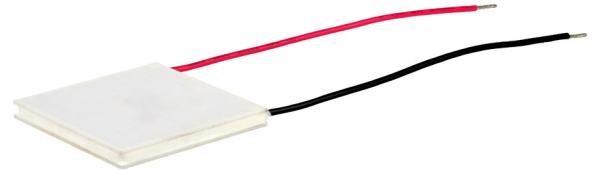


**SERIES: CP40 | DESCRIPTION: PELTIER MODULE**


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**FEATURES**

- arcTEC™ structure on select models
- solid state device
- precise temperature control
- quiet operation

**MODEL**

MODEL	input voltage <sup>1</sup> max (Vdc)	input current <sup>2</sup> max (A)	output Qmax <sup>3</sup>		output ΔTmax <sup>4</sup>	
			T <sub>h</sub> =27°C (W)	T <sub>h</sub> =50°C (W)	T <sub>h</sub> =27°C (°C)	T <sub>h</sub> =50°C (°C)
CP40136	3.8	4.0	8.1	9.0	66	72
CP40236	8.6	4.0	18.7	21.8	66	72
CP40336	15.4	4.0	33.4	37.3	66	72
CP40147	2.1	4.0	4.2	4.6	68	75
CP40247	3.8	4.0	7.5	8.3	68	75
CP40301547	4.2	4.0	8.4	9.2	68	75
CP40347 <sup>5</sup>	8.6	4.0	19.6	21.6	70	77
CP40447 <sup>5</sup>	15.4	4.0	32	35.2	70	77

- Notes:
1. Maximum voltage at ΔT max and T<sub>h</sub>=27°C
  2. Maximum current to achieve ΔT max
  3. Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and ΔT=0°C
  4. Maximum temperature difference occurs at I<sub>max</sub>, V<sub>max</sub>, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)
  5. Designed with arcTEC™ structure

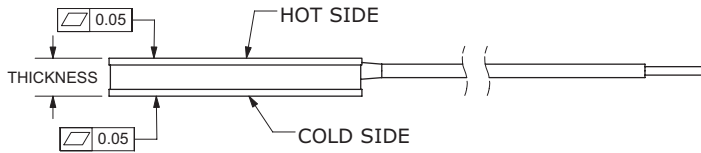
## SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
internal resistance <sup>1</sup>	CP40136	0.72	0.80	0.88	Ω
	CP40236	1.8	2.0	2.2	Ω
	CP40336	3.15	3.5	3.85	Ω
	CP40147	0.378	0.42	0.462	Ω
	CP40247	0.693	0.77	0.847	Ω
	CP40301547	0.783	0.87	0.957	Ω
	CP40347	1.584	1.76	1.936	Ω
	CP40447	2.835	3.15	3.465	Ω
solder melting temperature	connection between thermoelectric pairs CP40347, CP40447	235			°C
	all other models	138			°C
assembly compression	3.6 mm models			0.98	MPa
	4.7 mm models			1	MPa
hot side plate				80	°C
RoHS	2011/65/EU				

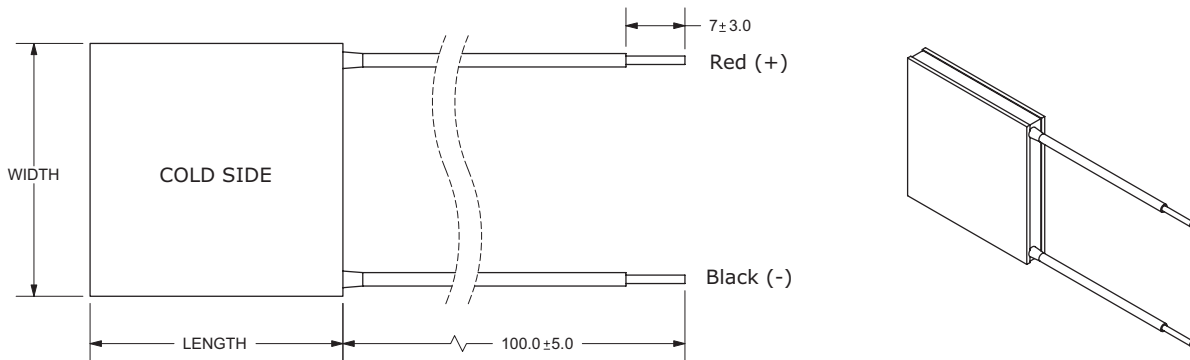
Note: 1. Measured by AC 4-terminal method at 25°C

## MECHANICAL DRAWING

units: mm



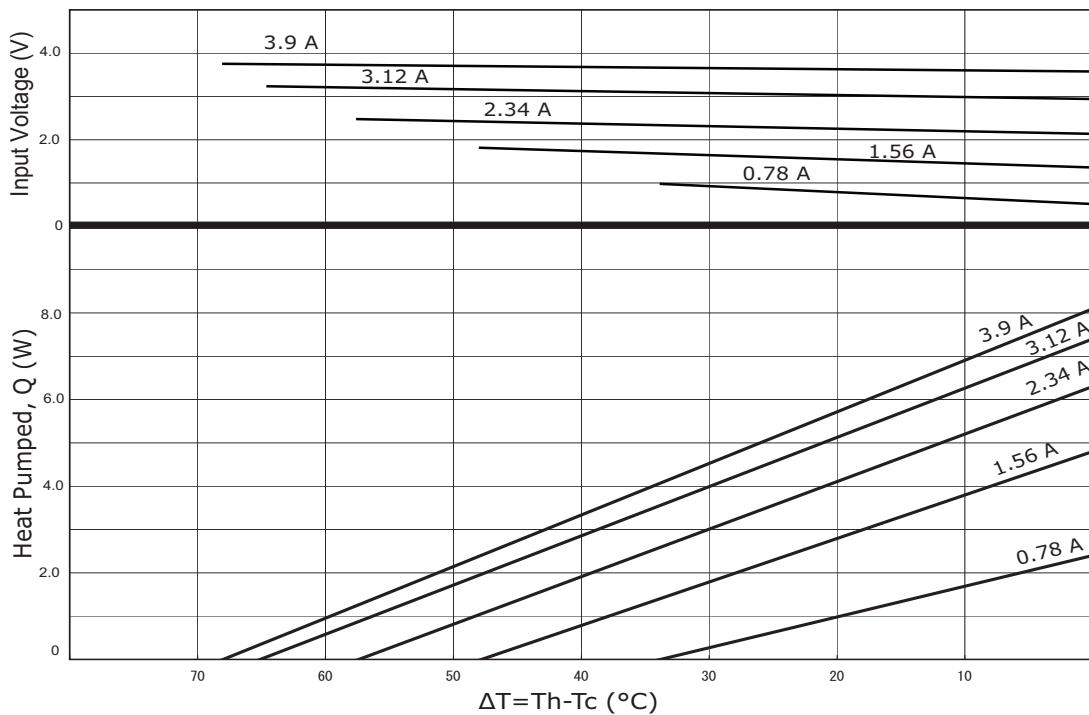
	MATERIAL	PLATING
ceramic plate	96% Al <sub>2</sub> O <sub>3</sub>	
wire leads (3.6 mm models)	22 AWG	tin
wire leads (4.7 mm models)	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	



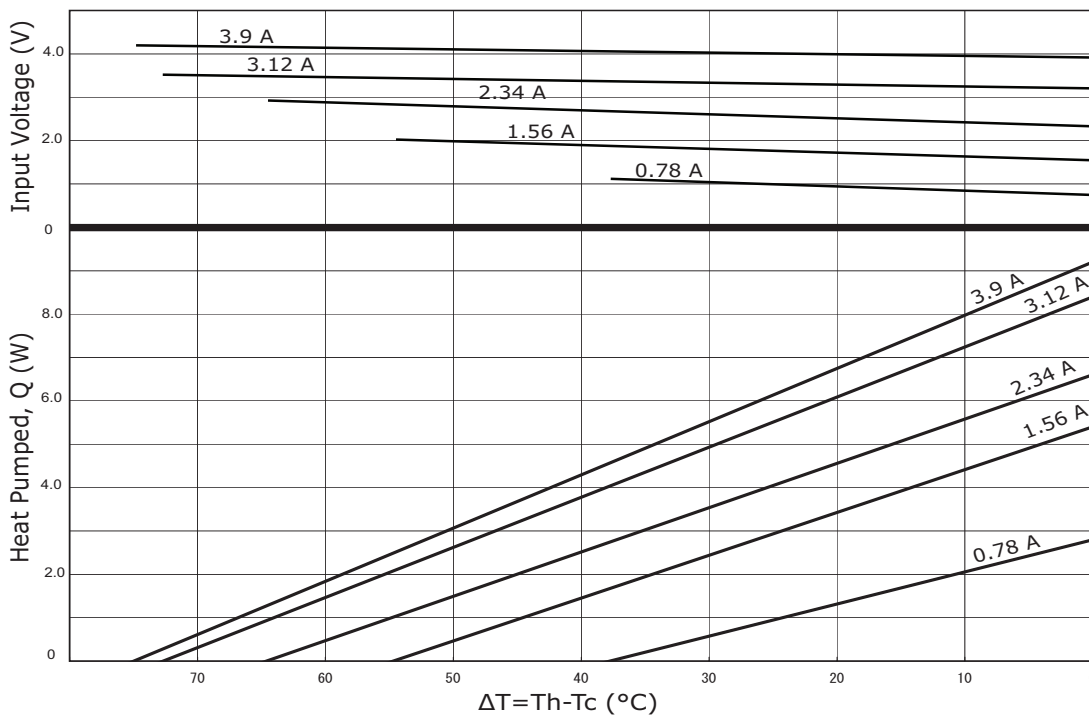
MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP40136	15 ±0.3	15 ±0.3	3.6 ±0.1
CP40236	20 ±0.3	20 ±0.3	3.6 ±0.1
CP40336	30 ±0.3	30 ±0.3	3.6 ±0.1
CP40147	15 ±0.3	15 ±0.3	4.7 ±0.1
CP40247	20 ±0.3	20 ±0.3	4.7 ±0.1
CP40301547	30 ±0.3	15 ±0.3	4.7 ±0.1
CP40347 <sup>2</sup>	30 ±0.3	30 ±0.3	4.6 ±0.1
CP40447 <sup>2</sup>	40 ±0.3	40 ±0.3	4.6 ±0.1

Notes: 2. Wire lead strip length on models CP40347 & CP40447 is 10 ±3.0 mm.

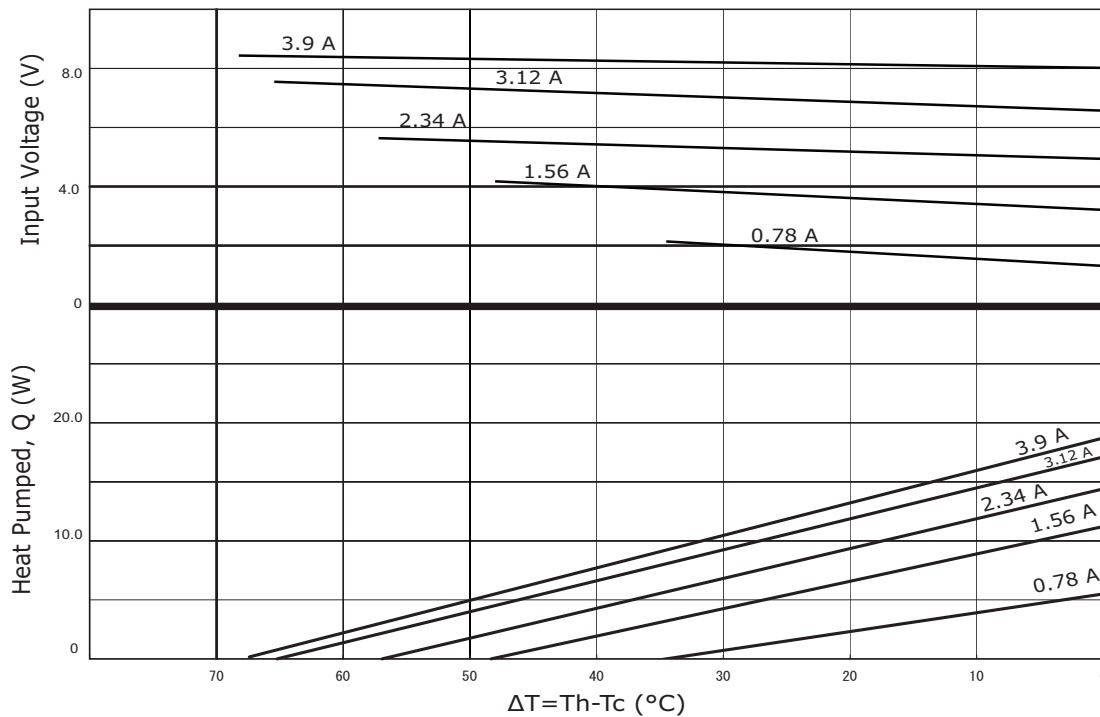
### CP40136 PERFORMANCE (Th=27°C)



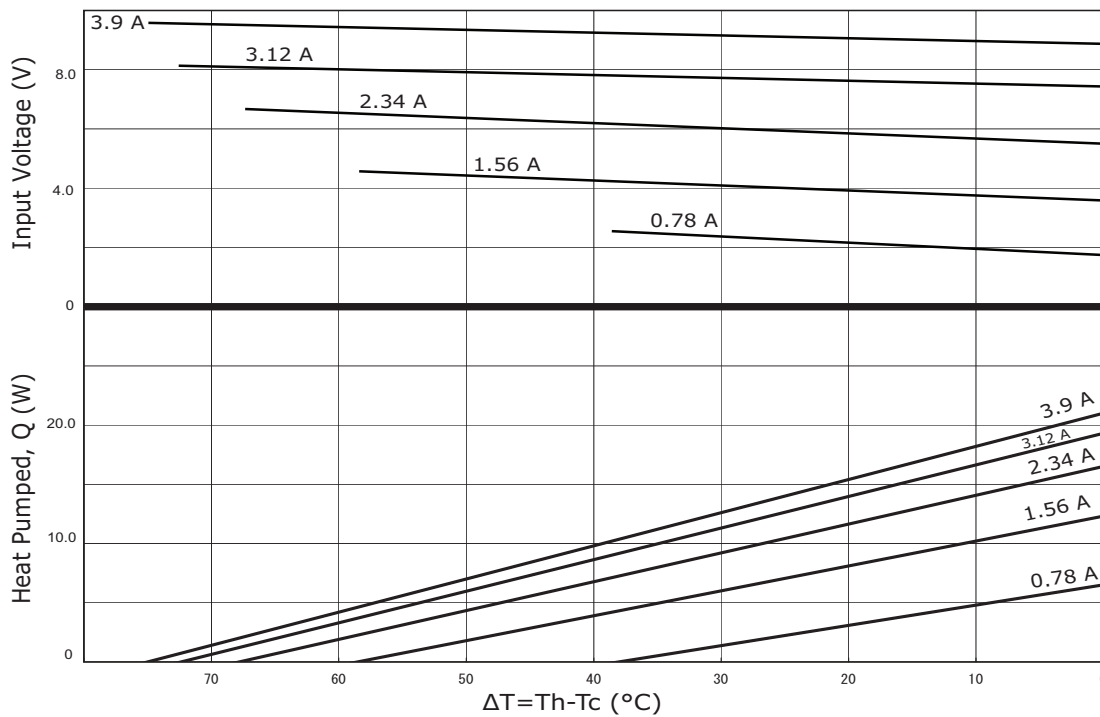
### CP40136 PERFORMANCE (Th=50°C)



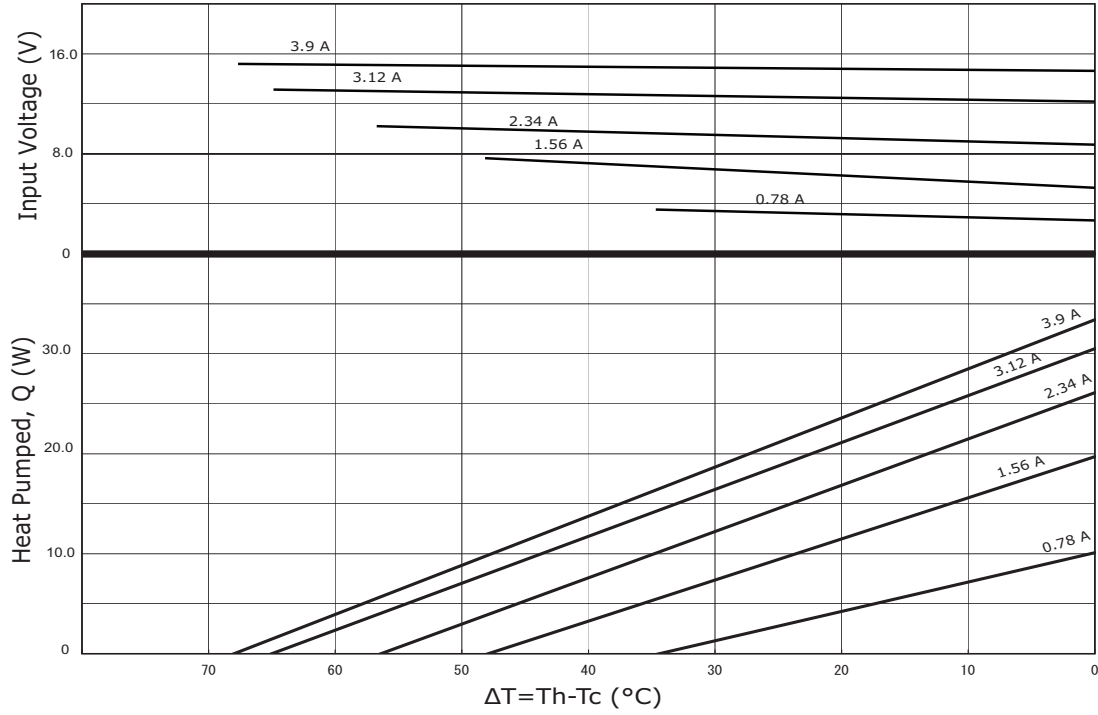
### CP40236 PERFORMANCE (Th=27°C)



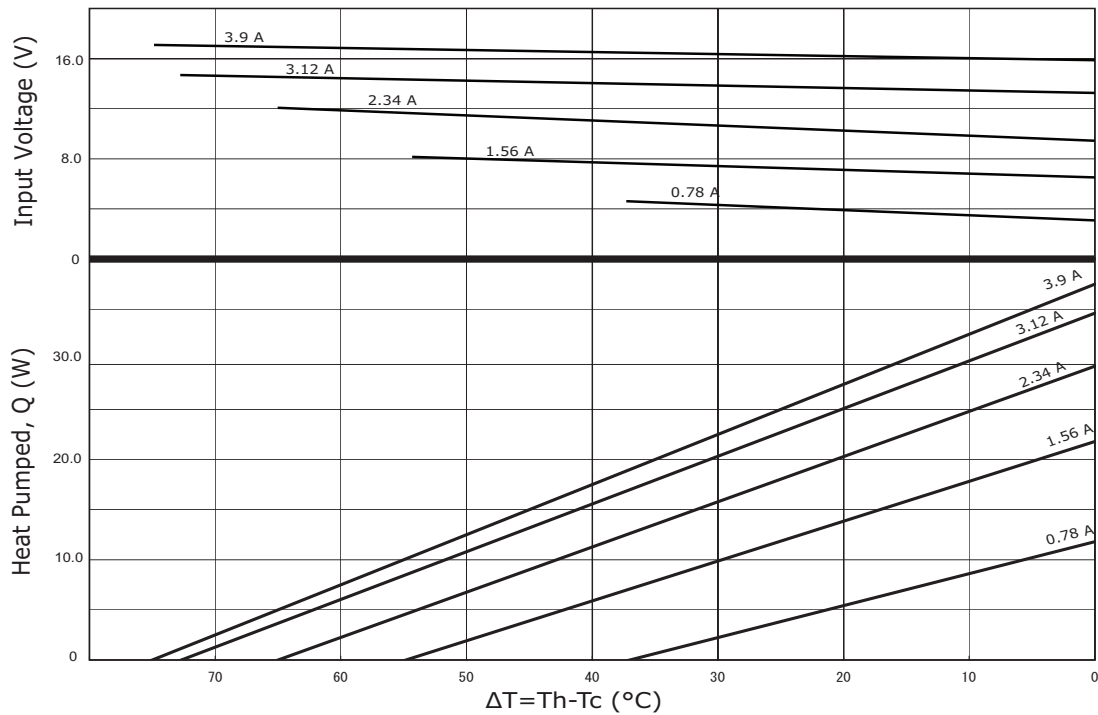
### CP40236 PERFORMANCE (Th=50°C)



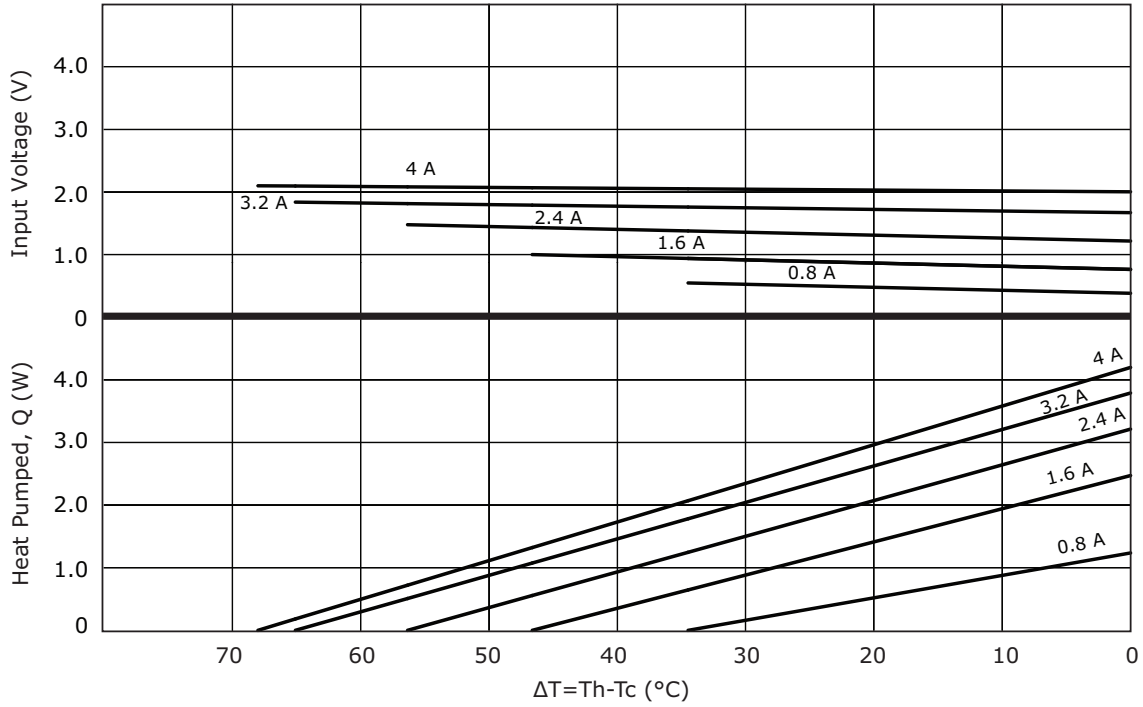
### CP40336 PERFORMANCE (Th=27°C)



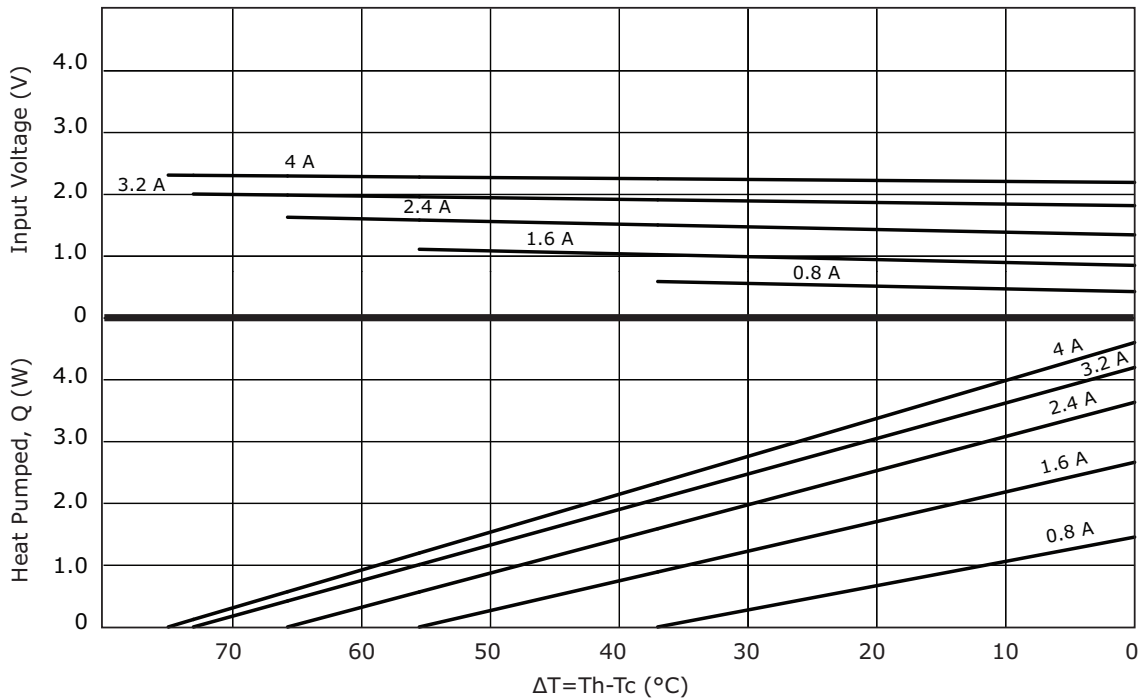
### CP40336 PERFORMANCE (Th=50°C)



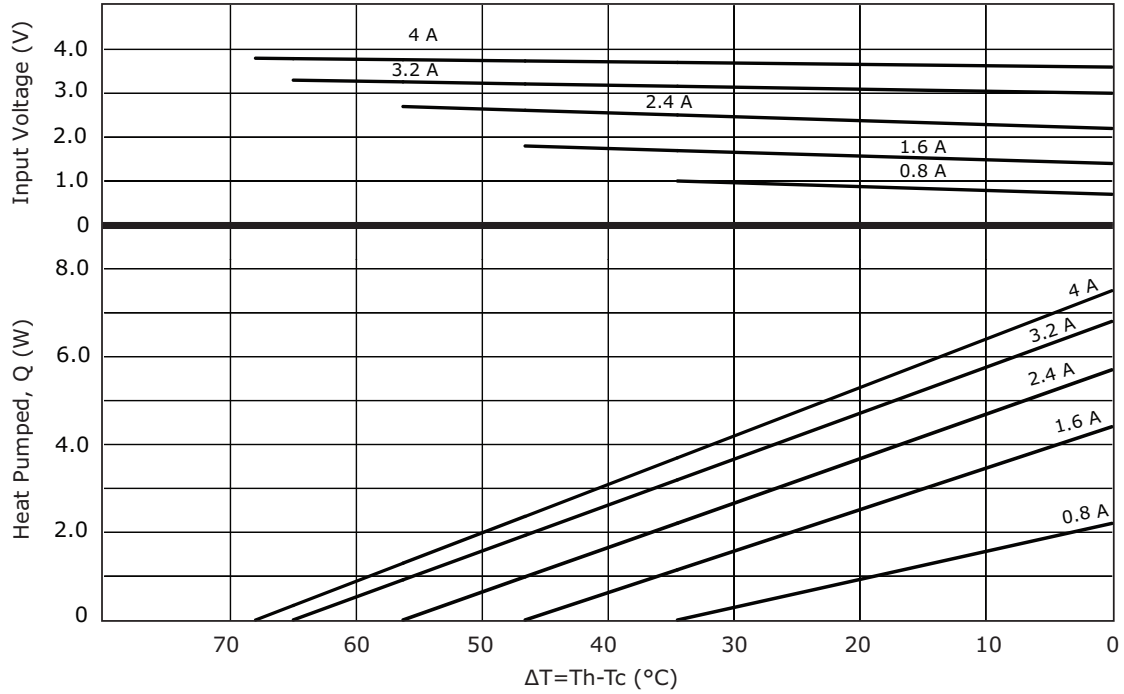
### CP40147 PERFORMANCE (Th=27°C)



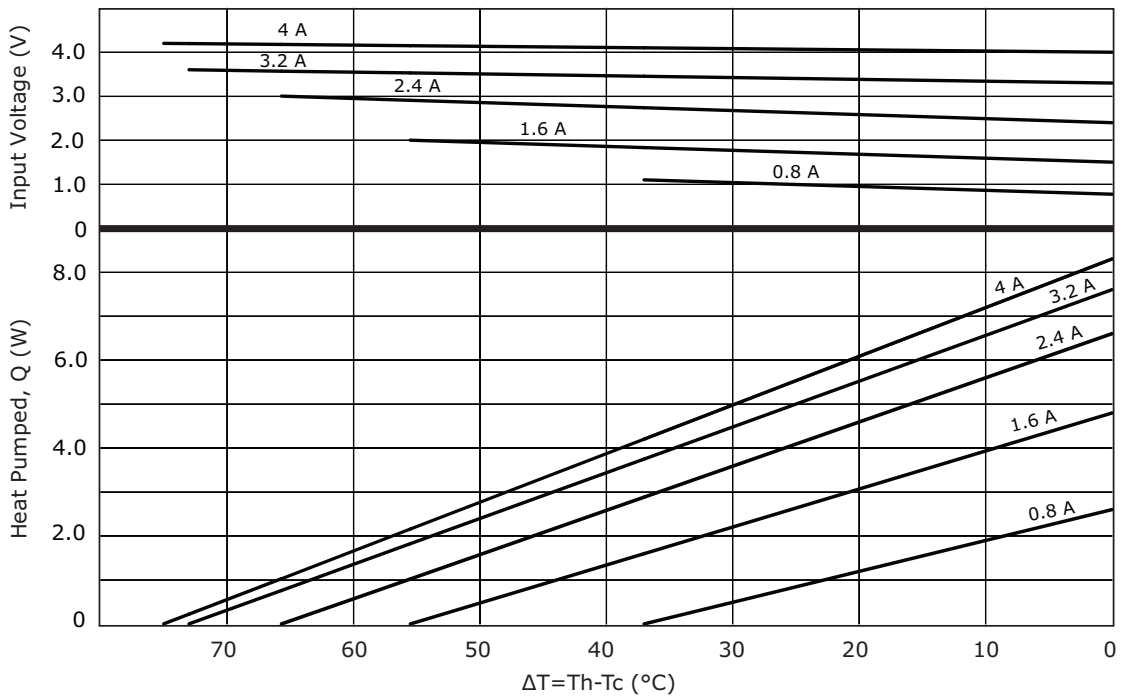
### CP40147 PERFORMANCE (Th=50°C)



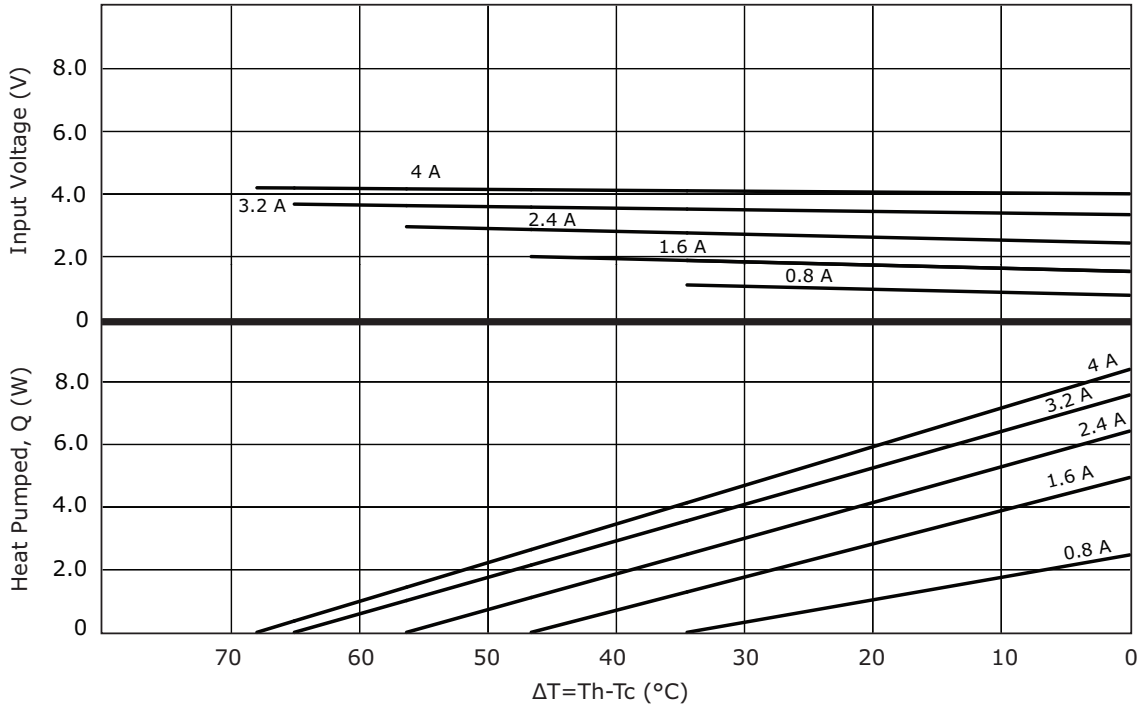
### CP40247 PERFORMANCE (Th=27°C)



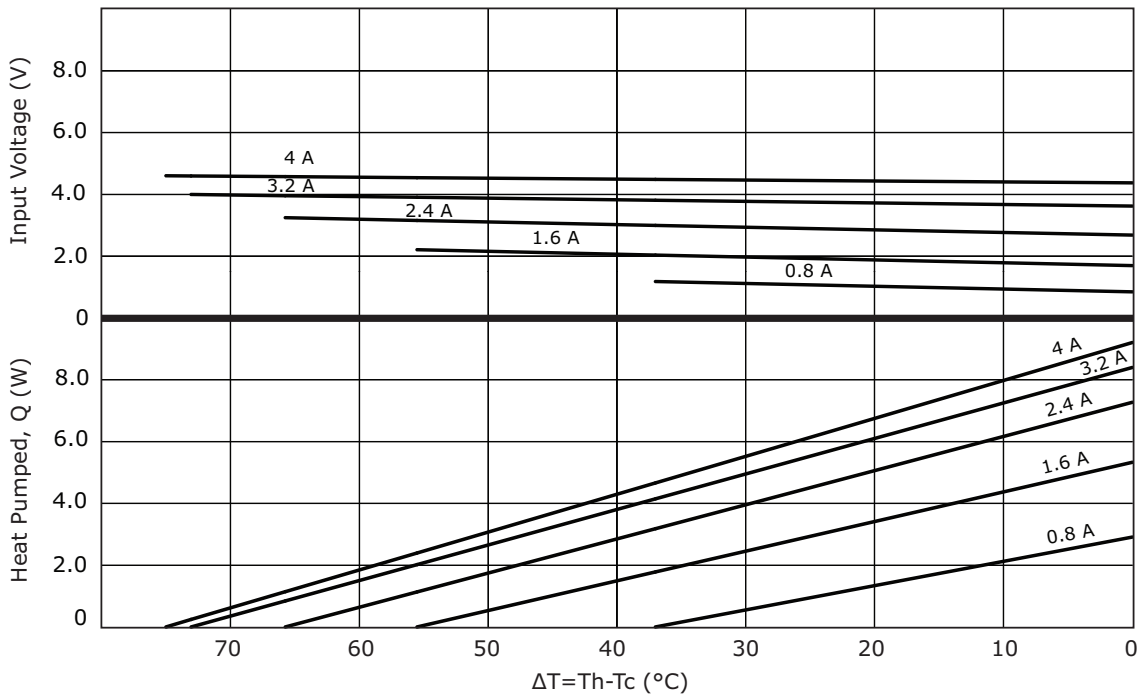
### CP40247 PERFORMANCE (Th=50°C)



### CP40301547 PERFORMANCE (Th=27°C)

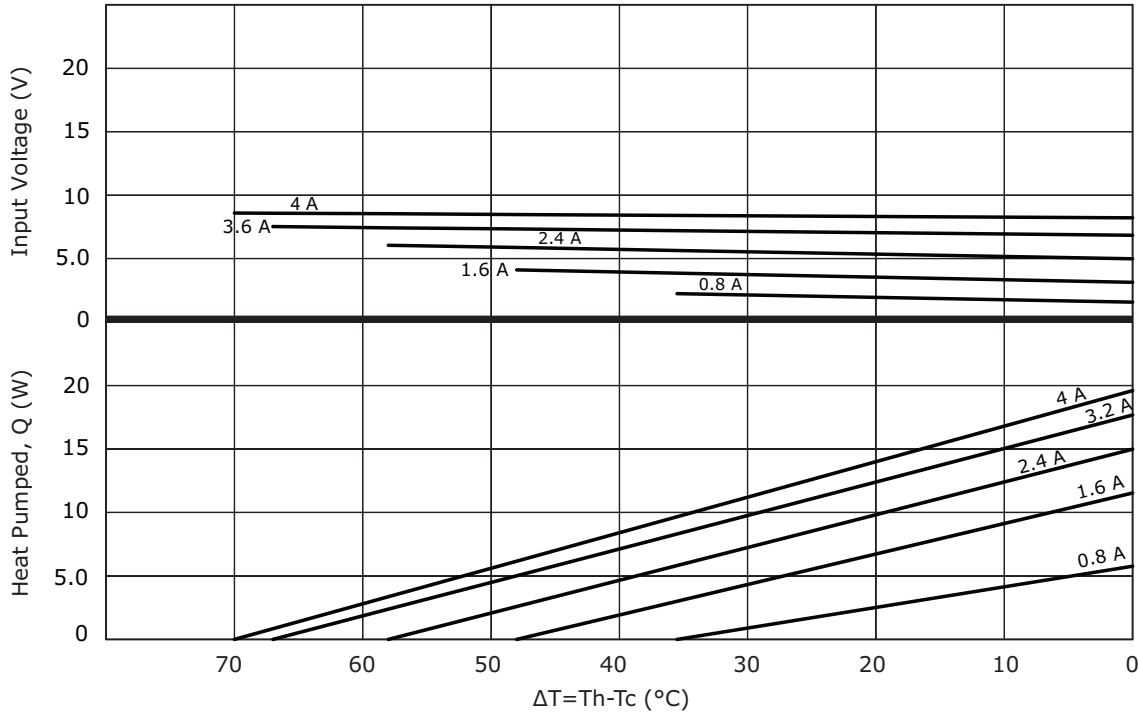


### CP40301547 PERFORMANCE (Th=50°C)

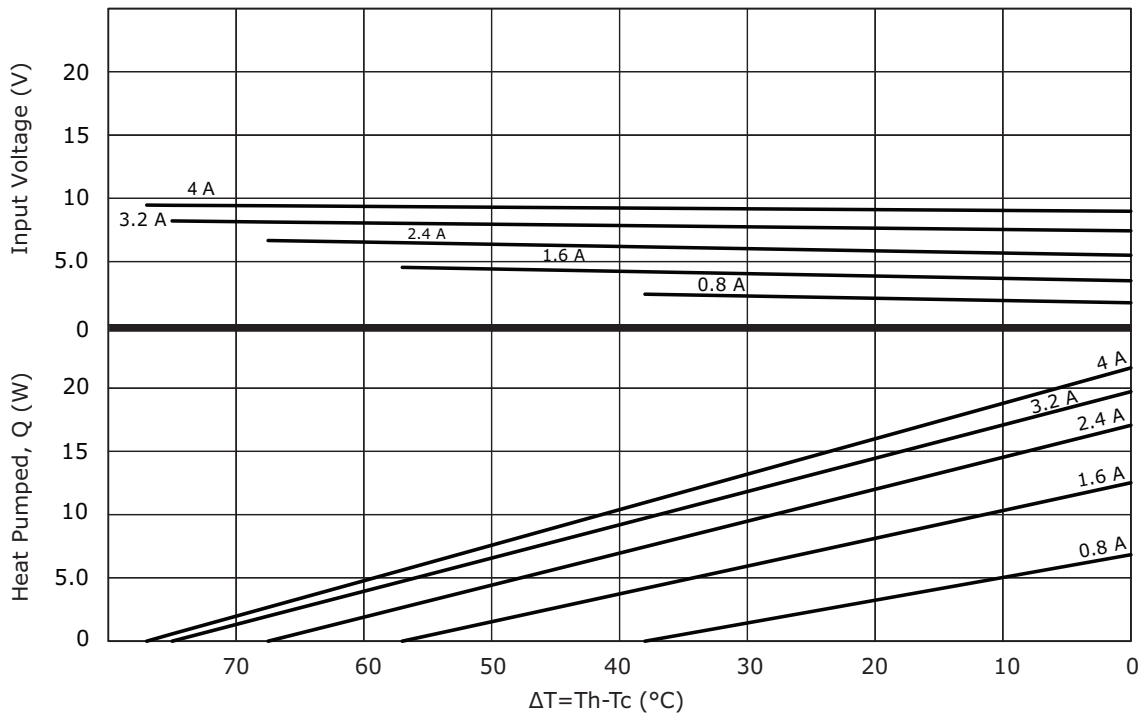




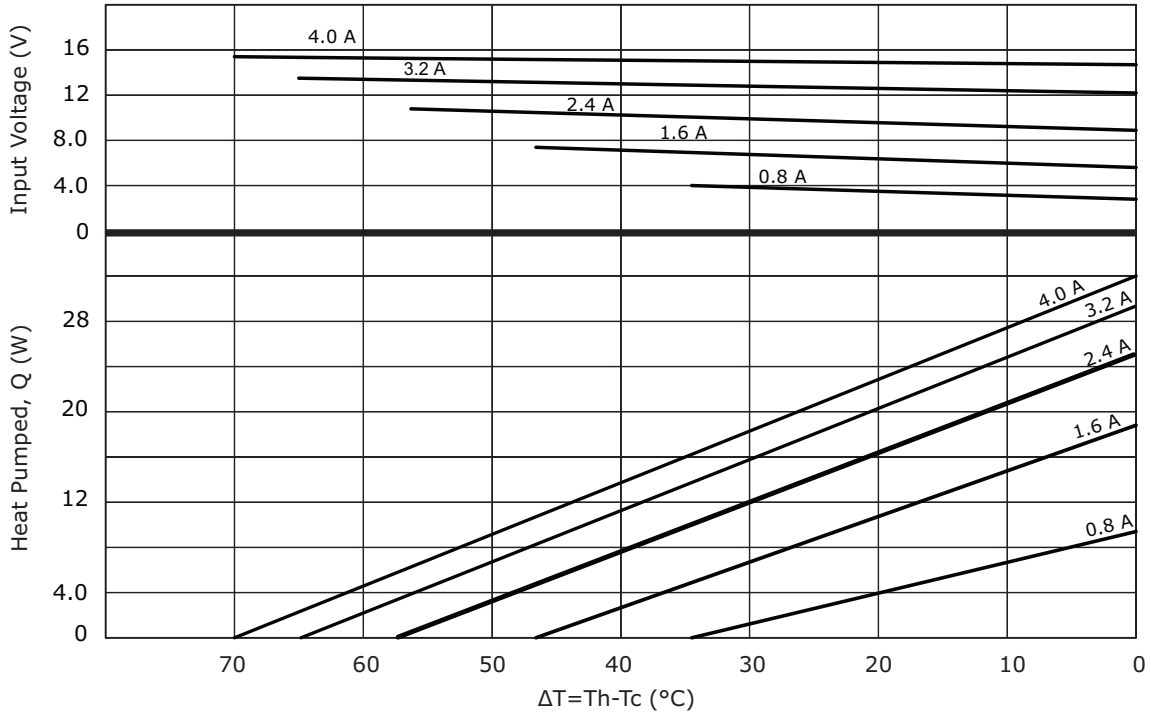
### CP40347 PERFORMANCE (Th=27°C)



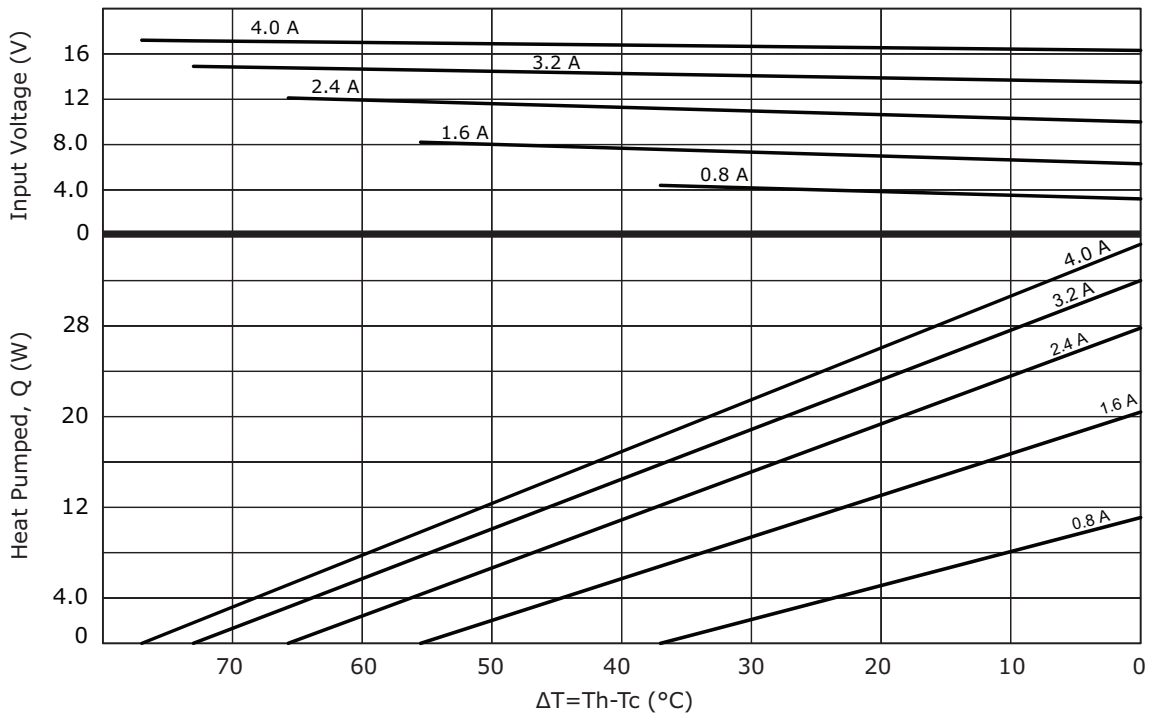
### CP40347 PERFORMANCE (Th=50°C)



### CP40447 PERFORMANCE (Th=27°C)



### CP40447 PERFORMANCE (Th=50°C)



## REVISION HISTORY

rev.	description	date
1.0	initial release	09/03/2009
1.01	applied new template	05/08/2012
1.02	added new models	09/08/2016
1.03	changed models CP40347 & CP40447 to arcTEC™ structure	12/01/2017

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



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