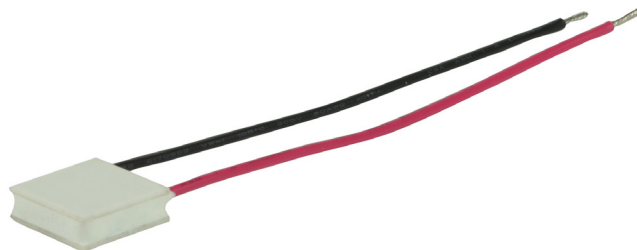




**SERIES:** CP35 | **DESCRIPTION:** PELTIER MODULE

**FEATURES**

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

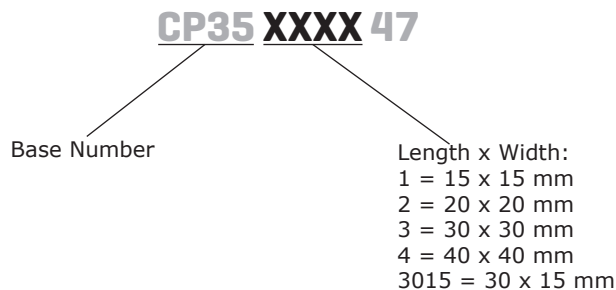


**MODEL**

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>n</sub> =27°C (W)	T <sub>n</sub> =50°C (W)	T <sub>n</sub> =27°C (°C)	T <sub>n</sub> =50°C (°C)
CP35147	2.1	3.5	3.9	4.3	68	75
CP35247	3.8	3.5	7.0	7.7	68	75
CP35301547	4.2	3.5	7.9	8.7	68	75
CP35347 <sup>5</sup>	8.6	3.5	16.0	17.8	70	77
CP35447 <sup>5</sup>	15.4	3.5	29.0	32.0	70	77

- Notes:
1. Maximum voltage at ΔT max and T<sub>n</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

**PART NUMBER KEY**



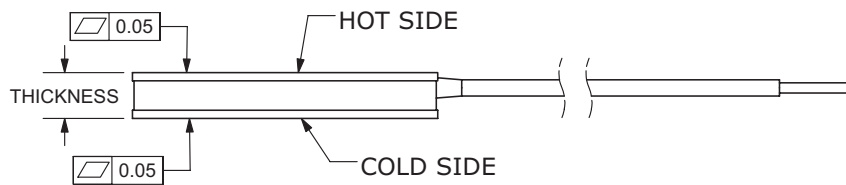
## SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
internal resistance <sup>1</sup>	CP35147	0.396	0.44	0.484	Ω
	CP35247	0.72	0.8	0.88	Ω
	CP35301547	0.81	0.90	0.99	Ω
	CP35347	1.737	1.93	2.123	Ω
	CP35447	2.97	3.3	3.63	Ω
solder melting temperature	connection between thermoelectric pairs CP35347, CP35447	235			°C
	all other models	138			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	2011/65/EU				

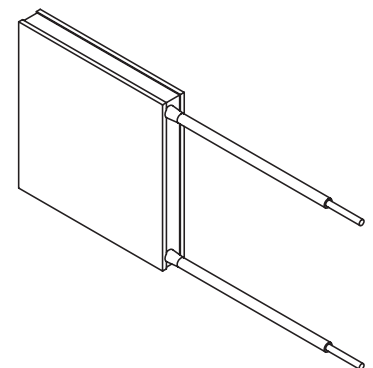
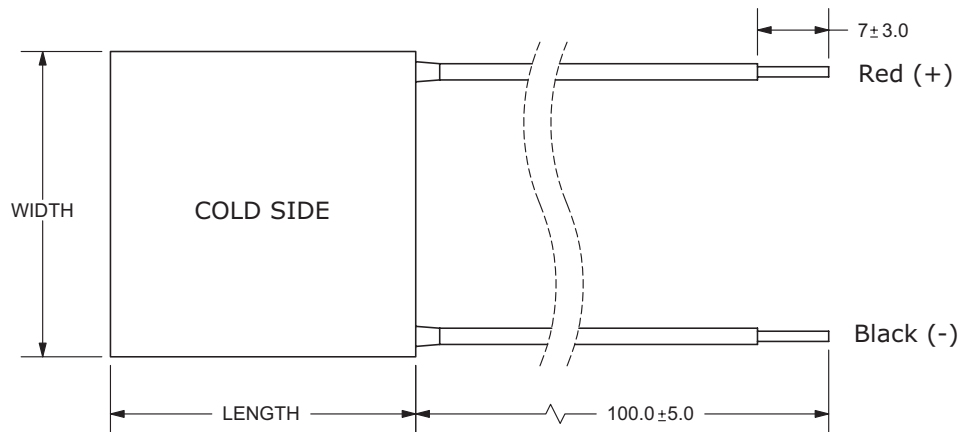
Note: 1. Measured by AC 4-terminal method at 25°C

## MECHANICAL DRAWING

units: mm



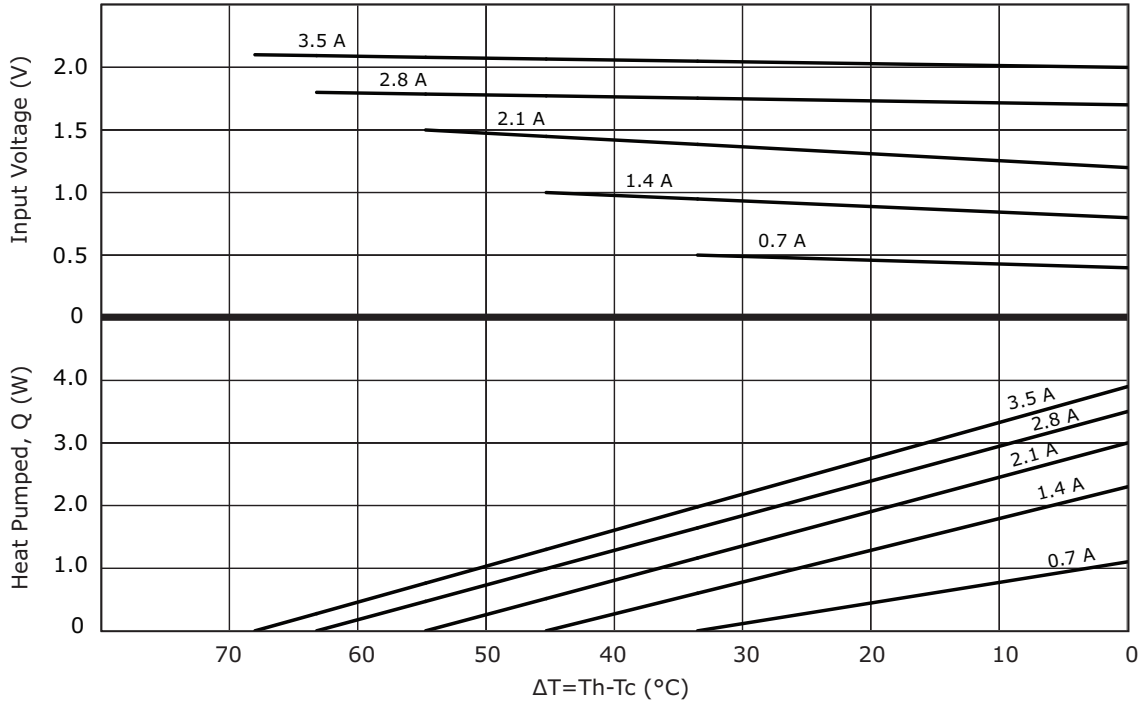
	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	



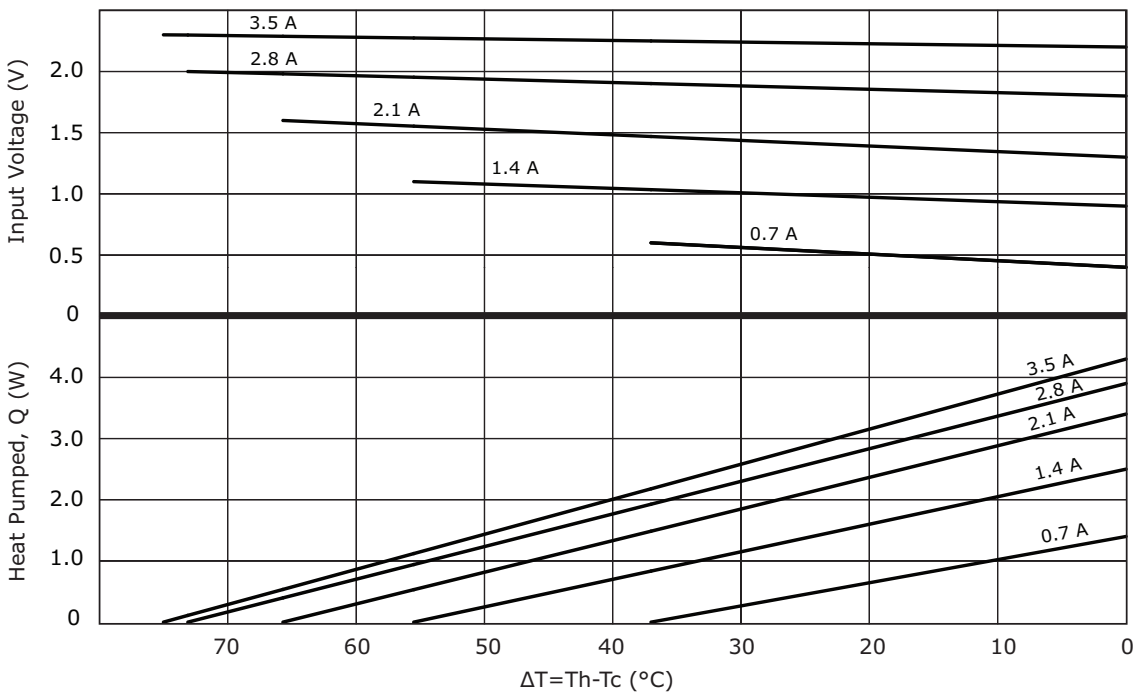
MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP35147	15 ±0.3	15 ±0.3	4.7 ±0.1
CP35247	20 ±0.3	20 ±0.3	4.7 ±0.1
CP35301547	30 ±0.3	15 ±0.3	4.7 ±0.1
CP35347 <sup>2</sup>	30 ±0.3	30 ±0.3	4.7 ±0.1
CP35447	40 ±0.3	40 ±0.3	4.65 ±0.025

Notes: 2. Wire lead strip length on model CP35347 is 10 ±3.0 mm.

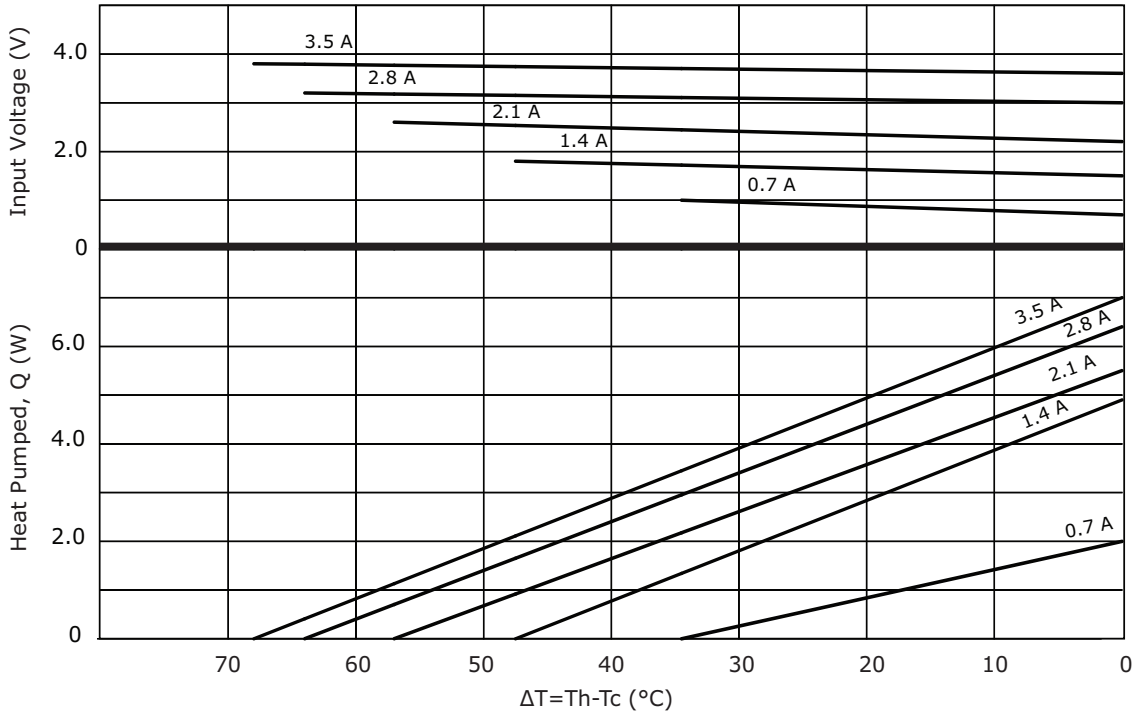
### CP35147 PERFORMANCE (Th=27°C)



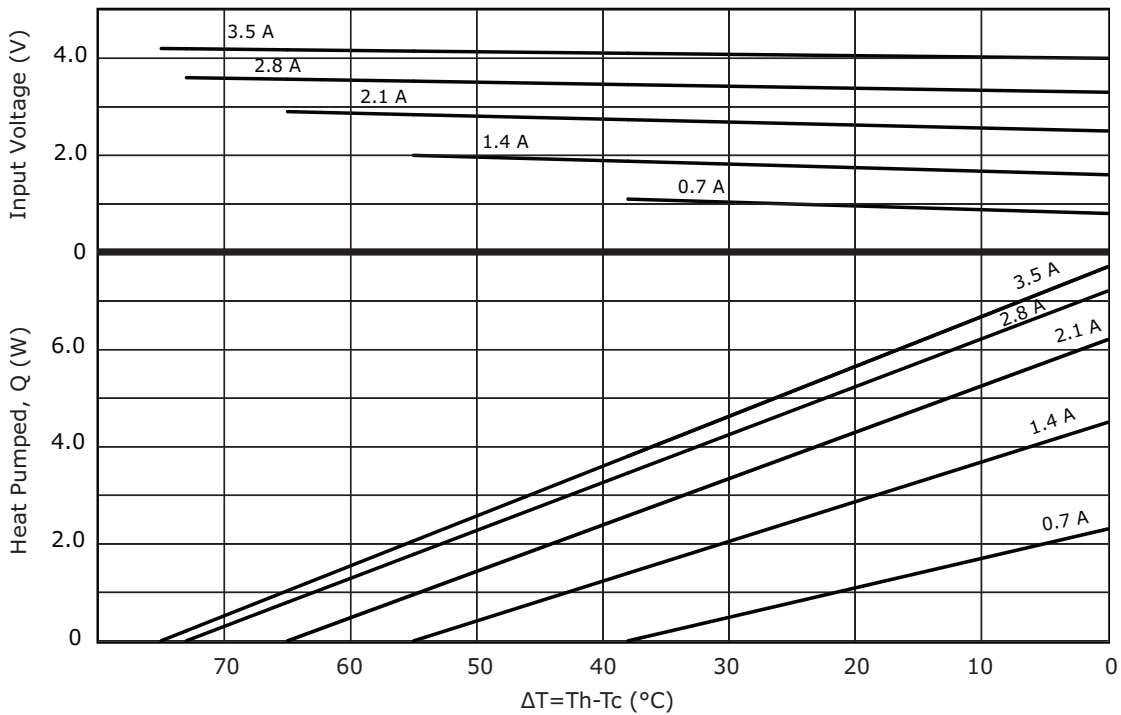
### CP35147 PERFORMANCE (Th=50°C)



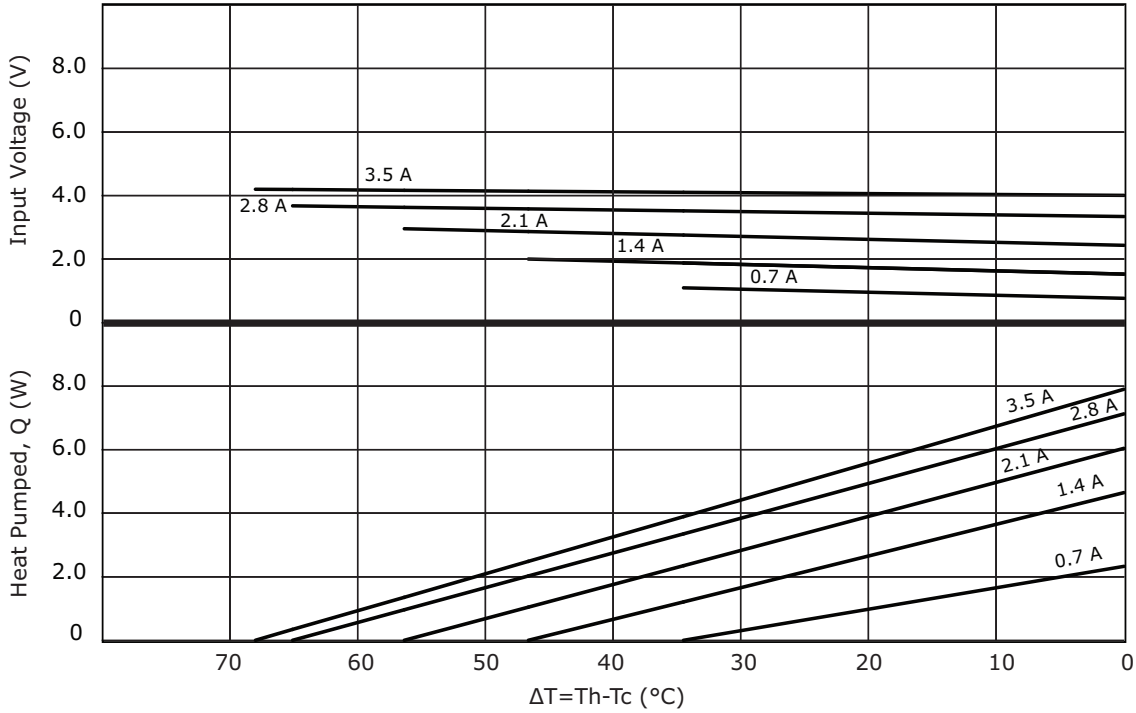
### CP35247 PERFORMANCE (Th=27°C)



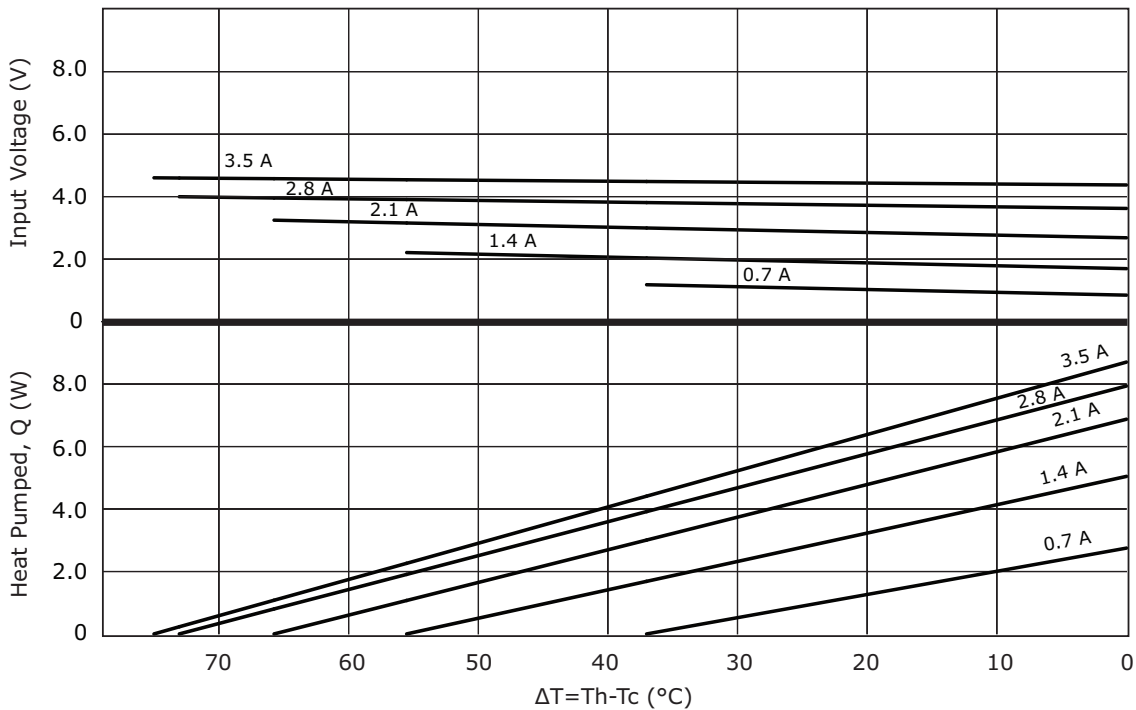
### CP35247 PERFORMANCE (Th=50°C)



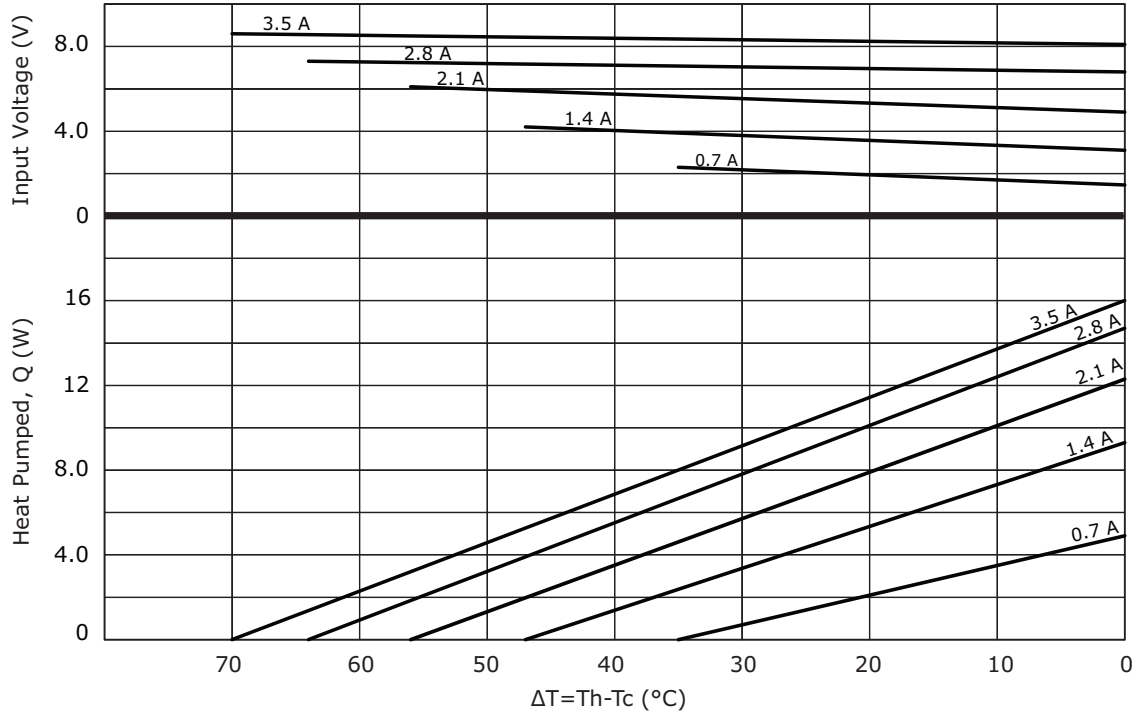
### CP35301547 PERFORMANCE (Th=27°C)



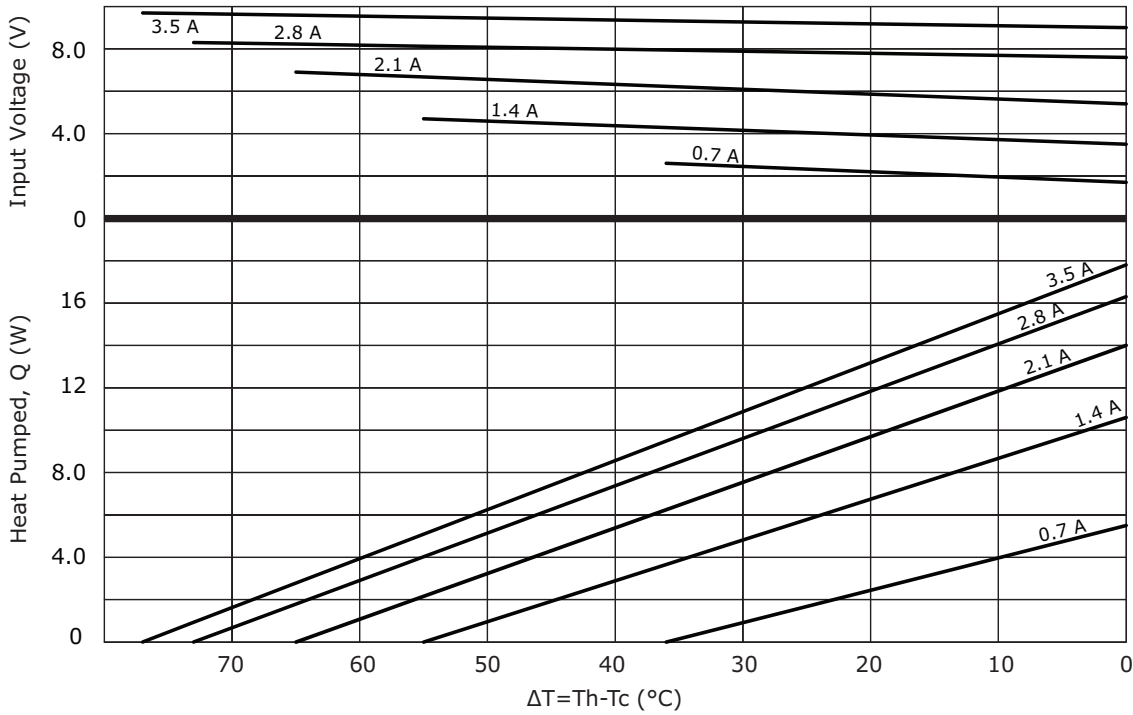
### CP35301547 PERFORMANCE (Th=50°C)



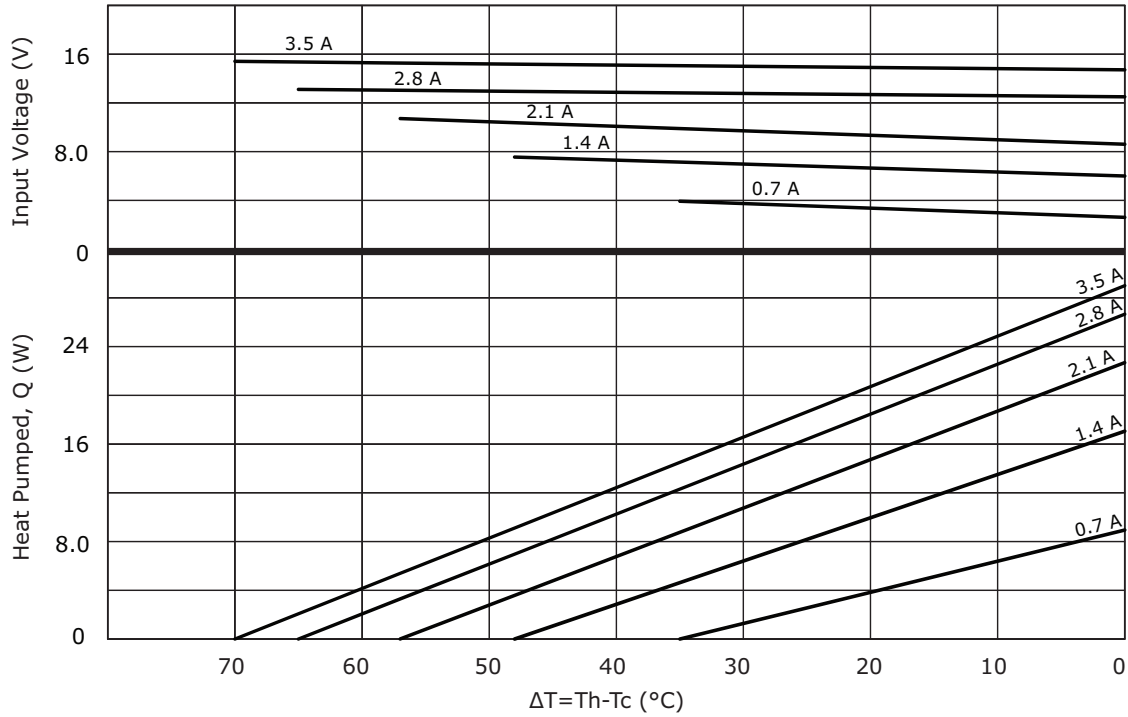
### CP35347 PERFORMANCE (Th=27°C)



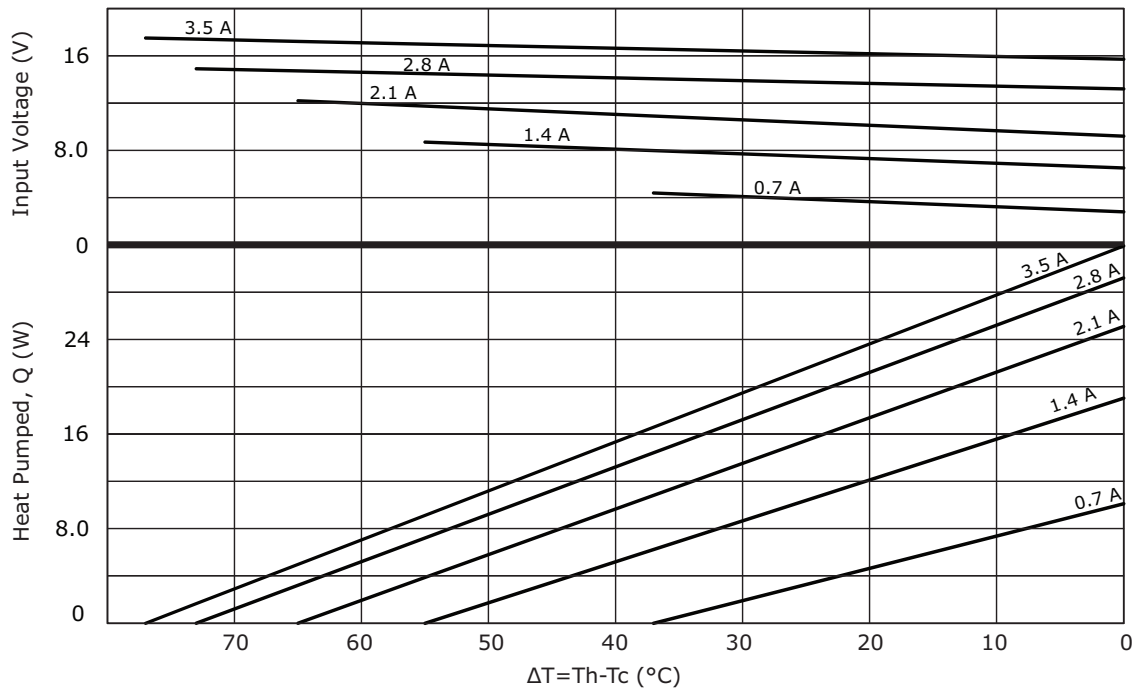
### CP35347 PERFORMANCE (Th=50°C)



### CP35447 PERFORMANCE (Th=27°C)



### CP35447 PERFORMANCE (Th=50°C)



## REVISION HISTORY

rev.	description	date
1.0	initial release	09/08/2016
1.01	changed models CP35347 & CP35447 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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