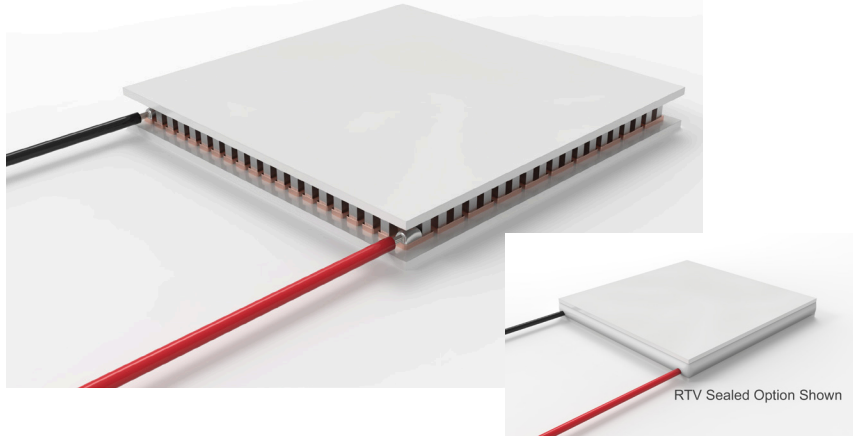


TEC Specification Sheet



Part #	I _{max} (Amps)	Q _{max} (Watts)	V _{max} (Volts)	DT _{max} (°C)	T _{max} (°C)
19911-9Q31-02CQ	2.0	28.1	24.0	67°C	200°C



Custom Options:

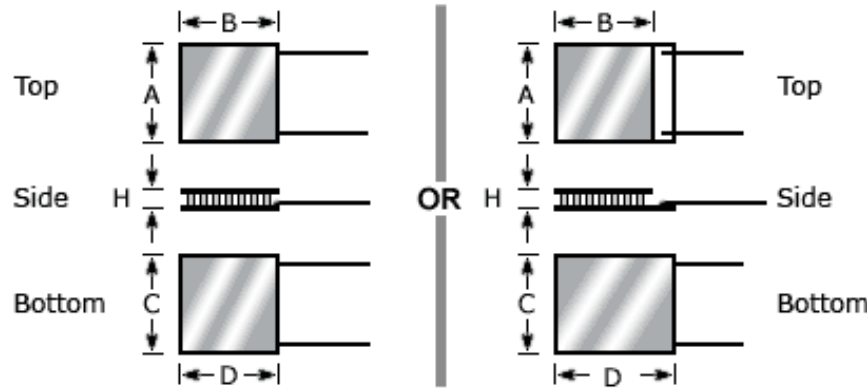
Email / Call for custom wire types and other custom options.

Notes:

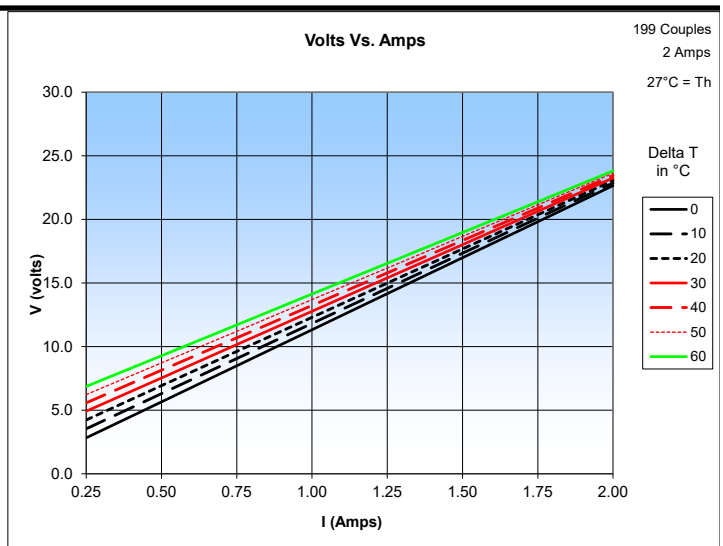
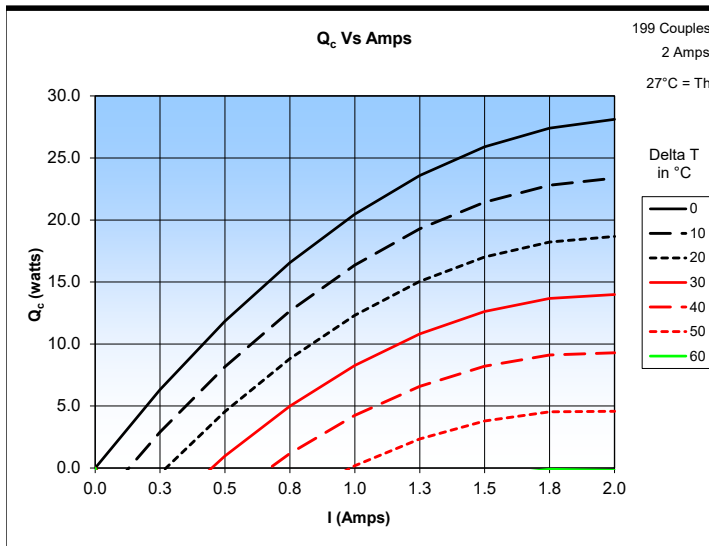
Typical power input is 40% to 80% of I_{max}
 Maximum Waste Heat (exiting the hot side) at 100% input power, I=I_{max}, V=V_{max} is;
 $(I_{max} * V_{max}) + Q_{max} = 76.1 \text{ watts}$
 Use of a properly sized heat sink or water block is required to remove the waste heat.

Bottom Plate				Top Plate				Metallized Height		Lapped Height	
A		B		C		D		H		H	
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
40.0	1.57	40.0	1.57	40.0	1.57	40.0	1.57	NA	NA	4.4	.173

Weight (w/o leads)
21 grams



Tolerances (typical)
 A, B, C, D = ±0.25mm (±0.010")
 H = ±0.2mm (±0.008")



Charts above are tested at a T_H=27°C. At higher T_H temperatures, TEC resistance increases. Since V=I*R, expect amperage to decrease for a given fixed voltage.