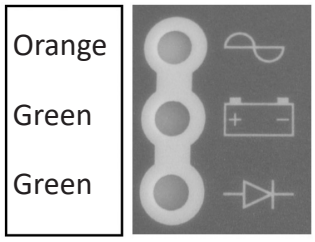
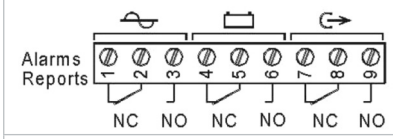
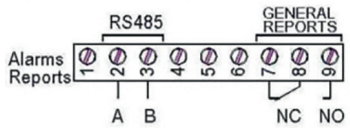
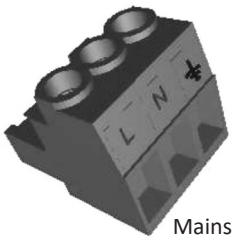
> Ratings		
	50 W	75 W
12 V DC	4 A	6 A
24 V DC	2 A	3 A
The currents (I_n) shown are at rated output power.		
> Standard-based specifications		
Safety	• EN IEC 62368-1 (2020) + A11 (2020)	
EMC - Immunity	• EN IEC 61000-6-1 (2019) • EN IEC 61000-6-2 (2019)	
EMC - Emission	• EN IEC 61000-6-3 (2021) • EN IEC 61000-6-4 (2019) • EN 55032 class B	
Trade	• EN 50131 - 6 grade 3	
Environment	This product range meets the environmental requirements of ISO 14001, RoHS and WEEE standards.	
Certification VdS	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	
MTBF	200,000 hours at 25°C for external atmosphere and 75% load	
> Input specifications		
Voltage	99 to 264 V AC single phase	
Frequency	45 to 65 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)
Efficiency	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 (U_n) set at half-load and 25°C	13.6 V (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	

> 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 discharged 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 close to the batteries measures the temperature thereof.
Battery backup	- **Automatic disconnection of the battery at end of discharge** to preserve its future capacity. • Prevents excessively deep discharge that can permanently downgrade performance (cut-out threshold 1.8V/cell). • An alarm is sent before disconnection (Pre-cut alarm threshold 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.

> Charger consumption on the battery during autonomy		
	12 V DC	24 V DC
50 W	31.5 mA	38.5 mA
75 W	31.5 mA	38.5 mA

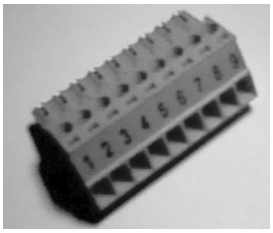
> For optimal communication	
 Display and remote reporting of the information	3 LEDs on card indicate the 3 fault states. Signaling failure orange LED if fault, green otherwise. - **Mains fault:** • If mains not present. - **Charger fault:** • If no voltage on Output 1. • If no voltage on Output 2. • 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, 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 when no display board exists. Signals: • All OK: green • Faults: red
Communication AXS3 	The 3 faults (mains, battery, output) are reported on 3 independent dry contacts NC / NO (failsafe). 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*  *Exists with RS485 communication. For more information, contact us.	- The 3 faults (mains, battery, charger) and opening of the cover and removal from the wall data are grouped one single dry contact (failsafe). - Dry contact: 1 A @ 24 V DC, 0.3 A @ 125 V AC. - A serial RS485 link (Modbus) allows to know precisely the fault information mentioned above and communicates the 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


Communication

> Options	
3 or 5 fuse outputs kit	• Customer installable Printed Circuit Board. • 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

SLAT can change specifications on his products without prior notice.