

Type : SDC 60/30-12
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
- Shake proof

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...30Vdc (set with potentiometer R7)
Output current : 0...12A
Tolerance : <3%
Line regulation : <2%
Ripple and noise : 150mVpp
Temperature coefficient : 3mVdc/°C
Input/Output Differential : 3.5Vdc (Uin >15Vdc) / 5Vdc (Uin <15Vdc)
Remote sense : remove JP2 for remote sense operation
Output current limit : 17A ±10%

General

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

Environment

Thermal performance : 0°C...+50°C (max. heat sink temperature: +80°C)
Relative humidity : 5%...80% no dewfall

Mechanical notes

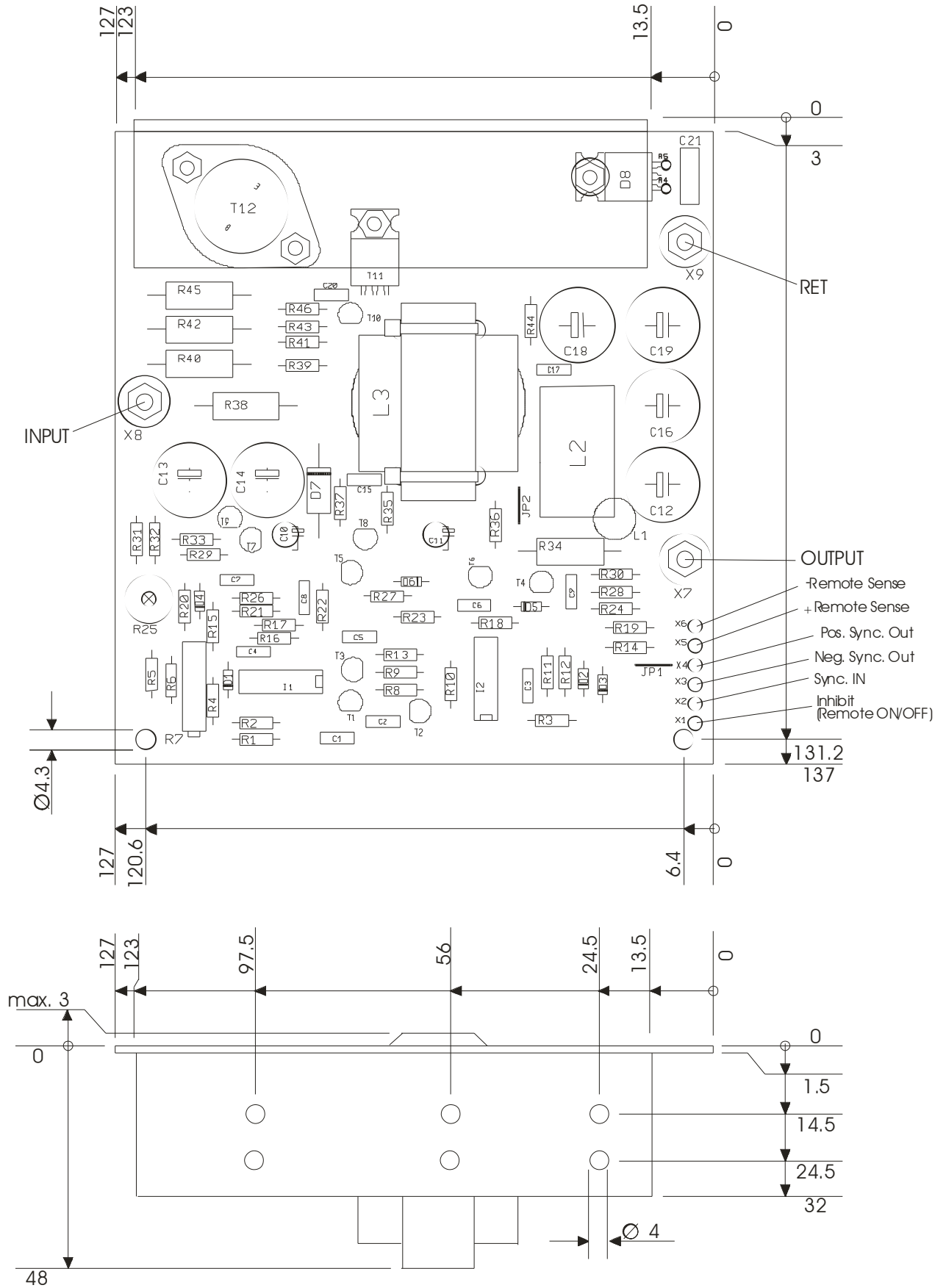
Remove JP1 to synchronise by master converter
Remove JP2 for -Sense (and +Sense)
No changes on PCB for +Sense (only)

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 SDC 60/30-12
without the hot melt glue)



All measurements in the draft above are in millimetres (mm).