



### Applications

- Photonics laser systems.
- Outdoor telecom cabinets
- Thermostat of biological assays.
- Medical diagnostics.
- Battery cabinets
- Industrial measuring instrument.
- Thermostabilization of electronic cabinets
- Analytical devices.
- Outdoor kiosks and displays
- Food and beverage cooling
- Others.

## Thermoelectric assembly Air-to Air

### TA-AA-200-24-N+1 COPMAX

#### Features

- Low current consumption.
- low noise pressure.
- Compact design.
- Small weight.
- Precise temperature control.
- Cooling and heating in the same unit
- Ease of installation and connection.
- DC operation of 22V or 27V voltage.
- Various positioning in space.
- Environmentally friendly solid state heat exchange operation with no CFC refrigerants.



Type	TA-AA-200-24-N+1 COPMAX
Voltage (nominal /maximal)	24/27 VDC
Amperage ±10% (nominal/starting)	8.6A/12.0A (at 24VDC)
Max ripple	5%
Cooling capacity at $\Delta T = 0^{\circ}\text{C}$ and nominal voltage . <sup>1</sup>	200W
Heating <sup>2</sup>	210W
Cooling capacity in Free cooling mode (Eco mode)	5W/C°
Power consumption in mode Free cooling (Eco mode)	11W
Operating temperature of the heatsinks on the inner and outer side, not more than <sup>3</sup>	85°C
Temperature range (external /internal)	-40°C to +60°C/-20°C to +60°C
Fans lifetime (at temperatures not higher than +40°C) and nominal voltage	≥60,000 hours
Sound pressure level (distance 1m.)	42dB(A)
Mode of operation	long-term
Protection of heatsinks	Anodizing film thickness of 10-20 microns
Degree of protection of fans out side <sup>4</sup>	IP55
Overheat protection	by demand the customer ( Additional option )
Type of connector	Dust and waterproof 6- pin female shoes
Weight ±3%	6.5kg

1- Cooling capacity is rated at ambient temperature +35°C.  
 Heating capacity is rated at external temperature of -40°C, nominal voltage, and  $\Delta T = -45^{\circ}\text{C}$ .  
 3- Possibility of increase to 150°C - Additional option.  
 4- IP68- Additional option.  
**NOTE!** A method of transferring heat - forced convection.  
 Not recommended to reduce airflow external and internal side.

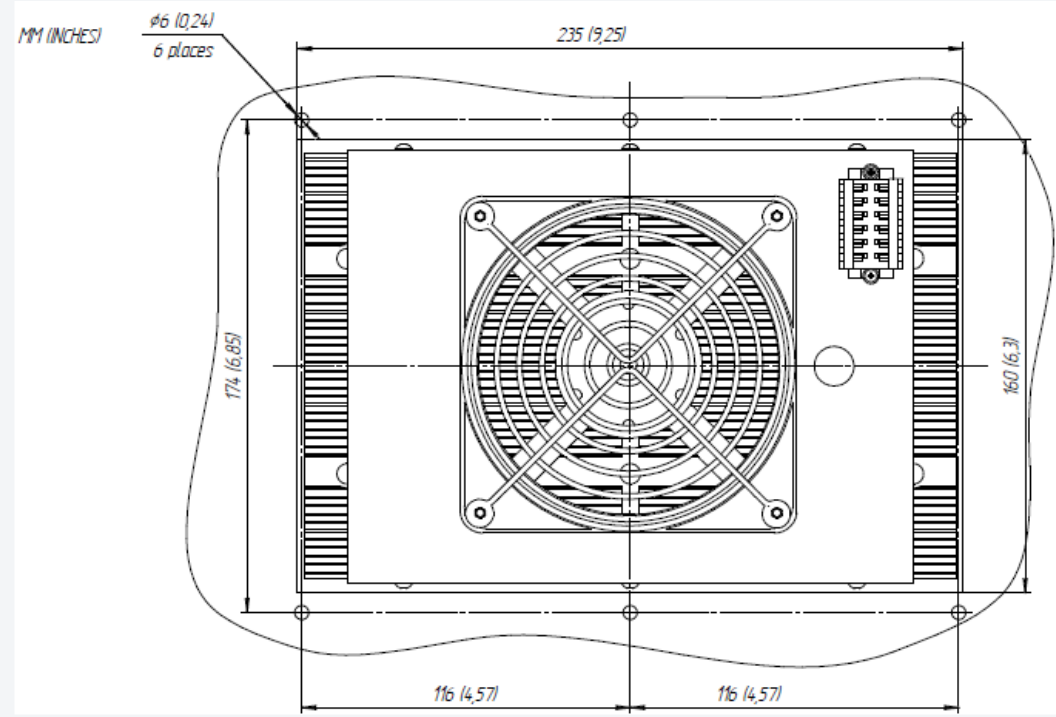
Contact us for more information  
 e-mail: [info@crystalltherm.com](mailto:info@crystalltherm.com).  
 +7.495.664.24.31 +7.495.519.88.52 +7.495.519.00.

### Performance Q[ $\Delta T$ ]



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

### MOUNTING SCHEME



# Dimensions of the assembly

MM (INCHES)

