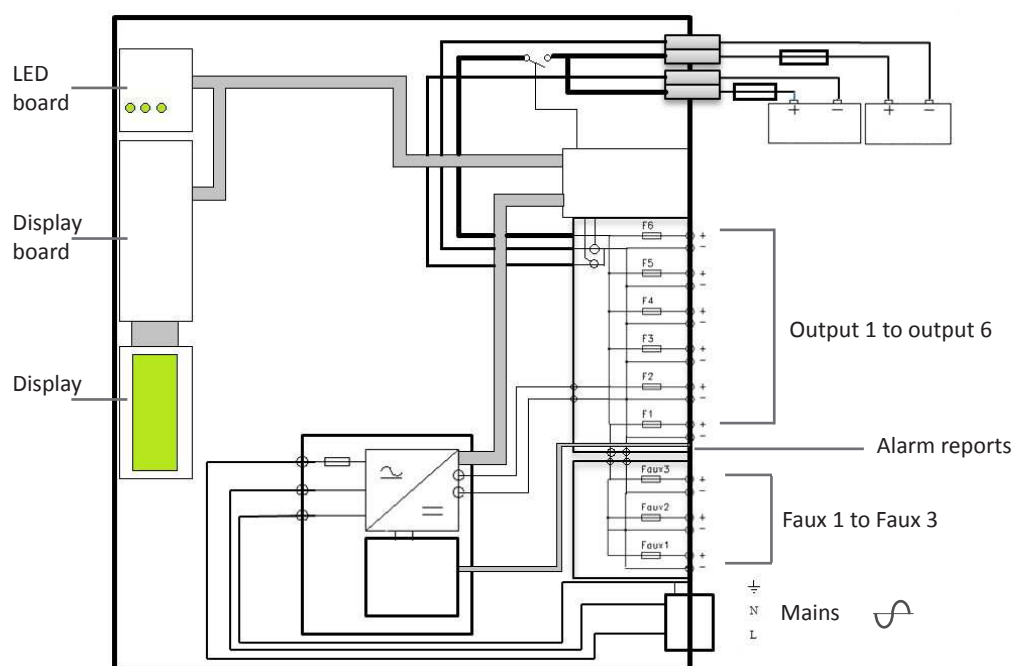




Front panel



Back



SON 24V 12A MS150 RK2U 2PBE

SON 48V 12A MS150 RK2U 2PBE

## > Standards-based specifications

Trade-specific standards	NF EN 54-4 / NF EN 12101-10 class A
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 55022 class B
Environment	<p>This product range meets the environmental requirements of ISO 14001, RoHS and WEEE standards.</p> <div style="display: flex; align-items: center; justify-content: center;"> </div>

## > N°CPR (CE)

0333-CPR-075557

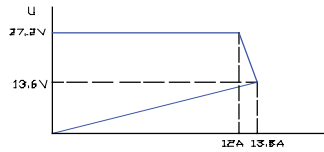
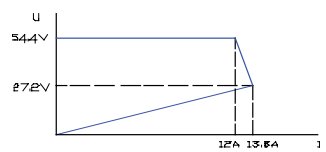
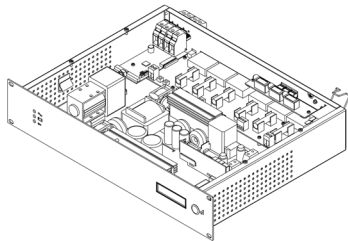
0333-CPR-075559

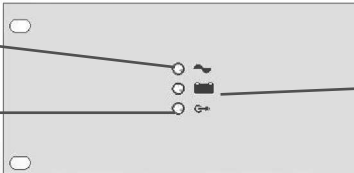
## > Environmental specifications


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 to +85°C
Working temperature	-5 to +45°C at 12 A
Altitude	Above 2,000 m, the maximum temperature decreases by 5% every 1,000 m
Working life	200,000 h at 25°C ambient surroundings

## > Ratings

Maximum current for all outputs	75 A	100 A	150 A
Number of amplifier outputs	6		
Maximum current per amplifier output	40 A		
Number of controller outputs	3		
Maximum current per controller output	5 A		

	SON 24V 12A MS150 RK2U 2PBE	SON 48V 12A MS150 RK2U 2PBE
> Input specifications		
Voltage	195 to 264 V AC	
Frequency	47 to 63 Hz	
Full load power	380 W	760 W
Full load efficiency	87%	91%
20% load efficiency	82%	86%
Neutral system	TT, TN, IT	
Class	Class 1	
> Output specifications		
Floating voltage (V <sub>n</sub> ) set at half-load and 25°C	27.2 V DC	54.4 V DC
Charger current	12 A	
Current limitation		
HFcac ripple (20 MHz - 50 Ω)	< 4% of U <sub>n</sub>	
Effective LF ripple	< 0.2% of U <sub>n</sub>	
Static and dynamic regulation characteristics	< 5% of floating voltage for cumulative variations of the mains and the load from 10 to 90%	
> Battery		
		
Cutoff	21.6 V +/- 3%	
Battery fault internal impedance threshold (configuration 75 A)	32 mΩ +/- 10%	64 mΩ +/- 10%
Battery fault internal impedance threshold (configuration 100 A)	25 mΩ +/- 10%	48 mΩ +/- 10%
Battery fault internal impedance threshold (configuration 150 A)	17 mΩ +/- 10%	32mΩ +/- 10%
Minimum battery capacity	65 Ah	
Maximum battery capacity	225 Ah	
Temperature compensation	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. If the temperature probe is shorted, broken or disconnected, the battery voltage is no longer compensated	
Charger power consumption	400 mA	600 mA

	SON 24V 12A MS150 RK2U 2PBE		SON 48V 12A MS150 RK2U 2PBE																																
> Connections																																			
Mains	2.5 mm² unpluggable																																		
Main amplifier outputs	16 mm² unpluggable																																		
Controller auxiliary outputs	2.5 mm² unpluggable																																		
Battery output	16 mm²																																		
Alarm report	1.5 mm² unpluggable																																		
Temperature probe	1.5 mm² unpluggable																																		
> Protections																																			
Against battery polarity inversions.	<b>- at power-up:</b> the switch does not close <b>- during operation:</b> fuse F8 (5 x 20, 12.5 A, T) of the power board breaks.																																		
Against battery connection errors.	<b>- if at power-up,</b> the battery voltage is > 30 V +/- 3% the battery switch does not close unless the voltage is < 30 V +/- 3% and> 14 V +/-3%		<b>- if at power-up,</b> the battery voltage is > 60 V +/- 3% the battery switch does not close unless the voltage is < 60 V +/- 3% and > 28 V +/-3%																																
Against overvoltages on secondary.	<b>- deregulation:</b> if output voltage> 28.8 V +/- 3%: cutting with cyclical restarting <b>- external:</b> transil protection		<b>- deregulation:</b> if output voltage> 57.6 V +/- 3%: cutting with cyclical restarting <b>- external:</b> transil protection																																
Against overcurrent and short circuits on secondary by fuse on each output / Against internal short circuits in the product by primary fuse	<table><tr><th>Fuse</th><th>Rating</th><th>Type</th><th>Size</th><th>Breaking capacity</th></tr><tr><td>F1 motherboard (mains)</td><td>6.3 A (24 V) and 8 A (48 V)</td><td>T</td><td>5 x 20</td><td>1,500 A high breaking capacity</td></tr><tr><td>F8 motherboard</td><td>12.5 A</td><td>T</td><td>5 x 20</td><td>-</td></tr><tr><td>F1...F6 (6 outputs) amplifiers</td><td>32 A</td><td>gG</td><td>10 x 38</td><td>-</td></tr><tr><td>Faux1 Faux3 (3 outputs) controllers</td><td>5 A</td><td>F</td><td>5 x 20</td><td>-</td></tr><tr><td>Additional battery fuse(s) (not included)</td><td>Ibmax (no mains) A</td><td>gG</td><td>-</td><td>-</td></tr></table>					Fuse	Rating	Type	Size	Breaking capacity	F1 motherboard (mains)	6.3 A (24 V) and 8 A (48 V)	T	5 x 20	1,500 A high breaking capacity	F8 motherboard	12.5 A	T	5 x 20	-	F1...F6 (6 outputs) amplifiers	32 A	gG	10 x 38	-	Faux1 Faux3 (3 outputs) controllers	5 A	F	5 x 20	-	Additional battery fuse(s) (not included)	Ibmax (no mains) A	gG	-	-
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Against overvoltage on the primary	by 275 V varistor																																		
Against excessive internal temperatures (65°C).	yes																																		
> Features																																			
Monitoring and signals	<div><div>mains fault</div><div>output voltage fault</div><div>battery fault</div><div></div><div>Signaling by LEDs Green if ok / orange if fault</div></div>																																		
Mains	<b>Fault:</b> - if mains <185 V +/- 5% as long as the charger has not started, <165 V +/- 5% if the charger had started. - if primary fuse absent or out of order, - if charger out of order, - if internal temperature too high																																		

	SON 24V 12A MS150 RK2U 2PBE	SON 48V 12A MS150 RK2U 2PBE
> Features		
Battery	<b>Fault:</b> - if no battery: - if too high internal impedance (threshold: cf. > Battery) - if battery voltage 23.5 V +/- 3% mains present.	<b>Fault:</b> - if no battery: - if too high internal impedance (threshold: cf. > Battery) - if battery voltage 47 V +/- 3% mains present.
	<b>Battery fault monitoring:</b> - detecting battery presence/absence: test every 30s during the first 20 minutes after commissioning and then 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. - internal impedance measurement: the test is performed every 4 hours maximum if the mains is present and if the current is < than the charger current.	
Output	<b>Fault:</b> - detection of the absence of voltage (no threshold) on one of the 6 + 3 outputs if no voltage on one of the outputs. - remote reporting by dry contact with delay (failsafe).	
Alarm reports	<div><div><div>1 2 3 4 5 6 7 8 9</div><div>NC NO NC NO NO NC NO</div></div><div><div>— Mains fault</div><div>— Battery fault</div><div>— Output voltage fault</div></div></div> <p>Mains fault / battery fault / output voltage fault: each fault is transferred to a contact (C-NO-NC) allowing 1 A @ 24 V DC / 0.5 A @ 120 V AC</p>	
OLED display	<div></div> <p>- <b>Languages available:</b> French, English, German. - <b>Measures:</b> battery voltage, output voltage, charger current, Ib1 and Ib2 battery current (if 2-battery configuration, total current I (sum of all output currents)). - <b>Faults:</b> mains fault, battery 1 and battery 2 absent, battery circuit impedance fault, battery low voltage fault, fuse faults / absence of voltage at outputs. - In case of failure the display provides access to troubleshooting instructions.</p>	
> Mechanical characteristics		
Dimensions 19"2U rack	19" L rack: 483 mm x 2U H: 89 mm x P: 400 mm (with connectors) or 344 mm (without connectors)	
Weight	5.4 kg (24 V) to 5.9 kg (48 V)	
Protection rating (front)	IP 30	
> Product references		
Available at <a href="http://www.slat.com">www.slat.com</a>		

\*SLAT reserves the right to modify the characteristics of its products without prior notice.