# 2. SPECIFICATIONS

## 2-1. Specification

Unit model	Indoor				RAS-B10N4KVRG-E		RAS-B13N4KVRG-E		
	Outdoor				RAS-10J2AVSG-E1		RAS-13J2AVSG-E1		
Cooling capacity	•			2.50		3.50			
Cooling capacity ra	nge			(kW)	0.89-3.20		1.00-4.10		
Heating capacity	_			(kW)	3.20		4.20		
Heating capacity ra	nge			0.90-4.7 1.00-5.30			-5.30		
Power supply	<u> </u>			(kW)	1Ph/220-240V/50Hz				
Electric	Indoor	Operation r	mode		Cooling	Heating	Cooling	Heating	
characteristic	Indoor			(A)	0.25-0.23	0.25-0.23	0.28-0.26	0.28-0.26	
		Running current		(W)	35	35	40	40	
		Power consumption					65	65	
	Outdoor	Power factor		(%)	63	63			
	Outdoor	Operation mode		(4)	Cooling	Heating	Cooling	Heating	
		Running current		(A)	2.57-2.35	3,30-3.02	4.23-3.86	4.92-4.54	
		Power consumption		(W) (%)	505	705	760	1040	
		Power factor	Power factor		87	95	82	96	
		Starting current		(A)	2.82-2.58	3.55-3.25	4.51-4.12	5.20-4.80	
COP (Cooling / Hea	ating)				4.63	/4.32	4.38	/3.89	
Operating	Indoor	High	(Cooling / Heating)	(dB-A)	41/41 31/31		43/43 34/34		
noise	1	Medium	(Cooling / Heating)	(dB-A)					
	1	Low	(Cooling / Heating)	(dB-A)	22/22		23/23		
	Outdoor	(Cooling / Heating)		(dB-A)	44/46		46/48		
Indoor unit	Unit model		<del></del>		RAS-B10N4KVRG-E		RAS-B13N4KVRG-E		
	Dimension	Height		(mm)	300		300		
	Billionolori	Width		(mm)	987		987		
				(mm)	210		210		
	Not weight	Depth		(kg)	11		11		
	Net weight						30		
	Fan motor output		(0	(W) (m <sup>3</sup> / hr.)	30				
0 11 "	+	Air flow rate (Cooling / Heating)			600/610		670/680		
Outdoor unit	Unit model				RAS-10J2AVSG-E1		RAS-13J2AVSG-E1		
	Dimension	Height		(mm)	550		550		
		Width		(mm)	780		780		
	Depth		(mm)	290		290			
	Net weight	-			26		30		
	Compressor	Motor outp	ut	(VV)	550		620		
		Туре				Single rotary type with DC-inverter variable speed control			
		L Model				KSK75D43UEZA KSK89D53UFZ			
	Fan motor output	Wodel		(W)	43				
	Air flow rate		(Cooling / Hoating)	(m <sup>3</sup> / hr.)	1890/1890 1950/1950			/1050	
Dining	-		(Cooling / Heating)	(111 / 111.)	1090/			71950	
Piping	Type	li			Flare connection				
connection	Indoor unit	Liquid side (mm)			Ø6.35				
		Gas side		(mm) (mm)		Ø9.52			
	Outdoor unit		Liquid side		Ø6.35				
		Gas side (mm				Ø9.52			
	Maximum length			(m)	20				
	Maximum charge-	less length		(m)	15				
	Maximum height o	lifference		(m)	12				
Refrigerant	Name of refrigerar	nt			R32				
	Weight			(kg)	0	).55	0	.80	
Wiring		Power supp	oly			3 Wires: Include:	s earth (Outdoor)		
connection			ction			4 Wires: Inc	ludes earth		
Usable temperature	range	Indoor			21-32/ -28				
		Outdoor	(Cooling / Heating)	(°C)	-15,46/-15,24				
Accessory	Indoor unit	_	Installation plate			1			
			Wireless remote controller			1			
		Batteries				2			
			Remote controller holder			1			
						2			
			Toshiba Ultra pure filter						
			Mounting screw  Permete controller helder		10(⊘4x25L)				
		Remote controller holder Flat head wood screw Installation manual Owner's manual			2(⊘3.1x16L) 1 1				
1									
	l								

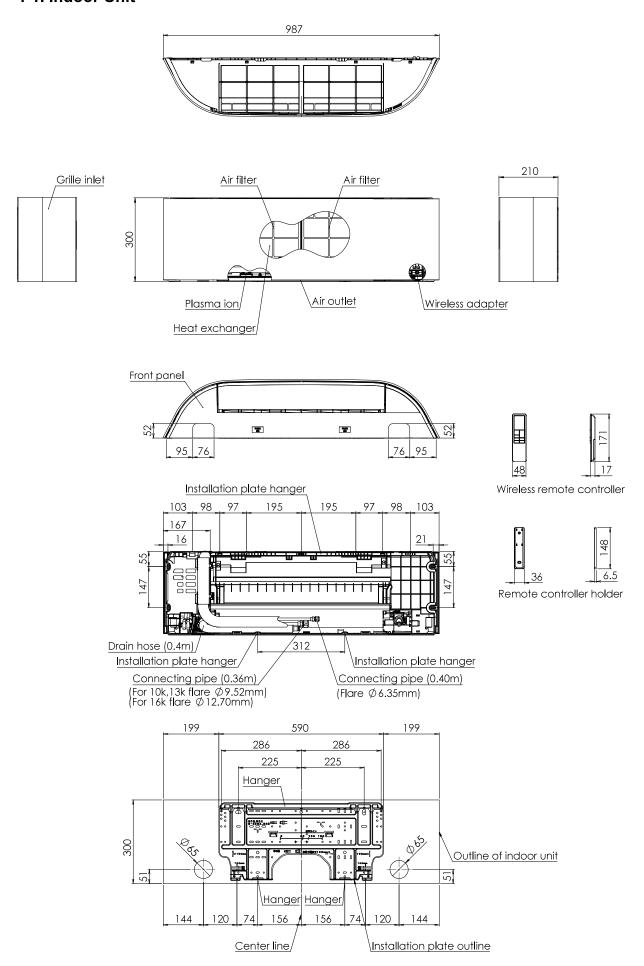
 $<sup>^{\</sup>star}$  The specification may be subject to change without notice for purpose of improvement.

Unit model	Indoor			1	RAS-B16N4KVRG-E			
	Outdoor				RAS-16J2AVSG-E1			
Cooling capacity				(kW)	4.60			
Cooling capacity r	ange			(kW)	1.20-5.30			
Heating capacity	9-			(kW)	5.50			
Heating capacity r	ange			(kW)	1.10-6.30			
Power supply	ango			()	1Ph/220-240V/50Hz			
Electric	Indoor	Operation	mode		Cooling Heating			
characteristic	Indoor	<u> </u>	Running current		0.31-0.29	0.31-0.29		
			Power consumption		45	45		
			Power factor		65	65		
	Outdoor		Operation mode					
	Outdoor	_ <u>_</u>			Cooling	Heating		
			Running current		6.14-5.91	7.04-6.46		
			Power factor		1305	1475		
			Power factor		92	96		
000 (0 1: (1)		Starting cu	Starting current		6.72-6.20	7.35-6.75		
COP (Cooling / He		I	T.2			/3.62		
Operating	Indoor	High	(Cooling / Heating)	(dB-A)		/45		
noise	1	Medium	(Cooling / Heating)	(dB-A)		/36		
	<u> </u>	Low	(Cooling / Heating)	(dB-A)	25/26			
	Outdoor		(Cooling / Heating)	(dB-A)		/50		
Indoor unit	Unit model	Unit model			RAS-B16N4KVRG-E			
	Dimension	Height		(mm)	3	00		
		Width		(mm)	9	87		
		Depth		(mm)	2	10		
	Net weight	-		(kg)		12		
	Fan motor output			(VV)	:	30		
	Air flow rate	·		(m <sup>3</sup> / hr.)	690/730			
Outdoor unit	Unit model				RAS-16J2AVSG-E1			
	Dimension	Height	Height		550			
		Width		(mm)	780			
		Depth		(mm)		90		
	Net weight	1500		(kg)	33			
	Compressor	Motor output		(W)	890			
	Compressor	Type		(,				
		1,,60	Type		Single rotary type with DC-inverter variable speed control			
		L Model			KSN108	D22LIE7		
	Fan motor output			(W)	KSN108D22UFZ 43			
	·			(m <sup>3</sup> / hr.)	2040/2040			
Piping	Air flow rate (Cooling / Heating)			(111 / 111.)				
	Type	It invited a lab		(	Flare connection			
connection	Indoor unit	Liquid side		(mm)	Ø6.35			
	0.11	Gas side		(mm)	Ø12.70			
	Outdoor unit	Liquid side		(mm)	Ø6.35			
		Gas side		(mm)		12.70		
	Maximum length			(m)	20			
	Maximum charge-			(m) (m)		15		
		Maximum height difference			12			
Refrigerant Name of refrigera		t			R32			
	Weight			(kg)		.80		
Wiring		Power supply			3 Wires: Includes earth (Outdoor)			
connection			Interconnection			cludes earth		
Usable temperatu	re range	Indoor	(Cooling / Heating)	(°C)	21-32/ -28			
		Outdoor	(Cooling / Heating)	(°C)	-15,46/-15,24			
Accessory	Indoor unit	Installation	plate		1			
		Wireless re	Wireless remote controller		1			
		Batteries	· · · · · · · · · · · · · · · · · · ·		2			
		Remote co	ontroller holder		1			
		Toshiba U	tra pure filter	1	2			
		Mounting s	-		10(⊘4x25L)			
		Remote co	Remote controller holder		2(⊘3.1x16L)			
		Flat head	Flat head wood screw			. 12196/		
		Installation	Installation manual			1		
		Owner's m	anual		1			
	_	_	_		'			

<sup>\*</sup> The specification may be subject to change without notice for purpose of improvement.

### 4. CONSTRUCTION VIEWS

#### 4-1. Indoor Unit



### 4-2. Outdoor Unit

