

single output
up to 1,5 Watt

DC/DC converters
with isolation



- Input voltage range up to > 1:5
- High potential isolation up to 2,5kV_{AC}
- PCB mountable
open build up, not potted
- ON-OFF-application / Inhibit (option)
- Input filter
- Low no-load current

for Telecommunications / Automotive applications /
Industrial applications / Railway applications



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Series MRI - U

Main Points:

Output:

- Accuracy absolute $\pm 2\%$
- Regulation factor $\Sigma(U_{in} + I_{out} + T_U) < \pm 2\%$
- Ripple 40 mV_{pp}
- Spikes typically 100 mV_{pp} (100 KHz)
- Response time $\Delta I = 50\% \leq 250$ [50] μs
- Short circuit current limiting
- Output 20% dyn. overload applicable
- No-load-, over-load protected
- Option: unsymmetrical outputs
- Outputs isolated

Input:

- ON-OFF-function (option)
- Input-current-filter
- Noise suppression (application)
- Low no-load current

General:

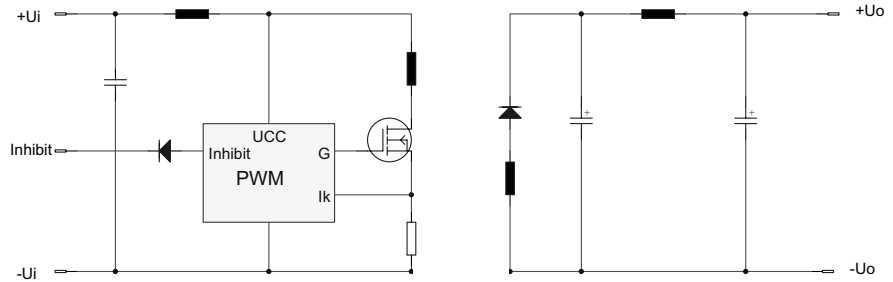
- Isolation test voltage 2500 V_{AC} 1 Min
- Ambient temperature -25°C / +70°C,
Option H: -40°C / +85°C
- Derating 1%/°C >60°C
- Convection cooled
- Weight approx. 14 g
- Dimension 33 x 20 x 20 mm³
- Constant ripple over T_U

- Other standard pin-assignments
On request

<u>U_{in}</u> V	<u>U_{out}</u> V	<u>I_{out}</u> mA	Model- number
9 - 16 8-27V dyn	5,1	200	MRI-U 12-05-200
	12	100	MRI-U 12-12-100
	15	80	MRI-U 12-15-080
	24	50	MRI-U 12-24-050
9 - 35 8-42V dyn	5,1	200	MRI-U 20-05-200
	12	100	MRI-U 20-12-100
	15	80	MRI-U 20-15-080
	24	50	MRI-U 20-24-050
25 - 85 135V dyn.	5,1	200	MRI-U 60-05-200
	12	100	MRI-U 60-12-100
	15	80	MRI-U 60-15-080
	24	50	MRI-U 60-24-050
(H)	-40°C up to +85°C		Additional charge
Modification costs for possible changes above values			on request

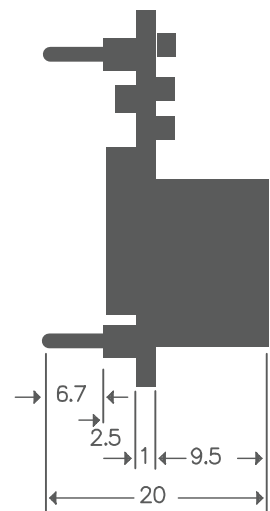
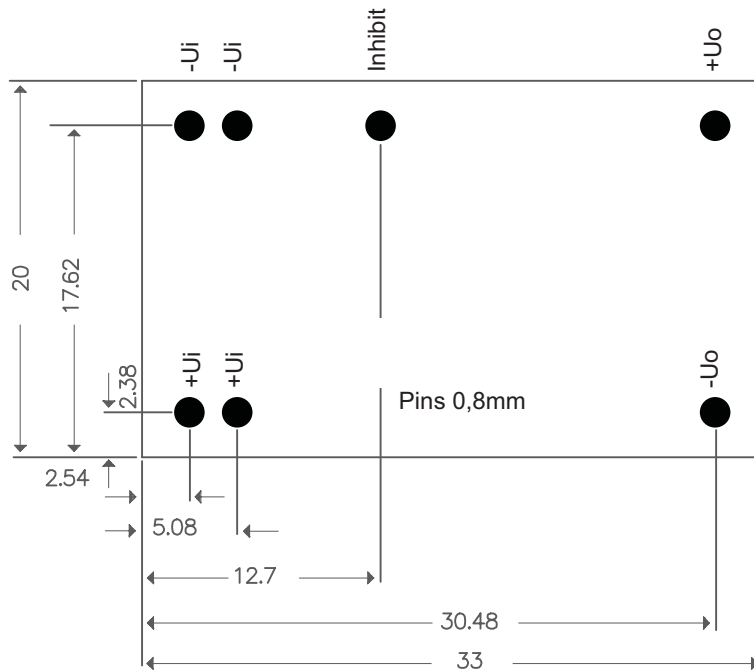
Modules from the **MRI.U** series are ideal for the use with long supply cables in industrial and battery networks because of the wide input voltage range and the high efficiency at low loads.

The converter's behaviour is controlled in all operational situations because of the used switching technology. This includes the no-load and the short circuit situation. Special effort was put in the realisation of low no-load currents. The proportional high share of SMD-components and special tantalum / multiple-layer capacitors lead to a converter's high functional life. The high component compactness has been improved by the use of multilayer-PCBs and the output sided ripples as well as the spikes have been reduced.

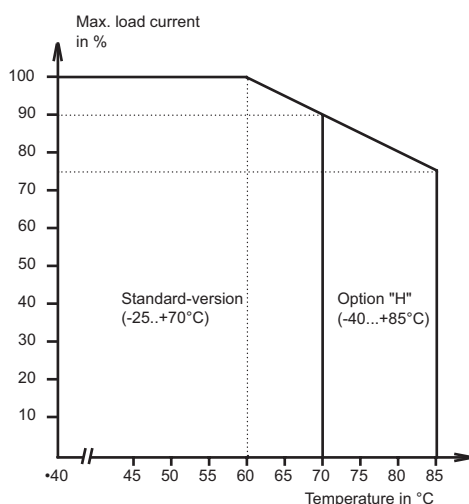


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Top view



Derating-curve



Application Noise suppression/EMC

