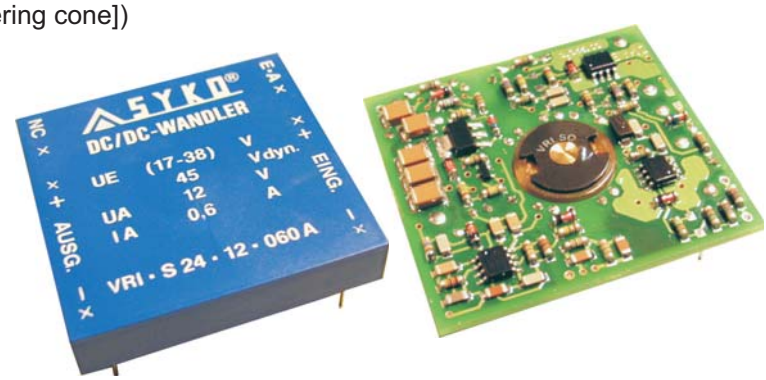
- **Input voltage range up to 1:5**
- **PCB-mountable**
  (Base plate with distance to the PCB [Soldering cone])
- **Flange mounting (Option)**
- **Input C-L²-C-Filter**
- **Test voltage 4 KV_{AC}(Option)**
- **NEW: 8 - 38 V**
  45 - 190 V
  14,4 - 45 V

for Telecommunications / Automotive applications / Industrial applications / Railway applications



Series VRI ·S
VRI ·SO ***(NEW: open build-up)***

Main Points:

Output:

- Accuracy absolute ± 1%
- Regulation factor $\Sigma(U_{in}+I_{out}+T_U)$ <±1,5%
- Ripple <40 mV_{pp}
- Spikes <50 mV_{pp} (T 1:1/50MHz)
- Response time ΔI=50% ≤ 300 µs
- Current limiting < 1,2 I_{outmax} (except 1))
- Output spike filter
- No-load-, over-load-, short circuit proof

Input:

- ON-OFF-application (A-Pinning)(Inhibit)
- Input-current-spike filter
- Noise suppression (see Application)

General:

- Isolation test voltage 500 V_{AC} 1 Min, Option: 4 KV_{AC} (power reduction)
- Ambient temperature -25°C / +70°C, Option H: -40°C / +85°C
- Derating 2% / °C > 70°C
- Convection cooled
- MTBF On request
- Weight approx. 55g
- Housing material: Noryl GV
- Dimension: 50,8 x 48 x 10,5 mm³
- Tantalum and multiple-layer-capacitors used
- Constant ripple over T_U

- Other standard pin-assignments On request

Uin V		Uout V	Iout mA	Model-number	
9 - 35		5,1	1000	VRI·S 20·05·100	
8-38V dyn		12	500	VRI·S 20·12·050	
		15	400	VRI·S 20·15·040	
7 - 18		5,1	1200	VRI·S 12·05·120	
22V dyn		12	500	VRI·S 12·12·050	
		15	400	VRI·S 12·15·040	
		24	250	VRI·S 12·24·025	
		48	150	VRI·S 12·48·015	1) 2)
17 - 38		5,1	1500	VRI·S 24·05·150	
45V dyn		5,1	2000	VRI·S 24·05·200	2)
14,4-38/45	3)	12	600	VRI·S 24·12·060	
Max. load 80%		12	1000	VRI·S 24·12·100	2)
option		15	500	VRI·S 24·15·050	
		15	800	VRI·S 24·15·080	2)
		24	300	VRI·S 24·24·030	
		48	200	VRI·S 24·48·020	1) 2)
36 - 76		5,1	1500	VRI·S 48·05·150	
85V dyn		5,1	2000	VRI·S 48·05·200	2)
	3)	12	600	VRI·S 48·12·060	
		12	1000	VRI·S 48·12·100	2)
		15	500	VRI·S 48·15·050	
		15	800	VRI·S 48·15·080	2)
		24	300	VRI·S 48·24·030	
		48	200	VRI·S 48·48·020	1) 2)
45 - 158		5,1	800	VRI·S 10·05·080	
190V dyn		12	500	VRI·S 10·12·050	
(only A-Pinning)		15	400	VRI·S 10·15·040	

(H) -40°C up to +85°C Additional charge

Modification costs for possible changes above values: on request

1) Hight: 11,6 mm 2) Derating 2%/°C >60°C, 1%/°C >70°C

3) 14,4 - 38 V / 45 V dyn. VRI.S 23.XX.XXX (80% Iout) available on request

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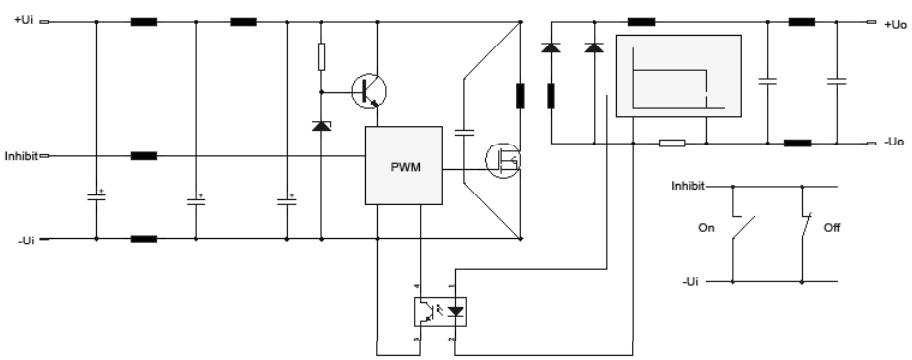
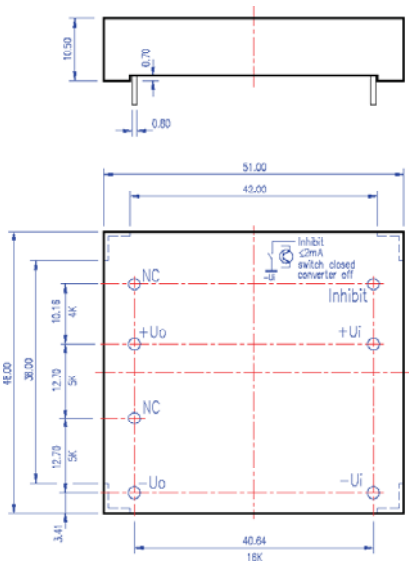
Modules of the ***VRI.S*** series are ideal for the use in industrial and battery networks because of the wide input voltage range and the high efficiency.

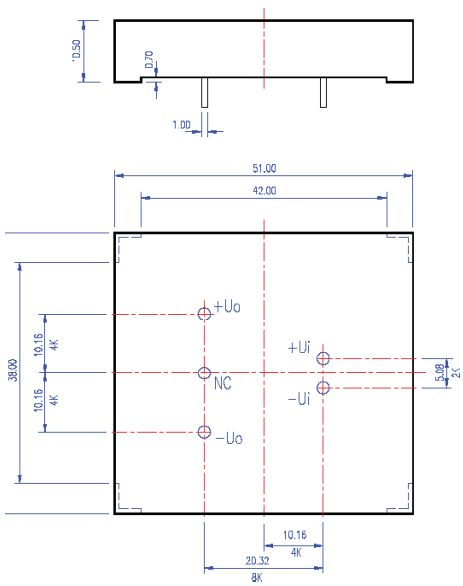


The converter‘s behaviour is controlled in all operational situations because of the used complex switching technology. This includes the no-load and the short circuit situation. The proportional high share of SMD-components and special tantalum- / multiple-layer capacitors lead to a converter‘s high functional live and reliability security. Optionally a special transformer body realises a high isolation voltage between input and output. With a special technology an isolation test voltage of 4kV AC (1 min) can be connected (Pinning B / potted).

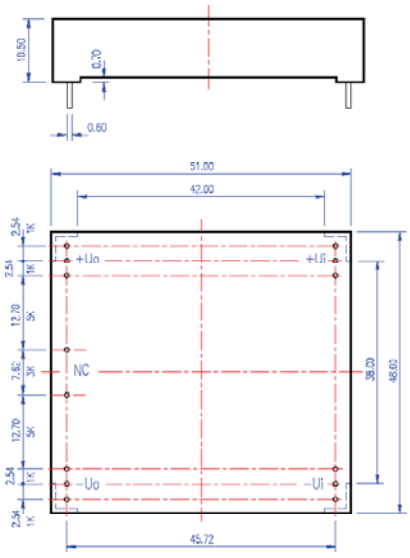
Pinning A



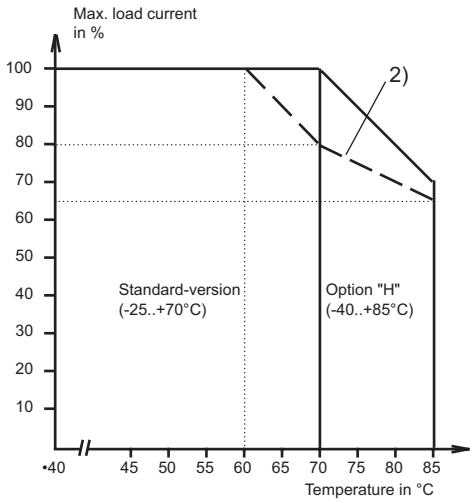
Pinning B



Pinning D



Derating-curve



Application Noise suppression / Disturbances