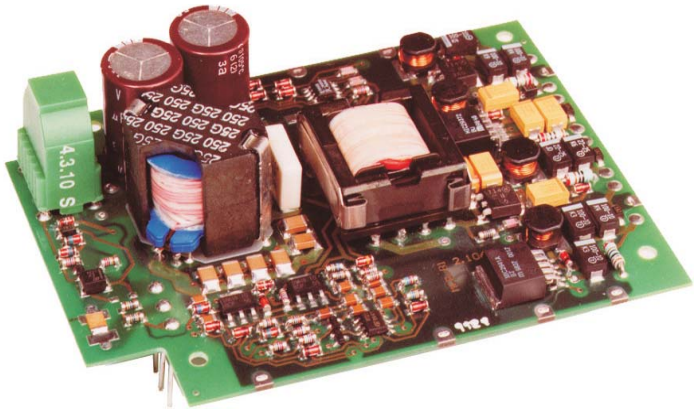
- **Input voltage range 8 - 80 V**
- **Noise suppression EN 55022.B (- 10 dB)**
- **Transienten range up to 3xU_{inmax}**
- **PCB-mountable for high shock- and vibration applications**
- **Extreme radio interference adjustable**
- **Surge- and long term-transient adjusted**
- **High and constant efficiency**
- **Independent outputs**
- **Option -40°C up to +85°C**



Series MCB.V

General:

Output:

- Accuracy absolute ± 1%
- Regulation factor $\Sigma(U_{in}+I_{out}+T_U)\pm1{,}0\%$
- Ripple <10 mV_{pp}(const. over T_U)
- Spikes <100 mV_{pp} (T 1:1/50MHz)
- Response time ΔI=50% < 100µs
- Current limiting I_{outmax}
- Dynam. und stat. short circuit proof
- On-load current limiting
- No-load-, over-load-, short circuit proof
- Over voltage protection

Input:

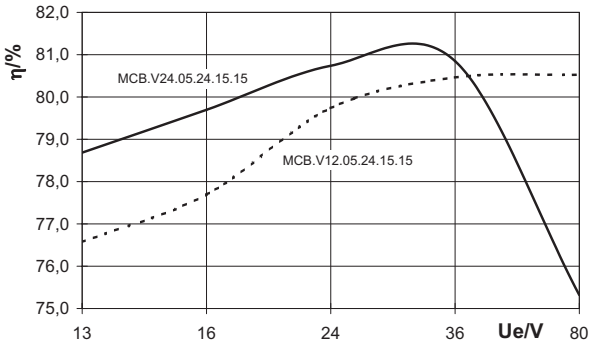
- No-load power 0,8 Watt
- Noise suppression EN 55022 B
- Transients VG 96916 Load-dump
- Regulation of defined transients
- Switch-on current limited / integral
- Inhibit: -Uin=ON/open or +Uin=OFF

General:

- Isolation test voltage Input-Output 500VAC 1 Min
- Ambient temperature -25°C / +70°C
- Option H: -40°C / +85°C
- Cooling with PCB
- MTBF: SN29500 2,5 Mio h / 40°C
- Shock / vibration annex V
- Weight approx. 110 g
- Screwable distant bolts
- Dimension: 115 x 85 x 31 mm³
- No break-through Input-Output possible

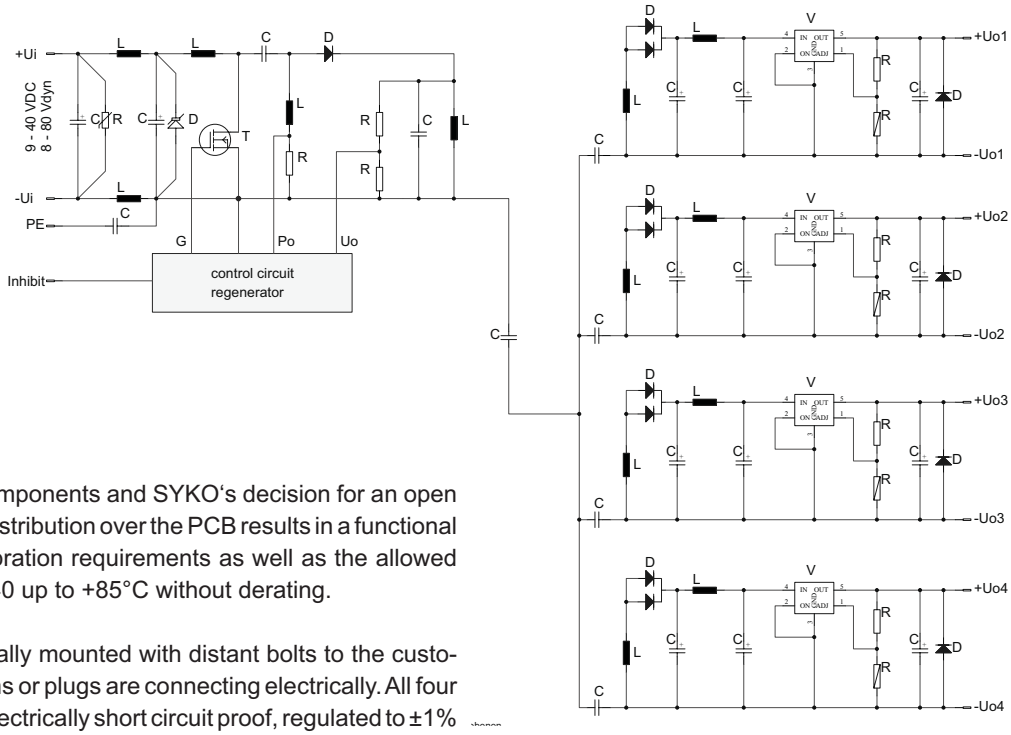
Uin V	Uout1·2 V	Uout3·4 V	Iout1·2 A	Iout3·4 A	Model-number
8 - 24	3,3·5	12·12	0,5·0,8	0,5·0,5	MCB.V 12.03.05.12.12
7-32 dyn.	5·5	12·12	1,0·0,5	0,5·0,5	MCB.V 12.05.05.12.12
	5·12	15·15	1,0·0,5	0,4·0,4	MCB.V 12.05.12.15.15
	5·24	15·15	1,0·0,3	0,4·0,4	MCB.V 12.05.24.15.15
9,5 - 36	3,3·5	12·12	0,5·0,8	0,5·0,5	MCB.V 20.03.05.12.12
8-60 dyn.	5·5	12·12	1,0·0,5	0,5·0,5	MCB.V 20.05.05.12.12
	5·12	15·15	1,0·0,5	0,4·0,4	MCB.V 20.05.12.15.15
	5·24	15·15	1,0·0,3	0,4·0,4	MCB.V 20.05.24.15.15
16 - 40	3,3·5	12·12	0,6·0,6	0,4·0,6	MCB.V 24.03.05.12.12
13-80 dyn.	5·5	12·12	1,0·0,6	0,6·0,6	MCB.V 24.05.05.12.12
	5·12	15·15	1,0·0,6	0,5·0,5	MCB.V 24.05.12.15.15
	5·24	15·15	1,0·0,4	0,4·0,4	MCB.V 24.05.24.15.15
30 - 75	3,3·5	12·12	0,6·0,6	0,4·0,6	MCB.V 50.03.05.12.12
20-80 dy.	5·5	12·12	1,0·0,6	0,6·0,6	MCB.V 50.05.05.12.12
	5·12	15·15	1,0·0,6	0,5·0,5	MCB.V 50.05.12.15.15
	5·24	15·15	1,0·0,4	0,5·0,5	MCB.V 50.05.24.15.15
(H)	-40°C up to +85°C				Additional charge
Modification costs for possible changes above values					On request

Efficiency



SYKO Gesellschaft für Leistungselektronik mbH • Phone +49(0)6182/9352-0 • Fax +49(0)6182/9352-15 • www.syko.de • email: info@syko.de

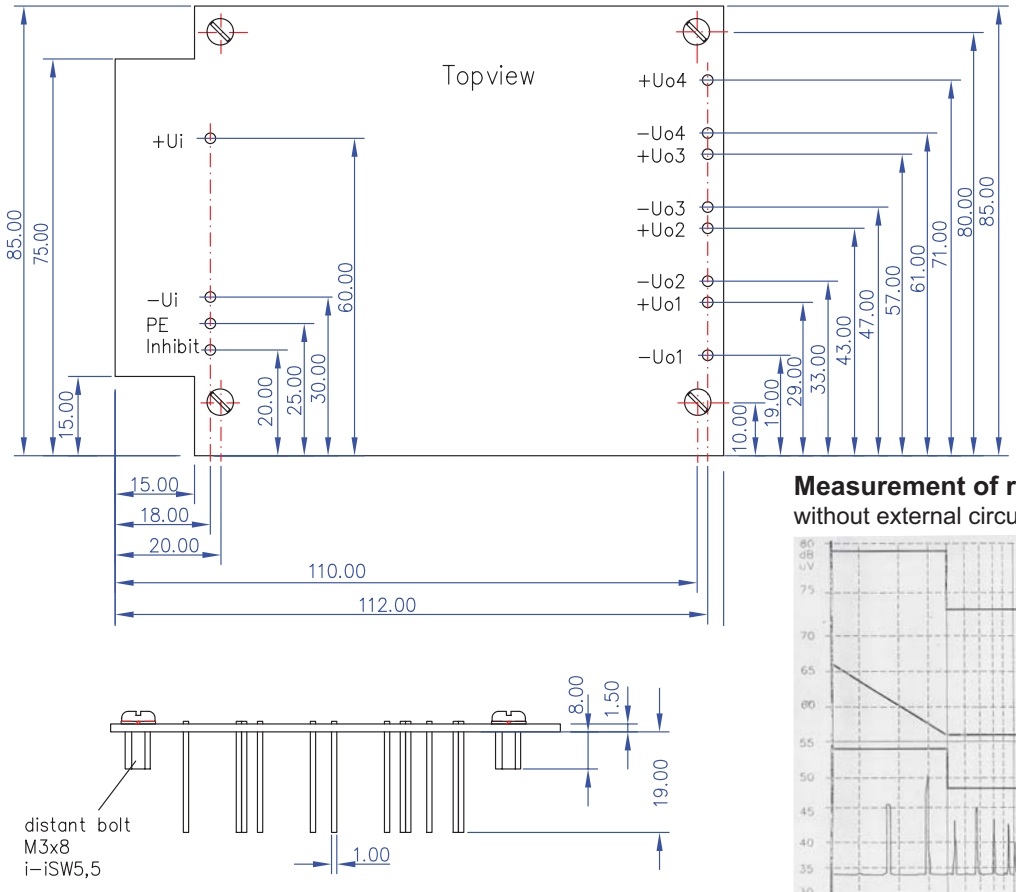
The ***MCB.V*** series has been developed for mobile applications in cars, trucks, ships, railway and special application systems. This 30 (20) Watt DC/DC converter can deal with long term transients up to 80V with a one-step topology which is based on the - from SYKO developed and international patented - Regenerator-topology.



The 96%-share of SMD-components and SYKO's decision for an open design with a special heat distribution over the PCB results in a functional reliability for high shock/vibration requirements as well as the allowed ambient temperatures of -40 up to +85°C without derating.

The converter is mechanically mounted with distant bolts to the customers PCB and soldering pins or plugs are connecting electrically. All four outputs are thermally and electrically short circuit proof, regulated to ±1% and have no inter-circuit interference from no-load up to short circuit.

The primary sided power limitation allows controlled run-up currents and the topology-depending low input capacity reduces the inrush current to a minimum in time and value. The converter is noise suppressed in accordance to the EN 55022.B and deals with disturbances in accordance to the EN 61000-4-4/5 with level 4 (pre-switched Varistores / Transzorb diodes), deals with the DIN 7637 part 1 / 2 / 3 as well as with load dumps or the VG 96916 50V / 50ms and 70V / 2ms.



Application
for pre-filter on request reverse polarity protection, transient protection, hold-up time

Measurement of radio interference
without external circuit