

## DCDC Converter S250 12V/24V/10A

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This type of DCDC converter is designed to be used in vehicles in applications where electrical isolation between input and output is not necessary (common minus pole).

### FEATURES:

- closed solid eloxal coated heatsink case
- common minus pole
- overheat protection - current limit decrease (no turn-off)
- water-resist - up to IP54 \*
- LED at the output \*
- EMC ensured

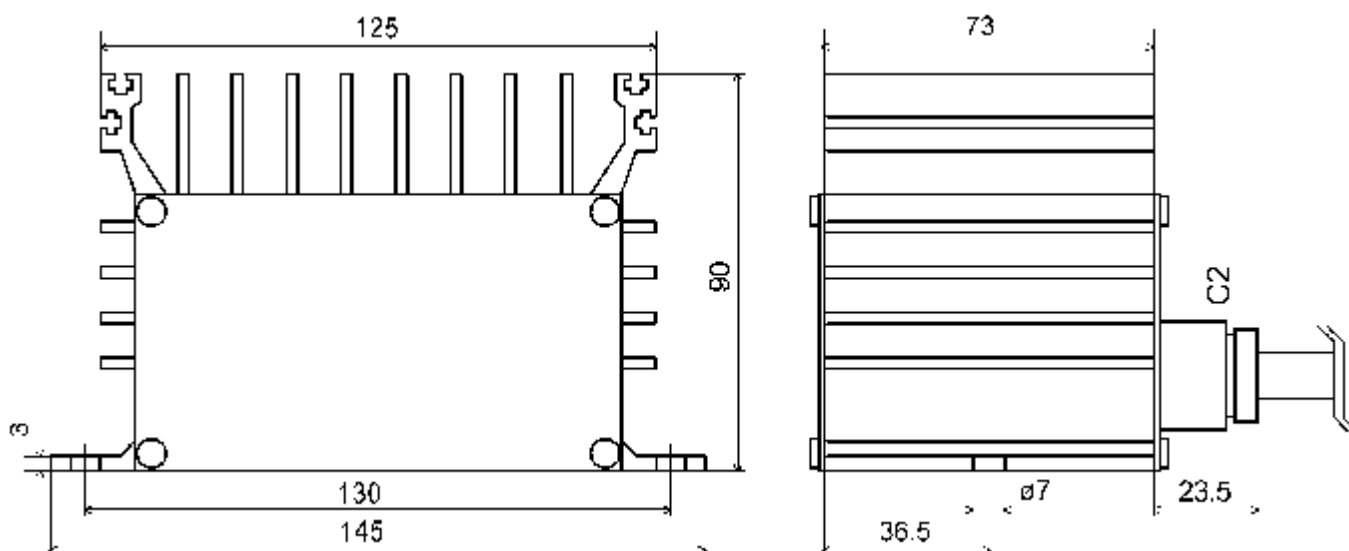
### SPECIFICATIONS:

Input voltage (nom.):	12 V
Input voltage range:	10 V – 16 V
Shutdown voltage (UVLO):	9 V (adjustable <sup>1</sup> )
Output voltage:	24 V (adjustable <sup>1</sup> )
Cont. output current:	10 A
Max. output current:	10 A
Protections:	
Incorrect input connection & breakdown	flat fuse at the input
Short-circuit	“”””
Input undervoltage	electronical circuit
Overload	electronic output current limit
Incorrect output connection (battery)	flat fuse at the output
Overheat	electronical current limit decrease
Output voltage ripple (0 – 50 MHz):	< 100 mV p-p
Line / load regulation:	< 2 %
Output to case isolation:	100 V DC
EMC - conducted emissions:	EN 55022 level A
Efficiency (nom. input, cont. current, typ.):	90 %
Switching frequency:	65 kHz
No load consumption:	max. 1 W
Connection:	see Options
Ambient temperature range (cont. current):	-25 °C .. +35 °C (no convection, vertical pos.)
Max. ambient temperature (derated power):	+50 °C
Storage temperature:	-40 °C - +70 °C
Dimensions (WxHxD):	145x90x95 mm (dependent on options)
Weight:	0.7 kg

1) Trim for reset under lid (from left PCB edge:  $U_{out}$ ,  $I_{out}$ , **UVLO**, upper limit)

\*) see Options

## DIMENSIONS:



## OPTIONS:

### **Cn - Case environmental protection**

- C0 - IP40
- C1 - IP42 - silicon stick, moulded rubber grommet
- C2 - IP54 - silicon stick, compression type cable gland (PG11)
- C3 - IP40/20 (screw terminals)

### **Ln - Indication LED under the window in the upper lid**

- L1 - connected to output
- L2 - converter work indication (independent on accu connected)

### **Xn - Special requirements (connectors, mounting etc.)**

- X0 - crimp ferrules ended wires
- X1 - 6.35x0.8mm tab housing AMP, 4 positions, tin plated brass
- X2 - standard screw terminals 6 mm<sup>2</sup>
- X3 - VDFK4 screw terminals (Phoenix)  
others upon customer's request.

### **Yn - alternative colors of wires (X0, X1)**

- |                                 | +IN   | -IN   | +OUT    | -OUT    | GND        |
|---------------------------------|-------|-------|---------|---------|------------|
| <input type="checkbox"/> Y0     | red   | black | red     | black   |            |
| <input type="checkbox"/> Y1     | red   | blue  | black   | brown   |            |
| <input type="checkbox"/> Y4(C2) | brown | blue  | 3xblack | 3xblack | (gn.& yl.) |