

single / double output  
up to 10 Watt

DC/DC converters  
limited input voltage range



- Input voltage range  $\pm 15\%$
- 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 51 x 48 x 10 mm<sup>3</sup>

for special technology, railway, building machinery



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## Series VCF

### Main points:

#### Output:

- Regulation  $\Delta U_o = U_{out} \cdot \Delta U_{in} / U_{in}$   
 $I_{out} < \pm 10\%$
- Ripple  $< 50 \text{ mV}_{pp}$
- Spikes  $< 50 \text{ mV}_{pp}$
- Temperature coefficient  $\pm 0,06\%/^{\circ}\text{C}$
- Not short circuit proof
- Short term 30 % over load capable

#### Input:

- Input voltage range  $\pm 15\%$
- Input current spike filter

#### In general:

- Isolation test voltage 500 V<sub>AC</sub> 1 min
- Ambient temperature -25°C / +70°C,  
Option: -40°C / +85°C
- Storage temperature -40°C / +100°C
- Derating 2% / °C > 70°C
- Free air convection
- MTBF on request
- Weight approx. 45 g
- Housing material Noryl GV
- Housing 51,0 x 48,0 x 10,5 mm<sup>3</sup>
- Tantalum- and multi layer capacitors

<u>U<sub>in</sub></u> V	<u>U<sub>out</sub></u> V	<u>I<sub>out</sub></u> mA	Model number	
<b>5</b> +10/-7% 6V dyn	5,1	800	VCF 5-1-05-800	
	12	800	VCF 5-1-12-800	
	15	650	VCF 5-1-15-650	
	18	550	VCF 5-1-18-550	
	±12	±400	VCF 5-2-12-400	
	±15	±330	VCF 5-2-15-330	
	±18	±270	VCF 5-2-18-270	
	<b>12</b> ±15% 15,5V dyn	5,1	800	VCF 12-1-05-800
		12	800	VCF 12-1-12-800
		15	650	VCF 12-1-15-650
18		550	VCF 12-1-18-550	
	±12	±400	VCF 12-2-12-400	
	±15	±330	VCF 12-2-15-330	
	±18	±270	VCF 12-2-18-270	
	<b>24</b> ±15% 31V dyn	5,1	800	VCF 24-1-05-800
		12	800	VCF 24-1-12-800
		15	650	VCF 24-1-15-650
18		550	VCF 24-1-18-550	
	±12	±400	VCF 24-2-12-400	
	±15	±330	VCF 24-2-15-330	
	±18	±270	VCF 24-2-18-270	
<b>28</b> ±15% 35V dyn	5,1	800	VCF 28-1-05-800	
	12	800	VCF 28-1-12-800	
	15	650	VCF 28-1-15-650	
	18	550	VCF 28-1-18-550	
	±12	±400	VCF 28-2-12-400	
	±15	±330	VCF 28-2-15-330	
	±18	±270	VCF 28-2-18-270	
	VCF (H)	-40°C up to +85°C	additional charge	
Modification costs for possible changes above values			on request	

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up to 10 Watt

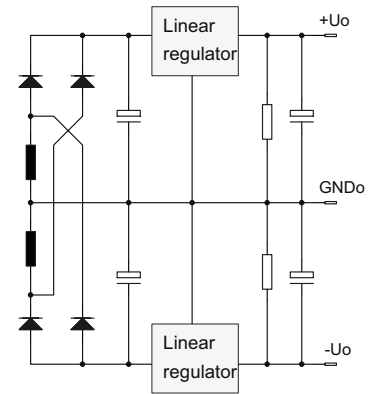
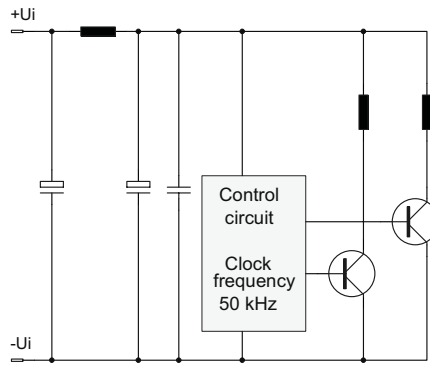
DC/DC converters  
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Modules of the **VCF** series are compulsory chopped, unregulated converters with galvanic isolation. Input and output sided current filters (Input C-L-C, Output C-L<sup>2</sup>-C) reduce the voltage ripples.

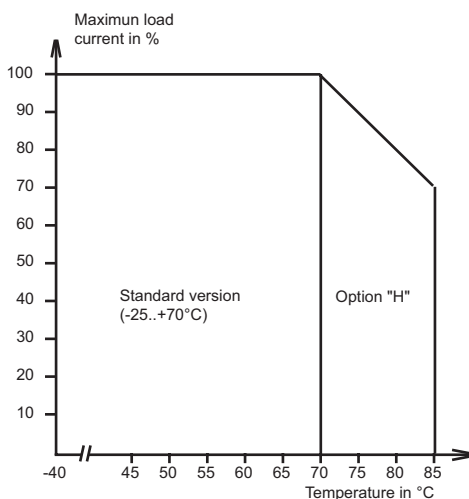
The converter is available with single and double voltage output. At almost constant supply voltage and almost constant load

this converters are used preferred as supplementary converters in series with non-isolating switching regulators and for data capturing applications.

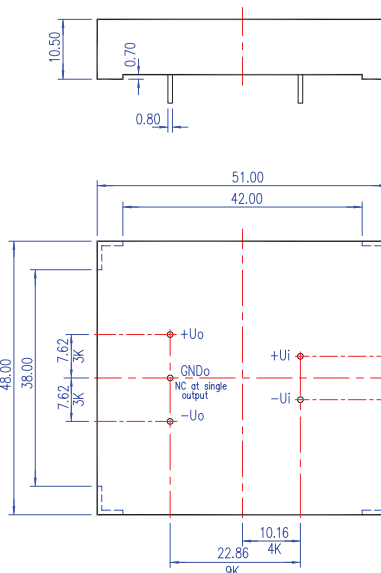


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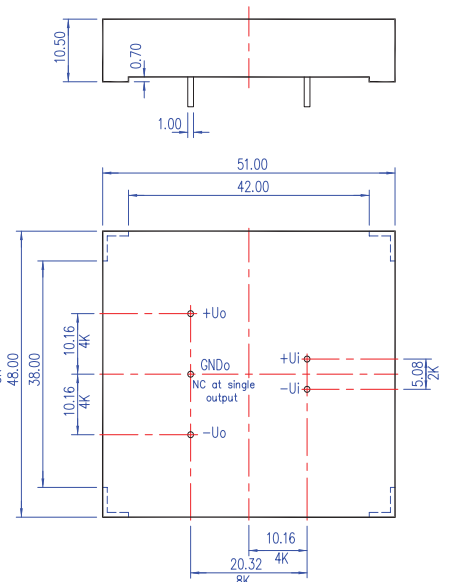
### Derating-curve



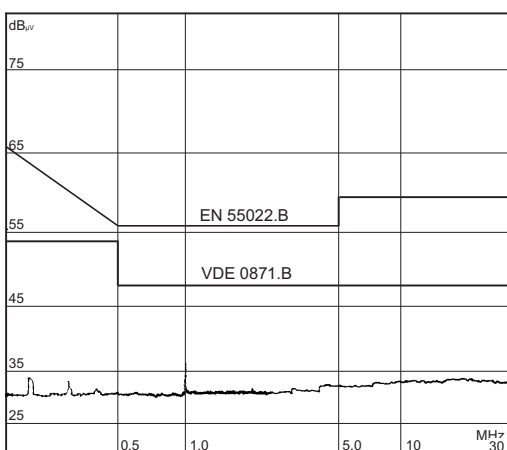
### Pinning A



### Pinning B



### Measurement of radion interference with external application



### Application noise suppression

