

VRV IV heat pump,  
optimised for heating  
Air Conditioning  
Technical Data  
RXYLQ-T /  
RXMLQ-T



RXYLQ10T7Y1B  
RXYLQ12T7Y1B  
RXYLQ14T7Y1B  
RXYLQ16T7Y1B  
RXYLQ18T7Y1B  
RXYLQ20T7Y1B  
RXYLQ22T7Y1B  
RXYLQ24T7Y1B  
RXYLQ26T7Y1B  
RXYLQ28T7Y1B  
RXYLQ30T7Y1B  
RXYLQ32T7Y1B  
RXYLQ34T7Y1B  
RXYLQ36T7Y1B  
RXYLQ38T7Y1B  
RXYLQ40T7Y1B  
RXYLQ42T7Y1B  
RXMLQ8T7Y1B



# TABLE OF CONTENTS

## RXYLQ-T / RXMLQ-T

1	Features	4
	RXYLQ-T	4
2	Specifications	5
3	Options	17
4	Combination table	18
5	Capacity tables	22
	Capacity Table Legend	22
	Capacity Correction Factor	23
6	Dimensional drawings	27
7	Centre of gravity	28
8	Piping diagrams	29
9	Wiring diagrams	32
	Wiring Diagrams - Three Phase	32
10	External connection diagrams	33
11	Sound data	35
	Sound Power Spectrum	35
	Sound Pressure Spectrum	37
12	Installation	39
	Installation Method	39
	Fixation and Foundation of Units	40
13	Operation range	41
14	Appropriate Indoors	42

# 1 Features

## 1 - 1 RXYLQ-T

Where heating is priority without compromising on efficiency

1

- › By choosing this product with Certified Reclaimed Refrigerant Allocation you support the reuse of refrigerant
- › Specifically developed for heating operation in low ambient conditions, making it suitable for single source heating
- › Stable heating capacity down to -15°C, thanks to vapour injection compressor
- › Extended operation range down to -25°C in heating
- › High reliability in severe conditions, thanks to hot gas bypass circuit in the heat exchanger
- › 15% increased heating capacity at high relative humidity (2°CDB/1°CWB and RH=83%) vs previous model
- › Shorter defrost and heat up time, compared to standard VRV heat pump
- › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air curtains
- › Wide range of indoor units: possibility to combine VRV with stylish indoor units (Daikin Emura, Perfera)
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature, VRV configurator, 7 segment display and full inverter compressors, 4-side heat exchanger, refrigerant cooled PCB, new DC fan motor, ...
- › Customize your VRV for best seasonal efficiency & comfort with the weather dependant Variable Refrigerant Temperature function. Increased seasonal efficiency with up to 28%. No more cold draft by supply of high outblow temperatures
- › Already fully ErP 2021 compliant (LOT 21 - Tier 2)
- › Free combination of outdoor units to meet installation space or efficiency requirements
- › High external static pressure (up to 78.4Pa) allows indoor installation
- › Simplified installation & guaranteed optimal efficiency with automatic charging & testing
- › Easy compliance with F-gas regulation thanks to automated refrigerant containment check
- › Wide piping flexibility: 30m indoor height difference, maximum piping length: 190m, total piping length: 500m



Inverter



## 2 Specifications

### 1 - 1 RXYLQ-T

Technical Specifications				RXYLQ10T	RXYLQ12T	RXYLQ14T
System Outdoor unit module 1				RXYLQ10T	RXYLQ12T	RXYLQ14T
Recommended combination				4 x FXMQ63P7VEB	6 x FXMQ50P7VEB	1 x FXMQ50P7VEB + 5 x FXMQ63P7VEB
Recommended combination 2				4 x FXSQ63A2VEB	6 x FXSQ50A2VEB	1 x FXSQ50A2VEB + 5 x FXSQ63A2VEB
Cooling capacity	Prated,c		kW	28.0 (1)	33.5 (1)	40.0 (1)
Heating capacity	Nom.	6°CWB	kW	28.00 (2)	33.50 (2)	40.00 (2)
	Prated,h		kW	31.5	37.5	45.0
	Max.	6°CWB	kW	31.5 (2)	37.5 (2)	45.0 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	7.13 (2)	7.85 (2)	10.26 (2)
COP at nom.	6°CWB		kW/kW	3.93	4.27	3.90
capacity						
SCOP				3.7	3.5	
SCOP recommended combination 2				3.7	3.5	
SEER				6.4	6.9	6.8
SEER recommended combination 2				6.4	6.8	
ηs,c			%	251.4	274.4	270.1
ηs,c recommended combination 2				251.4	267.0	270.2
ηs,h			%	144.3	137.6	137.1
ηs,h recommended combination 2				144.2	137.0	
Space cooling	A Condi- tion (35°C	EERd Pdc		3.2	3.5	3.2
	- 27/19)		kW	28.0	33.5	40.0
	B Condi- tion (30°C	EERd Pdc		4.9	5.1	5.0
	- 27/19)		kW	20.6	24.7	29.5
	C Condi- tion (25°C	EERd Pdc		8.1	8.4	7.0
Space cooling recommended combination 2	- 27/19)		kW	13.5	15.9	18.9
	D Condi- tion (20°C	EERd Pdc		9.3	11.2	16.1
	- 27/19)		kW	9.0	9.3	10.4
	A Condi- tion (35°C	EERd Pdc		3.2	3.4	3.2
	- 27/19)		kW	28.0	33.5	40.0
	B Condi- tion (30°C	EERd Pdc		4.9	5.1	5.0
	- 27/19)		kW	20.6	24.7	29.5
	C Condi- tion (25°C	EERd Pdc		8.1	8.4	7.0
	- 27/19)		kW	13.5	15.9	18.9
	D Condi- tion (20°C	EERd Pdc		9.36	10.9	16.1
Space heating (Average climate)	- 27/19)		kW	9.17	9.24	10.5
	TBivalent	COPd (declared COP)		2.33	2.11	1.84
		Pdh (declared heating cap)	kW	27.6	33.2	39.8
		Tbiv (bivalent temperature)	°C	-6.8	-7.0	
Space heating (Average climate)	TOL	COPd (declared COP)		2.58	2.38	2.47
		Pdh (declared heating cap)	kW	19.7	23.5	30.6
		Tol (temperature operating limit)	°C		-10	
	A Con- dition (-7°C)	COPd (declared COP)		2.38	2.11	1.84
		Pdh (declared heating cap)	kW	26.2	33.2	39.8
	B Condi- tion (2°C)	COPd (declared COP)		3.48	3.41	3.16
		Pdh (declared heating cap)	kW	17.0	20.2	24.2
	C Condi- tion (7°C)	COPd (declared COP)		5.06	4.93	5.92
		Pdh (declared heating cap)	kW	10.9	13.1	15.9
	D Con- dition (12°C)	COPd (declared COP)		7.15	5.74	7.45
		Pdh (declared heating cap)	kW	7.75	8.98	8.14

## 2 Specifications

### 1 - 1 RXYLQ-T

Technical Specifications					RXYLQ10T		RXYLQ12T		RXYLQ14T			
Space heating (Average climate) recommended combination 2	A Con- dition (-7°C)	COPd (declared COP)			2.40		2.10		1.80			
		Pd <sub>h</sub> (declared heating cap) kW			26.2		33.2		39.8			
	B Condi- tion (2°C)	COPd (declared COP)			3.50		3.41		3.20			
		Pd <sub>h</sub> (declared heating cap) kW			17.0		20.2		24.2			
	C Condi- tion (7°C)	COPd (declared COP)			5.10		4.71		5.90			
		Pd <sub>h</sub> (declared heating cap) kW			10.9		13.1		15.9			
	D Con- dition (12°C)	COPd (declared COP)			7.20		6.53		7.50			
		Pd <sub>h</sub> (declared heating cap) kW			7.80		9.73		8.10			
	TBivalent	COPd (declared COP)			2.30		2.10		1.80			
		Pd <sub>h</sub> (declared heating cap) kW			27.6		33.2		39.8			
Tbiv (bivalent temperature) °C			-6.8		-7.0							
Capacity range				HP	10		12		14			
PED	Category				Category II							
	Most critical part	Name Ps*V Bar*I			Compressor 459							
Maximum number of connectable indoor units					64 (3)							
Indoor index connection	Min.				175		210		245			
	Nom.				250		300		350			
	Max.				325		390		455			
Dimensions	Unit	Height			mm						1,685	
		Width			mm						1,240	
		Depth			mm						765	
	Packed unit	Height			mm						1,820	
		Width			mm						1,305	
		Depth			mm						860	
Weight	Unit			kg						302		
Weight	Packed unit			kg						322		
Packing	Material				Carton							
	Weight				kg						3	
Packing 2	Material				Wood							
	Weight				kg						19	
Packing 3	Material				Plastic							
	Weight				kg						1	
Casing	Colour				Daikin White							
	Material				Painted galvanized steel plate							
Heat exchanger	Type				Cross fin coil							
	Indoor side				Air							
	Outdoor side				Air							
	Air flow rate	Cooling	Rated	m³/h	10,290	13,554						
		Heating	Rated	m³/h	13,554	14,940		17,280				
Fan	Quantity				2							
	Diameter				mm						541	
	External static pressure	Max.			Pa						78	
Fan motor	Quantity				2							
	Type				DC motor							
	Output				W						750	
Compressor	Quantity				1							
	Type				Hermetically sealed scroll compressor							
	Crankcase heater				W						33	
Operation range	Cooling	Min.	°CDB		-5							
		Max.	°CDB		43							
	Heating	Min.	°CWB		-25							
		Max.	°CWB		16							
Sound power level	Cooling	Nom.	dBA		77.0 (4)		81.0 (4)					
Sound pressure level	Cooling	Nom.	dBA		56.0 (5)		59.0 (5)					
Refrigerant	Type				R-410A							
	GWP				2,087.5							
	Charge				TCO2Eq						24.6	
	Charge				kg						11.8	
Refrigerant oil	Type				Synthetic (ether) oil FVC68D							
Piping connections	Liquid	Type			Braze connection							
		OD	mm			10		13				
	Gas	Type			Braze connection							

## 2 Specifications

### 1 - 1 RXYLQ-T

Technical Specifications					RXYLQ10T	RXYLQ12T	RXYLQ14T
Piping connections	Gas	OD		mm	22.2	28.6	
	Total piping length	System	Actual	m	500 (6)		
	Level difference	OU - IU	Outdoor unit in highest position	m	50		
			Indoor unit in highest position	m	40		
			IU - IU		m	30	
Defrost method					Reversed cycle		
Capacity control		Method			Inverter controlled		
Indication if the heater is equipped with a supplementary heater					no		
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0		
Power consumption in other than active mode	Crank-case heater mode	Cooling	PCK	kW	0.000		
		Heating	PCK	kW	0.0430		
	Off mode	Cooling	POFF	kW	0.0380		
		Heating	POFF	kW	0.0380		
	Standby mode	Cooling	PSB	kW	0.0380		
		Heating	PSB	kW	0.0380		
	Thermo-stat-off mode	Cooling	PTO	kW	0.0140		
		Heating	PTO	kW	0.0610		
Cooling	Cdc (Degradation cooling)				0.25		
Heating	Cdh (Degradation heating)				0.25		
Safety devices	Item	01			High pressure switch		
		02			Fan driver overload protector		
		03			Inverter overload protector		
		04			PC board fuse		

Standard accessories: Installation manual; Quantity: 1;

Standard accessories: Operation manual; Quantity: 2;

Standard accessories: Connection pipes; Quantity: 25;

Electrical Specifications				RXYLQ10T	RXYLQ12T	RXYLQ14T
Power supply	Name			Y1		
	Phase			3N~		
	Frequency Hz			50		
	Voltage V			380-415		
Power supply intake				Both indoor and outdoor unit		
Voltage range	Min.		%	-10		
	Max.		%	10		
Current	Nominal running current (RLA)	Cooling	A	13.8 (7)	15.0 (7)	19.6 (7)
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-		
		Combina- tion B	Cooling	-		
	Starting current (MSC) - remark			See note 8		
	Zmax	List		No requirements		
	Minimum Ssc value kVa			5,638 (9)		
	Minimum circuit amps (MCA) A			22.0 (10)	24.0 (10)	27.0 (10)
	Maximum fuse amps (MFA) A			25 (11)	32 (11)	
	Total overcurrent amps (TOCA) A			42.5 (12)		
	Full load amps (FLA)	Total	A	1.5 (13)		
Power Performance	Power factor	Combina- tion B	35°C ISO - Full load	-		
			46°C ISO - Full load	-		
Wiring connections - 50Hz	For power supply	Quantity		5G		
	For connec- tion with indoor	Quantity		2		
		Remark		F1,F2		

(1)Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m (horizontal); level difference: 0m |

(2)Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m |

(3)Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (70% ≤ CR ≤ 130%) |

(4)Sound power level is an absolute value that a sound source generates. |

## 2 Specifications

### 1 - 1 RXYLQ-T

(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |

(6)Refer to refrigerant pipe selection or installation manual |

(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |

(8)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current.

(9)n accordance with EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply with Ssc ≥ minimum Ssc value |

(10)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |

(11)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |

(12)TOCA means the total value of each OC set. |

(13)FLA means the nominal running current of the fan |

Technical specifications System					RXYLQ16T		RXYLQ18T		RXYLQ20T		RXYLQ22T	
System		Outdoor unit module 1			RXMLQ8T				RXYLQ10T			
		Outdoor unit module 2			RXMLQ8T				RXYLQ10T		RXYLQ12T	
Recommended combination					4 x FXMQ63P7VEB + 2 x FXMQ80P7VEB		3 x FXMQ50P7VEB + 5 x FXMQ63P7VEB		2 x FXMQ50P7VEB + 6 x FXMQ63P7VEB		6 x FXMQ50P7VEB + 4 x FXMQ63P7VEB	
Cooling capacity	Prated,c		kW		44.8 (1)		50.4 (1)		56.0 (1)		61.5 (1)	
Heating capacity	Prated,h		kW		50.0		56.5		63.0		69.0	
	Max.	6°CWB		kW	50.0 (2)		56.5 (2)		63.0 (2)		69.0 (2)	
SCOP					3.5		3.6		3.7		3.6	
SEER					6.6		6.5		6.4		6.6	
ηs,c					%		261.8		255.7		251.4	
ηs,h					%		138.0		140.5		144.3	
Space cooling	A Condi- tion (35°C - 27/19)	EERd Pdc	kW		3.6		3.3		3.2		3.4	
			kW		44.8		50.4		56.0		61.5	
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW		4.7		4.8		4.9		5.0	
			kW		33.0		37.1		41.3		45.3	
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW		9.1		8.5		8.1		8.3	
			kW		21.2		24.1		27.0		29.4	
D Condi- tion (20°C - 27/19)	EERd Pdc	kW		9.6		9.5		9.3		10.2		
		kW		17.4		17.7		18.1		18.3		
Space heating (Average climate)	TBivalent	COPd (declared COP)					2.33				2.21	
		Pdh (declared heating cap)		kW	47.1		51.2		55.3		60.8	
		Tbiv (bivalent temperature)		°C	-8.5				-6.8			
	TOL	COPd (declared COP)			2.55		2.57		2.58		2.47	
		Pdh (declared heating cap)		kW	37.5		38.5		39.5		43.2	
		Tol (temperature operating limit)			°C		-10					
	A Con- dition (-7°C)	COPd (declared COP)			2.47		2.42		2.38		2.22	
		Pdh (declared heating cap)		kW	44.2		48.3		52.3		59.3	
	B Condi- tion (2°C)	COPd (declared COP)			3.22		3.36		3.48		3.44	
		Pdh (declared heating cap)		kW	26.9		30.4		33.9		37.2	
	C Condi- tion (7°C)	COPd (declared COP)			4.79		4.94		5.06		4.99	
		Pdh (declared heating cap)		kW	17.3		19.6		21.8		24.0	
	D Con- dition (12°C)	COPd (declared COP)			6.38		6.76		7.15		6.32	
		Pdh (declared heating cap)		kW	14.6		15.0		15.5		16.7	
Capacity range					HP		16		18		20	
PED					Category		Category II					
Maximum number of connectable indoor units					64 (3)							
Indoor index connection	Min.				280		315		350		385	
Indoor index connection	Nom.				400		450		500		550	
	Max.				520		585		650		715	
Sound power level	Cooling	Nom.	dBA		78.0 (4)		79.0 (4)		80.0 (4)		82.0 (4)	
Sound pressure level	Cooling	Nom.	dBA		58.0 (5)		59.0 (5)				61.0 (5)	
Refrigerant	Type				R-410A							
	GWP				2,087.5							
Refrigerant oil	Type				Synthetic (ether) oil FVC68D							
Piping connections	Liquid	Type			Braze connection							
		OD		mm	13		16					
	Gas	Type			Braze connection							
		OD		mm	28.6							
	Total piping length	System	Actual	m	500 (6)							
	Level dif- ference	OU - IU	Outdoor unit in highest position		m	50						
Indoor unit in highest position			m	40								
IU - IU		m		30								



## 2 Specifications

### 1 - 1 RXYLQ-T

Technical specifications System					RXYLQ16T	RXYLQ18T	RXYLQ20T	RXYLQ22T
Defrost method					Reversed cycle			
Capacity control	Method				Inverter controlled			
Indication if the heater is equipped with a supplementary heater					no			
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0			
Power consumption in other than active mode	Crank-case heater mode	Cooling	PCK	kW	0.000			
		Heating	PCK	kW	0.0860			
	Off mode	Cooling	POFF	kW	0.0760			
		Heating	POFF	kW	0.0760			
	Standby mode	Cooling	PSB	kW	0.0760			
		Heating	PSB	kW	0.0760			
	Thermo-stat-off mode	Cooling	PTO	kW	0.0280			
		Heating	PTO	kW	0.1220			
Cooling	Cdc (Degradation cooling)				0.25			
Heating	Cdh (Degradation heating)				0.25			

Technical specifications System					RXYLQ24T		RXYLQ26T		RXYLQ28T		RXYLQ30T				
System		Outdoor unit module 1			RXYLQ12T				RXYLQ14T		RXYLQ10T				
		Outdoor unit module 2			RXYLQ12T		RXYLQ14T				RXYLQ10T				
		Outdoor unit module 3			-								RXYLQ10T		
Recommended combination					4 x FXMQ50P7VEB + 4 x FXMQ63P7VEB + 2 x FXMQ80P7VEB		7 x FXMQ50P7VEB + 5 x FXMQ63P7VEB		6 x FXMQ50P7VEB + 4 x FXMQ63P7VEB + 2 x FXMQ80P7VEB		9 x FXMQ50P7VEB + 5 x FXMQ63P7VEB				
Cooling capacity	Prated,c		kW		67.0 (1)		73.5 (1)		80.0 (1)		84.0 (1)				
Heating capacity	Prated,h		kW		75.0		82.5		90.0		94.5				
	Max.	6°CWB		kW	75.0 (2)		82.5 (2)		90.0 (2)		94.5 (2)				
SCOP					3.5							3.7			
SEER					6.9		6.8				6.4				
ηs,c					274.4		270.8		270.1		251.4				
ηs,h					137.6		137.1				144.3				
Space cooling	A Condition (35°C Pdc - 27/19)	EERd	kW		3.5		3.3		3.2						
			kW		67.0		73.5		80.0		84.0				
	B Condition (30°C Pdc - 27/19)	EERd	kW		5.1		5.1		5.0		4.9				
			kW		49.4		54.2		59.0		61.9				
	C Condition (25°C Pdc - 27/19)	EERd	kW		8.4		7.6		7.0		8.1				
			kW		31.8		34.8		37.8		40.5				
	D Condition (20°C Pdc - 27/19)	EERd	kW		11.2		13.3		16.1		9.3				
			kW		18.6		19.7		20.8		27.1				
Space heating (Average climate)	TBivalent	COPd (declared COP)			2.11		1.95		1.84		2.33				
		Pdh (declared heating cap)		kW	66.3		73.0		79.6		82.9				
		Tbiv (bivalent temperature)		°C	-7.0								-6.8		
	TOL	COPd (declared COP)			2.38		2.43		2.47		2.58				
		Pdh (declared heating cap)		kW	47.0		54.1		61.2		59.2				
		Tol (temperature operating limit)		°C	-10										
	A Condition (-7°C)	COPd (declared COP)			2.11		1.95		1.84		2.38				
		Pdh (declared heating cap)		kW	66.3		73.0		79.6		78.5				
	B Condition (2°C)	COPd (declared COP)			3.41		3.27		3.16		3.48				
		Pdh (declared heating cap)		kW	40.4		44.4		48.5		50.9				
	C Condition (7°C)	COPd (declared COP)			4.93		5.43		5.92		5.06				
		Pdh (declared heating cap)		kW	26.2		29.0		31.8		32.7				
	D Condition (12°C)	COPd (declared COP)			5.74		6.48		7.45		7.15				
		Pdh (declared heating cap)		kW	18.0		17.1		16.3		23.3				
	Capacity range					HP		24		26		28		30	
	PED		Category			Category II									
Maximum number of connectable indoor units					64 (3)										
Indoor index connection	Min.				420		455		490		525				
	Nom.				600		650		700		750				
	Max.				780		845		910		975				
Sound power level	Cooling	Nom.	dB(A)				84.0 (4)								
Sound pressure level	Cooling	Nom.	dB(A)				62.0 (5)				61.0 (5)				
Refrigerant	Type				R-410A										
	GWP				2,087.5										

## 2 Specifications

### 1 - 1 RXYLQ-T

2

Technical specifications System					RXYLQ24T	RXYLQ26T	RXYLQ28T	RXYLQ30T
Refrigerant oil	Type				Synthetic (ether) oil FVC68D			
Piping connections	Liquid	Type				Braze connection		
		OD	mm	16	19			
	Gas	Type				Braze connection		
		OD	mm	34.9				
	Total piping length	System	Actual	m	500 (6)			
	Level difference	OU - IU	Outdoor unit in highest position	m	50			
			Indoor unit in highest position	m	40			
		IU - IU	m	30				
Defrost method					Reversed cycle			
Capacity control	Method				Inverter controlled			
Indication if the heater is equipped with a supplementary heater					no			
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0			
Power consumption in other than active mode	Crank-case heater mode	Cooling	PCK	kW	0.000			
		Heating	PCK	kW	0.0860		0.1290	
	Off mode	Cooling	POFF	kW	0.0760		0.1140	
		Heating	POFF	kW	0.0760		0.1140	
	Standby mode	Cooling	PSB	kW	0.0760		0.1140	
		Heating	PSB	kW	0.0760		0.1140	
	Thermo-stat-off mode	Cooling	PTO	kW	0.0280		0.0420	
		Heating	PTO	kW	0.1220		0.1830	
Cooling	Cdc (Degradation cooling)				0.25			
Heating	Cdh (Degradation heating)				0.25			

Technical specifications System				RXYLQ32T		RXYLQ34T		RXYLQ36T		RXYLQ38T	
System	Outdoor unit module 1			RXYLQ10T				RXYLQ12T			
	Outdoor unit module 2			RXYLQ10T		RXYLQ12T					
	Outdoor unit module 3			RXYLQ14T							
Recommended combination				8 x FXMQ63P7VEB + 4 x FXMQ80P7VEB		3 x FXMQ50P7VEB + 9 x FXMQ63P7VEB + 2 x FXMQ80P7VEB		2 x FXMQ50P7VEB + 10 x FXMQ63P7VEB + 2 x FXMQ80P7VEB		6 x FXMQ50P7VEB + 10 x FXMQ63P7VEB	
Cooling capacity	Prated,c		kW	89.5 (1)		95.0 (1)		100.5 (1)		107.0 (1)	
Heating capacity	Prated,h		kW	101		107		113		120	
	Max. 6°CWB		kW	100.5 (2)		106.5 (2)		112.5 (2)		120.0 (2)	
SCOP				3.6				3.5			
SEER				6.6		6.7		6.9			
ηs,c		%		259.1		266.8		274.4		271.6	
ηs,h		%		141.6		139.2		137.6		137.1	
Space cooling	A Condition (35°C - 27/19)	EERd Pdc		3.3		3.4		3.5		3.4	
			kW	89.5		95.0		100.5		107.0	
	B Condition (30°C - 27/19)	EERd Pdc		5.0				5.1			
			kW	66.0		70.0		74.1		78.9	
	C Condition (25°C - 27/19)	EERd Pdc		8.2		8.3		8.4		7.8	
			kW	42.9		45.3		47.7		50.7	
D Condition (20°C - 27/19)	EERd Pdc		9.9		10.5		11.2		12.5		
		kW	27.4		27.6		27.9		29.0		

## 2 Specifications

### 1 - 1 RXYLQ-T

Technical specifications System					RXYLQ32T	RXYLQ34T	RXYLQ36T	RXYLQ38T
Space heating (Average climate)	TBivalent	COPd (declared COP)			2.24	2.17	2.11	2.00
		Pdh (declared heating cap) kW			88.4	94.0	99.5	106
		Tbiv (bivalent temperature) °C			-6.8		-7.0	
	TOL	COPd (declared COP)			2.50	2.44	2.38	2.41
		Pdh (declared heating cap) kW			63.0	66.7	70.5	77.6
		Tol (temperature operating limit) °C			-10			
	A Con- dition (-7°C)	COPd (declared COP)			2.27	2.18	2.11	2.00
		Pdh (declared heating cap) kW			85.5	92.5	99.5	106
	B Condi- tion (2°C)	COPd (declared COP)			3.45	3.43	3.41	3.31
		Pdh (declared heating cap) kW			54.1	57.3	60.6	64.6
	C Condi- tion (7°C)	COPd (declared COP)			5.01	4.97	4.93	5.26
		Pdh (declared heating cap) kW			34.9	37.1	39.3	42.1
	D Con- dition (12°C)	COPd (declared COP)			6.56	6.10	5.74	6.18
Pdh (declared heating cap) kW			24.5	25.7	26.9	26.1		
Capacity range				HP	32	34	36	38
PED	Category				Category II			
Maximum number of connectable indoor units					64 (3)			
Indoor index connection	Min.				560	595	630	665
	Nom.				800	850	900	950
	Max.				1,040	1,105	1,170	1,235
Sound power level	Cooling	Nom.	dBa	84.0 (4)	85.0 (4)	86.0 (4)		
Sound pressure level	Cooling	Nom.	dBa	62.0 (5)	63.0 (5)	64.0 (5)		
Refrigerant	Type				R-410A			
	GWP				2,087.5			
Refrigerant oil	Type				Synthetic (ether) oil FVC68D			
Piping connections	Liquid	Type			Braze connection			
		OD mm			19			
	Gas	Type			Braze connection			
		OD mm			34.9	41.3		
	Total piping length	System	Actual	m	500 (6)			
		Level dif- ference	OU - IU	Outdoor unit in highest position	m	50		
	Indoor unit in highest position			m	40			
	IU - IU		m	30				
	Defrost method					Reversed cycle		
Capacity control	Method				Inverter controlled			
Indication if the heater is equipped with a supplementary heater					no			
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0			
Power consump- tion in other than active mode	Crank- case heater mode	Cooling	PCK	kW	0.000			
		Heating	PCK	kW	0.1290			
	Off mode	Cooling	POFF	kW	0.1140			
		Heating	POFF	kW	0.1140			
	Standby mode	Cooling	PSB	kW	0.1140			
		Heating	PSB	kW	0.1140			
	Thermo- stat-off mode	Cooling	PTO	kW	0.0420			
		Heating	PTO	kW	0.1830			
	Cooling	Cdc (Degradation cooling)				0.25		
Heating	Cdh (Degradation heating)				0.25			

Technical specifications System				RXYLQ40T		RXYLQ42T	
System	Outdoor unit module 1			RXYLQ12T		RXYLQ14T	
	Outdoor unit module 2			RXYLQ14T			
	Outdoor unit module 3			RXYLQ14T			
Recommended combination				9 x FXMQ50P7VEB + 9 x FXMQ63P7VEB		12 x FXMQ63P7VEB + 4 x FXMQ80P7VEB	
Cooling capacity	Prated,c	kW		113.5 (1)		120.0 (1)	
Heating capacity	Prated,h	kW		128		135	
	Max.	6°CWB	kW	127.5 (2)		135.0 (2)	
SCOP				3.5			
SEER				6.8			
ηs,c		%		270.3		270.1	
ηs,h		%		137.1			

## 2 Specifications

### 1 - 1 RXYLQ-T

Technical specifications System					RXYLQ40T		RXYLQ42T	
Space cooling	A Condi- tion (35°C - 27/19)	EERd Pdc	kW		3.3		3.2	
					113.5		120.0	
	B Condi- tion (30°C - 27/19)	EERd Pdc	kW		5.0		88.5	
					83.7			
	C Condi- tion (25°C - 27/19)	EERd Pdc	kW		7.4		7.0	
					53.7		56.7	
D Condi- tion (20°C - 27/19)	EERd Pdc	kW		14.1		16.1		
				30.1		31.3		
Space heating (Average climate)	TBivalent	COPd (declared COP)			1.91		1.84	
			Pdh (declared heating cap)	kW	113		119	
			Tbiv (bivalent temperature)	°C		-7.0		
	TOL	COPd (declared COP)			2.44		2.47	
			Pdh (declared heating cap)	kW	84.7		91.8	
			Tol (temperature operating limit)	°C		-10		
	A Con- dition (-7°C)	COPd (declared COP)			1.91		1.84	
			Pdh (declared heating cap)	kW	113		119	
	B Condi- tion (2°C)	COPd (declared COP)			3.23		3.16	
			Pdh (declared heating cap)	kW	68.7		72.7	
	C Condi- tion (7°C)	COPd (declared COP)			5.59		5.92	
			Pdh (declared heating cap)	kW	44.9		47.7	
	D Con- dition (12°C)	COPd (declared COP)			6.82		7.45	
			Pdh (declared heating cap)	kW	25.3		24.4	
Capacity range			HP	40		42		
PED	Category				Category II			
Maximum number of connectable indoor units					64 (3)			
Indoor index connection	Min.				700		735	
	Nom.				1,000		1,050	
	Max.				1,300		1,365	
Sound power level	Cooling	Nom.	dBA	86.0 (4)				
Sound pressure level	Cooling	Nom.	dBA	64.0 (5)				
Refrigerant	Type			R-410A				
	GWP			2,087.5				
Refrigerant oil	Type			Synthetic (ether) oil FVC68D				
Piping connections	Liquid	Type			Braze connection			
			OD		19			
	Gas	Type			Braze connection			
			OD		41.3			
	Total piping length	System	Actual	m	500 (6)			
	Level dif- ference	OU - IU	Outdoor unit in highest position		50			
			Indoor unit in highest position		40			
		IU - IU			30			
Defrost method					Reversed cycle			
Capacity control	Method				Inverter controlled			
Indication if the heater is equipped with a supplementary heater					no			
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0			
Power consump- tion in other than active mode	Crank- case heater mode	Cooling	PCK	kW	0.000			
		Heating	PCK	kW	0.1290			
	Off mode	Cooling	POFF	kW	0.1140			
		Heating	POFF	kW	0.1140			
	Standby mode	Cooling	PSB	kW	0.1140			
		Heating	PSB	kW	0.1140			
	Thermo- stat-off mode	Cooling	PTO	kW	0.0420			
		Heating	PTO	kW	0.1830			
Cooling	Cdc (Degradation cooling)				0.25			
Heating	Cdh (Degradation heating)				0.25			

## 2 Specifications

### 1 - 1 RXYLQ-T

Electrical specifications System				RXYLQ16T	RXYLQ18T	RXYLQ20T	RXYLQ22T
Current	Nominal running current (RLA)	Cooling	A	20.2 (7)	23.9 (7)	27.6 (7)	28.8 (7)
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-			
		Combina- tion B	Cooling	-			
	Starting current (MSC) - remark			See note 8			
	Zmax	List		No requirements			
	Minimum Ssc value	kVa		11,277 (9)			
	Minimum circuit amps (MCA)	A		32.2 (10)	38.1 (10)	44.0 (10)	46.0 (10)
	Maximum fuse amps (MFA)	A		40 (11)	45 (11)	50 (11)	60 (11)
	Total overcurrent amps (TOCA)	A		85.0 (12)			
Power Performance	Full load amps (FLA)	Total	A	3.0 (13)			
	Power factor	Combina- tion B	35°C ISO - Full load	-			
			46°C ISO - Full load	-			

Electrical specifications System				RXYLQ24T	RXYLQ26T	RXYLQ28T	RXYLQ30T
Current	Nominal running current (RLA)	Cooling	A	29.9 (7)	34.6 (7)	39.2 (7)	41.4 (7)
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-			
		Combina- tion B	Cooling	-			
	Starting current (MSC) - remark			See note 8			
	Zmax	List		No requirements			
	Minimum Ssc value	kVa		11,277 (9)			
	Minimum circuit amps (MCA)	A		48.0 (10)	51.0 (10)	54.0 (10)	66.0 (10)
	Maximum fuse amps (MFA)	A			60 (11)		80 (11)
	Total overcurrent amps (TOCA)	A		85.0 (12)			
Power Performance	Full load amps (FLA)	Total	A	3.0 (13)			
	Power factor	Combina- tion B	35°C ISO - Full load	-			
			46°C ISO - Full load	-			

Electrical specifications System				RXYLQ32T	RXYLQ34T	RXYLQ36T	RXYLQ38T
Current	Nominal running current (RLA)	Cooling	A	42.6 (7)	43.8 (7)	44.9 (7)	49.6 (7)
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-			
		Combina- tion B	Cooling	-			
	Starting current (MSC) - remark			See note 8			
	Zmax	List		No requirements			
	Minimum Ssc value	kVa		16,915 (9)			
	Minimum circuit amps (MCA)	A		68.0 (10)	70.0 (10)	72.0 (10)	75.0 (10)
	Maximum fuse amps (MFA)	A			80 (11)		90 (11)
	Total overcurrent amps (TOCA)	A		127.5 (12)			
Power Performance	Full load amps (FLA)	Total	A	4.5 (13)			
	Power factor	Combina- tion B	35°C ISO - Full load	-			
			46°C ISO - Full load	-			

Electrical specifications System				RXYLQ40T	RXYLQ42T
Current	Nominal running current (RLA)	Cooling	A	54.2 (7)	58.8 (7)

## 2 Specifications

1 - 1 RXYLQ-T

2

Electrical specifications System				RXYLQ40T	RXYLQ42T
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-	-
		Combina- tion B	Cooling	-	-
	Starting current (MSC) - remark			See note 8	
	Zmax	List		No requirements	
	Minimum Ssc value	kVa		16,915 (9)	
	Minimum circuit amps (MCA)	A		78.0 (10)	81.0 (10)
	Maximum fuse amps (MFA)	A		90 (11)	
	Total overcurrent amps (TOCA)	A		127.5 (12)	
	Full load amps (FLA)	A		4.5 (13)	
Power Performance	Power factor	Combina- tion B	35°C ISO - Full load	-	-
			46°C ISO - Full load	-	-

Technical specifications Module					RXMLQ8T
PED	Category				Category II
	Most critical part	Name	Ps*V	Bar*l	Compressor
					459
Dimensions	Unit	Height	mm		1,685
		Width	mm		1,240
		Depth	mm		765
	Packed unit	Height	mm		1,820
		Width	mm		1,305
		Depth	mm		860
Weight	Unit		kg		302
	Packed unit		kg		322
Packing	Material				Carton
	Weight		kg		3
Packing 2	Material				Wood
	Weight		kg		19
Packing 3	Material				Plastic
	Weight		kg		1
Casing	Colour				Daikin White
	Material				Painted galvanized steel plate
Heat exchanger	Type				Cross fin coil
	Indoor side				Air
	Outdoor side				Air
	Air flow rate	Cooling	Rated	m³/h	10,290
Fan		Heating	Rated	m³/h	13,554
	Quantity				2
	Diameter		mm		541
	External static pressure	Max.	Pa		78
Fan motor	Quantity				2
	Type				DC motor
	Output		W		750
Compressor	Quantity				1
	Type				Hermetically sealed scroll compressor
	Crankcase heater		W		33
Operation range	Cooling	Min.	°CDB		-5
		Max.	°CDB		43
	Heating	Min.	°CWB		-25
		Max.	°CWB		16
Sound power level	Cooling	Nom.	dB(A)		75.0 (1)
Sound pressure level	Cooling	Nom.	dB(A)		55.0 (2)
Refrigerant	Type				R-410A
	GWP				2,087.5
	Charge		TCO2Eq		24.6
	Charge		kg		11.8
Refrigerant oil	Type				Synthetic (ether) oil FVC68D

## 2 Specifications

### 1 - 1 RXYLQ-T

Technical specifications Module					RXMLQ8T
Piping connections	Liquid	Type			Braze connection
		OD		mm	10
	Gas	Type			Braze connection
		OD		mm	19,1
	Total piping length	System	Actual	m	500 (3)
	Level dif- ference	OU - IU	Outdoor unit in highest position	m	50
			Indoor unit in highest position	m	40
		IU - IU	m	30	
Defrost method					Reversed cycle
Capacity control	Method				Inverter controlled
Indication if the heater is equipped with a supplementary heater					no
Supplementary heater	Back-up capacity	Heating	elbu	kW	0.0
Power consump- tion in other than active mode	Crank- case heater mode	Cooling	PCK	kW	0.000
		Heating	PCK	kW	0.0430
	Off mode	Cooling	POFF	kW	0.0380
		Heating	POFF	kW	0.0380
	Standby mode	Cooling	PSB	kW	0.0380
		Heating	PSB	kW	0.0380
	Thermo- stat-off mode	Cooling	PTO	kW	0.0140
		Heating	PTO	kW	0.0610
Cooling	Cdc (Degradation cooling)				0.25
Heating	Cdh (Degradation heating)				0.25
Safety devices	Item	01			High pressure switch
		02			Fan driver overload protector
		03			Inverter overload protector
		04			PC board fuse

Electrical specifications Module					RXMLQ8T
Power supply	Name			Y1	
	Phase			3N~	
	Frequency	Hz	50		
	Voltage	V	380-415		
Power supply intake					Both indoor and outdoor unit
Voltage range	Min.	%	-10		
	Max.	%	10		
Current	Nominal running current (RLA)	Cooling	A	10.1 (4)	
Current - 50Hz	Nominal running current (RLA)	Combina- tion A	Cooling	-	
		Combina- tion B	Cooling	-	
	Starting current (MSC) - remark				See note 8
	Zmax	List	No requirements		
	Minimum Ssc value		kVa	5,638 (9)	
	Minimum circuit amps (MCA)		A	16.1 (10)	
	Maximum fuse amps (MFA)		A	20 (11)	
	Total overcurrent amps (TOCA)		A	42.5 (12)	
	Full load amps (FLA)	Total	A	1.5 (13)	
Power Performance	Power factor	Combina- tion B	35°C ISO - Full load	-	
			46°C ISO - Full load	-	
Wiring connections - 50Hz	For power supply	Quantity	5G		
	For connection with indoor	Quantity	2		
		Remark	F1,F2		

(1)Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m (horizontal); level difference: 0m |

(2)Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m |

(3)Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (70% ≤ CR ≤ 130%) |

(4)Sound power level is an absolute value that a sound source generates. |

(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |

## 2 Specifications

### 1 - 1 RXYLQ-T

(6)Refer to refrigerant pipe selection or installation manual |

(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |

(8)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current.

(9)In accordance with EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply with Ssc ≥ minimum Ssc value |

(10)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |

(11)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |

(12)TOCA means the total value of each OC set. |

(13)FLA means the nominal running current of the fan |



# 3 Options

## 3 - 1 Options

RXYLQ-T

RXMLQ-T

### VRV IV (cold regions)

### Heat pump

### Option list

Number	Item	Single unit			Multi -2- unit	Multi -3- unit
		RXYLQ10	RXYLQ12	4RXYLQ10		
I.	Refnet header	KHRQ22M29H			---	---
		KHRQ22M64H				
		---	---	---		
II.	Refnet joint	KHRQ22M20T			---	---
		KHRQ22M29T9				
		KHRQ22M64T				
		---	---	---		
III.	Outdoor multi-connection kit	See note -2-.			BHFQ22P1007	---
IV.	Outdoor multi-connection kit	See note -2-.			---	BHFQ22P1517
Number	Item	Single unit			Multi -2- unit	Multi -3- unit
		RXYLQ10	RXYLQ12	4RXYLQ10		
1a	Cool/heat selector (switch)	See note -3 & 4-.			KRC19-26A	
1b	Cool/heat selector (PCB)	See note -3-.			BRP2A81	
1d	Cool/heat selector (fixing box)	See note -4-.			KJB111A	
2	VRV configurator				EKPCCAB	
3	Branch selector box	-2- units			BPMKS967A2	
		-3- units			BPMKS967A3	
4	Demand PCB	See note -5-.			DTA104A61/62*	
5	Demand PCB mounting plate				KKS826B1*	

#### Notes

1. All options are kits
2. Only for multi units
3. To operate the cool/heat selector function, options -1a- and -1b- are both required.
4. To mount option -1d-, option -1a- is required.
5. To install the demand PCB on the large casing type, the demand PCB mounting plate is required.

3D117168B

# 4 Combination table

## 4 - 1 Combination Table

**RXMLQ-T**
**RXYLQ-T**
**VRV4**
**Heat pump**
**Indoor unit combination restrictions**

(1/2)

Indoor unit combination pattern	VRV* DX indoor unit	RA DX indoor unit	Hydrobox unit	Air handling unit (AHU) <sup>(3)</sup>
VRV* DX indoor unit	O	O	O	O
RA DX indoor unit	O	O	X	X
Hydrobox unit	O	X	O <sub>1</sub>	X
Air handling unit <sup>(3)</sup>	O	X	X	O <sub>2</sub>

O: Allowed  
X: Not allowed

### Notes

- VRV\* DX indoor unit
  - When combining VRV DX indoor units with other types of indoor units, respect the following combination patterns:
    - Example  
Allowed : [VRV DX indoor unit + Hydrobox unit] or [VRV DX indoor unit + RA DX indoor unit] or [VRV DX indoor unit + AHU]  
Not allowed : [VRV DX indoor unit + (RA DX indoor unit & (Hydrobox unit or AHU))] or [VRV DX indoor unit + (Hydrobox unit & (RA DX indoor unit or AHU))]
- O<sub>1</sub>
  - Only connect Hydrobox units to a VRV IV Heat Pump in combination with a VRV DX indoor unit.
    - Refer to the connection ratio restrictions (3D079540 & 3D117169).
    - Connection with only Hydrobox units: refer to the Daikin Altherma solutions.
  - Only connect Hydrobox units of the HXY\* series.
    - HXHD\* series Hydrobox units are not allowed.
- O<sub>2</sub>
  - Combination of AHU only + control box EKEQFA (the combination with VRV DX indoor units is not allowed; maximum 54HP for 400 + 2x500 class EKEQV kit)
    - X-control is possible (up to 3x [EKEQV+EKEQFA\* boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
    - Y-control is possible (up to 3x [EKEQV+EKEQFA\* boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
    - W-control is possible (up to 3x [EKEQV+EKEQFA\* boxes] can be connected to one outdoor unit (system)). No Variable Refrigerant Temperature control possible.
  - Combination of AHU only + control box EKEQMA (not combined with VRV DX indoor units)
    - Z-control is possible (the allowed number of [EKEQV + EKEQMA boxes] is determined by the connection ratio (90-110%) and the capacity of the outdoor unit).
- Combination of AHU and VRV DX indoor units
  - Z-control is possible (EKEQMA\* boxes are allowed, but with a limited connection ratio).
- The combination of AHU with Hydrobox units or RA DX indoor units is not allowed.
- (3) The following units are considered AHUs:
  - EKEQV + EKEQ(MA/FA) + AHU coil
  - Biddle air curtain
  - FXMQ\_MF units

### Information

- VKM units are considered to be regular VRV DX indoor units.

**3D079543F**
**RXMLQ-T**
**RXYLQ-T**
**VRV4**
**Heat pump**
**Indoor unit combination restrictions**

(2/2)

Combination table	RYYQ*	RYYQ*	RXVQ* RXMLQ* RXYLQ*	RXVQ* RXMLQ* RXYLQ*
	Single continuous heating	Multi continuous heating	Single non-continuous heating	Multi non-continuous heating
VRV* DX indoor unit	O	O	O	O
RA DX indoor unit	O	X	O	X
Hydrobox unit	O	O <sub>1</sub>	O	O <sub>1</sub>
Air handling unit (AHU) <sup>(2)</sup>	O	O	O	O

O: Allowed  
X: Not allowed

### Notes

- O<sub>1</sub>
  - Available upon request through the SPN procedure.
- (2) The following units are considered AHUs:
  - EKEQV + EKEQ(MA/FA) + AHU coil
  - Biddle air curtain
  - FXMQ\_MF units

**3D079543F**

## 4 Combination table

### 4 - 1 Combination Table

**RXMLQ-T**

**RXYLQ-T**

**Unit combination restrictions: VRV4 outdoor units (all models) + 15-class indoor units**

Units in scope: FXZQ15A and FXAQ15A.

1. In case the system contains these indoor units and the total connection ratio (CR)  $\leq 100\%$ : no special restrictions. Follow the restrictions that apply to regular VRV DX indoor units.
2. In case the system contains these indoor units and the total connection ratio (CR)  $> 100\%$ : special restrictions apply.
  - A. When the connection ratio (CR1) of the sum of all FXZQ15A and/or FXAQ15A units in the system  $\leq 70\%$ , and ALL other VRV DX indoor units have an individual capacity class  $> 50$ : no special restrictions.
  - B. When the connection ratio (CR1) of the sum of all FXZQ15A and/or FXAQ15A units in the system  $\leq 70\%$ , and NOT ALL other VRV DX indoor units have an individual capacity class  $> 50$ : the restrictions below apply.
    - $100\% < CR \leq 105\% \rightarrow$  CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be  $\leq 70\%$ .
    - $105\% < CR \leq 110\% \rightarrow$  CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be  $\leq 60\%$ .
    - $110\% < CR \leq 115\% \rightarrow$  CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be  $\leq 40\%$ .
    - $115\% < CR \leq 120\% \rightarrow$  CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be  $\leq 25\%$ .
    - $120\% < CR \leq 125\% \rightarrow$  CR1 of the sum of all FXZQ15A and/or FXAQ15A indoor units in the system must be  $\leq 10\%$ .
    - $125\% < CR \leq 130\% \rightarrow$  FXZQ15A and FXAQ15A cannot be used

#### REMARK

Only the 15-class indoor units explicitly mentioned on this page are in scope. Other indoor units follow the rules that apply to regular VRV DX indoor units.

**3D104665**

## 4 Combination table

### 4 - 1 Combination Table

RXMLQ-T

RXYLQ-T

RWEYQ-T9

Compatibility list: ·VRV4· heat pump - ·RA DX· indoor unit

Wall mounted type	Emura	FTXJ20M FTXJ25M FTXJ35M FTXJ50M				
	Stylish	FTXA20 FTXA25 FTXA35 FTXA42				
		FTXM	FTXA50 FTXM20R FTXM25R FTXM35R FTXM42R FTXM50R FTXM60R FTXM71R			
			Ceiling/wall mounted	Flex	FLXS25B FLXS35B FLXS50B FLXS60B	
				Floor standing type	FVXM	FVXM25F FVXM35F FVXM50F FVXM25A FVXM35A FVXM50A CVXM20A
	Nexura					FVXG25K FVXG35K FVXG50K

#### Remark

The limitations on the use of ·RA DX· indoor units with the ·VRV4· Heat Pump are subject to the rules set out in drawings ·3D079543· and ·3D079540·.

If you want to connect ·RA·/·SA· ·DX· cassette, ceiling-mounted, or duct indoor units, use their ·VRV DX· indoor unit equivalents instead.

**3D082373G**

## 4 Combination table

### 4 - 1 Combination Table

RXYLQ-T

·VRV· Cold region heat pump  
Multi-unit standard combinations table

		8HP	10HP	12HP	14HP
Heat PUMP	RXYLQ10		1		
	RXYLQ12			1	
	RXYLQ14				1
Multi combination with 2 outdoor units	RXYLQ16	2			
	RXYLQ18	1	1		
	RXYLQ20		2		
	RXYLQ22		1	1	
	RXYLQ24			2	
	RXYLQ26			1	1
	RXYLQ28				2
Multi combination with 3 outdoor units	RXYLQ30		3		
	RXYLQ32		2	1	
	RXYLQ34		1	2	
	RXYLQ36			3	
	RXYLQ38			2	1
	RXYLQ40			1	2
	RXYLQ42				3

#### Notes

- 1) It is allowed to have other combinations than those described above.
- 2) Never combine more than 3 units to create a multi-combination.
- 3) RXYLQ10~14 = single non continuous heating model
- 4) RXYLQ16~42 = multi non continuous heating model

3D117167

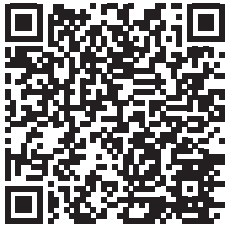
## 5 Capacity tables

### 5 - 1 Capacity Table Legend

In order to fulfill more your requirements on quick access of data in the format you require, we have developed a tool to consult capacity tables.

Below you can find the link to the capacity table database and an overview of all the tools we have to help you select the correct product:

- **Capacity table database:** lets you find back and export quickly the capacity information you are looking for based upon unit model, refrigerant temperature and connection ratio.
- You can access the capacity table viewer here:  
[https://my.daikin.eu/content/denv/en\\_US/home/applications/software-finder/capacity-table-viewer.html](https://my.daikin.eu/content/denv/en_US/home/applications/software-finder/capacity-table-viewer.html)



- An overview of **all software tools** that we offer can be found here:  
[https://my.daikin.eu/denv/en\\_US/home/applications/software-finder.html](https://my.daikin.eu/denv/en_US/home/applications/software-finder.html)



# Capacity tables

## 5 - 2 Capacity Correction Factor

RXMLQ-T

RXYLQ-T

•VRV• Cold region heat pump

Integrated Heating Capacity coefficient

The heating capacity tables do not take account of the reduction in capacity, when frost has accumulated or while the defrosting operation is in progress. The capacity values, which take these factors into account, in other words, the integrated heating capacity values, can be calculated as follows:

Formula:

Integrated heating capacity = **A**

Value given in table of capacity characteristics = **B** Integrating

correction factor for frost accumulation (kW) = **C A = B \* C**

Inlet air temperature of heat exchanger

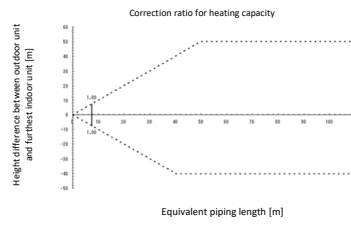
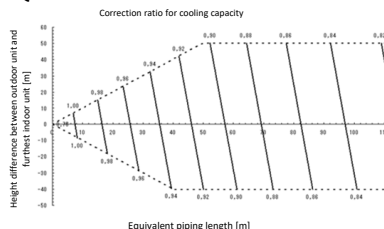
[°CDB/°CWB]	-7/-7,6 or less	-5/-5,6	-3/-3,7	0/-0,7	3/2,2	5/4,1	7/6
Correction factor defrost	0,95	0,90	0,90	0,90	0,90	0,95	1,00

## Notes

- 1) The figure shows that the integrated heating capacity expresses the integrated capacity for a single cycle (from defrost operation to defrost operation) in terms of time.
- 2) Note that, when there is an accumulation of snow against the outside surface of the outdoor unit heat exchanger, there will always be a temporary reduction in capacity, although this will of course vary in degree in accordance with a number of other factors, such as the outdoor temperature (°CDB), relative humidity (RH) and the amount of frosting which occurs.
- 3) Multi combination data is corresponding with the standard multi combination as mentioned on 3D117167.

3D117196

RXMLQ8T



Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.

2. With this outdoor unit, the following control is used:  
- in case of cooling: constant evaporating pressure control  
- in case of heating: constant condensing pressure control

3. Method of calculating the capacity of the outdoor units.

The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Condition Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at 100% connection ratio.  
x Correction ratio of piping to furthest indoor unit

Condition Indoor connection ratio > 100%.

Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at installed connection ratio.  
x Correction ratio of piping to furthest indoor unit

4. When the level difference is 50 m or more and the equivalent piping length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.

Refer to installation manual - 3D079540 / 3D79543.

For the new diameters, see below.

Model	Gas pipe	Liquid pipe
8HP	22,2	12,7

5. When the pipe length after the first refrigerant branch kit is more than 40 m, the pipe size between the first and the final branch kit must be increased (only for VRV DX indoor units).

For details, see the installer reference guide.

\* See the installation manual for allowed system setups and the rules for dedicated indoor connection types.

Equivalent piping length [m]

Diameter of the main pipes (standard size)

Model	Gas pipe	Liquid pipe
8HP	19,1	9,5

6. The equivalent lengths from the graphs above were obtained with the following calculation:

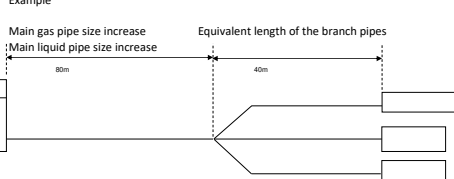
Equivalent piping length [m] =  
Equivalent length of the main pipe + Equivalent length of the branch pipes x Correction factor

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size  
When calculating the heating capacity: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1,0	0,5
Heating (liquid pipe)	1,0	0,5

Example



Cooling Overall equivalent length = 80m x 0,5 + 40m = 80m  
Heating Overall equivalent length = 80m x 0,5 + 40m = 80m

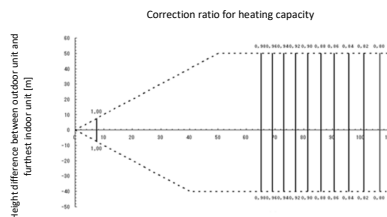
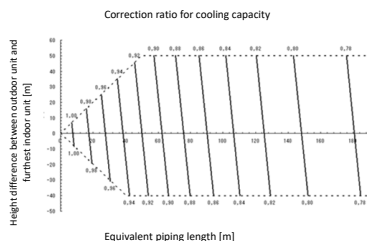
The change rate of the cooling capacity when the height difference = 0 is about -0,86%  
The change rate of the heating capacity when the height difference = 0 is about -1,0%

3D108958B

# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

### RXYLQ10T



#### Notes

- These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.
- With this outdoor unit, the following control is used:
  - in case of cooling: constant evaporating pressure control
  - in case of heating: constant condensing pressure control
- Method of calculating the capacity of the outdoor units.**  
The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Conditions Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at 100% connection ratio.  
x Correction ratio of piping to furthest indoor unit

Conditions Indoor connection ratio > 100%.

Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at installed connection ratio.  
x Correction ratio of piping to furthest indoor unit

- When the level difference is 50 m or more and the equivalent piping length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. Refer to installation manual 3D079540 / 3D079543. For the new diameters, see below.

Model	Gas pipe	Liquid pipe
10HP	25,4"	12,7"

- \* If not available on-site, do not increase the piping diameter.
- \* If not increased, do not apply a correction factor to the equivalent piping length (see note -6).

- When the pipe length after the first refrigerant branch kit is more than 40 m, the pipe size between the first and the final branch kit must be increased (only for VRV DX indoor units). For details, see the installer reference guide.

\* See the installation manual for allowed system setups and the rules for dedicated indoor connection types.

Equivalent piping length [m]

Diameter of the main pipes (standard size)

Model	Gas pipe	Liquid pipe
10HP	22,2	9,5

- The equivalent lengths from the graphs above were obtained with the following calculation:

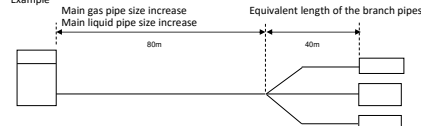
$$\text{Equivalent piping length [m]} = \text{Equivalent length of the main pipe} \times \text{Correction factor} + \text{Equivalent length of the branch pipes}$$

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size  
When calculating the heating capacity: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1,0	0,5
Heating (liquid pipe)	1,0	0,5

Example



Cooling Overall equivalent length = 80m x 0,5 + 40m = 80m  
Heating Overall equivalent length = 80m x 0,5 + 40m = 80m

The change rate of the cooling capacity when the height difference = 0 is about -0,87  
The change rate of the heating capacity when the height difference = 0 is about -0,90

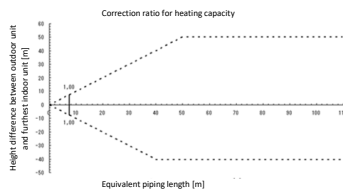
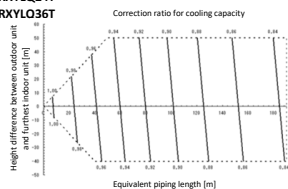
3D108958B

### RXYLQ12T

### RXYLQ14T

### RXYLQ24T

### RXYLQ36T



#### Notes

- These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions. Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.

- With this outdoor unit, the following control is used:
  - in case of cooling: constant evaporating pressure control
  - in case of heating: constant condensing pressure control

- Method of calculating the capacity of the outdoor units.**

The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Conditions Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at 100% connection ratio.  
x Correction ratio of piping to furthest indoor unit

Conditions Indoor connection ratio > 100%.

Maximum capacity of outdoor units = Capacity of outdoor units from capacity table at installed connection ratio.  
x Correction ratio of piping to furthest indoor unit

- When the level difference is 50 m or more and the equivalent piping length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. Refer to installation manual 3D079540 / 3D079543. For the new diameters, see below.

Model	Gas pipe	Liquid pipe
12HP	28,6	15,9
14HP	28,6	15,9
24HP	34,9	19,1
36HP	41,3	22,2

- When the pipe length after the first refrigerant branch kit is more than 40 m, the pipe size between the first and the final branch kit must be increased (only for VRV DX indoor units). For details, see the installer reference guide.

\* See the installation manual for allowed system setups and the rules for dedicated indoor connection types.

Diameter of the main pipes (standard size)

Model	Gas pipe	Liquid pipe
12HP	28,6	12,7
14HP	28,6	12,7
24HP	34,9	15,9
36HP	41,3	19,1

- The equivalent lengths from the graphs above were obtained with the following calculation:

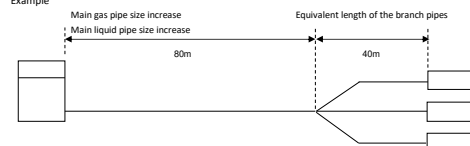
$$\text{Equivalent piping length [m]} = \text{Equivalent length of the main pipe} \times \text{Correction factor} + \text{Equivalent length of the branch pipes}$$

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size  
When calculating the heating capacity: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1,0	0,5
Heating (liquid pipe)	1,0	0,5

Example



Cooling Overall equivalent length = 80m x 1,0 + 40m = 120m  
Heating Overall equivalent length = 80m x 0,5 + 40m = 80m

The change rate of the cooling capacity when the height difference = 0 is about -0,89  
The change rate of the heating capacity when the height difference = 0 is about -1,0

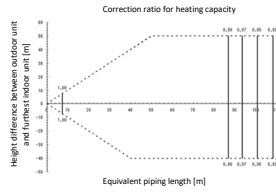
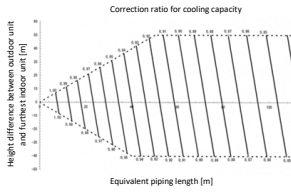
3D108958B



# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

### RXYLQ16T



#### Notes

- These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions.  
Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.

- With this outdoor unit, the following control is used:  
- in case of cooling: constant evaporating pressure control  
- in case of heating: constant condensing pressure control

- Method of calculating the capacity of the outdoor units.

The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

**Conditions Indoor connection ratio ≤ 100%.**

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at 100\% connection ratio.} \times \text{Correction ratio of piping to furthest indoor unit}$$

**Conditions Indoor connection ratio > 100%.**

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio.} \times \text{Correction ratio of piping to furthest indoor unit}$$

- When the level difference is 50 m or more and the equivalent piping length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.  
Refer to installation manual 3D079540 / 3D79543.  
For the new diameters, see below.

Model	Gas pipe	Liquid pipe
16HP	31.8 *	15.9

\* If not available on-site, do not increase the piping diameter.

\* If not increased, do not apply a correction factor to the equivalent piping length (see note 6).

- When the pipe length after the first refrigerant branch kit is more than 40 m, the pipe size between the first and the final branch kit must be increased (only for VRV DX indoor units).  
For details, see the installer reference guide.

\* See the installation manual for allowed system setups and the rules for dedicated indoor connection types.

#### Diameter of the main pipes (standard size)

Model	Gas pipe	Liquid pipe
16HP	28.6	12.7

- The equivalent lengths from the graphs above were obtained with the following calculation:

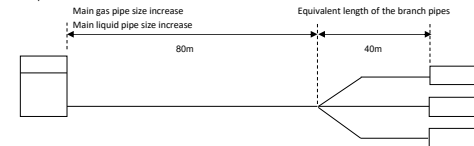
$$\text{Equivalent piping length (m)} = \text{Equivalent length of the main pipe} \times \text{Correction factor} + \text{Equivalent length of the branch pipes}$$

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size  
When calculating the heating capacity: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

#### Example

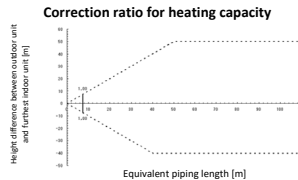
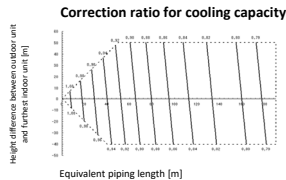


Cooling Overall equivalent length = 80m x 0.5 + 40m = 80m  
Heating Overall equivalent length = 80m x 0.5 + 40m = 80m

The change rate of the cooling capacity when the height difference = 0 is about -0.88  
The change rate of the heating capacity when the height difference = 0 is about -0.99

3D108958B

### RXYLQ18T RXYLQ26T RXYLQ28T RXYLQ30T RXYLQ38T RXYLQ40T RXYLQ42T



#### Notes

- These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions.  
Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.

- With this outdoor unit, the following control is used:  
- in case of cooling: constant evaporating pressure control  
- in case of heating: constant condensing pressure control

- Method of calculating the capacity of the outdoor units.

The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

**Conditions Indoor connection ratio ≤ 100%.**

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at 100\% connection ratio.} \times \text{Correction ratio of piping to furthest indoor unit}$$

**Conditions Indoor connection ratio > 100%.**

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio.} \times \text{Correction ratio of piping to furthest indoor unit}$$

- When the level difference is 50 m or more and the equivalent piping length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.  
Refer to installation manual 3D079540 / 3D79543.  
For the new diameters, see below.

Model	Gas pipe	Liquid pipe
18HP	31.8 *	19.1
26~30HP	38.1 *	22.2
38~42HP	41.3	22.2

\* If not available on-site, do not increase the piping diameter.

\* If not increased, do not apply a correction factor to the equivalent piping length (see note 6).

- When the pipe length after the first refrigerant branch kit is more than 40 m, the pipe size between the first and the final branch kit must be increased (only for VRV DX indoor units).  
For details, see the installer reference guide.

\* See the installation manual for allowed system setups and the rules for dedicated indoor connection types.

#### Diameter of the main pipes (standard size)

Model	Gas pipe	Liquid pipe
18HP	28.6	15.9
26~30HP	34.9	19.1
38~42HP	41.3	19.1

- The equivalent lengths from the graphs above were obtained with the following calculation:

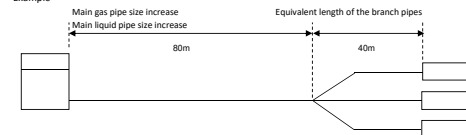
$$\text{Equivalent piping length (m)} = \text{Equivalent length of the main pipe} \times \text{Correction factor} + \text{Equivalent length of the branch pipes}$$

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size  
When calculating the heating capacity: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

#### Example



Cooling Overall equivalent length = 80m x 1.0 + 40m = 120m  
Heating Overall equivalent length = 80m x 0.5 + 40m = 80m

The change rate of the cooling capacity when the height difference = 0 is about 0.83  
The change rate of the heating capacity when the height difference = 0 is about 1.0

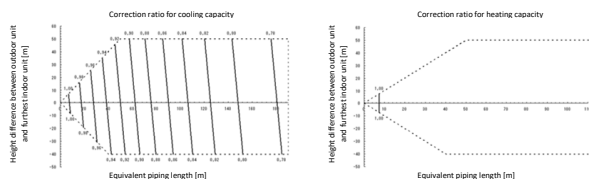
3D108958B

# 5 Capacity tables

## 5 - 2 Capacity Correction Factor

5

### RXYLQ20T RXYLQ32T RXYLQ34T



#### Notes

- These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions.

Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.

- With this outdoor unit, the following control is used:
  - in case of cooling: constant evaporating pressure control
  - in case of heating: constant condensing pressure control

#### Method of calculating the capacity of the outdoor units

The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

#### Conditions Indoor connection ratio ≤ 100%

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor unit}$$

#### Conditions Indoor connection ratio > 100%

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor unit}$$

- When the level difference is 50 m or more and the equivalent piping length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. Refer to installation manual -3D079540 / 3D79543- For the new diameters, see below.

Model	Gas pipe	Liquid pipe
20HP	31,8 *	19,1
32/34HP	38,1 *	22,2

- When the pipe length after the first refrigerant branch kit is more than 40 m, the pipe size between the first and the final branch kit must be increased (only for VRV DX indoor units). For details, see the installer reference guide.

\* See the installation manual for allowed system setups and the rules for dedicated indoor connection types.

#### Diameter of the main pipes (standard size)

Model	Gas pipe	Liquid pipe
20HP	28,6	15,9
32/34HP	34,9	19,1

- The equivalent lengths from the graphs above were obtained with the following calculation:

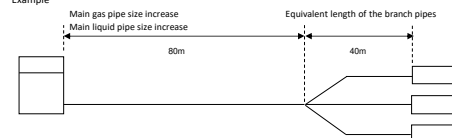
$$\text{Equivalent piping length [m]} = \text{Equivalent length of the main pipe} \times \text{Correction factor} + \text{Equivalent length of the branch pipes}$$

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size  
When calculating the heating capacity: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1,0	0,5
Heating (liquid pipe)	1,0	0,5

#### Example

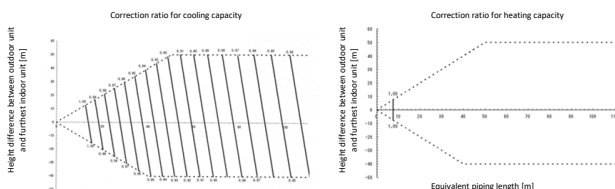


Cooling Overall equivalent length = 80m x 0,5 + 40m = 80m  
Heating Overall equivalent length = 80m x 0,5 + 40m = 80m

The change rate of the cooling capacity when the height difference = 0 is about -0,88  
The change rate of the heating capacity when the height difference = 0 is about -1,0

3D108958B

### RXYLQ22T



#### Notes

- These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions.

Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.

- With this outdoor unit, the following control is used:
  - in case of cooling: constant evaporating pressure control
  - in case of heating: constant condensing pressure control

#### Method of calculating the capacity of the outdoor units

The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

#### Conditions Indoor connection ratio ≤ 100%

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at 100\% connection ratio} \times \text{Correction ratio of piping to furthest indoor unit}$$

#### Conditions Indoor connection ratio > 100%

$$\text{Maximum capacity of outdoor units} = \text{Capacity of outdoor units from capacity table at installed connection ratio} \times \text{Correction ratio of piping to furthest indoor unit}$$

- When the level difference is 50 m or more and the equivalent piping length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased. Refer to installation manual -3D079540 / 3D79543- For the new diameters, see below.

Model	Gas pipe	Liquid pipe
22HP	31,8 *	19,1

\* If not available on-site, do not increase the piping diameter.

\* If not increased, do not apply a correction factor to the equivalent piping length (see note -6).

- When the pipe length after the first refrigerant branch kit is more than 40 m, the pipe size between the first and the final branch kit must be increased (only for VRV DX indoor units). For details, see the installer reference guide.

\* See the installation manual for allowed system setups and the rules for dedicated indoor connection types.

#### Diameter of the main pipes (standard size)

Model	Gas pipe	Liquid pipe
22HP	28,6	15,9

- The equivalent lengths from the graphs above were obtained with the following calculation:

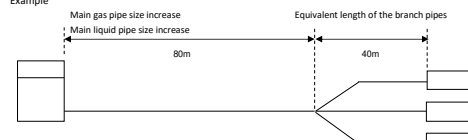
$$\text{Equivalent piping length [m]} = \text{Equivalent length of the main pipe} \times \text{Correction factor} + \text{Equivalent length of the branch pipes}$$

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size  
When calculating the heating capacity: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1,0	0,5
Heating (liquid pipe)	1,0	0,5

#### Example



Cooling Overall equivalent length = 80m x 0,5 + 40m = 80m  
Heating Overall equivalent length = 80m x 0,5 + 40m = 80m

The change rate of the cooling capacity when the height difference = 0 is about -0,88  
The change rate of the heating capacity when the height difference = 0 is about -1,0

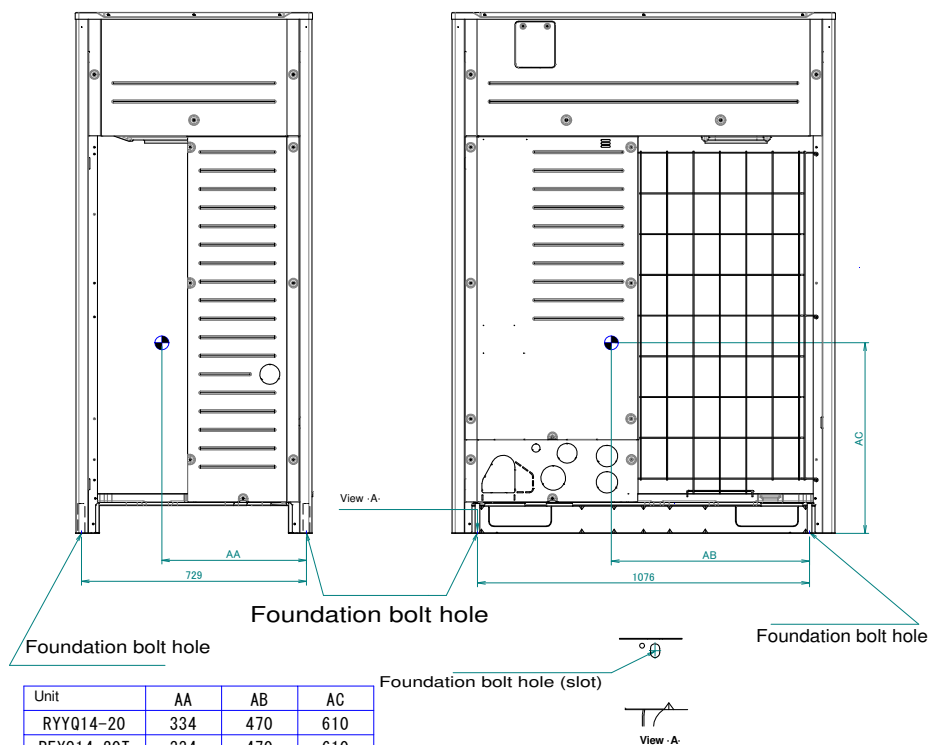
3D108958B



# 7 Centre of gravity

## 7 - 1 Centre of Gravity

RXMLQ-T  
RXYLQ-T



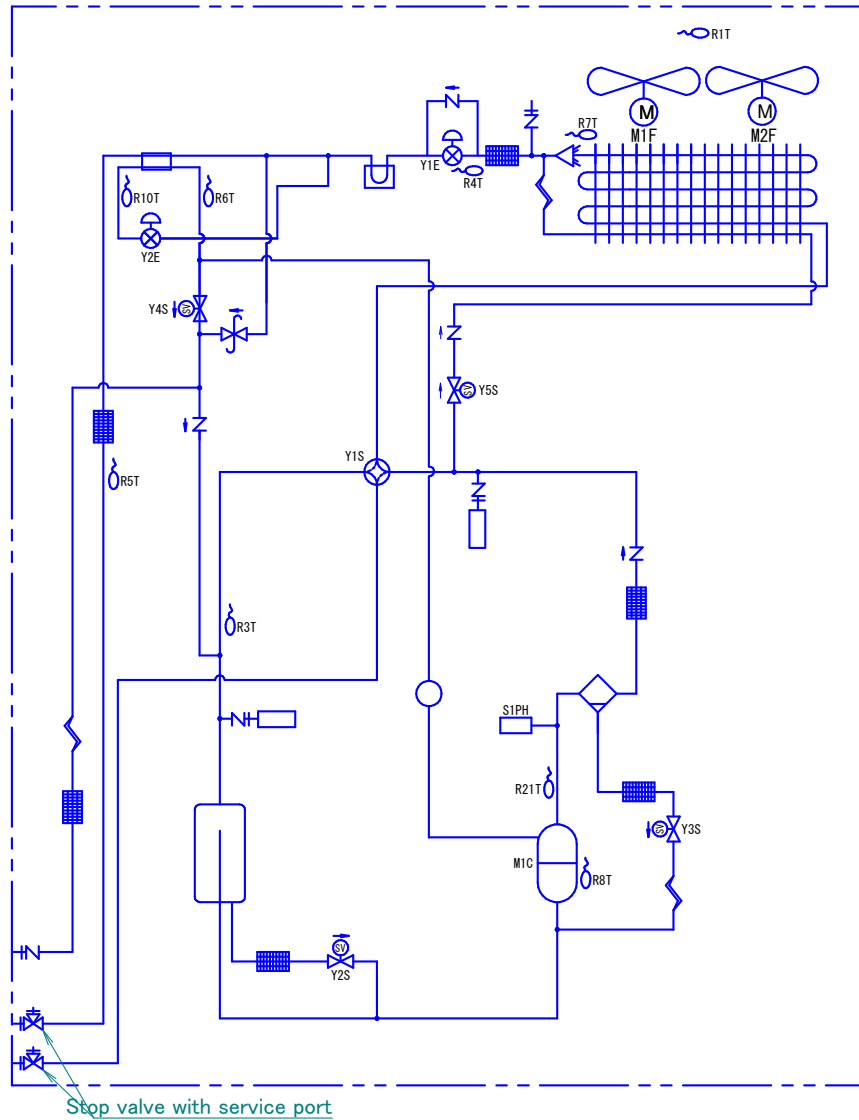
Unit	AA	AB	AC
RYYQ14-20	334	470	610
REYQ14-20T	334	470	610
RYMQ14-20	360	569	610
RXYQ (Q) 14-20	345	575	610
RXYTQ10-12T	350	610	810
RXYTQ14-16T	351	565	610
RX (M/Y) LQ*T	350	571	787

3D079583D

# 8 Piping diagrams

## 8 - 1 Piping Diagrams

### RXMLQ-T RXYLQ-T



- Propeller fan
- Heat exchanger
- Electronic expansion valve
- 4-way valve
- Service port · 5/16" flare
- High pressure switch
- Low pressure switch
- Compressor
- Oil separator
- Stop valve
- Distributor
- PCB Cooling
- Accumulator
- Subcool heat exchanger

- Muffler
- Check valve
- Filter
- Solenoid valve
- Capillary tube
- Pressure relief valve

- R1T:** Thermistor (air)
- R21T:** Thermistor (discharge)
- R3T:** Thermistor (suction)
- R4T:** Thermistor (heat exchanger liquid main)
- R5T:** Thermistor (subcool heat exchanger liquid)
- R6T:** Thermistor (subcool heat exchanger gas)
- R7T:** Thermistor (heat exchanger, deicer)
- R8T:** Thermistor (compressor body)
- R10T:** ThermistorSubcool heat exchanger inlet

**3D117164A**

# 8 Piping diagrams

## 8 - 1 Piping Diagrams

### RXMLQ-T

### RXYLQ-T

VRV4  
Heat pump  
Piping restrictions 1/3

For the reference drawing, see  
page 2/3.

		Maximum piping length			Maximum height difference			Total piping length
		Longest pipe (A+{B,G,E,J}) Actual / (Equivalent)	After first branch (B,G,E,J) Actual	After first branch (for multi-outdoor) (D) Actual / (Equivalent)	Indoor-to-outdoor (H1) Outdoor above indoor / (indoor above outdoor)	Indoor-to-indoor (H2)	Outdoor-to-outdoor (H3)	
<b>Standard</b>								
VRV DX indoor units only		165/(190)m <sup>(8)</sup>	40m <sup>(1)</sup>	10/(13)m	50/(40)m <sup>(8)</sup>	30m	5m	500m
<b>Standard multi-combination</b>								
All multi-outdoor-unit combinations except standard multi-outdoor-unit combinations		135/(160)m <sup>(8)</sup>	40m <sup>(1)</sup>	10/(13)m	50/(40)m <sup>(8)</sup>	30m	5m	300m
<b>Hydrobox connection</b>		135/(160)m <sup>(8)</sup>	40m	10/(13)m	50/(40)m	15m	5m	300m <sup>(6)</sup>
<b>RA connection</b>		100/(120)m <sup>(8)</sup>	50m <sup>(2)</sup>	-	50/(40)m	15m	-	250m
<b>AHU connection</b>	Pair	50/(55)m <sup>(6)</sup>	-	-	40/(40)m	-	-	-
	Multi <sup>(6)</sup>	120/(140)m <sup>(8)</sup>	40m	10/(13)m	40/(40)m	15m	5m	500m
	Mix <sup>(7)</sup>	120/(140)m <sup>(8)</sup>	40m	10/(13)m	40/(40)m	15m	5m	500m

#### Remark

For standard multi-outdoor-unit combinations, see 3D117167.

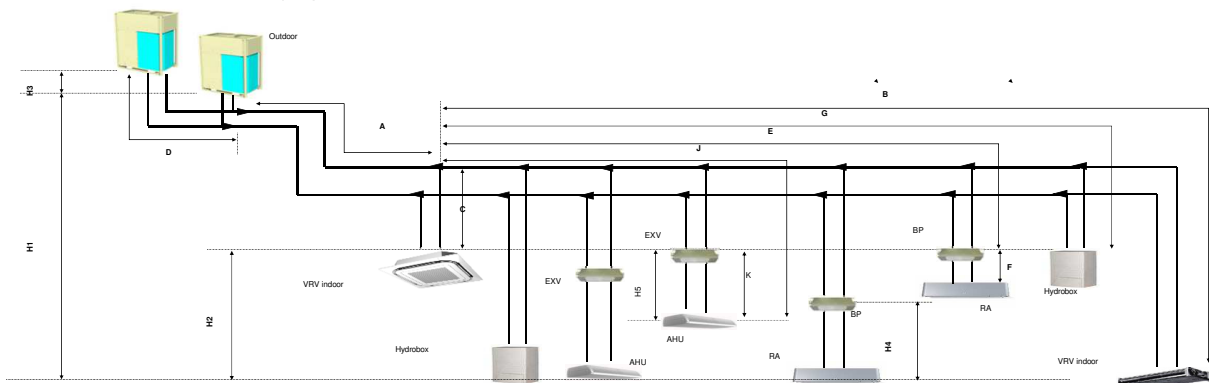
- (1) If all conditions below are met, the limitation can be extended up to 90 m.
  - a. The piping length between all indoor units and the nearest branch kit is ≤ 40m.
  - b. It is necessary to increase the size of the gas and liquid piping.  
If the increased pipe size is larger than the pipe size of the main pipe, also increase the size of the main pipe.
  - c. When the piping size is increased, the piping length has to be counted as double.
- (2) The total piping length has to be within limitations.
- (3) The piping length difference between the nearest indoor unit from the first branch to the outdoor unit and the farthest indoor unit to the outdoor unit is ≤ 40m.
- (4) If the piping length between the first branch and the BP box or VRV indoor unit is more than 20m, increase the length of the gas and liquid piping between the first branch and the BP box or VRV indoor unit.
- (5) An extension to up to 90 m is possible without an additional option kit. Respect the following conditions:
  - > If the outdoor units are positioned higher than the indoor units:
    - a. Size up the liquid piping
    - b. A dedicated setting on the outdoor unit is required.
  - > If the outdoor units are positioned lower than the indoor units:
    - a. 40°E Minimum connection ratio: 80%
    - 60°E Minimum connection ratio: 90%
    - 65°E Minimum connection ratio: 100%
    - 80°E Minimum connection ratio: 110%
  - b. Size up the liquid piping.  
A dedicated setting on the outdoor unit is required.
- (6) The allowable minimum length is 5 m.
- (7) In case of multi-outdoor-unit combinations.
- (8) Multiple air handling units (AHU)(EKEV + EKEQ kits).
- (9) Mix of AHU units and VRV DX indoor
- (10) If the equivalent piping length between is > 90m, size up the main liquid and gas piping.

3D117169

### RXMLQ-T

### RXYLQ-T

VRV4  
Heat pump  
Piping restrictions 2/3



# 8 Piping diagrams

## 8 - 1 Piping Diagrams

RXMLQ-T

RXYLQ-T

VRV4  
Heat pump  
Piping restrictions 3/3

System pattern Allowed connection ratio (CR) Other combinations are not allowed.	Total		Allowed capacity			
	Capacity	Indoor unit quantity (VRV, RA, AHU, Hydrobox)	VRV DX indoor unit	RA DX indoor unit	Hydrobox unit	Air handling unit (AHU)
VRV DX indoor units only	70~130%	Max.64	70~130%	-	-	-
VRV DX indoor unit + RA DX	80~130%	Max.32 <sup>(1)</sup>	0~130%	0~130%	-	-
RA DX indoor unit	80~130%	Max.32 <sup>(1)</sup>	-	80~130%	-	-
VRV DX indoor unit + LT hydrobox	70~130%	Max.32	70~130%	-	0~50%	-
VRV DX indoor unit + AHU	70~110% <sup>(3)</sup>	Max.64 <sup>(2)</sup>	70~110%	-	-	0~110%
AHU only Pair + multi (4)	90~110% <sup>(3)</sup>	Max.64 <sup>(2)</sup>	-	-	-	90~110%

### Remark

- (1) There is no restriction on the number of connectable BP boxes.
- (2) For connection with AHU  
EKEXV kits are also considered indoor units.
- (3) Restrictions regarding the air handling unit capacity
- (4) Pair AHU = system with 1 air handling unit connected to one outdoor unit  
Multi AHU = system with multiple air handling units connected to one outdoor unit

### About ventilation applications

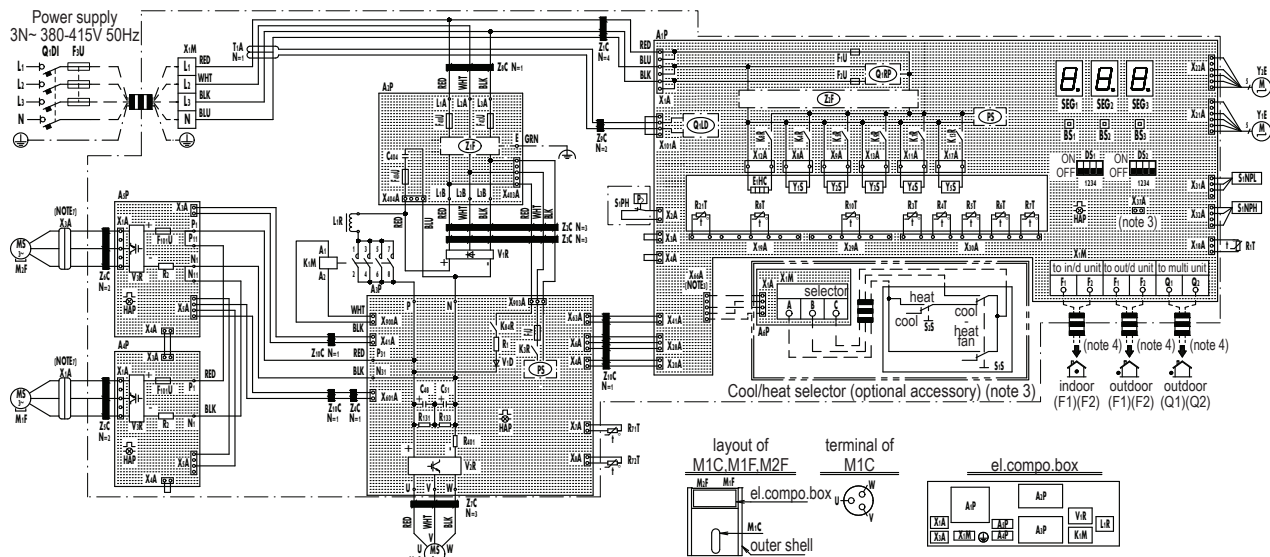
- I. FXMQ\_MF units are considered air handling units, following air handling unit limitations.  
Maximum connection ratio when combined with VRV DX indoor units: <30%.  
Maximum connection ratio when only air handling units are connected: <100%.  
For information on the operation range, refer to the documentation of the FXMQ\_MF unit.
- II. Biddle air curtains are considered air handling units, following air handling unit limitations:  
For information on the operation range, refer to the documentation of the Biddle unit.
- III. [EKEXV + EKEQ] units combined with an air handling unit are considered air handling units, following air handling unit limitations.  
For information on the operation range, refer to the documentation of the EKEXV-EKEQ unit.
- IV. VKM units are considered to be regular VRV DX indoor units.  
For information on the operation range, refer to the documentation of the VKM unit.
- V. Because there is no refrigerant connection with the outdoor unit (only communication F1/F2), VAM units do not have connection limitations.  
However, since there is communication via F1/F2, count them as regular indoor unit when calculating the maximum allowed number of connectable indoor units.

3D117169

# 9 Wiring diagrams

## 9 - 1 Wiring Diagrams - Three Phase

### RXMLQ-T, RXYLQ-T



A1P	Printed circuit board (main)	R3T	Thermistor (suction)
A2P	Printed circuit board (noise filter)	R4T	Thermistor (heat exc, liq, main)
A3P	Printed circuit board (inv)	R5T	Thermistor (subcool, heat exc, liq)
A4P, A5P	Printed circuit board (fan)	R6T	Thermistor (subcool, heat exc, gas)
A6P	Printed circuit board (ABC I/P)	R7T	Thermistor (heat exc, deicer)
BS1~3 (A1P)	Push button switch (mode, set, return)	R8T	Thermistor (compressor body)
C48, C51 (A3P)	Capacitor	R10T	Thermistor (subcool, heat exc, inl)
C404 (A2P)	Capacitor	R21T	Thermistor (discharge)
DS1~2 (A1P)	Dip switch	R71T	Thermistor (power modular)
E1HC	Crank case heater	R72T	Thermistor (rectifier bridge plate)
F1U, F2U (A1P)	Fuse (T, 3, 15A, 250V)	S1NPH	Pressure sensor (high)
F1U (A3P)	Fuse (T, 1A, 500V)	S1NPL	Pressure sensor (low)
F3U	Field fuse	S1PH	Pressure switch (disch)
F101U (A4P, A5P)	Fuse	SEG1~3 (A1P)	7-Segment display
F404U, F410U, F412U (A2P)	Fuse	T1A	Current sensor
HAP (A1P, A3P, A4P, A5P)	Pilotlamp (service monitor-green)	V1D (A3P)	Diode
K1M	Magnetic contactor	V1R	Power module
K3R (A3P)	Magnetic relay	V2R (A3P)	Power module
K4R (A1P)	Magnetic relay (Y1S)	V3R (A4P, A5P)	Power module
K5R (A1P)	Magnetic relay (Y2S)	X1A, X3A	Connector (M1F, M2F)
K7R (A1P)	Magnetic relay (Y4S)	X1M	Terminal block (power supply)
K8R (A1P)	Magnetic relay (E1HC)	X1M (A6P)	Terminal block (control)
K9R (A1P)	Magnetic relay (Y3S)	X*A (A*P)	Connector
K13R (A1P)	Magnetic relay (Y5S)	Y1E	Electronic expansion valve (main)
K84R (A3P)	Magnetic relay	Y2E	Electronic expansion valve (injection)
L1R	Reactor	Y1S	Solenoid valve (main)
M1C	Motor (compressor)	Y2S	Solenoid valve (accumulator oil return)
M1F, M2F	Motor (fan)	Y3S	Solenoid valve (oil1)
PS (A1P, A3P)	Switching power supply	Y4S	Solenoid valve (inj.)
Q1DI	Field earth leakage breaker	Y5S	Solenoid valve (hot gas)
Q1LD (A1P)	Earth leakage current detector	Z*C	Noise filter (ferrite core)
Q1RP (A1P)	Phase reversal detect circuit	Z1F (A2P)	Noise filter (with surge absorber)
R1 (A3P)	Resistor (current limiting)	Z2F (A1P)	Noise filter
R2 (A4P, A5P)	Resistor (current sensor)		Connector for optional accessories
R131, R133 (A3P)	Resistor	X37A	Connector (power adapter)
R401 (A3P)	Resistor (current sensor)	X66A	Connector (remote switching cool/heat selector)
R1T	Thermistor (air)		

### NOTES

- This wiring diagram applies only to the outdoor unit.
- Field wiring, terminal block, connector, terminal, protective earth (screw), functional earth, earth wiring, field supply, PCB, switch box, options
- When using the optional adapter, refer to the installation manual of the optional adapter.
- For connection wiring from indoor-outdoor transmission F1-F2
- Outdoor-outdoor transmission F1-F2, outdoor-multi transmission Q1-Q2
- Refer to the installation manual.
- How to use BS1~3 switch. Refer to "service precaution" label on el. compo. box cover.
- When operating, don't shortcircuit the protection devices (S1PH).
- Connector X1A (M1F) is white, connector X3A (M2F) is red.

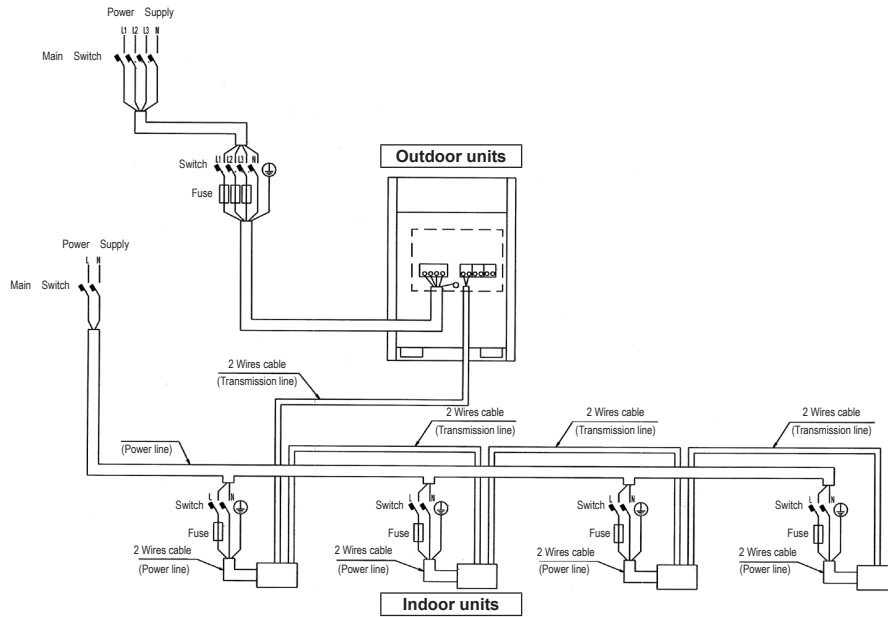
2D117163A



# 10 External connection diagrams

## 10 - 1 External Connection Diagrams

RXMLQ-T  
RXYLQ-T

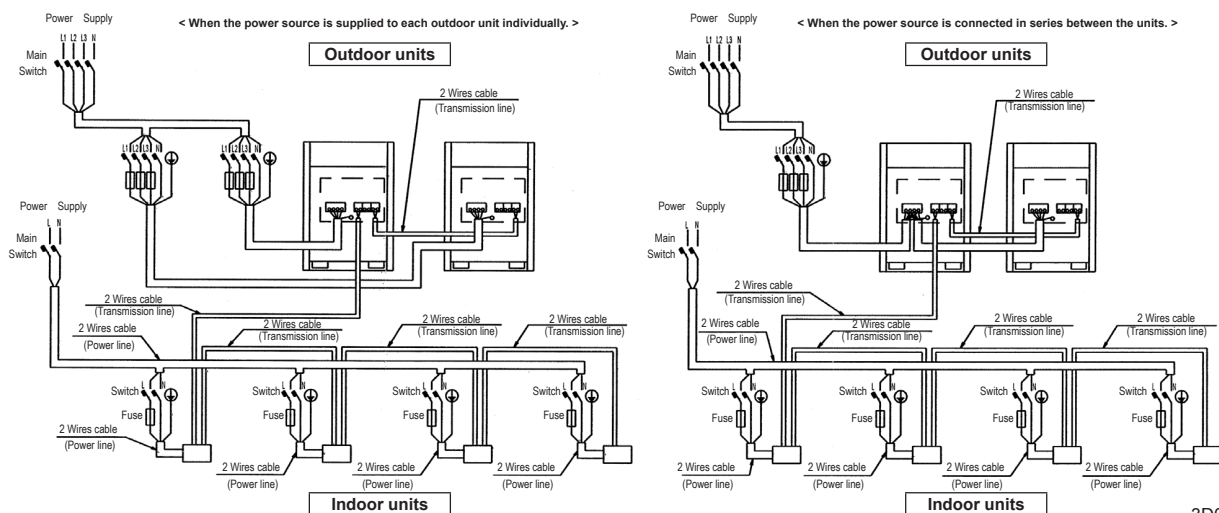


3D079576

### NOTES

1. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipment.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
11. Must install earth leakage circuit breaker.

RXMLQ-T  
RXYLQ-T



3D079577

### NOTES

1. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipment.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. the capacity of UNIT1 must be larger than UNIT2 when the power source is connected in series between the units.
11. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
12. Must install earth leakage circuit breaker.

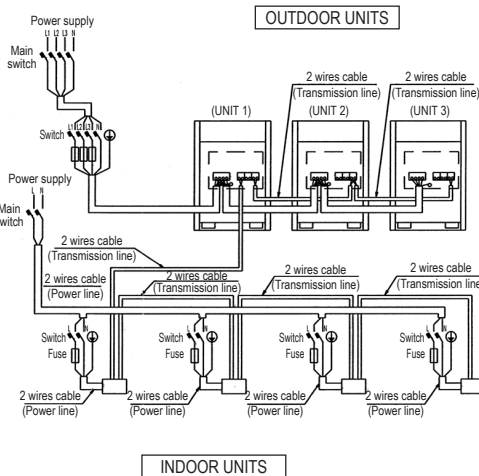
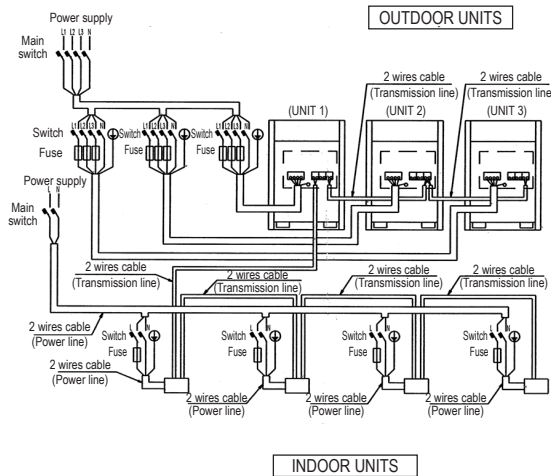
# 10 External connection diagrams

## 10 - 1 External Connection Diagrams

RXMLQ-T  
RXYLQ-T

<When the power source is supplied to each outdoor unit individually>

<When the power source is connected in series between the units>



3D079578

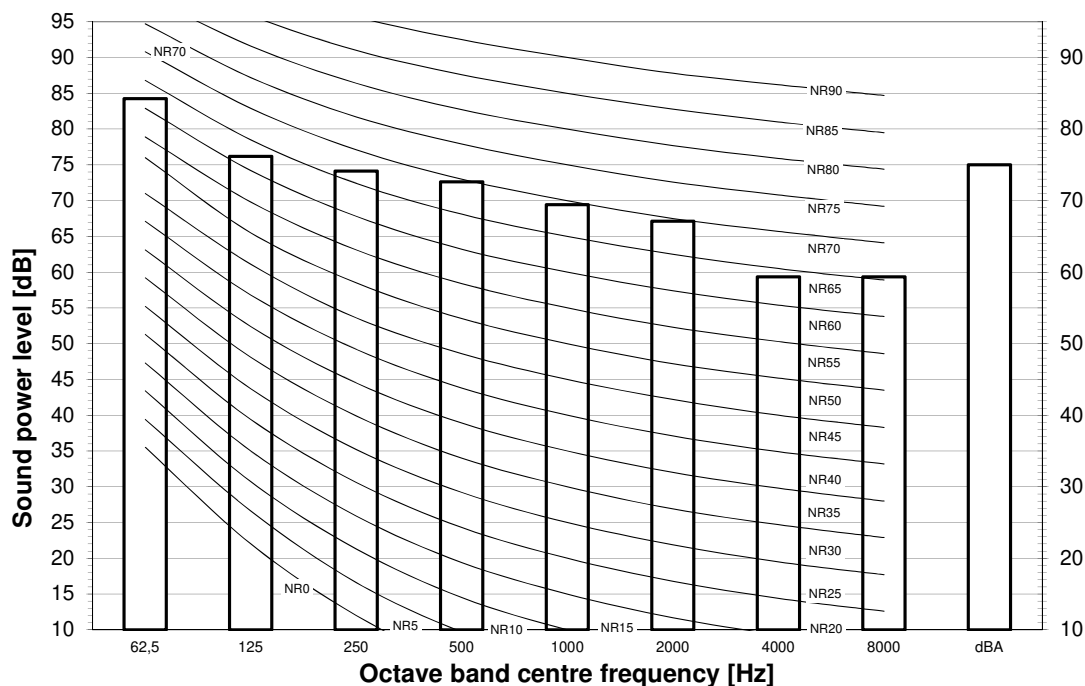
### NOTES

1. All wiring, components and materials to be produced on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipment.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. The capacity of UNIT1 must be larger than UNIT2 when the power source is connected in series between the units.
11. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
12. Must install earth leakage circuit breaker.

# 11 Sound data

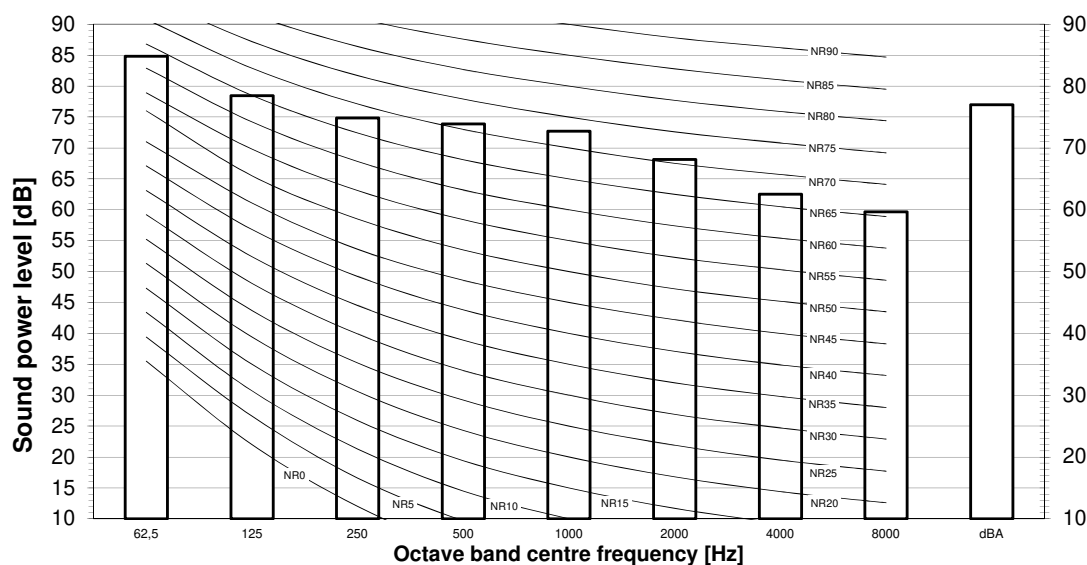
## 11 - 1 Sound Power Spectrum

### RXMLQ8T



3D117172

### RXYLQ10T

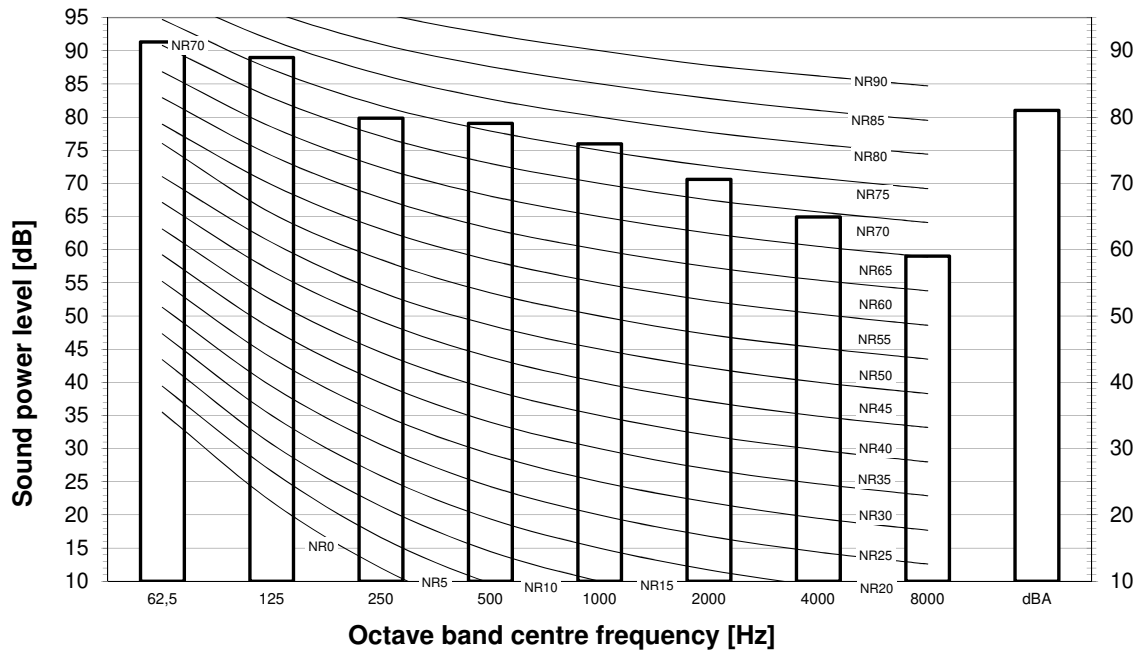


3D117174

# 11 Sound data

## 11 - 1 Sound Power Spectrum

RXYLQ12T

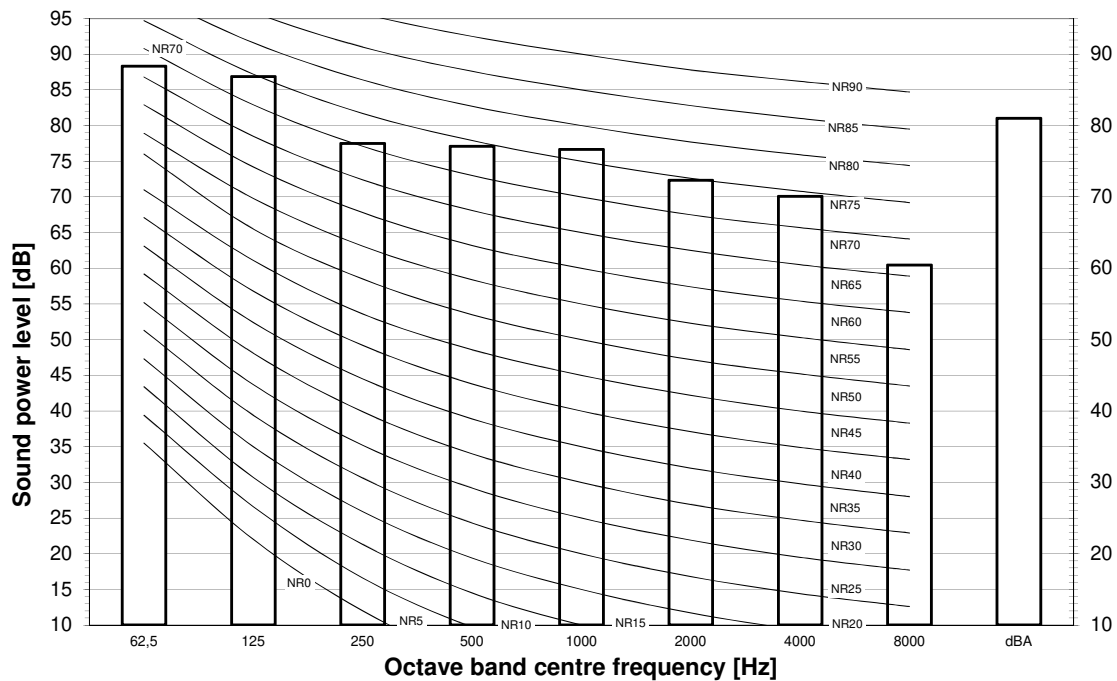


### Notes

- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10E-6μW/m<sup>2</sup>
- Measured according to ISO 3744

3D117176

RXYLQ14T

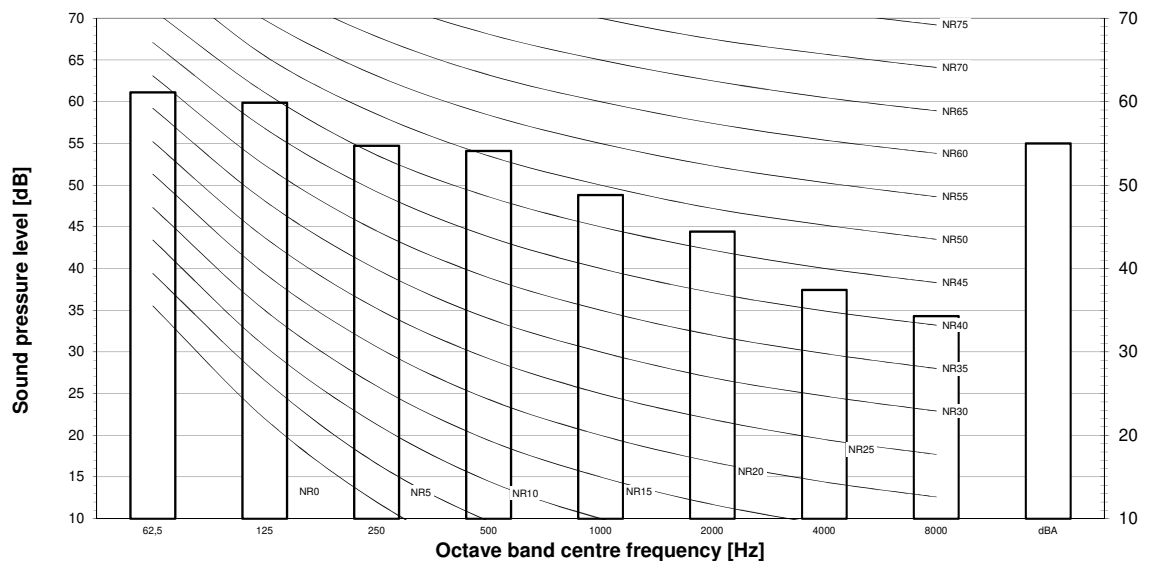


3D117178

# 11 Sound data

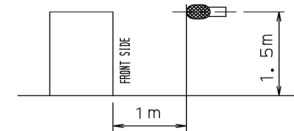
## 11 - 2 Sound Pressure Spectrum

RXMLQ8T



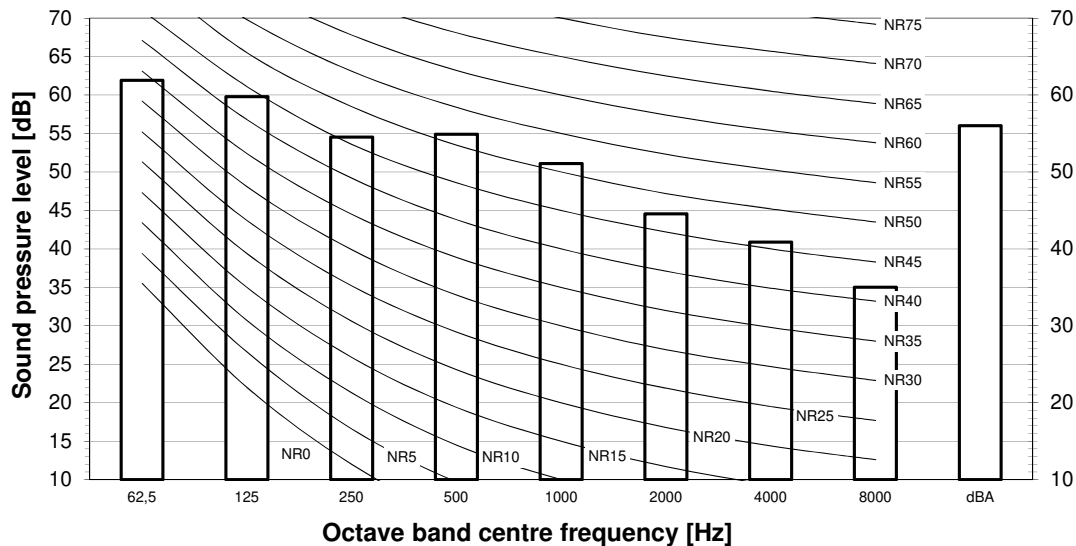
### Notes

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20  $\mu$ Pa



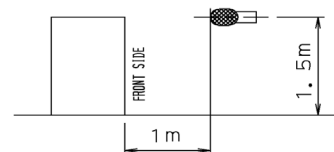
3D117171

RXYLQ10T



### Notes

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20  $\mu$ Pa

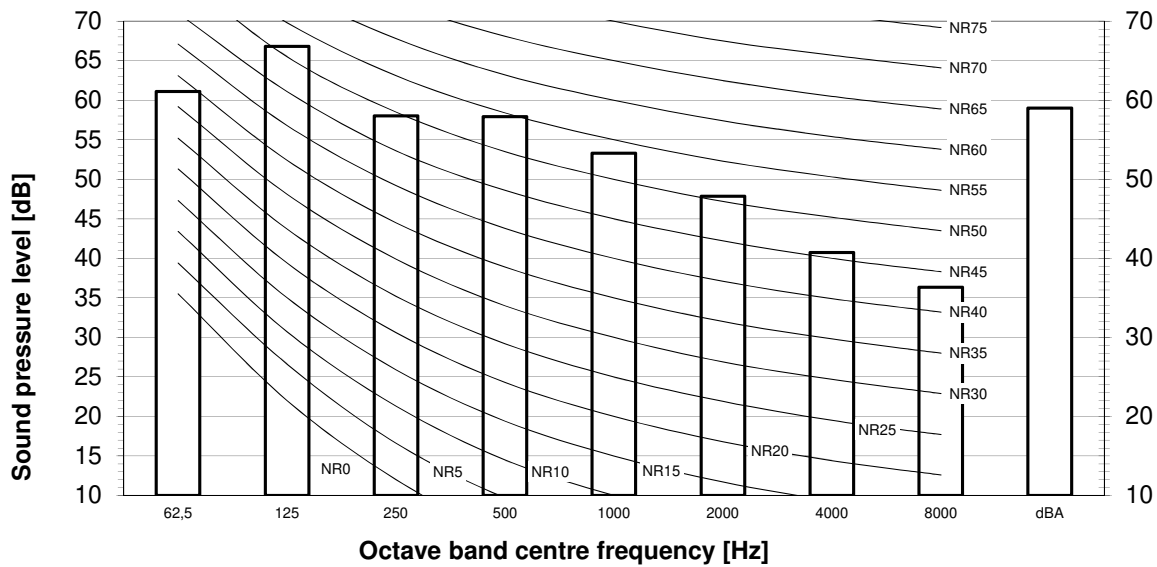


3D117173

# 11 Sound data

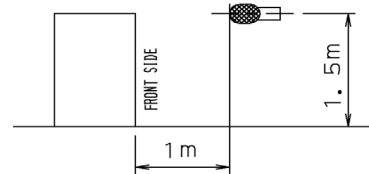
## 11 - 2 Sound Pressure Spectrum

RXYLQ12T



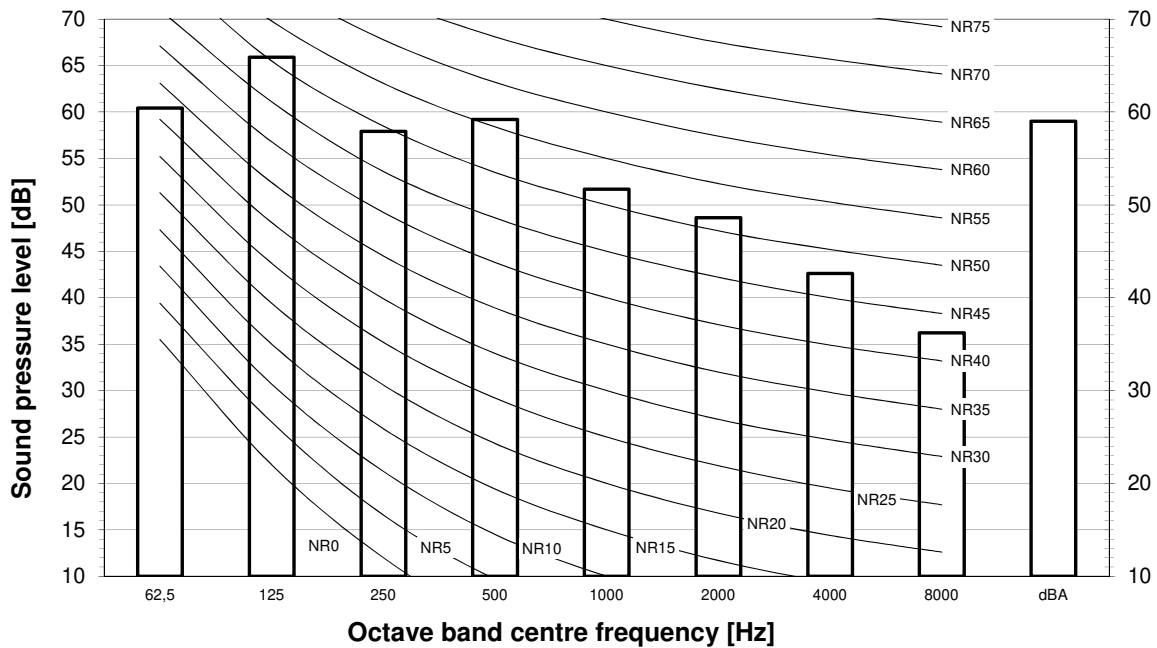
**Notes**

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20  $\mu$ Pa



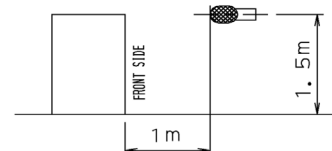
3D117175

RXYLQ14T



**Notes**

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20  $\mu$ Pa



3D117177

# 12 Installation

## 12 - 1 Installation Method

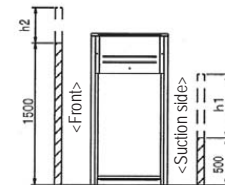
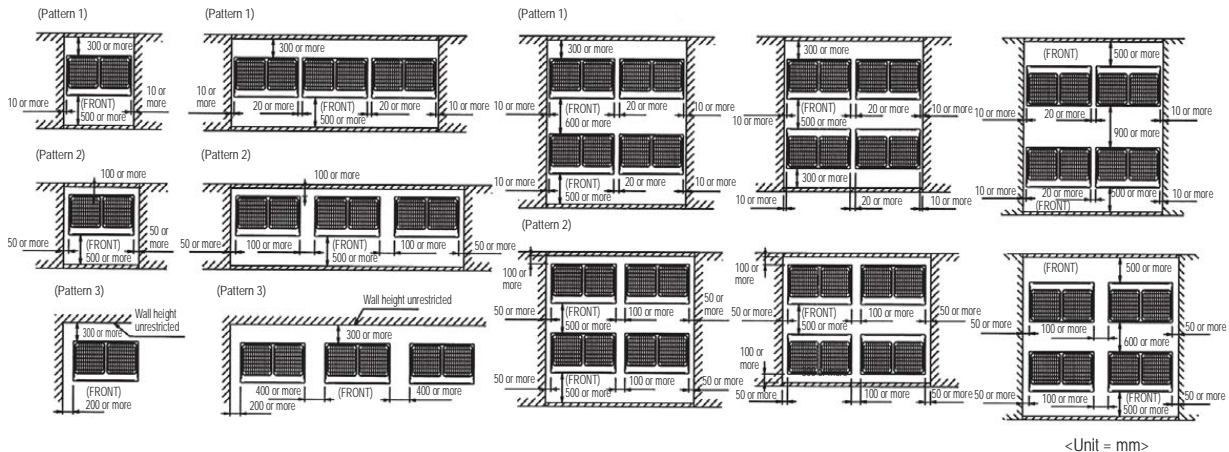
RXMLQ-T  
RXYLQ-T

12

For single unit installation

For installation in rows

For centralized group layout



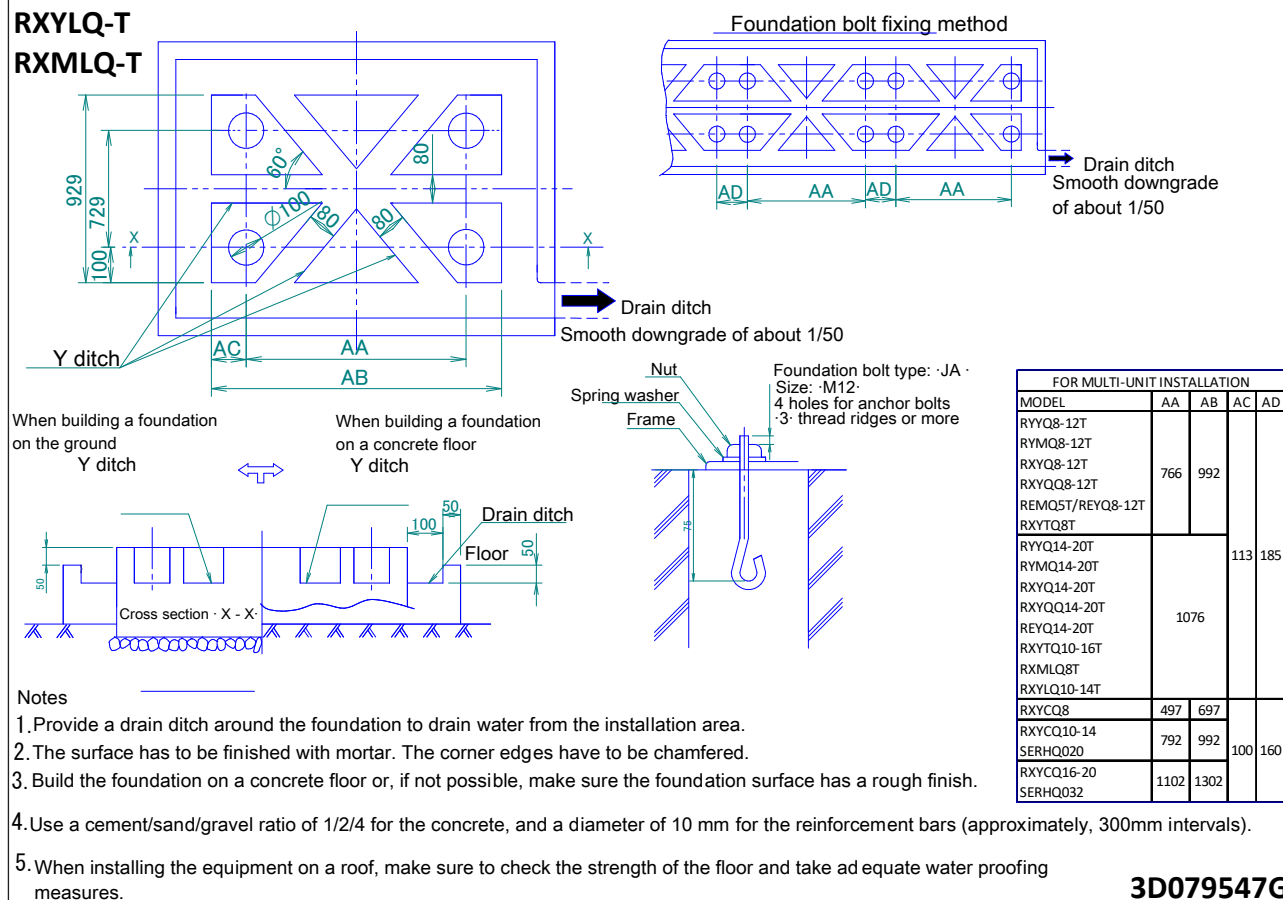
### NOTES

- Heights of walls in case of patterns 1 and 2:  
Front: 1500mm  
Suction side: 500mm  
Side: Height unrestricted  
Installation space as shown on this drawing is based on the cooling operation at 35 degrees outdoor air temperature.  
When the design outdoor air temperature exceeds 35 degrees or the load exceeds maximum ability of much generation load of heat in all outdoor unit, take the suction side space more broadly than the space as shown on this drawing.
- 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 figure on the right.
- When installing the units most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available. Always keep in mind the need to leave enough space for a person to pass between units and wall and also 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.

3D079542

## 12 - 2    Fixation and Foundation of Units

RXYLQ-T  
RXMLQ-T



**3D079547G**

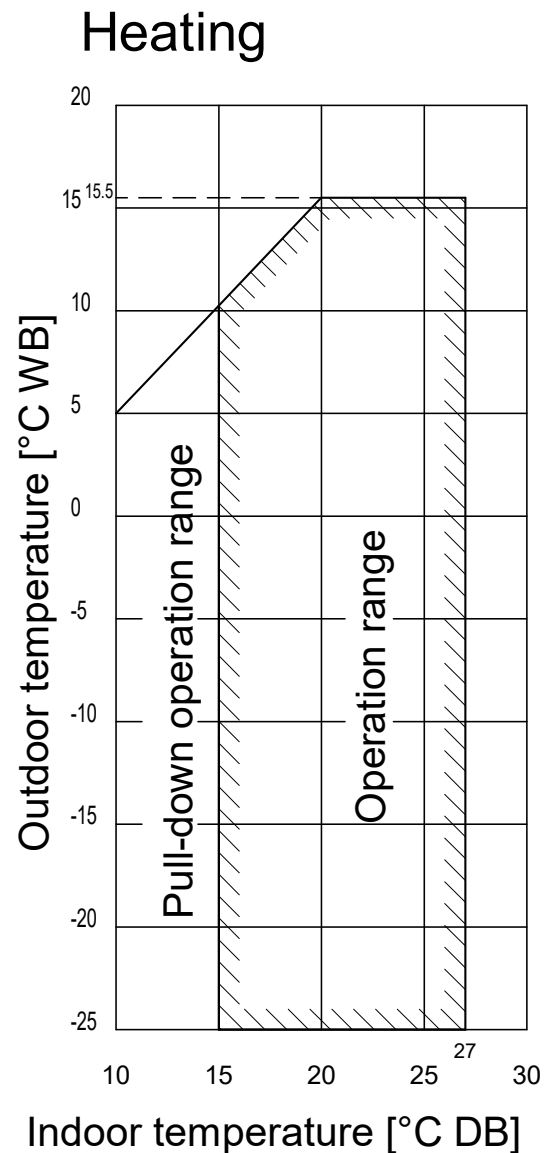
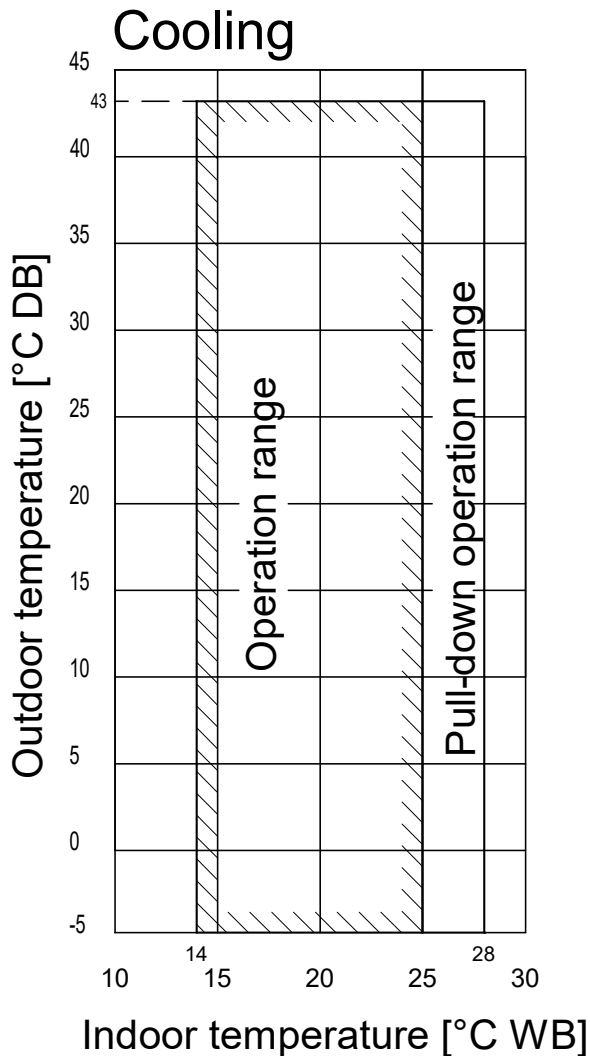


## 13 Operation range

### 13 - 1 Operation Range

RXMLQ-T  
RXYLQ-T

13



#### Notes

- These figures assume the following operation conditions  
Indoor and outdoor units  
Equivalent piping length: ·5·m  
Level difference: ·0·m
- Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
- To reduce the freeze-up operation (indoor de-icing) frequency, it is recommended to install the outdoor unit in a location not exposed to wind.
- Operation range is valid in case direct expansion indoor units are used.  
If other indoor units are used, refer to the documentation of the respective indoor units.

3D117195

# 14 Appropriate Indoors

## 14 - 1 Appropriate Indoors

14

RXYQ-U

RYYQ-U

RYMQ-U

RXMLQ-T

RXYLQ-T

Recommended indoor units for RXYQ\*U\* / RYYQ\*U\* / RYMQ\*U\* / RXMLQ\*T\* / RXYLQ\*T\* outdoor units

HP	8	10	12	14	16	18	20
1	4xFXFQ50	4xFXFQ63	6xFXFQ50	1xFXFQ50 5xFXFQ63	4xFXFQ63 2xFXFQ80	3xFXFQ50 5xFXFQ63	2xFXFQ50 6xFXFQ63
2	4xFXSQ50	4xFXSQ63	6xFXSQ50	1xFXSQ50 5xFXSQ63	4xFXSQ63 2xFXSQ80	3xFXSQ50 5xFXSQ63	2xFXSQ50 6xFXSQ63
3	4xFXMQ50	4xFXMQ63	6xFXMQ50	1xFXMQ50 5xFXMQ63	4xFXMQ63 2xFXMQ80	3xFXMQ50 5xFXMQ63	2xFXMQ50 6xFXMQ63

For multi outdoor units >16HP, the recommended amount of indoor units is the sum of the indoor units defined for a single outdoor unit.

For details about the allowed combinations, see the engineering databook.

Appropriate indoor units for RXYQ\*U\* / RYYQ\*U\* / RYMQ\*U\* / RXMLQ\*T\* / RXYLQ\*T\* outdoor units

### Covered by ENER LOT21

FXFQ20-25-32-40-50-63-80-100-125  
FXZQ15-20-25-32-40-50  
FXCQ20-25-32-40-50-63-80-125  
FXKQ25-32-40-63  
FXDQ15-20-25-32-40-50-63  
FXSQ15-20-25-32-40-50-63-80-100-125-140  
FXMQ50-63-80-100-125-200-250  
FXAQ15-20-25-32-40-50-63  
FXHQ32-63-100  
FXUQ71-100  
FXNQ20-25-32-40-50-63  
FXLQ20-25-32-40-50-63

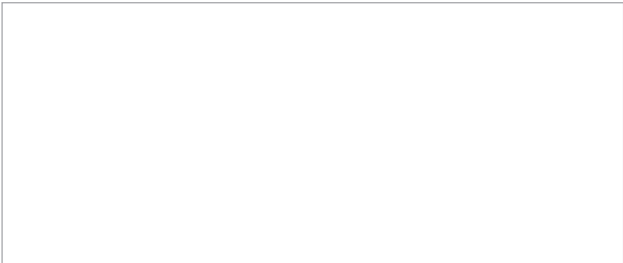
### Covered by ENER LOT10

FTXJ25-35-50  
FTXA20-25-35-42-50  
FTXM20R-25R-35R-42R-50R-60R-71R  
FLXS25-35-50-60  
FVXM25F-35F-50F  
FVXG25-35-50  
FVXM25A-35A-50A  
CVXM20A

### Outside the scope of ENER LOT21

EKEXV50-63-80-100-125-140-200-250-400-500 + EKEQM / EKEQF  
HXY080-125  
VKM50-80-100  
CYVS100-150-200-250  
CYVM100-150-200-250  
CYVL100-150-200-250

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04/2022



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