

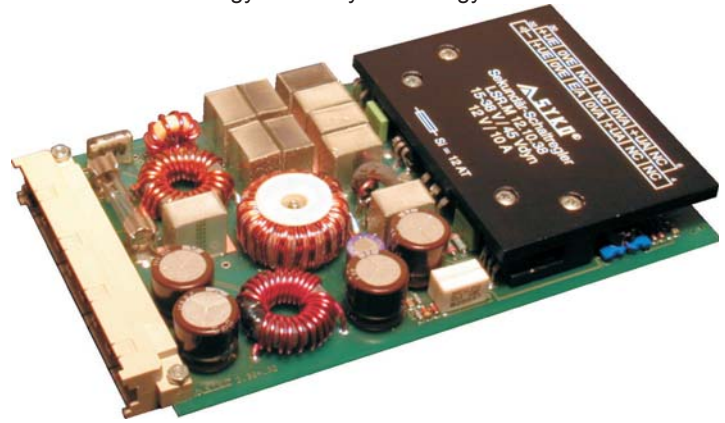
single output
up to 150 Watt

Switching Regulators
without isolation



- Euro-card 3U / 5TE (-front panel)
- Extreme input voltage range
- Output adjustable (Poti, only LSR-L)
- Limited parallel operation
- Over voltage protection (Thyristor)
- Dyn. und stat. short circuit proof
- Noise suppression better than EN 55022.B

for Telecommunication / Vehicle applications /
Installation technology / Railway technology



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Series LSR-M

Main points:

Output:

- Accuracy absolute $\pm 2\%$
- Regulation $\Sigma(U_{in} + I_{out} + T_{U}) < \pm 2\%$
- Ripple $< 20 \text{ mV}_{\text{rms}}$ over T_U
- Spikes $< 60 \text{ mV}_{\text{rms}}$ (T 1:1/50MHz)
- Response time $\Delta I=50\% \leq 500 \mu\text{s}$
- Short circuit current $\leq 1,2 I_{o \text{ max}}$
- Output spike filter (C - L² - C)
- Over voltage protection $1,2 U_{o \text{ max}}$ (Thyr.)

Input:

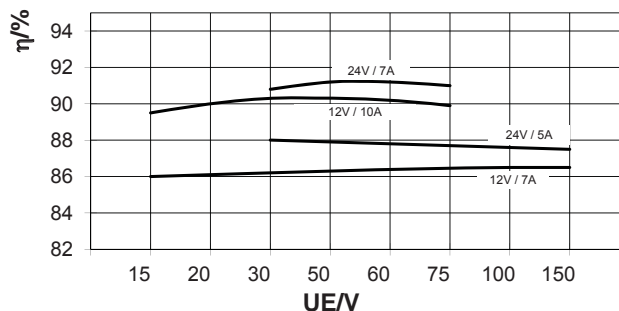
- Wide input voltage range
- Input fuse on PCB
- Input reverse polarity protection (fuse)
- Input filter acc. to EN 55022.B
- ON-OFF-control (Inhibit)
- No external application circuit necessary
- with ground connection (EMC)

General:

- 15-pol. connector DIN41612 (style H)
- Pin-compatible to series LSR-V
- Ambient temperature $-25^\circ\text{C} / +70^\circ\text{C}$,
Option: $-40^\circ\text{C} / +85^\circ\text{C}$
- Derating $2\% / ^\circ\text{C} > 65^\circ\text{C}$
- Free air convection
- Common 0V input-output
- MTBF on request
- Shock/vibration acc. to EN 50155
- Weight approx. 380 g

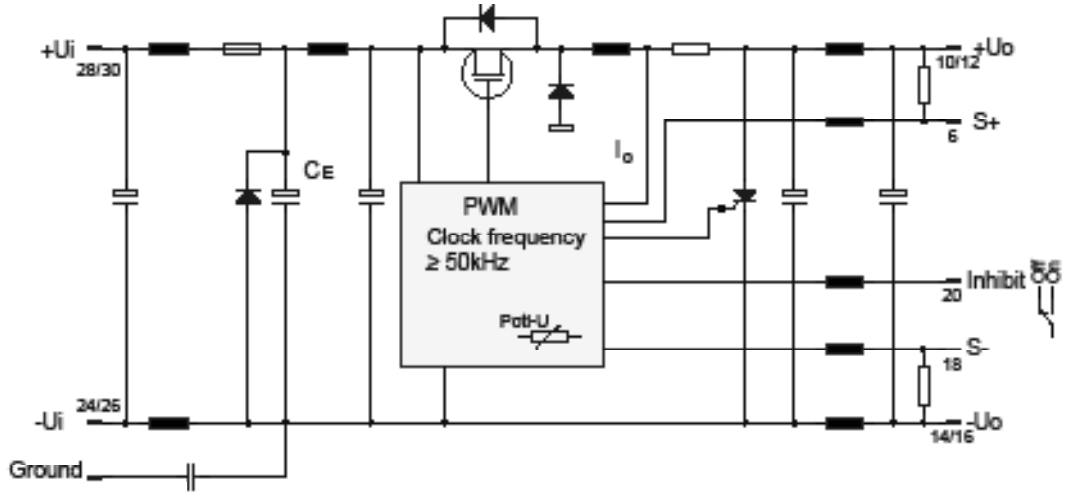
<u>U_{in}</u> V	<u>U_{out}</u> A	<u>I_{out}</u> A	Model number
15 - 38 45V dyn.	12	7,0	LSR-M 12-07-38
	12	10,0	LSR-M 12-10-38
18 - 42 45V dyn.	15	7,0	LSR-M 15-07-42
	15	10,0	LSR-M 15-10-42
15 - 76	5,1	10,0	LSR-M 05-10-76
15 - 76	12	10,0	LSR-M 12-10-76
18 - 76	15	8,0	LSR-M 15-08-76
28 - 76	24	7,0	LSR-M 24-07-76
22 - 76	24	10,0	LSR-M 24-10-76 ¹⁾
15 - 158	5,1	7,0	LSR-M 05-07-15
15 - 158	12	7,0	LSR-M 12-07-15
18 - 158	15	6,0	LSR-M 15-06-15
28 - 158	24	5,0	LSR-M 24-05-15
(H)	-40°C up to +85°C		Additional charge
Modification costs for possible changes above values			on request
1) on request			

Efficiency:



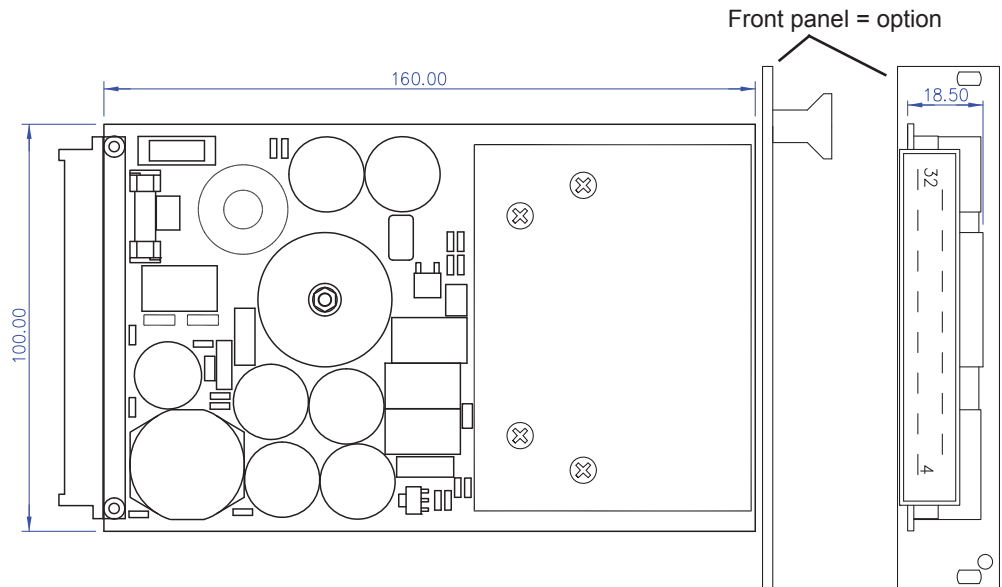
The **LSR.M** series has been developed for higher industrial requirements as high power converters without isolation. These switching regulators are also usable for mobile applications.

The converter's complex input and output filtering actions reduce the disturbances to a system suitable level. The extreme high efficiency is constant over the input voltage range and the secured functionality in all operational situations ensure a constant quality and a high operational reliability.

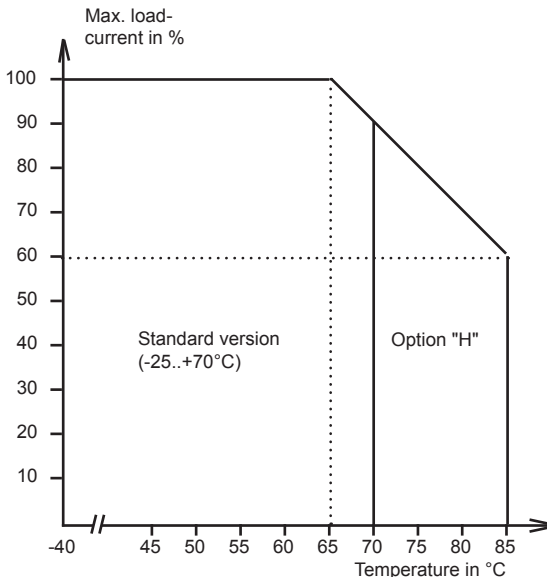


Pin-assignment

Funct.	LSR·M
+Ui	28/30
-Ui	24/26
Ground	32
Inhibit	20
+Uo	10/12
-Uo	14/16



Derating curve



Measurement of radio interference
without external noise suppression

