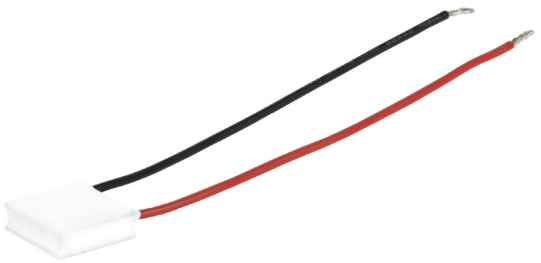
CUI DEVICES

SERIES: CP20H | 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



RoHS

MODEL	input voltage[1] max (Vdc)	input current[2] max (A)	internal resistance[3] typ (Ω±10%)	output Qmax[4] T_h=27°C (W)	output Qmax[4] T_h=50°C (W)	output ΔTmax[5] T_h=27°C (°C)	output ΔTmax[5] T_h=50°C (°C)
CP20147H	3.8	2.0	1.65	4.4	5.0	70	77
CP2020405H	6.0	2.0	2.0	7.7	8.5	70	77
CP20247H	8.8	2.0	3.7	10.2	11.2	70	77
CP20301547H	7.6	2.0	3.32	9	9.9	70	77
CP203475H[6]	15.7	2.0	6.7	18.2	19.5	70	77

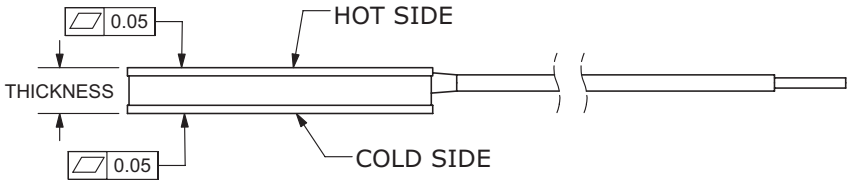
Notes:
1. Maximum voltage at ΔT max and T_h=27°C
2. Maximum current to achieve ΔT max
3. Measured by AC 4-terminal method at 25°C
4. Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and ΔT=0°C
5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (ΔT max measured in a vacuum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

SPECIFICATIONS

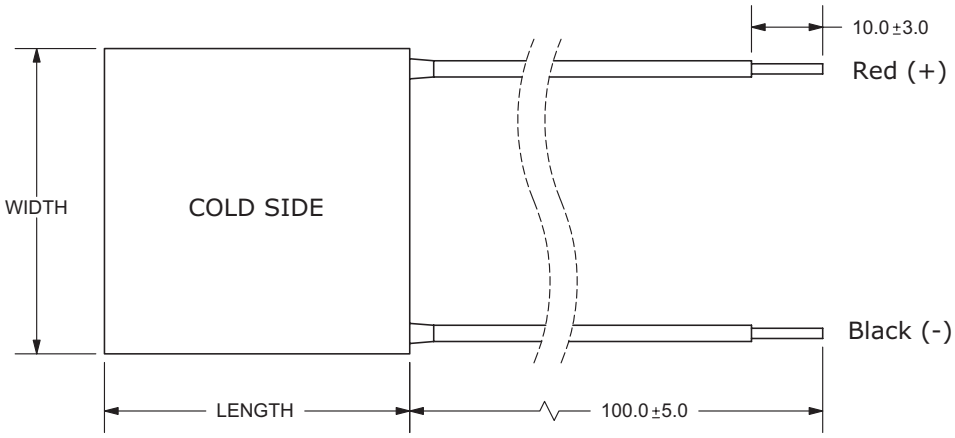
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

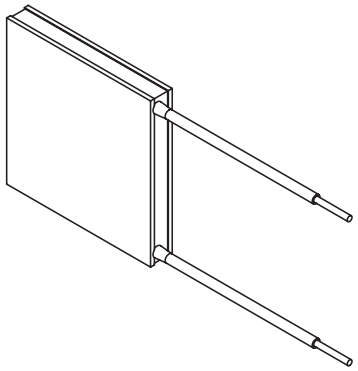
MECHANICAL DRAWING

units: mm



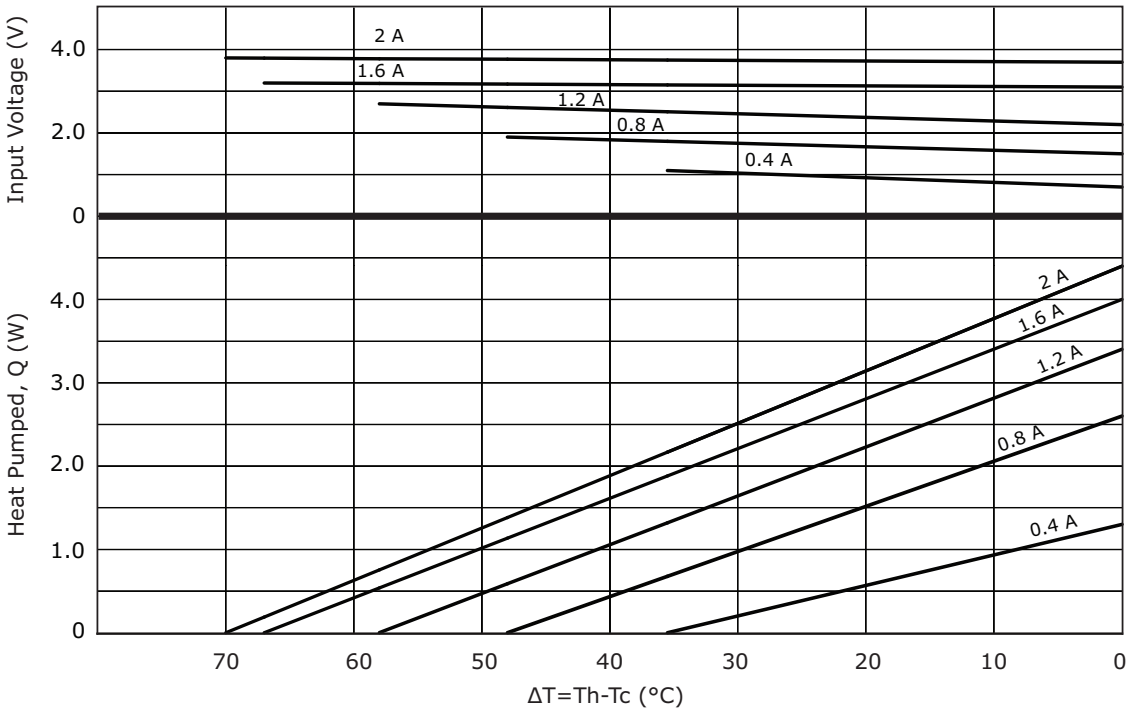
	MATERIAL	PLATING
ceramic plate	96% AL_2O_3	
wire leads	22 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	



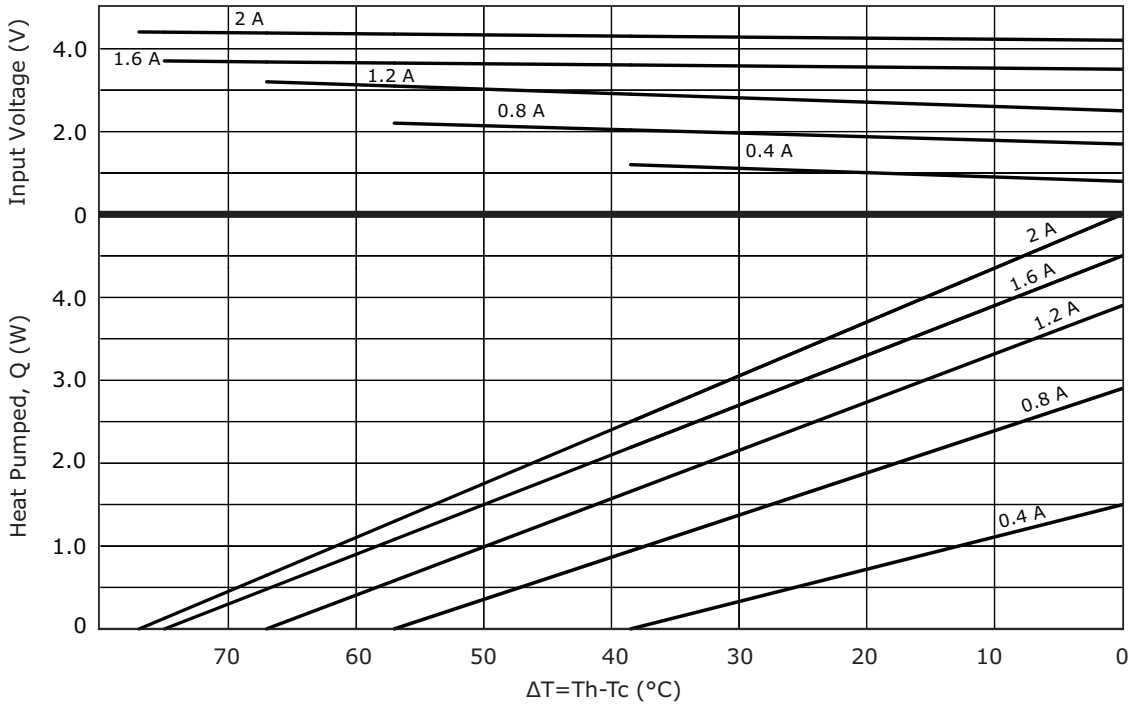


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP20147H	15 ±0.3	15 ±0.3	4.7 ±0.025
CP2020405H	20 ±0.3	20 ±0.3	4.05 ±0.10
CP20247H	20 ±0.3	20 ±0.3	4.7 ±0.025
CP20301547H	30 ±0.3	15 ±0.3	4.7 ±0.025
CP203475H	30 ±0.3	30 ±0.3	4.75 ±0.025

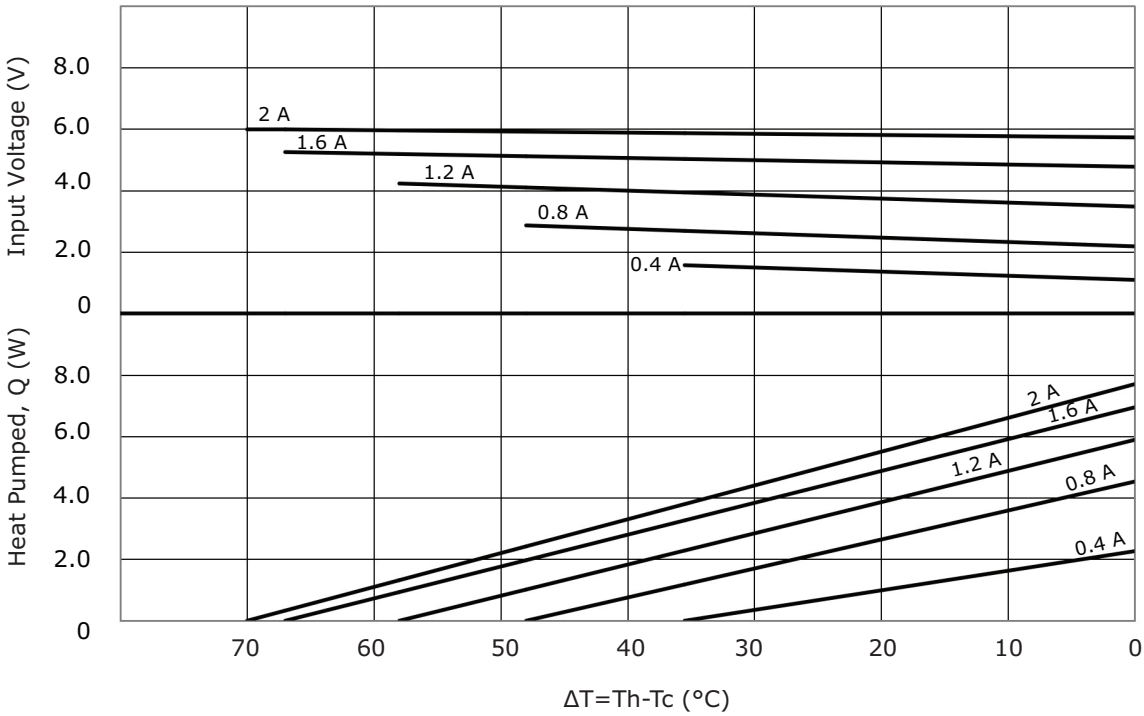
CP20147H PERFORMANCE (Th=27°C)



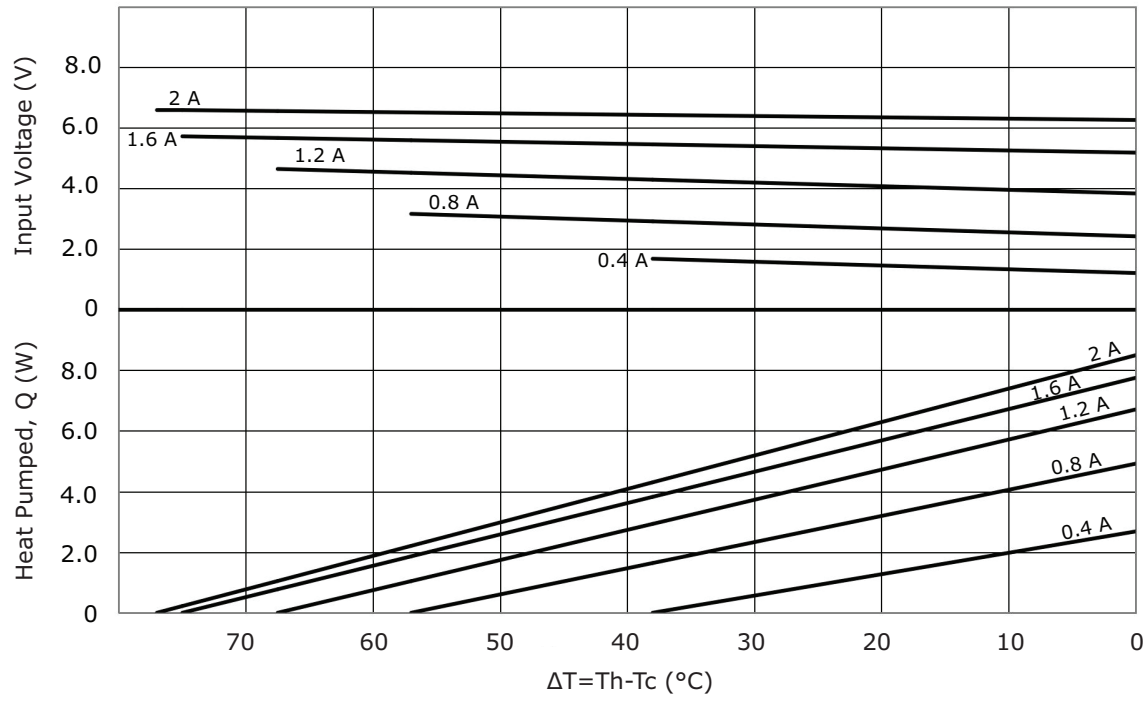
CP20147H PERFORMANCE (Th=50°C)



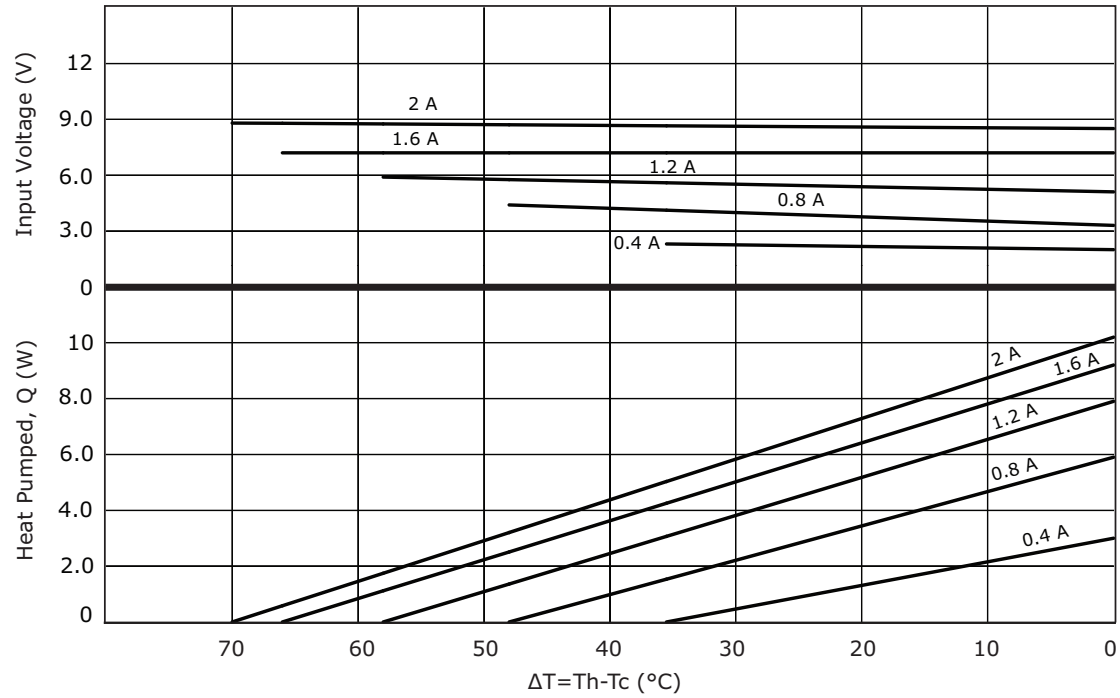
CP2020405H PERFORMANCE (Th=27°C)



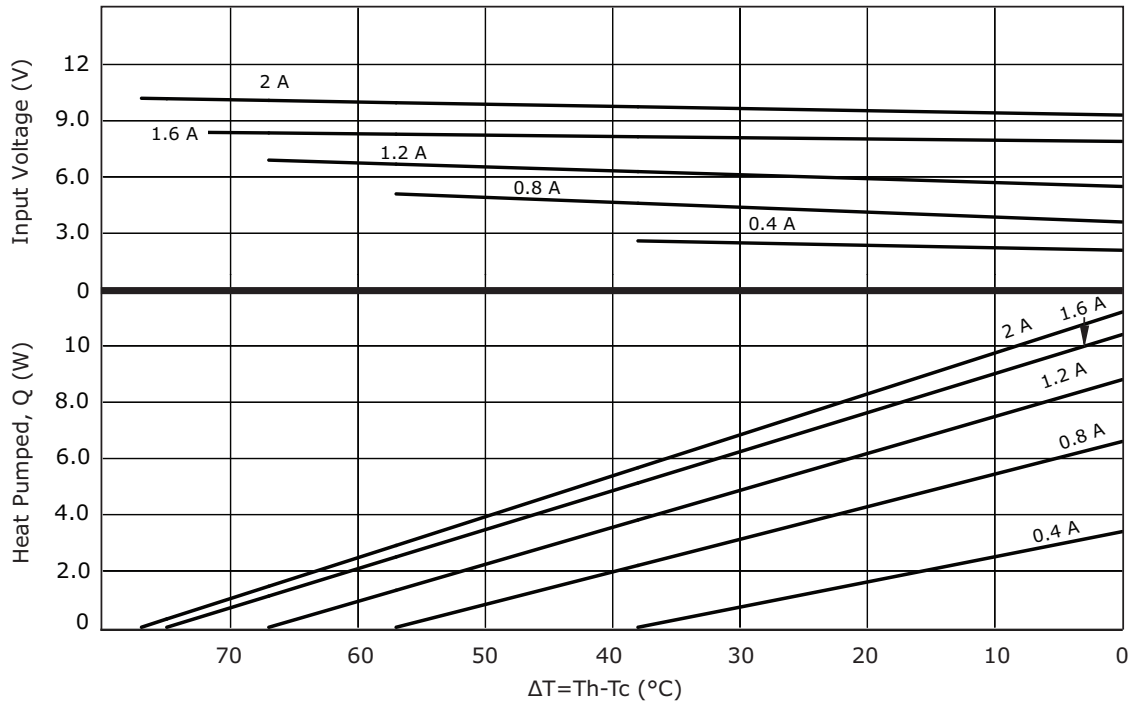
CP2020405H PERFORMANCE (Th=50°C)



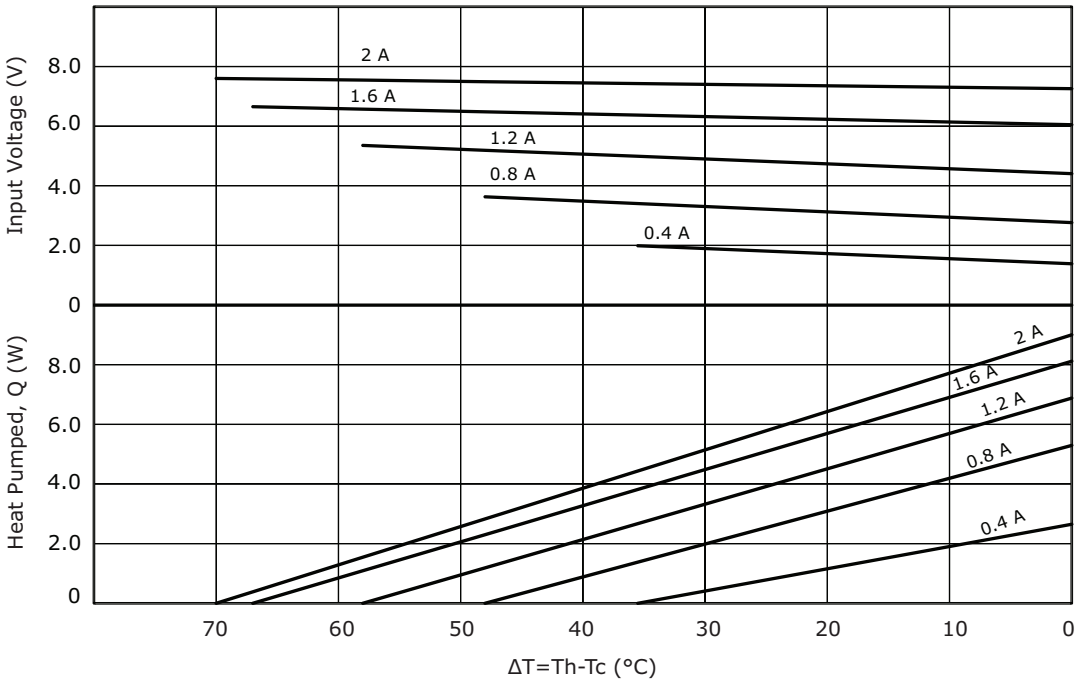
CP20247H PERFORMANCE (Th=27°C)



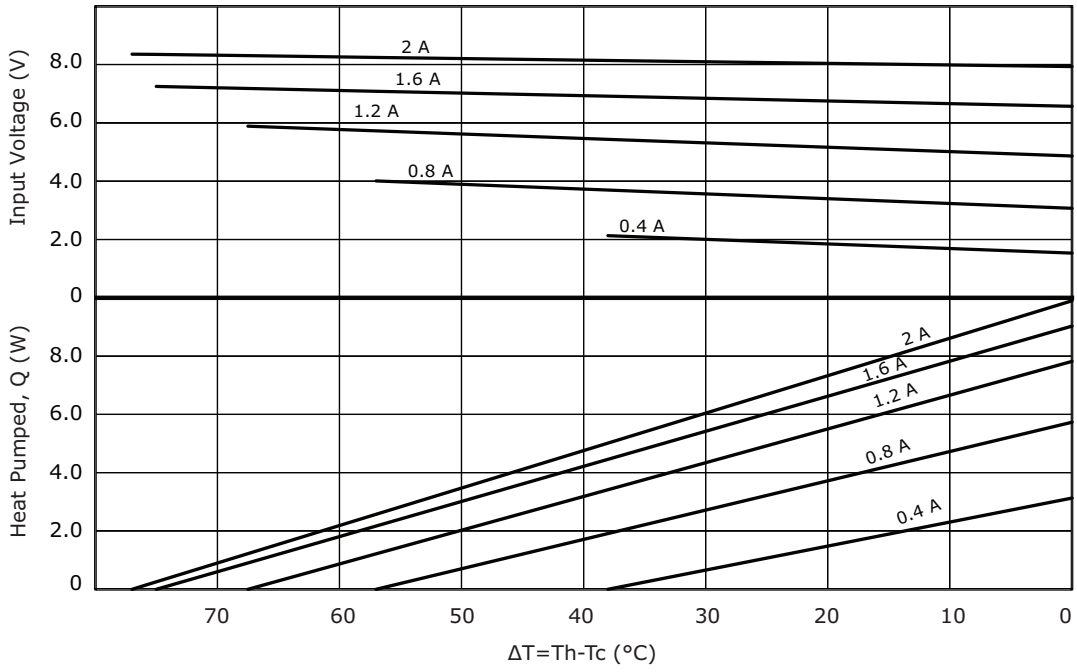
CP20247H PERFORMANCE (Th=50°C)



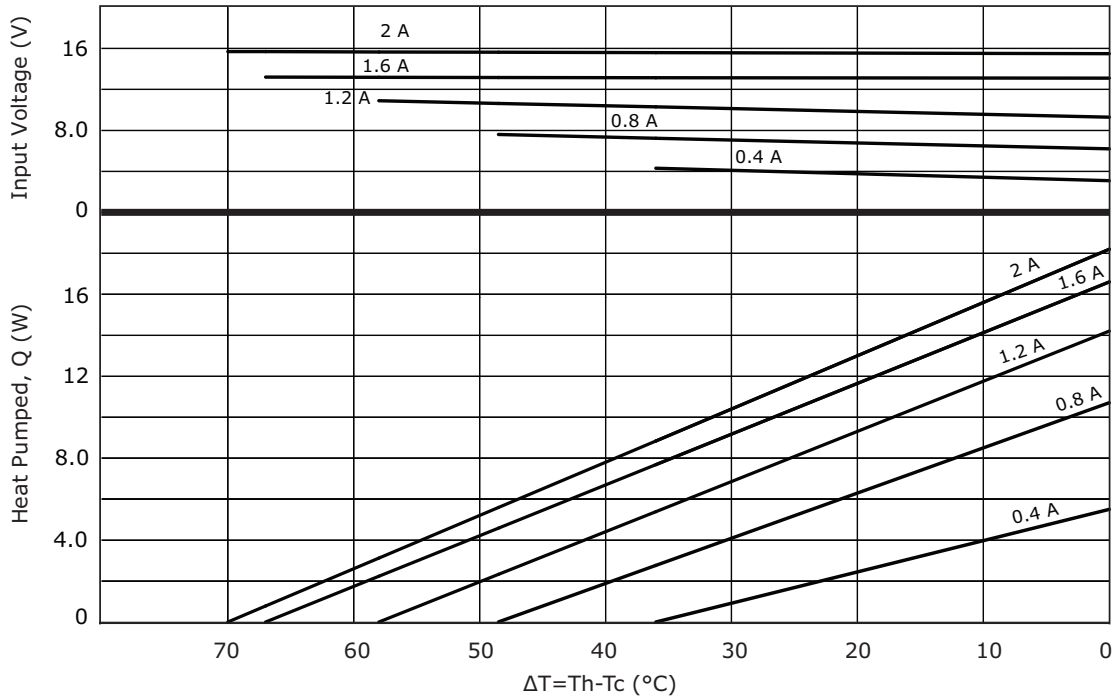
CP20301547H PERFORMANCE (Th=27°C)



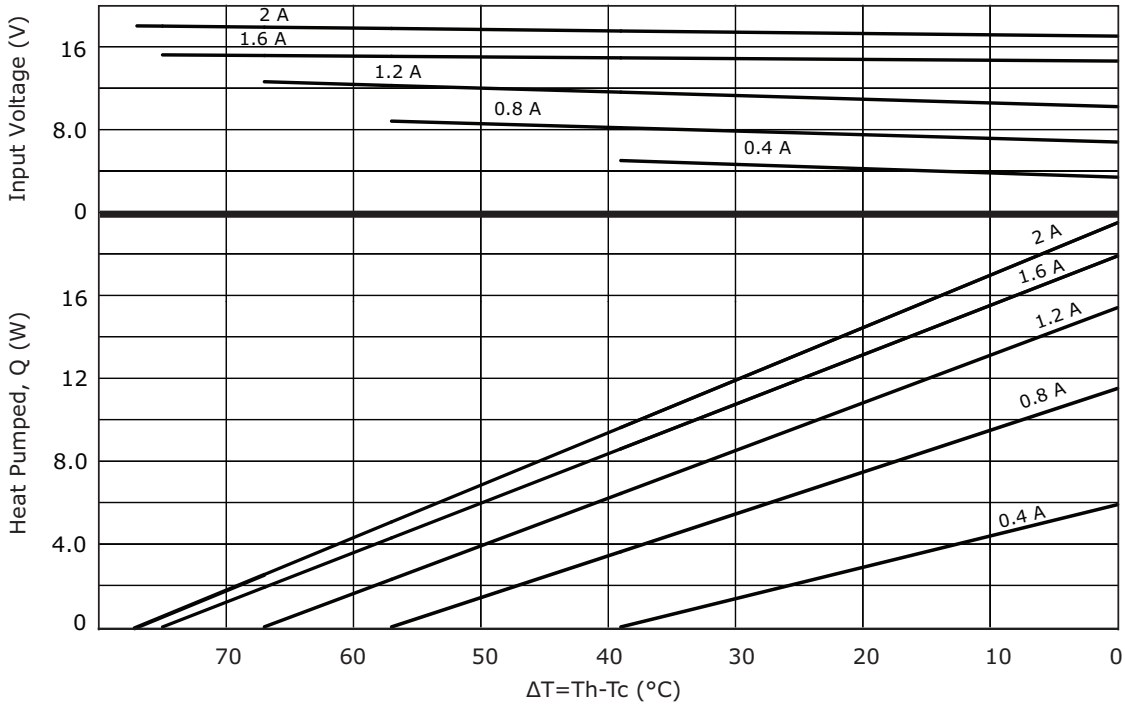
CP20301547H PERFORMANCE (Th=50°C)



CP203475H PERFORMANCE (Th=27°C)



CP203475H PERFORMANCE (Th=50°C)



REVISION HISTORY

rev.	description	date
1.0	initial release	09/08/2016
1.01	updated datasheet	09/25/2017
1.02	added new model	05/21/2018
1.03	brand update	10/28/2019
1.04	added model CP2020405H	11/09/2020

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

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