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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

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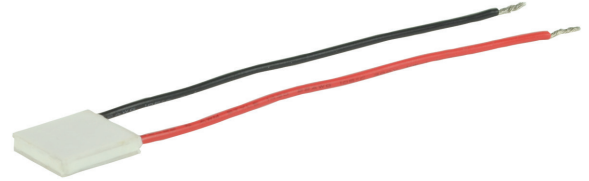
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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

**FEATURES**

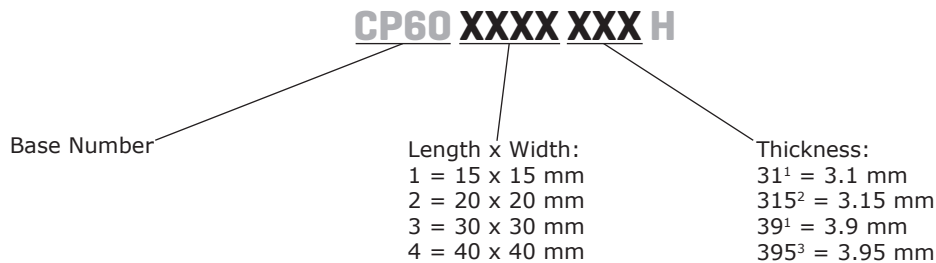
- arcTEC™ structure
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide  $\Delta T_{max}$
- low profile
- precise temperature control
- solid state construction



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	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	8.8	6.0	31.1	34.2	70	77
CP604395H	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)

**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

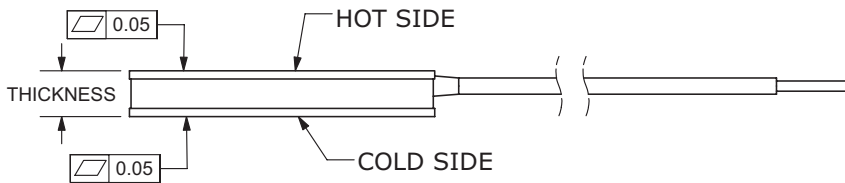
## SPECIFICATIONS

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				

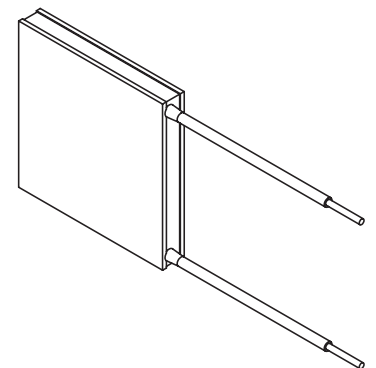
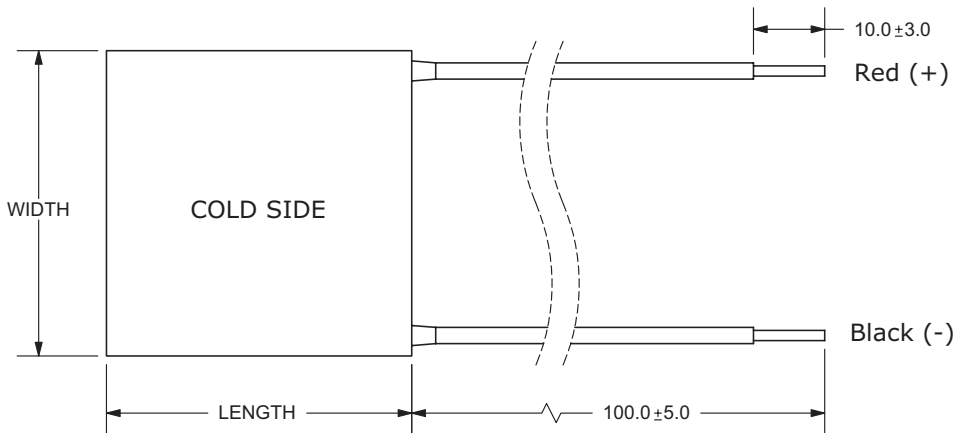
Note: 1. Measured by AC 4-terminal method at 25°C

## MECHANICAL DRAWING

units: mm

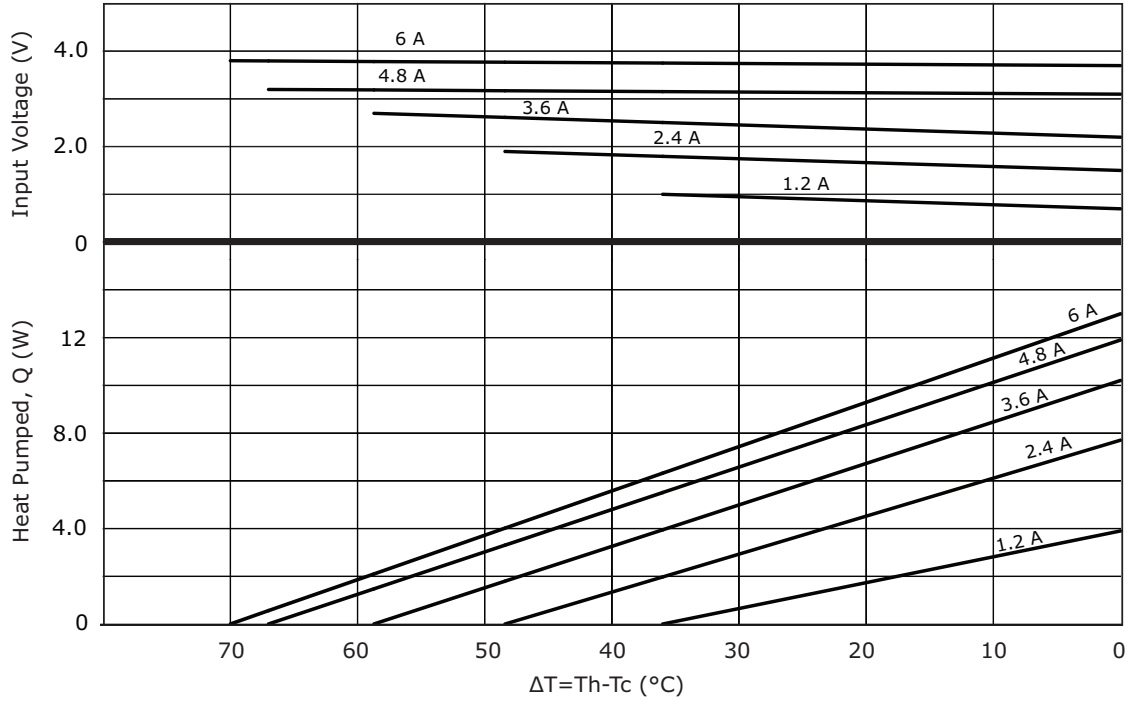


	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads (3.1 & 3.15 mm models)	22 AWG	tin
wire leads (3.9 & 3.95 mm models)	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

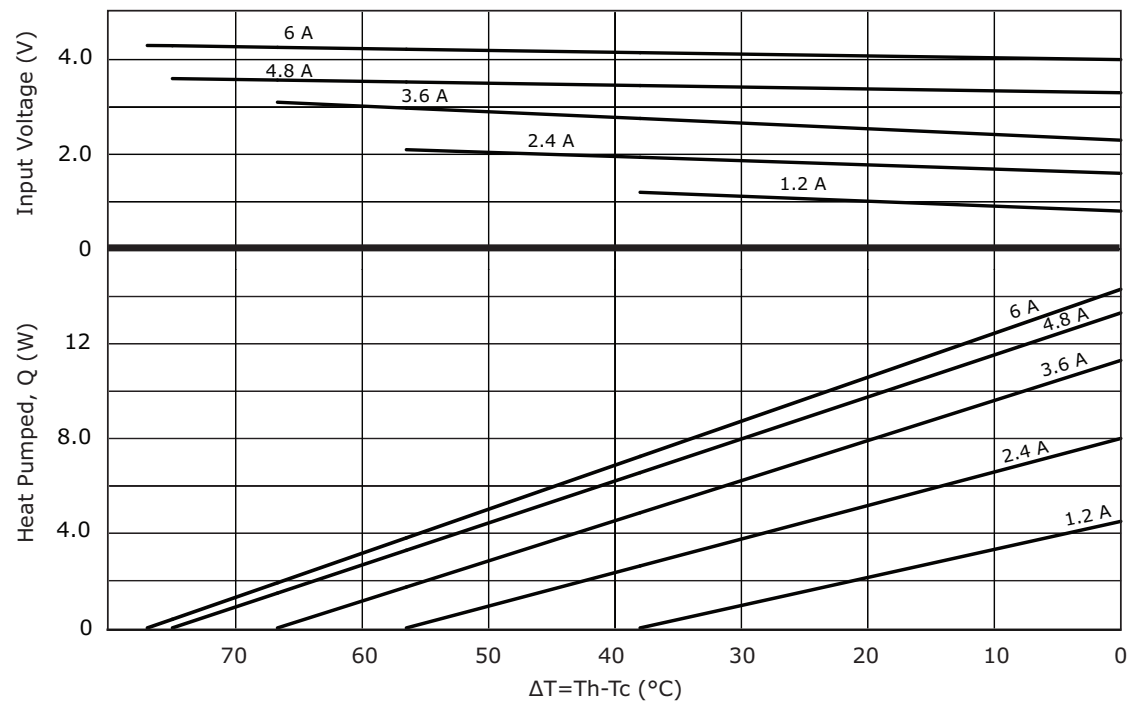


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP60131H	15 ± 0.3	15 ± 0.3	3.1 ± 0.025
CP60231H	20 ± 0.3	20 ± 0.3	3.1 ± 0.025
CP603315H	30 ± 0.3	30 ± 0.3	3.15 ± 0.025
CP60139H	15 ± 0.3	15 ± 0.3	3.9 ± 0.025
CP60239H	20 ± 0.3	20 ± 0.3	3.9 ± 0.025
CP603395H	30 ± 0.3	30 ± 0.3	3.95 ± 0.025
CP604395H	40 ±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

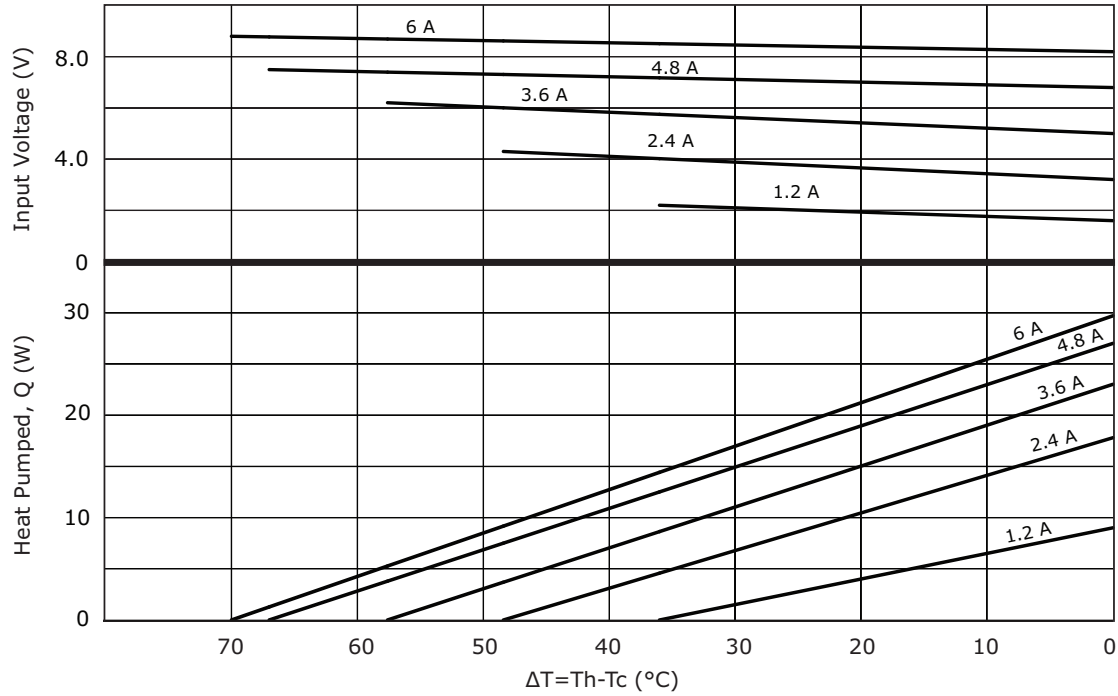
### CP60131H PERFORMANCE (Th=27°C)



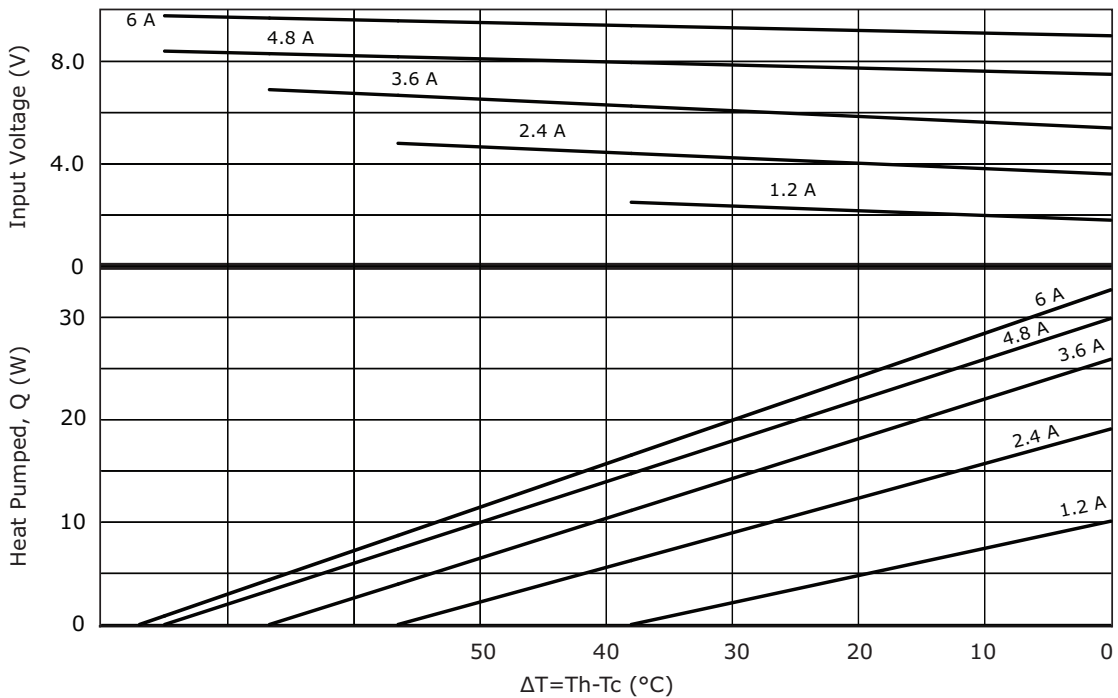
### CP60131H PERFORMANCE (Th=50°C)



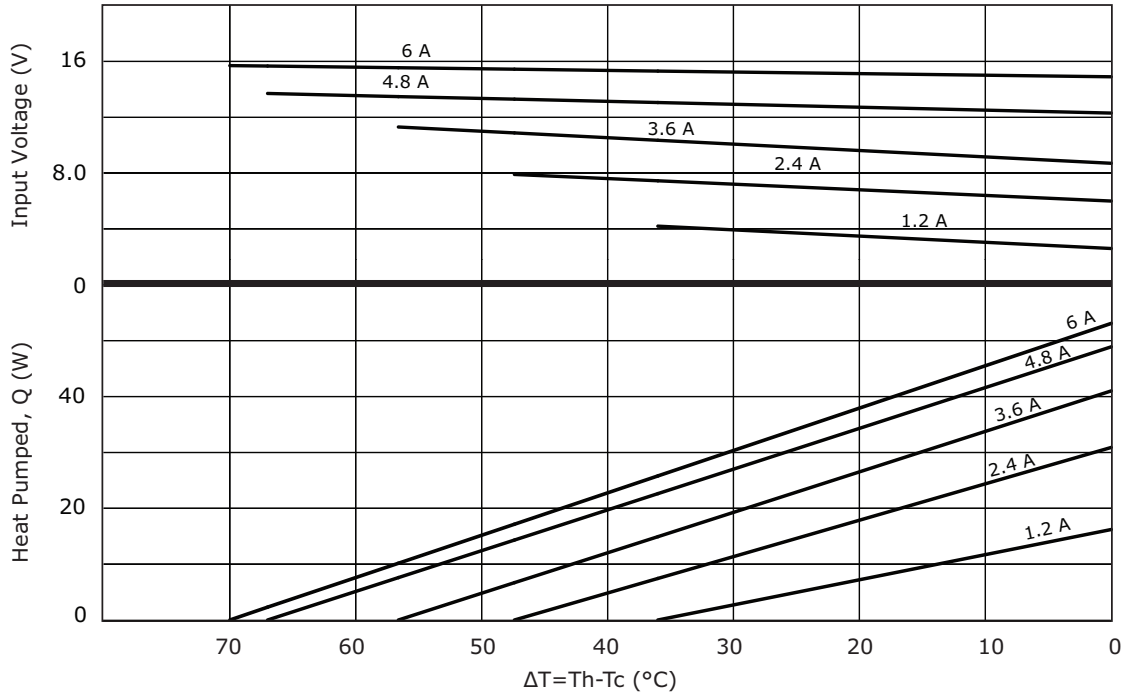
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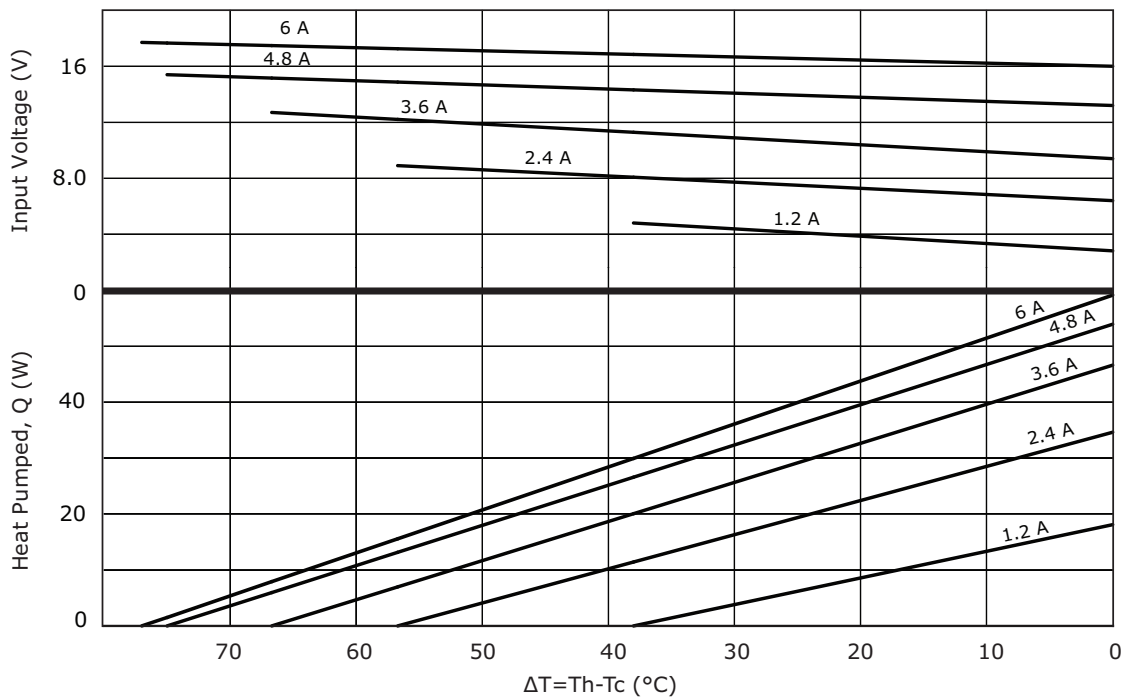
### CP60231H PERFORMANCE (Th=50°C)



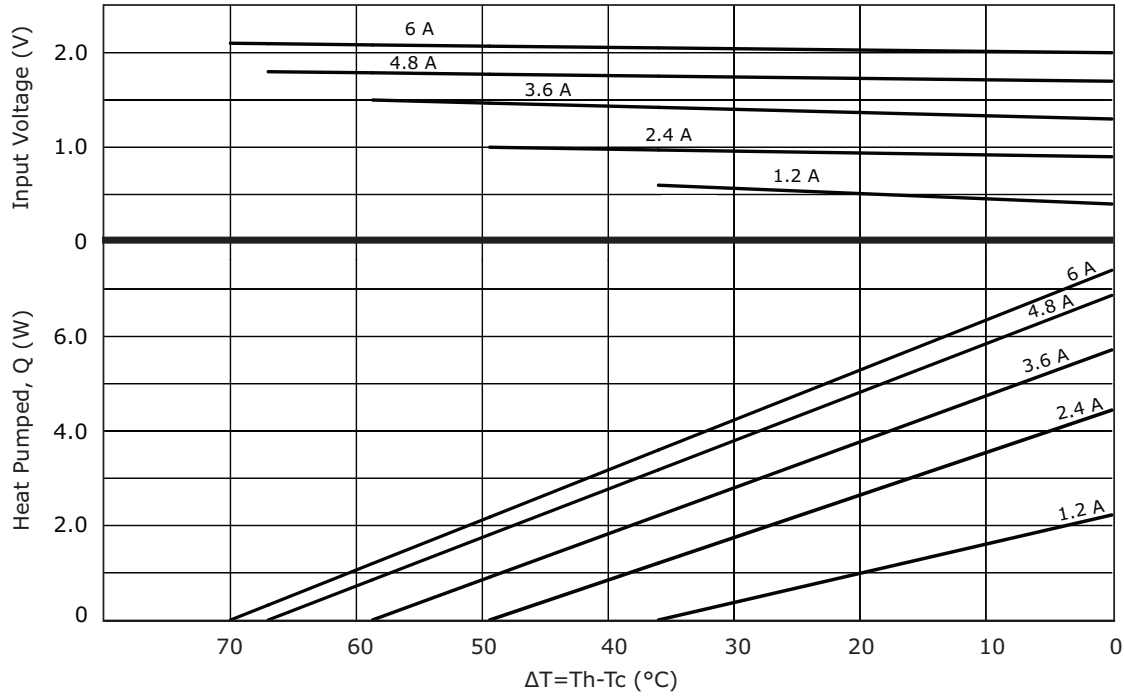
### CP603315H PERFORMANCE (Th=27°C)



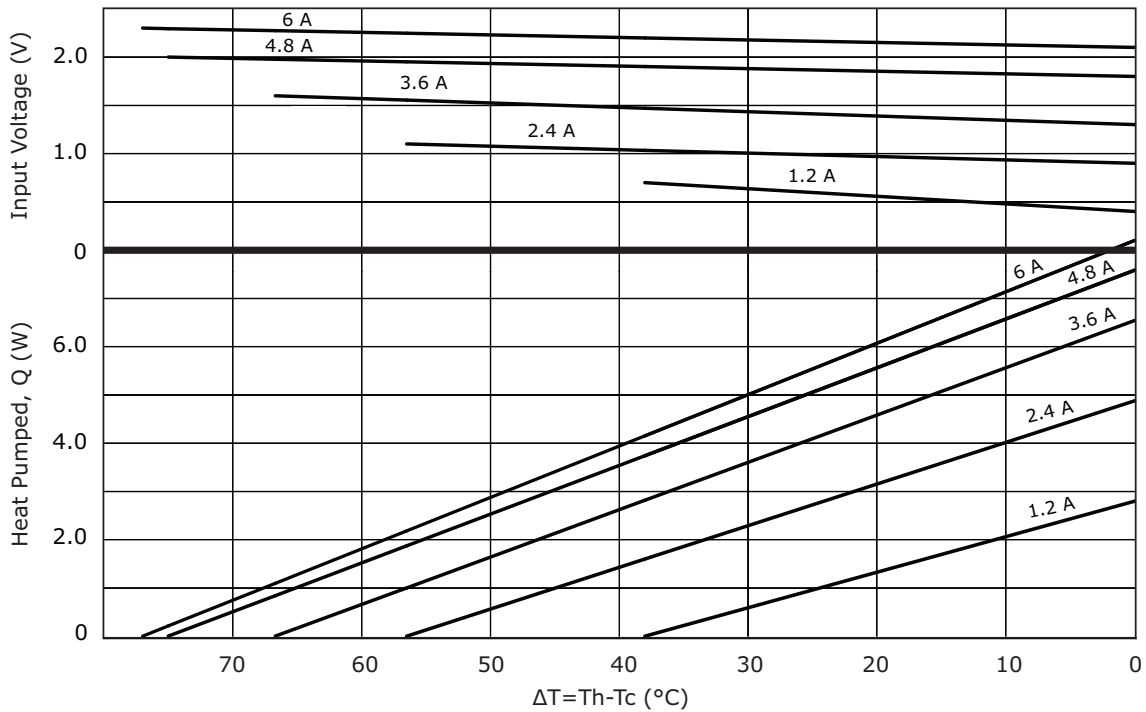
### CP603315H PERFORMANCE (Th=50°C)



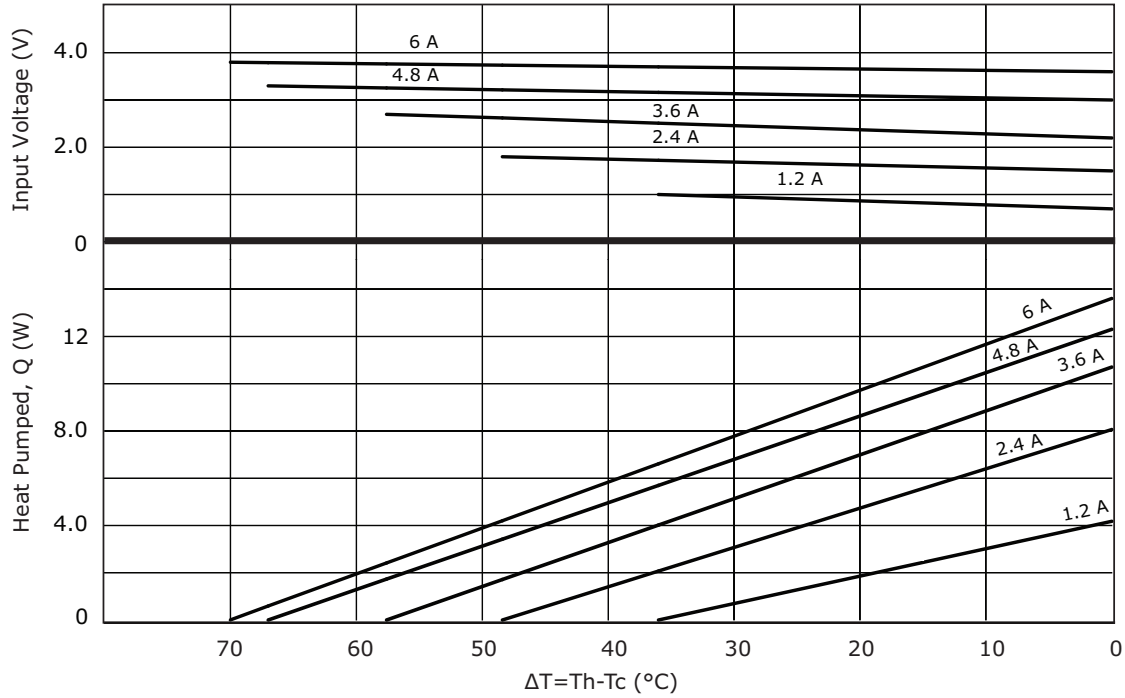
### CP60139H PERFORMANCE (Th=27°C)



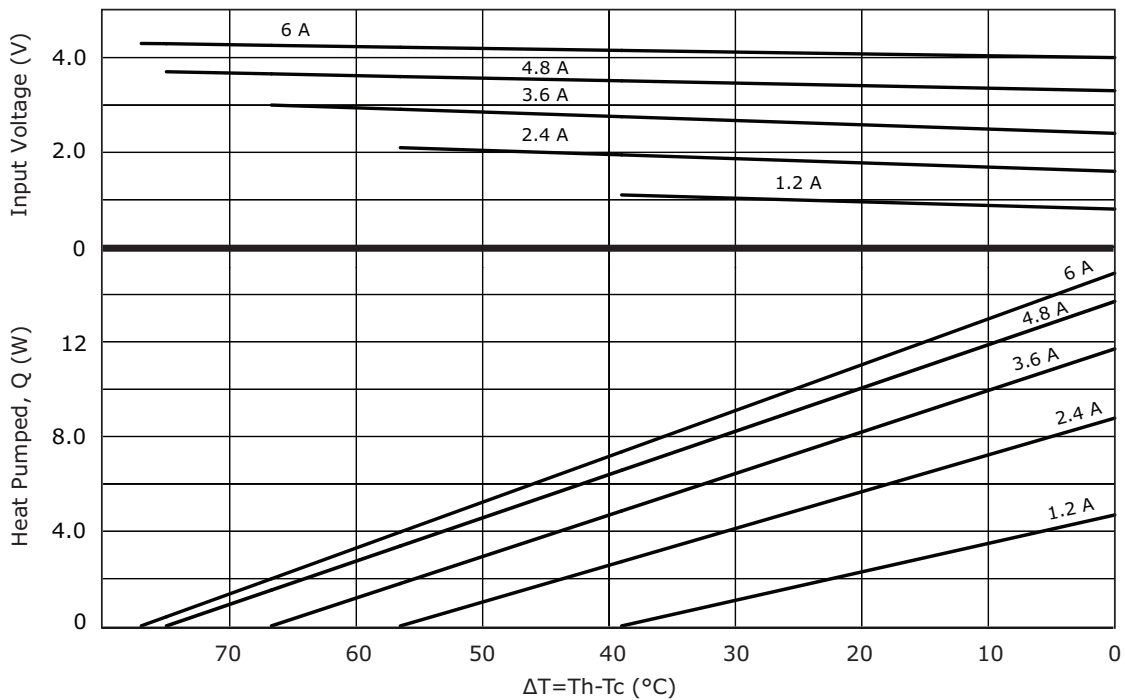
### CP60139H PERFORMANCE (Th=50°C)



### CP60239H PERFORMANCE (Th=27°C)

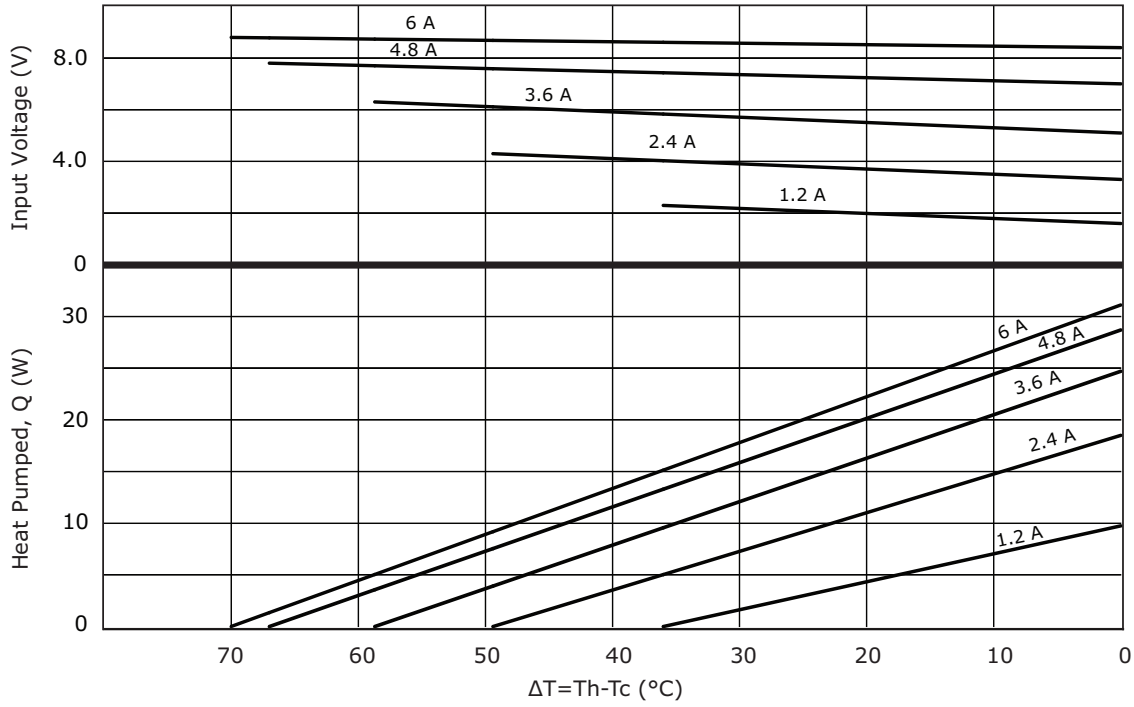


### CP60239H PERFORMANCE (Th=50°C)

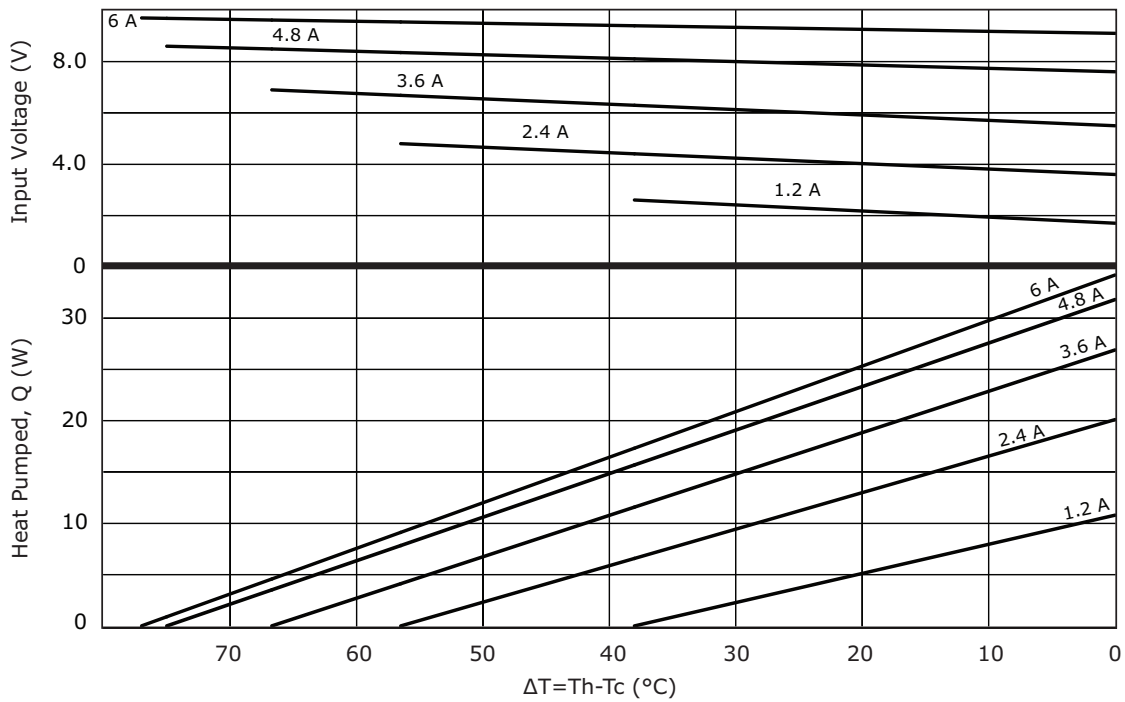




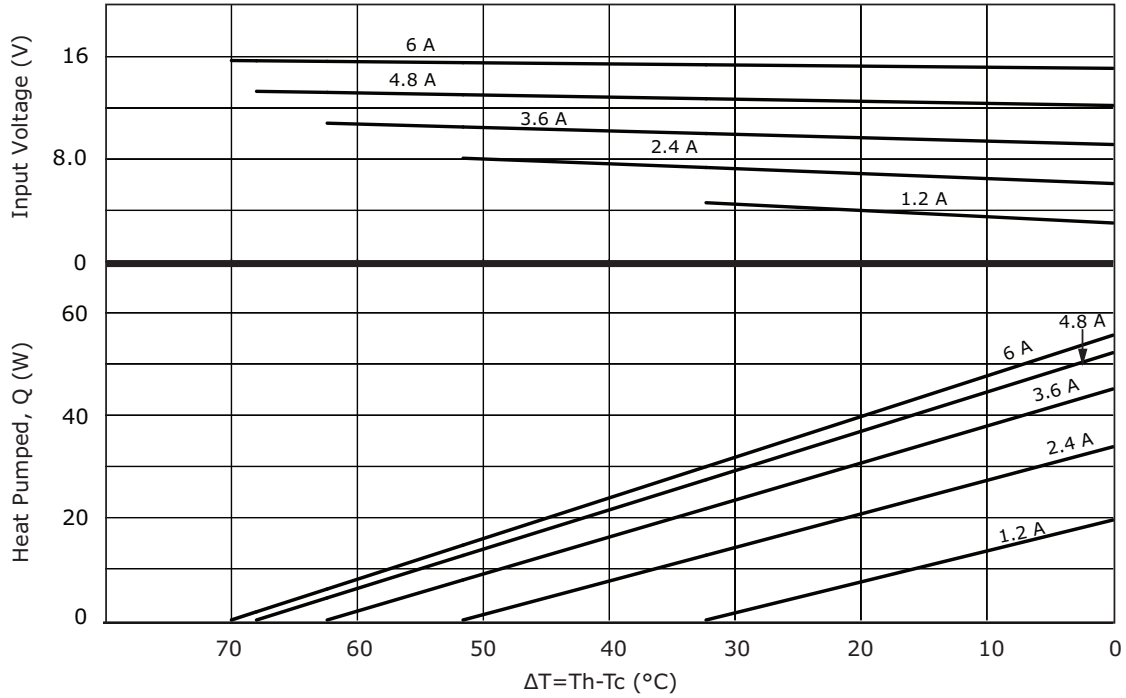
### CP603395H PERFORMANCE (Th=27°C)



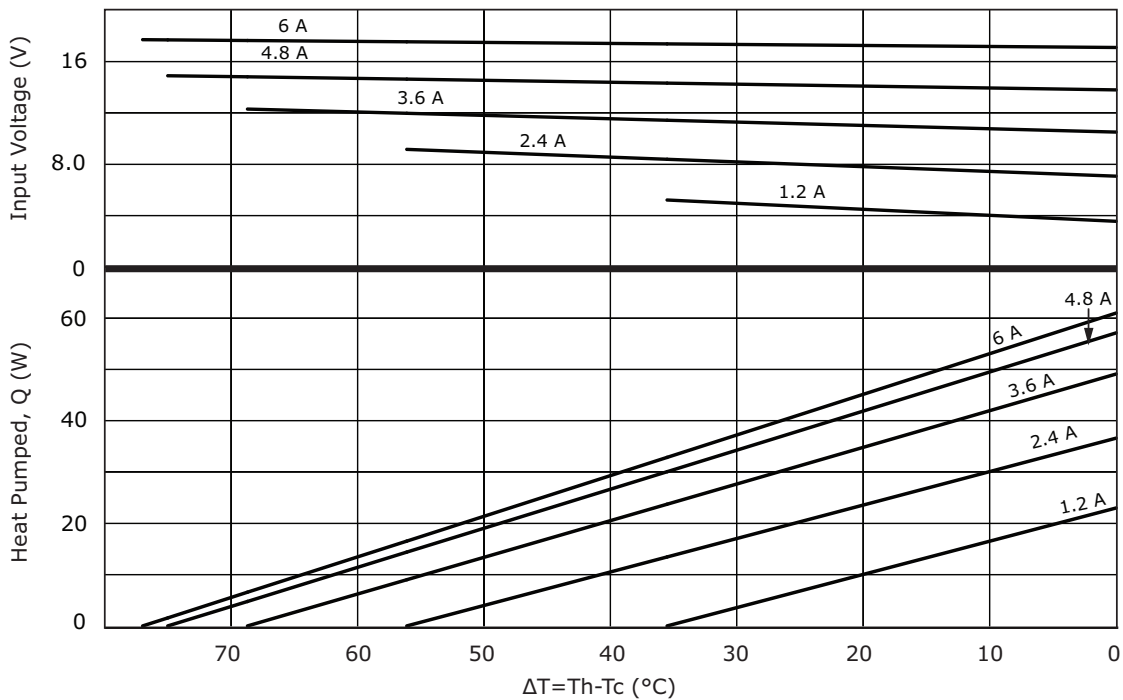
### CP603395H PERFORMANCE (Th=50°C)



### 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

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



**CUI INC**<sup>®</sup>

**Headquarters**  
20050 SW 112th Ave.  
Tualatin, OR 97062  
**800.275.4899**

Fax 503.612.2383  
**cui.com**  
techsupport@cui.com

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