THERMOELECTRIC CHILLER AND HEATER



TEChill

1.4kW of TEC Fluid Cooling!

The TEChill-1400A chiller and heater system is based on Thermoelectric devices (Peltier, TEC) that provide precision heating and cooling of the fluid medium. TECs are semiconductor refrigerators and heaters that have no moving parts. This eliminates the kinds



of failures associated with vapor compression for refrigeration. **TEChill is** capable of **1.4kW of cooling.**

Features & Benefits

- · Precise temperature control for heating and cooling
- Environmentally friendly
- · Localized heating and cooling once attached to a cold plate
- · Fast temperature response for both heating and cooling
- Low noise and vibration
- · Leak free, stainless steel fittings
- · Compact and portable system rides on lockable casters



Applications

- Medical chillers & heaters
- Water chillers & heaters
- Food & beverage
- Laser cooling
- X-Ray systems
- Laboratory testing of cell-biology
- Medical equipment
- Analytical equipment
- Defense & aerospace
- Semiconductor & equipment

SPECIFICATIONS

- » COOLING CAPACITY 1.4 kW
- » COOLING MODE RANGE 5°C to 60°C / (41°F to 140°F)
- » HEATING MODE LIMIT Up to 70°C / (158°F)
- » PUMP PRESSURE HEAD (MAXIMUM) 3.3 m / (4.7 psi / 11 ft)
- » PUMP FLOW RATE (MAXI-MUM) 3.79 L/Min / (1 GPM)
- » WATER TANK CAPACITY 2 L / (1/2 gal.)
- » FLUID LOOP ATTACH 1/2 Inch NPT, stainless steel
- » INPUT POWER 180 to 264 VAC
- » POWER INPUT CURRENT 20 A
- » FREQUENCY RANGE 47 to 63 HZ
- » OPERATING TEMP. RANGE 5°C to 50°C / (41°F to 122°F)
- » OPERATING HUMIDITY RANGE 20 to 90% RH
- » TEMPERATURE STABILITY + / - 1° C
- » STORAGE TEMPERATURE -40°C to +85°C / (-40°F to 185°F)
- » STORAGE HUMIDITY 10 to 95%
- » DIMENSIONS 40.1 x 72.1 x 52.4 CM (15.7 x 28.4 x 26.6 IN)
- » WEIGHT 40 KG / (88.2 LBS)
- » WETTED MATERIALS ALUMINUM, EPDM, STAINLESS STEEL, POLYCARBONATE, POLYPROPYLENE, POLYURETHANE, NYLON 11, SANTOPRENE

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Main Features of the TEChill-1400A Thermoelectric Chiller and Heater



Customization

ATS specializes in custom thermoelectric systems for your specific application. Contact us for your design requirements at

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