

double / triple output
up to 10 Watt

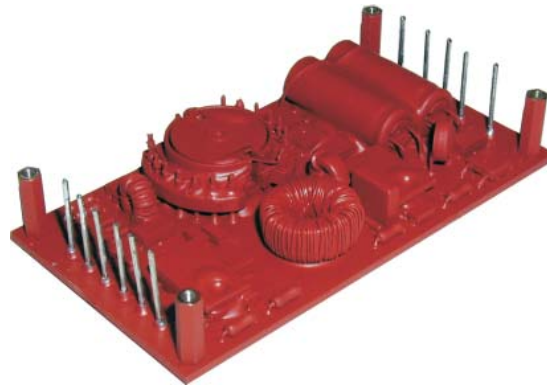
DC/DC converters
with isolation



- Input voltage range > 10:1
- PCB-mountable
Distant bolts for screw-mounting
- Open build-up (for thermal stress)
- Over voltage protection (Logic)
- Input current filter C-L-C
- Output spike filter C-L²-C
- -40/+85°C (Option)
- Dyn. and stat. short circuit proof

for Railway applications, Automotive applications, Special technology

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Series DRI - B/T

Main Points:

Output:

- Accuracy absolute $\pm 1\%$
- Regulation factor $\Sigma(U_{in} + I_{out} + T_U) < \pm 1,5\%$
- Ripple < 2 mV_{rms} (const. over T_U)
- Spikes < 60 mV_{pp} (T 1:1/50MHz)
- Response time $\Delta I = 50\% \leq 50 \mu s$
- Current limiting < 1,2 I_{outmax}
- No intercircuit interference
- No-load-, over-load-, short circuit proof
- Outputs isolated in-between each other

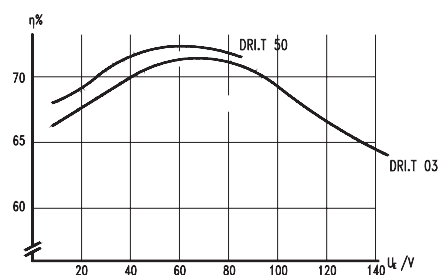
Input:

- No-load power 1,2 Watt
- ON-OFF-application (Inhibit)
- Input current filter C - L - C
- Chopper capacitors for I_{rms} at T_{Umax}
- On-load current limiting
- Do not use without application circuit
- Noise suppression (see application)

General:

- Over voltage protection
- Isolation test voltage 1,5kV_{AC} 1 Min,
- Ambient temperature -25°C / +70°C,
Option H: -40°C / +85°C
- Derating 1,5%/°C > 60°C
- Convection cooled
- MTBF On request
- Shock/vibration see annex V
- Weight approx. 75 g
- Dimension: 95 x 51 x 18 mm³

Efficiency:



<u>U_{in}</u> V	<u>U_{out}</u> V	<u>I_{out}</u> A	Model- number
triple output			
14,4 - 85	5,1 ±12	1,2 ±0,1	DRI-T 50-05-12-12-010
	24 ±5	0,25 ±0,15	DRI-T 50-24-05-025-015
14,4 - 158 190V dyn.	5,1 ±12	1,2 ±0,1	DRI-T 03-05-12-12-010
	24 ±5	0,25 ±0,15	DRI-T 03-24-05-025-015
double output			
14,4 - 85	5,1 12	1,2 0,2	DRI-B 50-05-12-12-020
14,4 - 158 190V dyn.	5,1 15	1,0 0,3	DRI-B 03-05-15-10-030
single output			
On request: single output 14,4 - 158V			Uout: 12 / 15 / 24V
(H) -40°C up to +85°C			Additional charge
Modification costs for possible changes above values			On request

Stand: 08/07

The **DRI.T** series has been designed for the universal use in railway / rolling stock applications.

The input voltage range of 14,4 - 158V / 190 V dyn. allows the universal supply of all battery-networks from 24V up to 110V with the logistic advance, not necessarily having to ask what input voltage is available.

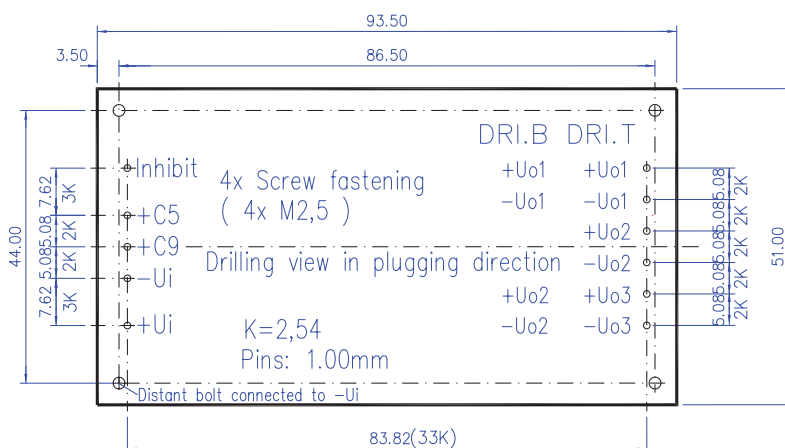
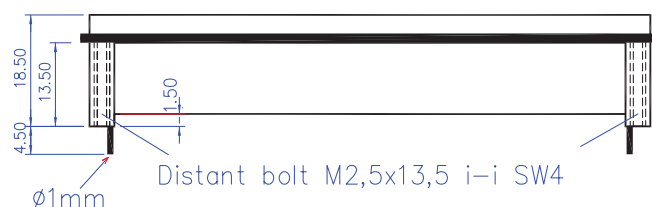
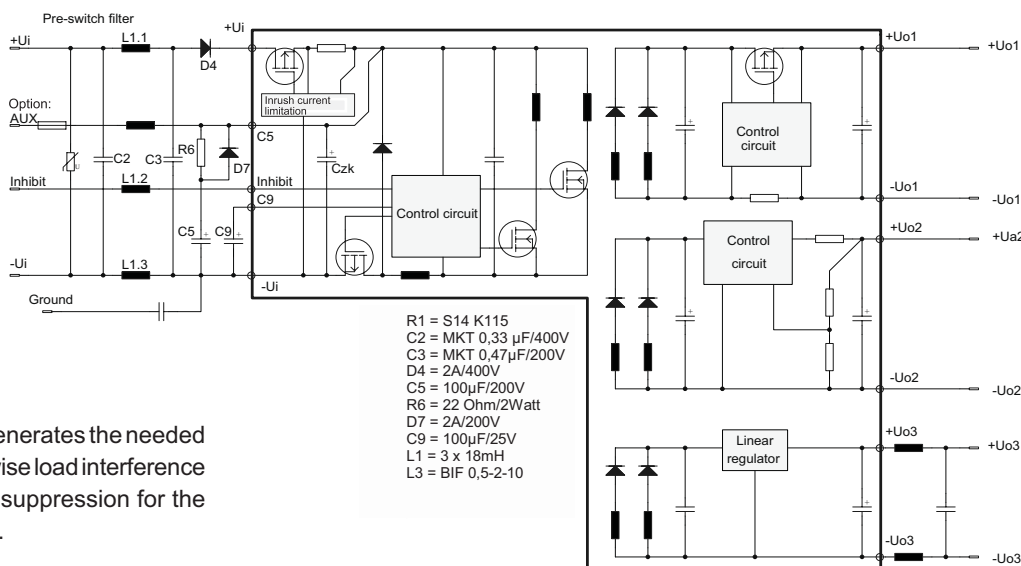
The switching circuit concept generates the needed outputs voltages without crosswise load interference and realises a optimum noise suppression for the complete system (application).

The open build-up guarantees a high level of functionality security. Four distant bolts are optimal for the use in high shock/vibration applied applications.

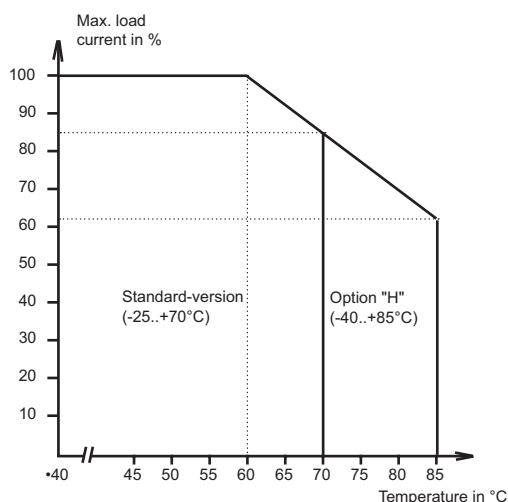
A patented circuit from SYKO limits the inrush current to CzK. This prevents the fuse's early aging and limits over voltages. On the additional pin C9 the converter can be switched on delayed (necessary to charge CzK) and the additional storage time-capacitor C5 will be charged high resistive over R6. Over D7 this capacitor gives the hold-up-energy in accordance to the standard EN 50155 S2 from the minimum input voltage.

An inhibit-function (ON-OFF) is existing as a converter's remote control. Outputs which are used outside the system (Uout3) should be filtered and protected (see application).

A transient free AUX-voltage can be put at your disposal optionally.



Derating-curve



Measurement of radio interference without application circuit

