

SPECIFICATIONS

Model			RBS03K3-100	RBS06K6-100	RBS09K9-100
Output rating					
Rated power			± 3300 W	± 6600 W	± 9900 W
Rated voltage (source)			0 V to 100 V	0 V to 100 V	0 V to 100 V
Operating voltage (sink)			5 V to 100 V	5 V to 100 V	5 V to 100 V
Rated current			±170 A	±340 A	±510 A
Output voltage					
Maximum settable voltage			100 V		
Setting accuracy			0.05 %+0.05 %FS		
Setting resolution			0.01 V		
Load regulation CV			0.05 %FS		
Line regulation CV			0.015 %FS		
Temperature coefficient CV			100 ppm		
Remote sensing (compensation voltage)			5 V		
Source only	Transient response(*1)		2 ms		
	Ripple noise	p-p(*2)	500 mV		
		rms(*3)	35 mV		
	Rise time(*4)	Full load	60 ms		
		No load	15 ms		
	Fall time(*5)	Full load	15 ms		
		No load	30 ms		
Output current					
Settable maximum source current			170 A	340 A	510 A
Settable maximum sink current			-170 A	-340 A	-510 A
Setting accuracy			0.4 %+0.4 %FS		
Setting resolution			0.01 A		
Load regulation CC			0.2 %FS		
Line regulation CC			0.05 %FS		
Ripple and noise(*6)		rms(*3)	0.1 %FS		
Temperature coefficient CC			200 ppm		
Output power					
Settable maximum source power			3300 W	6600 W	9900 W
Settable maximum sink power			-3300 W	-6600 W	-9900 W
Setting accuracy			0.5 %+0.5 %FS		
Setting resolution			1 W		
DC Output Resistor					
Resistance range			0 Ω to 100 Ω		
Setting accuracy(*7)			≤5 % Rmax(0 % to 10 % Rmax) ; ≤10 % Rmax(10 % to 100 % Rmax)		
Setting resolution			0.01 Ω		
Protective functions					
OVP	Range	0 %FS to 110 %FS			
	Accuracy	0.1 %FS			
OCP	Range	0 %FS to 110 %FS			
	Accuracy	0.2 %FS			
OTP			✓	✓	✓
Vsense reverse protection			✓	✓	✓
Input voltage protection (OVP, UVP)			✓	✓	✓
Display accuracy					
Voltage	Accuracy	0.05 %+0.05 %FS			
	Resolution	0.01 V			
Current	Accuracy	0.4 %+0.4 %FS			
	Resolution	0.01 A			
Power	Accuracy	0.5 %+0.5 %FS			
	Resolution	0.001 kW			
Interfaces digital					
All-in-One(USB,RS232,RS485,CAN,LAN)(*8)			All-in-One / GPIB		
GPIB(*8)			All-in-One / GPIB		
200V three-phase three-wire input					
Nominal input rating			220 Vac to 230 Vac		
Input voltage range			198 Vac to 242 Vac		
Input frequency range			47 Hz to 63 Hz		
Output Power			3300 W	6600 W	9900 W
Input current (MAX)		at 198 Vac	18.1 A	31.7 A	31.7 A
Input power (MAX)			3.7 kVA	7.3 kVA	10.9 kVA
Power factor (TYP)			0.99		
Leakage current			5 mA		
Efficiency sink/source (up to)			93 %		
General Specifications					
Environmental conditions	Operating temperature		0 °C to 40 °C		
	Operating humidity		20 % to 90 % RH		
	Storage temperature		-10 °C to 70 °C		
	Storage humidity		20 % to 90 % RH		
	Altitude		1000 m		
Withstand voltage		AC input to case (PE)	DC 2300 V		
Insulation resistance		Between output and GND	DC 500 V		
Mechanical construction	Dimensions (W x H x D) mm		482 mm x 133.3 mm x 790 mm		
	Weight		24 kg	32 kg	40 kg
Parallel operation			✓	✓	✓

(*1)When the load changes from 50 % to 100 %, or from 100 % to 50 %, the voltage returns to within 0.75 % of the rating.

(*2)Measurement frequency bandwidth is 20 Hz to 20 MHz.

(*3)Measurement frequency bandwidth is 20 Hz to 2 MHz.

(*4)First set the OV output, from 10 % to 90 % of the rated output voltage,with pure resistance.

(*5)Rated voltage output, then set to 0 V, from 90 % to 10 % of rated output voltage,with pure resistance.

(*6) The ripple is measured with the output voltage set between (20 to 100) % of the rated output voltage and at full output current. The ripple specification is 0.1 % FS in Source mode and 0.2 % FS in Sink and Load modes. For the 11.6 kW and 17.4 kW models, the ripple specification is 0.5 % FS. For the 2250 V, 9.9 kW model, the ripple specification is 0.15 % FS.

(*7)When the input voltage is within 10 % to 100 % of the RBS voltage range and the load current is within 10 % to 100 % of the RBS current range.

(*8)Communication interface: one of two, factory-installed.

SPECIFICATIONS

Model		RBS03K3-500	RBS06K6-500	RBS09K9-500	RBS11K6-500	RBS17K4-500
Output rating						
Rated power		± 3300 W	± 6600 W	± 9900 W	± 11600 W	± 17400 W
Rated voltage (source)		0 V to 500 V				
Operating voltage (sink)		10 V to 500 V				
Rated current		±40 A	±80 A	±120 A	±160 A	±240 A
Output voltage						
Maximum settable voltage		500 V				
Setting accuracy		0.05 %±0.05 %FS				
Setting resolution		0.01 V				
Load regulation CV		0.03 %FS				
Line regulation CV		0.015%FS				
Temperature coefficient CV		100 ppm				
Remote sensing (compensation voltage)		25 V				
Source only	Transient response ^(※1)	2 ms				
		Ripple noise	p-p ^(※2)	600 mV		
	rms ^(※3)		95 mV			
	Rise time ^(※4)	Full load	30 ms			
		No load	15 ms			
	Fall time ^(※5)	Full load	15 ms			
		No load	30 ms			
Output current						
Settable maximum source current		40 A	80 A	120 A	160 A	240 A
Settable maximum sink current		-40 A	-80 A	-120 A	-160 A	-240 A
Setting accuracy		0.15 %±0.15 %FS				
Setting resolution		0.01 A				
Load regulation CC		0.1 %FS				
Line regulation CC		0.05 %FS				
Ripple and noise ^(※6)		rms ^(※3)	0.1 %FS		0.5 %FS	
Temperature coefficient CC		200 ppm				
Output power						
Settable maximum source power		3300 W	6600 W	9900 W	11600 W	17400 W
Settable maximum sink power		-3300 W	-6600 W	-9900 W	-11600 W	-17400 W
Setting accuracy		0.5 %±0.5 %FS				
Setting resolution		1 W				
DC Output Resistor						
Resistance range		0 Ω to 500 Ω				
Setting accuracy ^(※7)		≤5 % Rmax(0 % to 10 % Rmax) ; ≤10 % Rmax(10 % to 100 % Rmax)				
Setting resolution		0.01 Ω				
Protective functions						
OVP	Range	0 %FS to 110 %FS				
	Accuracy	0.1 %FS				
OCP	Range	0 %FS to 110 %FS				
	Accuracy	0.2 %FS				
OTP		✓	✓	✓	✓	✓
Vsense reverse protection		✓	✓	✓	✓	✓
Input voltage protection (OVP, UVP)		✓	✓	✓	✓	✓
Display accuracy						
Voltage	Accuracy	0.05 %±0.05 %FS				
	Resolution	0.01 V				
Current	Accuracy	0.15 %±0.15 %FS				
	Resolution	0.01 A				
Power	Accuracy	0.5 %±0.5 %FS				
	Resolution	0.001 kW				
Interfaces digital						
All-in-One(USB,RS232,RS485,CAN,LAN) ^(※8)		All-in-One / GPIB				
GPIB ^(※8)		All-in-One / GPIB				
200V three-phase three-wire input						
Nominal input rating		220 Vac to 230 Vac				
Input voltage range		198 Vac to 242 Vac				
Input frequency range		47 Hz to 63 Hz				
Output Power		3300 W	6600 W	9900 W	11600 W	17400 W
Input current (MAX)		at 198 Vac	18.1A	31.7 A	31.7 A	55.2 A
Input power (MAX)			3.7 kVA	7.3 kVA	10.9 kVA	12.8 kVA
Power factor (TYP)			0.99			
Leakage current			5 mA			
Efficiency sink/source (up to)			93 %			
General Specifications						
Environmental conditions	Operating temperature	0 °C to 40 °C				
	Operating humidity	20 % to 90 % RH				
	Storage temperature	-10 °C to 70 °C				
	Storage humidity	20 % to 90 % RH				
	Altitude	1000 m				
Withstand voltage		AC input to case (PE)				
Insulation resistance		Between output and GND				
Mechanical construction	Dimensions (W x H x D) mm	482 mm x 133.3 mm x 790 mm				
	Weight	24 kg	32 kg	40 kg	34 kg	43 kg
Parallel operation		✓	✓	✓	✓	✓

(*1)When the load changes from 50 % to 100 %, or from 100 % to 50 %, the voltage returns to within 0.75 % of the rating.

(*2)Measurement frequency bandwidth is 20 Hz to 20 MHz.

(*3)Measurement frequency bandwidth is 20 Hz to 2 MHz.

(*4)First set the 0V output, from 10 % to 90 % of the rated output voltage,with pure resistance.

(*5)Rated voltage output, then set to 0 V, from 90 % to 10 % of rated output voltage,with pure resistance.

(*6) The ripple is measured with the output voltage set between (20 to 100) % of the rated output voltage and at full output current. The ripple specification is 0.1 % FS in Source mode and 0.2 % FS in Sink and Load modes. For the 11.6 kW and 17.4 kW models, the ripple specification is 0.5 % FS. For the 2250 V, 9.9 kW model, the ripple specification is 0.15 % FS.

(*7)When the input voltage is within 10 % to 100 % of the RBS voltage range and the load current is within 10 % to 100 % of the RBS current range.

(*8)Communication interface: one of two, factory-installed.

SPECIFICATIONS

Model		RBS03K3-750	RBS06K6-750	RBS09K9-750	RBS11K6-750	RBS17K4-750
Output rating						
Rated power		± 3300 W	± 6600 W	± 9900 W	± 11600 W	± 17400 W
Rated voltage (source)		0 V to 750 V				
Operating voltage (sink)		10 V to 750 V				
Rated current		±25 A	±50 A	±75 A	±120 A	±180 A
Output voltage						
Maximum settable voltage		750 V				
Setting accuracy		0.05 %+0.05 %FS				
Setting resolution		0.1 V				
Load regulation CV		0.03 %FS				
Line regulation CV		0.015 %FS				
Temperature coefficient CV		100 ppm				
Remote sensing (compensation voltage)		37.5 V				
Source only	Transient response(*1)		2 ms			
	Ripple noise	p-p(*2)	900 mV			
		rms(*3)	100 mV			
	Rise time(*4)	Full load	30 ms			
		No load	15 ms			
	Fall time(*5)	Full load	15 ms			
		No load	30 ms			
Output current						
Settable maximum source current		25 A	50 A	75 A	120 A	180 A
Settable maximum sink current		-25 A	-50 A	-75 A	-120 A	-180 A
Setting accuracy		0.15 %+0.15 %FS				
Setting resolution		0.01 A				
Load regulation CC		0.1 %FS				
Line regulation CC		0.05 %FS				
Ripple and noise(*6)	rms(*3)	0.1 %FS			0.5 %FS	
Temperature coefficient CC		200 ppm				
Output power						
Settable maximum source power		3300 W	6600 W	9900 W	11600 W	17400 W
Settable maximum sink power		-3300 W	-6600 W	-9900 W	-11600 W	-17400 W
Setting accuracy		0.5 %+0.5 %FS				
Setting resolution		1 W				
DC Output Resistor						
Resistance range		0 Ω to 750 Ω				
Setting accuracy(*7)		≤5 % Rmax(0 % to 10 % Rmax) ; ≤10 % Rmax(10 % to 100 % Rmax)				
Setting resolution		0.01 Ω				
Protective functions						
OVP	Range	0 %FS to 110 %FS				
	Accuracy	0.1 %FS				
OCP	Range	0 %FS to 110 %FS				
	Accuracy	0.2 %FS				
OTP		✓	✓	✓	✓	✓
Vsense reverse protection		✓	✓	✓	✓	✓
Input voltage protection (OVP, UVP)		✓	✓	✓	✓	✓
Display accuracy						
Voltage	Accuracy	0.05 %+0.05 %FS				
	Resolution	0.1 V				
Current	Accuracy	0.15 %+0.15 %FS				
	Resolution	0.01 A				
Power	Accuracy	0.5 %+0.5 %FS				
	Resolution	0.001 kW				
Interfaces digital						
All-in-One(USB,RS232,RS485,CAN,LAN)(*8)		All-in-One / GPIB				
GPIB(*8)		All-in-One / GPIB				
200V three-phase three-wire input						
Nominal input rating		220 Vac to 230 Vac				
Input voltage range		198 Vac to 242 Vac				
Input frequency range		47 Hz to 63 Hz				
Output Power		3300 W	6600 W	9900 W	11600 W	17400 W
Input current (MAX)	at 198 Vac	18.1A	31.7 A	31.7 A	55.2 A	55.2 A
Input power (MAX)		3.7 kVA	7.3 kVA	10.9 kVA	12.8 kVA	19.2 kVA
Power factor (TYP)		0.99				
Leakage current		5 mA				
Efficiency sink/source (up to)		93 %				
General Specifications						
Environmental conditions	Operating temperature	0 °C to 40 °C				
	Operating humidity	20 % to 90 % RH				
	Storage temperature	-10 °C to 70 °C				
	Storage humidity	20 % to 90 % RH				
	Altitude	1000 m				
Withstand voltage		AC input to case (PE)				
Insulation resistance		DC 2300 V				
Mechanical construction	Between output and GND	DC 500 V				
	Dimensions (W x H x D) mm	482 mm x 133.3 mm x 790 mm				
Parallel operation	Weight	24 kg	32 kg	40 kg	34 kg	43 kg
		✓	✓	✓	✓	✓

(*1)When the load changes from 50 % to 100 %, or from 100 % to 50 %, the voltage returns to within 0.75 % of the rating.

(*2)Measurement frequency bandwidth is 20 Hz to 20 MHz.

(*3)Measurement frequency bandwidth is 20 Hz to 2 MHz.

(*4)First set the 0V output, from 10 % to 90 % of the rated output voltage,with pure resistance.

(*5)Rated voltage output, then set to 0 V, from 90 % to 10 % of rated output voltage,with pure resistance.

(*6)The ripple is measured with the output voltage set between (20 to 100) % of the rated output voltage and at full output current. The ripple specification is 0.1 % FS in Source mode and 0.2 % FS in Sink and Load modes. For the 11.6 kW and 17.4 kW models, the ripple specification is 0.5 % FS. For the 2250 V, 9.9 kW model, the ripple specification is 0.15 % FS.

(*7)When the input voltage is within 10 % to 100 % of the RBS voltage range and the load current is within 10 % to 100 % of the RBS current range.

(*8)Communication interface: one of two, factory-installed.

SPECIFICATIONS

Model		RBS06K6-1000	RBS11K6-1000	RBS09K9-1500	RBS11K6-1500	RBS17K4-1500	RBS09K9-2250	RBS17K4-2250
Output rating								
Rated power		± 6600 W	± 11600 W	± 9900 W	± 11600 W	± 17400 W	± 9900 W	± 17400 W
Rated voltage (source)		0 V to 1000 V		0 V to 1500 V			0 V to 2250 V	
Operating voltage (sink)		10 V to 1000 V		10 V to 1500 V			10 V to 2250 V	
Rated current		±40 A	±80 A	±40 A	±60 A	±80 A	±25 A	±60 A
Output voltage								
Maximum setttable voltage		1000 V		1500 V			2250 V	
Setting accuracy		0.05 %+0.05 %FS						
Setting resolution		0.1 V						
Load regulation CV		0.03 %FS						
Line regulation CV		0.015 %FS						
Temperature coefficient CV		100 ppm						
Remote sensing (compensation voltage)		50 V		75 V			112.5 V	
Source only	Transient response(*1)	2 ms						
		Ripple noise	P-P(*2)	1700 mV		2000 mV		2400 mV
	rms(*3)		295 mV		300 mV		370 mV	400 mV
	Rise time(*4)	Full load	30 ms					
		No load	15 ms					
	Fall time(*5)	Full load	15 ms					
		No load	30 ms					
Output current								
Settable maximum source current		40 A	80 A	40 A	60 A	80 A	25 A	60 A
Settable maximum sink current		-40 A	-80 A	-40 A	-60 A	-80 A	-25 A	-60 A
Setting accuracy		0.15 %+0.15 %FS					0.2 %+0.2 %FS	
Setting resolution		0.01 A						
Load regulation CC		0.1 %FS						
Line regulation CC		0.05 %FS						
Ripple and noise(*6)	rms(*3)	0.1 %FS	0.5 %FS	0.1 %FS	0.5 %FS		0.15 %FS	0.5 %FS
Temperature coefficient CC		200 ppm						
Output power								
Settable maximum source power		6600 W	11600 W	9900 W	11600 W	17400 W	9900 W	17400 W
Settable maximum sink power		-6600 W	-11600 W	-9900 W	-11600 W	-17400 W	-9900 W	-17400 W
Setting accuracy		0.5 %+0.5 %FS					1 %+1 %FS	
Setting resolution		1 W						
DC Output Resistor								
Resistance range		0 Ω to 1000 Ω		0 Ω to 1500 Ω			0 Ω to 2250 Ω	
Setting accuracy(*7)		≤5 % Rmax(0 % to 10 % Rmax) ; ≤10 % Rmax(10 % to 100 % Rmax)						
Setting resolution		0.01 Ω						
Protective functions								
OVP	Range	0 %FS to 110 %FS						
	Accuracy	0.1 %FS						
OCP	Range	0 %FS to 110 %FS						
	Accuracy	0.2 %FS						
OTP		✓	✓	✓	✓	✓	✓	✓
Vsense reverse protection		✓	✓	✓	✓	✓	✓	✓
Input voltage protection (OVP, UVP)		✓	✓	✓	✓	✓	✓	✓
Display accuracy								
Voltage	Accuracy	0.05 %+0.05 %FS						
	Resolution	0.1 V						
Current	Accuracy	0.15 %+0.15 %FS					0.2 %+0.2 %FS	
	Resolution	0.01 A						
Power	Accuracy	0.5 %+0.5 %FS					1 %+1 %FS	
	Resolution	0.001 kW						
Interfaces digital								
All-in-One(USB,RS232,RS485,CAN,LAN)(*8)		All-in-One / GPIB						
GPIB(*8)		All-in-One / GPIB						
200V three-phase three-wire input								
Nominal input rating		220 Vac to 230 Vac						
Input voltage range		198 Vac to 242 Vac						
Input frequency range		47 Hz to 63 Hz						
Output Power		6600 W	11600 W	9900 W	11600 W	17400 W	9900 W	17400 W
Input current (MAX)	at 198 Vac	31.7 A	55.2 A	31.7 A	55.2 A	55.2 A	31.7 A	55.2 A
Input power (MAX)		7.3 kVA	12.8 kVA	10.9 kVA	12.8 kVA	19.2 kVA	10.9 kVA	19.2 kVA
Power factor (TYP)		0.99						
Leakage current		5 mA						
Efficiency sink/source (up to)		93 %						
General Specifications								
Environmental conditions	Operating temperature	0 °C to 40 °C						
	Operating humidity	20 % to 90 % RH						
	Storage temperature	-10 °C to 70 °C						
	Storage humidity	20 % to 90 % RH						
	Altitude	1000 m						
Withstand voltage	AC input to case (PE)	DC 2300 V						
Insulation resistance	Between output and GND	DC 500 V						
Mechanical construction	Dimensions (W x H x D) mm	482 mm x 133.3 mm x 790 mm						
	Weight	32 kg	34 kg	40 kg	34 kg	43 kg	40 kg	43 kg
Parallel operation		✓	✓	✓	✓	✓	✓	✓

(*1)When the load changes from 50 % to 100 %, or from 100 % to 50 %, the voltage returns to within 0.75 % of the rating.

(*2)Measurement frequency bandwidth is 20 Hz to 20 MHz.

(*3)Measurement frequency bandwidth is 20 Hz to 2 MHz.

(*4)First set the 0V output, from 10 % to 90 % of the rated output voltage,with pure resistance.

(*5)Rated voltage output, then set to 0 V, from 90 % to 10 % of rated output voltage,with pure resistance.

(*6) The ripple is measured with the output voltage set between (20 to 100) % of the rated output voltage and at full output current. The ripple specification is 0.1 % FS in Source mode and 0.2 % FS in Sink and Load modes. For the 11.6 kW and 17.4 kW models, the ripple specification is 0.5 % FS. For the 2250 V, 9.9 kW model, the ripple specification is 0.15 % FS.

(*7)When the input voltage is within 10 % to 100 % of the RBS voltage range and the load current is within 10 % to 100 % of the RBS current range.

(*8)Communication interface: one of two, factory-installed.