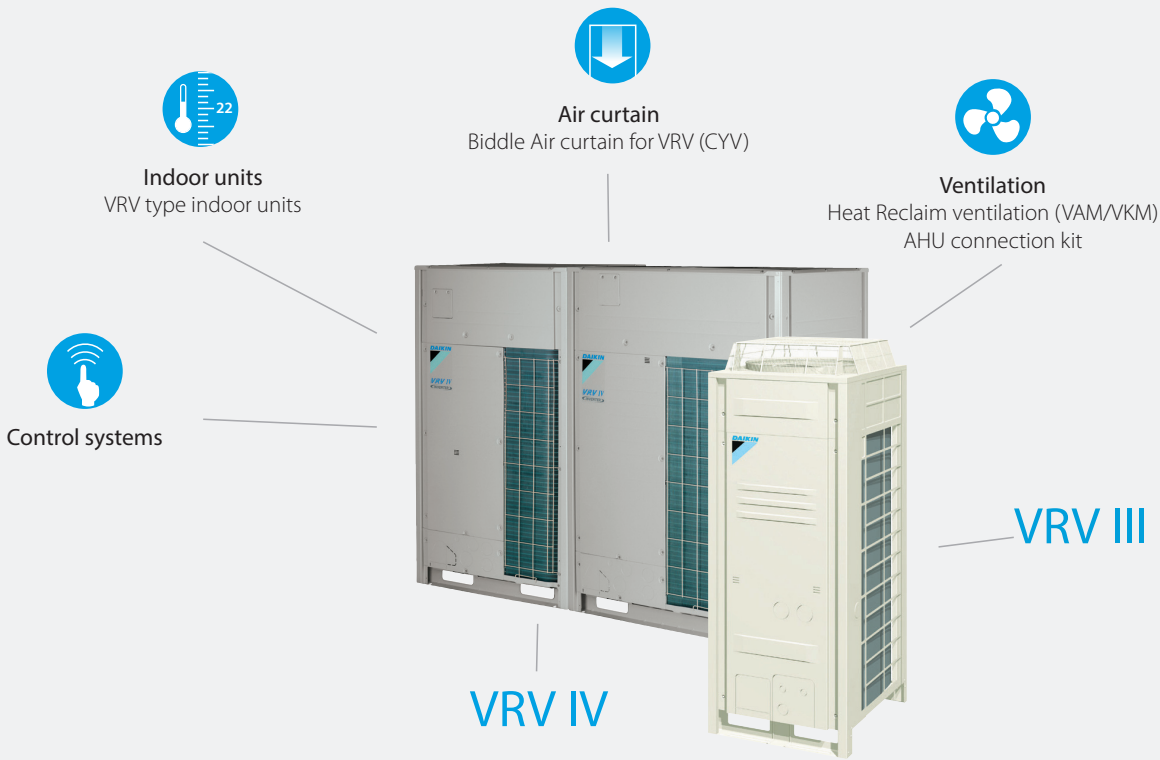


Replacement VRV



Quick & quality replacement for R-22 and R-407C systems



Outdoor Unit Product Range

VRV IV Q-series

Heat pump

Variable refrigerant temperature

Customize your VRV for best seasonal efficiency & comfort

VRV configurator

Software for simplified commissioning, configuration and customisation

- › 7 segment indicator
- › Automatic refrigerant charge
- › Night quiet mode
- › Low noise function
- › Full inverter compressors
- › Gas cooled PCB
- › 4 side heat exchanger
- › Reluctance brushless DC compressor
- › Sine wave DC inverter
- › DC fan motor
- › E-pass heat exchanger
- › I demand function
- › Manual demand function



VRV III-Q

Heat pump & Heat recovery

- › Automatic refrigerant charge
- › Night quiet mode
- › Low noise function
- › Full inverter compressors
- › Reluctance brushless DC compressor
- › Sine wave DC inverter
- › DC fan motor
- › E-pass heat exchanger
- › I demand function
- › Manual demand function

For more information on these features refer to the VRV IV technologies tab

Replacement technology



The quick and quality way of upgrading R-22 and R-407C systems

These benefits will convince your customer

Drastically improve your efficiency, comfort and reliability

Avoid loss of business

Replacing now prevents unplanned, lengthy downtime of air conditioning systems. It also avoids loss of business for shops, complaints from guests in hotels, lower working efficiency and loss of tenants in offices.

Quick and easy installation

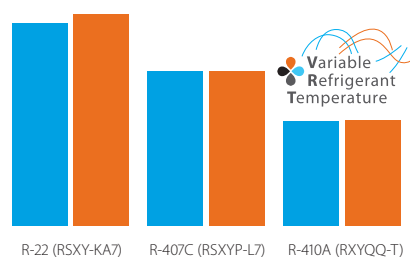
No interruption of daily business while replacing the system thanks to phased-in, fast installation.

Smaller footprint, more performance

Thanks to a smaller footprint, Daikin outdoor units save space. Also, more indoor units can be connected to the new outdoor unit compared to the old system, allowing to increase capacity.

Lower long-term costs

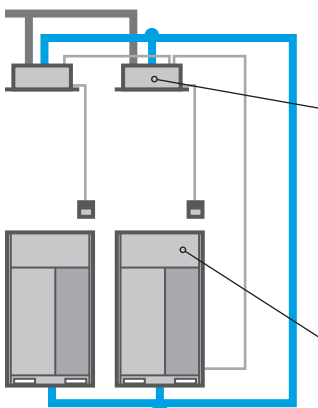
EU Directives prohibit system repairs with R-22 after January 1, 2015. Delaying the required R-22 replacement until an unplanned system breakdown is a losing game. Replacement day will come. Installing a technically advanced system lowers energy consumption and maintenance costs from day one.



Up to 48% less consumption

Comparison of 10HP systems:
■ Cooling mode
■ Heating mode

Keep your refrigerant piping



The Daikin low-cost upgrade solution

! Replace indoor units and BS boxes

Contact your local dealer to check compatibility in case you need to keep the indoor units.

! Replace outdoor units

Your copper pipes will last for multiple generations

- copper pipes used in air conditioning systems tested by Daikin will last over 60 years after installation.
- Japan/China have replaced with VRV Q-series already 10 years ago!

Umeda Center Building, Japan

- original A/C system: 20 years in use
- replacement with VRV Q-series: 2006 - 2009
- capacity up from 1620HP to 2322HP
- SHASE renewal award:





! Planning your replacement in future?

Monitor your system now!

Your building use might have changed over the years. Monitoring and Daikin expert advice prepare you for an optimum replacement to maximize efficiency and comfort, while minizing the investment cost of your new system.

VRV-Q benefits to increase your profit

Optimise your business

Less installation time

Tackle more projects in less time thanks to faster installation. It is more profitable than replacing the full system with new piping.

Lower installation costs

Reducing installation costs enables you to offer customers the most cost-effective solution and improve your competitive edge.

Replace non-Daikin systems **NON DAIKIN** **DAIKIN**

It is a trouble-free replacement solution for Daikin systems and for systems made by other manufacturers.

Easy as one-two-three

A simple solution for replacement technology enables you to handle more projects for more customers in less time and offer them the best price! Everybody gains.

Compare installation steps

Conventional solution

- 1 Recover refrigerant
- 2 Remove units
- 3 Remove refrigerant pipes
- 4 Install new piping and wiring
- 5 Install new units
- 6 Leak test
- 7 Vacuum drying
- 8 Refrigerant charging
- 9 Test operation

VRV-Q

- 1 Recover refrigerant
- 2 Remove units
- Re-use existing piping and wiring
- 3 Install new units
- 4 Leak test
- 5 Vacuum drying
- 6 Automatic refrigerant charging, cleaning and testing



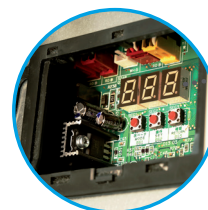
Up to 45% shorter installation time

Automatic refrigerant charge

The unique automatic refrigerant charge eliminates the need to calculate refrigerant volume and ensures that the system will operate perfectly. Not knowing the exact piping lengths because of changes or mistakes in case you didn't do the original installation or replacing a competitor installation no longer poses a problem.

Automatic pipe cleaning

There is no need to clean inside piping as this is handled automatically by the VRV-Q unit. Finally the test operation is performed automatically to save time.



One touch convenience:

- > Measure and charge refrigerant
- > Automatic pipe cleaning
- > Test operation



Replacement VRV

- › Cost effective and fast replacement as only the outdoor and indoor unit needs to be replaced, meaning almost no work has to be carried out inside the building
- › Efficiency gains of more than 70% can be realized, by virtue of technological developments in heat pump technology and the more efficient R-410A refrigerant
- › Less intrusive and time consuming installation compared to installing a new system, as the refrigerant piping can be maintained
- › Unique automatic refrigerant charge eliminates the need to calculate refrigerant volume and allows safe replacement of competitor replacement
- › Automatic cleaning of refrigerant piping ensures a clean piping network, even when a compressor breakdown has occurred
- › Accurate temperature control, fresh air provision, air handling units and Biddle air curtains all integrated in a single system requiring only one single point of contact
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors (for RXYQQ-T units)
- › Possibility to add indoor units and increase capacity without changing the refrigerant piping
- › Possibility to spread the various stages of replacement thanks to the modular design of the VRV system
- › Free combination of outdoor units to meet installation space or efficiency requirements (for RXYQQ-T units)
- › Contains all standard VRV features

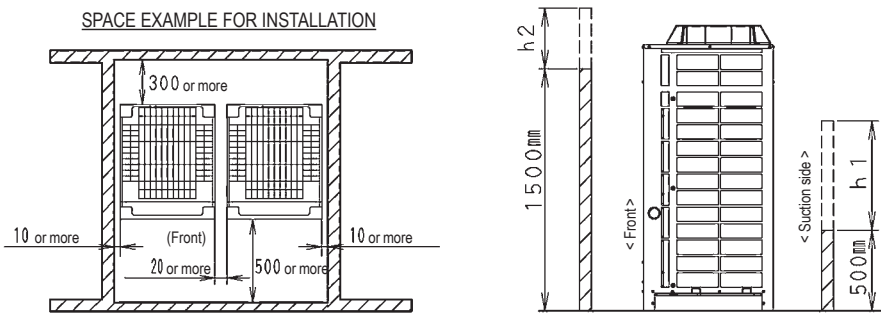
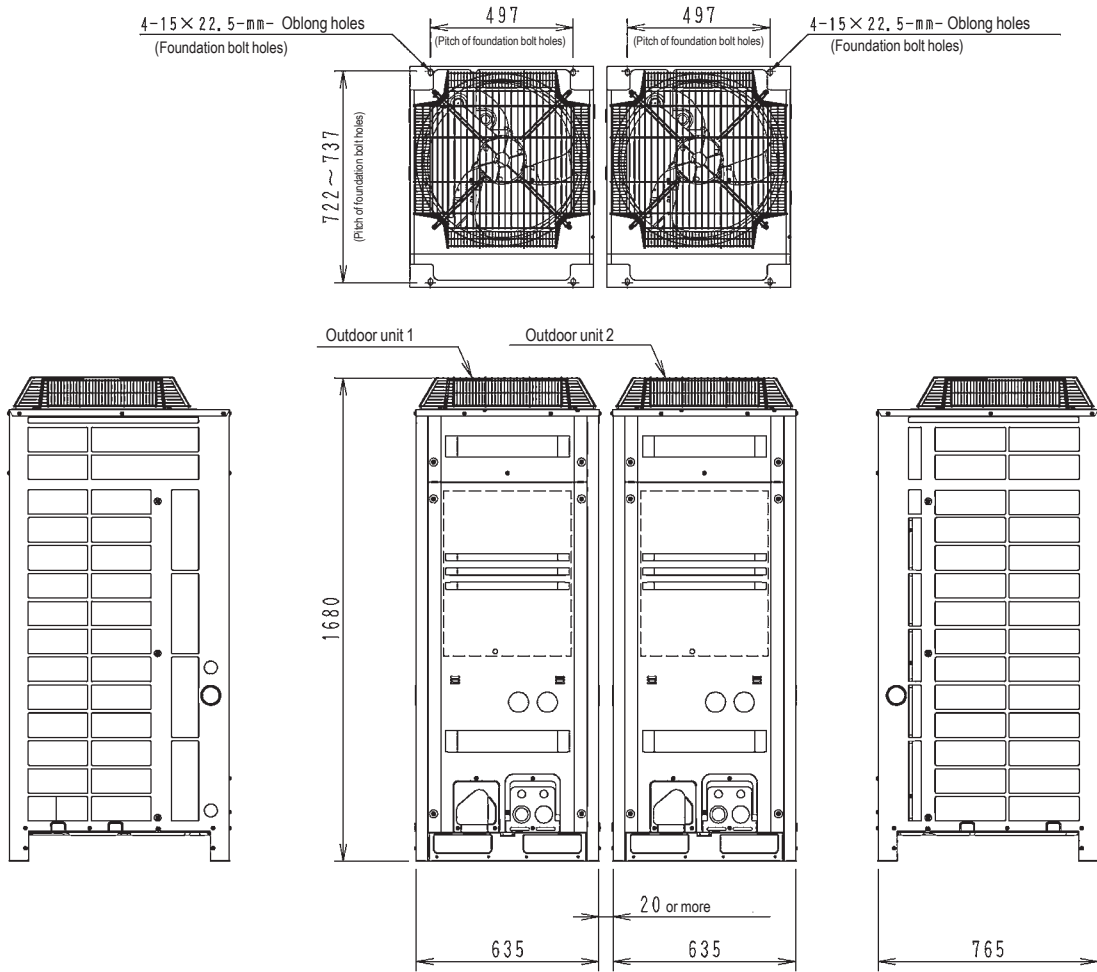


Outdoor system				RQCEQ	280P3	360P3	460P3	500P3	540P3	636P3	712P3	744P3	816P3	848P3
System	Outdoor unit module 1			RQEQ140P3	RQEQ180P3	RQEQ140P3		RQEQ180P3	RQEQ212P3	RQEQ140P3		RQEQ180P3	RQEQ212P3	
	Outdoor unit module 2			RQEQ140P3	RQEQ180P3	RQEQ140P3	RQEQ180P3		RQEQ212P3	RQEQ180P3		RQEQ212P3		
	Outdoor unit module 3			-			RQEQ180P3		RQEQ212P3	RQEQ180P3	RQEQ212P3			
	Outdoor unit module 4			-			-			RQEQ212P3				
Capacity range		HP	10	13	16	18	20	22	24	26	28	30		
Cooling capacity	Nom.	kW	28.0	36.0	45.0	50.0	54.0	63.6	71.2	74.4	81.6	84.8		
Heating capacity	Nom.	kW	32.0	40.0	52.0	56.0	60.0	67.2	78.4	80.8	87.2	89.6		
Power input - 50Hz	Cooling	Nom.	kW	7.04	10.3	12.2	13.9	15.5	21.9	21.2	23.3	27.1	29.2	
	Heating	Nom.	kW	8.00	10.7	13.4	14.7	16.1	17.7	20.7	21.2	23.1	23.6	
EER		kW	3.98	3.48	3.77	3.61	3.48	2.90	3.36	3.19	3.01	2.90		
COP		kW	4.00	3.72	3.89	3.80	3.72	3.79	3.80	3.81	3.77	3.79		
Maximum number of connectable indoor units				21	28	34	39	43	47	52	56	60	64	
Indoor index connection	Min.		140	180	230	250	270	318	356	372	408	424		
	Nom.		280	360	500		540	636	712	744	816	848		
	Max.		364	468	598	650	702	827	926	967.0	1,061	1,102		
Sound pressure level	Cooling	Nom.	dBA	57	61		62	63	64	63	64	65	66	
	Piping connections		Liquid	OD	mm	9.52	12.7		15.9			19.1		
Piping connections	Gas		OD	mm	22.2	25.4	28.6			34.9				
	Discharge gas		OD	mm	19.1		22.2		25.4		28.6			
	Total piping length		System	Actual	m									300
Current - 50Hz	Maximum fuse amps (MFA)			A	30	40	50	60	70	80	90			

Contains fluorinated greenhouse gases

Outdoor unit module				RQEQ	140P3	180P3	212P3
Dimensions	Unit	Height/Width/Depth		mm	1,680/635/765		
Weight	Unit			kg	175		179
Fan	Air flow rate	Cooling	Nom.	m ³ /min	95	110	
Sound power level	Cooling	Nom.		dBA	-		
Sound pressure level	Cooling	Nom.		dBA	54	58	60
Operation range	Cooling	Min.~Max.		°CDB	-5~43		
	Heating	Min.~Max.		°CWB	-20~15.5		
Refrigerant	Type	R-410A					
	Charge			kg	10.3	10.6	11.2
				TCO ₂ eq	21.5	22.1	23.4
	GWP		2,087.5				
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/380-415		
Current - 50Hz	Maximum fuse amps (MFA)			A	15	20	22.5

RQCEQ280-360P



Model name	Outdoor unit 1	Drawing N°.	Outdoor Unit 2	Drawing N°.
RQCEQ280P3	RQE140P3	3D066441A	RQE140P3	3D066441A
RQCEQ360P3	RQE180P3	3D066441A	RQE180P3	3D066441A

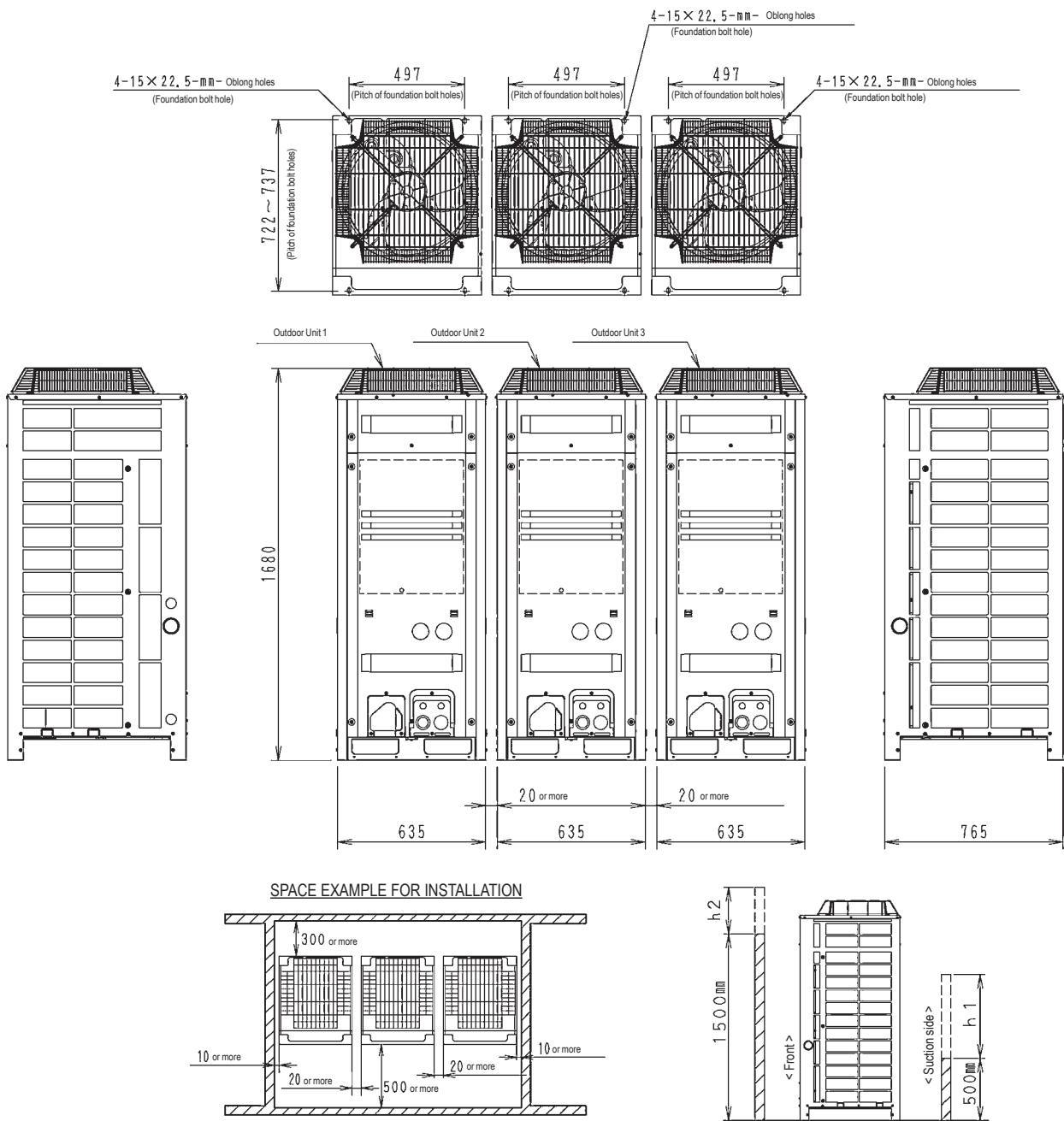
Unit:mm

NOTES

- Heights of walls
 Front: 1500mm
 Suction side: 500mm
 Side: Height unrestricted
 The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 35°C.
 The installation space of suction side shown above must be expanded in the following case.
 - Design outdoor temperature becomes over 35°C.
 - Operating over Max. operating load
 (In case of causing a heavy heating load at indoor unit side)
- If the above wall heights are exceeded then h2/2 and h1/2 should be added to the front and suction side service spaces respectively as shown in the following figure.
- When installing the units the most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to leave enough room for a person to pass between units and wall for the air to circulate freely. (If more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits.)
- The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

3D066856A

RQCEQ460-636P



Unit:mm

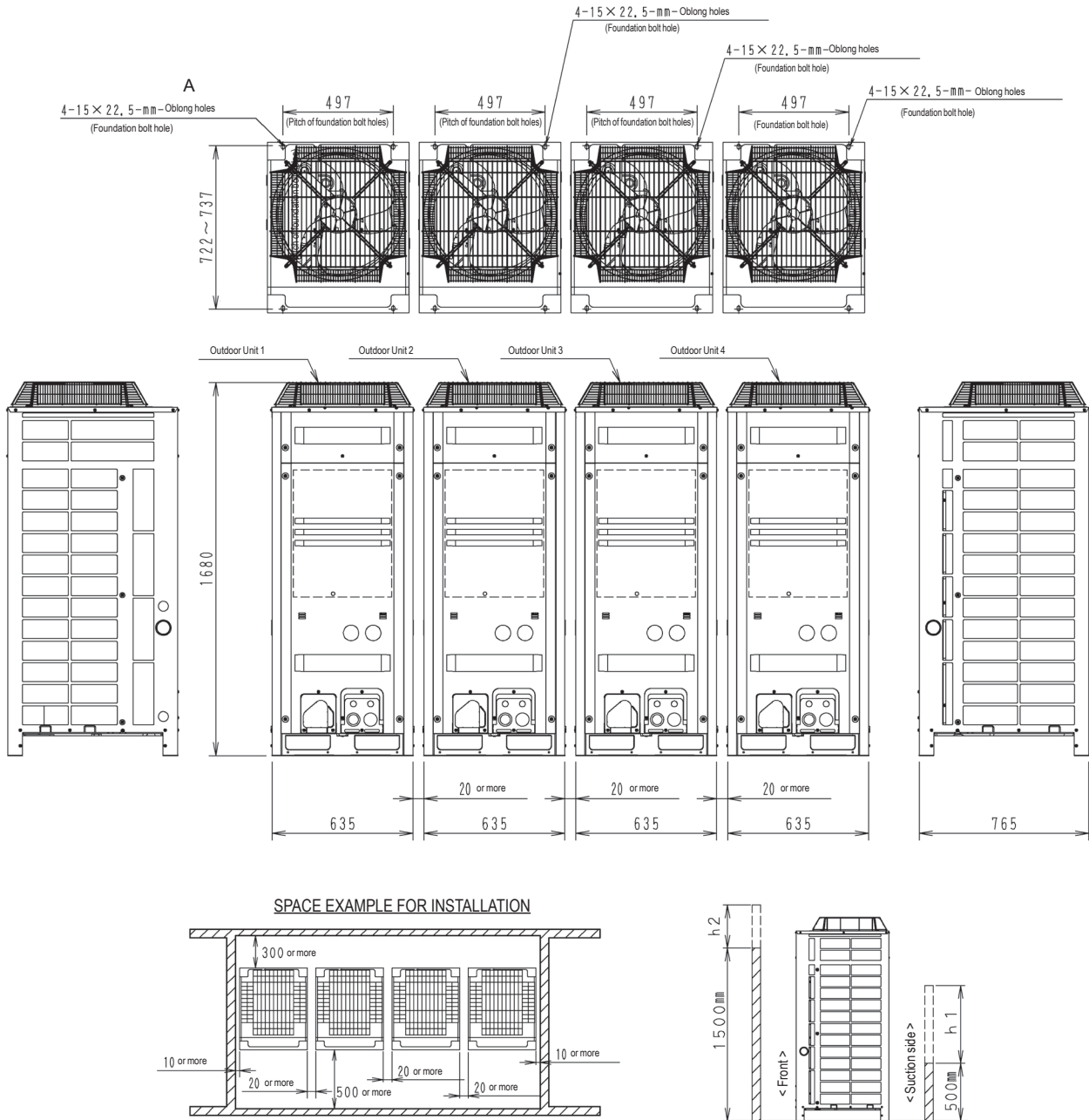
Model name	Outdoor unit 1	Drawing N°	Outdoor Unit 2	Drawing N°	Outdoor unit 1	Drawing N°
RQCEQ460P3	RREQ180P3	3D066441A	RREQ140P3	3D066441A	RREQ140P3	3D066441A
RQCEQ500P3	RREQ180P3	3D066441A	RREQ180P3	3D066441A	RREQ140P3	3D066441A
RQCEQ540P3	RREQ180P3	3D066441A	RREQ180P3	3D066441A	RREQ180P3	3D066441A
RQCEQ636P3	RREQ212P3	3D066441A	RREQ212P3	3D066441A	RREQ212P3	3D066441A

NOTES

- Heights of walls
 Front: 1500mm
 Suction side: 500mm
 Side: Height unrestricted
 The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 35°C.
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- The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

3D066860A

RQCEQ721-848P



Unit: mm

Model name	Outdoor unit 1	Drawing N°.	Outdoor Unit 2	Drawing N°.	Outdoor unit 3	Drawing N°.	Outdoor unit 4	Drawing N°.
RQCEQ712P3	RQE212P3	3D066441A	RQE2180P3	3D0664413	RQE2180PA	3D066441A	RQE2140P3	3D066441A
RQCEQ744P3	RQE212P3	3D066441A	RQE212P3	3D0664413	RQE2180PA	3D066441A	RQE2140P3	3D066441A
RQCEQ816P3	RQE212P3	3D066441A	RQE212P3	3D0664413	RQE212PA	3D066441A	RQE2180P3	3D066441A
RQCEQ848P3	RQE212P3	3D066441A	RQE212P3	3D0664413	RQE212PA	3D066441A	RQE212P3	3D066441A

NOTES

- Heights of walls
 Front: 1500mm
 Suction side: 500mm
 Side: Height unrestricted
 The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 35°C.
 The installation space of suction side shown above must be expanded in the following case.
 - Design outdoor temperature becomes over 35°C.
 - Operating over Max. operating load
 (In case of causing a heavy heating load at indoor unit side)
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3D066865A