

# SUBMITTAL DATA SHEET

### MODEL: Heat Recovery 50Hz - REYQ44TAY1

TROJECT NAME.	
Location:	Approval:
Engineer:	Date
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

#### FEATURES AND BENEFITS

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The new VRV R series enables simultaneous operation of cooling and heating within a single refrigerant piping circuit by controlling the BS unit. This series also substantially improves energy efficiency by recycling exhaust heat.

Modern office buildings are highly airtight and subject to an increasing heat load due to the use of computers, lighting equipment and other office equipment. In these buildings some rooms may require artificial cooling even in winter, depending on the amount of sunshine received and the number of people in the room. In order to meet such requirements the Heat Recovery Series enables the simultaneous operation of cooling and heating by controlling the BS unit that switches cooling and heating. This series also substantially improves energy efficiency by recycling waste heat.

Development of a highly efficient heat exchanger utilizing of a two-split structure in a conventional system, two heat exchanger panels are utilized: one is used as an evaporator; while the other is used as a condenser. In the newly developed system, a two-split structure is utilized, with one panel split into two parts (top and bottom) at an optimal ratio depending on the capacity required for simultaneous cooling and heating operation. Heat radiation loss has been minimized, and the heat recovery efficiency and partial load characteristics have been improved.

VRT Smart Control optimally supply only for the needed capacity of indoor units Daikin developed VRT smart control by combining air volume control (VAV: Variable Air Volume) for indoor units with conventional VRT control, which optimizes compressor speed by calculating the required load for the entire system and optimal target refrigerant temperature based on data sent from each indoor unit. Coordination with the air volume control reduces compressor load and minimizes operation loss based on detailed control. VRT smart control ensures energy savings and comfortable air conditioning to meet actual operating conditions.

Comfort low operation sound night time quiet operation function for areas with stringent restrictions placed on outdoor sound levels, the outdoor unit can be set for low operation sound during the nighttime to meet sound restrictions. Large airflow, high static pressure and quiet technology.

Compact design with high performance highly integrated heat exchanger, optimized inner design to ensure smooth airflow, electric components were downsized and positioned in the dead space of the bell mouth side to decrease airflow resistance. Sufficient cooling for electrical components

High reliability at high ambient temperatures it is possible to keep operation stable even at high ambient temperatures by cooling the inverter power module.

Outer Rotor DC Motor (ODM) Only Daikin has adapted an ODM with the feature of stable rotation and volumetric efficiency.

Easy maintenance the electrical components are strategically located on the top which eases the maintenance process. Moreover, the heat exchanger on the front side can be used effectively to improve its performance. Without affecting the fan volume, the electric components are designed to be at the top and this utilizes dead space. This eliminates the problem of suction resistance.

Long piping length provides more design flexibility, which can match even large-sized buildings.

#### **EXTERNAL APPEARANCE**









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#### **SPECIFICATIONS**

### MODEL: Heat Recovery 50Hz - REYQ44TAY1

Model Name			REYQ44TAY1 (REYQ12TAY1+REYQ16TAY1+REYQ16TAY1)			
Power supply			3 phase, 380-415 V, 50 Hz			
kca *1 Cooling capacity Btu		kcal/h	107.000			
		Btu/h	423.000			
		kW	124,0			
		kcal/h	119.000			
5		Btu/h	471.000			
		kW	138,0			
Casing colour			Ivory white (5Y7.5/1)			
			(1,657×930×765)+(1,657×1,240×765)+			
Dimensions: (H×W×D)		mm	(1,657×1,240×765)			
Heat exchange	r	-	Cross fin coil			
	Туре		Hermetically sealed scroll type			
Compressor	Motor output× Number of units	kW	$(4.9 \times 1) + (3.4 \times 1) + (3.7 \times 1) + (3.4 \times 1) + (3.7 \times 1)$			
	Starting method		Soft start			
	Туре		Propeller fan			
	Motor output	kW	(0.50×1)+(0.60×2)+(0.60×2)			
-	Airflow rate	m³/min				
Fan		l/s	3,000+3,983+3,983			
		cfm	6,354+8,437+8,437			
	Drive		Direct drive			
	Liquid pipe	mm	f19.1 C1220T (Brazing connection)			
Connecting pipes	Gas pipe	mm	f41.3 C1220T (Brazing connection)			
pipes	High and low pressure gas pipe	mm	f34.9 C1220T (Brazing connection)			
Mass kg		kg	230+310+310			
*3 Sound pressure level dB(A)		dB(A)	65			
Sound power level dB(/		dB(A)	86			
Safety devices			High pressure switch, Fan driver overload protector, Over current relay, Inverter overload protector			
Capacity control %		%	4-100			
	Refrigerant name		R410A			
Refrigerant	Charge	kg	9.9+11.8+11.8			
	Control		Electronic expansion valve			
Refrigerator oil			Refer to the nameplate of compressor			
Standard accessories			Installation manual, Operation manual, Connection pipes, Clamp			
Drawing No.	Specifications					
	Sound level		—			

Notes:

\*1. Indoor temp.: 27°CDB, 19°CWB / outdoor temp.: 35°CDB / Equivalent piping length: 7.5 m, level difference: 0 m.

\*2. Indoor temp.: 20°CDB, 15°CWB / outdoor temp.: 7°CDB, 6°CWB / Equivalent piping length: 7.5 m, level difference: 0 m.

\*3. Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.

During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.

When there is concern for noise the surrounding area such as residences, we recommend investigating the

installation location and taking soundproofing measures.

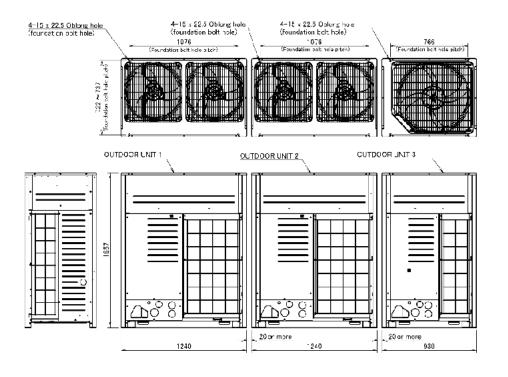




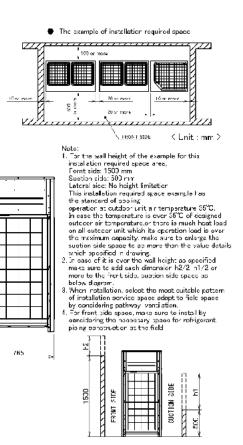
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DIMENSIONS

### MODEL: Heat Recovery 50Hz - REYQ44TAY1



l	SYSTEM NAME	OUTDOOR UNIT1	DVG. Ho.	CUTDODE UNIT2	DWC . No.	CUTDOOR UNITS	EWC. No.
[	REYC42T/TA	REVCIOE/TA	SD091 906	FEYD16T/TA	3009-906	RFYQ OT/TA	30091883
	REYG44T/TA	REVG16T/TA	SEC91306	FEYQ16T/TA	3009 906	REYQ: 21/TA	30091883



Unit: mm 3D091950A



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