

RDC1000

Battery Charger/Rectifier Series

APPLICATIONS

- RDC1000 Compact Battery Charger Rectifier for Industrial applications
- Oil & Gas
- Energy production and distribution
- Process controls
- Transportation
- Safety
- Telecommunications
- All the industrial & process control applications (chemical, mining, steel, paper, etc.)

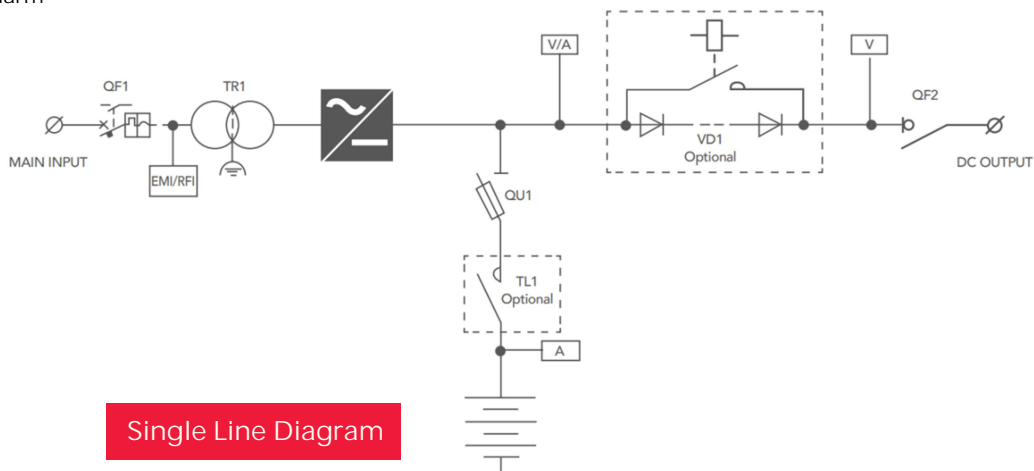
MAIN OPTIONS

- Battery automatic Circuit Breaker (thermal-magnetic release)
- Blocking Diode on Output for parallel operation
- Surge arresters on Input
- DC Earth Fault monitor with separate positive & negative signalisation
- Relay card with up to #24 remote signals
- Active load sharing 10% In in parallel operation
- Fan monitor and alarm
- Base metal plate with removable undrilled plate for installation on site
- Temperature sensor (cable length=10m) for charging voltage compensation
- DC Distribution Panel
- Dropping Diodes for Load voltage regulation
- Battery (with rack or cabinet)
- Other Input/Output voltages
- ny other specification according to specific projects (contact us)
- Fan monitor and alarm

FEATURES

- Standard DC System Configuration
- Compact Design
- Cost Effective & Short Lead Time solutions
- Microprocessor Control
- 6-Pulse SCR Bridge
- Suitable for charging Lead-acid or Ni-Cd batteries
- Digital Control Panel w/ Graphic LCD, LEDs & Keypad
- Input automatic Circuit Breaker (thermal-magnetic release)
- Output Disconnected switch
- Input insulation transformer
- EMI Filter on Input
- LC Smoothing filter on Output EMI Filter on Input

Rating	50A	100A	200A
	24/48	110/220	220



Single Line Diagram

RDC1000 TECHNICAL SPECIFICATIONS

AC Input

Rated Voltage	230VAC 1Ph $\pm 10\%$ Or 400V AC 3Ph $\pm 10\%$
Frequency	50, 60 Hz $\pm 5\%$
THD	$\leq 30\%$ typ.
Protections	Under/Over voltage – Automatic Circuit Break

DC Output

Rated Voltage	24 / 48 / 110 / 220 VDC					
Charging Voltages		VRLA	Vented LA	Ni-Cd		
	Floating:	2.23-2.27	2.20-2.30	1.40-1.50	V/c	(adj.)
	Boost:	-	2.40-2.45	1.50-1.65	V/c	(adj.)
	Equalise:	up to 2.35	up to 2.70	up to 1.70	V/c	(adj.)
Charge Characteristic	"IU" according to DIN 41773					
Static Regulation	$\pm 1\%$					
Voltage Ripple	$< 1\%$ RMS					
Output Total current limit	20 \div 100 % In (adj.)					
Battery charging current	10 \div 100 % In (adj.)					
Protections	Under/Over voltage – Overload – Short circuit					

Control & Signalisation

Microprocessor	High Performance 8-Bit Microcontroller with Advanced RISC Architecture
LCD Panel	Backlit graphic LCD for Meters, Alarm/Status messages, History events & Parameters Settings
Signalling LED	Operation (green), Mains OK (green), Common minor alarm (red), Common major alarm (red)
Acoustic Signal	Buzzer
Volt free signalling contacts	Mains failure, Charger minor alarm, Charger major alarm, Battery low; relays COM/NO/NC

Environmental conditions

Installation	Indoor
Ambient Temperature	-10°C to +50°C
Storage Temperature	-25°C to +70°C
Relative Humidity	$\leq 95\%$ @ 40°C non condensing
Max Installation Altitude	≤ 2000 m a.s.l.
Audible Noise	< 65 dB (A) at 1 m

Mechanical Characteristics

Cabinet	Free standing, floor mounting, steel sheet (15-20/10 sheet thickness)
Cooling method	Fan assisted (temperature-controlled)
Access	Front door
Cable entry	From bottom
Degree of protection	IP21/Other on request
Painting / Colour	Epoxy-polyester thermosetting powder coating / RAL 7035
Dimensions & Weights	See the table below

Standards

Quality	ISO 9001 - 2008
CE Conformity	Yes
Safety	IEC EN 60950
EMC	IEC EN 61000-6-2, 61000-6-4
Semiconductor Convertors	IEC EN 60146-1-1, 60146-1-3, 60146-2

Dimensions (W×D×H, mm) / Weights (kg Approx.)

DC Volt Nom.	Amps		
	50	100	150
24	600×600×1100 140	600×600×1100 155	600×600×1100 180
48	600×600×1100 150	600×600×1300 210	600×600×1300 220
110	600×600×1300 205	600×600×1300 230	600×600×1300 295
220	600×600×1300 235	600×600×1500 325	600×600×1500 375



SATRON Power Solutions
Approach your local SATRON Power Solutions
representative for further support.
Contact details can be found on:
www.satronpower.com