



**OPERATING TEMPERATURE AND AMBIENT TEMPERATURE ARE NOT THE SAME!**

90% of development- and purchasing staff got the wrong idea about the socalled operating-temperature!

Most people believe they can run a part with a specified operating temperature of +71°C at an ambient temperature of +71°C.

This supposition is fatal and "deadly".

Results are early failures, high costs for service and warranty and a bad reputation.

Operating temperature is the sum of ambient temperature the temperature generated by resistive losses (part temperature)

$$t_{\text{operating}} = t_{\text{part}} = t_{\text{ambient}} + t_{\text{losses}}$$

This means that commercial converters made in Taiwan, Hong Kong, Japan, GB, France, Germany, Switzerland, USA ect. cannot be operated at their specified burden at temperatures higher than around +40°C without the danger of failing.

But of course there are converters suitable for industrial standards.

We offer DC/DC-Converters for different temperature-ranges:

- a) Industrial temperature range from -25°C up to +71°C T ambient
- b) Automotive temperature range from -55°C up to +85°C T ambient

Serien	CMK	3W	DIP24 bis +71°C	t ambient
	CMKA	3W	DIP24 bis +85°C	t ambient
	EIW	6W	50,8x25,4x10,6mm bis +71°C	t ambient
	DIW	6W / 10W	50,8x50,8x10,6mm bis +71°C	t ambient
	DAW	6W / 10W	50,8x50,8x10,6mm bis +85°C	t ambient

**DO KEEP IN MIND:**

$$t_{\text{operating}} = t_{\text{ambient}} + t_{\text{switching+resistive losses}}$$

**DON`T MIX UP OPERATING TEMPERATURE WITH AMBIENT TEMPERATURE !**