

These high input voltage converters are particularly intended for specific applications such as WINDMILLS and PHOTOVOLTAIC systems. They are built in robust all-aluminum cases. The internal casting made of epoxy resin homogenizes the components' temperature, offers maximum power dissipation, and protects against humidity, dust, shocks and vibrations.

Electrical data

◆ "Vin" Input (protected against undervoltage)

- 200V to 1000V (accidental max: 1200V/5s)
- no load consumption: 2 to 10 mA (see table)
- possible retarded fuse, on the input: ≤ 2A or 4A or 8A depending on the module's power and its minimum input voltage

◆ "Vout" Output

- 12V/3.4A ; 24V/1.7A ; 24V/3.2A ; 48V/1.6A ; 48V/3.2A (accuracy: 1%)
- line and load regulation: <1% of Vout
- temperature coefficient: $2 \cdot 10^{-4}$ of Vout, per °C
- switching frequency: fixed (> 60kHz)
- residual ripple: ≤1% of Vout
- minimum efficiency, at full load: 83%
- permissible capacitive load: from 2200µF to ≥22 000µF depending on load

Protections

- input-output insulation: 4000V dc. Internal filter on the input
- against overload and short circuit (even constant) by pulsed flow
- in case of inductive load: option "L" will reinforce protection
- inversion Vin (standard protection, without influence on the efficiency)
- abnormal temperature rise: automatic shutdown and restarting
- sealing: IP67 protection against water and dust

Thermal and environmental performances

- storage: -40 to +85°C ; operating: -30 to +75°C
- cooling: natural convection (derating 3.3% per °C)
- temperature rise of the case, at full load: ≈ +30°C
- maximum ambient temperature:
 - 45°C at full power
 - 60°C at half power
- vibrations, shocks, humidity: protection by epoxy resin

Standards and specifications

- marking CE/UL60950-1, ICE60950-1, EN60950-1 / RoHS
- flammability: closed all aluminum housing
- MTBF: 350,000 h (40W); 150,000 h (80W); 75,000 h (160W) at 25°C
- worldwide manufacturers for active parts
- assembling and final controls: ELECDAN-CONVERTER

Housing screwable on wall with 4 "M4" center distance:	Length x width x depth	Material weight	Power	Connections
108 x 84 mm	120 x 94 x 35 mm	0,6 kg	40W	screw terminal Phoenix VDFK4 wire ≤ 8mm ²
135 x 85 mm	145 x 95 x 40 mm	0,92 kg	80W	
212 x 136 mm	223 x 146 x 40 mm	2,1 kg	160W	

Range & No. sequence	Input range (Volts)	Outputs		no load consu. (mA)	SKU	Pre-tax price
		Volts	Amp			
16 - 1	200V to 1000V	12	3.4	2	CC 12-3.4 / 1000	
16 - 2		24	1.7	2	CC 24-1.7 / 1000	
16 - 3		24	3.2	5	CC 24-3.2 / 1000	
16 - 4		48	1.6	5	CC 48-1.6 / 1000	
16 - 5		48	3.2	10	CC 48-3.2 / 1000	

Three all aluminum housing



① Version **40W** (12 and 24V)
(120 + 11) x 94 x 35 mm

② Version **80W** (24V and 48V)
(145 + 11) x 95 x 40 mm

③ Version **160W** (48V)
(223 + 11) x 146 x 40 mm