

Modules equipped with streamlined DC/DC converters, dust & water-resistant IP67, available in two presentations with different thermal resistance:

- **4** : thermal resistance  $1^{\circ}\text{C/W}$ ; can be mounted on front or side, on wall or DIN rail; connections through 4 streamlined clamps for wires  $\leq 72\text{mm}^2$ .
- **4S** : thermal resistance  $0,5^{\circ}\text{C/W}$ ; a symmetrical dissipator "225 S" is added to case **4**, which doubles the thickness (74 mm instead of 37 mm).

### Electrical data

#### ◆ "Vin" Input (protected against undervoltage)

- 36 to 75V (accidental max.: 100V / 0.1s)
- no load consumption: 90mA to 100mA (see table)
- possible external fuse: 25A
- optional "ON/OFF" remote control

#### ◆ "Vout" Output

- 24V / 28V / 48V; accuracy: 1%
- optional fit with embedded "10 revolutions" axis:  $\pm 10\%$
- line and load regulation:  $< 2 \cdot 10^{-3}$  of  $V_{out}$
- temperature coefficient:  $2 \cdot 10^{-4}$  of  $V_{out}$ , per  $^{\circ}\text{C}$
- switching frequency: fixed ( $\approx 450\text{ kHz}$ )
- residual ripple:  $\leq 1\%$  of  $V_{out}$
- nominal efficiency: 90% (losses  $\leq 50\text{W}$ )
- dynamic response: 0.2 ms, with 25% load variation
- permissive capacitive load:  $2200\mu\text{F}$  to  $\geq 22,000\mu\text{F}$  depending on load

### Protections

- input-output insulation: 1500V DC. Internal filter on the input
- against overload and short circuit (even constant) by limitation
- in case of inductive load: option "L" will reinforce protection
- "inversion Vin" option: internal diode (external fuse required)
- abnormal temperature rise: automatic shutdown and restarting
- total sealing IP67

### Thermal and environmental performances

- storage:  $-40$  to  $+100^{\circ}\text{C}$ ; operating:  $-40$  to  $+90^{\circ}\text{C}$
- cooling: natural convection (derating 2.5% per  $^{\circ}\text{C}$ )
- temperature rise of the case, at full load:  $+50^{\circ}\text{C}$
- maximum ambient temperature:
  - at full power:  $40^{\circ}\text{C}$  for case **4** and  $65^{\circ}\text{C}$  for case **4S**
  - at half power:  $65^{\circ}\text{C}$  for case **4** and  $77^{\circ}\text{C}$  for case **4S**
- vibrations, shocks, humidity: protection by epoxy resin

### Standards and specifications

- marking CE/UL60950-1, ICE60950-1, EN60950-1 / RoHS
- flammability: UL94HB, horizontal test
- MTBF  $> 5 \cdot 10^5$  hours, case at  $25^{\circ}\text{C}$
- worldwide manufacturers for active parts
- assembling and final controls: **ELECDAN-CONVERTER**

Case mountable on	Dimensions (mm)	Weight	SKU	Connections
<b>4</b> DIN rail & wall	225 x 120 x 37	1150 g	<b>4</b>	screw terminal wires $\leq 72\text{mm}^2$
<b>4S</b> DIN rail & wall	225 x 120 x 74	2260 g	<b>4S</b>	

OPTIONS and SKU	Option	Code	Description	Value
	Vout fit with axis "10 revolutions"	AJ	other $V_{in}$ and/or $V_{out}$	value
	inductive load driving	L	symmetrical dissipator	225 S
	"ON / OFF" remote control	H	"inversion" protection	PI

Range & No. sequence	Input range (Volts)	Outputs		no load consu. (mA)	SKU aadd 4 or 4S	Pre-tax price
		Volts	Amp			
<b>11 - 1</b>	<b>36V to 75V</b>	24	1.8	90	CC 24-18 / 3675	
<b>11 - 2</b>		28	1.6	100	CC 28-16 / 3675	
<b>11 - 3</b>		48	9.3	100	CC 48-9.3 / 3675	
New options (please contact us)		① output choice: 24V to 30V; efficiency: 95% ② output: 0 to 60V; internal or external setting				

**Case 4S**  
(Case **4** + symmetrical dissipator 225S)



### Mounting on wall or DIN rail

#### ① Wall :

- front 225 x 120: two holes  $\varnothing 4.5\text{ mm}$ , vertical fixing distance: 90 or 200 mm
- side 225 x 37: two M3, vertical fixing distance: 50 mm

#### ② Clip :

- front 225 x 120: clip C 225
- side 225 x 37: clip C 37