• Heats as well as cools (when used with heat & cool / bipolar controller).
• Provides effective, direct-contact cooling for small heat loads at low temperatures.
• Can also be used for heating up to 100 °C.
• Highly efficient 67 mm wide heat sink for compact size and low power consumption.
• Airflow can be blocked at one end of the heat sink, which provides more options for routing air flow within instruments.
• Compatible with a wide range of temperature controllers.
• Threaded holes are located in the cold plate for easy attachment of a temperature sensor, interface plates, and other cooled plates.
• An optional bracket is available for converting the cooler into a bench-top version.
• CE marked, RoHS compliant.
Please review the Thermoelectric Cooling Assembly (TCA) Instruction Manual (or manual in other languages), ordering information, and FAQ’s for related technical information before purchasing or using this product.

1Current, at steady-state, is rated at +25 °C ambient, +25 °C internal, maximum heat removal. At -25 °C internal, the typical steady-state current is 2.6 A.
2Current, at steady-state operation under worst-case conditions, is rated at -10 °C ambient, +70 °C internal, maximum heat removal.
3Total current consumption is sum of TE current and Fan current.

Performance is based on unrestricted air flow to fans and from air-flow outlets. Do not operate if the heat sink or cold plate exceeds 100 °C. Do not operate fans at air temperatures below -10 °C or over 70 °C.

A 3D PDF, .stp, and .sldprt solid models are also available from the website. Contact TE Technology for 3D solid models in other formats.

All dimensions in millimeters.
Cold plate shown in blue;
External (ambient) side shown in red.
CP-040HT with Optional Mounting Bracket
(for converting to bench-top use)

NOTE:
1. ALL DIMENSIONS ARE IN MILLIMETERS
2. OPTIONAL MOUNTING BRACKET SHOWN ATTACHED TO CONVERT CP-040HT FOR BENCH-TOP USE

FOUR M3 x 0.5 - 4 mm PPH SCREWS INCLUDED WITH BRACKET

127
76.2
25.4
85.85
92.2

RoHS Compliant
Directive 2011/65/EU

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Example: You need to maintain the cold plate at 0 °C while in a 25 °C ambient. The cooler can remove a maximum of approximately 20 W of heat from the cold plate. If the heat gain from the ambient plus anything else actively generating heat exceeds this, you would need a cooler with a larger cooling capacity or multiple coolers.
The CP-040HT can be installed with the exhaust air obstructed on the fan end of the heat sink with only minimal impact to performance.

NOTE: Do not obstruct the opposite end of the heat sink.

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You need to maintain the cold plate at 30 °C while in a 25 °C ambient. The cooler can add up to approximately 105 W of heat to the cold plate. If the heat dissipation from the cold plate to the ambient exceeds this (plus anything else generating heat), you would need multiple coolers or a cooler with a larger heating capacity.

Example: You need to maintain the cold plate at 30 °C while in a 25 °C ambient. The cooler can add up to approximately 105 W of heat to the cold plate. If the heat dissipation from the cold plate to the ambient exceeds this (plus anything else generating heat), you would need multiple coolers or a cooler with a larger heating capacity.
Terminal Block Configuration for Continuous Operation at Full Power

As-Shipped Configuration 1 of 2

1. REMOVE TERMINAL BLOCK COVER

2. FOUR ELECTRICAL JUMPERS INSTALLED (ORIGINAL CONFIGURATION)

LOOSEN TWO SCREWS
KEEP JUMPERS INSTALLED

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INSTALL WIRES, TIGHTEN SCREWS TO 1.0 N-M, AND REPLACE COVER
Terminal Block Configuration for Operation with Temperature Controller

1. **REMOVE TERMINAL BLOCK COVER**

2. **FOUR ELECTRICAL JUMPERS INSTALLED (ORIGINAL CONFIGURATION)**

3. **LOOSEN SIX SCREWS**

4. **REMOVE TWO ELECTRICAL JUMPERS FROM 2-3 AND 4-5**
Terminal Block Configuration for Operation with Temperature Controller

2 of 2

3

INSTALL WIRES, TIGHTEN SCREWS TO 1.0 N-M, AND REPLACE COVER

4

Power supply (+) Red Wire to POSITION 6

Temperature Controller (+) Red Wire to POSITION 4

Temperature Controller (-) Black Wire To POSITION 3

Power supply (-) Black Wire to POSITION 1

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