

Type : **Step-Down Converter DC/DC**

Description : Versatile switching regulator with a single adjustable stabilized output from a DC source. The efficiency is essentially independent of input voltage. Output current need not be derated with increasing input voltage. The open version guarantees many possibilities of mounting.

- Features :**
- Adjustable output voltage
 - Short circuit protection
 - Connecting in parallel
 - Stand-by function
 - Remote ON/OFF
 - High efficiency
 - Vibration-proof by glue-fixed components on the PCB

Safety : acc. to EN 60950

Specifications :

Input

Input voltage range : 10...60Vdc
No load input current : 40mA
Remote ON/OFF : Inhibit >3V / Operate <1V

Output

Output voltage : 4.5...15Vdc (set with potentiometer R7)
Output current : 0...20A
Tolerance : <3%
Line regulation : <2%
Ripple and noise : 150mVpp
Temperature coefficient : 3mVdc/°C
Input/Output Differential : 3.5Vdc (U_{in} >15Vdc) / 5Vdc (U_{in} <15Vdc)
Remote sense : Remove JP2 for remote sense operation.
Output current limit : 24...27A factory preset (However, when units are used in parallel configuration, the current limit should be set at 20A with potentiometer R25.)

General

Efficiency : typical 75%
Switching frequency : 25kHz
Weight : approx. 0.4kg
Dimension W x H x D : 127mm x 51mm x 137mm

Environment

Thermal performance : 0...+70°C (max. heat sink temperature: +80°C)
Relative humidity : 5...80% / no dewfall

Mechanical notes

Remove JP1 to synchronise to other regulators.
Remove JP2 for remote sense.

Important Hints

The module should be fixed at the heat sink and the opposite edges of the PCB; an elastic mounting is highly recommended. The efficiency of the heat sink must be sufficient. The contacts (INPUT+, OUTPUT+ and GND/RET) are realized by metric stud bolts (diameter: 4mm). The feedthroughs are intended for the signal contacts.



Fig. 1
(Shows the PCB without the hot melt glue.)

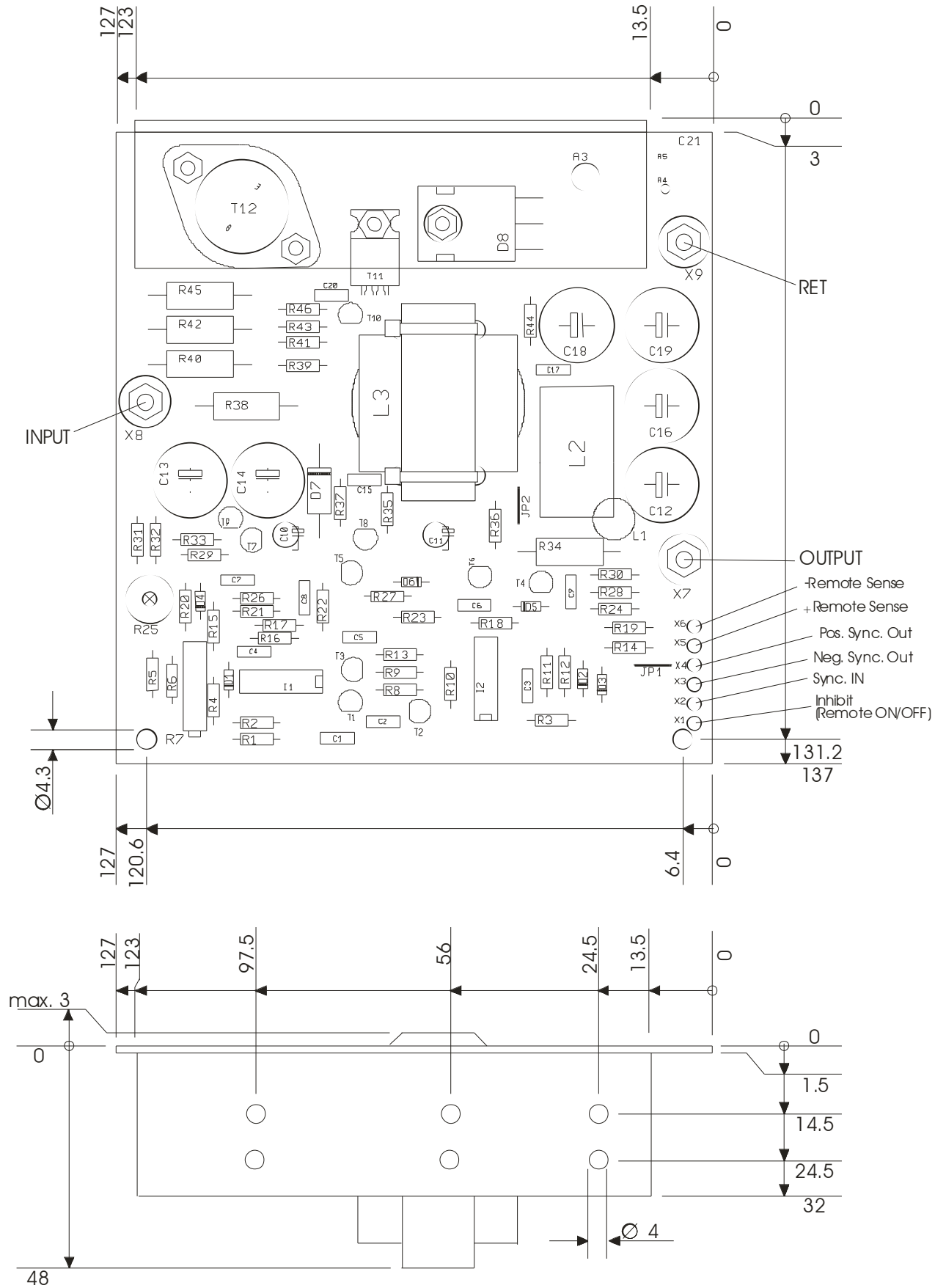


Fig. 2
 (All measurements in the draft above are in millimetres [mm].)