

DCDC Converter S600 12V/24V/25A

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 for input and output
- overheat protection - current limit decrease (no turn-off)
- water-resist - up to IP54 ¹⁾
- LED at the output ¹⁾
- EMC ensured

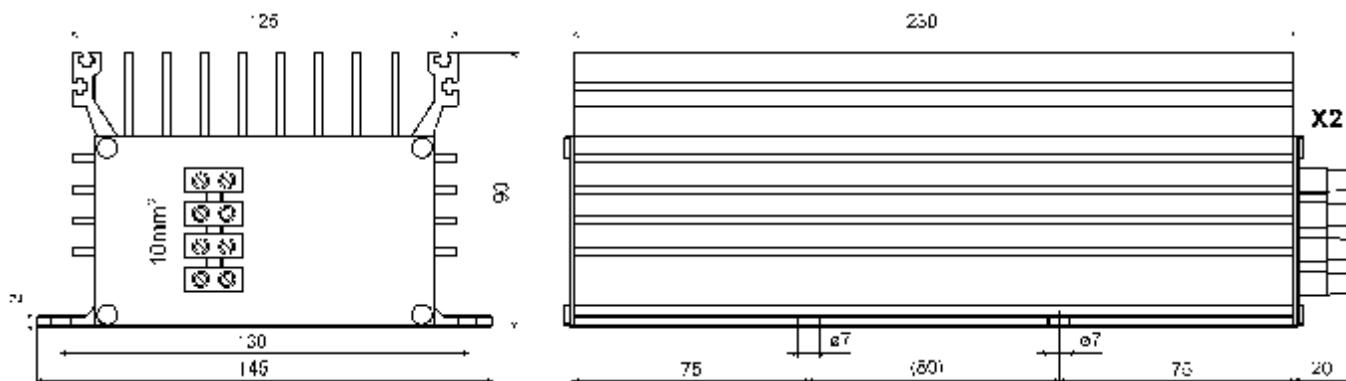
SPECIFICATIONS:

Input voltage (nom.):	12 V
Input voltage range:	10 V – 16 V
Shutdown voltage (UVLO):	9 V ²⁾
Output voltage:	24 V (adjustable)
Cont. output current:	20 A
Max. output current (decreases with temp.):	25 A
Protections:	
Incorrect input connection & breakdown	built-in strip fuse 60A/32V at the input
Incorrect output connection (battery)	built-in fuse 30A/32V, 6x32 mm at the output
Short-circuit	_____ ³⁾
Input undervoltage	electronical circuit
Overload	electronic output current limit
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):	145x90x250 mm (dependent on options)
Weight:	2.5 kg

Notes:

1. see Options
2. In case of UVLO (shutdown), input voltage slightly lowered appears at the output !!
3. In case of short-circuit, output fuse blows out (standard type 6x32 mm, 30A/32V). The fuse is accessible under a lid.

DIMENSIONS:



OPTIONS:

Cn - Case environmental protection

- C0 - IP40
- C1 - IP42 - silicon stick, moulded rubber grommet
- C2 - IP54 - silicon stick, compression type cable gland (PG11)
- F2 – standard EMI suppression (EN 55022 – A), other upon customer's request

Ln - Indication LED between heatsink fins

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

Sn - Built-in fuse

- S1 - input fuse
- S2 - output fuse (against reverse battery current)

V - Pot for output voltage adjustment

Xn - Special requirements (connectors, mounting etc.)

- X0 - crimp ferrules ended wires
- X2 - standard screw terminals
- X6 - VDFK4 + standard screw terminals
others upon customer's request.

Yn - alternative colors of wires

	+IN	-IN	+OUT	-OUT	GND
<input checked="" type="checkbox"/> Y0	red	black	red	black	
<input type="checkbox"/> Y1	red	blue	black	brown	