

**SERIES:** CP60H | **DESCRIPTION:** PELTIER MODULE

**FEATURES**

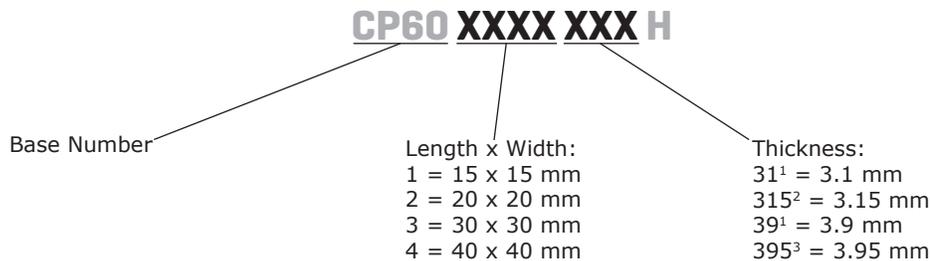
- arcTEC™ structure on select models
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide  $\Delta T$  max
- low profile
- precise temperature control
- solid state construction



MODEL	input voltage <sup>1</sup> max (Vdc)	input current <sup>2</sup> max (A)	output Qmax <sup>3</sup>		output $\Delta T$ max <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)
CP60131H	3.8	6.0	13	14.3	70	77
CP60231H	8.8	6.0	29.7	32.7	70	77
CP603315H <sup>5</sup>	15.7	6.0	53.1	59.1	70	77
CP60139H	2.1	6.0	7.4	8.2	70	77
CP60239H	3.8	6.0	13.6	14.9	70	77
CP603395H <sup>5</sup>	8.8	6.0	31.1	34.2	70	77
CP604395H <sup>5</sup>	15.7	6.0	55.6	61.0	70	77

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

**PART NUMBER KEY**



- Notes:
1. Only available in 15 x 15 and 20 x 20 mm size
  2. Only available in 30 x 30 mm size
  3. Only available in 30 x 30 and 40 x 40 mm size

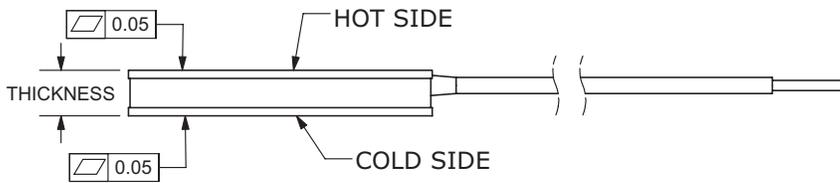
## SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
internal resistance <sup>1</sup>	CP60131H	0.405	0.45	0.495	Ω
	CP60231H	0.945	1.05	1.155	Ω
	CP603315H	1.71	1.90	2.09	Ω
	CP60139H	0.27	0.30	0.33	Ω
	CP60239H	0.495	0.55	0.605	Ω
	CP603395H	1.125	1.25	1.375	Ω
	CP604395H	1.98	2.2	2.42	Ω
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	2011/65/EU				

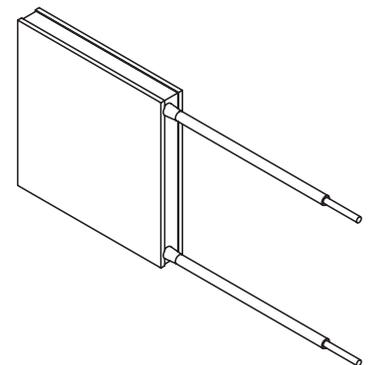
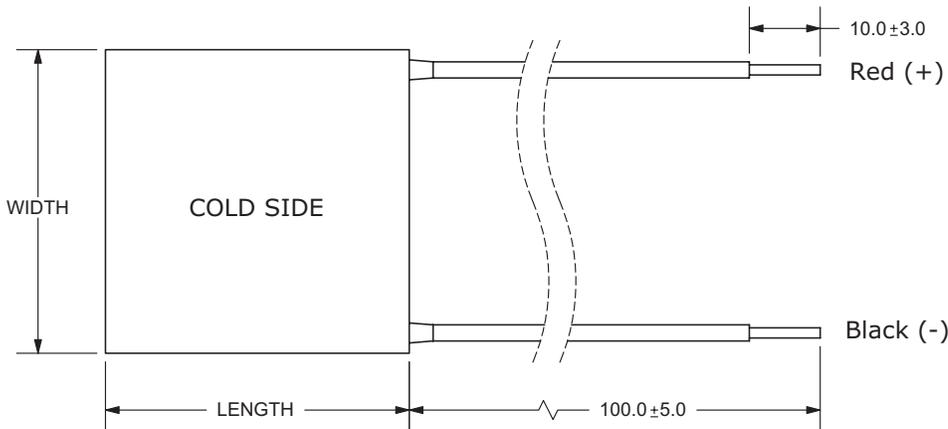
Note: 1. Measured by AC 4-terminal method at 25°C

## MECHANICAL DRAWING

units: mm

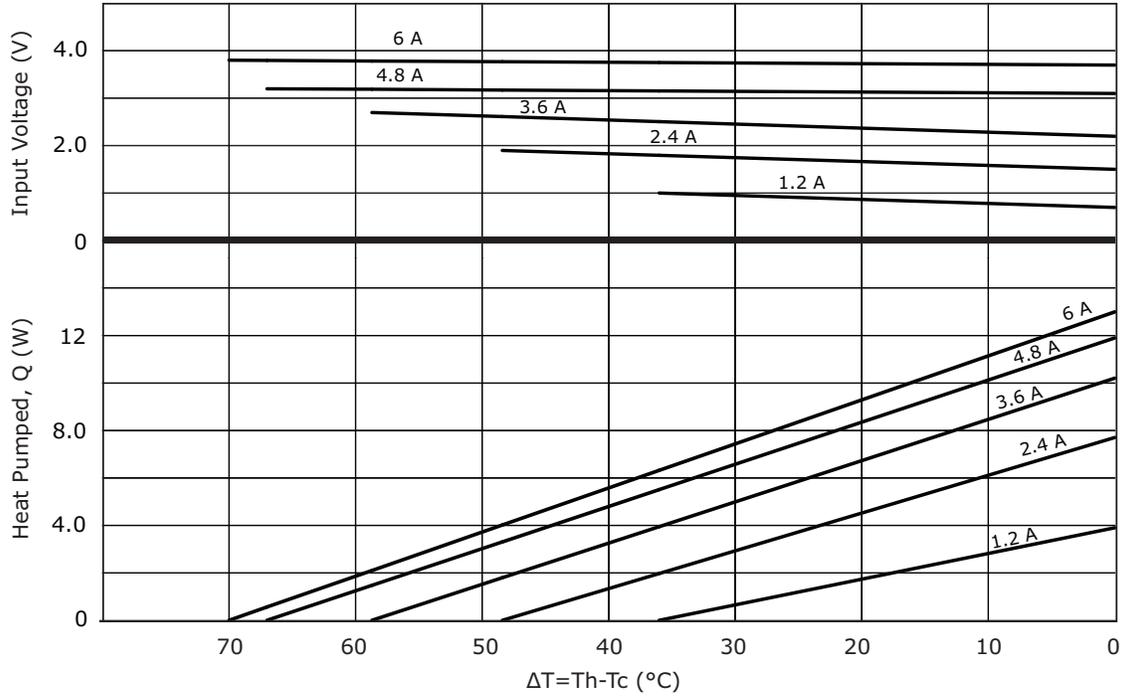


	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads (3.1 & 3.15 mm models)	22 AWG	tin
wire leads (3.9 & 3.95 mm models)	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

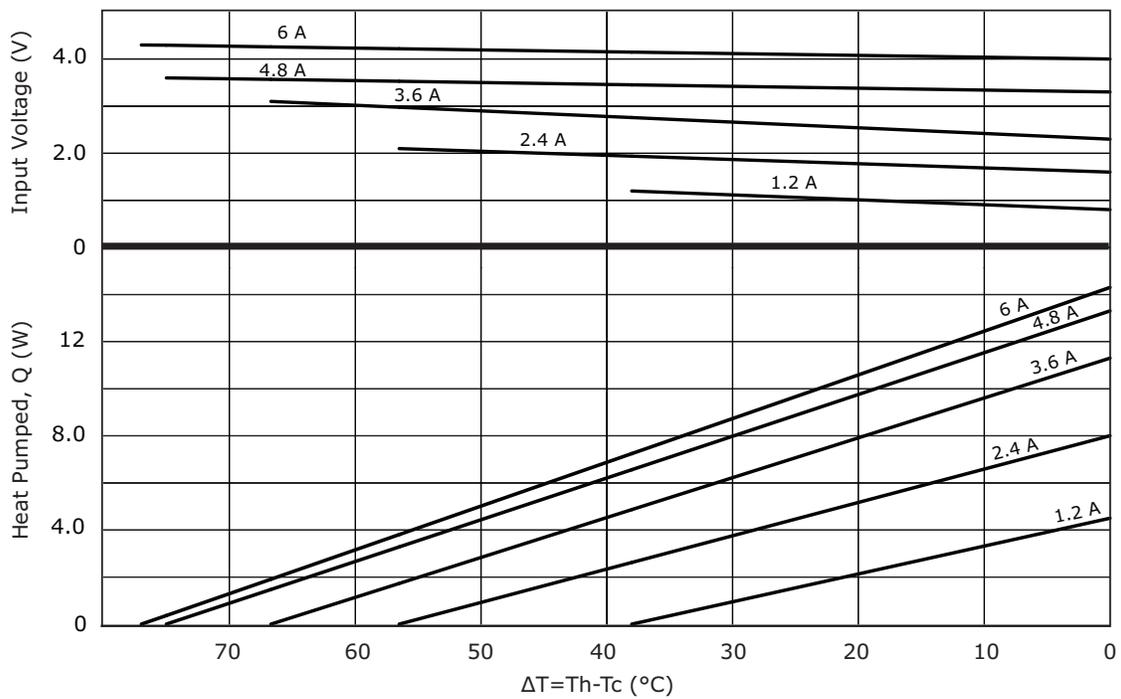


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP60131H	15 ± 0.3	15 ± 0.3	3.1 ± 0.025
CP60231H	20 ± 0.3	20 ± 0.3	3.1 ± 0.025
CP603315H	30 ± 0.3	30 ± 0.3	3.15 ± 0.025
CP60139H	15 ± 0.3	15 ± 0.3	3.9 ± 0.025
CP60239H	20 ± 0.3	20 ± 0.3	3.9 ± 0.025
CP603395H	30 ± 0.3	30 ± 0.3	3.95 ± 0.025
CP604395H	40 ± 0.3	40 ± 0.3	3.95 ± 0.025

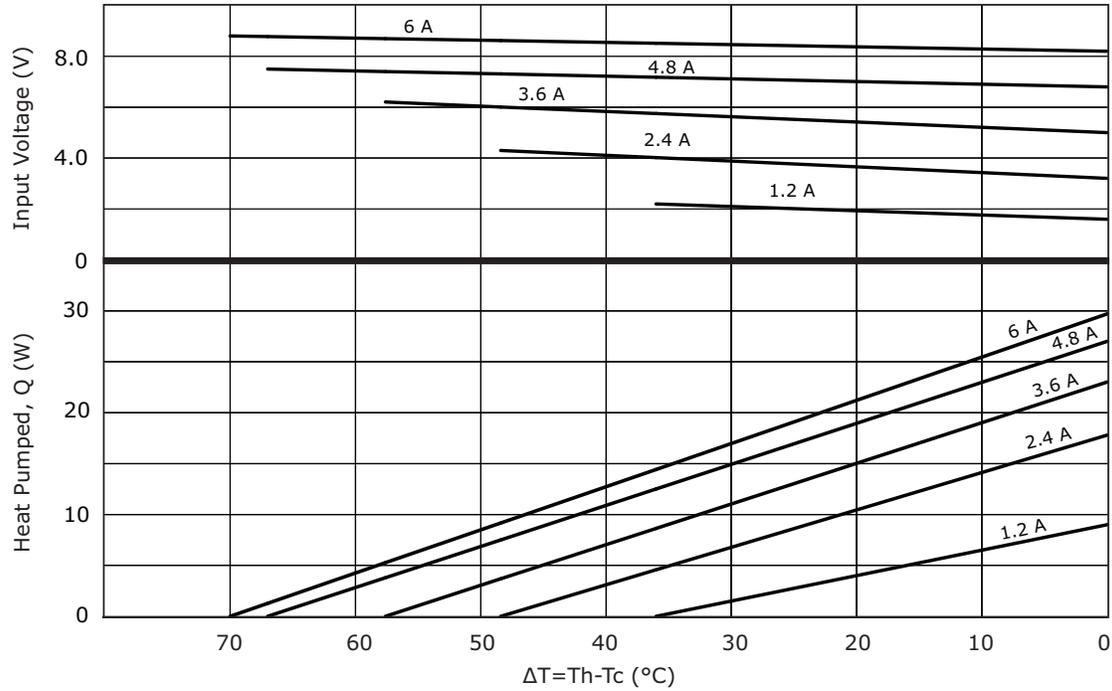
### CP60131H PERFORMANCE (Th=27°C)



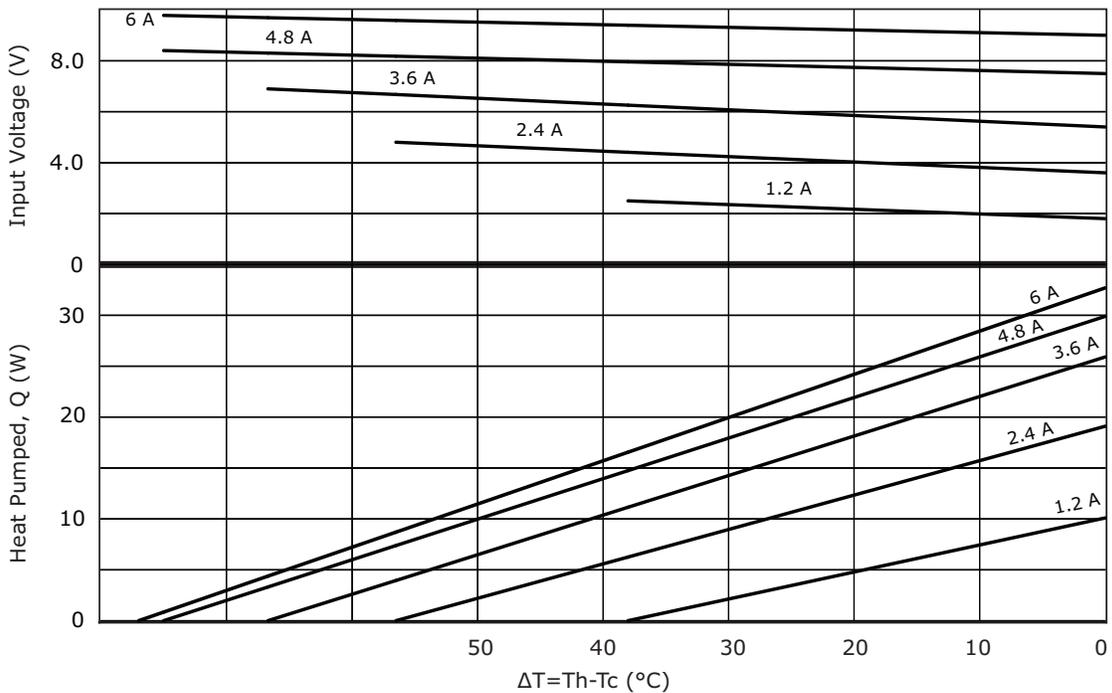
### CP60131H PERFORMANCE (Th=50°C)



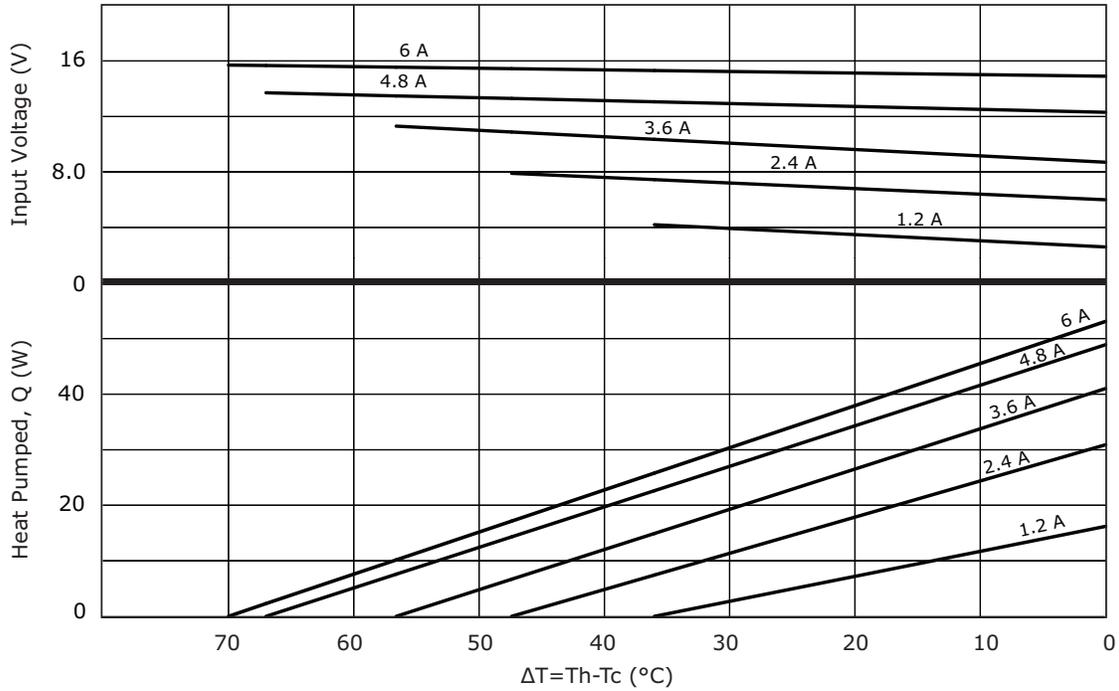
### CP60231H PERFORMANCE (Th=27°C)



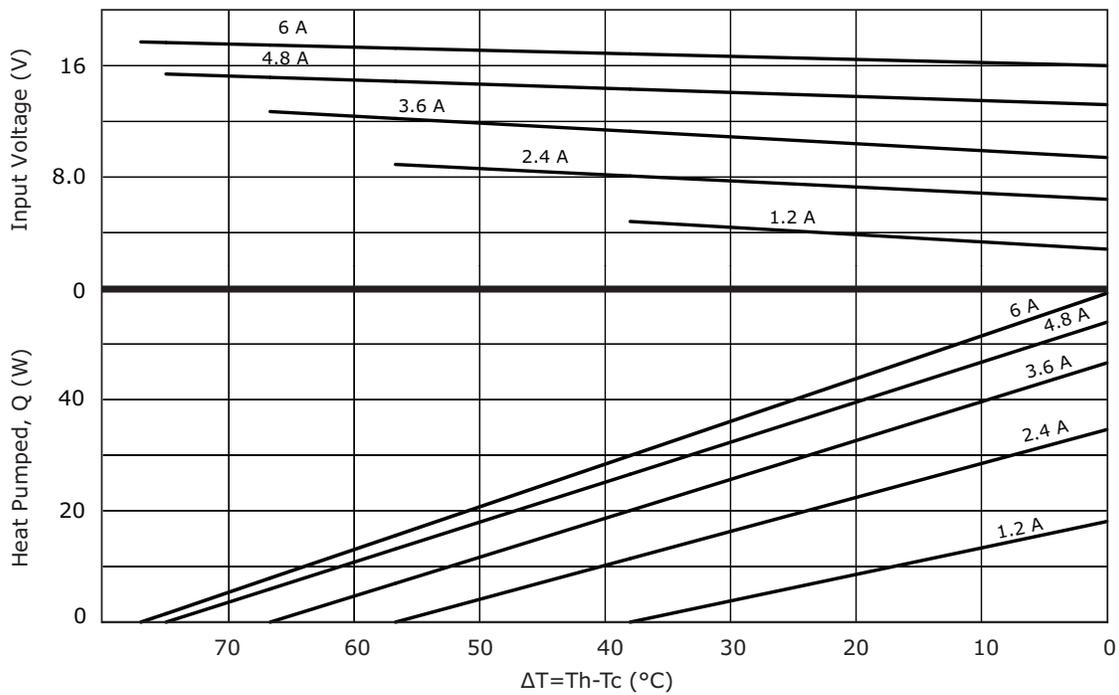
### CP60231H PERFORMANCE (Th=50°C)



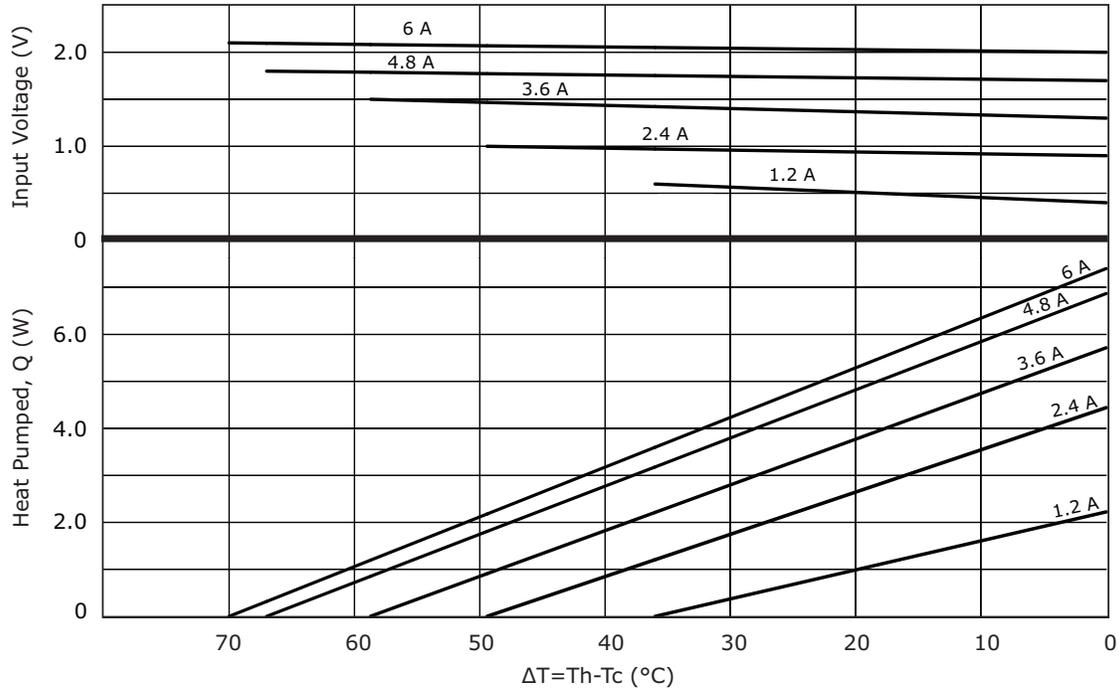
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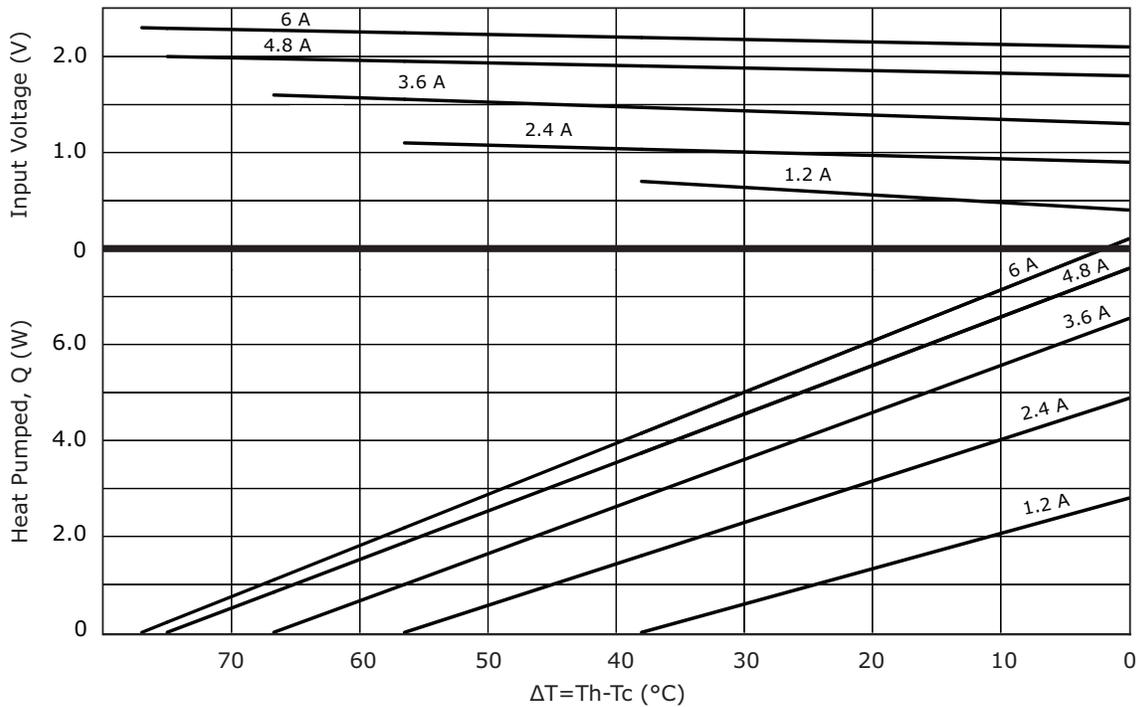
### CP603315H PERFORMANCE (Th=50°C)



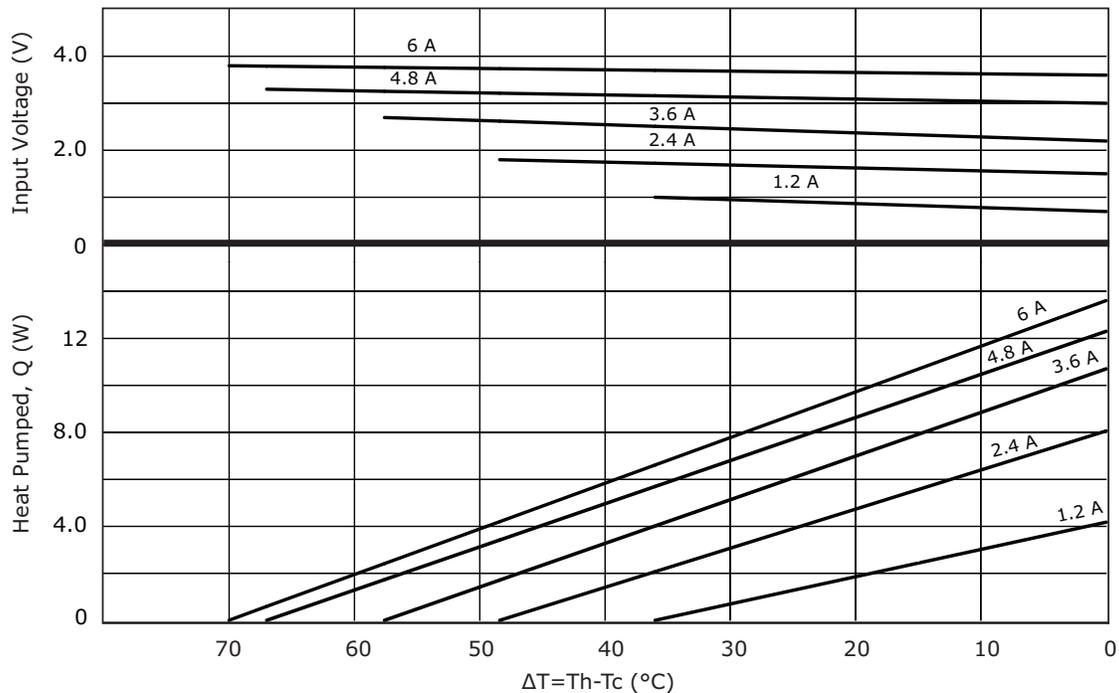
### CP60139H PERFORMANCE (Th=27°C)



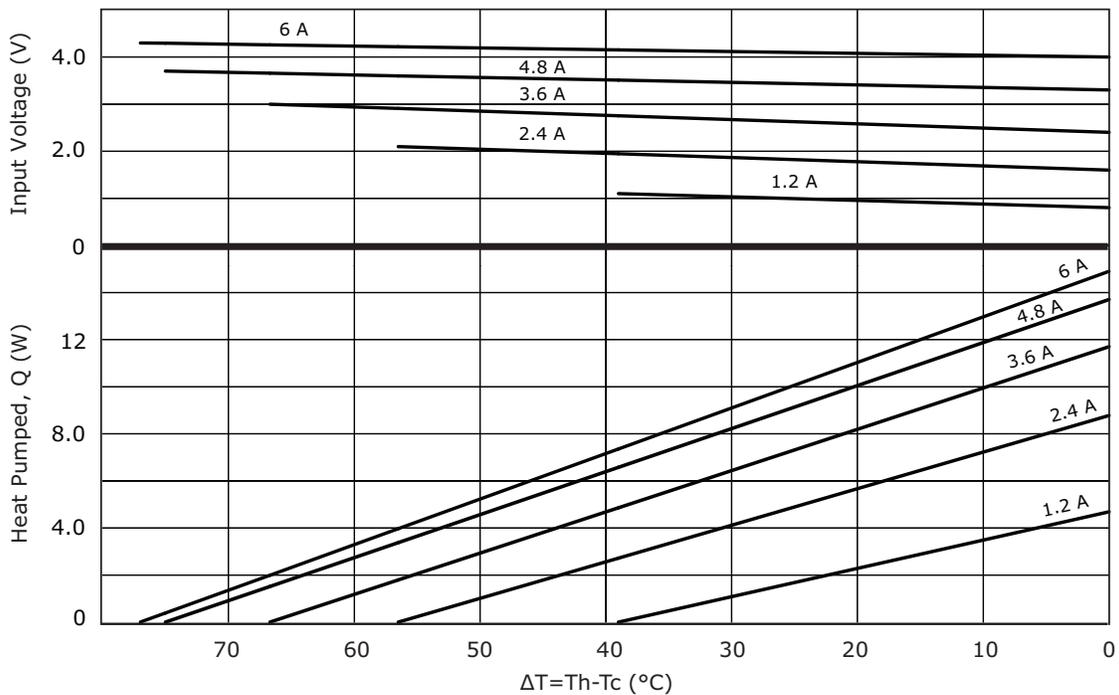
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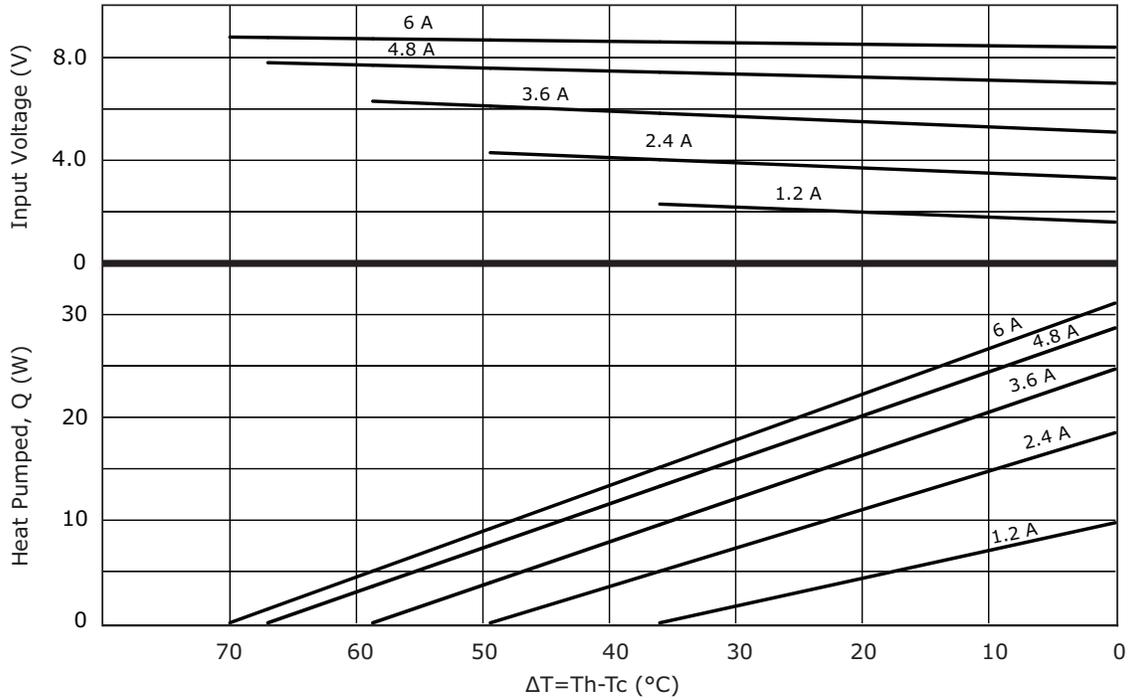
### CP60239H PERFORMANCE (Th=27°C)



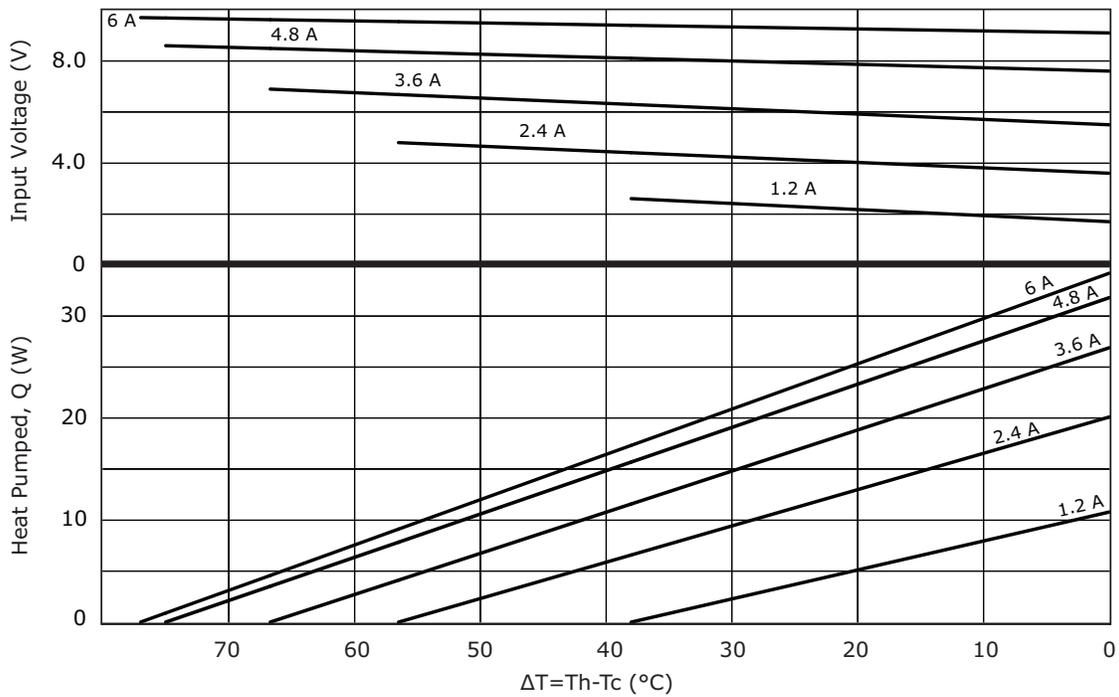
### CP60239H PERFORMANCE (Th=50°C)



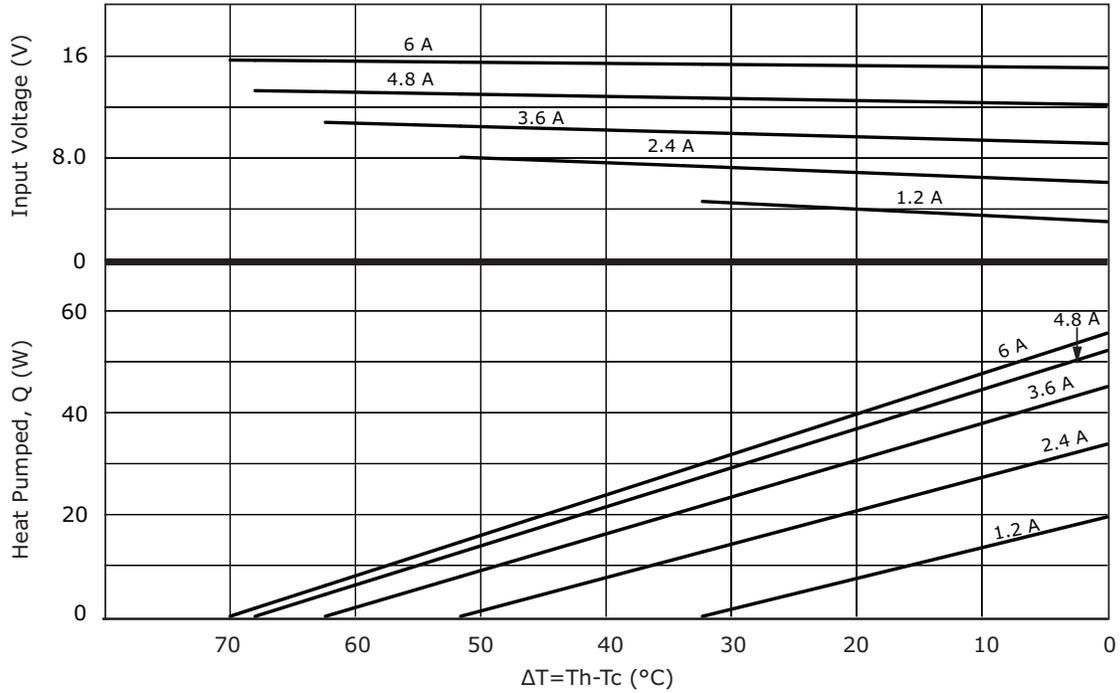
### CP603395H PERFORMANCE (Th=27°C)



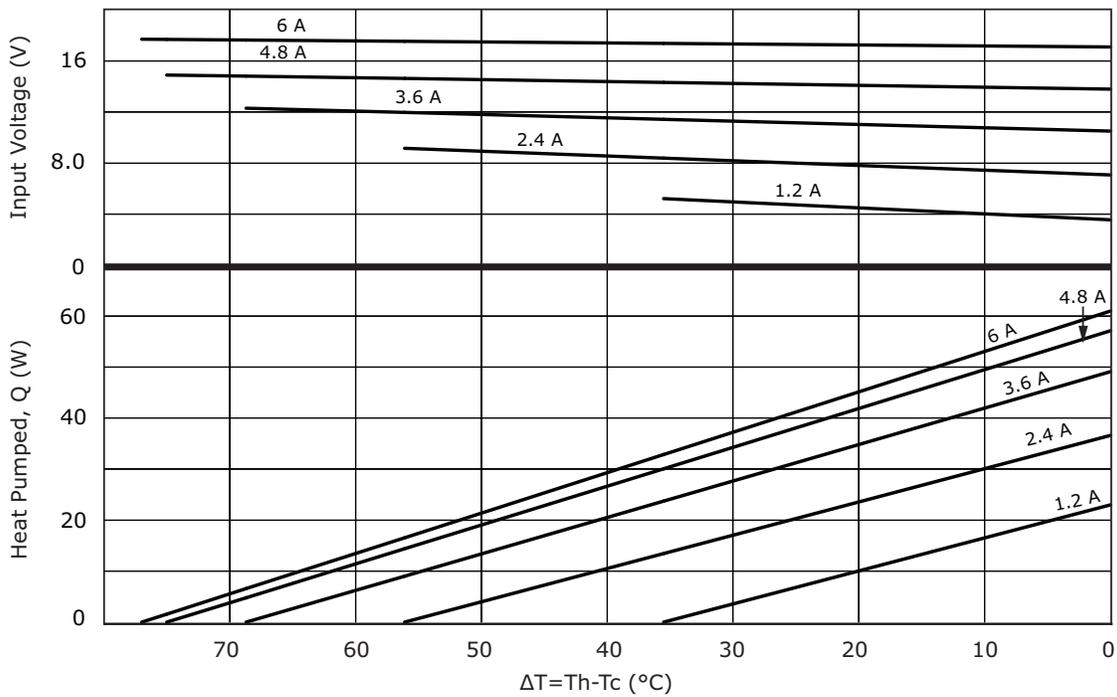
### CP603395H PERFORMANCE (Th=50°C)



### CP604395H PERFORMANCE (Th=27°C)



### CP604395H PERFORMANCE (Th=50°C)



## REVISION HISTORY

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<b>rev.</b>	<b>description</b>	<b>date</b>
1.0	initial release	09/08/2016
1.01	updated datasheet	09/25/2017

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



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