

## Liquid-to-Air Thermoelectric Assembly

### Thermoelectric cooling unit for medical and industrial applications



The Liquid-to-Air Series thermoelectric assembly (TEA) offers dependable, compact performance by cooling objects via liquid to transfer heat. Heat is absorbed through a liquid heat exchanger and dissipated thru a high density heat sink equipped with an air ducted shroud and brand name fan. The thermoelectric modules are custom designed to achieve a high coefficient of performance (COP) to minimize power consumption. This product series is available in a wide range of cooling capacities and voltages. Custom configurations are available, however, MOQ applies.

#### FEATURES

- Compact form factor
- Precise temperature control
- Reliable solid-state operation
- DC operation
- RoHS compliant

#### APPLICATIONS

- Medical Diagnostics
- Industrial Lasers
- Medical Lasers
- Analytical Instrumentation

Americas: +1.919.597.7300

Europe: +46.31.420530

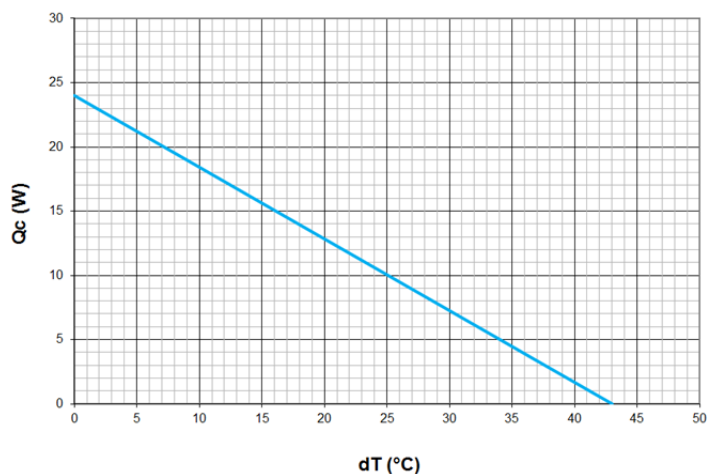
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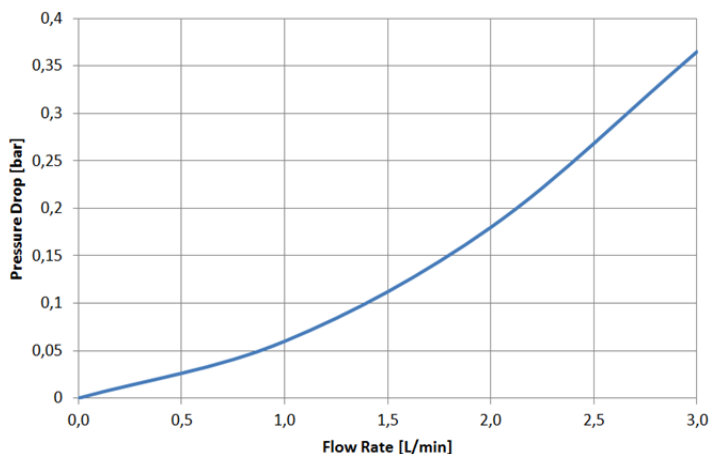
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Q<sub>c</sub> vs dT



Pressure Drop vs Flow Rate



## SPECIFICATIONS

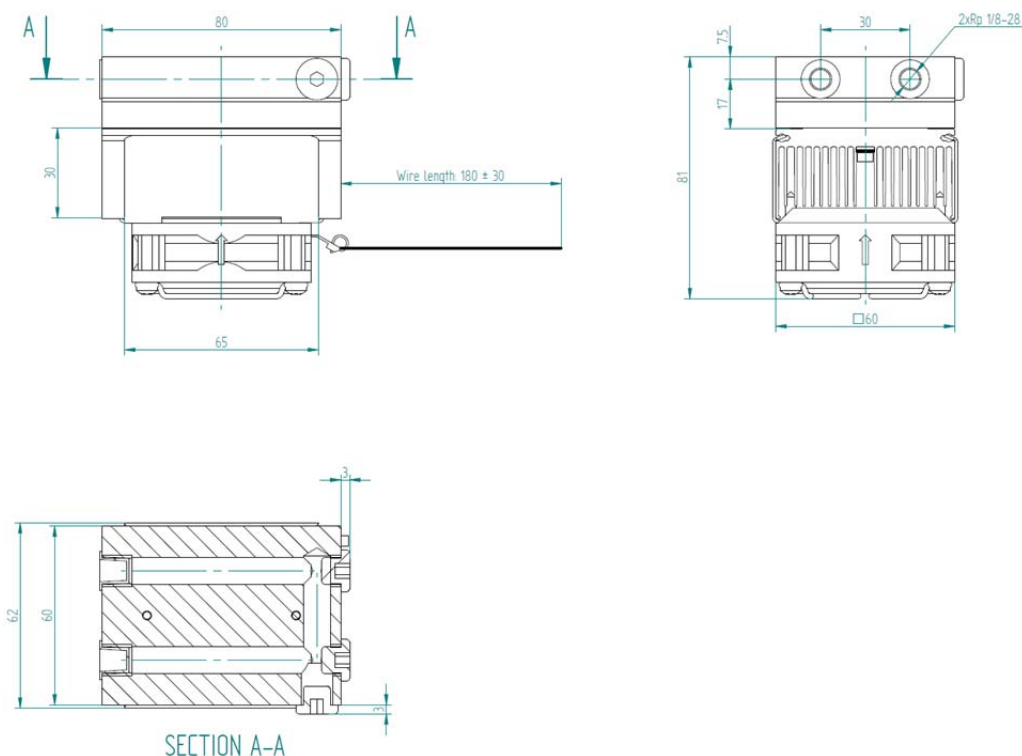
### TECHNICAL

Technology	Thermoelectric based
Cooling at $\Delta T = 0^{\circ}\text{C}$	24 W
Voltage (nominal / maximum) <sup>1</sup>	12/15 VDC
Current draw, $\pm 10\%$ (nominal / startup)	2.2/2.8 A
Weight	0.5 kg
MTBF (fans)	50,000 hours
Performance Tolerance	$\pm 10\%$

### ENVIRONMENTAL

Temperature range	$-10^{\circ}\text{C}$ to $+48^{\circ}\text{C}$
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**MECHANICAL DRAWING**



**Note:**

- For indoor use only
- Turbulators are mounted inside liquid channels to turbulate flow
- Cold block requires insulation to minimize moisture buildup under dew point conditions.

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