

Amperis ASR battery rectifier

Amperis industrial rectifier with IGBT and SCR technology




Amperis ASR battery rectifier

- Robust and reliable design for industrial applications.
- Provides high reliability, efficiency at moderate cost.
 - Microprocessor control.
- Equipment designed to provide easy accessibility and on-site maintenance.
 - Extensive variety of options and custom solutions.
- Industrial power supplies are based on standardized SCR and IGBT power converter technologies.
 - From 10 to 500A, up to 220VDC output.

amperis

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Industrial power supplies are based on a rectifier that converts AC power to direct current (DC). The Amperis ASR battery rectifier is designed to power critical charges in DC or to charge any type of battery. It is based on the standardized IGBT and SCR power converter technologies (6/12 pulses configuration) which guarantees high reliability and efficiency. These systems are available in various cabin types depending on their degree of protection, with protection ratings up to IP 54 or NEMA 3R. The team has a wide variety of options and custom solutions. The control boards are based on state-of-the-art microprocessors, equipped with alphanumeric and tactile control panels. From the panel the information is stored and you have a full range of communication options (RS-232, RS-485, USB, CANBUS, Wireless).

Applications:

- Petrochemical plants and Oil & Gas.
- Generation and substations.
- Water treatment plants.
- Manufacturer plants.
- Transportation

Optional Equipment:

- Output block diode (for parallel operation).
- Switch for charging.
- Ground fault monitoring, alarms and cooling system.
- Redundant power for control boards.
- Advanced communication solutions (RS-232, RS-485, USB, CANBUS, MODBUS, Wireless).
- IP54 cab.
- Expanded data logger with miniUSB or Bluetooth port.

Technical specifications

AC INPUT		COOLING	Forced ventilation.
TYPE	Amperis ASR battery rectifier	AUDIBLE NOISE	< 65 dBA at 1 meter.
STANDARD VOLTAGES	Single-phase 220-230-240 VAC ± 10% Three-phase 220-240, 400, 440, 480, 600 VAC ± 10% Frequency 50/60 Hz ± 5 Hz	ENCLOSURE PROTECTION	IP21 (Standard) IP31 (Opcional) IP54 (Opcional)
EFFICIENCY	>90%	TEMPERATURA AMBIENTE	Operation: -10/+50 °C Storage: -10/+70 °C
POWER FACTOR	Single-phase >90% / Three-phase > 94%	ALTITUDE	< 2000 m (According to EN62040-3)
DC OUTPUT		USER INTERFACE AND CONNECTIVITY	
STANDARD VOLTAGES	Nominal voltages of 24, 48, 220 VCC	USER INTERFACE	Display LCD + LEDs, keyboard and audible alarm.
MAXIMUM OUTPUT CURRENT	10,20,30,40,50,100,150,200,320,500A	CONNECTIVITY	- Internal storage of 200 cycles (expandable to 600 with miniUSB, optional) - Optional BMS. - Optional Wireless Card. - Interface CANBUS. - Compatible with Wireless battery identification modules. - RS-485 port for network connections.
OVERLOAD CAPACITY	<120% to 30 min <150% to 3 min >150% to 3s		
OUTPUT REGULATION	Static voltage regulation <1% Voltage ripple <1%		
PROTECTION			
ELECTRONIC OVERLOAD PROTECTION	Complete protection in case of output short circuit or overload.	STANDARDS	
ANTI-ARCING	When the battery is connected, no arcing is generated at the connectors. If the battery is disconnected while it's being charged, arcing is possible, (it's necessary to turn off the charger before to disconnect the battery).	MARKING	CE
POWER-ON SELF-TEST	Self-test at each power-up (<10s). In the event of an error, an error message is displayed.	EMC	IEC EN 61000-6-2, IEC EN 61000-6-4
MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS		SAFETY	IEC EN 50178, IEC EN 62040-1
DIMENSIONS (W x H x D mm)	CABINET A: 500 x 900 x 440 (mm) CABINET B: 550 x 1300 x 550 (mm) CABINET C: 800 x 1600 x 500 (mm) CABINET D: 800 x 2000 x 600 (mm)	TEST RUN	IEC EN 62040-3

NOTE: Reported Efficiency and Power Factor values are AVERAGE values, measured over the entire charging cycle. Peak Efficiency and Power Factor are higher.