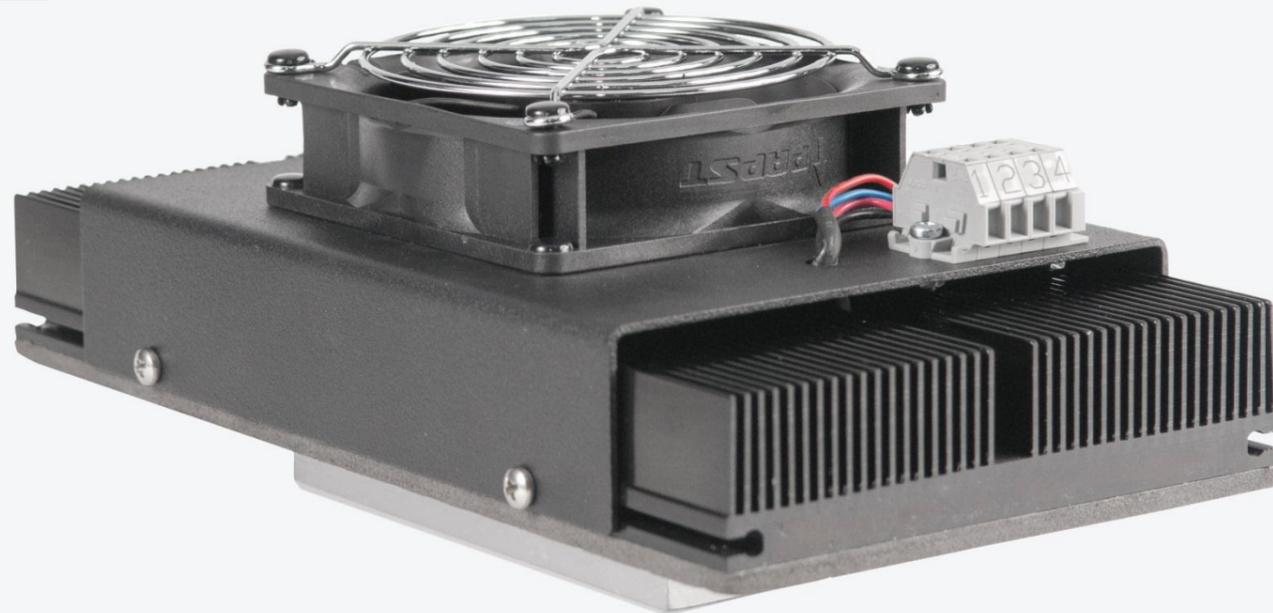


## TA-DA-80-12

### Features

- This type thermoelectric cooler Peltier heat is absorbed through contact with the aluminum cold plate and removed thru a heat sink to ambient air.
- The thermoelectric cooler series TA-DA traditionally use modules produced of Crystal Ltd. This ensures high performance and durability of thermoelectric assemblies.
- Low noise pressure.
- Compact design.
- Small weight.
- Precise temperature control.
- Various positioning in space.
- Environmentally friendly solid state heat exchange operation with no CFC refrigerants.

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



### Applications

- Photonics laser systems.
- Thermostat of biological assays.
- Medical diagnostics.
- Industrial measuring instrument.
- Analytical devices.
- Food and beverage cooling
- Others.



Type	TA-DA-80-12
Voltage (nominal /maximal)	12/14 VDC
Amperage $\pm 10\%$ (nominal/starting)	8.4A/11A (at 12VDC)
Max ripple	5%
Cooling capacity at $dT = 0^\circ\text{C}$ and nominal voltage . <sup>1</sup>	81W
Operating temperature of the heatsink on the inner and outer side, not more than <sup>2</sup>	85°C
Temperature range	-20°C to +60°C
Fans lifetime (at temperatures not higher than +40°C) and nominal voltage	$\geq 60,000$ hours
Sound level (distance 1m.)	39dB(A)
Mode of operation	long-term
Protection of heatsink	Anodizing film thickness of 10-20 microns
Overheat protection	by demand the customer ( Additional option )
Type of connector	Terminal block with cage clamps
Degree of protection	IP55
Weight $\pm 3\%$	1.7kg

1-Cooling capacities at nominal / float voltage are rated at external temperatures of +35°C and +50°C respectively. Float voltage is defined at 14VDC.

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

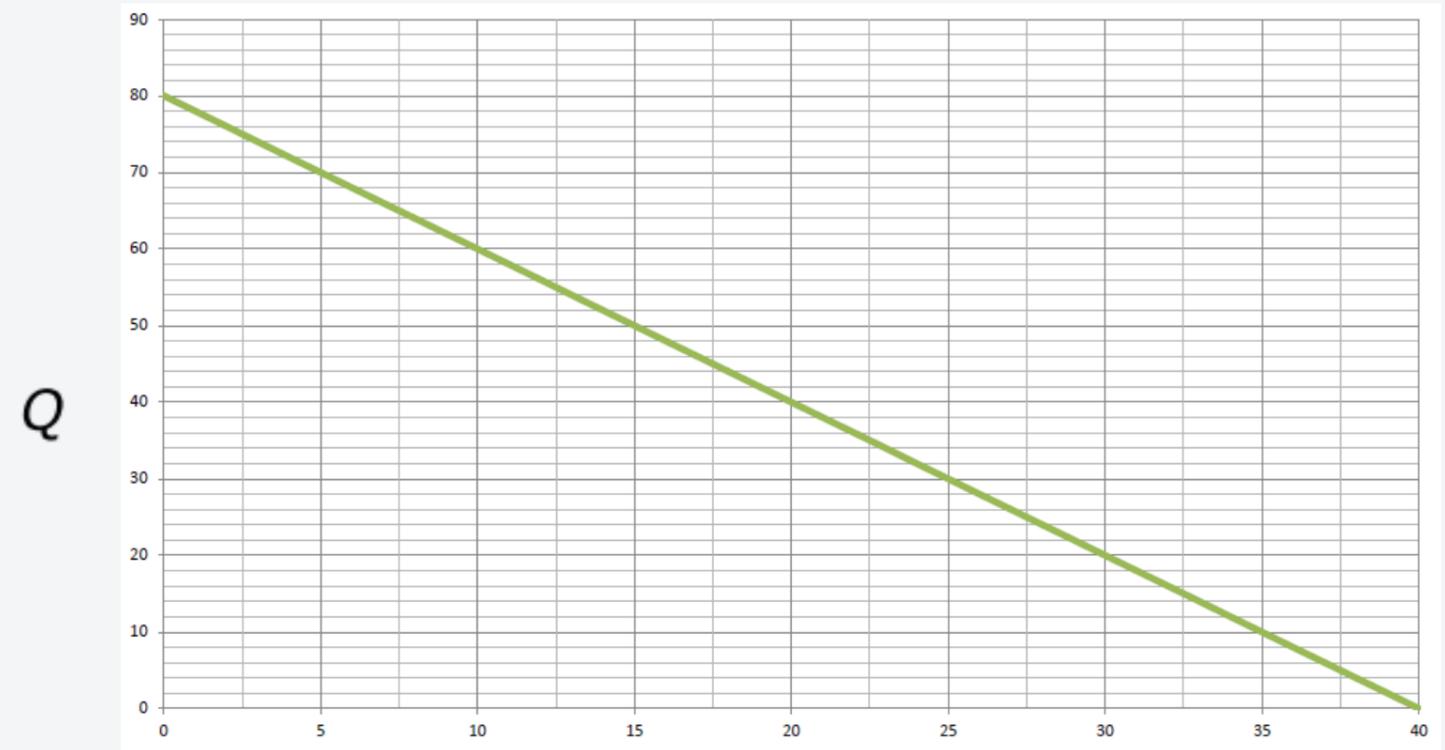
**NOTE!** A method of transferring heat - forced convection.

Not recommended to reduce airflow external 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 , +7-495-519-00-69  
Fax: +7-495-515-40-94

## Performance Q[dT]



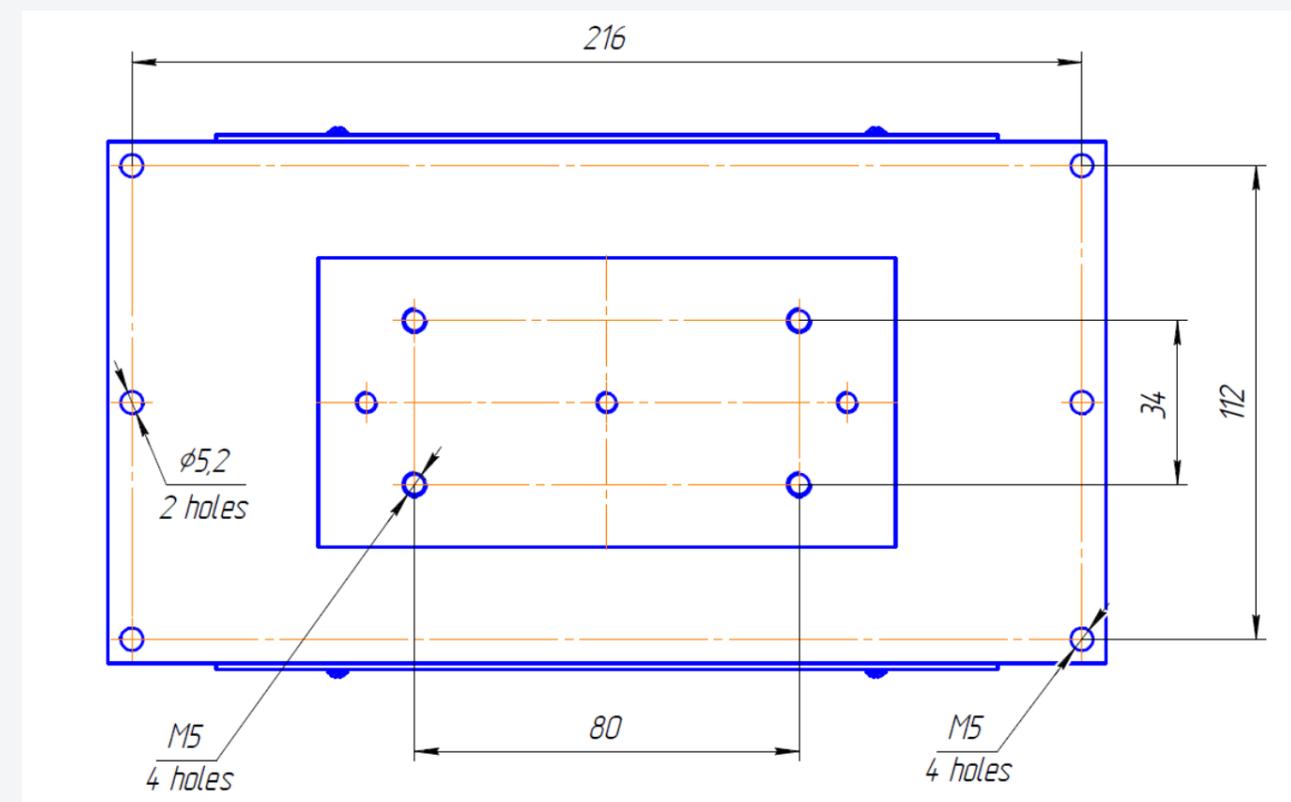
$dT$

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

Q - cooling capacity, W.

When ambient temperature. temperature plus +35 ° C and rated voltage

## MOUNTING SCHEME



MECHANICAL DRAWING

