

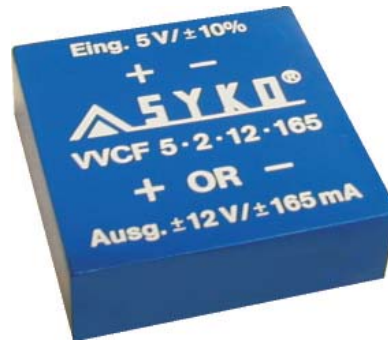
single / double output
up to 3,6 Watt

DC/DC converters
limited input voltage range



- **Input voltage range $\pm 10\%$**
- **PCB-mounting**
(Base plate with distance to the PCB [Soldering cone])
- **Up to 70°C without Derating**
- **Option -40/+85°C**
- **Input filtering C - L - C**
- **Housing 40 x 40 x 13 mm³**

for special technology, railway, building machinery



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Series VVCF

Main points:

Output:

- Regulation $\Delta U_o = U_{out} \cdot \frac{\Delta U_{in}}{U_{in}}$
 $I_{out} < \pm 10\%$
- Ripple $< 40 \text{ mV}_{pp}$
- Spikes $< 50 \text{ mV}_{pp}$
- Temperature coefficient $\pm 0,05\%/^{\circ}\text{C}$
- Not short circuit proof
- Short term 30 % over load capable

Input:

- Input voltage range $\pm 10\%$
- Input current spike filter

In general:

- Isolation test voltage 500 V_{AC} 1 min
- Ambient temperature $-25^{\circ}\text{C} / +70^{\circ}\text{C}$,
Option: $-40^{\circ}\text{C} / +85^{\circ}\text{C}$
- Storage temperature $-40^{\circ}\text{C} / +100^{\circ}\text{C}$
- Derating 2% / $^{\circ}\text{C} > 70^{\circ}\text{C}$
- Free air convection
- MTBF on request
- Weight approx. 35 g
- Housing material Noryl GV
- Housing $40,0 \times 40,0 \times 13,0 \text{ mm}^3$
- Tantalum- and multi layer capacitors

<u>U_{in}</u> V	<u>U_{out}</u> V	<u>I_{out}</u> mA	Model number	
5 $\pm 10\%$	5,1	500	VVCF 5-1-05-500	
	12	250	VVCF 5-1-12-250	
	15	200	VVCF 5-1-15-200	
	18	170	VVCF 5-1-18-170	
	± 12	± 165	VVCF 5-2-12-165	
	± 15	± 130	VVCF 5-2-15-130	
	± 18	± 110	VVCF 5-2-18-110	
	12 $\pm 10\%$	5,1	500	VVCF 12-1-05-500
		12	330	VVCF 12-1-12-330
		15	260	VVCF 12-1-15-260
18		220	VVCF 12-1-18-220	
± 12		± 165	VVCF 12-2-12-165	
± 15		± 130	VVCF 12-2-15-130	
24 $\pm 10\%$	5,1	500	VVCF 24-1-05-500	
	12	330	VVCF 24-1-12-330	
	15	260	VVCF 24-1-15-260	
	18	220	VVCF 24-1-18-220	
	± 12	± 165	VVCF 24-2-12-165	
	± 15	± 130	VVCF 24-2-15-130	
	± 18	± 110	VVCF 24-2-18-110	
	28 $\pm 10\%$	5,1	500	VVCF 28-1-05-500
		12	330	VVCF 28-1-12-330
		15	260	VVCF 28-1-15-260
18		220	VVCF 28-1-18-220	
± 12		± 165	VVCF 28-2-12-165	
± 15		± 130	VVCF 28-2-15-130	
± 18	± 110	VVCF 28-2-18-110		
VVCF (H)	-40°C up to $+85^{\circ}\text{C}$		additional charge	
Modification costs for possible changes above values			on request	

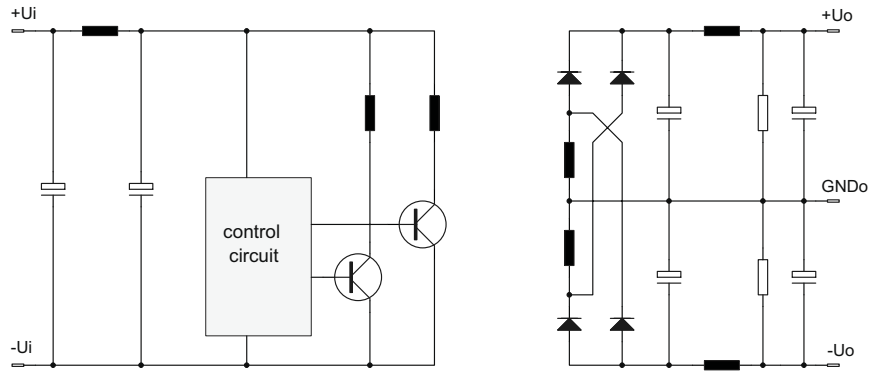
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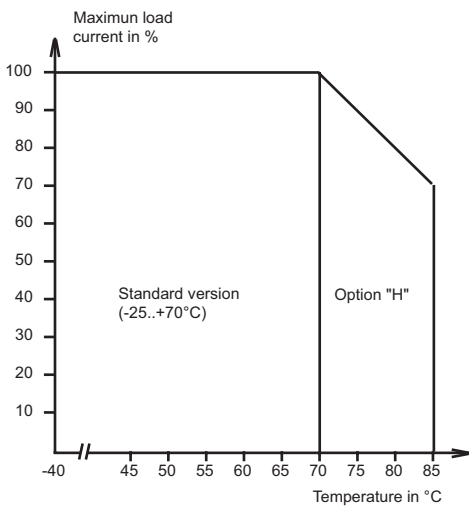
Modules of the **VVCF** series are low power converters with galvanic isolation. Input and output sided current filters (Input C-L-C, Output C-L²-C) reduce spikes.

The converter is available with single and double voltage output. At almost constant supply voltage and almost constant load this converters are used preferred as supplementary converters in series with non-isolating switching regulators and for data capturing applications.

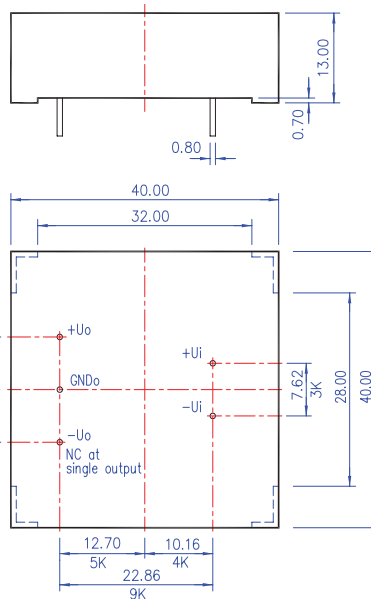


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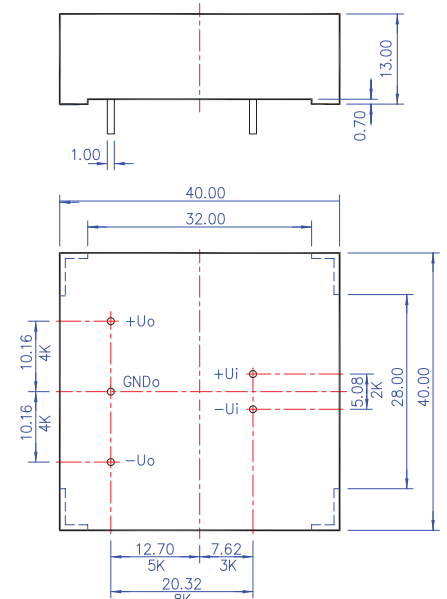
Derating-curve



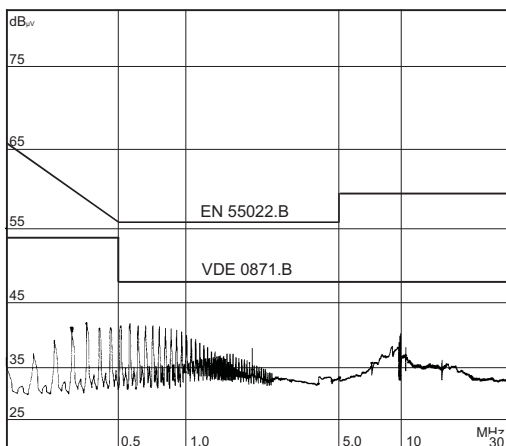
Pinning A



Pinning B



Measurement of radion interference



Application noise suppression

