

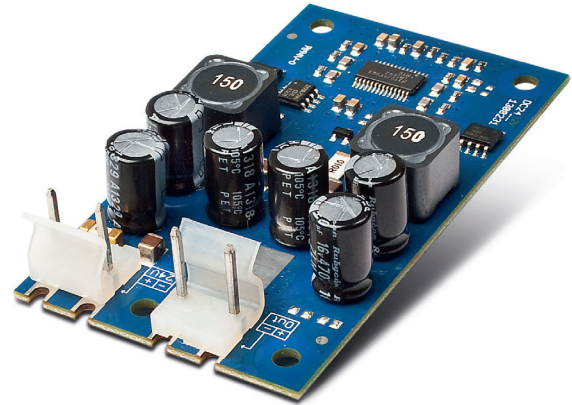
DC2400

110 Watt



- ✓ DC/DC converter 24 V to 12 V or 19 V respectively
- ✓ Wide input range
- ✓ High efficiency up to 94 %

The particularly small DC-DC converter generates a regulated output voltage of 12 VDC or 19 VDC respectively. It has been designed for direct supply of single-board computers (SBC) or their peripherals from 24 VDC. The DC2400 is characterized by high efficiency and low heat loss. Suitable for use in industrial and medical devices it is of robust construction and built from high-quality components. Further output voltages between 12 and 19 VDC respectively are available on request.



Technical data	
Input voltage	DC2412: 18...30 VDC / DC2419: 20.5...30 VDC
Input current	6.7 A max. (18 VDC)
Inrush current	App. 70 A at +25 °C
Efficiency	89...94 %
Protection	Short circuit protection: Switch off Overload protection: >11.5 A Overvoltage protection: At input app. 32 VDC Undervoltage protection: <15 VDC; Switch off; Restart: Switch off the input for 3 s Inverse polarity protection: No Overtemperature protection: Switch off
Insulation voltage	No separation between input and output
Temperature	Operating: -10...+70 °C / Storage: -25...+70 °C
Derating	+50...+70 °C, 2.6 W / °C
Max. operation altitude	5000 m
MTBF	>700000 h according to SN29500 at +50 °C
Humidity	Operating: 10...85 % RH, non-condensing / Storage: 10...90 % RH, non-condensing
Dimensions (WxDxH)	44.5 x 79 x 18 mm ±0.5 mm
Weight (net)	0,04 kg

Product specific data	
Load dump	On demand
Input capacitance	<270 µF

Advice! In case of a temperature transfer of the PCB to the chassis bottom via Thermal Pad, the PCB temperature decreases depending on the ambient temperature by approx. 10...20 °C.

Article No.	Output voltage	Output current			Load regulation	Line regulation	Ripple & Noise
		min	max	peak			
DC2412	+12 V	0 A	9.3 A	11.5 A	±5 %	±1 %	125 mV
DC2412-B1*	+12 V	0 A	9.3 A	11.5 A	±5 %	±1 %	125 mV
DC2419	+19 V	0 A	4.7 A	7.3 A	±5 %	±1 %	125 mV


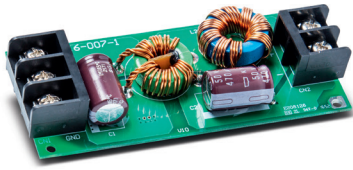
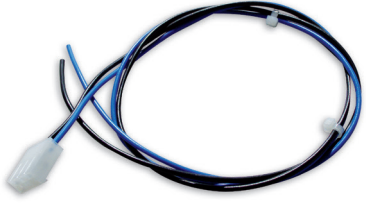
*UV lock out disabled

Max. output power must not exceed 110 W. Ripple and noise was measured by a 20 MHz bandwidth limited oscilloscope with connected 470 nF ceramic capacitor at each output. For connection to a low voltage mains supply an additional input filter may be required.

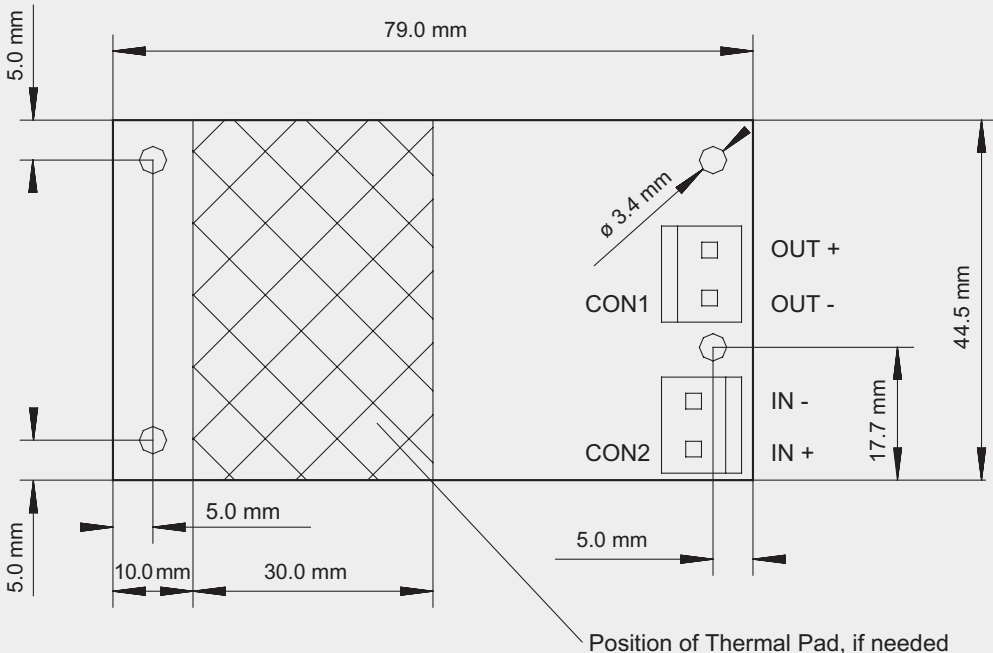
As a power component this PSU is for assembly purposes only and must not be operated in unassembled conditions. The final assembly has to comply with the valid EMC and safety standards.

Optional Accessories

▷▷▷ For detailed information please visit our website www.bicker.de and refer to the article number.

<p>CB-DC2412 Cable harness</p> <p>For DC/DC converter, 1x P4, Length 200 mm</p> 	<p>PSZ-1040 EMC filter</p> <p>Reduces conducted noise and emission</p> 	<p>X1-024 AC input cable</p> <p>2-pole, length 620 mm, AWG18, ends open</p> 
--	---	--

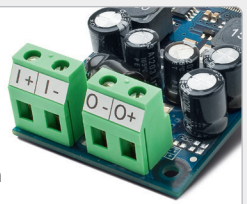
Drawing DC2400



Technical drawing of the DC2400 converter showing dimensions and component locations:

- Overall width: 79.0 mm
- Overall height: 44.5 mm
- Top edge offset: 5.0 mm
- Bottom edge offset: 5.0 mm
- Left edge offset: 10.0 mm
- Internal width segments: 5.0 mm, 30.0 mm, 5.0 mm
- CON1 connector offset: 5.0 mm
- CON2 connector offset: 5.0 mm
- Terminal spacing: 17.7 mm
- Mounting hole diameter: $\varnothing 3.4$ mm
- Position of Thermal Pad, if needed

Note:
In place of Molex plug connector also screw terminals are available on request (DC2400-B2).



Connectors:
CON1, CON2:
Molex: 09-50-1031 or equal

Tolerance ± 0.5 mm

Specification is subject to change without notice. Errors excepted. Status as at: 05.07.2023