





> Ratings

	75 W	100 W	150 W	200 W	300 W	400 W	600 W
12 V DC	6 A	8 A	12 A	16 A	24 A	32 A	48 A
24 V DC	3 A	4 A	6 A	8 A	12 A	16 A	24 A
48 V DC	-	2 A	3 A	4 A	6 A	8 A	12 A

The currents (I_n) shown are at rated output power.

> Standard-based specifications

Safety	EN 60950-1 SELV class
EMC - Immunity	EN 61000-6-1 ☑ EN 61000-6-2
EMC - Emissions	EN 61000-3-2 ☑ EN 61000-6-3 ☑ EN 61000-6-4 ☑ EN 55022 class B
Environmental	<p>This product range complies with the environmental policy (ISO 14001, RoHS and WEEE).</p>    

> Environmental specifications

Relative humidity	storage: 10% to 95% non-condensing relative humidity operation: 20% to 95% non-condensing relative humidity		
Storage temperature	-25°C to +85°C		
Operating temperature	Efficiency	65 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 maximum temperature decreases by 5% every 1,000 m		
Service life	50,000 h at 25°C (external environment) and 75% of load, product installed in a cabinet		

> Caractéristiques d'entrée

Voltages	98 V AC to 264 V AC (115 V AC-15% to 230 V AC+15%) single-phase		
Frequency	45 to 65 Hz		
Neutral systems	TT - TN - IT		
Inrush current	limited by CTN		
Upstream circuit breaker to be provided	D curve		
Class	Class I		

Note: For the 100 W - 150 W range: voltage 230 V +/-15% (195 V to 264 V)

	75 W	100 W	150 W	200 W	300 W	400 W	600 W
Mains consumption @195 V	0.5 A	0.75 A	1 A	1.5 A	2 A	3 A	4 A
Output	75 W	100 W - 150 W		200 W - 300 W		400 W - 600 W	
Efficiency at 20% load	71%	75%		84%		85%	
Efficiency at rated load	85%	84%		90%		91%	

> Output characteristics

Rated voltage	12 V DC	24 V DC	48 V DC
Floating voltage (U_n) set at half-load and at 25°C (V)	13.6 +/-0.5%	27.2 +/-0.5%	54.4 +/-0.5%
Adjustment range (V) in power supply mode only	12 - 14	23 - 29	46 - 58
Charger current limitation	I_n		

> For reliable output voltage

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

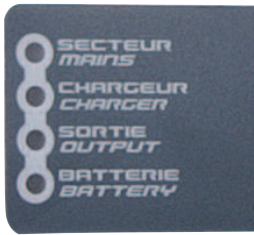
> For the control of the emergency power source

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

	12 V DC	24 V DC	48 V DC
75 W	32 mA	39 mA	-
100 W - 150 W	49 mA	75 mA	85 mA
200 W - 300 W	65 mA	45 mA	37 mA
400 W - 600 W	141 mA	106 mA	73 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).

- Load presence:

Voltage presence (no threshold) on the load outputs indicated by green LED.
If either of the two outputs has no voltage, the LED will go out.
No associated relay.

- 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).

Comment:

In the case of C6 cabinet installation, signaling is accomplished by a single indicator light:

No fault: green

Mains fault: orange

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

- 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

Screw terminal	75 W	100 W - 150 W	200 W - 300 W	400 W - 600 W
Mains	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²
Batteries	2.5 mm ²	6 mm ²	10 mm ²	10 mm ²
Load (2 outputs)	2.5 mm ²	6 mm ²	10 mm ²	10 mm ²
Alarm reports*	1.5 mm ²	1.5 mm ²	1.5 mm ²	1.5 mm ²

*the alarm report connector is unpluggable

Note: the battery and 12 V/48 A load terminals are 35 mm²

> Options

3 output connections with fuse, 4 output connections possible:	☑ Board to be installed by the customer. ☑ Secured by 4 clips on the motherboard. ☑ Connectors with 2.5 mm ² screw terminals. • Fuse 5 x 20 rating 4 A.
Omega DIN rail mounting kit	• Adapter for mounting the C6 and C23 cabinet on a DIN type rail
Digital display on C85 cabinet.	in quantity, consult us.
TCR cabinet	For redundancy maximal current 40 A.

> Cabinet and rack characteristics

Version	Size W x H x D (mm)	IP	Socle	Cover
C6	194 x 243 x 97	IP30	Metal, RAL 9006	ABS RAL 9003
C23	248 x 322 x 126	IP30	Metal, RAL 9006	ABS RAL 9003
C24	322 x 248 x 126	IP30	Metal, RAL 9006	ABS RAL 9003
C38	289 x 350 x 189	IP31	Metal, RAL 7035	Metal, RAL 7035
C48	425 x 345 x 120	IP30	Metal, RAL 9006	ABS RAL 9003
C85	408 x 408 x 224	IP31	Metal, RAL 7035	Metal, RAL 7035
C180	505 x 610 x 430	IP31	Metal, RAL 7035	Metal, RAL 7035
Rack F3U	482 x 132 x 110	IP30	Metal, RAL 7035	Metal, RAL 7035
Rack	483 x 132 x 395	IP30	Metal, RAL 7035	Metal, RAL 7035

> Types of battery cabinets

Version	Type	12 V DC	24 V DC	48 V DC
C24	Wall-mounted	7 Ah, 12 Ah, 24 Ah (2 x 12 Ah)	7 Ah, 12 Ah	2.1 Ah
C38	Wall-mounted & Floor-mounted	17 Ah, 24 Ah, 38 Ah	17 Ah, 24 Ah	7 Ah, 12 Ah
C48	Wall-mounted	24 Ah (2 x 12 Ah), 36 Ah (3 x 12 Ah), 48 Ah (4 x 12 Ah)	7 Ah, 12 Ah, 24 Ah (4 x 12 Ah)	7 Ah, 12 Ah
C85	Wall-mounted & Floor-mounted	48 Ah (2 x 24 Ah), 65 Ah, 80 Ah, 96 Ah (4 x 24 Ah)	24 Ah, 38 Ah, 48 Ah (4 x 24 Ah)	12 Ah, 17 Ah, 24 Ah
C180	Floor-mounted	120 Ah, 130 Ah, 140 Ah	65 Ah, 80 Ah, 120 Ah, 130 Ah, 170 Ah	38 Ah, 65 Ah, 80 Ah

> Product referencesAvailable on www.slat.com

SLAT can change specifications on his products without prior notice.