

## DCDC Converter F100 48V/24V/5A

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This type of DCDC converter is designed to be used in the industry.

### **FEATURES:**

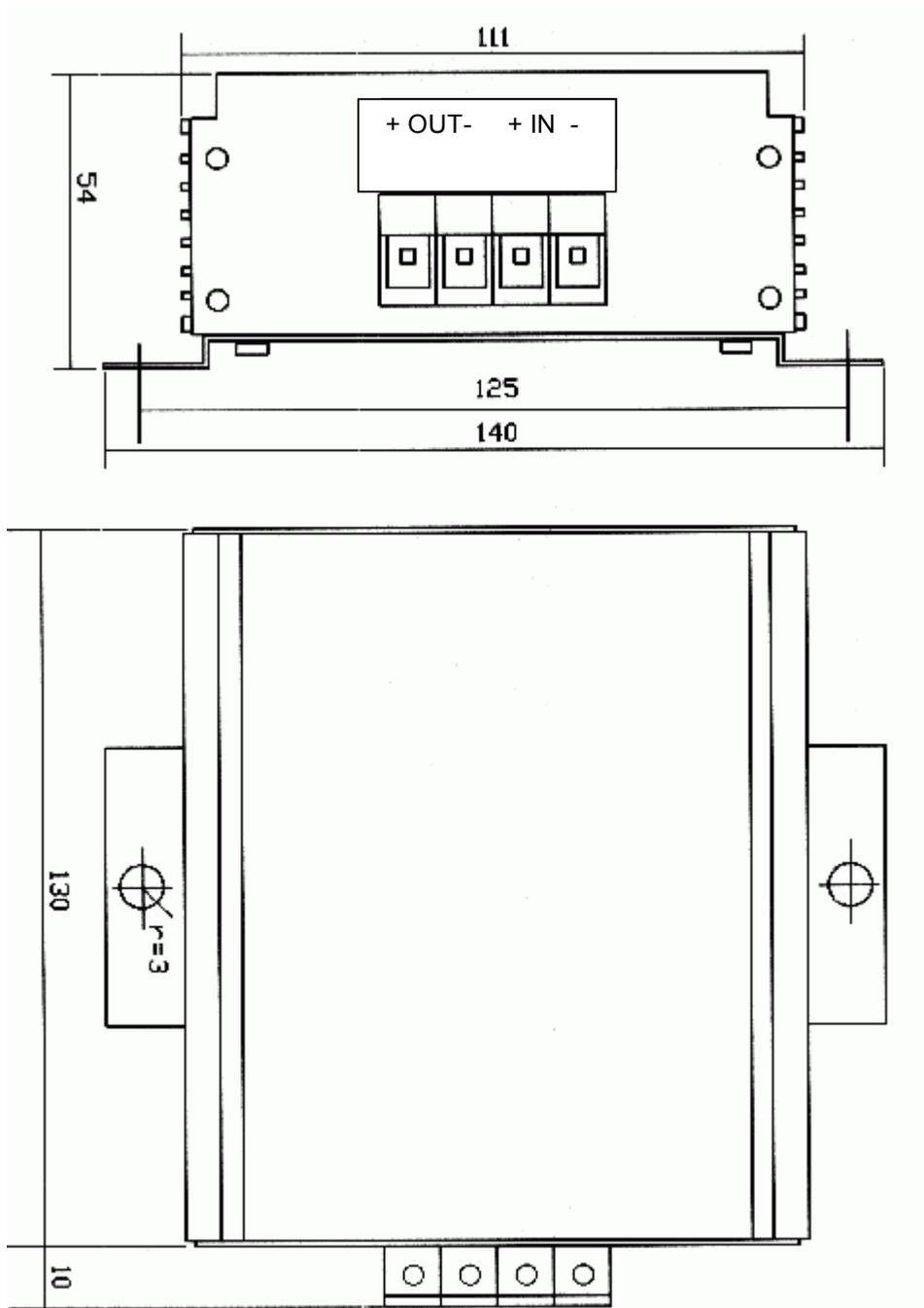
- galvanical separation between input and output
- short-circuit proof
- metal AL enclosure
- EMC ensured

### **SPECIFICATIONS:**

Input voltage:	48 V $\pm$ 30 %
Shutdown voltage (UVLO):	30 V
Output voltage:	24.5 V $\pm$ 2 % fixed (27.2 V opt. U)
Cont. output current:	4A
Output current limit:	5 A
Protections:	
Incorrect input connection & breakdown	built-in fuse T 6.3 A (6x32 mm)
Input undervoltage	electronical circuit
Overload and output short-circuit	electronic output current limit
Overheat	electronical current limit decrease
Output voltage ripple (0 – 50 MHz):	<10 mV rms
	<50 mV p-p
Transient response:	max. $\pm$ 1 V, 1 ms recovery
Line / load regulation:	<2 %
EMC - conducted emissions:	EN 55022 level B
Safety:	IEC950
Input/output circuit isolation:	2 kV ac
Input/case isolation:	1,5 kV ac
Output/case isolation:	500 V dc
Efficiency (nom. input, cont. current, typ.):	84 %
Switching frequency:	50 kHz
No load & UVLO current consumption:	Nom. 1.5 W
Connection:	screw terminals 4 mm <sup>2</sup>
Ambient temperature range (cont. power):	-25 °C .. +35 °C (no convection)
Max. ambient temperature (derated power):	+50 °C
Storage temperature:	-40 °C - +70 °C
Case env. protection:	IP40 (except terminals)
Dimensions (WxHxD):	111(140)x54x140 mm
Weight:	0.5 kg

Warranty: 2 years.

**DIMENSIONS:**



**NOTES:**

1. The case of the converter must be grounded to the chassis at  $U_{imp} > 48V$  (PE).
2. It's not recommended to mount the converter directly to the motor or to the gearbox. Case environmental protection must be considered in case of possible water influence.
3. When connecting the converter into the vehicle electric circuitry, it is necessary to keep proper polarity (+/- poles) ! Otherwise the built-in input fuse can blow. This is the only user replaceable part, it is accessible after removing the lid.
4. The converter doesn't contain any moving parts, therefore no maintenance is required. It's recommended to check connector tabs and mounting screws at least once a year.