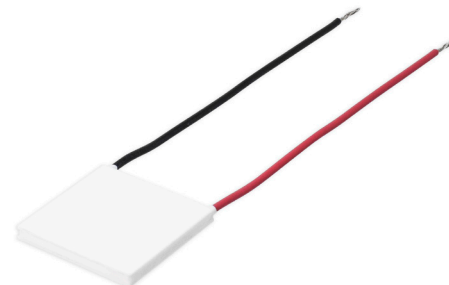


SERIES: CP100 | **DESCRIPTION:** PELTIER MODULE

FEATURES

- arcTEC™ structure on select models
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide ΔT_{max}
- precise temperature control
- solid state construction


MODEL

	input voltage ¹	input current ²	internal resistance ³	output Qmax ⁴		output ΔT_{max} ⁵	
	max [Vdc]	max [A]	typ [$\Omega \pm 10\%$]	$T_h = 27^\circ\text{C}$ [W]	$T_h = 50^\circ\text{C}$ [W]	$T_h = 27^\circ\text{C}$ [°C]	$T_h = 50^\circ\text{C}$ [°C]
CP10205033	9.6	10	0.71	56.2	62	68	75
CP103033 ⁶	11.8	10	0.88	69	75	70	77
CP10304033 ⁶	15	10	1.13	89	97	70	77
CP10415273 ⁶	4.9	10	0.37	28	30	70	77
CP105559415 ⁶	24.6	10	1.82	140	154	70	77

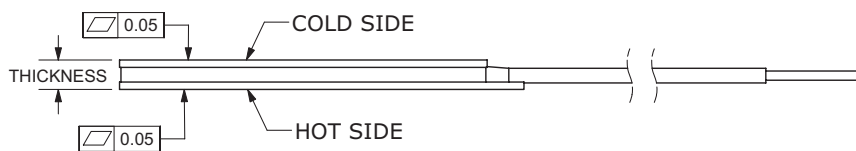
Notes: 1. Maximum voltage at ΔT_{max} and $T_h = 27^\circ\text{C}$
 2. Maximum current to achieve ΔT_{max}
 3. Measured by AC 4-terminal method at 25°C
 4. Maximum heat absorbed at cold side occurs at I_{max} , V_{max} , and $\Delta T = 0^\circ\text{C}$
 5. Maximum temperature difference occurs at I_{max} , V_{max} , and $Q = 0\text{W}$ (ΔT_{max} measured in a vacuum at 1.3 Pa)
 6. Designed with arcTEC™ structure.

SPECIFICATIONS

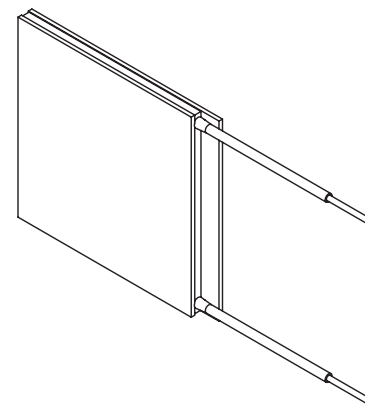
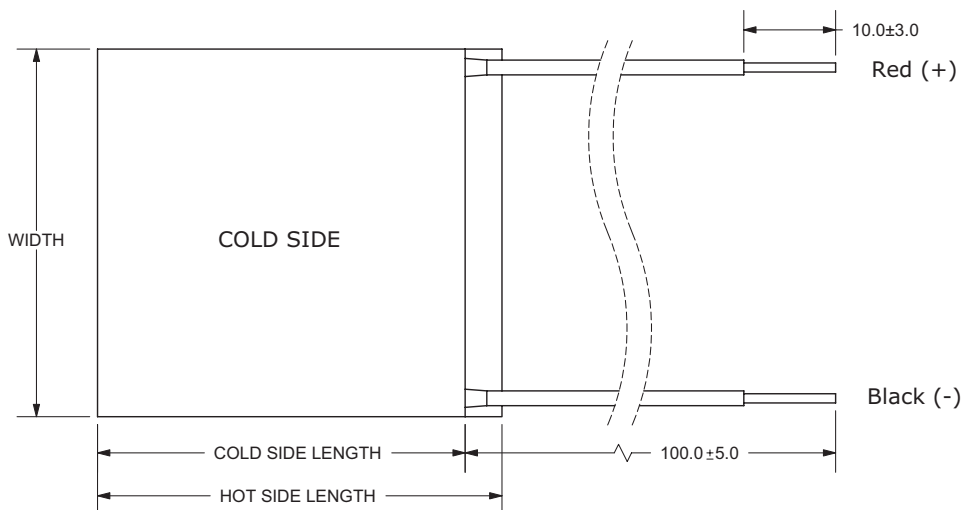
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

MECHANICAL DRAWING

units: mm

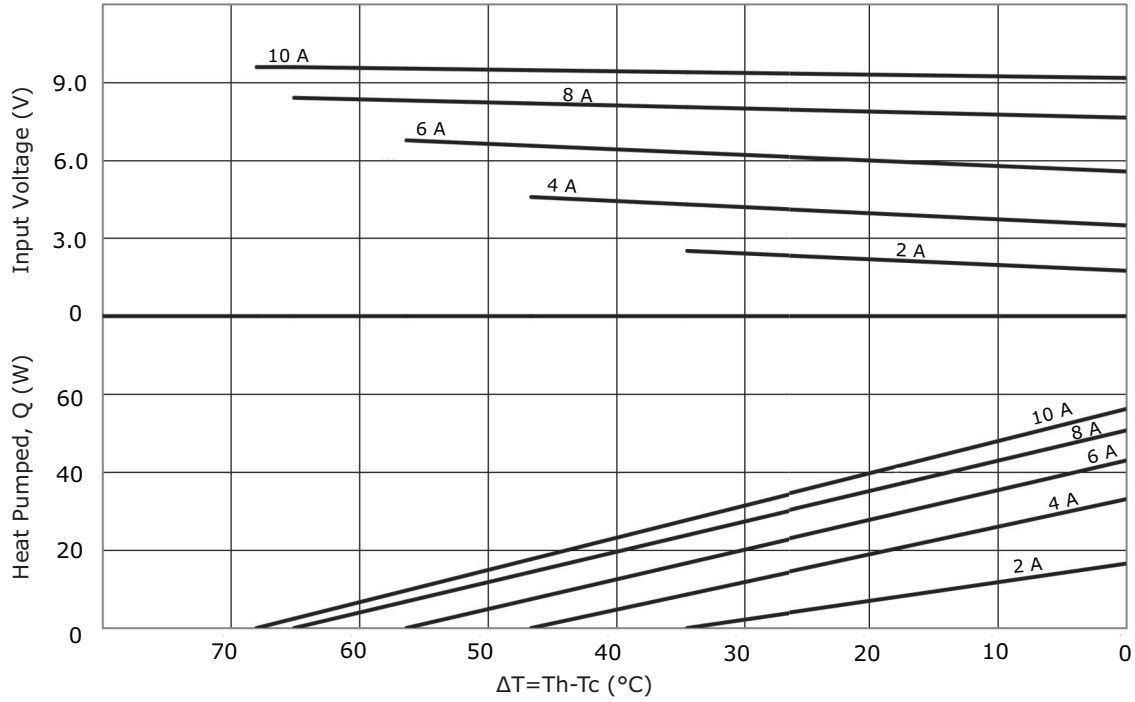


	MATERIAL	PLATING
ceramic plate	96% Al_2O_3	
wire leads [CP10415273]	18 AWG	tin
wire leads [all other models]	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

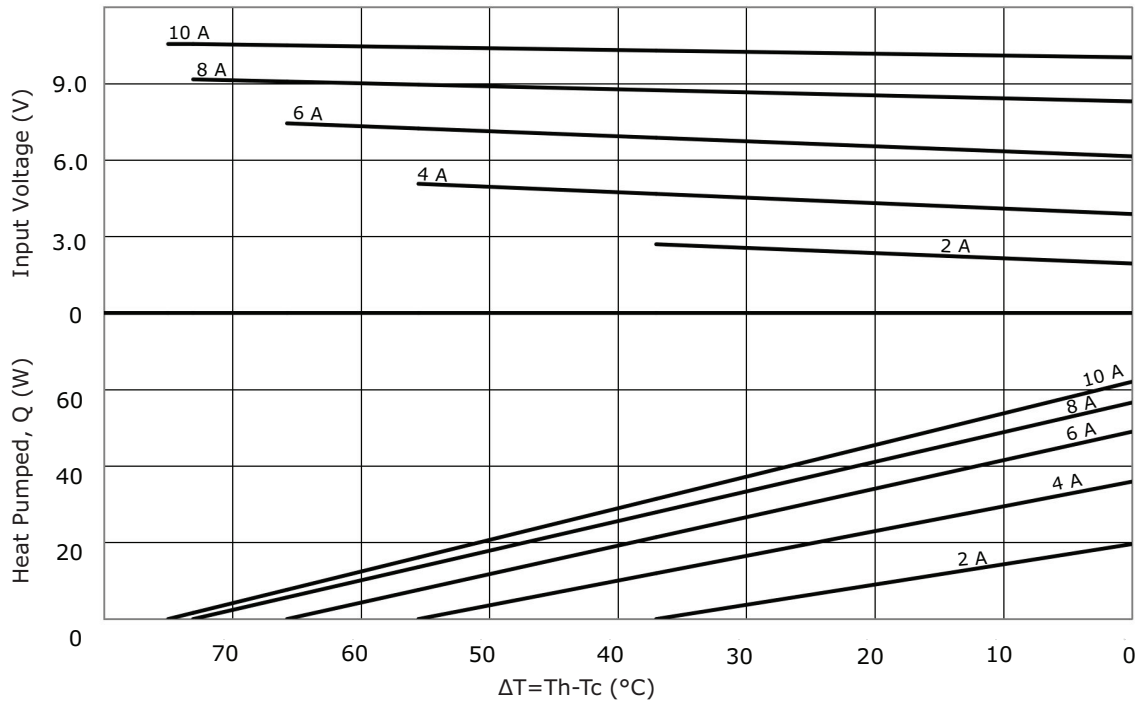


MODEL NO.	HOT SIDE LENGTH [mm]	COLD SIDE LENGTH [mm]	WIDTH [mm]	THICKNESS [mm]
CP10205033	20 ± 0.3	20 ± 0.3	50 ± 0.3	3.3 ± 0.1
CP103033	30 ± 0.3	30 ± 0.3	30 ± 0.3	3.3 ± 0.1
CP10304033	30 ± 0.3	30 ± 0.3	40 ± 0.3	3.3 ± 0.1
CP10415273	57 ± 0.3	52 ± 0.3	41 ± 0.3	7.3 ± 0.1
CP105559415	59 ± 0.3	55 ± 0.3	55 ± 0.3	4.15 ± 0.1

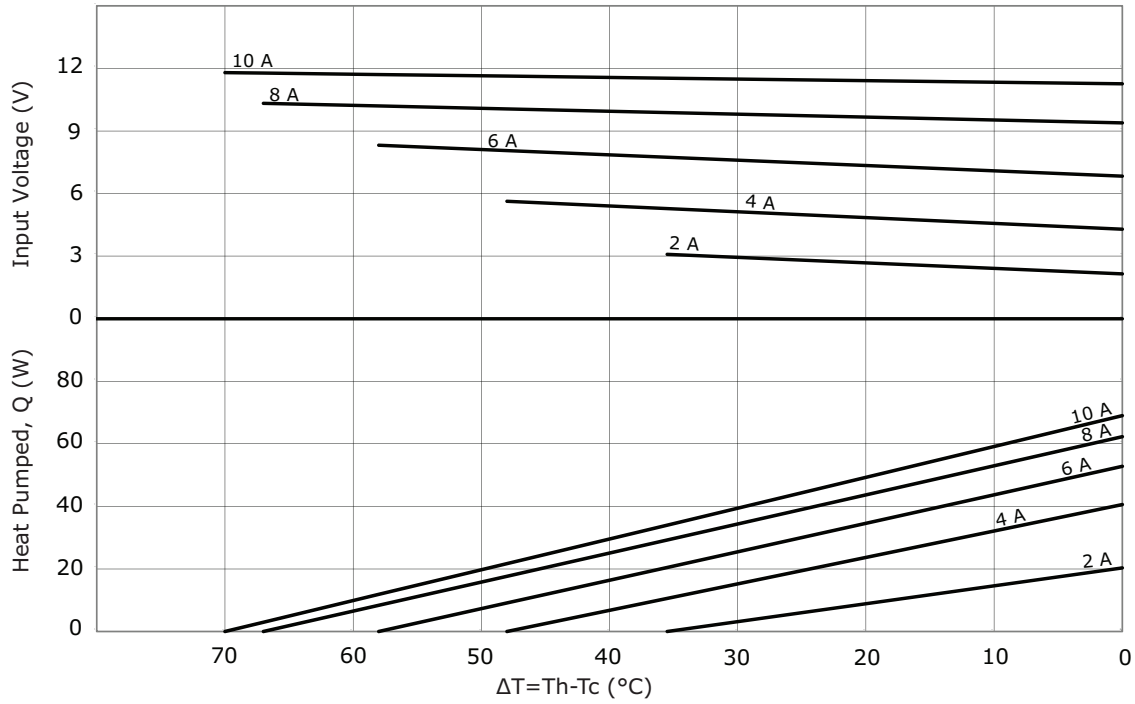
CP10205033 PERFORMANCE (Th=27°C)



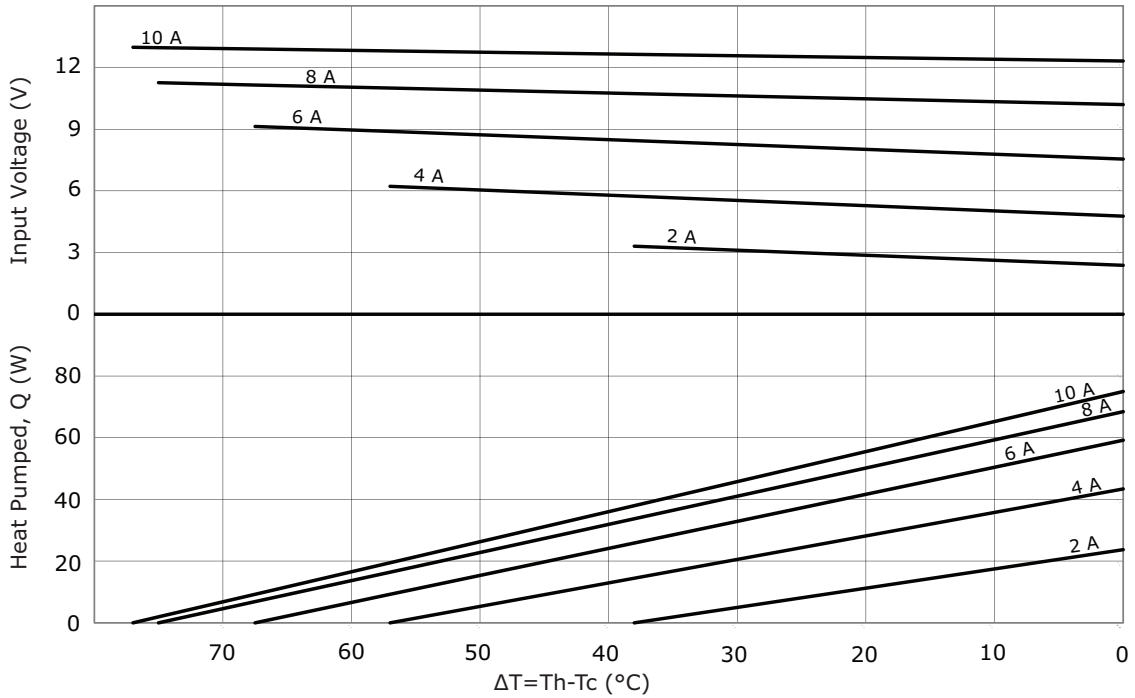
CP10205033 PERFORMANCE (Th=50°C)



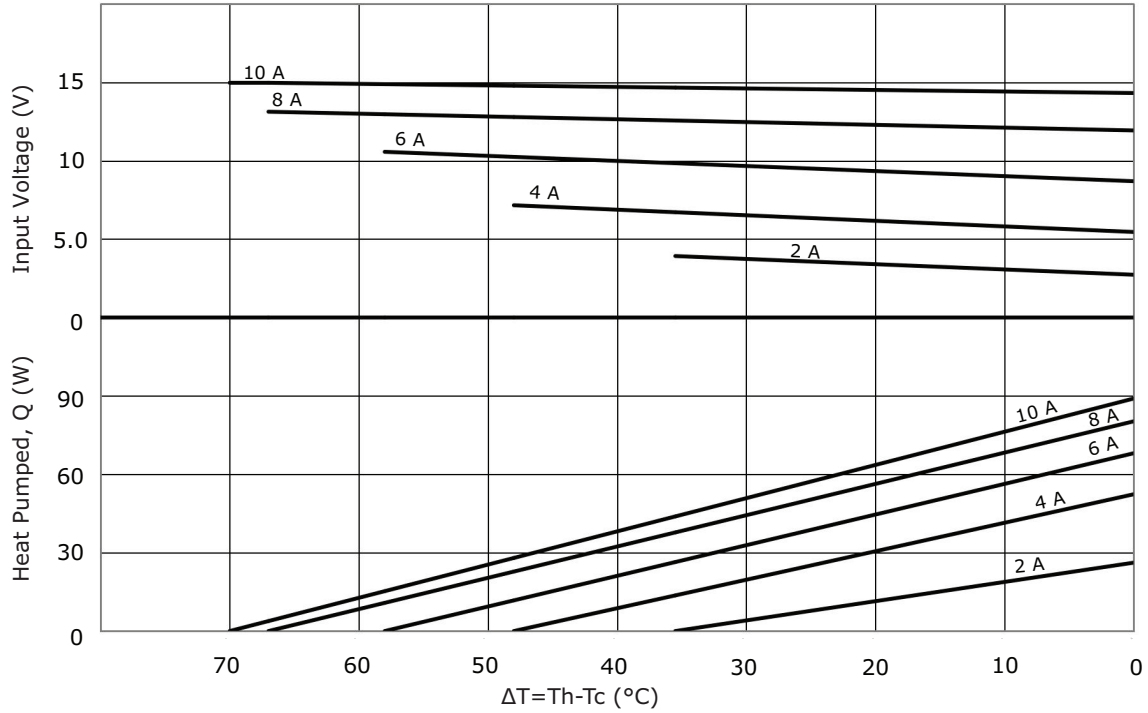
CP103033 PERFORMANCE (Th=27°C)



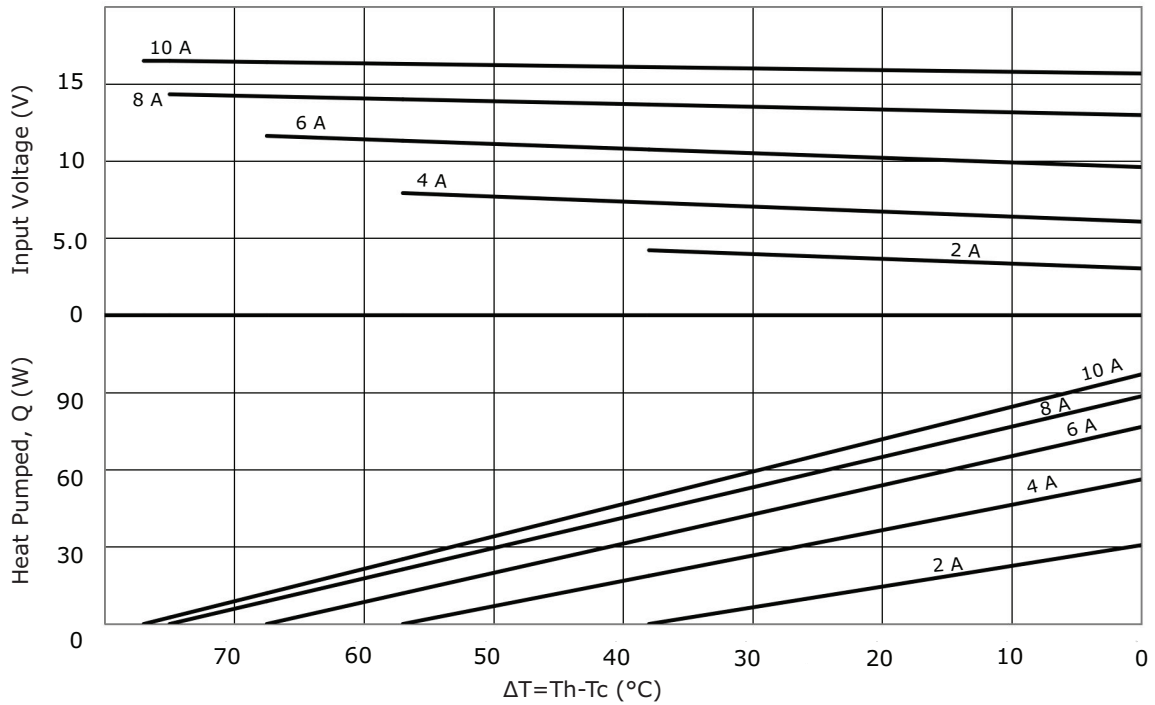
CP103033 PERFORMANCE (Th=50°C)



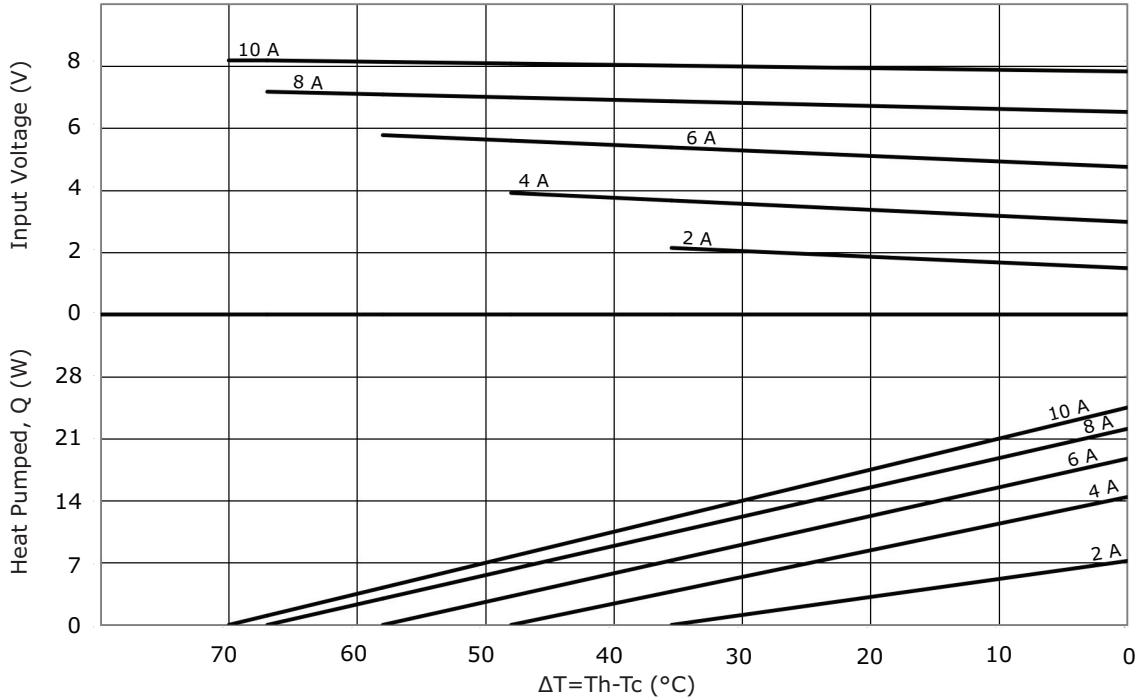
CP10304033 PERFORMANCE (Th=27°C)



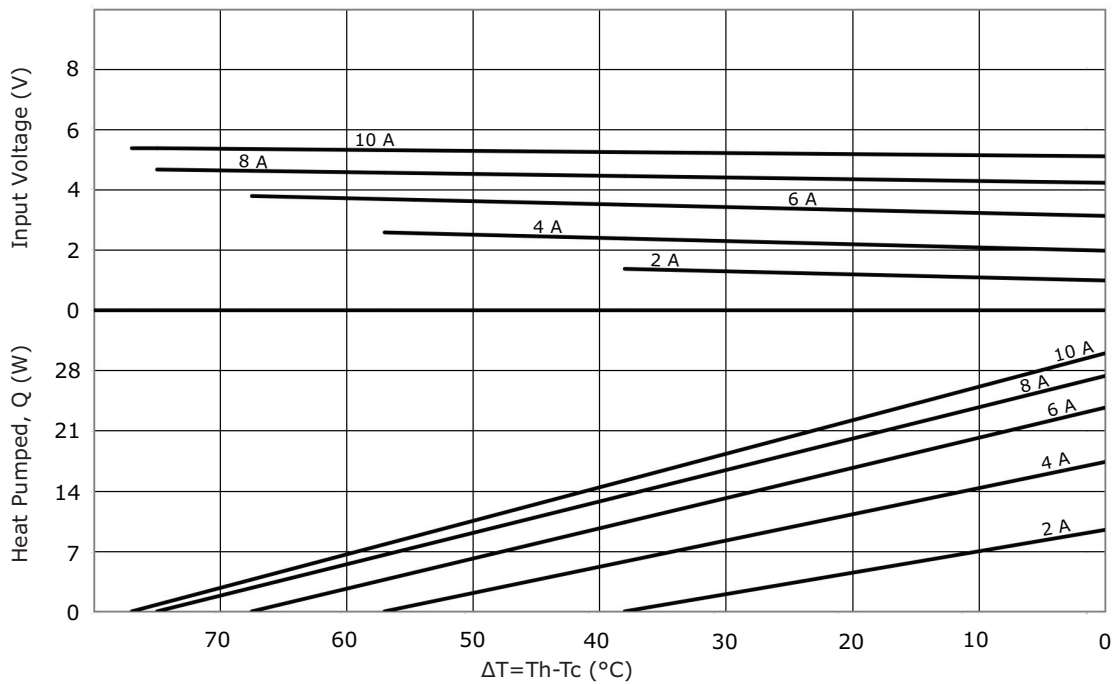
CP10304033 PERFORMANCE (Th=50°C)



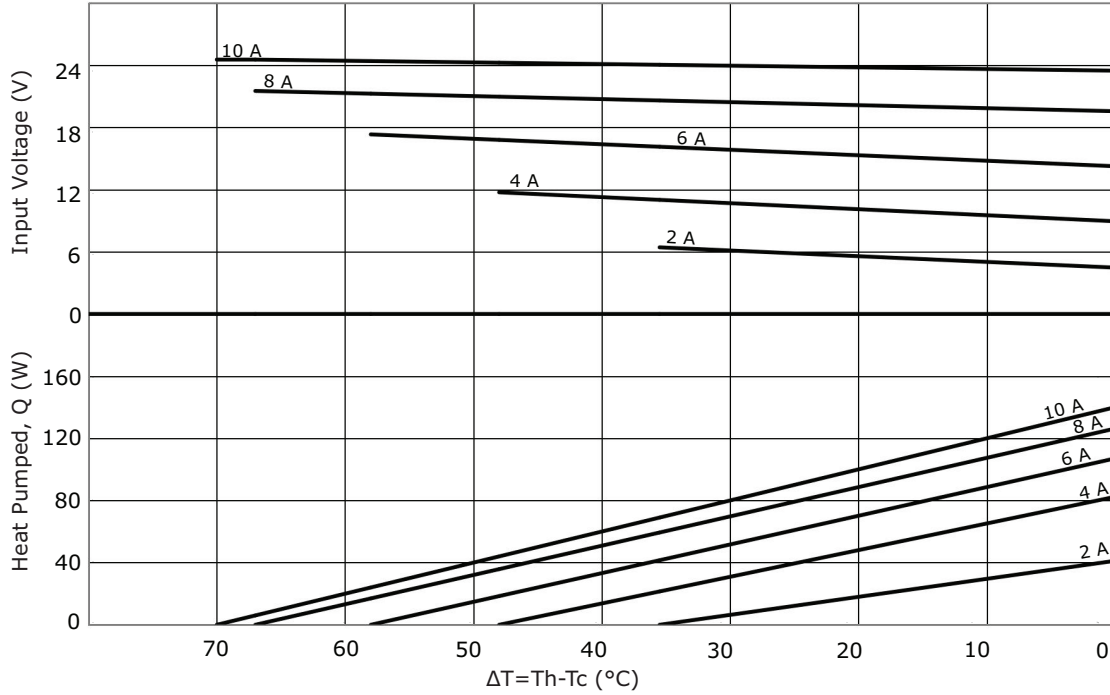
CP10415273 PERFORMANCE (Th=27°C)



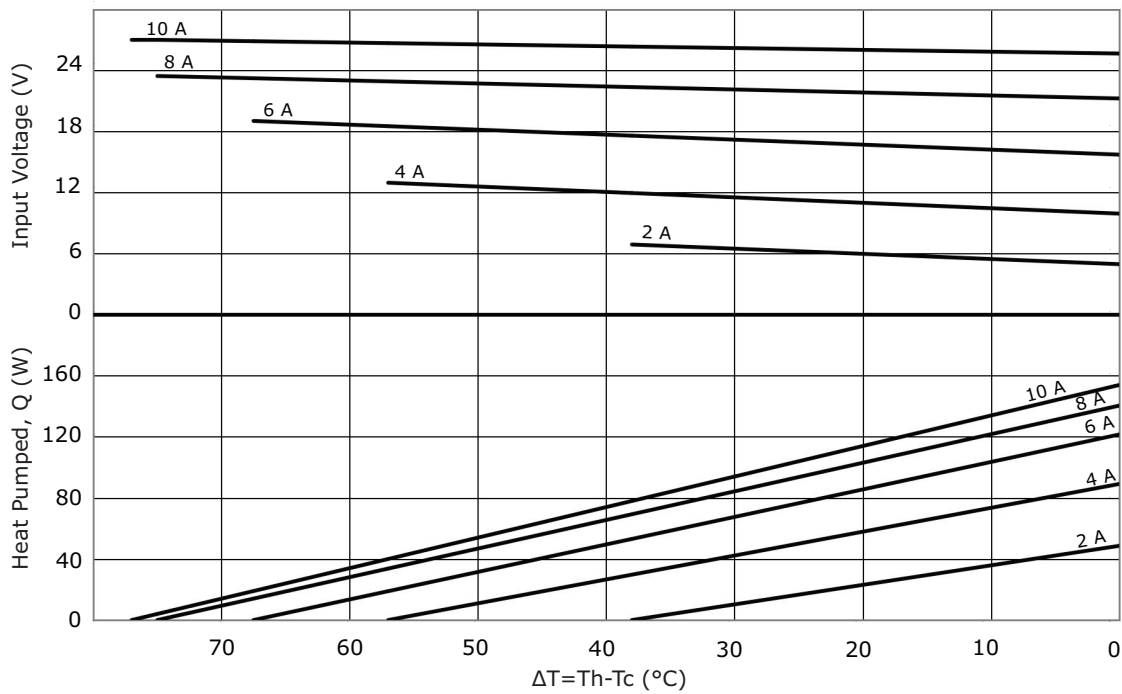
CP10415273 PERFORMANCE (Th=50°C)



CP10559415 PERFORMANCE (Th=27°C)



CP10559415 PERFORMANCE (Th=50°C)



REVISION HISTORY

rev.	description	date
1.0	initial release	11/05/2019
1.01	added models CP10205033 & CP10304033	11/09/2020
1.02	logo, datasheet style update	08/05/2022

The revision history provided is for informational purposes only and is believed to be accurate.



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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