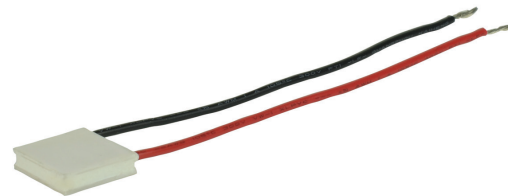




SERIES: CP39H | **DESCRIPTION:** PELTIER MODULE

FEATURES

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



MODEL	input voltage ¹	input current ²	internal resistance ³	output Qmax ⁴		output ΔT max ⁵	
	max (Vdc)	max (A)	typ ($\Omega \pm 10\%$)	T _h =27°C (W)	T _h =50°C (W)	T _h =27°C (°C)	T _h =50°C (°C)
CP39136H	3.8	3.9	0.85	8.6	9.5	70	77
CP39236H	8.8	3.9	1.95	18.7	20.9	70	77
CP39301536H	7.6	3.9	1.73	16.5	18.1	70	77
CP393365H ⁶	15.7	3.9	3.50	35.2	39.0	70	77

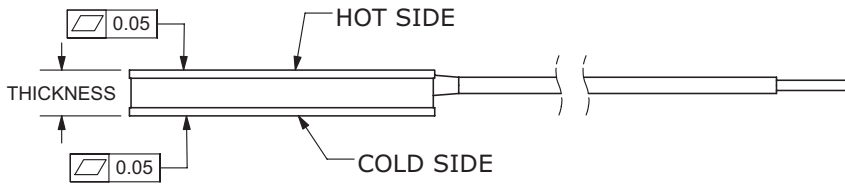
- Notes:
1. Maximum voltage at ΔT max and T_h=27°C
 2. Maximum current to achieve ΔT max
 3. Measured by AC 4-terminal method at 25°C
 4. Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and $\Delta T=0^\circ\text{C}$
 5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W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

SPECIFICATIONS

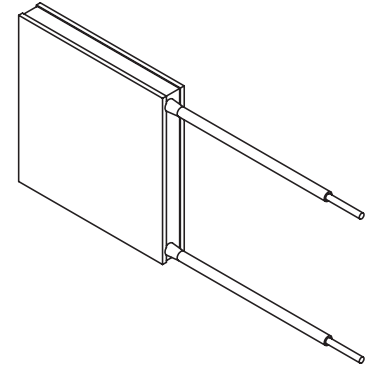
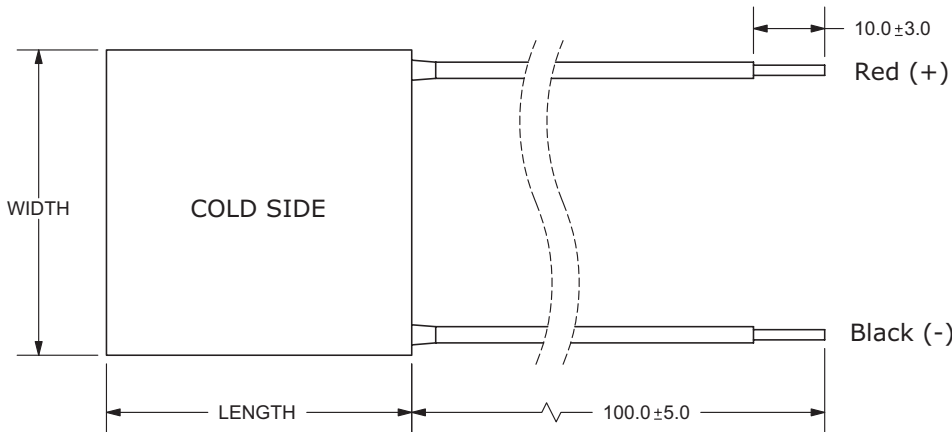
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	2011/65/EU				

MECHANICAL DRAWING

units: mm

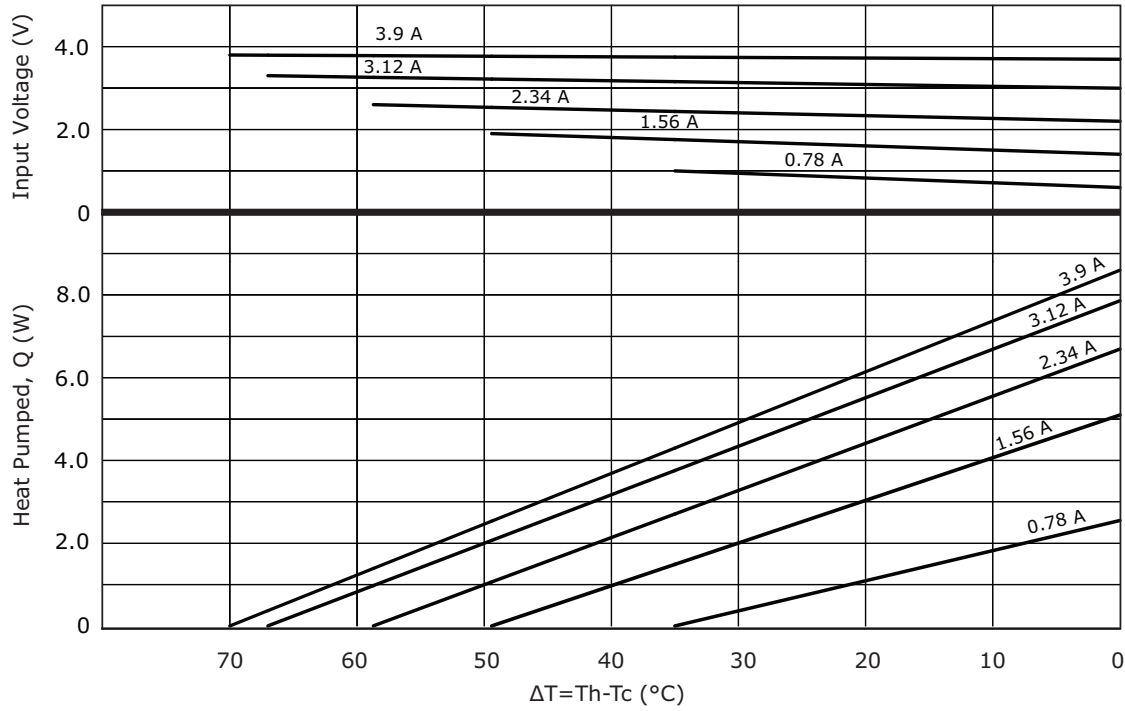


	MATERIAL	PLATING
ceramic plate	96% AL ₂ O ₃	
wire leads	22 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

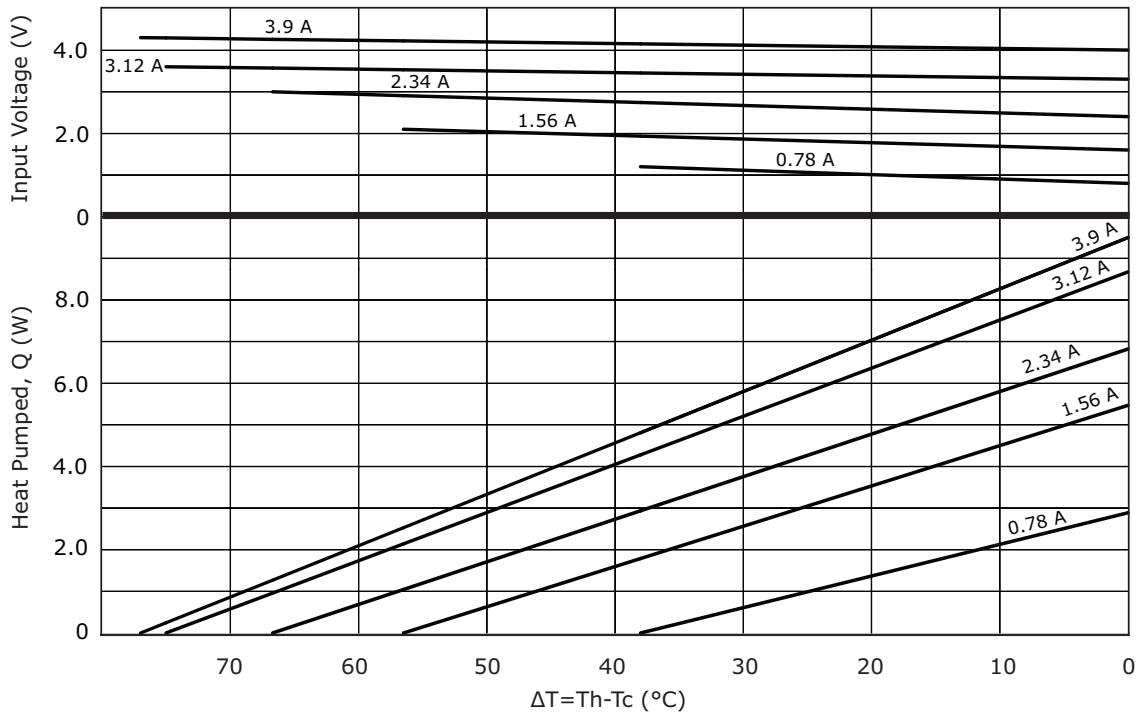


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP39136H	15 ±0.3	15 ±0.3	3.6 ±0.025
CP39236H	20 ±0.3	20 ±0.3	3.6 ±0.025
CP39301536H	30 ±0.3	15 ±0.3	3.6 ±0.025
CP393365H	30 ±0.3	30 ±0.3	3.65 ±0.025

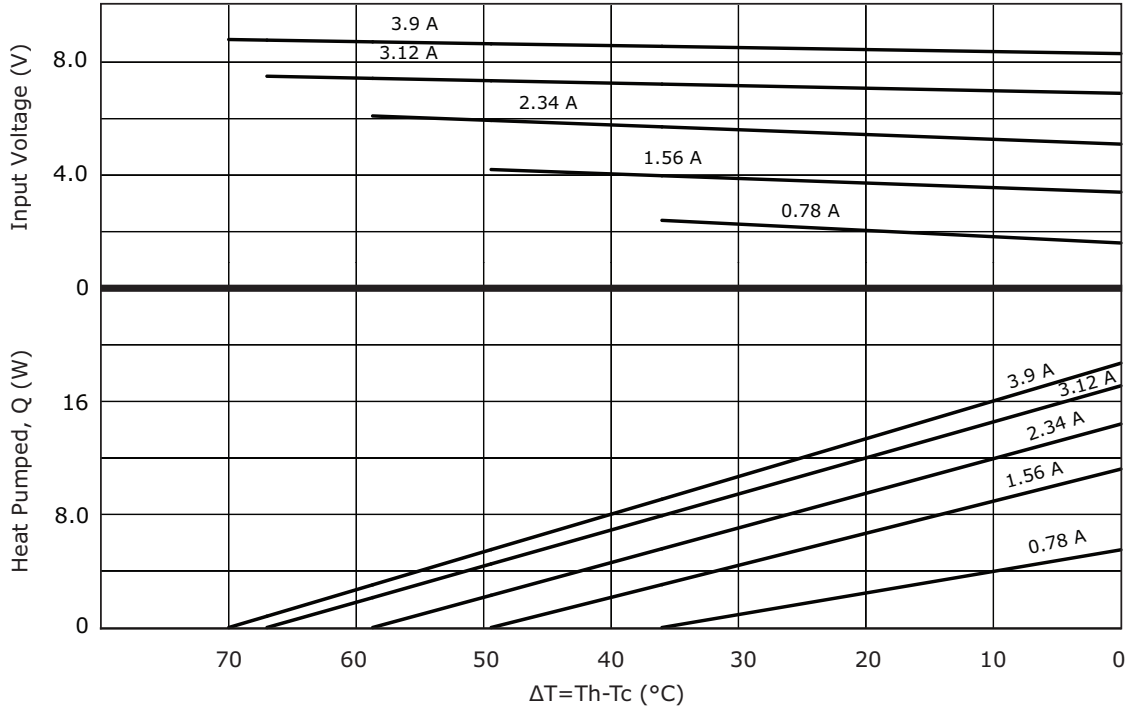
CP39136H PERFORMANCE (Th=27°C)



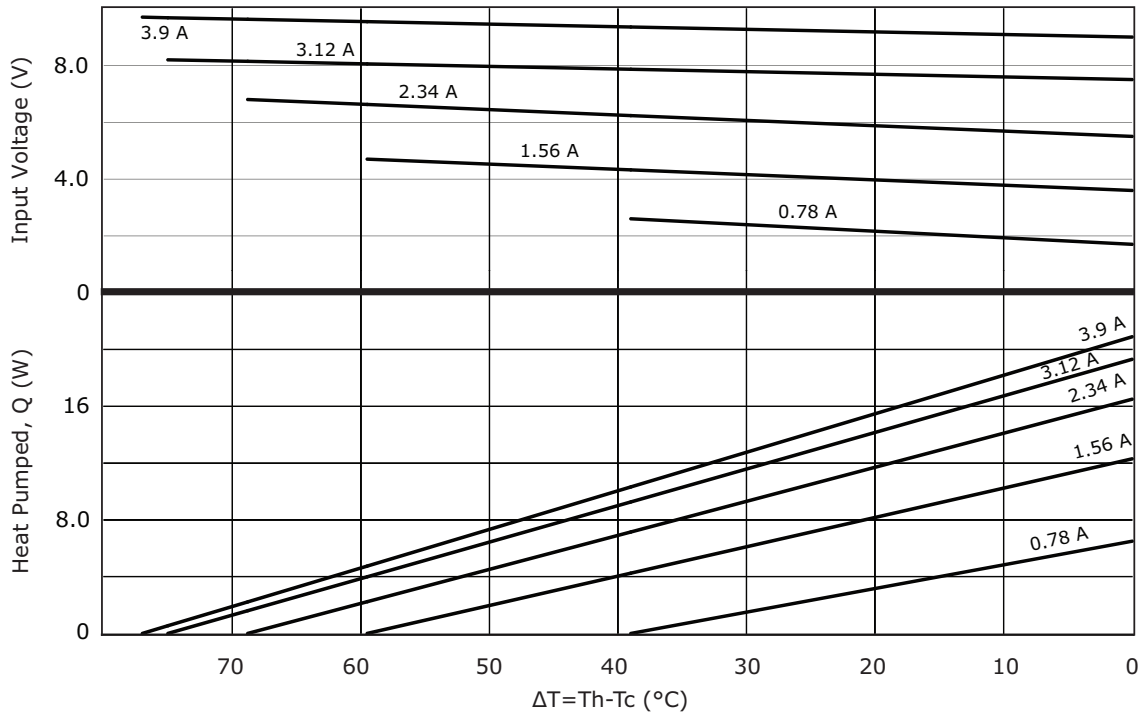
CP39136H PERFORMANCE (Th=50°C)



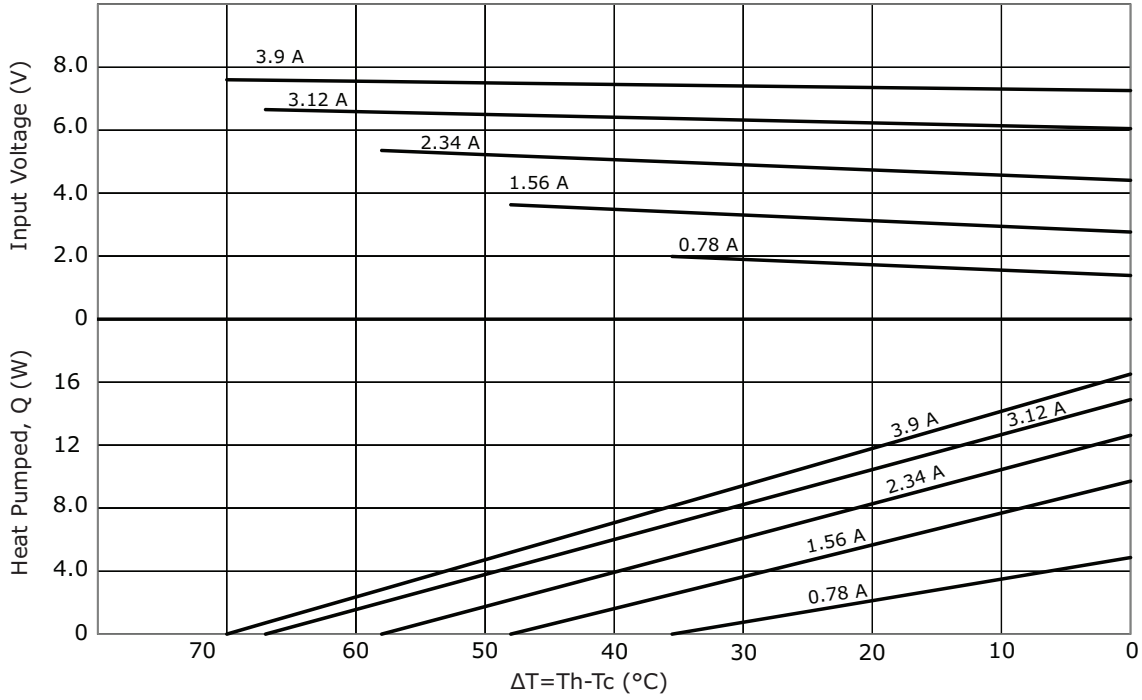
CP39236H PERFORMANCE (Th=27°C)



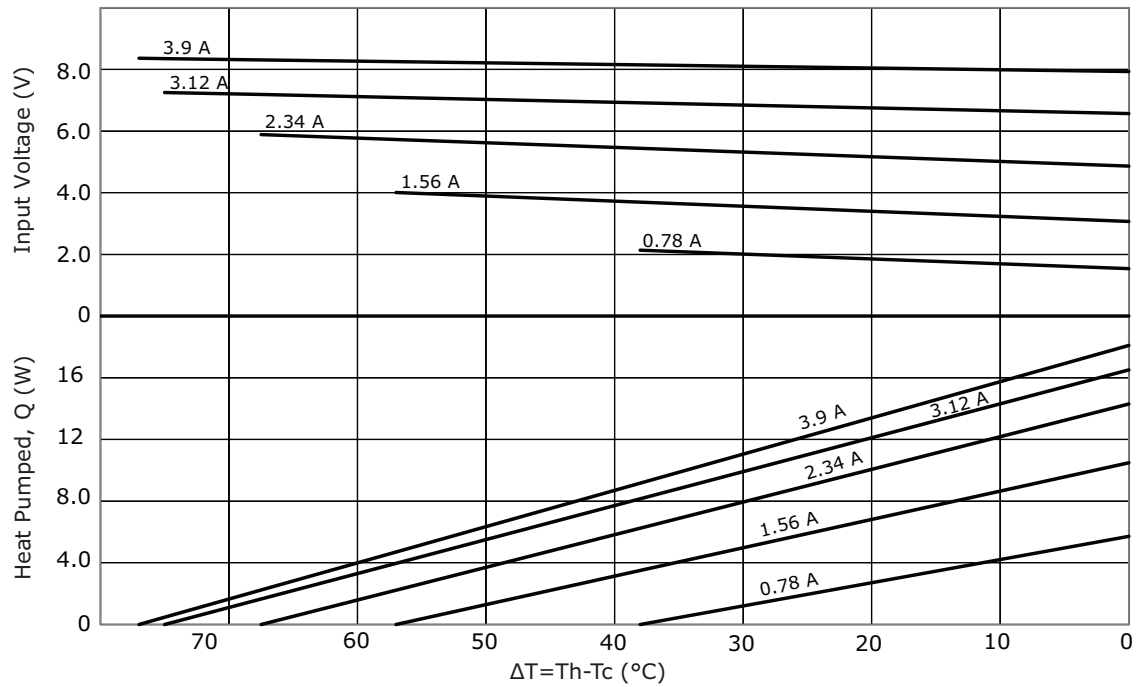
CP39236H PERFORMANCE (Th=50°C)



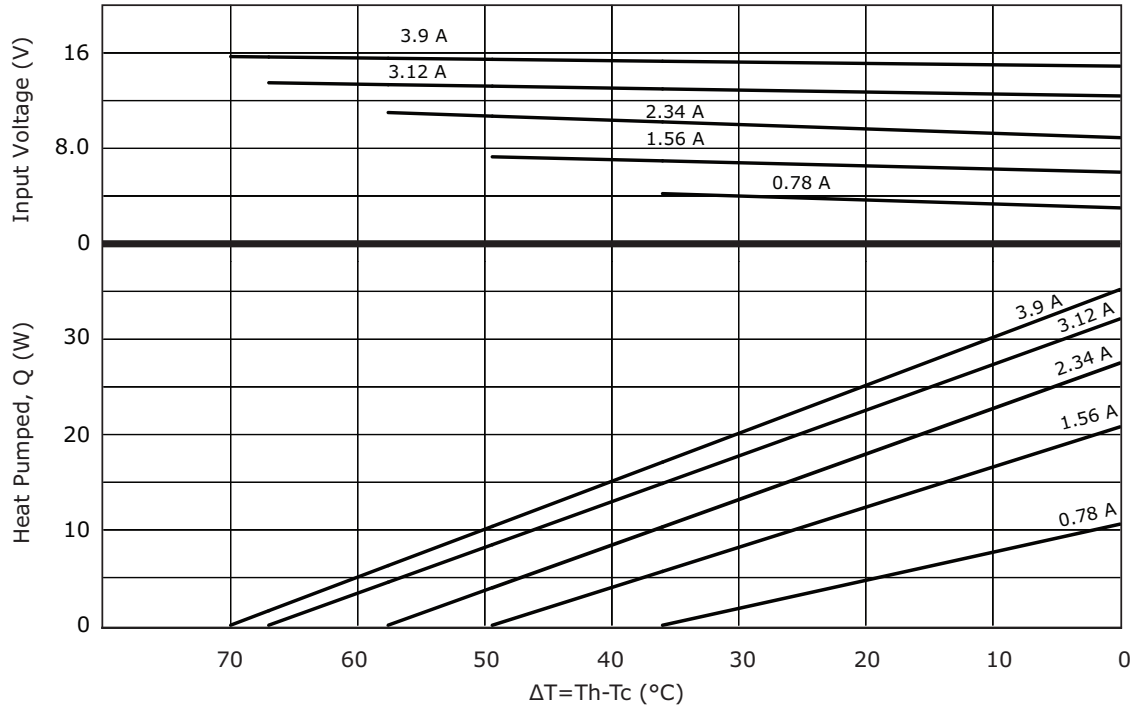
CP39301536H PERFORMANCE (Th=27°C)



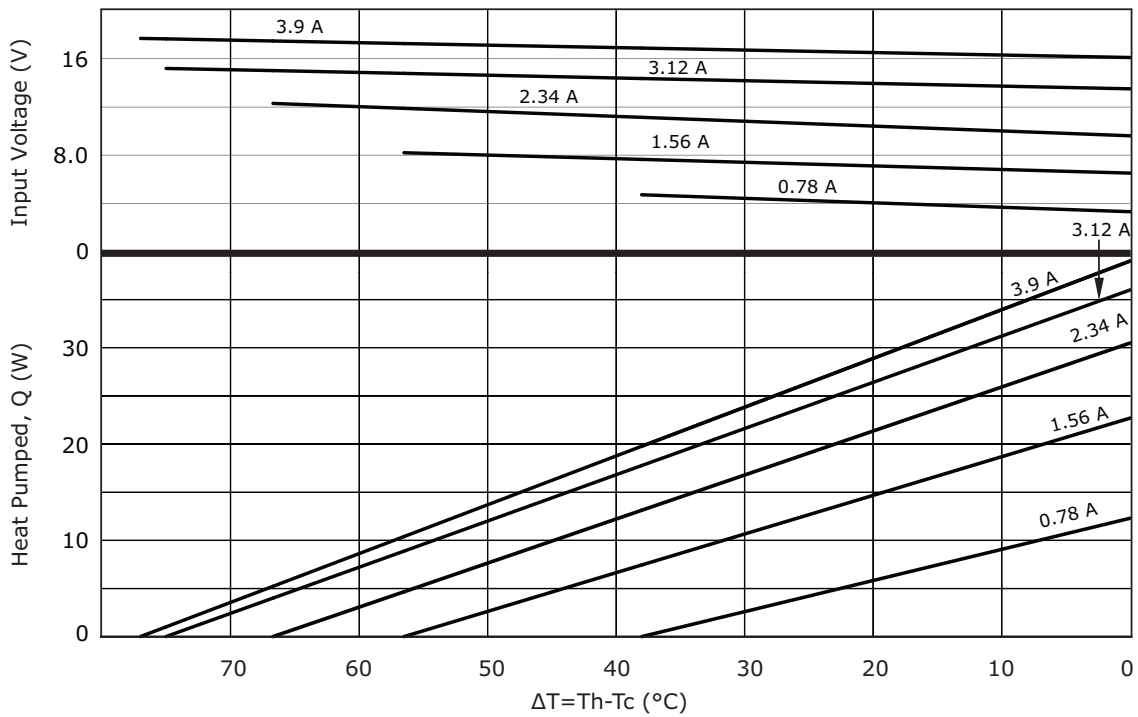
CP39301536H PERFORMANCE (Th=50°C)



CP393365H PERFORMANCE (Th=27°C)



CP393365H 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

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



CUI INC[®]

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

Fax 503.612.2383
cui.com
techsupport@cui.com

CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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