- **Euro card 3U / 8 TE**
- **8TE front panel (Option)**
- **Remote control (inhibit)**
- **Over voltage protection**
- **Input noise suppression EN 55022.B**
- **Input / output spike filter**
- **Wide input voltage range**
- **Shock/vibration acc. to EN 50155**
- **Active transient protection filter**
  (SYKO-Patent no. 3804074 and 0402367)

for
- Railway
- Special technology
- Industrial applications

Series RAB5.U

Main points:

Output:

- Regulation $\Sigma(U_{in}+I_{out}+T_U)<\pm1,5\%$
- Accuracy absolute ± 1%
- Ripple <20 mV_{pp} over T_U
- Spikes <100 mV_{pp} (T 1:1/50MHz)
- Response time $\Delta I=50\% \leq 1ms$
- Constant current limitation < 1,2 $I_{o\,max}$
- Output spike filter
- No-load, over load, short circuit proof
- Sense lines for load compensation FP/FM
- Over voltage protection (logic)
- Power fail PF

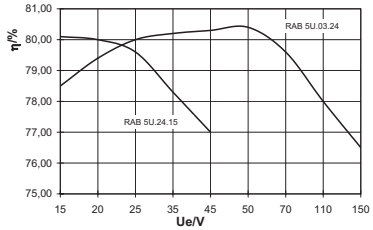
Input:

- Stand-by power approx. 3 Watt
- ON-OFF-application (inhibit)
- On-Off switch and time hysteresis at under voltage
- Low input capacity
- Input filter acc. to EN 55022.B
- Disturbance strength:
  EN 61000-4-4 (level 3) Burst
  EN 61000-4-5 (level 3) Surge
  Option: RIA 12 A-L
- Rev. polarity protection (fuse/square diode)
- Emergency fuse

In general:

- Connector DIN 41612, style H15
- Topology-Cascading
- Clock frequency 100 kHz
- Isolation test voltage 1,5 KV_{AC} 1 min
- Ambient temperature -25°C / +70°C
  Option: -40°C/+85°C Derating 1%/°C >70°C
- Noise suppression EN 55022.B
- MTBF typ. >1 Mio h (SN29500 40°C)
- Shock/vibration acc. to EN 50155
- Weight approx. 700g
- CE-conformity on request
- Limit temperature on KK-✱: 95°C

Efficiency



Uin	Pout	Uout	Iout	(Iout)	Model
V	W	V	A	(A)	number
				(without VG)	
8 - 38	**40**	5,1	8,0	(12,0)	RAB5.U 20·05·080 VG
50V50ms		12	3,3	(5,0)	RAB5.U 20·12·033 VG
70V2ms		15	2,7	(4,0)	RAB5.U 20·15·027 VG
VG 96 916 T5		24	1,7	(2,5)	RAB5.U 20·24·017 VG
ISO 7637 T1/3					
14,4 - 38	**60**	5,1	12,0		RAB5.U24·05·120
surge proof		12	5,0		RAB5.U24·12·050
1 kV / 2Ω		15	4,0		RAB5.U24·15·040
1,8 kV / 5Ω		24	2,5		RAB5.U24·24·025
14,4 - 158	**50**	5,1	10,0		RAB5.U03·05·100
surge proof		12	4,2		RAB5.U03·12·042
1 kV / 2Ω		15	3,3		RAB5.U03·15·033
1,8 kV / 5Ω		24	2,1		RAB5.U03·24·021
19 - 80	**60**	5,1	12,0		RAB5.U50·05·120
surge proof		12	5,0		RAB5.U50·12·050
1 kV / 2Ω		15	4,0		RAB5.U50·15·040
1,8 kV / 5Ω		24	2,5		RAB5.U50·24·025
45 - 158	**60**	5,1	12,0		RAB5.U10·05·120
surge proof		12	5,0		RAB5.U10·12·050
1 kV / 2Ω		15	4,0		RAB5.U10·15·040
1,8 kV / 5Ω		24	2,5		RAB5.U10·24·025

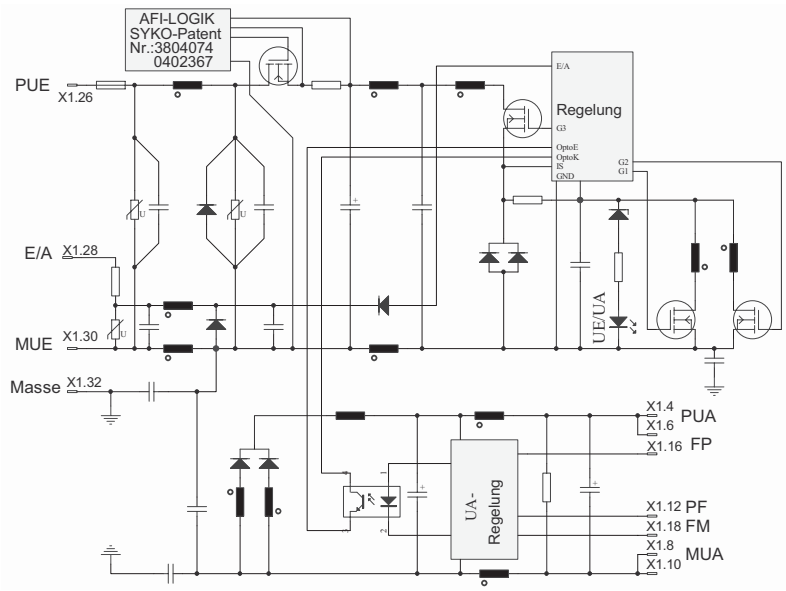
RAB 5U (H) -40°C up to +85°C additional charge

Modification costs of possible changes above values: on request

Stand: 02/07

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 ***RAB5.U*** series with an output power up to 60 W is developed for mobile applications and high operational reliability. The converter's stand-by mode (inhibit-function) requires a current consumption of just typically 3 mA, which is ideal for the use in battery networks.

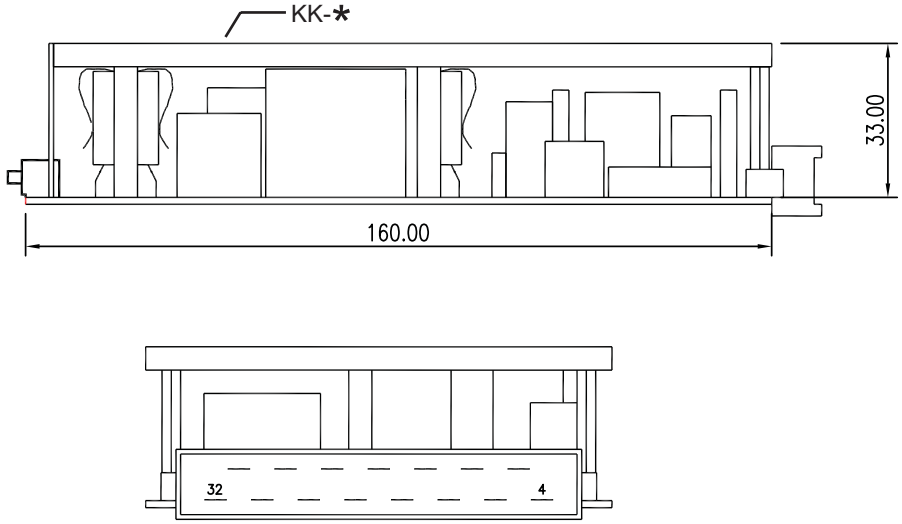


The ultra-wide input voltage range of >1:10 allows the use on weak and transient flawed networks and the global use in all international mobile on-board networks. The mechanically stable and ordered build up can be used in mobile applications with high shock/vibration requirements (special vehicles, short distance traffic, railway).

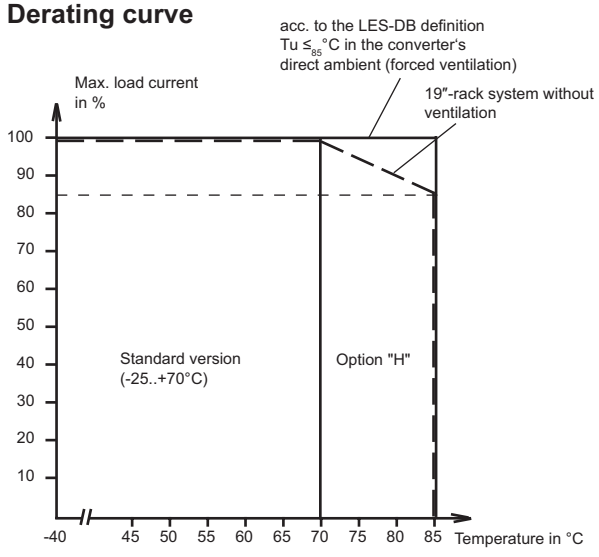
The functionality is secured in the whole operational range up to limit values based on the chosen components, filters, security circuits, dynamical and statically current limitation and over voltage protection. An active transient protection filter prevents dynamical inrush currents and transients and absorbs them.

Pin assignment

+Uo	4/6
-Uo	8/10
PF	12
+sense	16
- sense	18
+Ui	26
inhibit	28
-Ui	30
Ground	32



Derating curve



Measurement of radio interference