



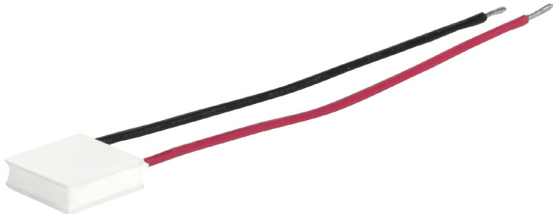
SERIES: CP35

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DESCRIPTION: PELTIER MODULE

FEATURES

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



MODEL

	input voltage ¹ max [Vdc]	input current ² max [A]	internal resistance ³ typ [Ω±10%]	output Qmax ⁴		output ΔTmax ⁵	
				T _h =27°C [W]	T _h =50°C [W]	T _h =27°C [°C]	T _h =50°C [°C]
CP35147	2.1	3.5	0.44	3.9	4.3	68	75
CP35247	3.8	3.5	0.80	7.0	7.7	68	75
CP35301547	4.2	3.5	0.90	7.9	8.7	68	75
CP35347 ⁶	8.6	3.5	1.93	16.0	17.8	70	77
CP353047 ⁶	11.8	3.5	2.52	24.0	26.0	70	77
CP35447 ⁶	15.4	3.5	3.3	29.0	32.0	70	77
CP354047 ⁶	24.1	3.5	5.17	49.0	53.0	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 ΔT=0°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
	CP35347, CP353047, CP35447, CP354047	138			°C
assembly compression				1	MPa
RoHS	yes				

MECHANICAL DRAWING

units: mm

The mechanical drawing includes a top view and a side view. The top view shows a rectangular module with a 'HOT SIDE' and a 'COLD SIDE'. The thickness is indicated as 0.05 mm on both sides. The side view shows the 'COLD SIDE' and the 'HOT SIDE' with wire leads extending from the hot side. The wire leads are labeled 'Red (+)' and 'Black (-)'. The length of the wire lead strip is 100.0 ± 5.0 mm. The width of the module is labeled 'WIDTH' and the length is labeled 'LENGTH'. A dimension of 7 ± 3.0 mm is shown for the wire lead strip length.

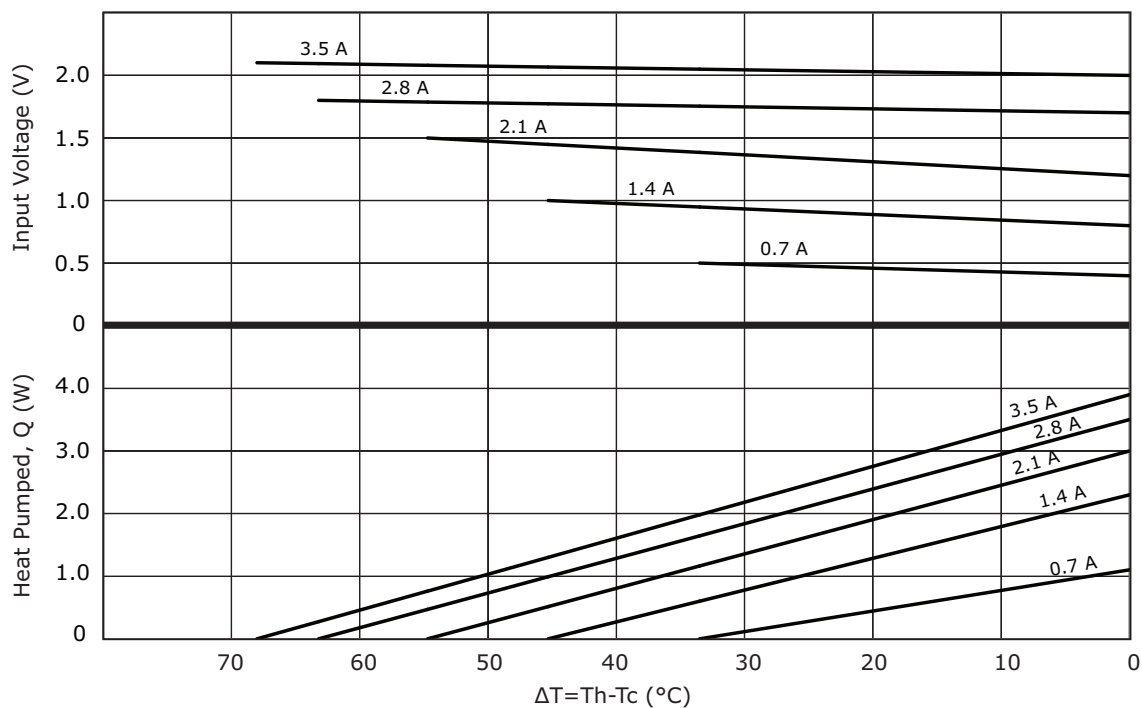
	MATERIAL	PLATING
ceramic plate	96% AL ₂ O ₃	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

A 3D perspective view of the Peltier module, showing the rectangular body and the two wire leads extending from one side.

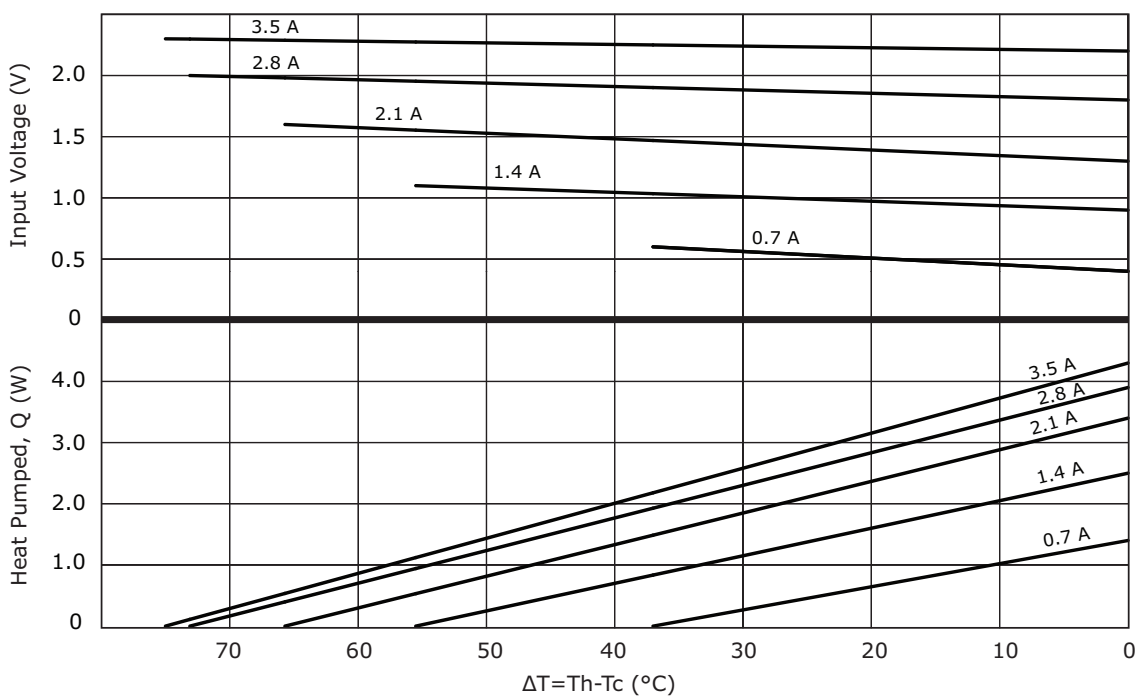
MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP35147	15 ±0.3	15 ±0.3	4.7 ±0.1
CP35247	20 ±0.3	20 ±0.3	4.7 ±0.1
CP35301547	30 ±0.3	15 ±0.3	4.7 ±0.1
CP35347 ¹	30 ±0.3	30 ±0.3	4.7 ±0.1
CP353047	30 ±0.3	30 ±0.3	4.7 ±0.1
CP35447	40 ±0.3	40 ±0.3	4.65 ±0.025
CP354047	40 ±0.3	40 ±0.3	4.7 ±0.1

Notes: 1. Wire lead strip length on model CP35347 is 10 ±3.0 mm.

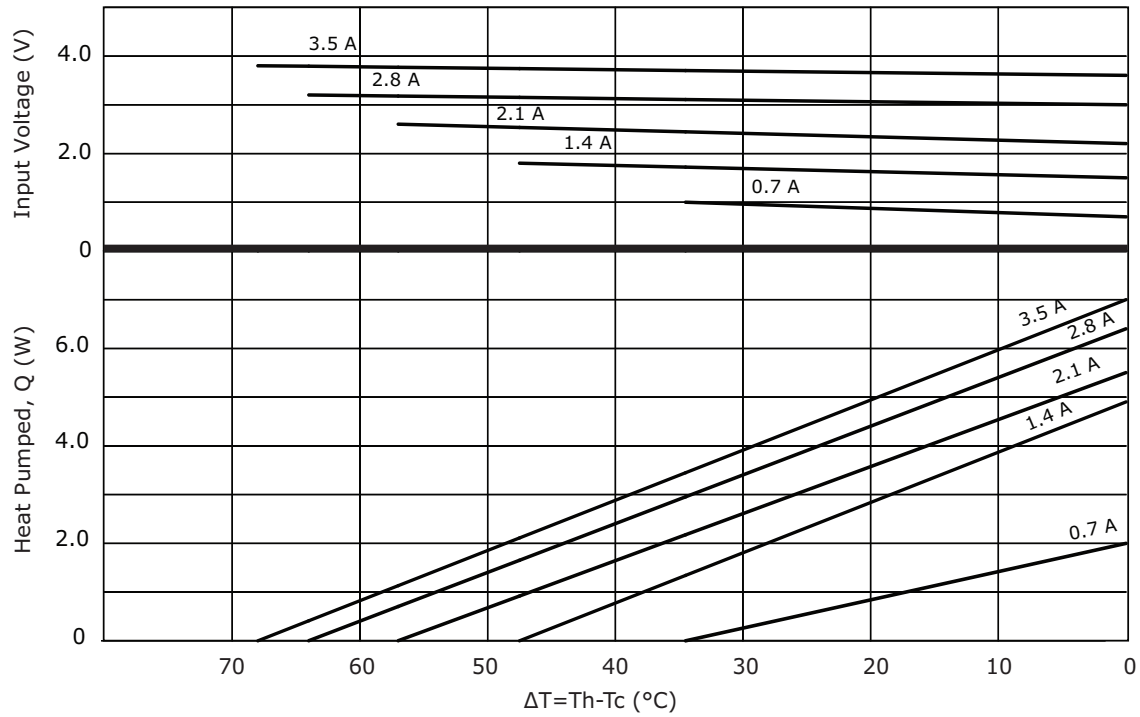
CP35147 PERFORMANCE (Th=27°C)



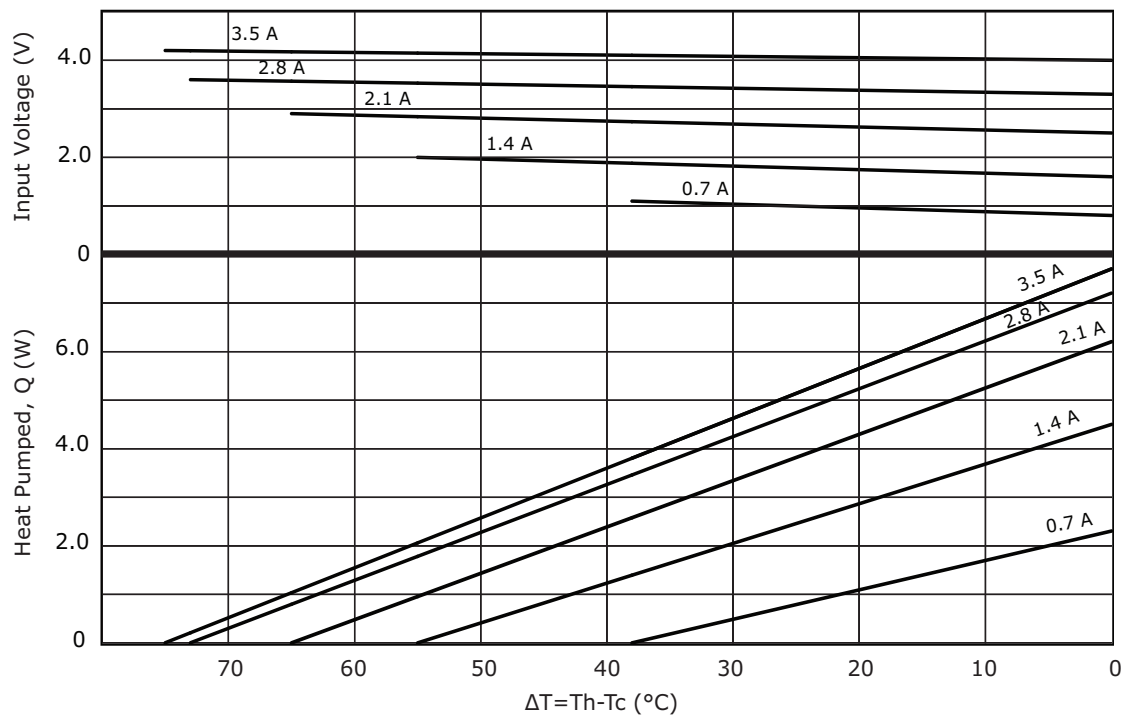
CP35147 PERFORMANCE (Th=50°C)



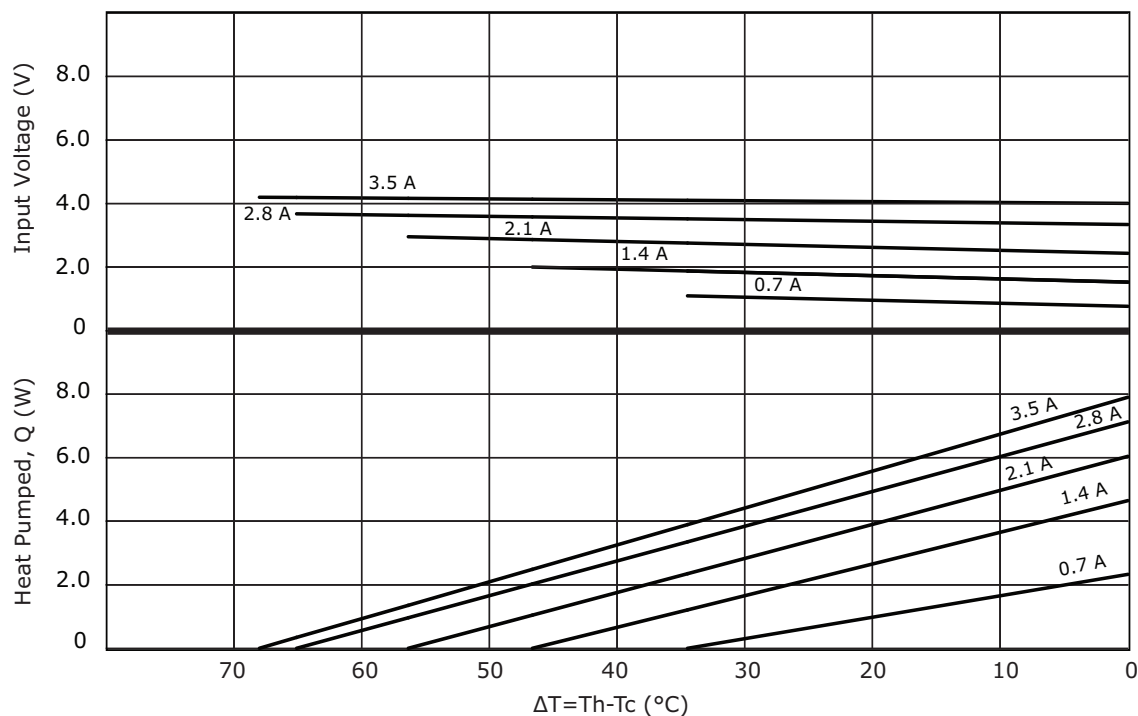
CP35247 PERFORMANCE (Th=27°C)



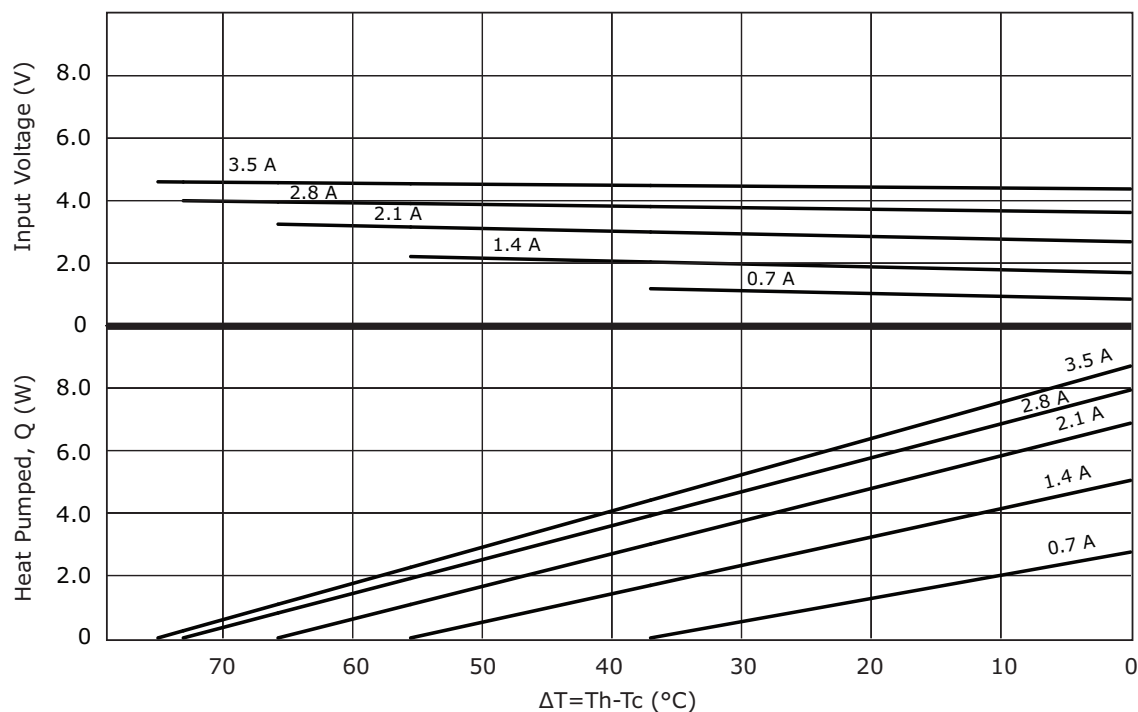
CP35247 PERFORMANCE (Th=50°C)



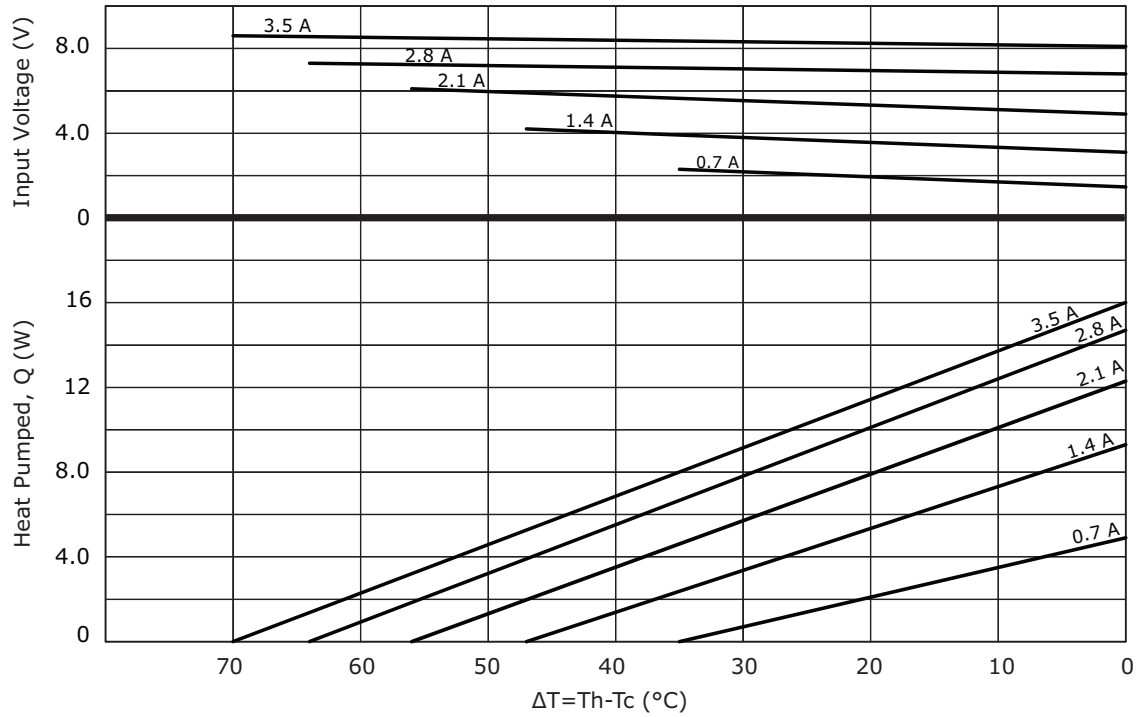
CP35301547 PERFORMANCE (Th=27°C)



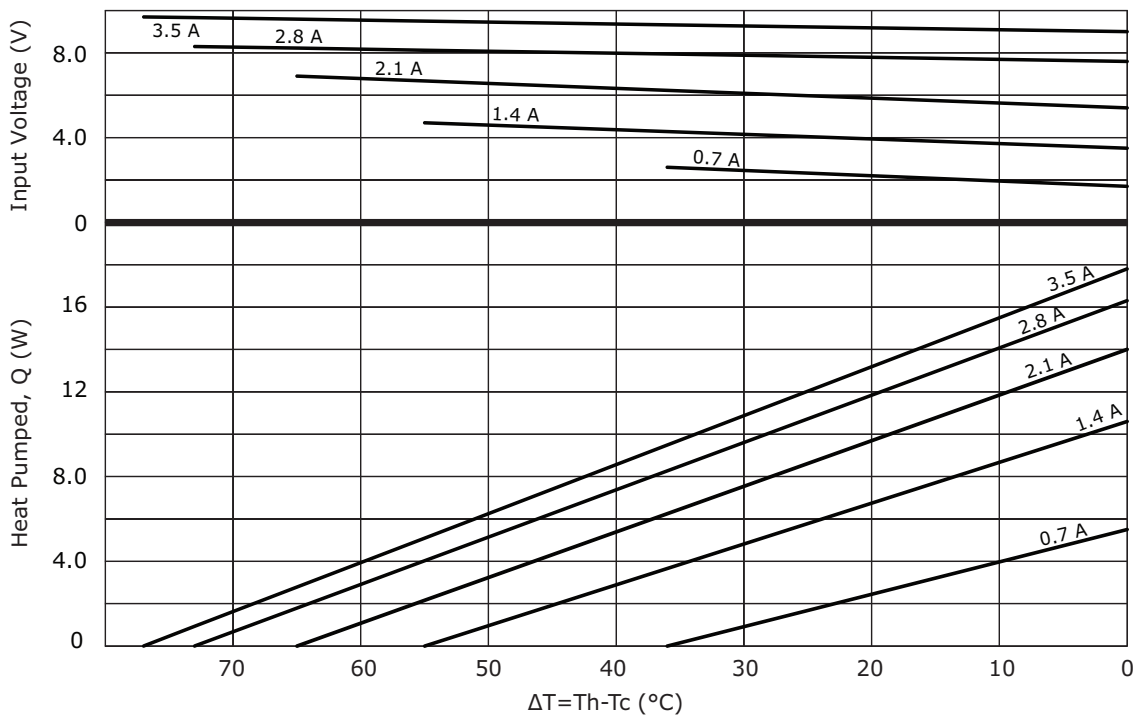
CP35301547 PERFORMANCE (Th=50°C)



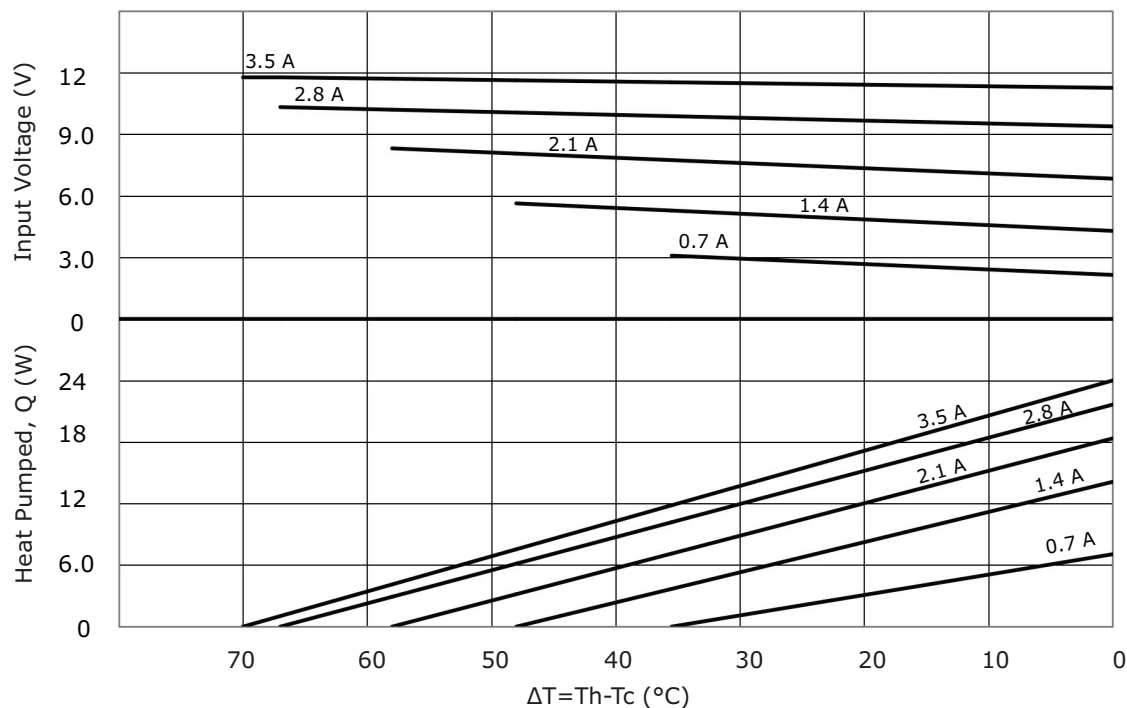
CP35347 PERFORMANCE (Th=27°C)



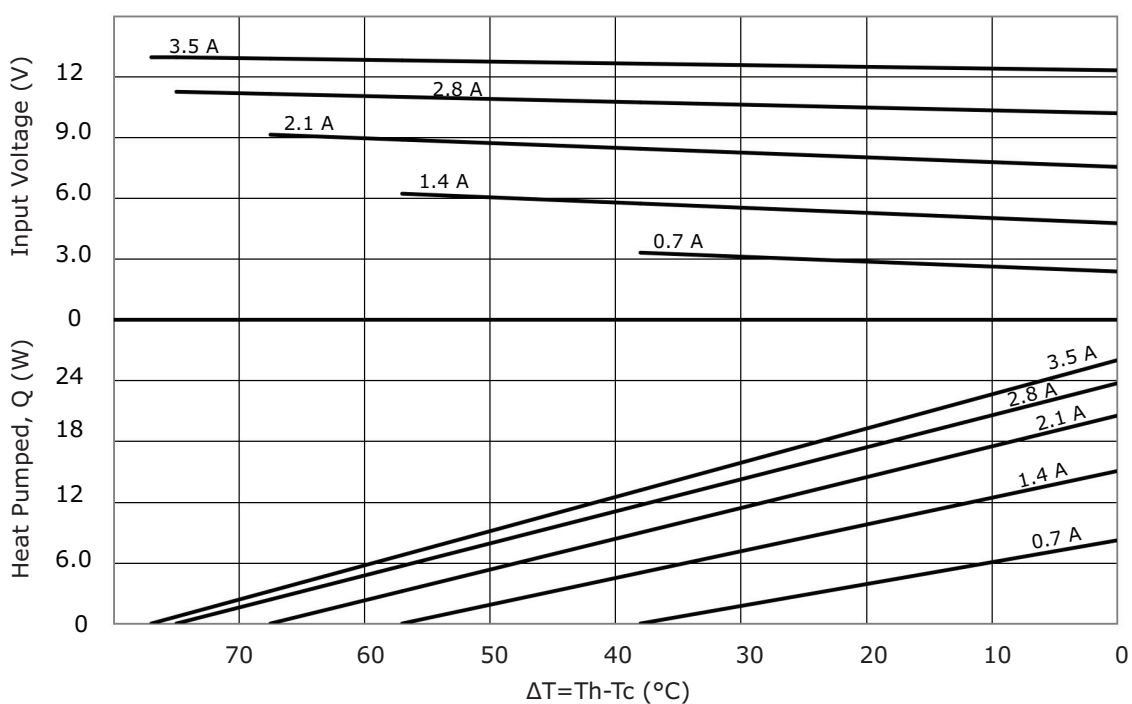
CP35347 PERFORMANCE (Th=50°C)



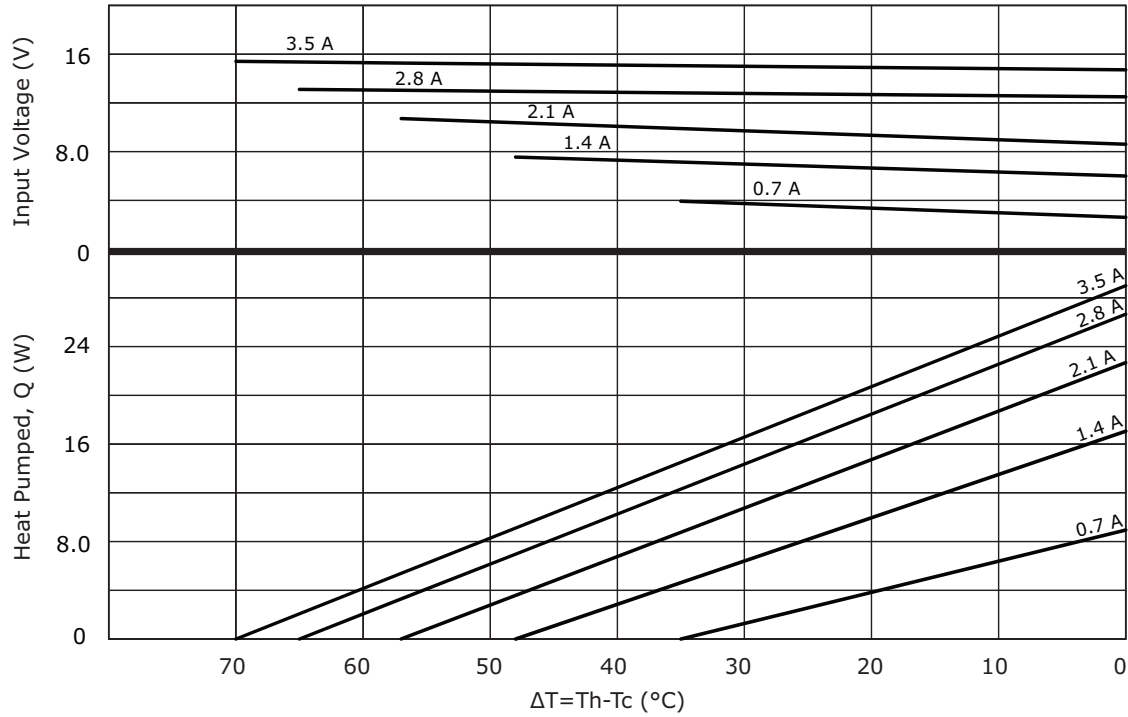
CP353047 PERFORMANCE (Th=27°C)



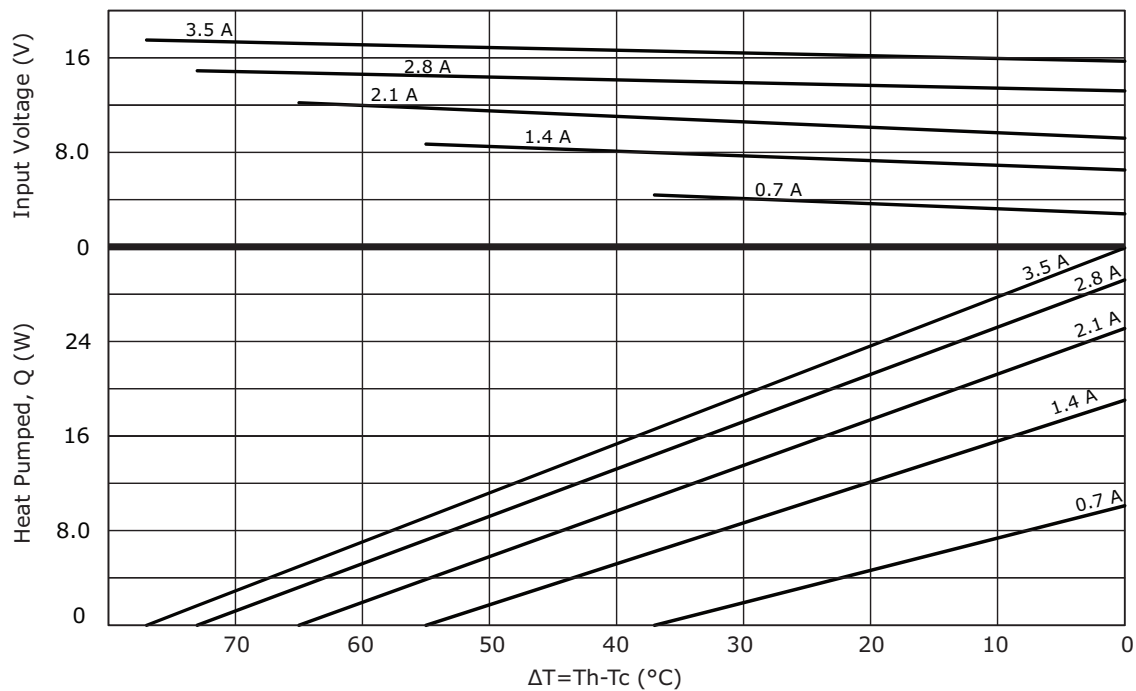
CP353047 PERFORMANCE (Th=50°C)



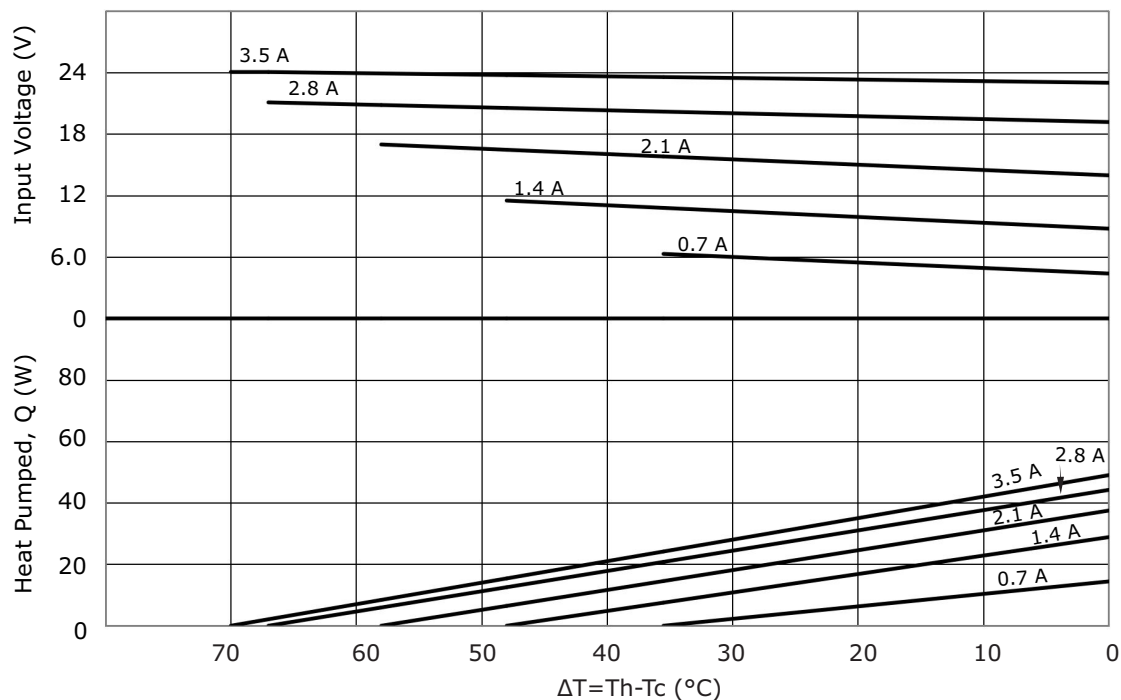
CP35447 PERFORMANCE (Th=27°C)



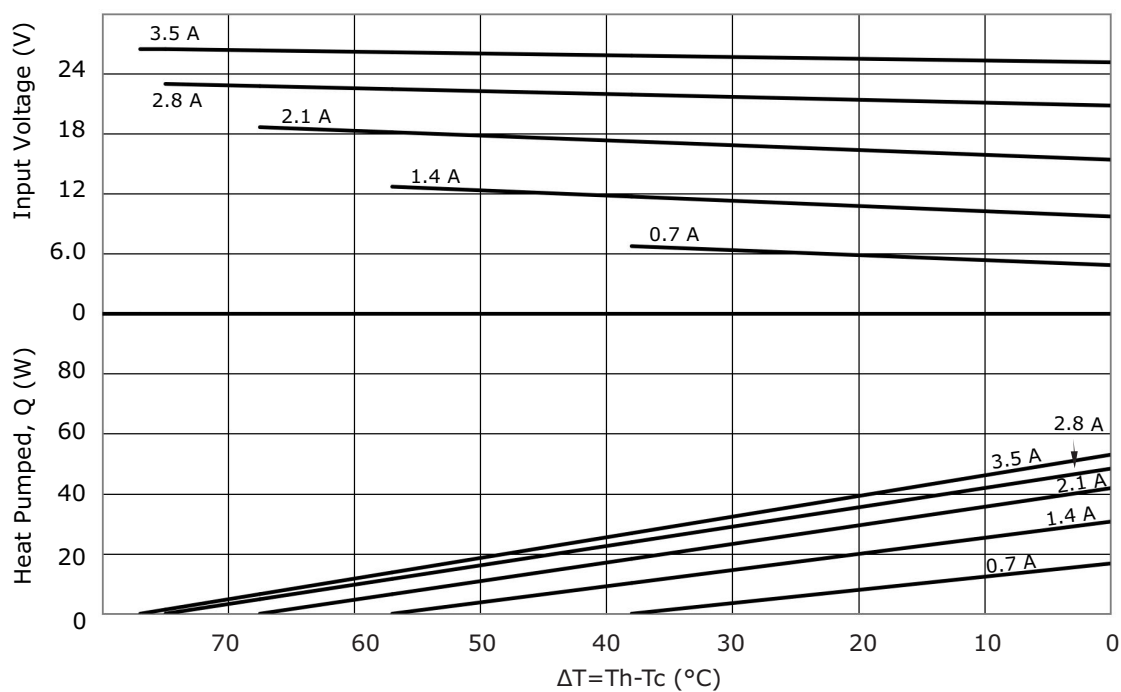
CP35447 PERFORMANCE (Th=50°C)



CP354047 PERFORMANCE (Th=27°C)



CP354047 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
1.02	added models CP353047 & CP354047, brand update	10/18/2019
1.03	logo, datasheet style update	08/05/2022
1.04	CUI Devices rebranded to Same Sky	09/12/2024

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



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

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