0 197

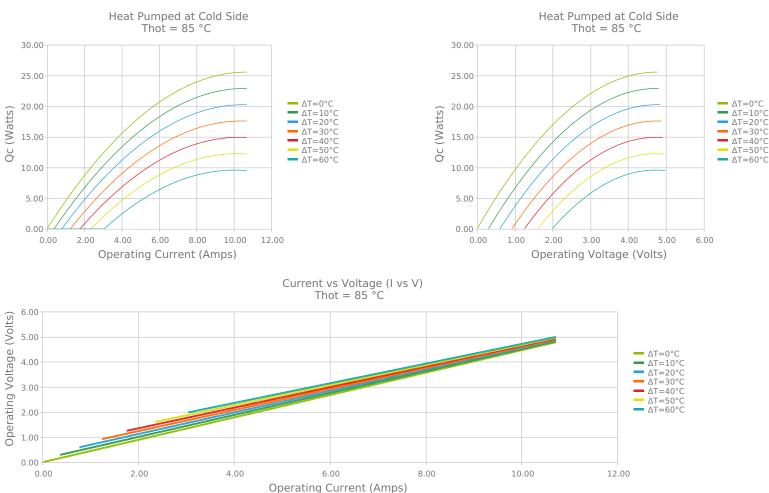
[5.0]

ŧ.

HiTemp ETX Series Thermoelectric Cooler **Features Applications** Peltier Cooling for Refrigerated Centrifuges The ETX9-3-F2-2525-TA-W6 high temperature, high-performance • High-temperature operation Reliable solid-state • Peltier Cooling for Machine Vision thermoelectric cooler uses Laird Thermal Systems' enhanced No sound or vibration • Thermoelectric Cooling for CMOS Sensors thermoelectric module construction preventing performance degrading Cooling Solutions for Autonomous Systems · Environmentally-friendly diffusion, which is common in standard grade thermoelectric coolers • Peltier Cooling for Digital Light Processors RoHS-compliant operating in high temperature environments exceeding 80 °C. It has a Heating and Cooling for Liquid Chromatography Systems maximum Qc of 23.6 Watts when $\Delta T = 0$ and a maximum ΔT of 83.2 °C • Thermoelectric Cooling for Security Cameras at Qc = 0. 1.130 [28.7] = (+) POSITIVE AWG 18 PTFE STRANDED 6.0 [152] LENGTH 1.000 [25.4 (-) NEGATIVE 1.000 [25.4] CONTROL SIDE HEATSINK SIDE CERAMIC MATERIAL: Al₂O₃ SOLDER CONSTRUCTION: 232°C, SbSn INCHES [MM]

ELECTRICAL AND THERMAL PERFORMANCE

For maximum performance, be sure to orient the CONTROL side of the TEC against the application to be managed and the HEATSINK side against the heat sink or other heat rejection method. The CONTROL side is always opposite the side with lead attachments. Lead attachment is a passive heat loss and less impactful if located on the side that attaches to the heat exchanger.



Laird

10.00

5.00

0.00

0.0

10.0

20.0

30.0

40.0

50.0

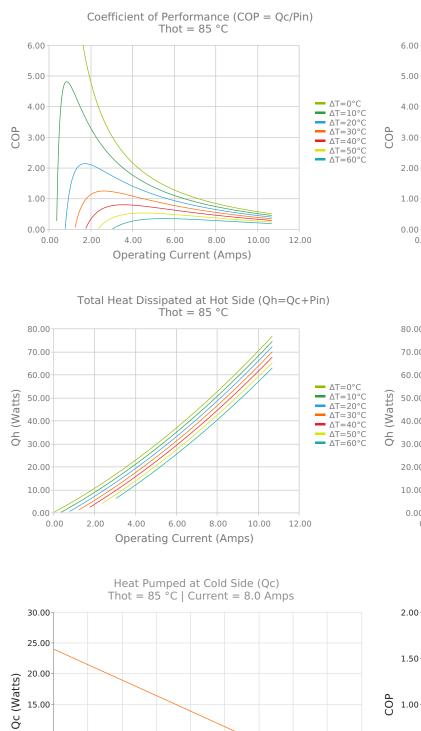
ΔT (°C)

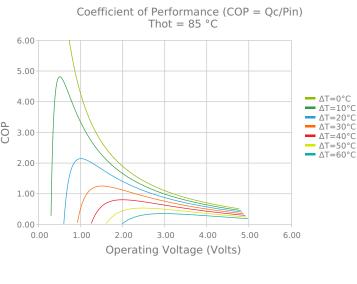
60.0

70.0

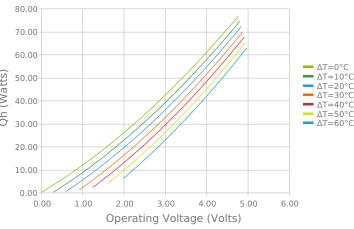
80.0

90.0

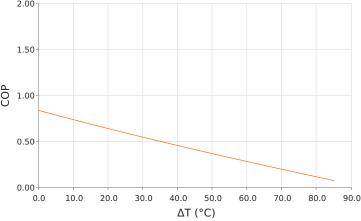




Total Heat Dissipated at Hot Side (Qh=Qc+Pin) Thot = 85 $^{\circ}\text{C}$



Coefficient of Performance (COP = Qc/Pin) Thot = $85 \degree$ C | Current = 8.0 Amps



SPECIFICATIONS*

Hot Side Temperature	50.0 °C	85.0 °C	110.0 °C
$Qcmax (\Delta T = 0)$	23.6 Watts	25.5 Watts	26.3 Watts
ΔTmax (Qc = 0)	83.2°C	95.3°C	102.0°C
lmax (I @ ΔTmax)	9.9 Amps	9.5 Amps	9.3 Amps
Vmax (V @ ΔTmax)	4.1 Volts	4.7 Volts	5.1 Volts
Module Resistance	0.38 Ohms	0.45 Ohms	0.49 Ohms
Max Operating Temperature	150 °C		
Weight	17.0 gram(s)		

* Specifications reflect thermoelectric coefficients updated March 2020

FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length	
ТА	5.004 ±0.025 mm 0.197 ± 0.0010 in	0.025 mm / 0.025 mm 0.001 in / 0.001 in	Lapped	Lapped	152.4 mm 6.00 in	

SEALING OPTIONS

Suffix	Sealant	Color	Temp Range	Description
	None			No sealing specified

NOTES

- 1. Max operating temperature: 150°C
- 2. Do not exceed Imax or Vmax when operating module
- 3. Reference assembly guidelines for recommended installation

Any information furnished by Laird and its agents, whether in specifications, data sheets, product catalogues or otherwise, is believed to be (but is not warranted as being) accurate and reliable, is provided for information only and does not form part of any contract with Laird. All specifications are subject to change without notice. Laird assumes no responsibility and disclaims all liability for losses or damages resulting from use of or reliance on this information. All Laird products are sold subject to the Laird Terms and Conditions of sale (including Laird's limited warranty) in effect from time to time, a copy of which will be furnished upon request.

© Copyright 2019-2022 Laird Thermal Systems, Inc. All rights reserved. Laird™, the Laird Ring Logo, and Laird Thermal Systems™ are trademarks or registered trademarks of Laird Limited or its subsidiaries.

Revision: 00 Date: 06-01-2022

Print Date: 06-13-2022