> Ratings		
	50 W	75 W
12 V DC	4 A	6 A
24 V DC	2 A	3 A
The currents (I_n) shown are at rated output power.		
> Standards-based specifications		
Safety	EN 60950-1 SELV class.	
EMC - Immunity	EN 61000-6-1 ⍰ EN 61000-6-2	
EMC - Emission	EN 61000-6-3 ⍰ EN 61000-6-4 ⍰ EN 55022 + A1 B class	
Trade	EN 50131 - 6 grade 3	
Environment	This product range meets the environmental requirements of ISO 14001, RoHS and WEEE standards.	
Certification	VdS 2115	
> Environmental specifications		
Humidity	while working: relative humidity 20% to 95% (non-condensing)	
Storage temperature	-25°C to +85°C	
Working temperature	Power	50 W - 75 W
	75% of load	-10°C to +60°C
	100% of load	-10°C to +55°C
Altitude	Above 2,000 m, the temperature decreases by 5% every 1,000 m	
Working life	200,000 hours at 25°C for external atmosphere and 75% load	
> Input specifications		
Voltages	110 V - 240 V single phase	
Frequency	50 to 60 Hz	
Neutral system	TT - TN - IT	
Switch-on current	limited by CTN	
Upstream circuit breaker required	Bipolar curve D	
Class	Class I	
	50 W	75 W
Primary current @ 195 V	0.51 A (12 V) - 0.52 A (24 V)	0.76 A (12 V) - 0.78 A (24 V)
Primary current @ 99 V	1 A (12 V) - 0.98 A (24 V)	1.63 A (12 V) - 1.5 A (24 V)
Converter	50 W	75 W
At 20% load	85%	85%
At rated load	88%	90%
> Output specifications		
Rated voltage	12 V DC - 24 V DC	12 V DC - 24 V DC
Floating voltage (V_n) set at half-load and 25°C (V)	13.6 (12 V) - 27.2 V (24 V)	13.6 V (12 V) - 27.2 V (24 V)
Short-circuit current limitation	From I_n to I_n +15% for output voltage > 50% of U_n.	

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> For reliable output voltage	
Protection against external attack	- **Resistance to all types of external aggressions:** • Overvoltages encountered on the mains network (lightning, industrial, isolation fault on impedance-earthed neutral system, etc.) • 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 at secondary. • Short-circuits inside the product, protected by primary fuse. • Increases in external temperatures (outside the specified range)
Charger current limitation control	- **Output current limitation** allows a charging cycle to be started with a dead battery. • Protects the product completely from short-circuits on the installation. • Protection selectivity is provided by fuses on each load output and the battery fuse.
High-performance regulation and filtering	- Particularly efficient **output voltage regulation** • Dynamic regulation < 5% of U_n for cumulative variations of the mains and the load (from 10% to 90%). - **Enhanced filtering**, which eliminates all interference and reduces the ripple on the DC output voltage. Battery capacity preserved and a guarantee of optimum system operation. • LF rms ripple < 0.2% U_n. • HF ripple (20 MHz-50 Ω) < 4% U_n. *Note: The* AXS3 and AXRS *ranges can operate without battery and may be used as a direct power supply.*
> For emergency power source control	
System control	- **Monitoring of:** • The status of mains, battery and load fuses. • Battery voltage. • Its operating status. • Mains voltage present in the correct operating range.
Battery charge management	- **This function is essential** for reaching the design life and to ensure optimum operation of the battery. • The load voltages are factory set for “sealed” recombination-type lead acid batteries. • They are consistent with the battery manufacturers' recommendations. • The charger features battery charging current limitation. • Supplying power to the load takes priority over battery charging. - The **battery current limit** is adjustable by the customer depending on the battery capacity to ensure recharge between 0.1 and 0.3C recommended by the manufacturers. • The thresholds are 25, 50 and 75% of rated current. • The selection is made by 2 microswitches. • The default load current is 75% of rated current. - **A battery voltage compensation system** maintains the charge characteristics within the limits specified by the battery manufacturer across the whole of the operational temperature range. A probe placed closer to the batteries measures the temperature thereof.
Battery backup	- **Automatic disconnection of the charger at end of discharge** to preserve its future capacity. • Prevents excessively deep discharge that can permanently downgrade performance (cut-out threshold 1.8V/cell). • Information is transmitted by the disconnections (pre-cut out alarm at 1.85 V/cell). • In 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.

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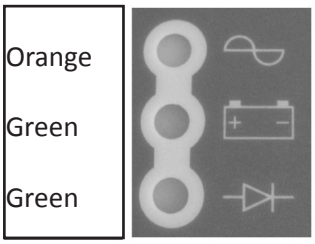
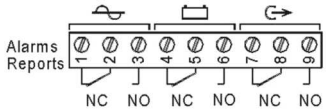
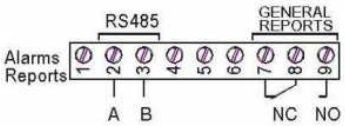
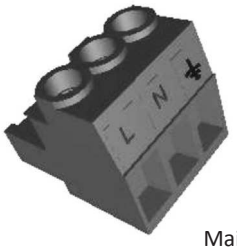
> Charger “own” consumption on the battery in autonomous mode		
	12 V DC	24 V DC
50 W	31.5 mA	38.5 mA
75 W	31.5 mA	38.5 mA

> For optimal communication	
 Display and remote reporting of the information	3 LEDs on card indicate the 3 fault states. Signaling failure orange LED if fault, green otherwise. - **Mains fault:** If mains not present. - **Charger fault:** If no voltage on Output 1. If no voltage on Output 2. If low voltage outputs (product overload). If the mains fuse is blown or not present. If the product is out of order. - **Battery fault:** • Battery fault if no battery (test every 30 seconds during the first 20 minutes after start-up and test every 15 minutes maximum. If a fault is detected, the test is conducted every 30 seconds, ll; and continues up to 20 minutes after the fault disappears). • If battery voltage < 1.85 V/cell ±3%. • If the internal impedance is too high (test every 4 hours maximum on a charged battery). A switch with a wired contact loop detects when the cover is opened or the unit is removed from the wall
On motherboard	A LED on the motherboard indicates the operational status before the cabinet is closed (display board not connected) or if no board is seen. Signals: All OK: green Faults: red
Communication AXS3 	The 3 faults (mains, battery, output) are reported on 3 dry contacts NC and NO (use positive security). Dry contact: 1A @ 24 V DC, 0.3A @ 125 V AC. An additional tamper dry contact is provided, grouping cover openning and wall detachment.
Communication AXRS 	- The 3 faults (mains, battery, charger) and opening of the cover and removal from the wall data are grouped on a single dry (failsafe) contact. - Dry contact: 1 A @ 24 V DC, 0.3 A @ 125 V AC. - AA serial RS485 link (Modbus) can communicate in addition of the 4 fault information, others analog values. (user’s, battery’s, charger’s voltages and currents, battery temperature). - The power supply is addressed by two microswitches (4 possible addresses).

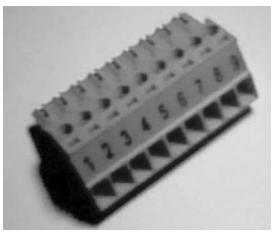
> Connection specifications	50 W - 75 W
Mains	1x3pin/0.2 - 2.5 mm²/15 A
Batteries	1x2pin/0.2 - 2.5 mm²/15 A
Load (2 outputs)	1x2pin/0.2 - 2.5 mm²/15 A
Alarm reports	1x9pin/0.2 - 1.5 mm²/14.5 A

All terminal blocks are removable with screen printing on the mobile card.



Mains

Output



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> Options	
3 fuse outputs kit	Board to be installed by the customer. Secured by 4 clips on the motherboard. Connectors with 2.5 mm² screw terminals. • 5 x 20 fuse, rating 4 A.

> Cabinet characteristics				
Cabinet	Dimension W x H x D (mm)	IP	Base	Cover
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
C85	408 x 408 x 224	IP31	Metal, RAL 7035	Metal, RAL 7035

> Types of battery cabinet			
Cabinet	Type	12 V DC	24 V DC
C24	Wall-mounted	7 Ah, 12 Ah, 24 Ah (2 x 12 Ah)	7 Ah, 12 Ah
C38	Wall-mounted & Floor-mounted	17 Ah, 24 Ah, 38 Ah	17 Ah, 24 Ah
C85	Wall-mounted & Floor-mounted	48 Ah (2 x 24 Ah), 65 Ah (3 x 12 Ah), 80 Ah, 96 Ah (4 x 24 Ah)	24 Ah, 38 Ah, 48 Ah (4 x 24 Ah)

> Associated battery capacities				
Charger voltage	12 V DC		24 V DC	
Charger ratings	4 A	6 A	2 A	3 A
Maximum battery charging current	3 A	4.5 A	1.5 A	2.25 A
Maximum capacity C20 - 1.75 V	50 Ah	86 Ah	26 Ah	40 Ah
Minimum capacity C20 - 1.75 V	7 Ah	7 Ah	7 Ah	7 Ah

> Product references
Available on www.slat.com

SLAT can change specifications on his products without prior notice.

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