

DCV00081 DC-DC-Converter

Made in Germany

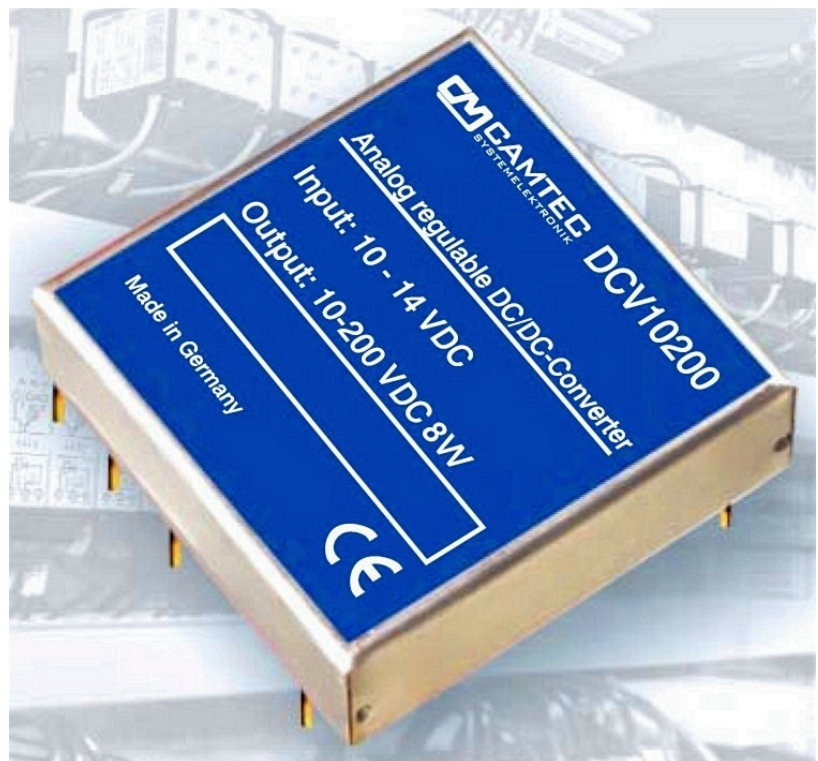
**DC-Input 18..36Vdc, 1 output, galvanic insulated
output 10-200Vdc continuous adjustable**

Short Specification:

- DC-Input 10..14Vdc
- Half Brick for print board assembling
- Solder-terminals
- Efficiency up to 81%
- Continuous short circuit protected
- Operating temperature 0°C...+65°C
- Minimum heat emission
- Free air convection
- Galvanic insulated output
- Short circuit protected
- Minimum load = 0A
- Switching frequency typ. 100kHz
- Master & slave operation modes
- Analogue voltage control input
- Output compensation sensing
- EMI/EMS EN61000-4-4, EN61000-4-5
55022 class B
- Safety : cUL60950/16950 IEC(EN)60950-1

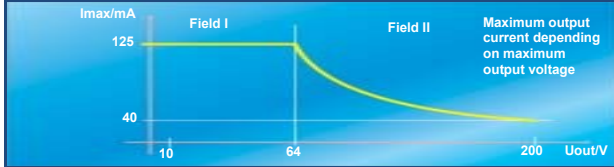
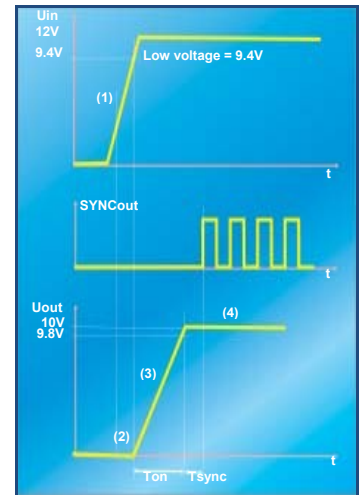
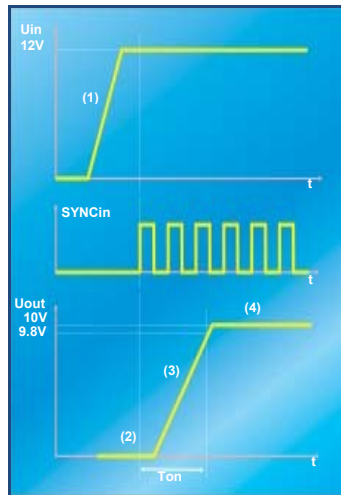
Print board solder assembling

0°C...+65°C operation



In accordance with IEC60950-1

Tolerance	± 1% Uout (10...200Vdc)
Stability Load switch	≤ ± 1% 10-100%, 100-10%
Ripple & Noise (max.)	100mVpp (20MHz)
Minimum Load	135mA ≤ 60 seconds
Efficiency	Up to 81%
Overload Protection	1,1x I _{rated} , auto recovery
Over Voltage	Protected
Low Volt. Protection	9.4V
Short Circuit	Continuous protection
Temperature Control	Yes
Soft Start	15ms typ.
Cooling	Free air convection
Ambient temperature	0°C ...+65°C (-40°C...+70°C storage)
EMI	EN55022 class B
EMS	EN50081-1,2
Safety	cUL60950/1950 (IEC)EN60950-1
Safety class 2(B)	VDE0805, VDE0100
Clearance	4mm (air & surface)
MTBF at full load	100000h at +55°C
Dimensions (HxWxD)	17x60x60mm
Weight	80g



- (1) starting DC-In (12V) and CTRL (500mV)
- (2) Stable SYNCin applied. Ton = time lag clock start / achieving 98% Uout and is 30ms at a maximum with all loads applied
- (3) control of Uout is activated by SENSE

- (1) starting DC-In (12V) and CTRL (500mV)
- (2) Softstart Uout to 10V. Start time = Uin exceeds 9.4V and achieves 98% Uout Ton = 30ms at a maximum with all loads applied
- (3) Uout = stable clock at SYNCout will be applied after Ton = 80ms max. / control of Uout is activated by SENSE

PIN 1	DC-Input	10...14Vdc, 12 Vdc typical, ≤ 1.23A rated input current, 8% of input current reflected, Input is protected
PIN 2	SYNCin	Master operation: no signal required, synchronisation from clock, no clock no output voltage
PIN 3	SYNCout	Master operation: 1 Master operates up to 3 slaves, TTL square pulse, Slave operation: no signal
PIN 4	Master/Slave	TTL level: low = master / high = slave
PIN 5	Reset	Reset over voltage protect and recover with TTL = high
PIN 6	GNDin	
PIN 7	DC-Output	10...200Vdc (10 min. / 205V max. 125mA rated current) (fixed outputs also available, example DCV00081.160 means 160Vdc fixed, etc.)
PIN 8	Sense	DC-Line Compensation 5V ±300mV
PIN 9	CTRL	Output voltage control: 500mV...10V, Uout=20xUctrl, 1mA typical (10mA maximum)
PIN 10	GNDout	

