

# » CPS3-SVE-250AC «



## 250W AC Power Supply for CompactPCI® Serial

- » High efficiency up to 92%
- » Wide input range 85 - 264 VAC
- » Extended temperature - fanless
- » EMI EN55022 Class B, UL, CSA

## CPS3-SVE-250AC

### 250W AC Power Supply for CompactPCI® Serial

#### For flexible, reliable, and energy saving usage

The CPS3-SVE-250AC provides all basic features to run a CompactPCI® Serial system. Several protection and regulation options, basic monitoring functions, and its hold-up time make the power supply a reliable system component. It provides +12V output and +5V standby, and therefore is not intended for use in classic CompactPCI® systems. The product meets EMI EN55022 Class B, a must for many applications. High efficiency and low standby input power is energy-saving and makes system cooling easier. Its wide input range of 85-264 VAC, and its operating temperature range of -25°C up to 70°C, even fanless with convection cooling, show how flexibly this power supply can be deployed.

#### Whenever cost saving is more important

Whenever some advanced features like hot-plug, redundancy, and PMBUS support are not required, and cost saving is more important, CPS-SVE-250AC is the right choice for CompactPCI® Serial systems.

#### Integrated part of a CPCI Serial card cage

The power supply is horizontally mounted into a cartridge to enable convection cooling. A guide rail and a backplane connection cable is included. The article is non-pluggable and comes as integrated part of a standard card cage. For integration into an alternative, custom selected enclosure and backplane, the power supply shall be combined with Kontron's "AC Input Kit and Integration Service" CP-MKIT-AC-IN.

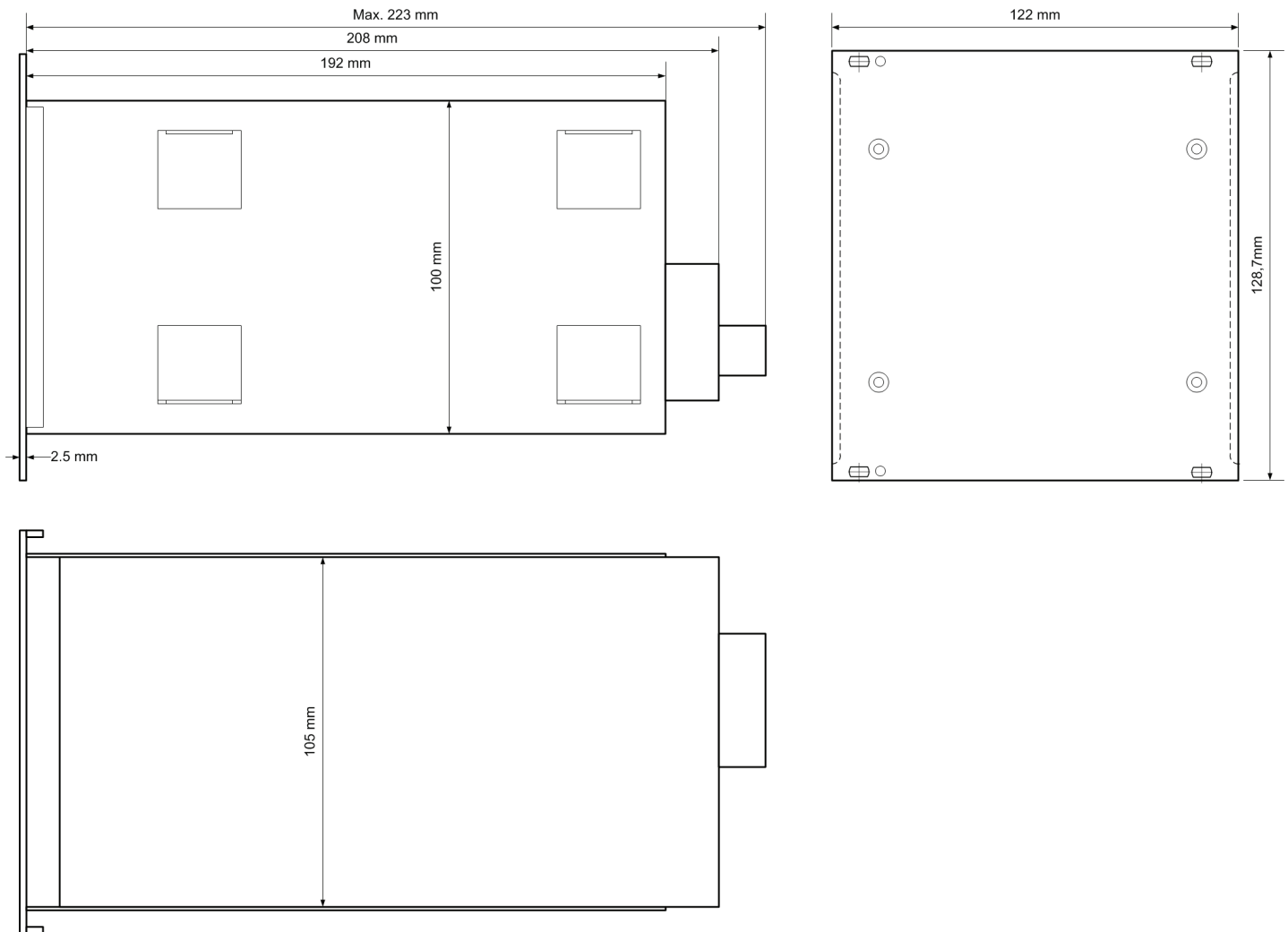


Figure: Mechanical dimensions, CPS3-SVE-250AC

## Technical Information

## Mechanical

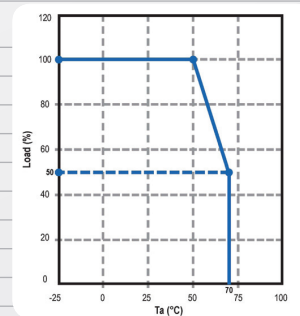
Formfactor	3U 24HP Cartridge
Mounting	Non-pluggable, integrated part of a card cage
System connection	Cable to backplane (included), screw terminals for AC input
Dimension LxWxH	225 x 122 x 128,7 mm
Front panel size	122 x 128,7 mm
Weight	1.250 g

## Input

AC Input Voltage	85 - 264 VAC (300VAC for 5s)
Input Frequency	47 - 63 Hz
DC Input Voltage	120 - 373 VDC
Inrush Current (cold start)	20A at 115 VAC, 40A at 230 VAC
Power Factor	Meets EN61000-3-2 (Typical PF 0.98/0.95 at 115/230VAC) Class A, Class C> 25% Load
Input Current	3.0 / 1.4 A (at 115/230VAC)
Leakage Current (Typ)	0.75mA at 230VAC
Standby Input Power	<0.5W when remote off and 5V Aux supply at no load

## Output and Regulation

Output Power	250 W max. Linear derating from 50°C to 50% power at 70°C (attached: output derating curve)
Output Voltage	12V
Auxiliary Supply	5V/0.3A
Hold Up Time	16 ms
Temperature Coefficient	<0.02%/°C
Adjustment Range	10.8V - 13.2V
Output Current	21A max.
Load Regulation	96mV
Line Regulation	48mV
Ripple&Noise	120mV
Efficiency (230VAC)	92% (for 230 VAC)



## Protection and Control

Overcurrent Protection	>105% rated output power or >101% of peak output power
Overvoltage Protection	13.8 - 16.2V (recycle AC, or use remote on/off to reset)
Overtemperature Protect	Yes (recycle AC, or use remote on/off to reset)
Remote Sense	No
Remote On/Off	Active Low
Monitoring Signal	DC OK, open collector signal, High on Fail (Active Low)

## Safety, Regulatory, and EMI

Withstand Voltage	Input to FG 1.5kVAC (20mA), Input to Output 3kVAC (20mA), output to FG 500VAC (100mA) for 1 min
Isolation Resistance	>100MΩ at 25°C & 70%RH
Immunity	Built to meet EN61000-4-2 (Level 2,3), -3 (Level 3), -4 (Level 3), -5 (Level 4), -6 (Level 3), -8 (Level 4), -11
Safety Agency Approvals	UL60950-1, CSA C22.2 No.60950-1-07 (2nd Edition), EN60950-1, IEC60950-1 (2nd Edition), CE
Conducted & Radiated EMI	Built to meet EN55022-B, CISPR22-B

## Environmental

Operating Temperature	-25°C to +70°C. (Refer to Output Derating Curve) Guaranteed Start Up at -40°C
Storage Temperature	-30°C to +85°C
Operating Humidity	30 - 90% RH (non condensing)
Storage Humidity	10 - 95% RH (non condensing)
Cooling	Convection
Vibration (non operating)	10 - 55Hz: 19.6m/s <sup>2</sup> Constant sweep 1 min X, Y, Z for 1 hour each
Shock (in package)	< 196.1 m/s <sup>2</sup> (20G)

## Ordering Information

## Article

CPS3-SVE-250AC

**Related product:**  
CP-MKIT-AC-IN

## Description

Power Supply for CompactPCI-Serial. 250W, 85-240 VAC, 3U 24HP. Nominal voltage/max current: +12V/21A, Standby +5V/0.3A. Operating temperature -25°C to 70°C, startup from -40°C, linear derating from 50°C. Hold-up time 16 ms. Non-pluggable. Cartridge with guide rail and backplane connecting cable.

AC Input Mounting Kit and Rack Integration Service for 3U CPCI and CPCI-Serial. AC Input Kit 8HP, front or rear side. Integration and connecting of PSU and backplane. System drawing mandatory!

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