

SERIES: CP85H | **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 [$\Omega \pm 10\%$]	$T_h = 27^\circ\text{C}$ [W]	$T_h = 50^\circ\text{C}$ [W]	$T_h = 27^\circ\text{C}$ [°C]	$T_h = 50^\circ\text{C}$ [°C]
CP85134H	2.1	8.5	0.2	10.3	11.3	70	77
CP85153034H	4.2	8.5	0.4 ⁷	21	23	70	77
CP85234H	3.8	8.5	0.35	18.8	20.8	70	77
CP852040345H ⁶	7.6	8.5	0.75	38.2	42	70	77
CP85301534H	4.2	8.5	0.4 ⁷	21	23	70	77
CP853345H ⁶	8.8	8.5	0.85	43.1	48	70	77
CP8530345 ⁶	11.8	8.5	1.15	57.7	63.4	70	77
CP854020345H ⁶	7.6	8.5	0.75	38.2	42	70	77
CP854345H ⁶	15.7	8.5	1.5	77.1	85	70	77

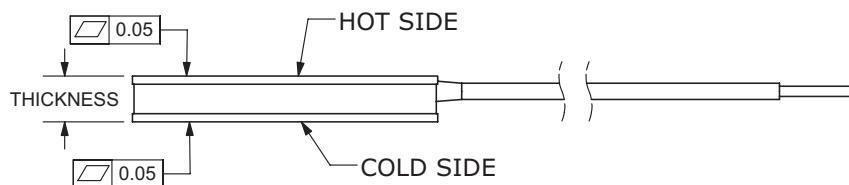
- Notes:
1. Maximum voltage at ΔT_{max} and $T_h = 27^\circ\text{C}$
 2. Maximum current to achieve ΔT_{max}
 3. Measured by AC 4-terminal method at 25°C
 4. Maximum heat absorbed at cold side occurs at I_{max} , V_{max} , and $\Delta T = 0^\circ\text{C}$
 5. Maximum temperature difference occurs at I_{max} , V_{max} , and $Q = 0\text{W}$ (ΔT_{max} measured in a vacuum at 1.3 Pa)
 6. Designed with arcTEC™ structure.
 7. Internal resistance tolerance is $\pm 12.5\%$

SPECIFICATIONS

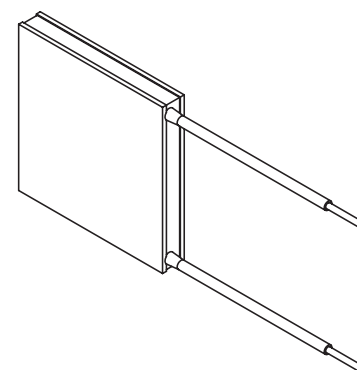
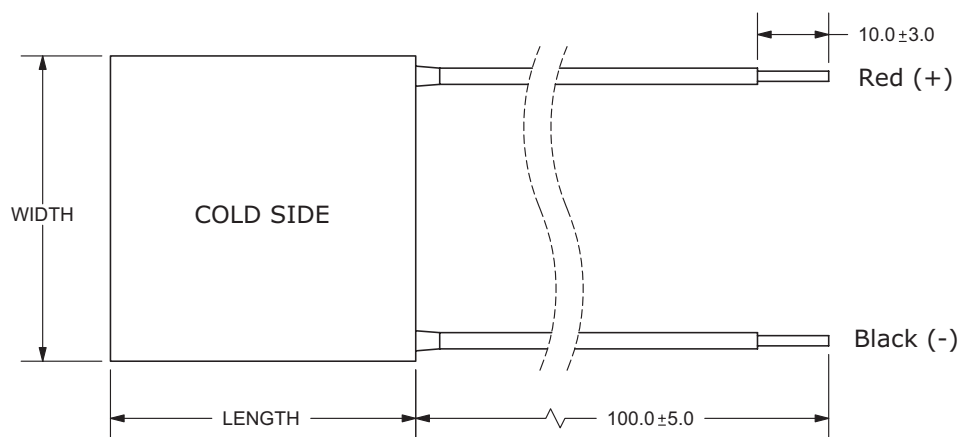
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

MECHANICAL DRAWING

units: mm

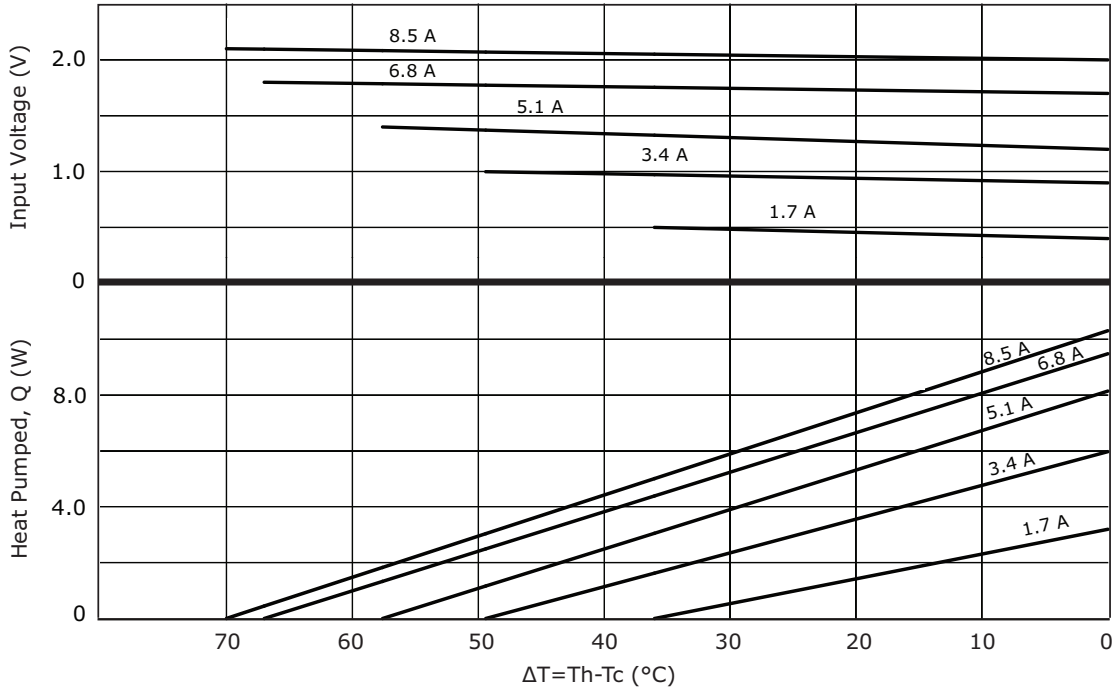


	MATERIAL	PLATING
ceramic plate	96% AL ₂ O ₃	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

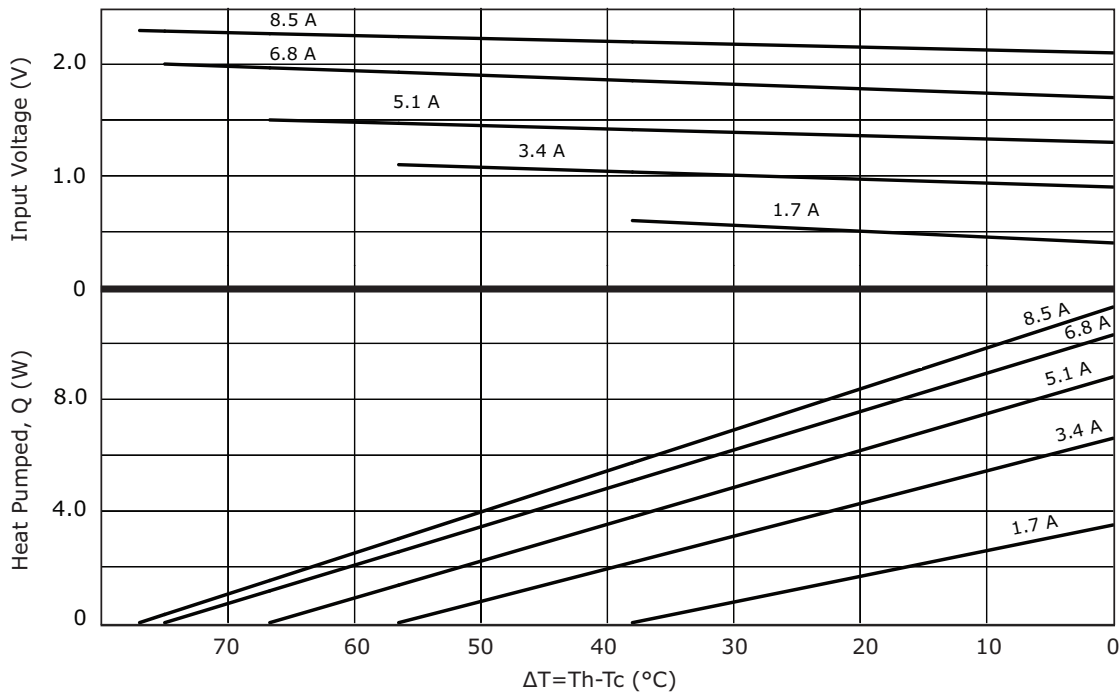


MODEL NO.	LENGTH [mm]	WIDTH [mm]	THICKNESS [mm]
CP85134H	15 ±0.3	15 ±0.3	3.4 ±0.025
CP85153034H	15 ±0.3	30 ±0.3	3.4 ±0.025
CP85234H	20 ±0.3	20 ±0.3	3.4 ±0.025
CP852040345H	20 ±0.3	40 ±0.3	3.45 ±0.025
CP85301534H	30 ±0.3	15 ±0.3	3.4 ±0.025
CP853345H	30 ±0.3	30 ±0.3	3.45 ±0.025
CP8530345	30 ±0.3	30 ±0.3	3.45 ±0.025
CP854020345H	40 ±0.3	20 ±0.3	3.45 ±0.025
CP854345H	40 ±0.3	40 ±0.3	3.45 ±0.025

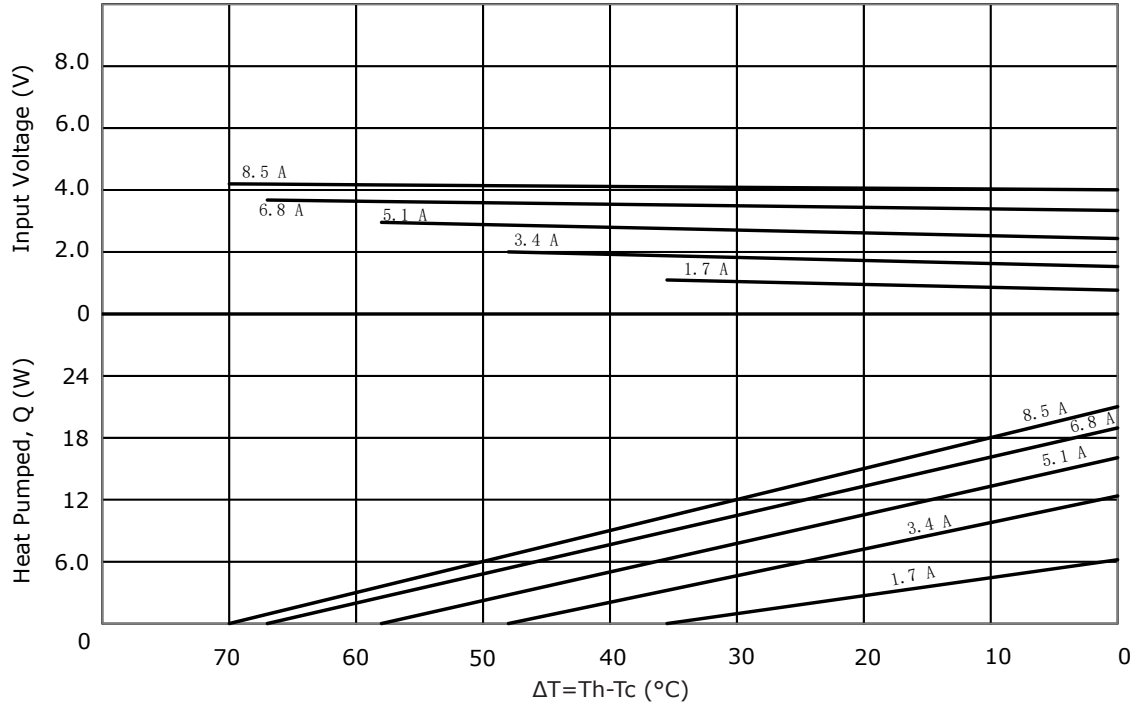
CP85134H PERFORMANCE (Th=27°C)



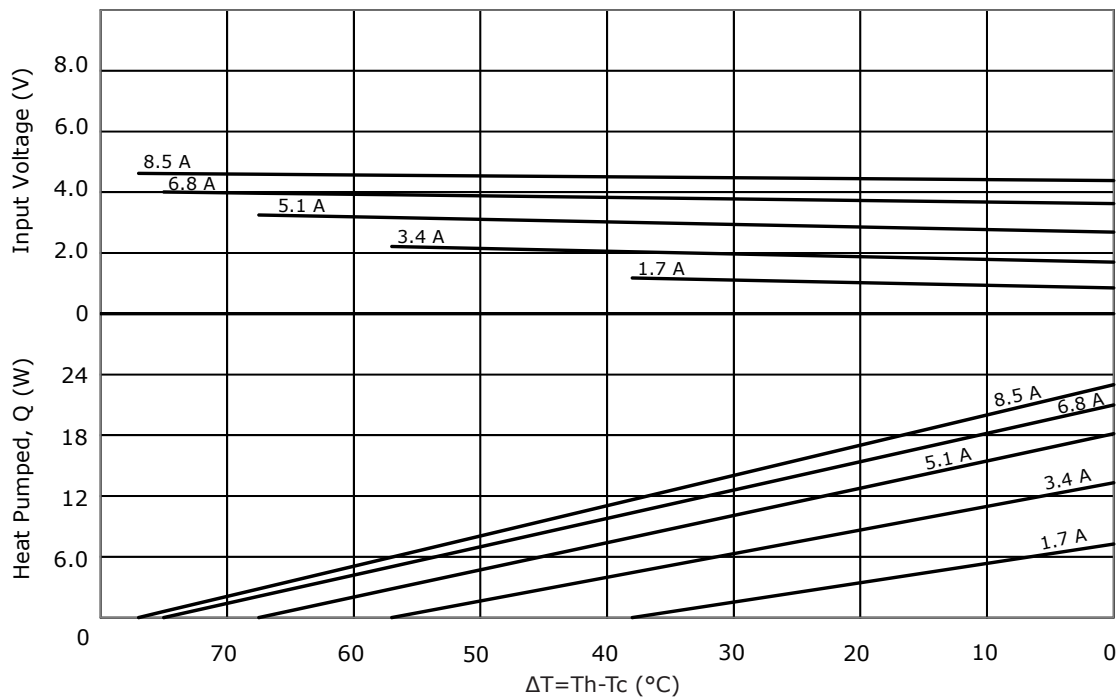
CP85134H PERFORMANCE (Th=50°C)



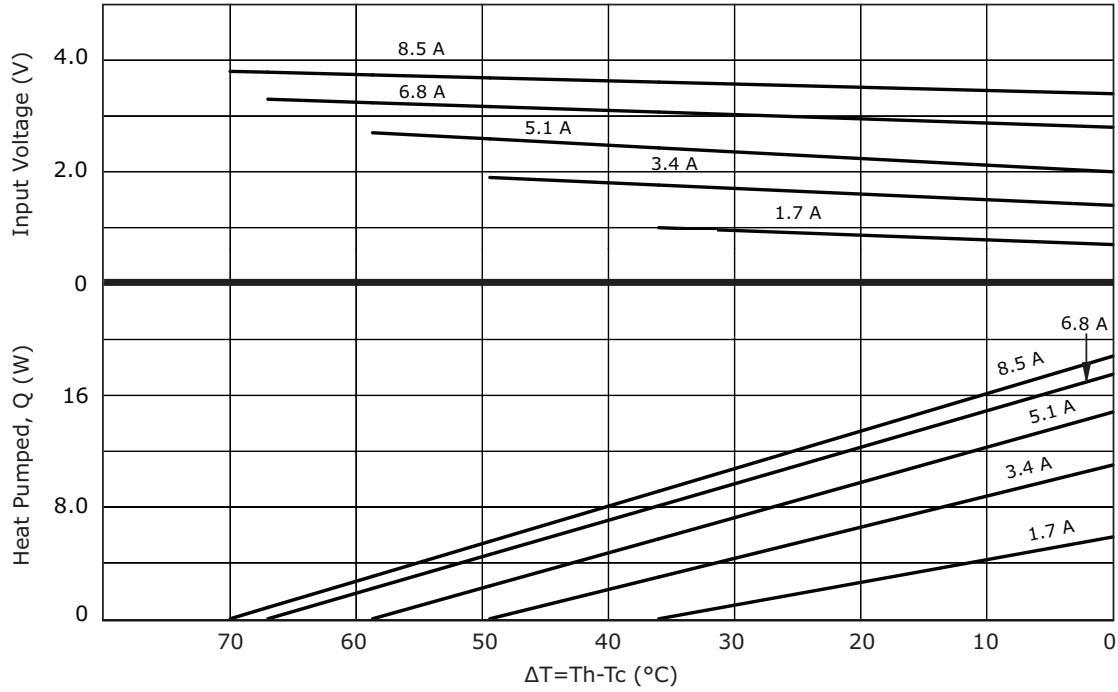
CP85153034H PERFORMANCE (Th=27°C)



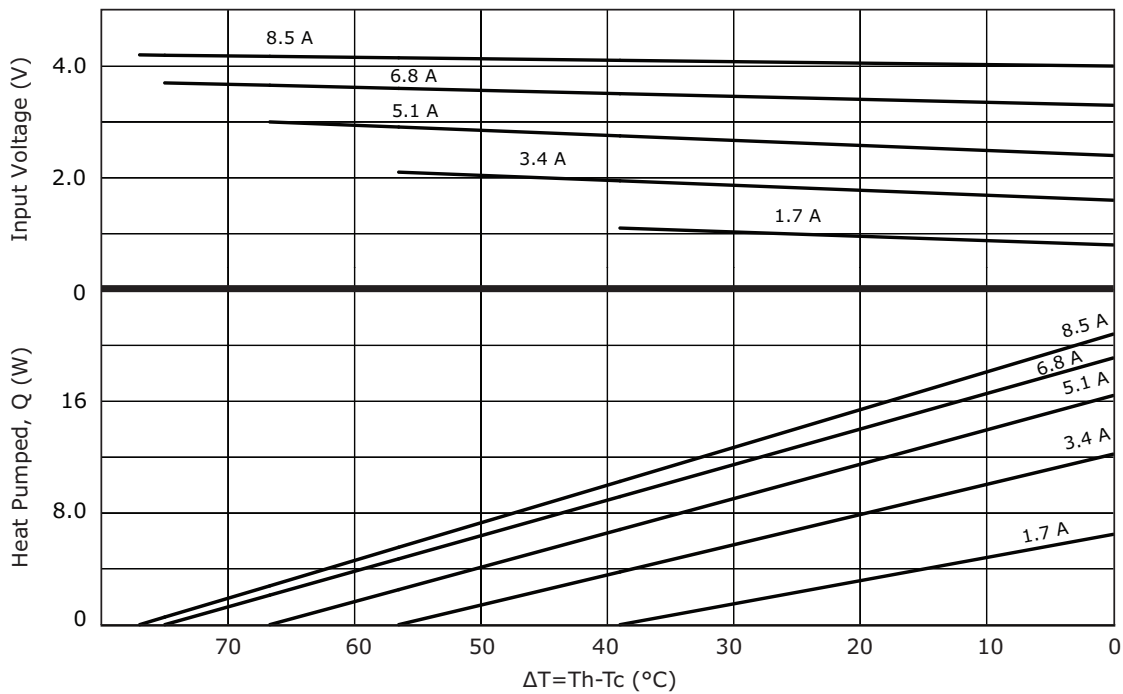
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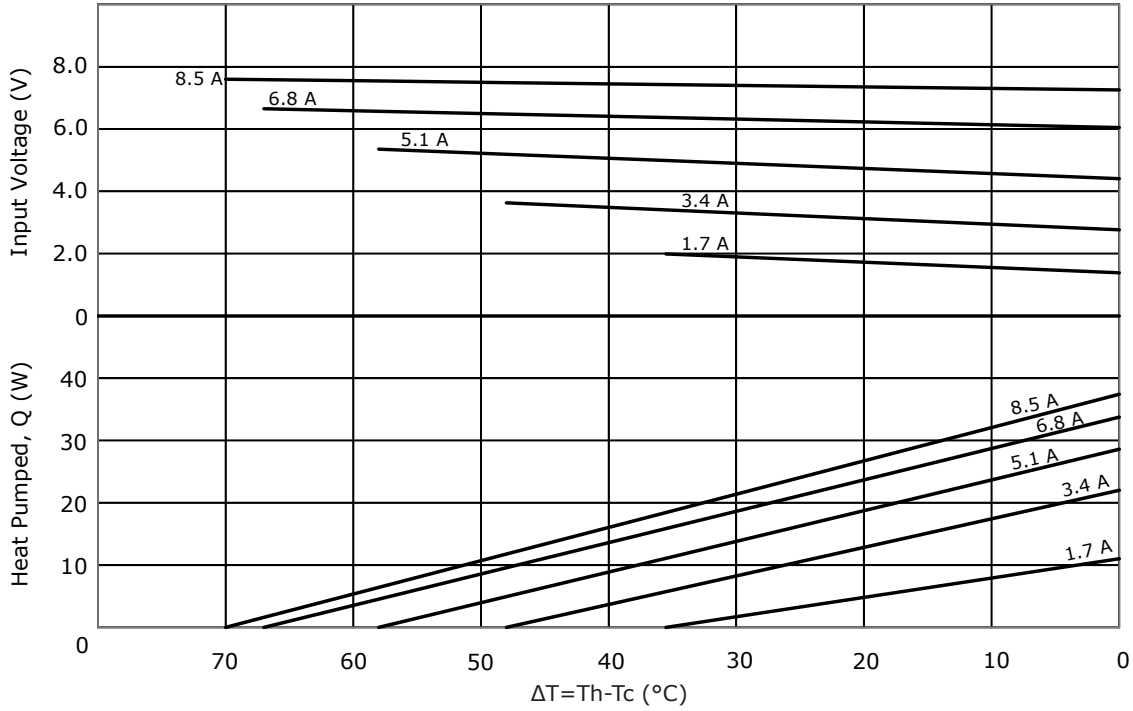
CP85234H PERFORMANCE (Th=27°C)



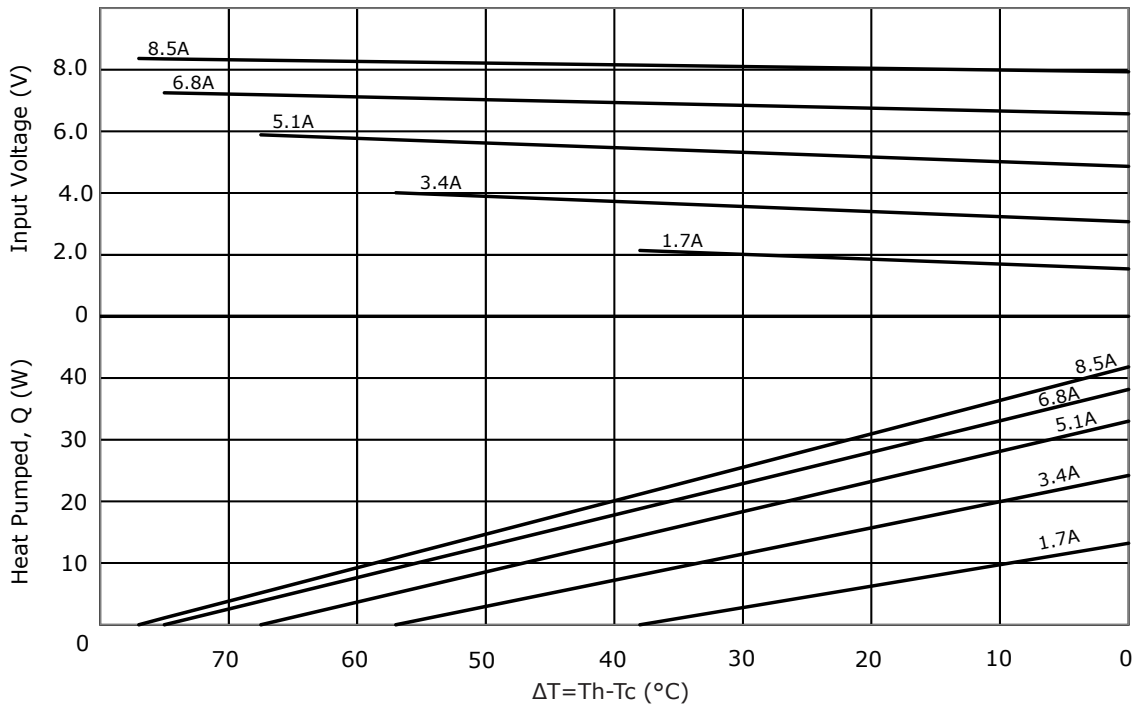
CP85234H PERFORMANCE (Th=50°C)



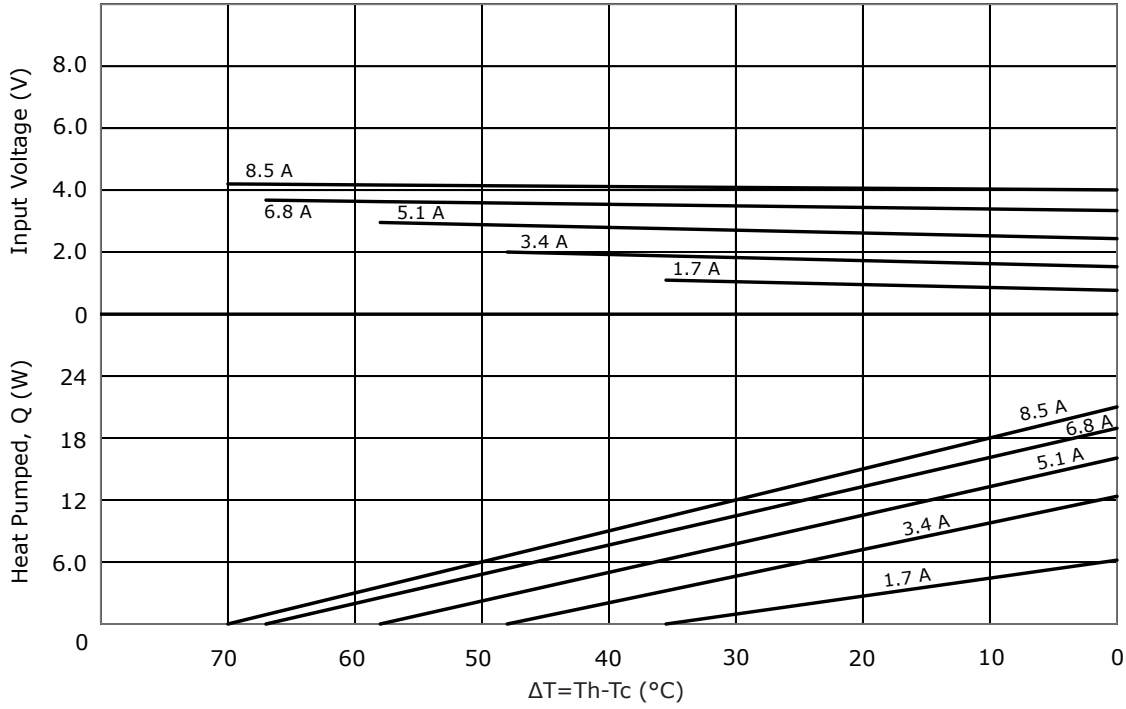
CP852040345H PERFORMANCE (Th=27°C)



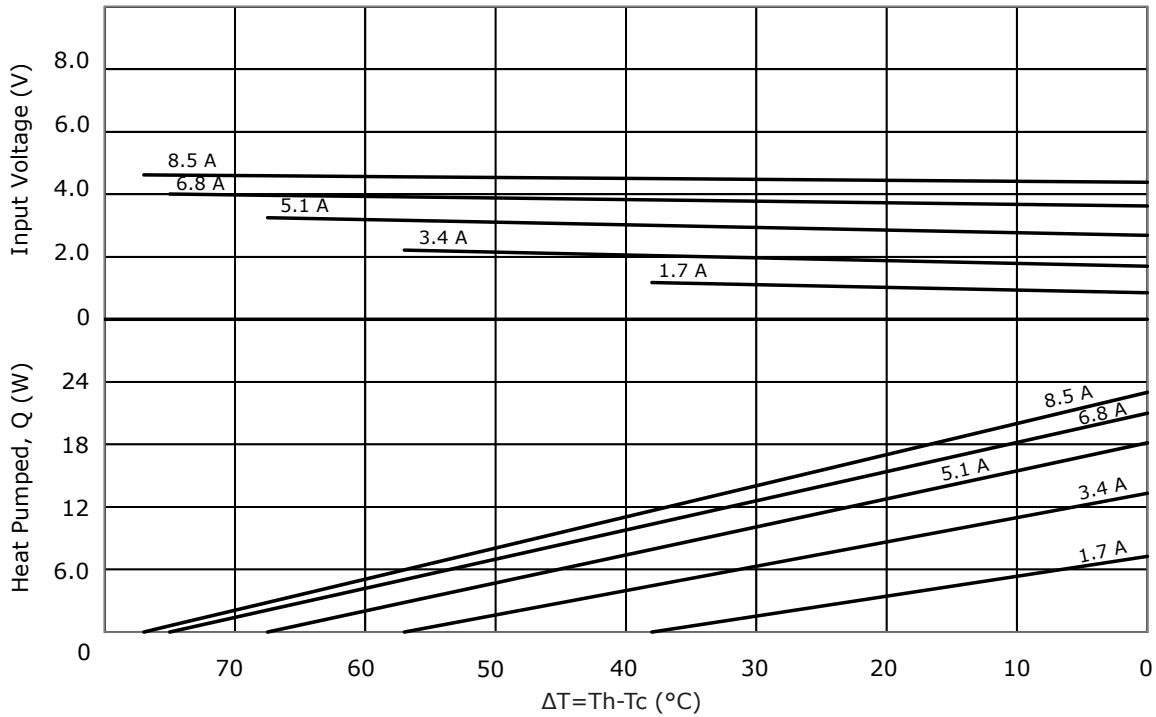
CP852040345H PERFORMANCE (Th=50°C)



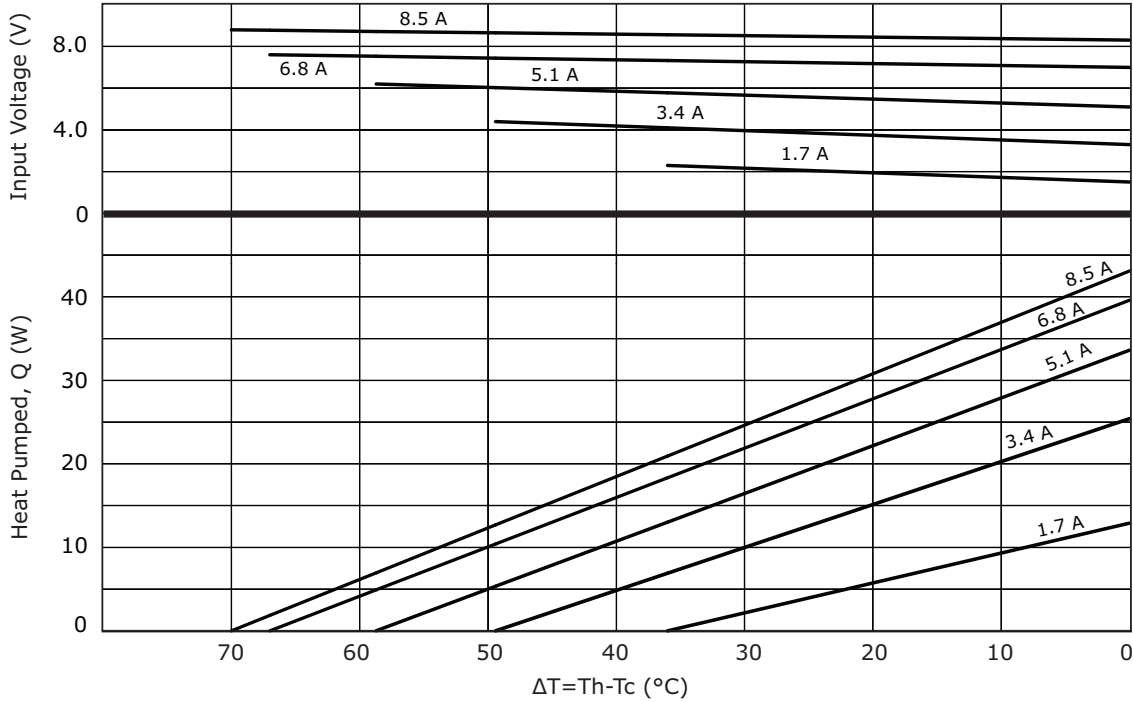
CP85301534H PERFORMANCE (Th=27°C)



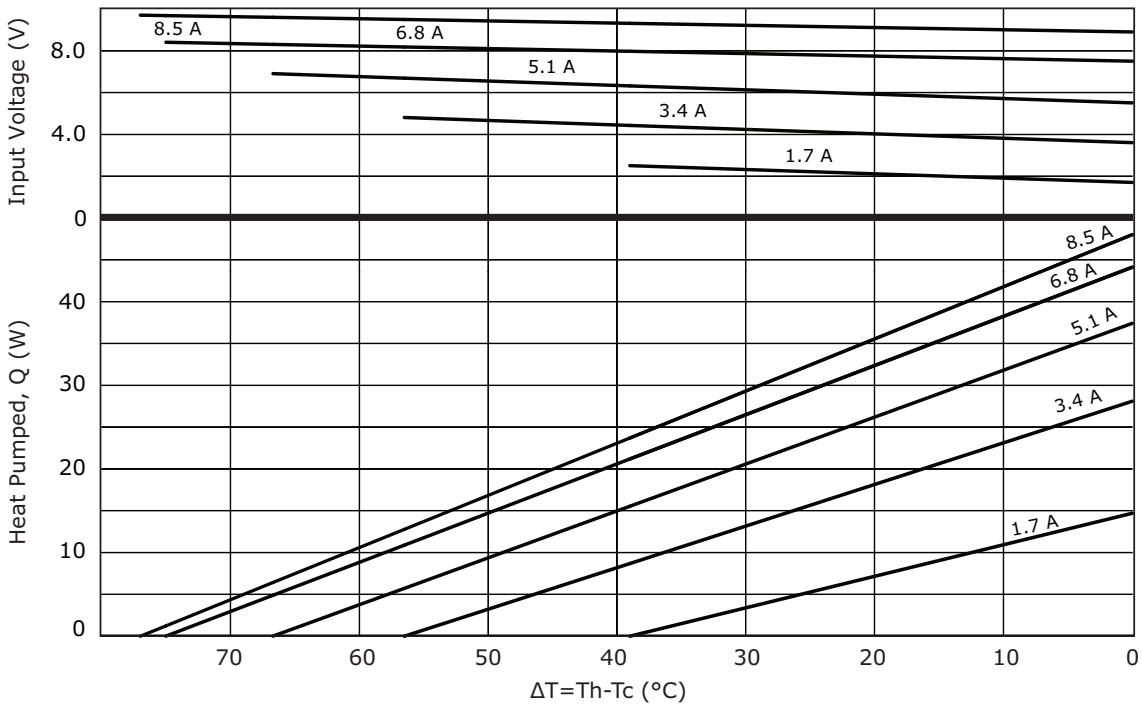
CP85301534H PERFORMANCE (Th=50°C)



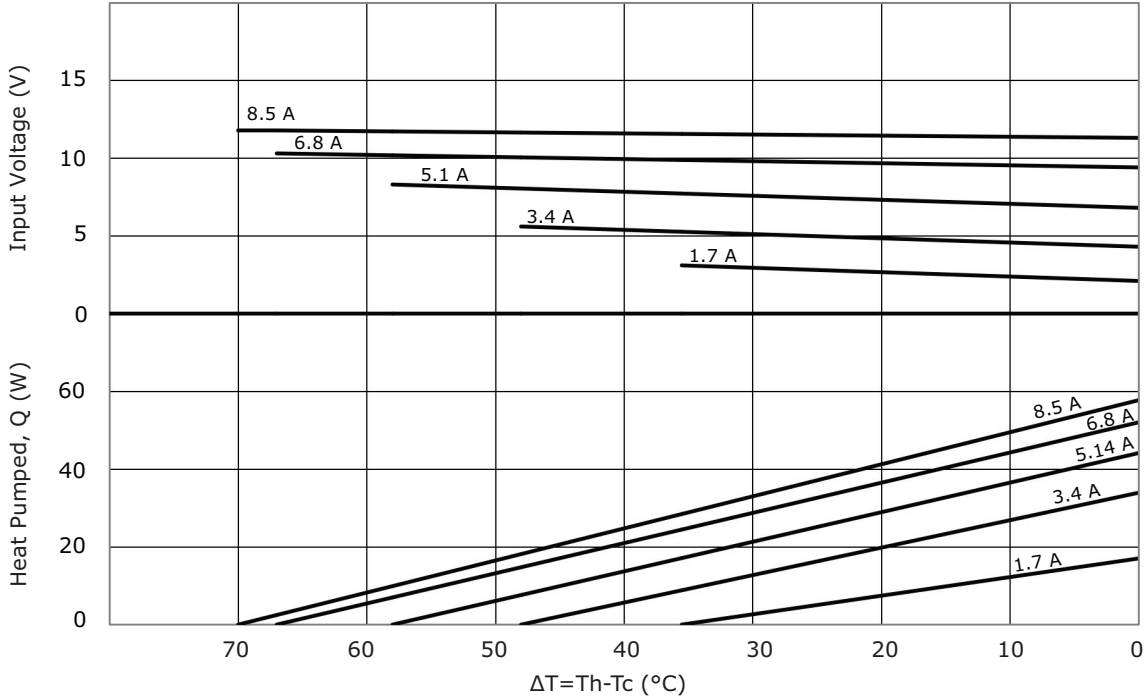
CP853345H PERFORMANCE (Th=27°C)



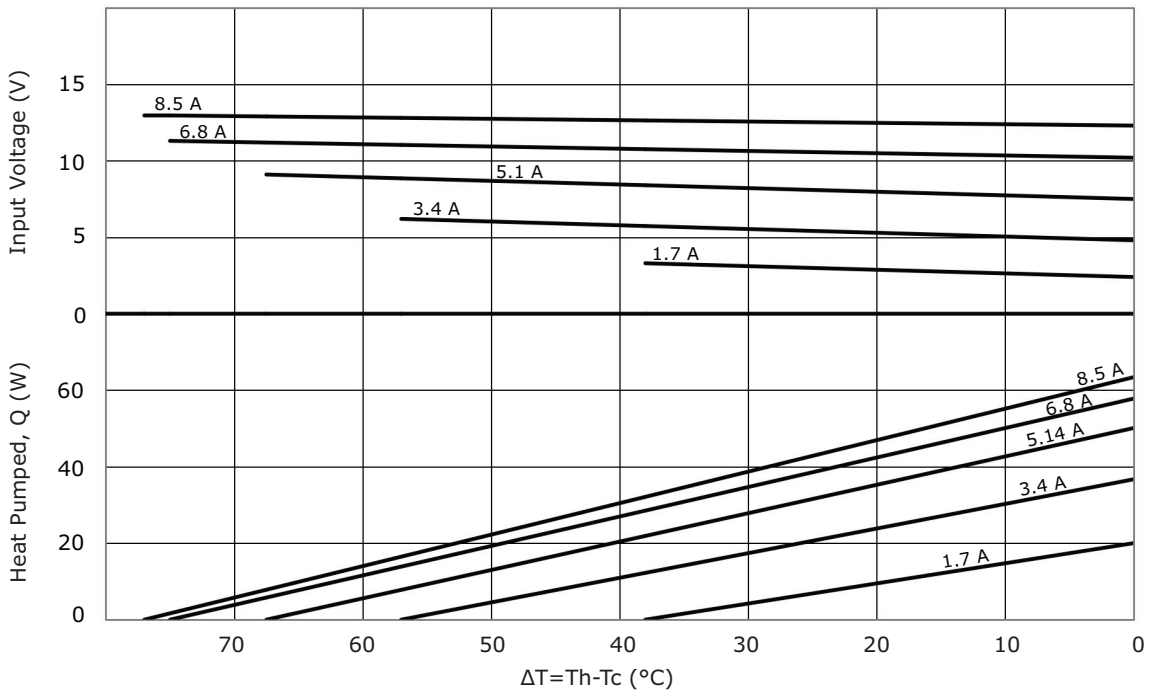
CP853345H PERFORMANCE (Th=50°C)



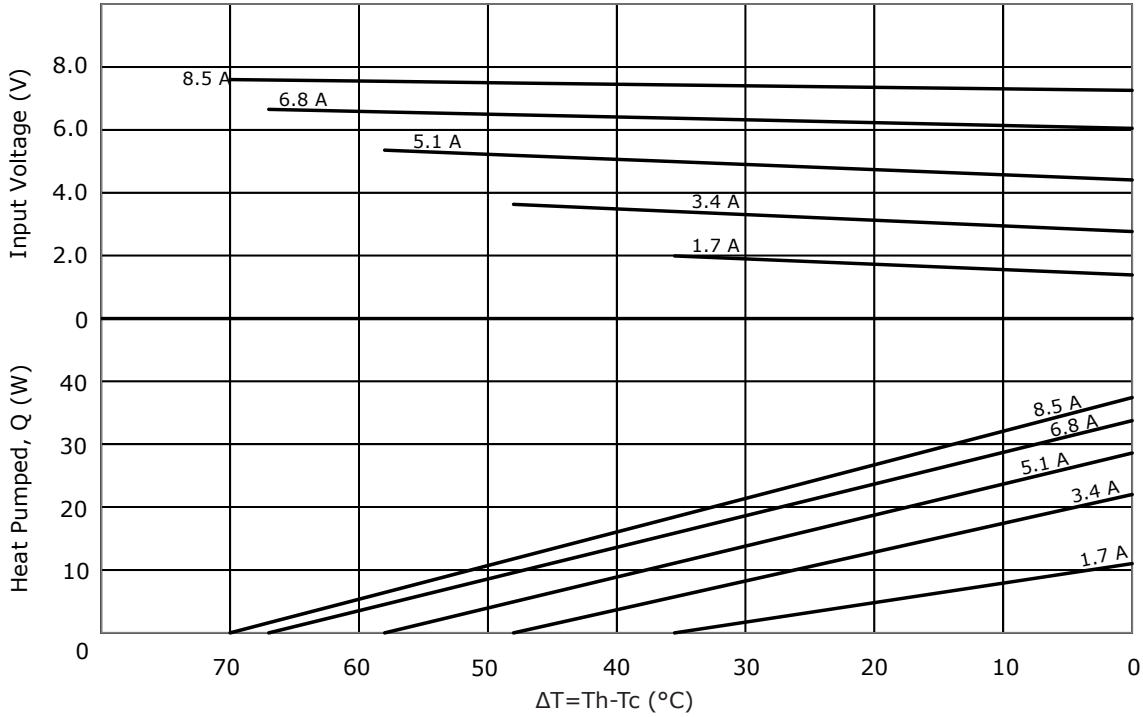
CP8530345 PERFORMANCE (Th=27°C)



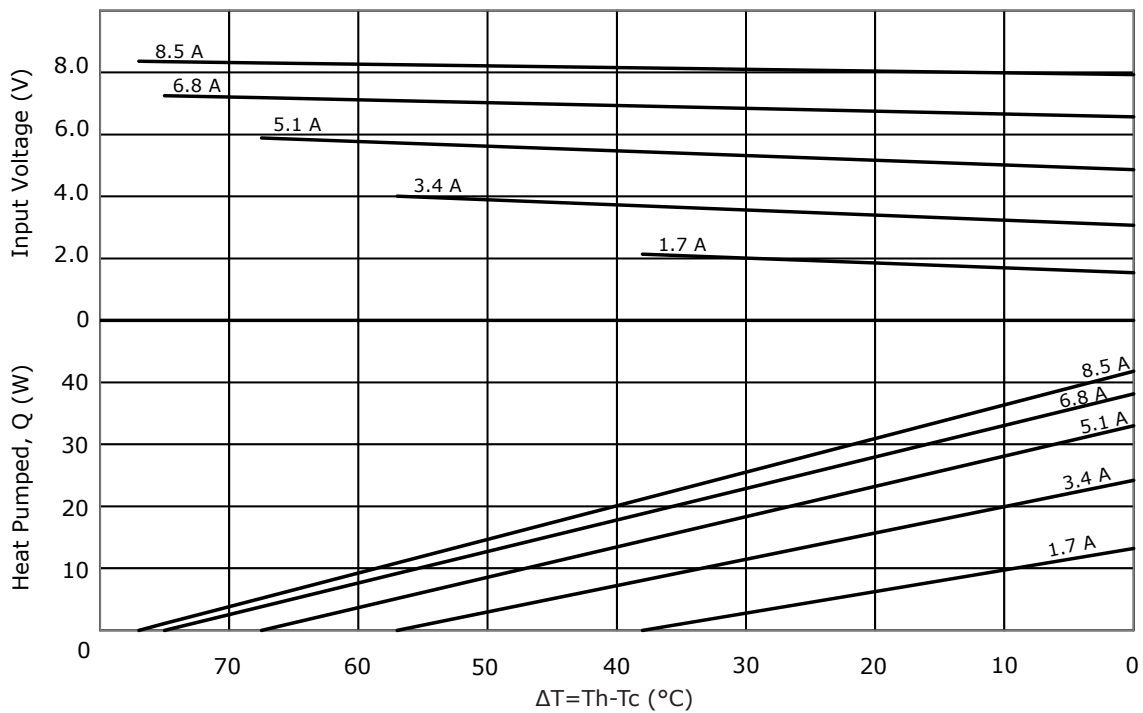
CP8530345 PERFORMANCE (Th=50°C)



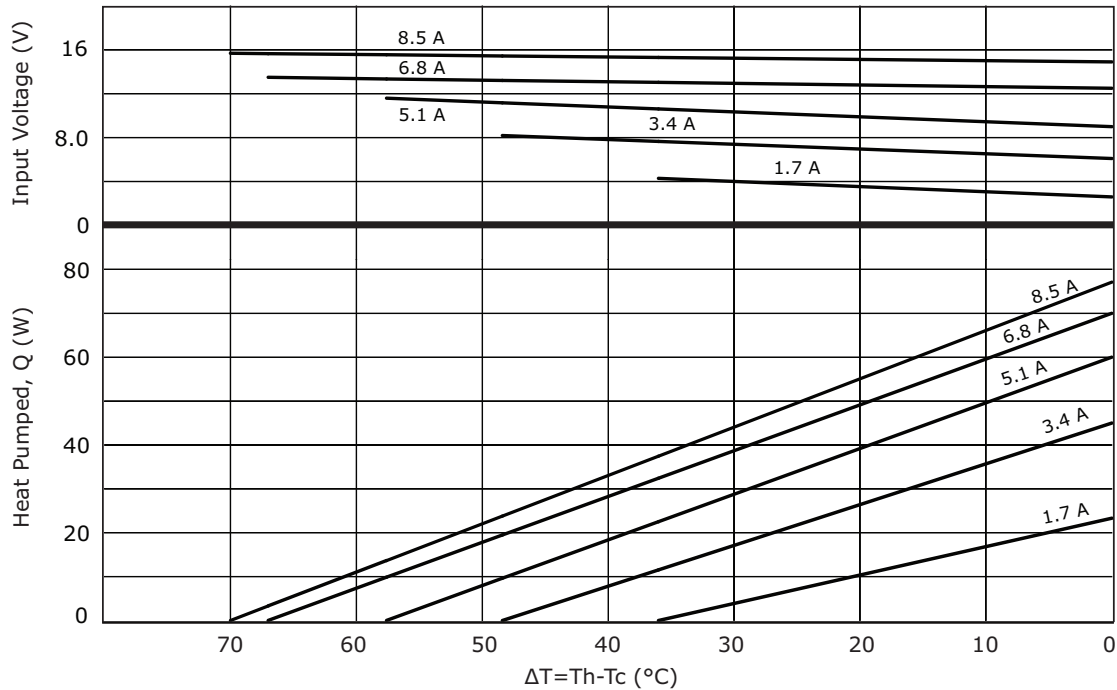
CP854020345H PERFORMANCE (Th=27°C)



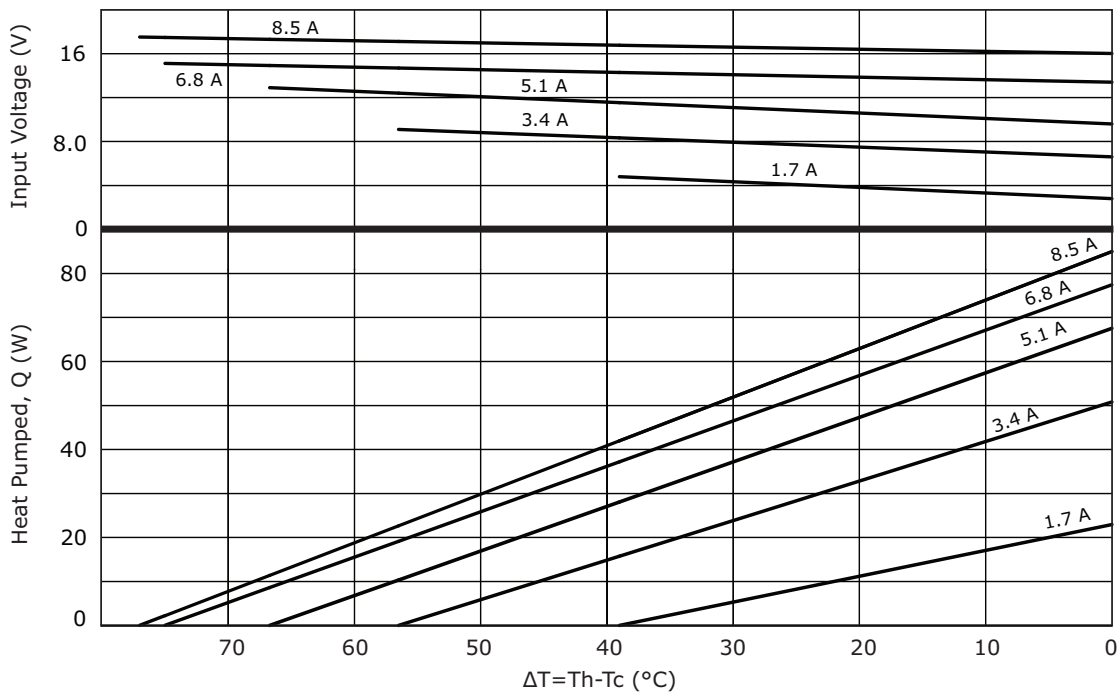
CP854020345H PERFORMANCE (Th=50°C)



CP854345H PERFORMANCE (Th=27°C)



CP854345H 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 models	05/21/2018
1.03	added model CP8530345, brand update	10/18/2019
1.04	logo, datasheet style update	08/05/2022

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



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