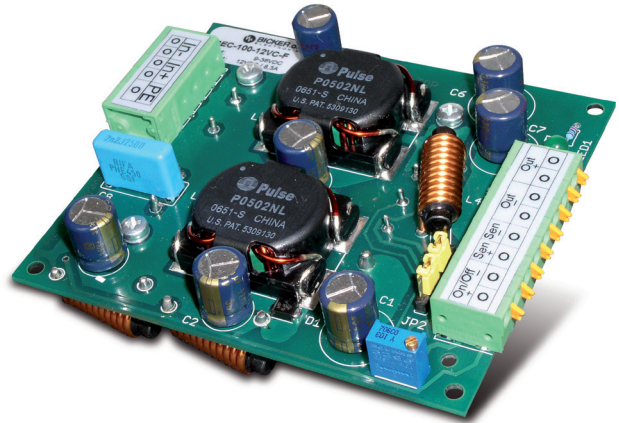


BEC-100-12VCF

100 Watt

- Operating temperature -20...+70 °C
- Compact design
- Widerange input

The compact DC/DC converter BEC-100-12VCF was designed for supplying displays for mobile applications. With its widerange input this DC/DC converter operates both in 12 V DC and 24 V DC vehicle voltages. The output voltage is galvanically isolated from the input and regulated. Cooling for the BEC-100-12VCF is done either by means of a heatsink or optionally by an extension to the casing.

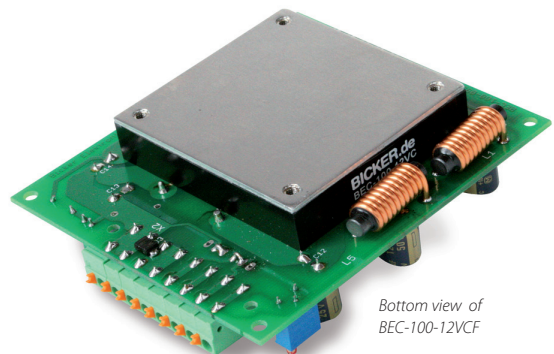


Technical data	
Input voltage	10...36 VDC
Input current	13 A max (10 VDC), 5.5 A max. (24 VDC)
Efficiency	App. 80 %
Protection	Short circuit protection: yes, auto-recovery Overtemperature protection: Switch off at app. +100 °C (chassis temperature), auto-recovery
Insulation voltage	1500 VDC Input / Output
Safety	Designed according to EN60950
Operating temperature	-20...+70 °C
Derating	Depending on ambient operating temperature, load and cooling
Cooling	For fanless operation at + 50 °C a heatsink with a thermal resistance of ≤ 2 K / W is required.
Temperature coefficient	± 0.03 % / °C
MTBF	900 000 h at +25 °C according to MIL-HDBK-217F
Storage temperature	-40...+85 °C
Operating humidity	10...90 % RH, non-condensing
Dimensions	98 x 86 x 28 mm ± 0.8 mm (without heatsink)
Weight (net)	0.15 kg

Product specific data	
Adjustable range	Output voltage ± 10 %, adjustable at R2
On / Off function	X2 PIN7,8, ON if X2 is not connected open = On / bridged = Off

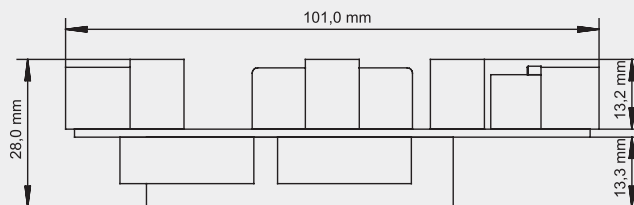
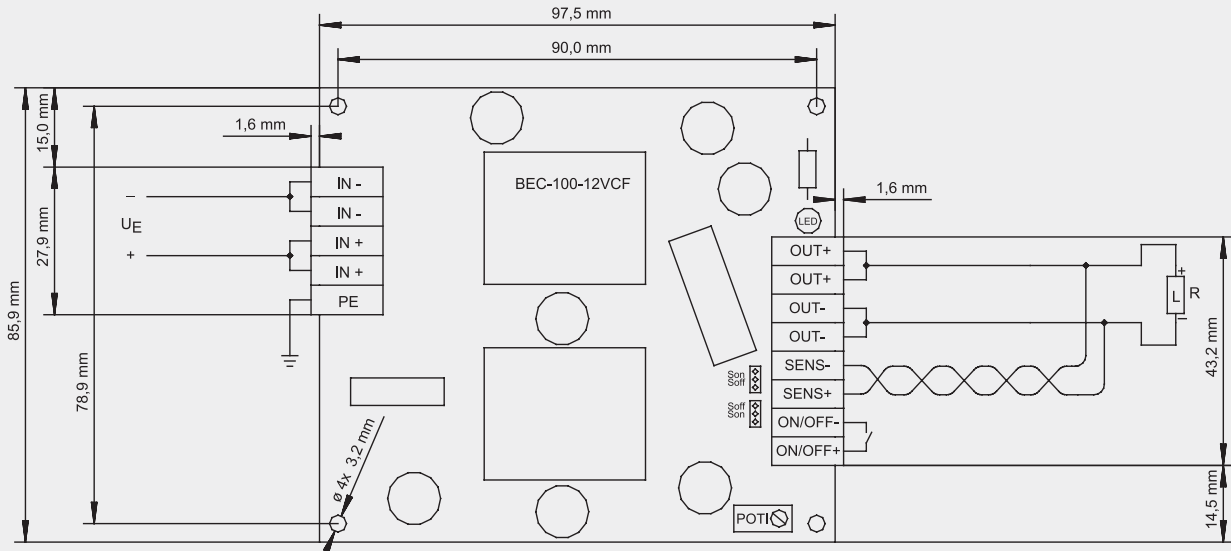
Article No.	Output voltage	Output current min	Output current max	Ripple & Noise
BEC-100-12VCF	+12 V	0 A	8.3 A	150 mV

Ripple and noise was measured by a 15 MHz bandwidth limited oscilloscope with connected 10 nF Tantalum capacitor and 1 μ F ceramic capacitor at each output.
As a power component this PSU is for assembly purposes only and must not be operated in unassembled condition. The final assembly has to comply with the valid EMC and safety standards.



Bottom view of BEC-100-12VCF

Drawing BEC-100-12VCF



X1 Input	X2 Output	Sense JP1 / JP2
1 PE / GROUND	1 Output +	12 External o
2 Input +	2 Output +	23 Internally bridged
3 Input +	3 Output -	
4 Input -	4 Output -	
5 Input -	5 Sense -	
	6 Sense +	
	7 On / Off -	
	8 On / Off +	

The sense line was factory-set to internal (off). If an external sense line is required, the wire jumper on the PCB has to be cut with a wire cutter. The length of the sense line must not exceed 300 mm and it must be twisted. It is connected directly to the supply connector of the load.

Tolerance ±0.8 mm

Specification is subject to change without notice. Errors excepted. Status as at: 09.12.2011