



## DC/DC CONVERTER

### PSC305 HV

**In: 90 - 275V<sub>DC</sub>**

**Out: 24/48/60/110/220V<sub>DC</sub> (480W)**

#### KEY FEATURES

- **1/6 x 19", 3U**
- **Wide input voltage range**
- **Input overvoltage protection**
- **"Hot plug-in" design with backplane connection**
- **High power density**
- **CAN-Bus interface**
- **Integrated output decoupling**
- **Wide range of available output voltages**
- **Convection cooling**

#### PRODUCT DESCRIPTION

Power supply modules of series PSC 305 are compact DC/DC converter with an optimized switching principle and therefore with a very high power density. The DC/DC converter can be used in all DC applications with or without battery.

Due to the modular concept and a high scalability the user is able to equip the power supply with additional modules according to his actual power profile. The units are very user friendly and can be swapped and upgraded during operation.

The devices get their operation parameters via the system wide CAN communication bus. After a successful login a central monitoring unit controls and monitors the devices. In case of CAN-Bus interruption the modules operate continuously with internal default values. The power rating of the unit is 480W in convection cooling mode.

Up to 6 modules can be integrated in a 19" sub rack with 4U.

In systems with a high packing rate and limited vertical airflow we recommend to use a fan rack for cooling.

#### APPLICATIONS

DC power supply facilities in all areas of industry, power generation and power distribution.



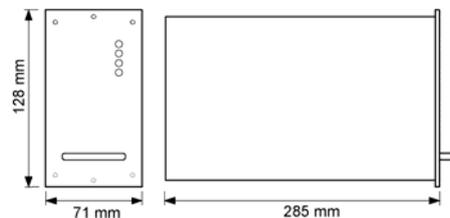
## TECHNICAL DATA

Type	PSC305-HV/24-20	PSC305-HV/48-10	PSC305-HV/60-8	PSC305-HV/110-4.4	PSC305-HV/220-2.2
Article code	201-005-747.00	201-005-757.00	201-005-767.00	201-005-777.00	201-005-787.00
Nominal input voltage	90-275VDC				
Nominal input current	4.9 A@110VDC / 2.5 A@220VDC				
Input frequency	DC				
Efficiency	≥ 89%				
Internal input fusing	10A (6.3x32mm)				
Nominal output voltage	24VDC	48VDC	60VDC	110VDC	220VDC
Nominal output current	20ADC	10ADC	8ADC	4.4ADC	2.2ADC
Nominal output power	480W				
Output characteristic curve	IV characteristic according to DIN41772/DIN41773; power limited				
Voltage ripple	≤ 20mVpp	≤ 20mVpp	≤ 20mVpp	≤ 100mVpp	≤ 200mVpp
Psophom. acc. to CCITT-A	<1.2mV	<1.8mV	<1.8mV	---	---
Dynamic accuracy of the output voltage	<3% Vnom at load changes between 10%-90%-10% Inom; correction time ≤ 1.5ms				
Short circuit protection	Continuous short circuit proof; 1x Inom				
Parallel operation	Yes; current distribution ≤ 10% Inom				
Internal decoupling at the output	Yes; active, low-loss decoupling circuit in the negative output line				
Internal output fuse	40A	25A	20A	10A	5A
LED signalling	Operation (green), Vo OK (green), Vo > (red), Alarm (red)				
Isolated signalling contacts	"General fault"; relay contact				
Communications interface	CAN-Bus, proprietary protocol				
Ambient temperature	Operation: -20°C to +55°C, storage: -40°C to +85°C				
Cooling	Convection cooling (forced cooling recommended)				
Climatic conditions	according to IEC 721-3-3 class 3K3/3Z1/3B1/3C2/3S2/3M2				
Max. installation altitude	≤ 1500m				
Audible noise	<30dBA				
Type of construction	1/6 x 19", 3U				
Dimensions (W/H/D)	71/128/285mm				
Weight	approx. 2.2kg	approx. 2.2kg	approx. 2.2kg	approx. 2.2kg	approx. 2.2kg
Type of enclosure / Protection class	IP20 (front panel) / 1				
Colour (front panel)	RAL 7035, black imprint				
CE conformity	yes				
Compliance to safety standards	EN60950-1; VDE0100 T410; VDE0110; EN50178; EN60146				
Compliance to EMC standards	EN55011/22 class "B"; EN61000-4 T2-5				
Connections	DC input, DC output and signalization: DIN41612-M-connector				

## OPTIONS

Article code / Designation	View
202-305-607.00  Assembly set 19" sub rack 4U incl. backplane for 6pcs. PSC305 (single DC input/output connection for each module)	
102-308-FR1.LV02 or 102-308-FR1.HV02 (Fan rack, recommended)	

## DIMENSIONS



DS\_PSC305\_HV\_2007\_E\_R03 - Subject to change without notice - Eltek Valere Industrial GmbH

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