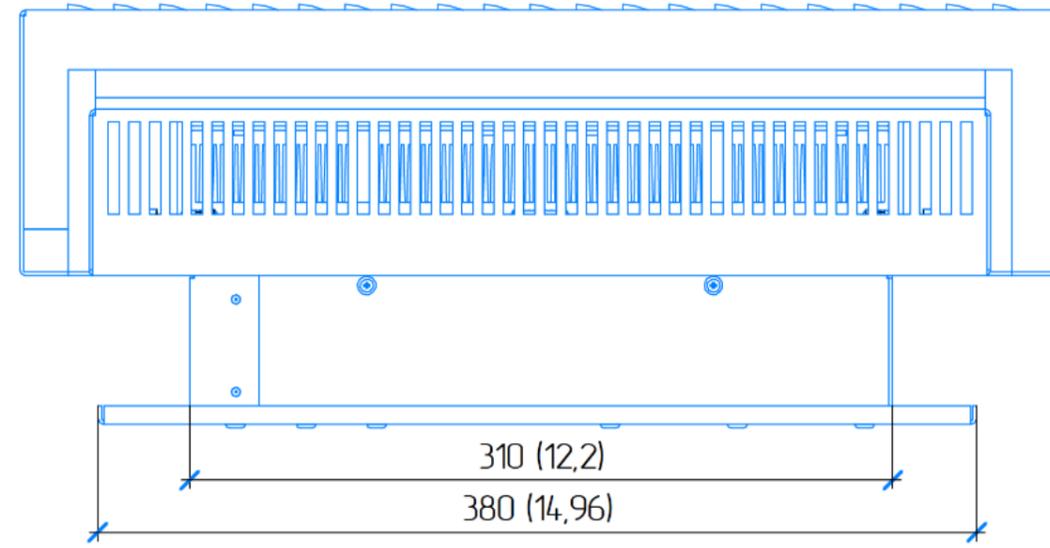
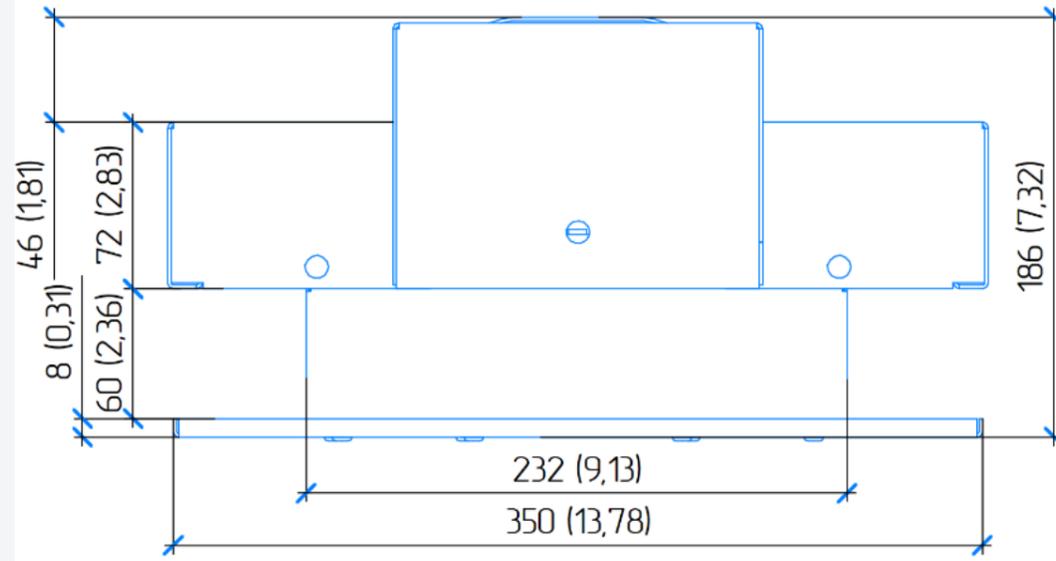


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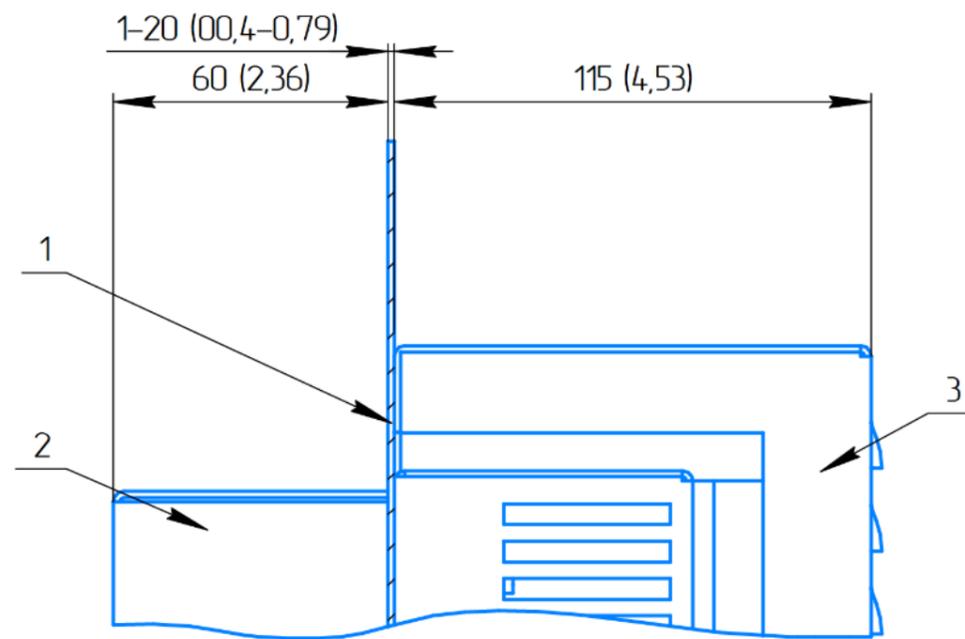
# Dimensions of the assembly

MM (INCHES)

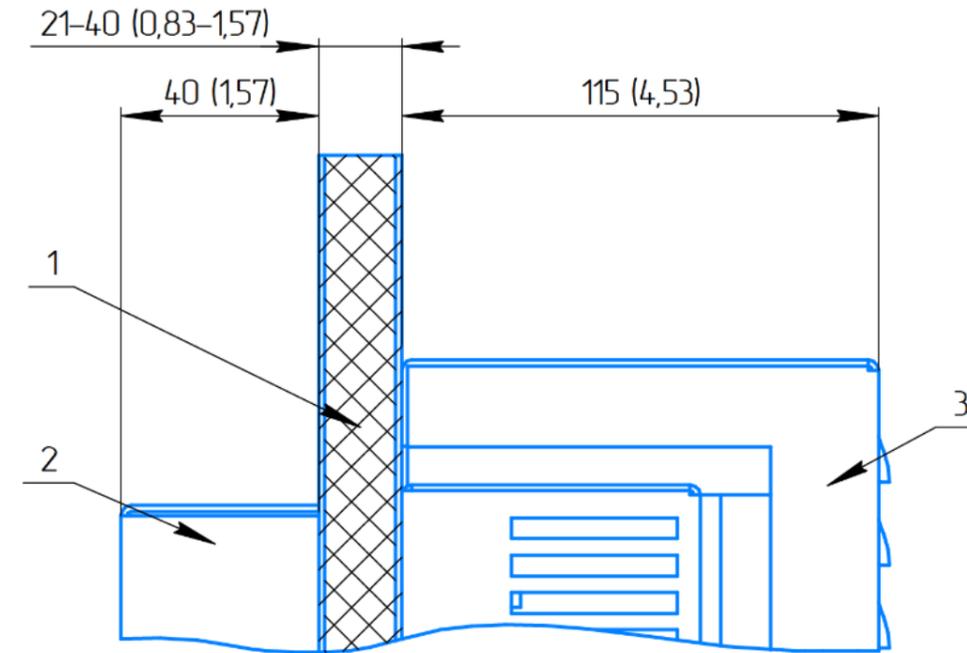


Cabinet wall thickness options

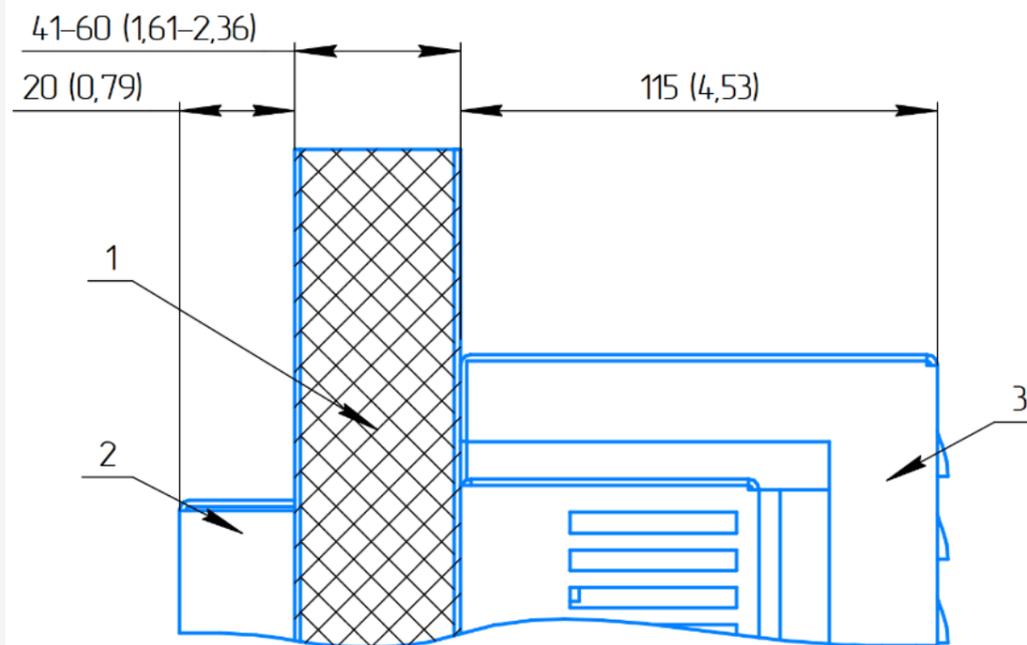
TA-AA-200-48-HF-CHD-X



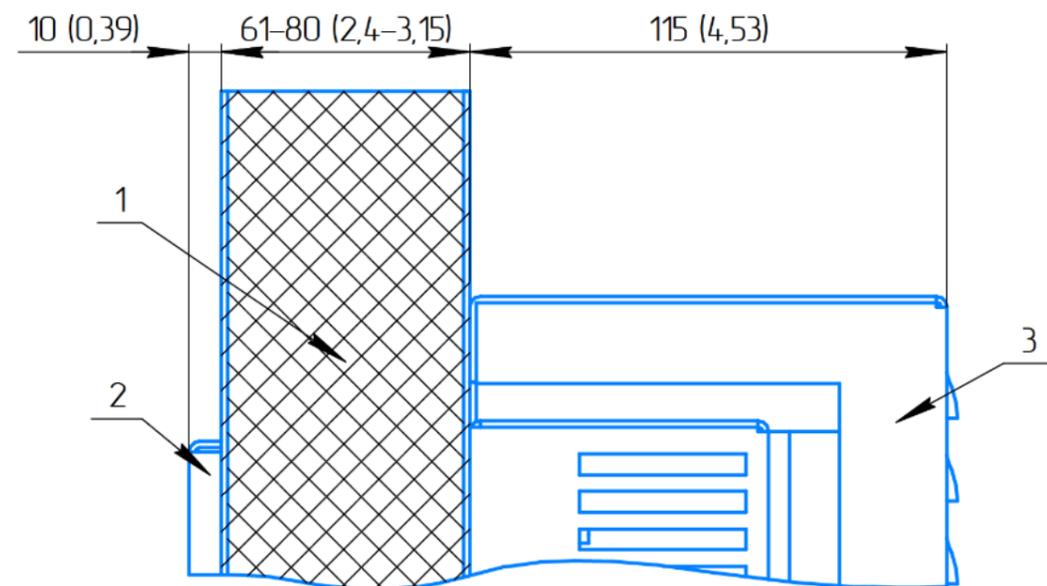
TA-AA-200-48-HF-CHD-XX



TA-AA-200-48-HF-CHD-XXX



TA-AA-200-48-HF-CHD-XXXX



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

MM (INCHES)