





> Ratings							
	75 W	100 W	150 W	200 W	300 W	400 W	600 W
24 V DC	3 A	4 A	6 A	8 A	12 A	16 A	24 A
The currents (I <sub>n</sub> ) shown are at ratedoutput power							
> Standards-based specifications							
Safety	EN 60950-1 SELV class						
EMC - Immunity	EN 61000-6-1 ☑ EN 61000-6-2						
EMC - Emission	EN 61000-3-2 ☑ EN 61000-6-3 ☑ EN 61000-6-4 ☑ EN 55022 B class						
Specific	EN 61046						
Environment	This product range is environmental policy ISO 14001, RoHS et WEEE.    						
> Environmental specifications							
Humidity	<b>in storage:</b> relative humidity 10% to 95% (non-condensing) <b>in operation:</b> relative humidity 20% to 95% (non-condensing)						
Storage temperature	-25°C à +85°C						
Operating temperature	Power	75 W - 100 W			150 W - 600 W		
	75% of load	-5°C to +50°C			-5°C to +50°C		
	100% of load	-5°C to +50°C			-5°C to +40°C		
Altitude	Above 2,000 m, the temperature decreases by 5% every 1,000 m						
Working life	50,000 h at 25°C (external environment) and 75% of load, product installed in a cabinet						
> Input specifications							
Voltages	230 V AC +/- 15% single-phase						
Frequency	45 to 65Hz						
Neutral system	TT - TN - IT						
Switch-on current	limited by CTN						
Upstream circuit breaker required	Bipolar D Curve						
Class	I Class						
	75 W	100 W	150 W	200 W	300 W	400 W	600 W
Primary current @ 195 V	0.5 A	0.75 A	1 A	1.5 A	2 A	3 A	4 A
Converter	75 W		100 W - 150 W		200 W - 300 W		400 W - 600 W
At 20% load	71%		75%		84%		85%
At rated load	85%		84%		90%		91%
> Output specifications							
Rated voltage	24 V DC						
Floating voltage (V <sub>n</sub> ) set at half-load and 25°C (V)	27.2 V +/-0.5%						
Short-circuit current limitation	I <sub>n</sub>						

> For reliable output voltage

Protection against external aggressions	<ul style="list-style-type: none"> <li>- <b>Resistance to all types of external aggressions:</b> <ul style="list-style-type: none"> <li>• Overvoltages encountered on the mains network (lightning, industrial, isolation fault on impedance-earthed neutral system).</li> <li>☑ Short-circuit on the primary power supply by a slow blow fuse on the phase.</li> <li>• Differential mode shock waves by varistor and fuse.</li> <li>• Battery polarity inversions.</li> <li>☑ Overvoltages on secondary.</li> <li>☑ Overcurrents and short-circuits on secondary.</li> <li>☑ The short-circuits inside the product, protected by primary fuse.</li> <li>• Increases in external temperatures (outside the specified range).</li> </ul> </li> </ul>
Charger current limitation	<ul style="list-style-type: none"> <li>- <b>Output current limitation allows a charge cycle to be started with a dead battery.</b> <ul style="list-style-type: none"> <li>• Completely protects the product from short-circuits on the installation.</li> <li>• Protection selectivity is ensured by fuses on each load output and the battery fuse.</li> </ul> </li> </ul>
High performance filtering and regulation	<ul style="list-style-type: none"> <li>- <b>Particularly efficient output voltage regulation</b> <ul style="list-style-type: none"> <li>• Static regulation &lt; 0.5% of <math>U_n</math>.</li> <li>• Dynamic regulation &lt; 5% of <math>U_n</math> for cumulative variations of the mains and the load (from 10% to 90%).</li> </ul> </li> <li>- Enhanced filtering that eliminates all parasites and reduces the ripple on the V DC output. Battery capacity preserved and the guarantee of optimum system operation. <ul style="list-style-type: none"> <li>• LF rms ripple &lt; 0.2% of <math>U_n</math></li> <li>• HF ripple (20 MHz-50 Ω) &lt; 4% of <math>U_n</math>.</li> </ul> </li> </ul> <p><i>Note: The SANTE range can operate without battery and may be used as a direct power supply.</i></p>

> For the control of the emergency power source

System control	<ul style="list-style-type: none"> <li>- <b>Monitoring of:</b> <ul style="list-style-type: none"> <li>• The status of mains, battery and load fuses.</li> <li>• Battery presence or absence.</li> <li>☑ The temperature inside the cabinet (200 W to 600 W).</li> <li>• Battery voltage and its operating status.</li> <li>• Mains voltage present in the correct operating range.</li> </ul> </li> </ul>
Battery charge management	<ul style="list-style-type: none"> <li>- <b>This function is essential for reaching the design life and to ensure optimum operation of the battery.</b> <ul style="list-style-type: none"> <li>• The charge voltages are factory set for «sealed» recombination-type lead acid batteries.</li> <li>• They are consistent with the battery manufacturers' recommendations.</li> <li>• The charger features battery charge current limitation.</li> <li>• The supply of power to the load takes priority over the battery charge.</li> </ul> </li> </ul>
Battery backup	<ul style="list-style-type: none"> <li>- <b>Automatic disconnection of the charge at end of discharge to preserve its future capacity.</b> <ul style="list-style-type: none"> <li>• Prevents excessively deep discharge that can permanently downgrade performance, cut-off threshold 1.8 V/cell. (+/- 0.5%).</li> <li>• A report is sent before disconnection. Pre-cut-off alarm threshold 1.85 V/cell.(+/- 0.5%).</li> </ul> </li> </ul> <p>During autonomous operation, up to the cut-off threshold, the design of the SLAT unit significantly limits the charger's own consumption on the battery. This allows your application to take full advantage of the battery's capacity.</p>

> Charger consumption on the battery in autonomous mode

	75 W	100 W - 150 W	200 W - 300 W	400 W - 600 W
24 V DC	108 mA	75 mA	44 mA	106 mA

> For optimal communication



Displaying and remote reporting of the information

**- Mains:**

Presence indicated by a green LED.  
Remote reporting by dry contact with delay (failsafe).

**- Charger:**

Correct operation indicated by a green LED.  
Charger fault if mains fuse is out of order or not present, or if product is out of order.  
Remote reporting by dry contact with delay (failsafe).

**- Battery:**

Presence indicated by a green LED.

**- Battery fault:**

If battery is not present (test every 30 seconds for the 1st 20 minutes after the installation, then every 15 min) or if battery voltage < 1.85 V/cell in autonomous mode.  
Voltage of less than 1.85 V/element indicated by flashing orange LED (autonomous mode).  
Remote reporting by dry contact with delay (failsafe).

On motherboard

**- Internal signaling on the motherboard**

A LED on the motherboard indicates operational status before the cabinet is closed (display board not connected).

Signals:

☐ All OK: green

☐ Mains fault: orange

• Battery or charger fault, or load not present: red  
(this fault takes priority over a mains fault).

> Connection specifications

	75 W	100 W - 150 W	200 W - 300 W	400 W - 600 W
Screw terminal				
Mains	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
Batteries	2.5 mm <sup>2</sup>	6 mm <sup>2</sup>	6 mm <sup>2</sup>	10 mm <sup>2</sup>
Load (2 outputs)	4 x 2.5 mm <sup>2</sup>	1 x 6mm <sup>2</sup> 3 x 2.5 mm <sup>2</sup>	1 x 6mm <sup>2</sup> 3 x 2.5 mm <sup>2</sup>	1 x 10mm <sup>2</sup> 5 x 2.5 mm <sup>2</sup>
Alarm reports*	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>

\*the alarm report connector is unpluggable - Dry contacts, 1 A @ 24 V DC, 0.5 @ 120 V AC.

> Cabinet characteristics

Version	Size W x H x D (mm)	IP	Socle	Cover
C24	322 x 248 x 126	IP30	Metal, RAL 9006	ABS RAL 9003
C48	425 x 345 x 120	IP30	Metal, RAL 9006	ABS RAL 9003
C180	505 x 610 x 430	IP31	Metal, RAL 7035	Metal, RAL 7035

> Types of battery cabinets

Version	Type	24 V
C24	Wall-mounted	7 Ah, 12 Ah
C48	Wall-mounted	7 Ah, 12 Ah, 24 Ah (4 x 12 Ah)
C180	Floor-mounted	65 Ah, 80 Ah, 120 Ah, 130 Ah, 170 Ah

> Product references

Available on [www.slat.com](http://www.slat.com)

SLAT can change specifications on his products without prior notice.