AC230V-20kW Rack Mount Load Bank

Technical Solutions

1 Foreword

- (1) With the progress of society, the application of uninterruptible power supplies is becoming more and more widespread, such as data centers, network rooms, banks, industry, communications, military, aerospace, marine, transportation, scientific research institutes and other fields. 20kW Rack Mount Load Bank is used to simulate the actual heating of the server room in the server room to detect the precision air conditioning cooling effect. The load stability is good, the power accuracy is high, the product availability is strong, and it is suitable for the test of 230VAC power load. The Rack Mount Load Bank is based on the actual rack. It is made in size and can be adjusted in multiple gears, which is suitable for the test of temperature rise and precision air conditioning in the equipment room. Professional design, safe, reliable, small size can simulate the on-site server load characteristics, tailor-made.
- (2) The diagram in the agreement is only for reference, specific please in kind prevail.

2 Supply List

The following chart shows the equipment and accessories that will be delivered.

Equipment Components	Quantity	Remarks
AC230V-20kW Rack Mount Load Bank	1unit	
Manual	1 copy	
Packing List	1 copy	

3 Technical Parameters

System Parameter		
Rated Voltage & Frequency	230V single phase 50Hz	
Rated Load Power	20kW	
Load Steps	8 load steps:A(FAN,1kW, 1kW), B(3kW), C(3kW), D (3kW), E (3kW), F (3kW), G (3kW); When voltage lower than rated voltage, the power will change according to Ohm' Law	
Power Factor	1	
Full Load Tolerance	≤+5%	
Insulation Grade	Grade F	
Duty Cycle	Continuous	

Cooling	Forced air cooling, air intake in front and exhaust in back	
Connection Mode	C20 port at load bank side	
Protection Grade	IP20	
Case Color	Black	
Enclosure Dimension	10U: Approximate (about 483.6mm×500mm×444.5mm (width * depth* height)	
Weight	Around 35kgs	
Working Environment Parameter		
Ambient Temperature	-10℃~+40℃	
Altitude	≤1500 meters	
Atmospheric Pressure	86∼106kPa	
Relative humidity	≤95%	
Brands of Main Components		
Switch gear	Huyu	

4 Main Functions

- (1) **Load test:** It can load any power within the rated power to test the cooling effect, load capacity of power supply and line reliability of precision air conditioner by analogy with the actual heating of the server in the room.
- **(2) Control mode:** 20kW rack-mounted load, the load is equipped with 1 fan switch and 8 load steps switches, which can be controlled by any combination of 8 miniature circuit breakers (well-known brands) to increase/decrease power.
- **(3) Fan power supply:** After the power is connected, the fan switch is turned on and the fan starts.
- **(4) Temperature Protection:** Temperature protection: When the fan stops or the load temperature exceeds the safety threshold (85 $^{\circ}$ C), an audible and visual alarm is generated and the load is cut off.

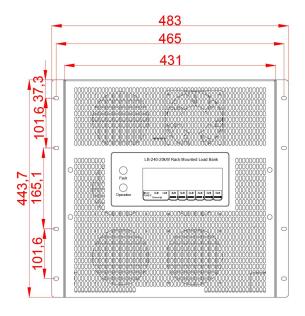
(5) Load Bank Cable:

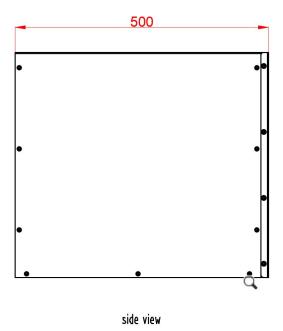
Internal cables adopt multi-core flame retardant flexible wire, and add glass fiber sleeve protection

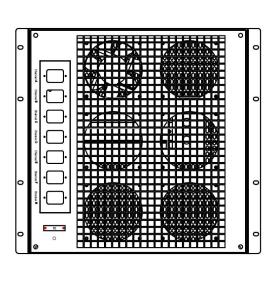
5 Operation Caution

The load bank is with 8 load steps switches and 1 fan switch. First start fan switch, can load/unload through 8 load steps air switches combination, Max power is 20kW. Please make sure fan start before loading. If overheat alarm, please turn off the power switch and then check the equipment problem.

6. Outline Diagram (just for reference)







rear view





C19



C20

