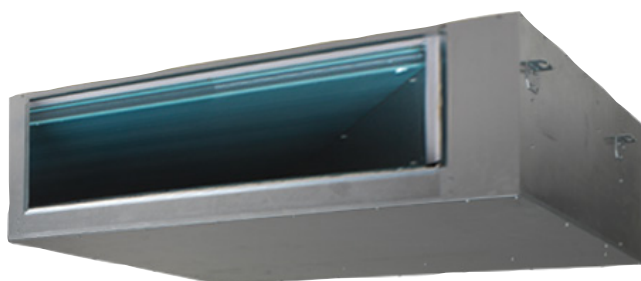


VRV IV heat pump for  
indoor installation  
Technical data book  
SB.RKXYQ-T /  
SB.RKXYQ-T8



SB.RKXYQ8T  
SB.RKXYQ5T8  
RDXYQ8TV1B  
RKXYQ8TY1B  
RKXYQ5T8Y1B  
RDXYQ5T8V1B



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## SB.RKXYQ-T / SB.RKXYQ-T8

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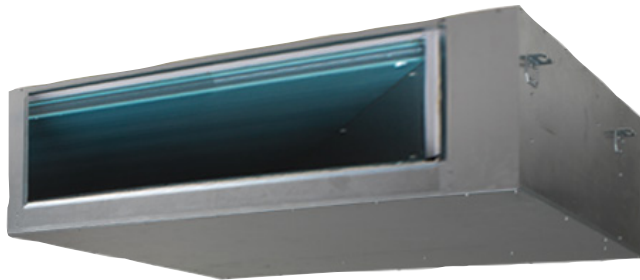
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# 1 Features

## 1 - 1 SB.RKXYQ-T

### The invisible VRV

- › By choosing a LOOP by Daikin product you support the reuse of refrigerant, for more information visit [www.daikin.eu/loop-by-daikin](http://www.daikin.eu/loop-by-daikin)
- › Unique VRV heat pump for indoor installation
- › Unrivalled flexibility because the unit is split up into two elements: the heat exchanger and the compressor
- › Highly suited to densely populated areas thanks to the low operation sound and seamless integration into surrounding architecture as only the grille is visible
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature, VRV configurator and full inverter compressors
- › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air curtains
- › 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
- › Lightweight units (max. 105kg) can be installed by two people
- › Unique V-shape heat exchanger results in compact dimensions (h/e unit only 400mm high) allowing false ceiling installation, while ensuring top efficiency
- › Super efficient centrifugal fans (over 50% efficiency increase compared to sirocco fan)
- › Small footprint compressor unit (760 x 554 mm) maximizing useable floor space
- › Connectable to all VRV control systems
- › Keep your system in top condition via the Daikin Cloud Service: 24/7 monitoring for maximum efficiency, extended lifetime and immediate service support thanks to failure prediction



Inverter

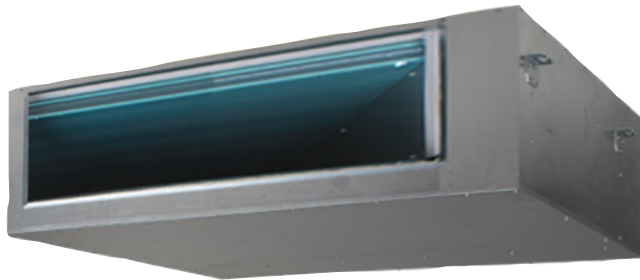
# 1 Features

1 - 2 SB.RKXYQ-T8

## The invisible VRV

1

- › By choosing a LOOP by Daikin product you support the reuse of refrigerant, for more information visit [www.daikin.eu/loop-by-daikin](http://www.daikin.eu/loop-by-daikin)
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Inverter

## 2 Specifications

### 1 - 2 SB.RKXYQ-T8

Technical specifications System					SB.RKXYQ8T		
System	Heat exchanger unit				RDXYQ8T		
	Compressor unit				RKXYQ8T		
Recommended combination					4 x FXMQ50P7VEB		
Cooling capacity	Prated,c		kW		22.4 (1)		
Heating capacity	Prated,h		kW		12.9		
	Max.	6°CWB		kW		25.0 (2)	
SCOP					3.6		
SEER					4.9		
ηs,c					191.1		
ηs,h					140.9		
Space cooling	A Condition (35°C -27/19)		EERd Pdc		kW		2.2
	B Condition (30°C -27/19)		EERd Pdc		kW		22.4
							3.7
							16.5
	C Condition (25°C -27/19)		EERd Pdc		kW		5.5
							10.6
	D Condition (20°C -27/19)		EERd Pdc		kW		10.5
							6.4
Space heating (Average climate)	TBivalent	COPd (declared COP)				2.0	
		Pdh (declared heating cap)		kW		12.9	
		Tbiv (bivalent temperature)		°C		-10.0	
	TOL	COPd (declared COP)				2.0	
		Pdh (declared heating cap)		kW		12.9	
		Tol (temperature operating limit)		°C		-10.0	
	A Condition (-7°C)	COPd (declared COP)				2.3	
		Pdh (declared heating cap)		kW		11.4	
	B Condition (2°C)	COPd (declared COP)				3.0	
		Pdh (declared heating cap)		kW		6.9	
	C Condition (7°C)	COPd (declared COP)				6.6	
		Pdh (declared heating cap)		kW		5.4	
	D Condition (12°C)	COPd (declared COP)				7.3	
		Pdh (declared heating cap)		kW		6.0	
Capacity range				HP		8	
Maximum number of connectable indoor units					17 (3)		
Indoor index connection	Min.				100.0		
	Max.				260.0		
Fan	External static pressure	Max.		Pa		150	
		Nom.		Pa		60	
Operation range	Cooling	Min.		°CDB		-5.0	
		Max.		°CDB		46.0	
	Heating	Min.		°CWB		-20.0	
		Max.		°CWB		15.5	
	Temperature around casing	Min.		°CDB		5	
		Max.		°CDB		35	
	Humidity around	Cooling	Max.	%		80	
		Heating	Max.	%		50	
Refrigerant	Type				R-410A		
Refrigerant oil	Type				Synthetic (ether) oil FVC68D		
Piping connections	Between Compressor module (CM) and heat exchanger module (HM)	Liquid	Type			Braze connection	
			OD	mm	12.7		
		Gas	Type			Braze connection	
			OD	mm	22.2		
		Piping length	Max.	m		30.0	
	Between Compressor module (CM) and indoor units (IU)	Liquid	Type			Braze connection	
			OD	mm	9.52		
		Gas	Type			Braze connection	
			OD	mm	19.1		
		Total piping length	System	Actual	m		300 (4)
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	

# 2 Specifications

## 1 - 2 SB.RKXYQ-T8

2

Technical specifications System					SB.RKXYQ8T
Power consumption in other than active mode	Crankcase heater	Cooling	PCK	kW	0.000
		Heating	PCK	kW	0.050
	Off mode	Cooling	POFF	kW	0.043
		Heating	POFF	kW	0.050
	Standby mode	Cooling	PSB	kW	0.043
		Heating	PSB	kW	0.050
	Thermostat-off mode	Cooling	PTO	kW	0.012
		Heating	PTO	kW	0.060
Cooling	Cdc (Degradation cooling)				0.25
Heating	Cdh (Degradation heating)				0.25
Safety devices	Item	01			High pressure switch
Safety devices	Item	02			Fan driver overload protector
		03			Inverter overload protector
		04			PC board fuse
		05			Earth leakage detector

Electrical specifications System				SB.RKXYQ8T
Current - 50Hz	Zmax	List		No requirements
	Minimum Ssc value		kVa	3,329 (5)

(1)Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; 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 units depends on the indoor unit type (VRV DX indoor, etc.) and the connection ratio restriction for the system (being; 50% ≤ CR ≤ 130%). |  
(4)Refer to refrigerant pipe selection or installation manual |  
(5)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 |  
Sound power level is an absolute value that a sound source generates. |  
Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |  
RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |  
MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |  
MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |  
MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |  
TOCA means the total value of each OC set. |  
FLA means the nominal running current of the fan |  
Maximum allowable voltage range variation between phases is 2%. |  
Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |  
Sound values are measured in a semi-anechoic room. |  
EN/IEC 61000-3-12: European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current > 16A and ≤ 75A per phase |  
Ssc: Short-circuit power |  
For detailed contents of standard accessories, see installation/operation manual

Technical specifications System				SB.RKXYQ5T8
System	Heat exchanger unit			RDXYQ5T8
	Compressor unit			RKXYQ5T8
Recommended combination				4 x FXSQ32A2VEB
Cooling capacity	Prated,c	kW		14.0 (1)
Heating capacity	Prated,h	kW		10.4
	Max.	6°CWB	kW	16.0 (2)
SCOP				3.8
SEER				5.1
ηs,c				200.1
ηs,h				149.3
Space cooling	A Condition (35°C EERd - 27/19) Pdc			2.4
				14.0
	B Condition (30°C EERd - 27/19) Pdc			4.0
				10.3
	C Condition (25°C EERd - 27/19) Pdc			6.5
				6.6
	D Condition (20°C - 27/19) EERd			9.4
				4.8



## 2 Specifications

1 - 2 SB.RKXYQ-T8

Technical specifications System					SB.RKXYQ5T8	
Space heating (Average climate)	TBivalent	COPd (declared COP)			2.2	
		Pdh (declared heating cap) kW			10.4	
		Tbiv (bivalent temperature) °C			-10.0	
	TOL	COPd (declared COP)			2.2	
		Pdh (declared heating cap) kW			10.4	
		Tol (temperature operating limit) °C			-10.0	
	A	COPd (declared COP)			2.4	
	Condition (-7°C)	Pdh (declared heating cap) kW			9.2	
	B	COPd (declared COP)			3.3	
	Condition (2°C)	Pdh (declared heating cap) kW			5.6	
	C	COPd (declared COP)			7.1	
	Condition (7°C)	Pdh (declared heating cap) kW			3.6	
D	COPd (declared COP)			5.2		
Condition (12°C)	Pdh (declared heating cap) kW			4.1		
Capacity range				HP	5	
Maximum number of connectable indoor units					10 (3)	
Indoor index connection	Min.				62.5	
	Max.				162.5	
Fan	External static pressure	Max.	Pa		150	
		Nom.	Pa		60	
Operation range	Cooling	Min.	°CDB		-5.0	
		Max.	°CDB		46.0	
	Heating	Min.	°CWB		-20.0	
		Max.	°CWB		15.5	
	Temperature around casing	Min.	°CDB		5	
		Max.	°CDB		35	
	Humidity around	Cooling	Max.	%	80	
		Heating	Max.	%	50	
Refrigerant	Type				R-410A	
Refrigerant oil	Type				Synthetic (ether) oil FVC50K	
Piping connections	Between Compressor module (CM) and heat exchanger module (HM)	Liquid	Type		Braze connection	
			OD	mm	12.7	
		Gas	Type		Braze connection	
			OD	mm	19.1	
		Piping length	Max.	m	30.0	
	Between Compressor module (CM) and indoor units (IU)	Liquid	Type		Braze connection	
			OD	mm	9.52	
		Gas	Type		Braze connection	
			OD	mm	15.9	
		Total piping length	System	Actual	m	140 (4)
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	Crankcase heater	Cooling	PCK	kW	0.000	
		Heating	PCK	kW	0.055	
	Off mode	Cooling	POFF	kW	0.045	
		Heating	POFF	kW	0.055	
	Standby mode	Cooling	PSB	kW	0.045	
		Heating	PSB	kW	0.055	
	Thermostat-off mode	Cooling	PTO	kW	0.000	
		Heating	PTO	kW	0.055	
	Cooling	Cdc (Degradation cooling)				0.25
Heating	Cdh (Degradation heating)				0.25	
Safety devices	Item	01			High pressure switch	
Safety devices	Item	02			Fan driver overload protector	
		03			Inverter overload protector	
		04			PC board fuse	

Electrical specifications System			SB.RKXYQ5T8
Current - 50Hz	Zmax	List	No requirements
Wiring connections - 50Hz	For connection with indoor	Quantity	2
		Remark	F1,F2

# 2 Specifications

## 1 - 2 SB.RKXYQ-T8

(1)Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; 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 units depends on the indoor unit type (VRV DX indoor, etc.) and the connection ratio restriction for the system (being; 50% ≤ CR ≤ 130%). |  
(4)Refer to refrigerant pipe selection or installation manual |  
Sound power level is an absolute value that a sound source generates. |  
Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |  
RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |  
MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |  
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 |  
MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |  
MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |  
TOCA means the total value of each OC set. |  
FLA means the nominal running current of the fan |  
Maximum allowable voltage range variation between phases is 2%. |  
Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |  
Sound values are measured in a semi-anechoic room. |  
EN/IEC 61000-3-12: European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current > 16A and ≤ 75A per phase |  
Ssc: Short-circuit power |  
For detailed contents of standard accessories, see installation/operation manual

Technical specifications Module					RDXYQ8T	
PED	Category				Excluded from scope of 2014/68/EU due to article 1.2 f	
Dimensions	Unit	Height	mm		397	
		Width	mm		1,456	
		Depth	mm		1,044	
	Packed unit	Height	mm		1,245	
		Width	mm		1,604	
		Depth	mm		470	
	Ducting	Height	mm		298	
		Width	mm		1,196	
Weight	Unit		kg		103	
	Packed unit		kg		123	
Packing	Material				Carton	
	Weight		kg		4.9	
Packing 2	Material				Wood	
	Weight		kg		14.0	
Casing	Colour				Unpainted	
	Material				Galvanised steel	
Heat exchanger	Type				Cross fin coil	
Fan	Quantity				3	
	Air flow rate	Cooling	Nom.	m <sup>3</sup> /min	100	
Fan motor	Quantity				3	
	Output			W	500	
Sound power level	Cooling	Nom.		dBA	81 (1)	
Sound pressure level	Cooling	Nom.		dBA	54	
Refrigerant	Type				R-410A	
Refrigerant oil	Type				Daphne FVC68D	
Piping connections	Drain	OD		mm	32	

Electrical specifications Module					RDXYQ8T	
Power supply	Name				V1	
	Phase				1N~	
	Frequency		Hz		50	
	Voltage		V		220-240	
Voltage range	Min.		%		-10	
	Max.		%		10	
Current	Nominal running current (RLA)	Cooling		A	4.6	
Current - 50Hz	Minimum circuit amps (MCA)			A	7.0	
	Maximum fuse amps (MFA)			A	10	
	Total overcurrent amps (TOCA)			A	7.0	
	Full load amps (FLA)	Total		A	6.6	
Wiring connections - 50Hz supply	For power	Quantity			3G	

(1)Refer to refrigerant pipe selection or installation manual |  
Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m |  
Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m |  
Actual number of units depends on the indoor unit type (VRV DX indoor, etc.) and the connection ratio restriction for the system (being; 50% ≤ CR ≤ 130%). |  
Sound power level is an absolute value that a sound source generates. |  
Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |  
RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |  
MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |  
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 |  
MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |  
MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |  
TOCA means the total value of each OC set. |  
FLA means the nominal running current of the fan |

# 2 Specifications

## 1 - 2 SB.RKXYQ-T8

Maximum allowable voltage range variation between phases is 2%.

Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

Sound values are measured in a semi-anechoic room.

EN/IEC 61000-3-12: European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current > 16A and ≤ 75A per phase.

Ssc: Short-circuit power

For detailed contents of standard accessories, see installation/operation manual

Technical specifications Module				RKXYQ8T
PED	Category			Category II
	Most critical part	Name	Ps*V Bar*l	Accumulator
				245
Dimensions	Unit	Height	mm	701
		Width	mm	760
		Depth	mm	554
	Packed unit	Height	mm	825
		Width	mm	875
		Depth	mm	660
Weight	Unit		kg	105
	Packed unit		kg	116
Packing	Material			Carton
	Weight		kg	2.2
Packing 2	Material			Wood
	Weight		kg	8.5
Packing 3	Material			Plastic
	Weight		kg	0.3
Casing	Colour			Daikin White
	Material			Painted galvanized steel plate
Compressor	Quantity			1
	Type			G-type scroll compressor
	Crankcase heater		W	33
Sound power level	Cooling	Nom.	dB(A)	64 (1)
Sound pressure level	Cooling	Nom.	dB(A)	48
Refrigerant	Type			R-410A
	GWP			2,087.5
	Charge		TCO2Eq	8.35
	Charge		kg	4.00
Refrigerant oil	Type			Daphne FVC68D

Electrical specifications Module				RKXYQ8T
Power supply	Name			Y1
	Phase			3N~
	Frequency			50
	Voltage			380-415
Voltage range	Min.		%	-10
	Max.		%	10
Current	Nominal running current (RLA)	Cooling	A	8.6
Current - 50Hz	Minimum circuit amps (MCA)		A	17.4
	Maximum fuse amps (MFA)		A	20
	Total overcurrent amps (TOCA)		A	17.4
Wiring connections - 50Hz	For power supply	Quantity		5G
	For connection with indoor	Quantity		2
		Remark		F1,F2

(1) Refer to refrigerant pipe selection or installation manual

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

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

Actual number of units depends on the indoor unit type (VRV DX indoor, etc.) and the connection ratio restriction for the system (being; 50% ≤ CR ≤ 130%).

Sound power level is an absolute value that a sound source generates.

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

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

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

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

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

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

TOCA means the total value of each OC set.

FLA means the nominal running current of the fan

Maximum allowable voltage range variation between phases is 2%.

Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

Sound values are measured in a semi-anechoic room.

EN/IEC 61000-3-12: European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current > 16A and ≤ 75A per phase

Ssc: Short-circuit power

For detailed contents of standard accessories, see installation/operation manual

Technical specifications Module				RKXYQ5T8
PED	Category			Category I

# 2 Specifications

## 1 - 2 SB.RKXYQ-T8

2

Technical specifications Module				RKXYQ5T8
Dimensions	Unit	Height	mm	701
		Width	mm	600
		Depth	mm	554
	Packed unit	Height	mm	838
		Width	mm	740
		Depth	mm	680
Weight	Unit		kg	79
	Packed unit		kg	90
Casing	Colour			Daikin White
	Material			Painted galvanized steel plate
Refrigerant	Type			R-410A
	GWP			2,087.5
	Charge	TCO2Eq		4.20
	Charge	kg		2.00

Electrical specifications Module				RKXYQ5T8
Power supply	Name			Y1
	Phase			3N~
	Frequency	Hz		50
	Voltage	V		380-415
Voltage range	Min.	%		-10
	Max.	%		10
Current - 50Hz	Minimum circuit amps (MCA)	A		13.5 (1)
	Maximum fuse amps (MFA)	A		16 (2)
	Total overcurrent amps (TOCA)	A		13.5 (3)
Wiring connections - 50Hz supply	For power Quantity			5G

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

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

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

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

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

Actual number of units depends on the indoor unit type (VRV DX indoor, etc.) and the connection ratio restriction for the system (being; 50% ≤ CR ≤ 130%). |

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

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

Refer to refrigerant pipe selection or installation manual |

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

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

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 |

FLA means the nominal running current of the fan |

Maximum allowable voltage range variation between phases is 2%. |

Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |

Sound values are measured in a semi-anechoic room. |

EN/IEC 61000-3-12: European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current > 16A and ≤ 75A per phase |

Ssc: Short-circuit power |

For detailed contents of standard accessories, see installation/operation manual

Technical specifications Module				RDXYQ5T8
PED	Category			Excluded from scope of 2014/68/EU due to article 1.2 f
Dimensions	Unit	Height	mm	397
		Width	mm	1,456
		Depth	mm	1,044
	Packed unit	Height	mm	1,245
		Width	mm	1,604
		Depth	mm	470
	Ducting	Height	mm	298
		Width	mm	1,196
Weight	Unit		kg	95
	Packed unit		kg	119
Packing	Material			Carton
	Weight		kg	4.9
Packing 2	Material			Wood
	Weight		kg	14.0
Casing	Colour			Unpainted
	Material			Galvanised steel plate
Heat exchanger	Type			Cross fin coil
	Indoor side			Air
	Outdoor side			Air
	Air flow rate	Cooling	Rated m³/h	3,300
		Heating	Rated m³/h	3,300
Fan	Quantity			2
Fan motor	Quantity			2
	Output		W	500
Sound power level	Cooling	Nom.	dBA	77.0 (1)
Sound pressure level	Cooling	Nom.	dBA	47.0 (2)

# 2 Specifications

## 1 - 2 SB.RKXYQ-T8

Technical specifications Module				RDXYQ5T8	
Refrigerant	Type			R-410A	
Refrigerant oil	Type			Synthetic (ether) oil FVC50K	
Piping connections	Drain	OD	mm	32	
Electrical specifications Module				RDXYQ5T8	
Power supply	Name			V1	
	Phase			1N~	
	Frequency	Hz		50	
	Voltage	V		220-240	
Voltage range	Min.	%		-10	
	Max.	%		10	
Current	Nominal running current (RLA)	Cooling	A	1.8 (3)	
Current - 50Hz	Starting current (MSC) - remark			See note 8	
	Minimum circuit amps (MCA)		A	4.6 (4)	
	Maximum fuse amps (MFA)		A	10 (5)	
	Total overcurrent amps (TOCA)		A	4.6 (6)	
	Full load amps (FLA)	Total	A	4.4 (7)	
Wiring connections - 50Hz	For power supply	Quantity		3G	

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

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

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

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

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

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

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

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

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

Actual number of units depends on the indoor unit type (VRV DX indoor, etc.) and the connection ratio restriction for the system (being; 50% ≤ CR ≤ 130%). |

Refer to refrigerant pipe selection or installation manual |

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

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 |

Maximum allowable voltage range variation between phases is 2%. |

Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |

Sound values are measured in a semi-anechoic room. |

EN/IEC 61000-3-12: European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current > 16A and ≤ 75A per phase |

Ssc: Short-circuit power |

For detailed contents of standard accessories, see installation/operation manual

# 3 Combination table

## 3 - 1 Combination Table

SB.RKXYQ-T

**VRV4-i**
**Heat pump**
**Indoor unit combination restrictions**

System pattern	Capacity [%]	DX [%]	AHU [%]	FXMQ*MF [%]
VRV DX indoor unit	50 - 130	50 - 130	-	-
RA indoor unit	-	-	-	-
Hydrobox unit	-	-	-	-
DX + AHU	See note 1.	50 - 110	0 - 60	-
Air handling unit only	See note 1.	90 - 110	90 - 110	-
FXMQ*MF	50 - 100	-	-	50 - 100

AHU: Air handling unit (AHU)

Notes

1. AHU = CYV (biddle) air curtain OR EKEXV + EKEQM

**3D098838A**

## 4 Capacity tables

### 4 - 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)



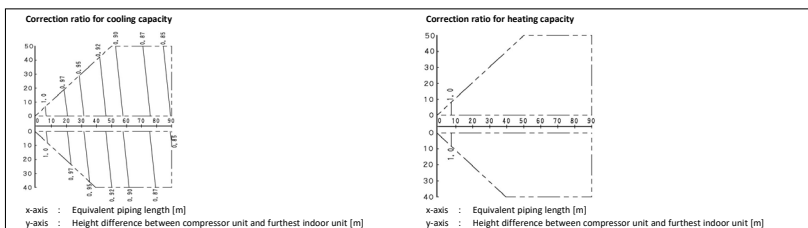
# 4 Capacity tables

## 4 - 2 Capacity Correction Factor

SB.RKXYQ5T8

VRV4-i  
Heat pump

Page -3-



### 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 -VRV4-i- system, 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 delivered by the compressor unit plus the heat exchanger unit, whichever is less.

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

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

4. If the equivalent pipe length between the heat exchanger unit and the furthest indoor unit is ≥ 90-m, it is recommended to increase the size of the main gas pipe (between compressor unit and first refrigerant branch kit). If the recommended gas pipe (with increased size) is not available, you must use the standard size (which might result in a small capacity decrease).  
If the equivalent pipe length between the heat exchanger unit and the furthest indoor unit is ≥ 90-m, you MUST increase the size of the main liquid pipe (between compressor unit and first refrigerant branch kit).

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
5- HP	9.5	12.7	19.1	22.2

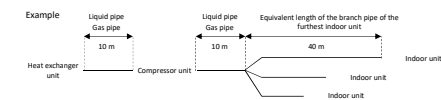
5. Overall equivalent length  
Overall equivalent length = Equivalent length of the main pipe x Correction factor + Equivalent length of the branch pipes

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size

When calculating the heating capacity: liquid pipe size

	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.3



### Overall equivalent length

Cooling mode = 10 m + 10 m x 1 + 40 m = 60 m  
Heating mode = 10 m + 10 m x 1 + 40 m = 60 m

### Capacity correction ratio (height difference = 0)

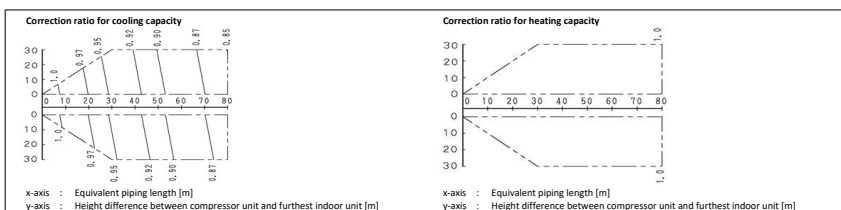
Cooling mode = 0.89  
Heating mode = 1.00

3D098839A

SB.RKXYQ5T8

VRV4-i  
Heat pump

Page -2-



### 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 -VRV4-i- system, 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 delivered by the compressor unit plus the heat exchanger unit, whichever is less.

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

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

4. If the equivalent pipe length between the heat exchanger unit and the furthest indoor unit is ≥ 90-m, it is recommended to increase the size of the main gas pipe (between compressor unit and first refrigerant branch kit). If the recommended gas pipe (with increased size) is not available, you must use the standard size (which might result in a small capacity decrease).

Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
5- HP	9.5	Not increased	15.9	19.1

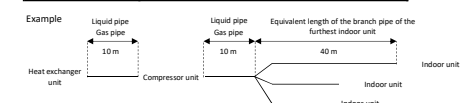
5. Overall equivalent length  
Overall equivalent length = Equivalent length of the main pipe x Correction factor + Equivalent length of the branch pipes

Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size

When calculating the heating capacity: liquid pipe size

	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.3



### Overall equivalent length

Cooling mode = 10 m + 10 m x 1 + 40 m = 60 m  
Heating mode = 10 m + 10 m x 1 + 40 m = 60 m

### Capacity correction ratio (height difference = 0)

Cooling mode = 0.89  
Heating mode = 1.00

3D098839A



## 4 Capacity tables

### 4 - 2 Capacity Correction Factor

SB.RKXYQ5T8

#### VRV4-i Heat pump Integrated heating capacity coefficient

The heating capacity tables do not take into account the capacity reduction in case of frost accumulation or defrost operation.  
The capacity values that take these factors into account, or in other words, the integrated heating capacity values, can be calculated as follows:

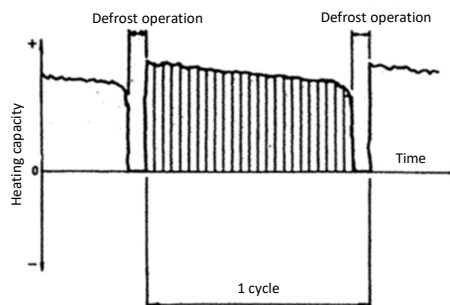
Formula

A = Integrated heating capacity  
B = Capacity characteristics value  
C = Integrated correction factor for frost accumulation (see table)

$$A = B \cdot C$$

Inlet air temperature of heat exchanger

[°CDB/°CWB]	-7/-7.6	-5/-5.6	-3/-3.7	0/-0.7	3/2.2	5/4.1	7/6
5 HP	0,88	0,86	0,80	0,75	0,76	0,82	1,00
8 HP	0,88	0,86	0,80	0,75	0,76	0,82	1,00



#### Notes

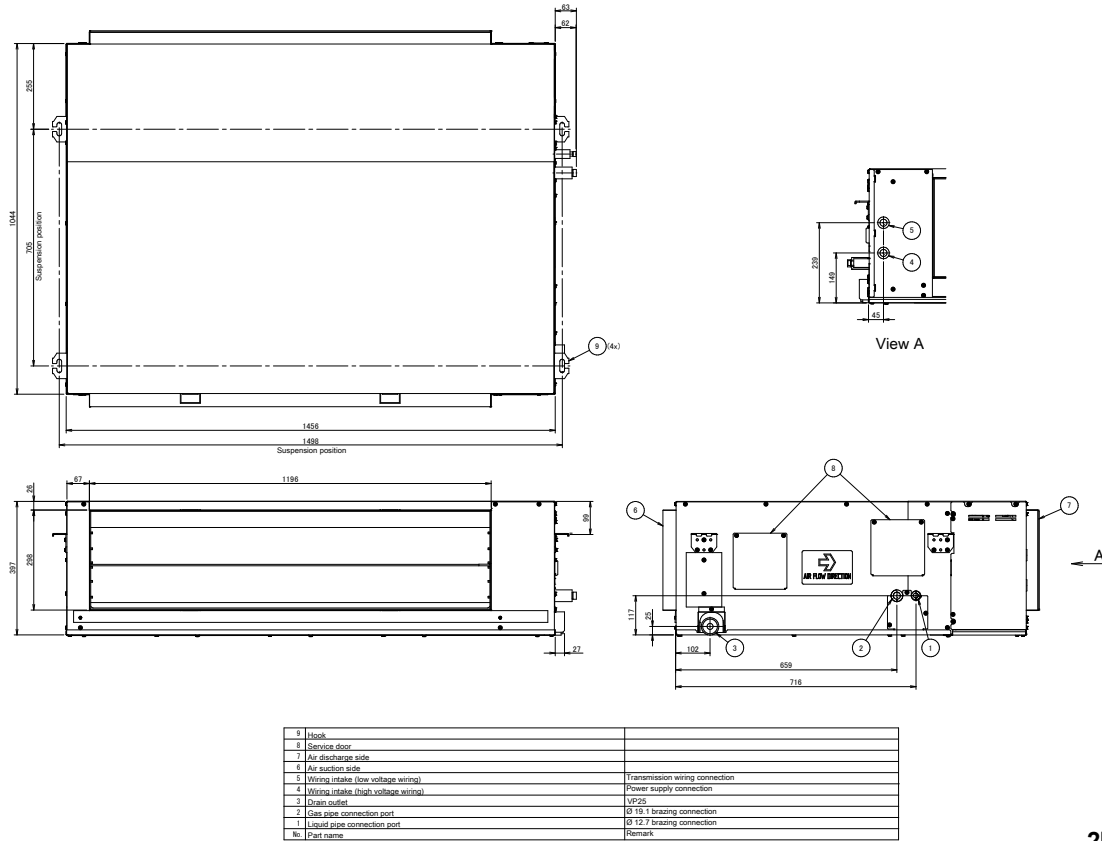
1. The figure shows the integrated heating capacity for a single cycle (from one defrost operation to the next).

3D098840A

# 5 Dimensional drawings

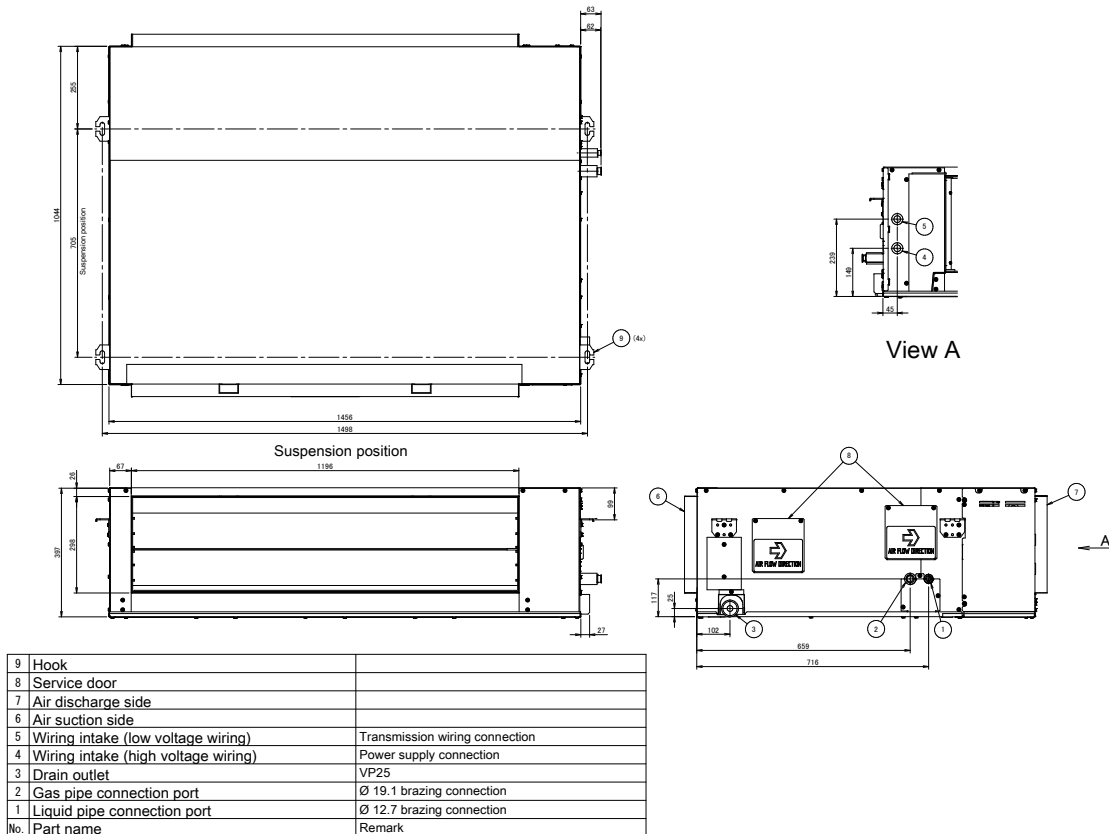
## 5 - 1 Dimensional Drawings

### SB.RKXYQ-T



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### RDXYQ-T8

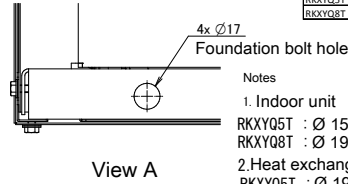
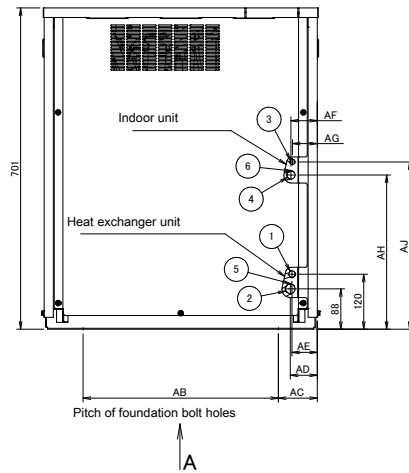
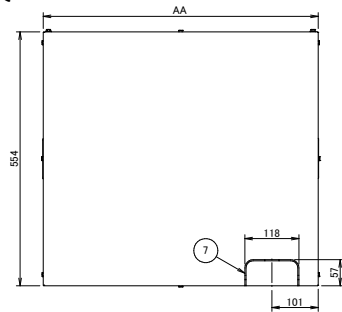


2D112002

# 5 Dimensional drawings

## 5 - 1 Dimensional Drawings

### SB.RKXYQ-T8



Model	AA	AB	AC	AD	AE	AF	AG	AH	AJ
RKXYQ5T	600	426	85	59	55	57	54	337	365
RKXYQ8T	760	600	78	55	52	55	52	197	222

Notes

1. Indoor unit

RKXYQ5T : Ø 15.9 brazing connection

RKXYQ8T : Ø 19.1 brazing connection

2. Heat exchanger unit

RKXYQ5T : Ø 19.1 brazing connection

RKXYQ8T : Ø 22.2 brazing connection

8	Handle	Knockout hole.
7	Pipe routing hole	Transmission wiring connection
6	Wiring intake (low voltage wiring)	Power supply connection
5	Wiring intake (high voltage wiring)	See note 1.
4	Gas pipe connection port	Ø 9.5 brazing connection
3	Liquid pipe connection port	See note 2.
2	Gas pipe connection port	Ø 12.7 brazing connection
1	Liquid pipe connection port	Remark
No.	Part name	

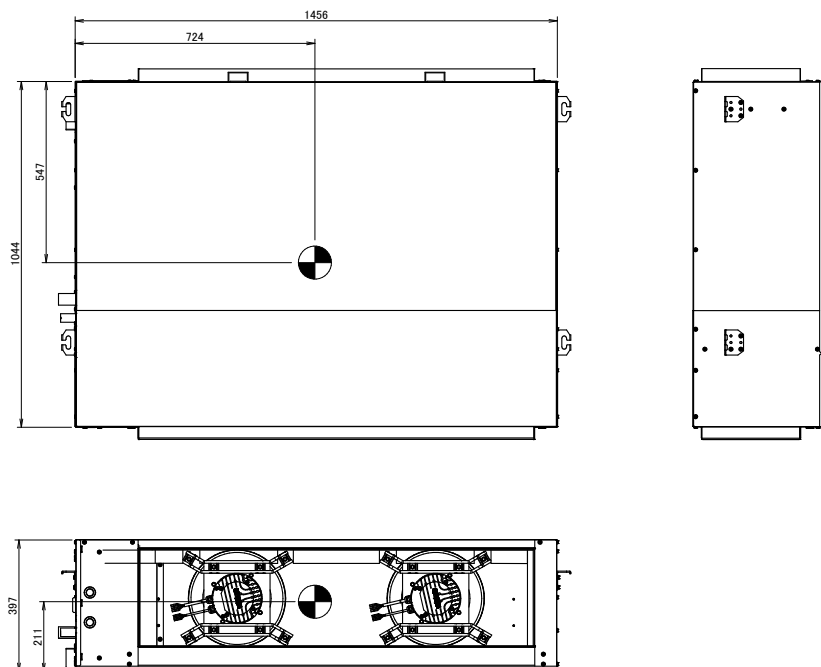
3D098827A

# 6 Centre of gravity

6 - 1 Centre of Gravity

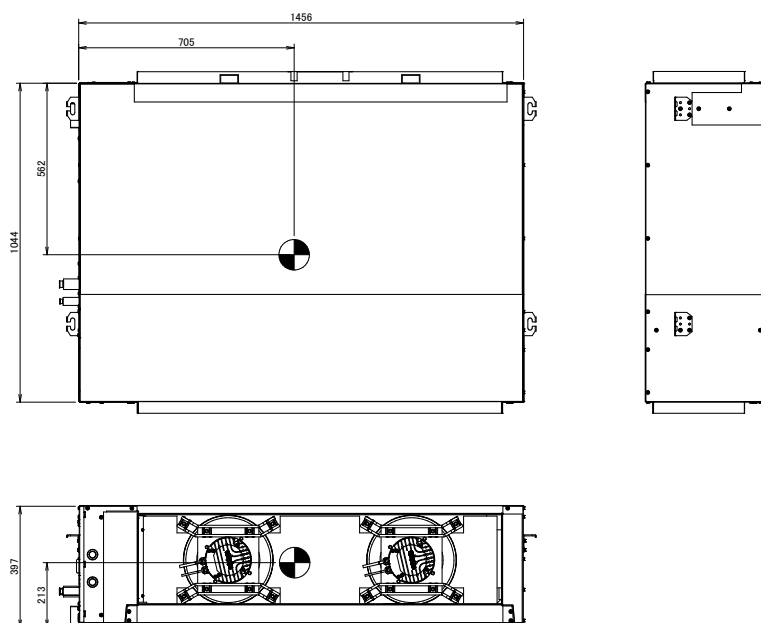
6

RDXYQ5T



3D098403

RDXYQ-T8

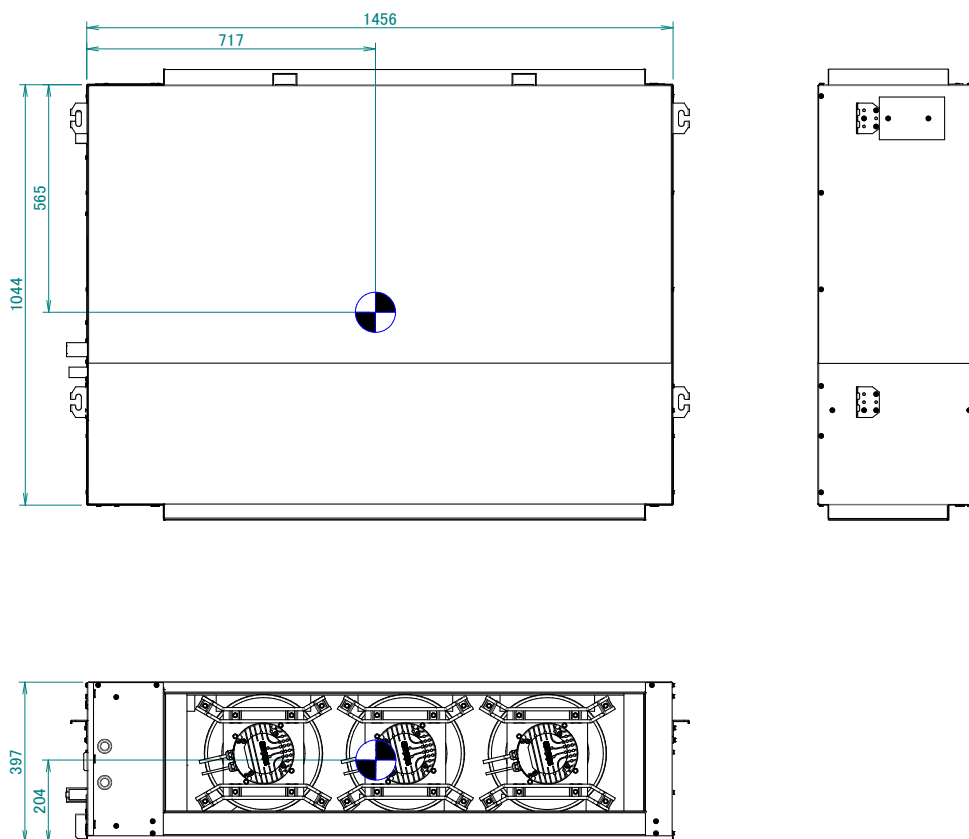


3D112001

## 6 Centre of gravity

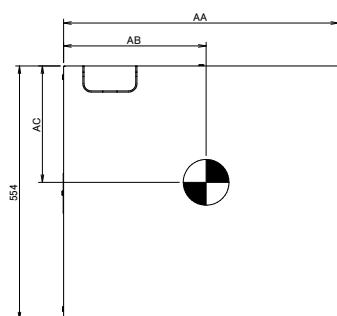
### 6 - 1 Centre of Gravity

**RDXYQ8T**

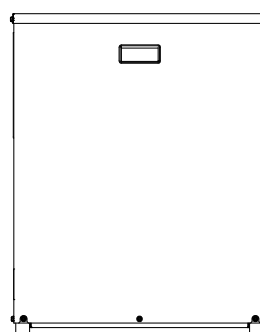
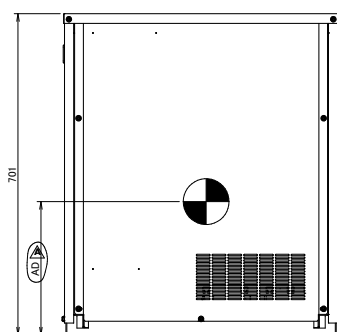


**3D099643**

**SB.RKXYQ-T8**



Model	AA	AB	AC	AD
RKXYQ5T	600	311	254	291
RKXYQ8T	760	450	256	292

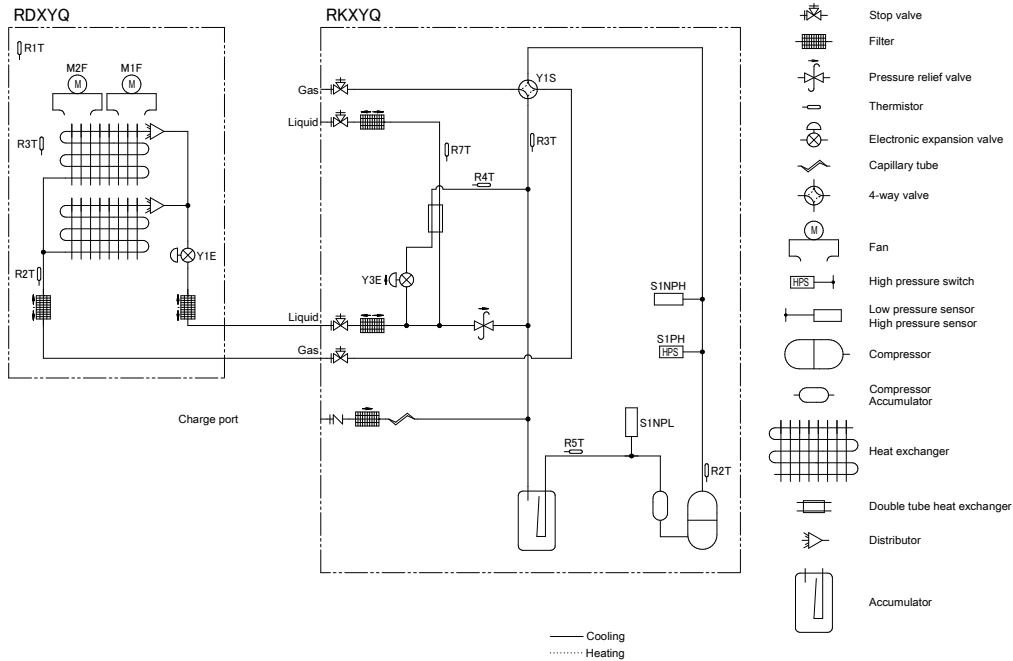


**3D098830A**

# 7 Piping diagrams

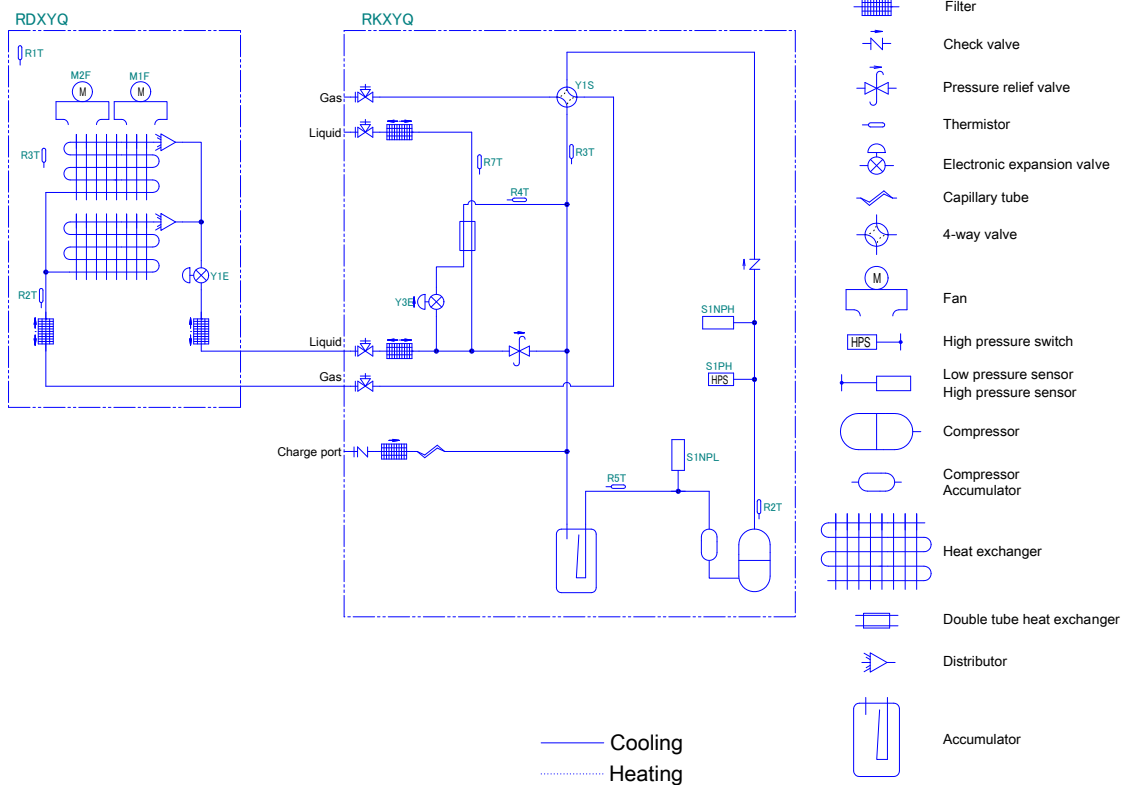
## 7 - 1 Piping Diagrams

SB.RKXYQ5T



3D098825B

RDXYQ5T8  
 RKXYQ5T8

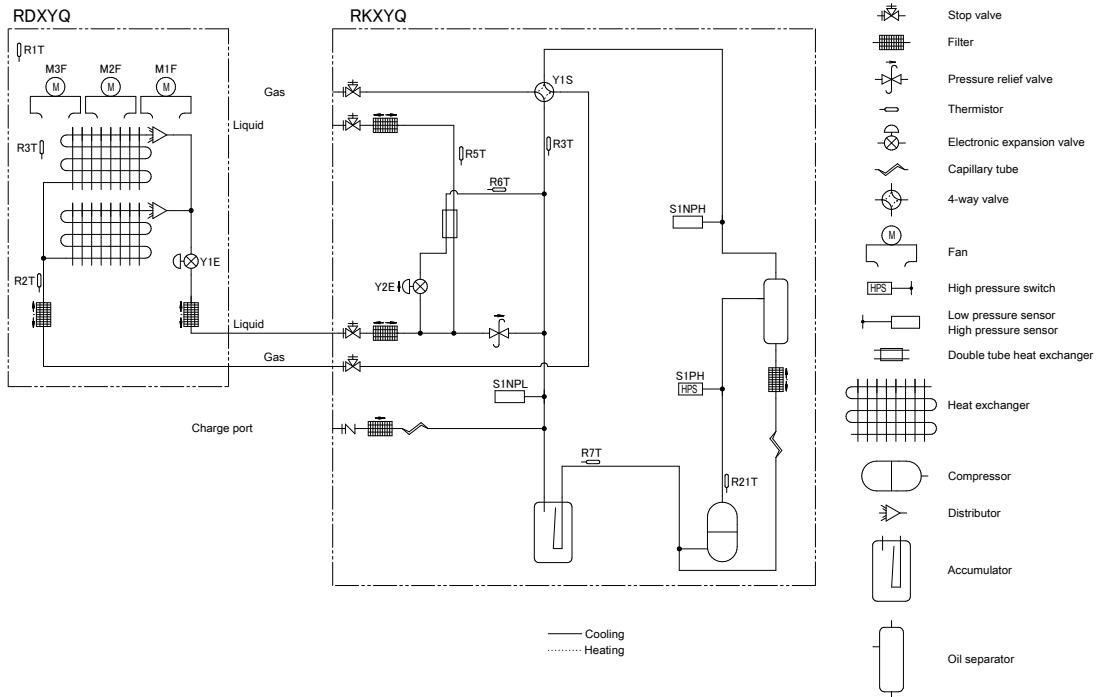


3D110524

# 7 Piping diagrams

## 7 - 1 Piping Diagrams

SB.RKXYQ8T

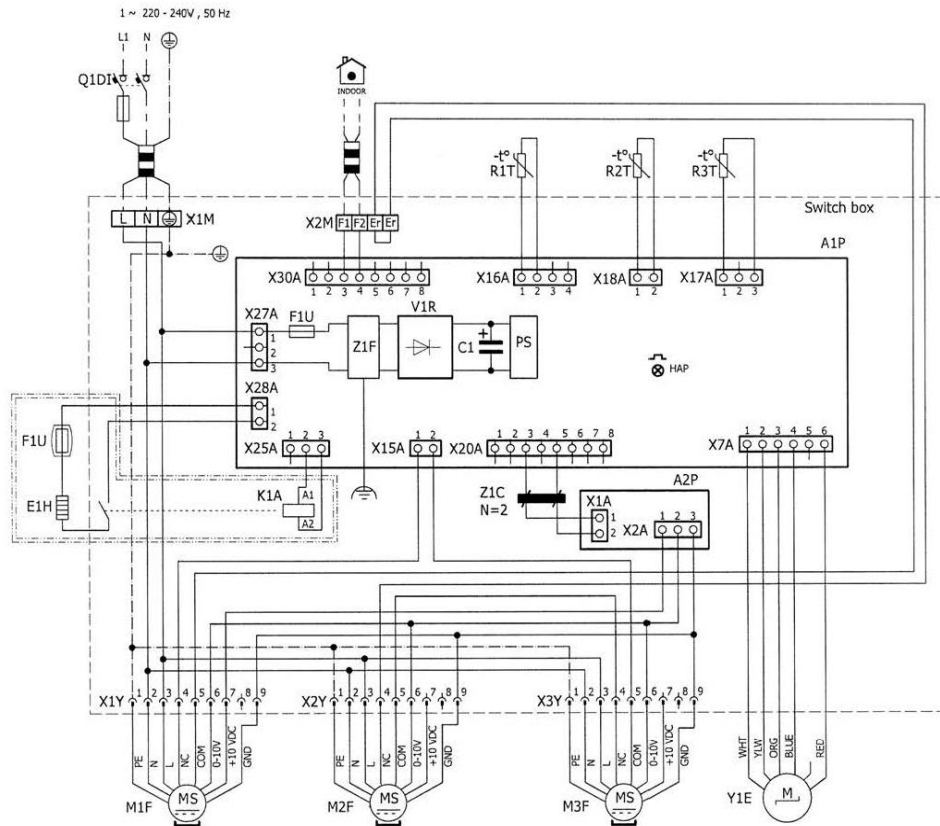


3D104510

# 8 Wiring diagrams

## 8 - 1 Wiring Diagrams - Single Phase

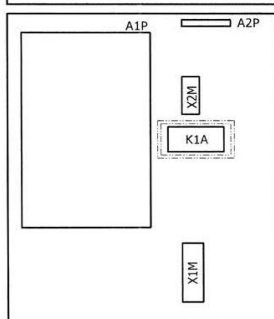
RDXYQ8T



### NOTES to go through before starting the unit

- X1M : Main terminal
- 15 : Earth wiring
- 15 : Wire number 15
- Field wire
- Field cable
- \*\*/12.2 : Connection \*\* continues on page 12 column 2
- ① : Several wiring possibilities
- Option
- Wiring depending on model
- Not mounted in switch box
- PCB

### POSITION IN SWITCH BOX



### LEGEND



Translation can be found in the installation manual.

Part n°	Description
A1P	main PCB
A2P	adapter PCB
C1 (A1P)	capacitor
E1H	* drain pan heater
F1U	* fuse F 1 A 250 V
F1U (A1P)	fuse T 6.3 A 250 V for PCB
HAP (A1P)	running LED (service monitor-green)
K1A	* auxiliary relay
M3F	* motor (fan)
Q1DI	# earth leakage circuit breaker
PS (A1P)	switching power supply
R1T	thermistor air
R2T	thermistor gas
R3T	thermistor coil
V1R (A1P)	diode module
X1M	main terminal
X2M	field wiring terminal
X2Y	connector
Y1E	electronic expansion valve
Z1C	ferrite core
Z1F (A1P)	noise filter

\* : optional  
# : field supply

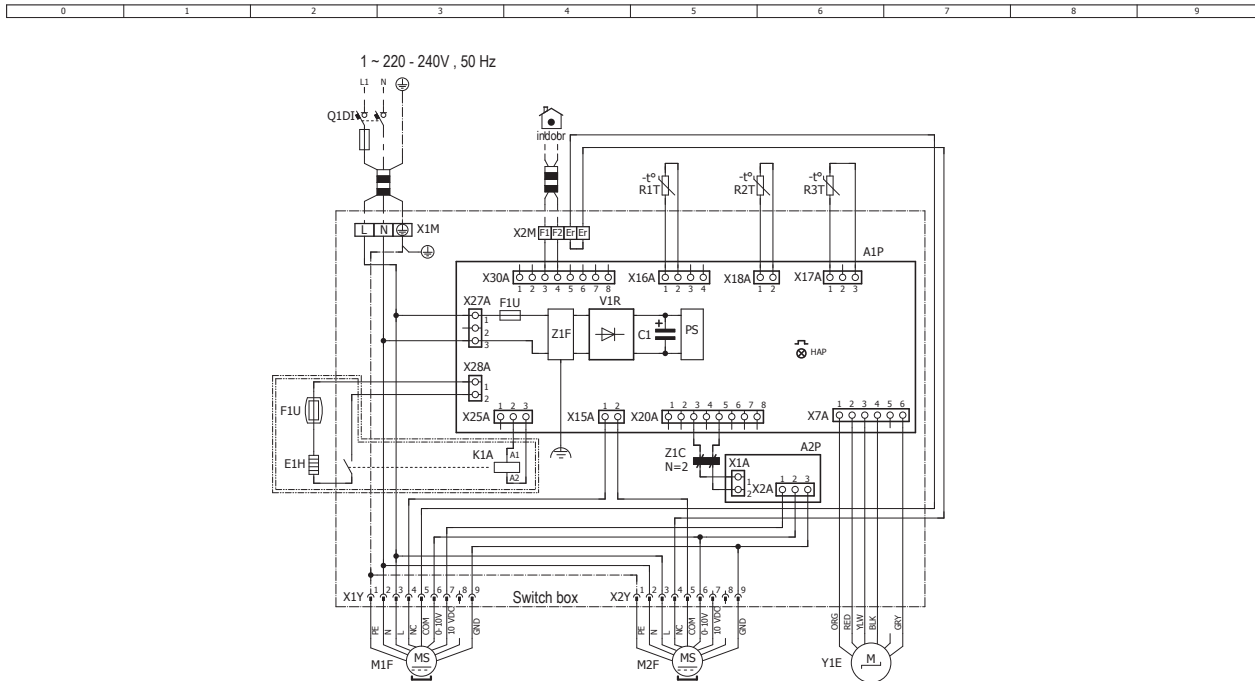
4D104741A



# 8 Wiring diagrams

## 8 - 1 Wiring Diagrams - Single Phase

### RKXYQ5T8

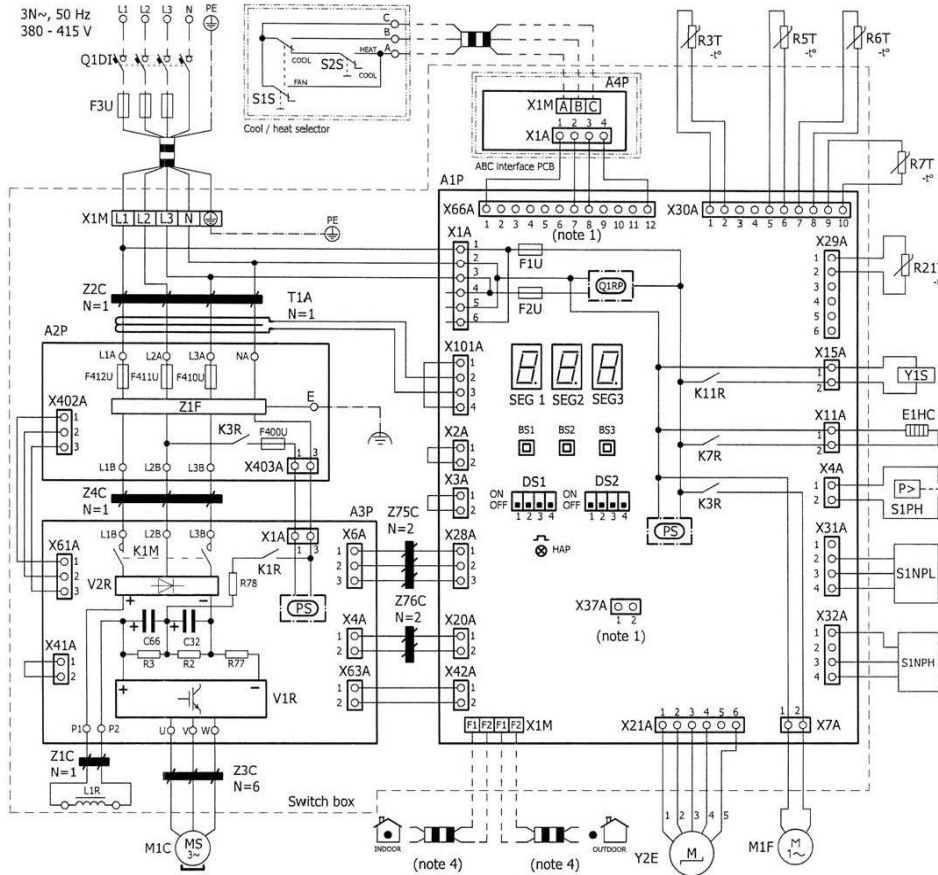


4D105518

# 8 Wiring diagrams

## 8 - 2 Wiring Diagrams - Three Phase

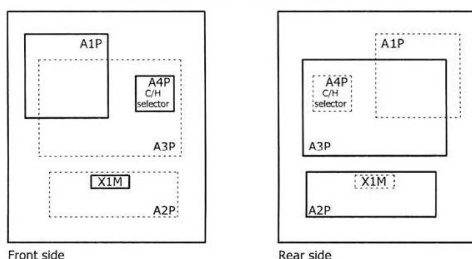
RKXYQ8T



### NOTES to go through before starting the unit

1. Symbols :
  - X1M : Main terminal
  - 15 : Earth wiring
  - 15 : Wire number 15
  - Field wire
  - Field cable
  - Connection \*\* continues on page 12 column 2
  - Several wiring possibilities
  - Option
  - Not mounted in switch box
  - Wiring depending on model
  - PCB
1. When using the optional adapter, refer to the installation manual of the optional adapter.
2. Refer to the installation or service manual on how to use BS1 ~ BS3 push buttons and DS1 ~ DS2 DIP switches.
3. Do not operate the unit by short-circuiting protection device (S1PH).
4. For connection to indoor-outdoor transmission F1-F2 wiring, outdoor - outdoor transmission F1-F2, refer to "service manual".

### POSITION IN SWITCH BOX



### LEGEND



Translation can be found in the installation manual.

Part n°	Description	Part n°	Description
A1P	main PCB	R5T	thermistors (subcool liquid, pipe)
A2P	noise filter PCB	R6T	thermistors (heat exchanger gas pipe)
A3P	inverter PCB	R7T	thermistors (suction)
A4P	cool/heat selector PCB	R* (A3P)	resistor
BS* (A1P)	push buttons (mode, set, return)	S1NPH	high pressure sensor
C* (A3P)	capacitors	S1NPL	low pressure sensor
DS* (A1P)	dipswitch	S1PH	high pressure switch (disch)
E1HC	crankcase heater	S1S	* air control switch
F*U (A1P)	fuse T 3,15 A 250 V	S2S	* cool / heat switch
F3U	field fuse	SEG1 SEG3	7-segment display
F400U (A2P)	fuse T 6.3 A 250 V	T1A	current sensor
F410U (A2P)	fuse T 40 A 500 V	V1R (A3P)	IGBT power module
F411U (A2P)	fuse T 40 A 500 V	V2R (A3P)	diode module
F412U (A2P)	fuse T 40 A 500 V	X37A	* connector (power supply for option PCB)
HAP (A1P)	running LED (service monitor-green)	X66A	* connector (remote switching cool/heat selector)
K1M (A3P)	magnetic contactor	X1M	terminal strip (power supply)
K*R (A*P)	magnetic relay	X*A	PCB connector
L1R	reactor	X*M (A*P)	terminal strip on PCB
M1C	motor (compressor)	X*Y	connector
M1F	motor (fan)	Y2E	electronic expansion valve
PS (A1P,A3P)	power supply	Y*S	solenoid valve (4-way valve)
Q1DI	# earth leakage circuit breaker	Z*C	noise filter (ferrit core)
Q1RP (A1P)	phase reversal detect circuit	Z*F	noise filter
R21T	thermistors (M1C discharge)		
R3T	thermistors (accumulator)		

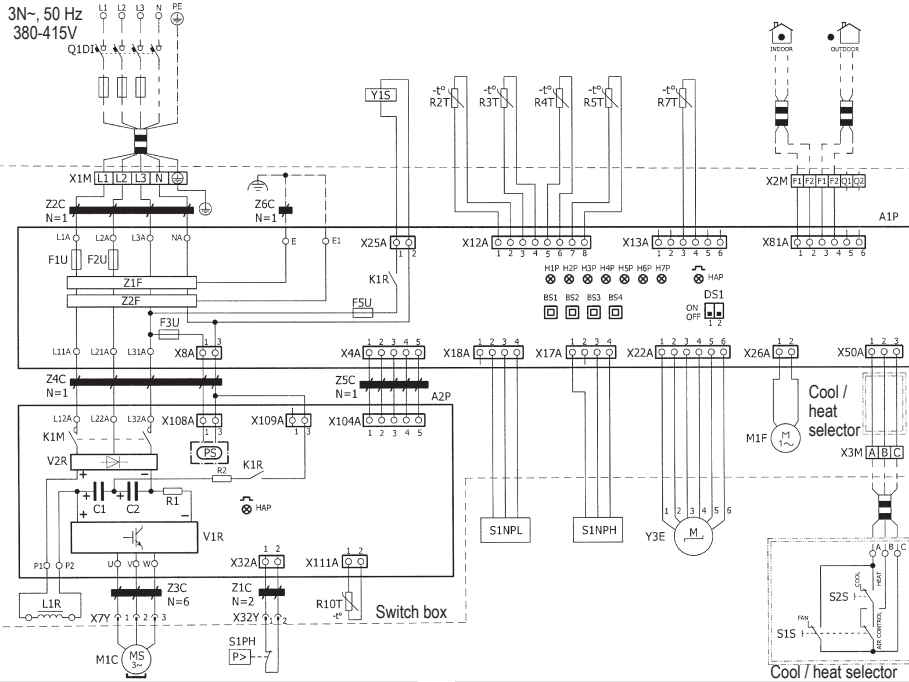
\* : optional  
# : field supply

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# 8 Wiring diagrams

## 8 - 2 Wiring Diagrams - Three Phase

RKXYQ5T7Y1B

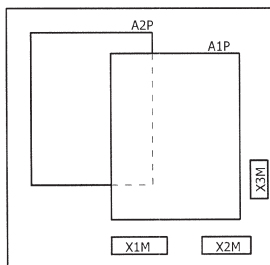


### NOTES TO GO THROUGH BEFORE STARTING THE UNIT:

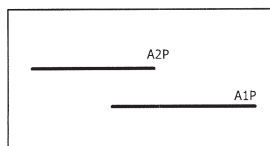
X1M: Main terminal

- : Earth wiring
- 15 : Wire number 15
- - - : Field wire
- : Field cable
- \*\*/12.2 : Connection \*\* continues on page 12 column 2
- ① : Several wiring possibilities
- [ ] : Option
- [ ] : Wiring depending on model
- [ ] : Not mounted in switch box
- [ ] : PCB

### POSITION IN SWITCH BOX:



Front side



Upper side

### LEGEND:

Part n°	Description
A1P	Main PCB
A2P	Inverter PCB (INV)
BS* (A1P)	Push button
C* (A2P)	Capacitor
DS1 (A1P)	Dipswitch
F1U (A1P)	Fuse (T, 31.5A, 250V) for PCB
F2U (A1P)	Fuse (T, 31.5A, 250V) for PCB
F3U (A1P)	Fuse (T, 6.3A, 250V) for PCB
F5U (A1P)	Fuse (T, 6.3A, 250V) for PCB
H*P (A1P)	LED (service monitor-orange)
HAP (A*P)	Running LED (service monitor-green)
K1M (A2P)	Magnetic contactor
K1R (A*P)	Magnetic relay
L1R	Reactor
M1C	Motor (compressor)
M1F	Motor (fan)
PS (A21P)	Switching power supply
Q1DI	Earth leakage circuit breaker
R* (A2P)	Resistor
R2T	Thermistor (discharge)
R3T	Thermistor (suction accumulator)
R4T	Thermistor (subcool HE gas)
R5T	Thermistor (suction compressor)
R7T	Thermistor (liquid)
R10T	Thermistor (fin)
S1NPL	Pressure sensor (low)
S1NPH	Pressure sensor (high)
S1PH	High pressure switch
S*S	* Switch cool/heat selector
V1R (A2P)	IGBT power module
V2R (A2P)	Diode module
X1M	Terminal strip (power supply)
X2M	Terminal strip (low voltage)
X3M	Terminal strip (cool/heat selector)
X*Y	Connector
Y3E	Electronic expansion valve
Y1S	Solenoid valve (4 way valve)
Z*C	Noise filter (ferrite core)
Z*F (A1P)	Noise filter

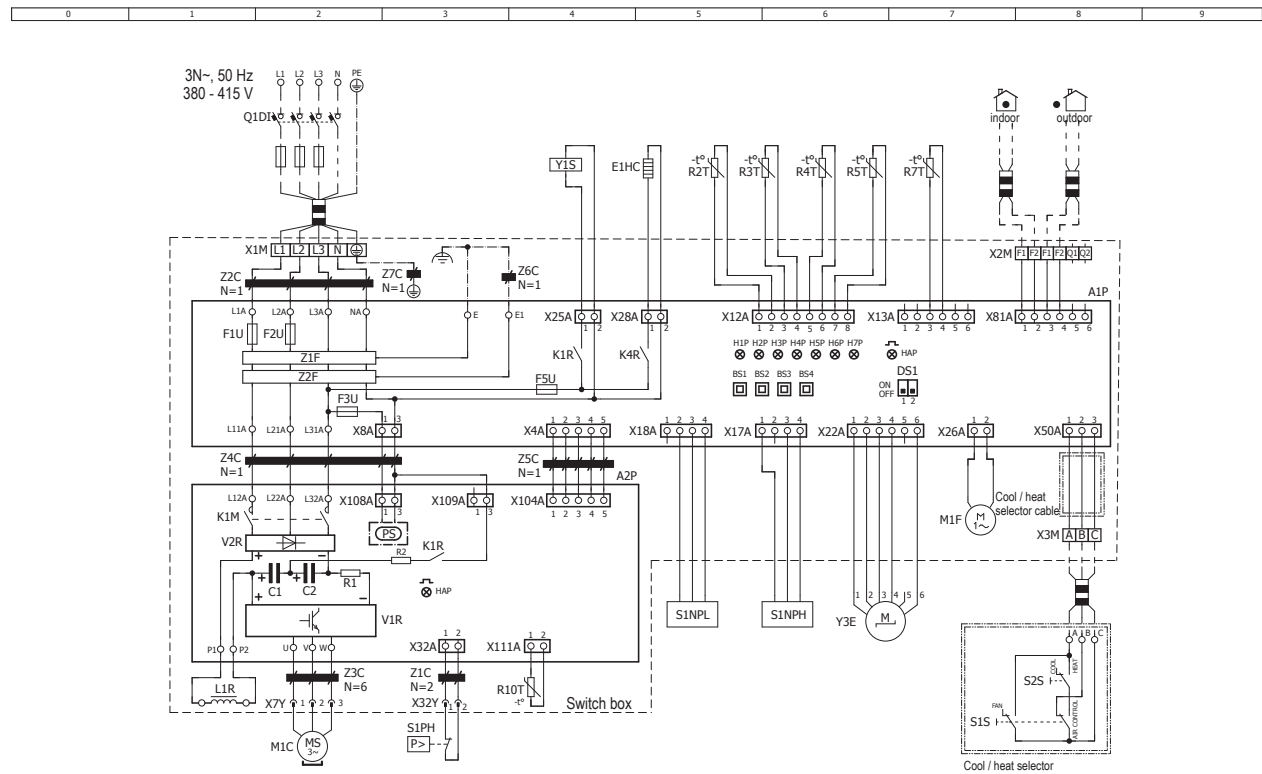
\*: Optional  
#: Field supply

4D096978A

# 8 Wiring diagrams

## 8 - 2 Wiring Diagrams - Three Phase

### RKXYQ5T8



4D096978B

# 8 Wiring diagrams

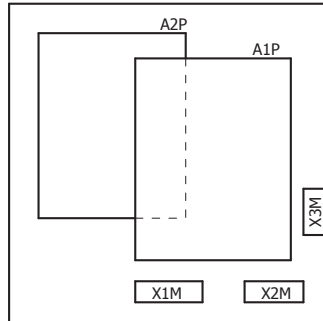
## 8 - 3 Notes & Legend

### RKXYQ5T8

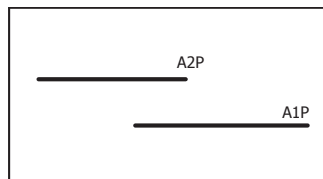
#### NOTES to go through before starting the unit

- X1M : Main terminal  
 15 : Earth wiring  
 15 : Wire number 15  
 : Field wire  
 : Field cable  
 → \*\*/12.2 : Connection \*\* continues on page 12 column 2  
 ① : Several wiring possibilities  
 : Option  
 : Wiring depending on model  
 : Not mounted in switch box  
 : PCB

#### POSITION IN SWITCH BOX



Front side



Upper side

#### LEGEND

Part n°	Description	Part n°	Description
A1P	main PCB	R3T	thermistor (suction accumulator)
A2P	inverter PCB (INV)	R4T	thermistor (subcool HE gas)
BS* (A1P)	push button	R5T	thermistor (suction compressor)
C* (A2P)	capacitor	R7T	thermistor (liquid)
DS1 (A1P)	dipswitch	R10T	thermistor (fin)
E1HC	crankcase heater	S1NPL	pressure sensor (low)
F1U (A1P)	fuse T 31,5 A 250 V for PCB	S1NPH	pressure sensor (high)
F2U (A1P)	fuse T 31,5 A 250 V for PCB	S1PH	high pressure switch
F3U (A1P)	fuse T 6,3 A 250 V for PCB	S*S	* switch cool/heat selector
F5U (A1P)	fuse T 6,3 A 250 V for PCB	V1R (A2P)	IGBT power module
H*P (A1P)	LED (service monitor-orange)	V2R (A2P)	diode module
HAP (A*P)	running LED (service monitor-green)	X1M	terminal strip (power supply)
K1M (A2P)	magnetic contactor	X2M	terminal strip (low voltage)
K1R (A*P)	magnetic relay	X3M	terminal strip (cool/heat selector)
K4R (A1P)	magnetic relay (E1HC)	X*Y	connector
L1R	reactor	Y1S	solenoid valve ( 4 way valve)
M1C	motor (compressor)	Y3E	electronic expansion valve
M1F	motor (FAN)	Z*C	noise filter (ferrit core)
PS (A2P)	switching power supply	Z*F (A1P)	noise filter
Q1DI	earth leakage circuit breaker		
R* (A2P)	resistor		
R2T	thermistor (discharge)		

\* : optional  
 # : field supply

4D096978B

# 8 Wiring diagrams

## 8 - 3 Notes & Legend

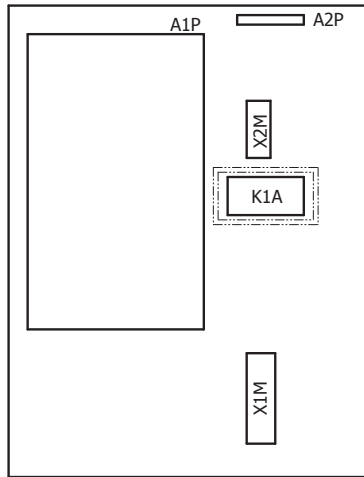
8

### RKXYQ5T8

#### NOTES to go through before starting the unit

- X1M : Main terminal
- \_\_\_\_\_ : Earth wiring
- 15 : Wire number 15
- \_\_\_\_\_ : Field wire
- \_\_\_\_\_ : Field cable
- \*\*/12.2 : Connection \*\* continues on page 12 column 2
- ① : Several wiring possibilities
- \_\_\_\_\_ : Option
- \_\_\_\_\_ : Wiring depending on model
- \_\_\_\_\_ : Not mounted in switch box
- \_\_\_\_\_ : PCB

#### POSITION IN SWITCH BOX



#### LEGEND

Part n°	Description
A1P	main PCB
A2P	adapter PCB
C1 (A1P)	capacitor
E1H	* drain pan heater
F1U	* fuse F 1 A 250 V
F1U (A1P)	fuse T 6.3 A 250 V for PCB
HAP (A1P)	running LED (service monitor-green)
K1A	* auxiliary relay
M*F	motor (fan)
Q1DI	# earth leakage circuit breaker
PS (A1P)	switching power supply
R1T	thermistor air
R2T	thermistor gas
R3T	thermistor coil
V1R (A1P)	diode module
X1M	main terminal
X2M	field wiring terminal
X*Y	connector
Y1E	electronic expansion valve
Z1C	ferrite core
Z1F (A1P)	noise filter

- \* : optional
- # : field supply


4D105518

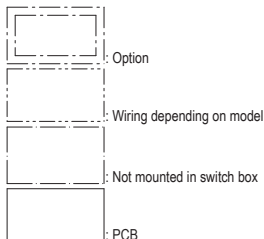
# 8 Wiring diagrams

## 8 - 3 Notes & Legend

### RDXYQ5T

#### NOTES to go through before starting the unit

- X1M : Main terminal
- — — — — : Earth wiring
- 15 : Wire number 15
- - - - - : Field wire
-  : Field cable
- \*\*/12.2 : Connection \*\* continues on page 12 column 2
- ① : Several wiring possibilities

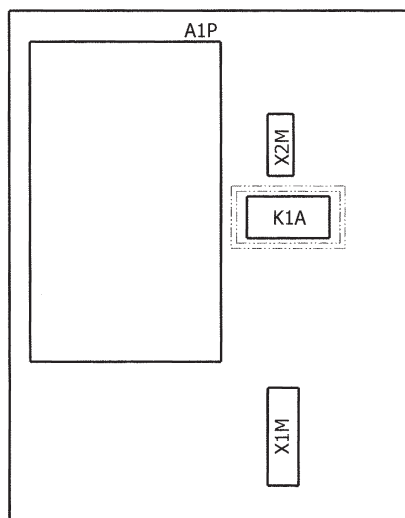


#### LEGEND

Part n°	Description
A1P	main PCB
C1( (A1P)	capacitor
E1H	* drain pan heater
F1U	* fuse T 1 A 250 V
F1U (A1P)	fuse T 6.3 A 250 V for PCB
HAP (A1P)	running LED (service monitor-green)
K1A	* auxiliary relay
M*F	motor (fan)
Q1DI	# earth leakage circuit breaker
PS (A1P)	switching power supply
R1T	thermistor air
R2T	thermistor gas
R3T	thermistor coil
V1R (A1P)	diode module
X1M	main terminal
X2M	field wiring terminal
X*M	terminal strip
X*Y	connector
Y1E	electronic expansion valve
Z1C	ferrite core
Z1F (A1P)	noise filter

\* : optional # : field supply

#### POSITION IN SWITCH BOX

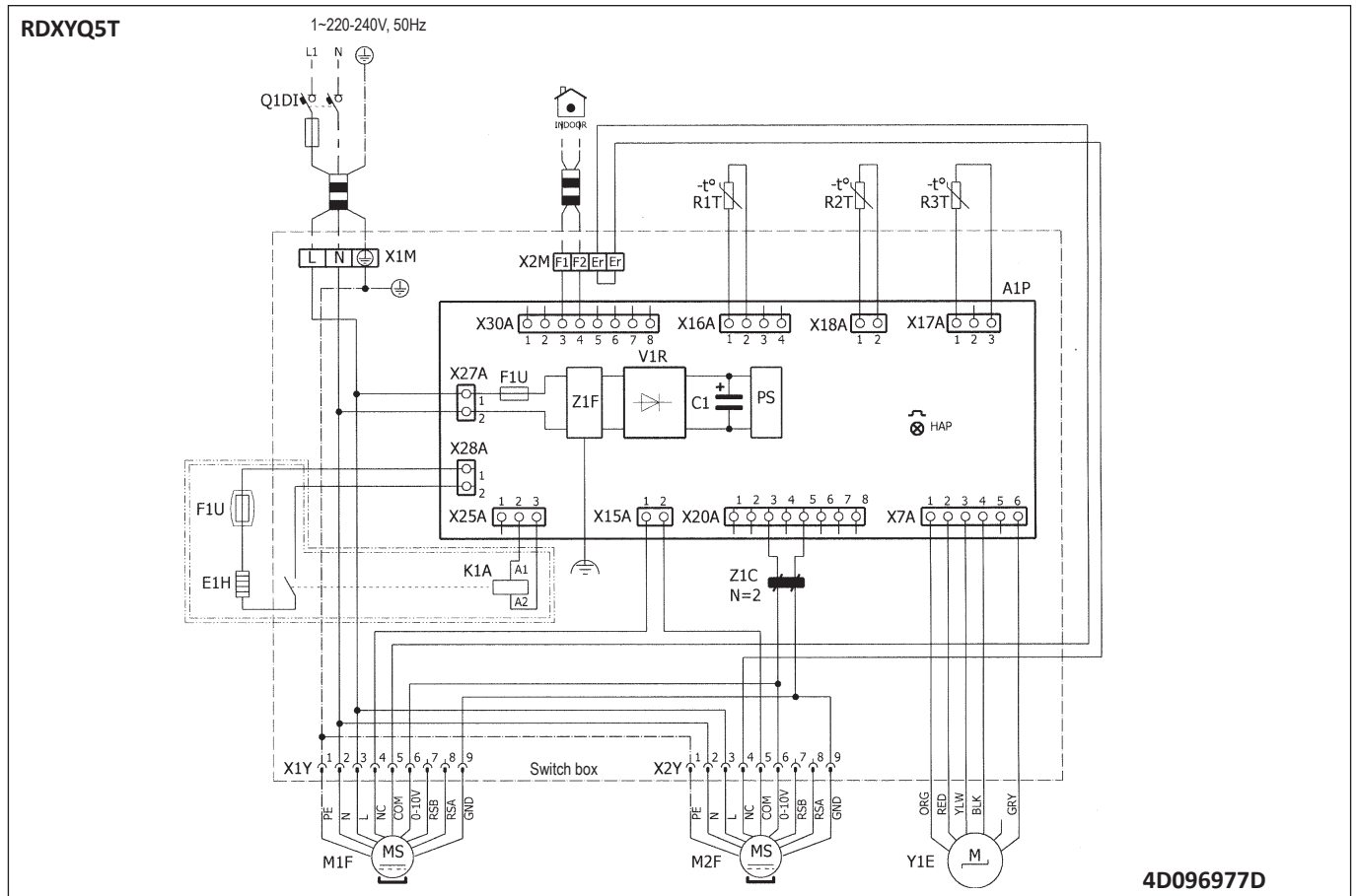


4D096977D

# 8 Wiring diagrams

## 8 - 4 Control Circuit, Inverter

8

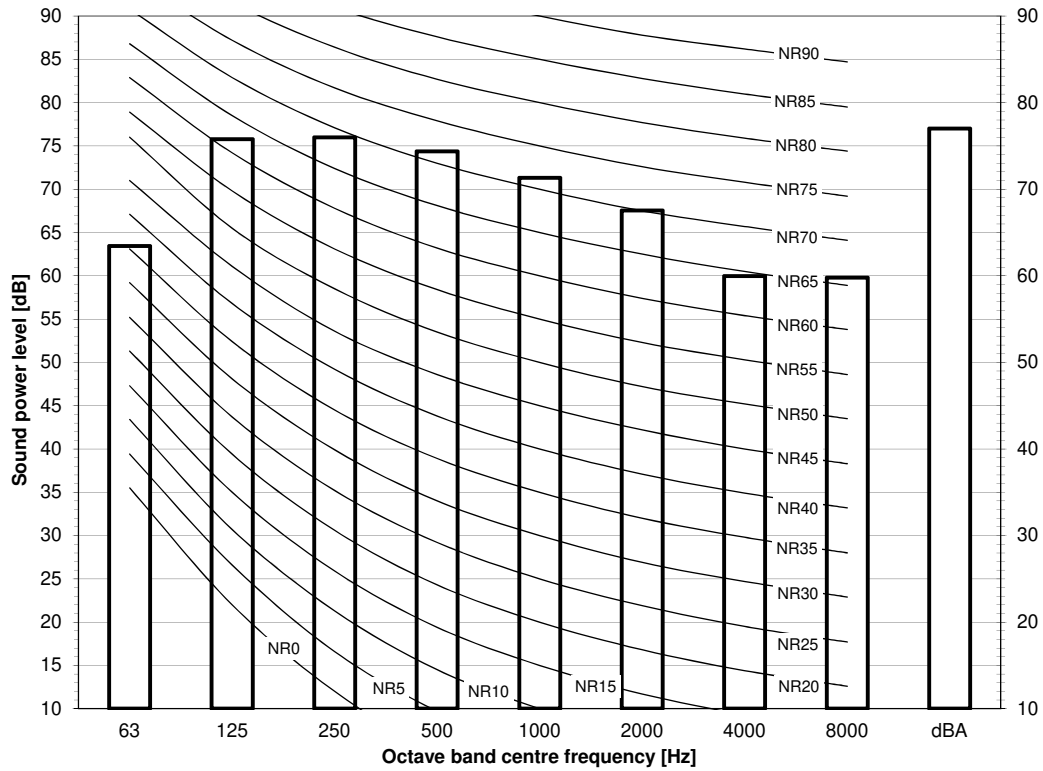




# 9 Sound data

## 9 - 1 Sound Power Spectrum

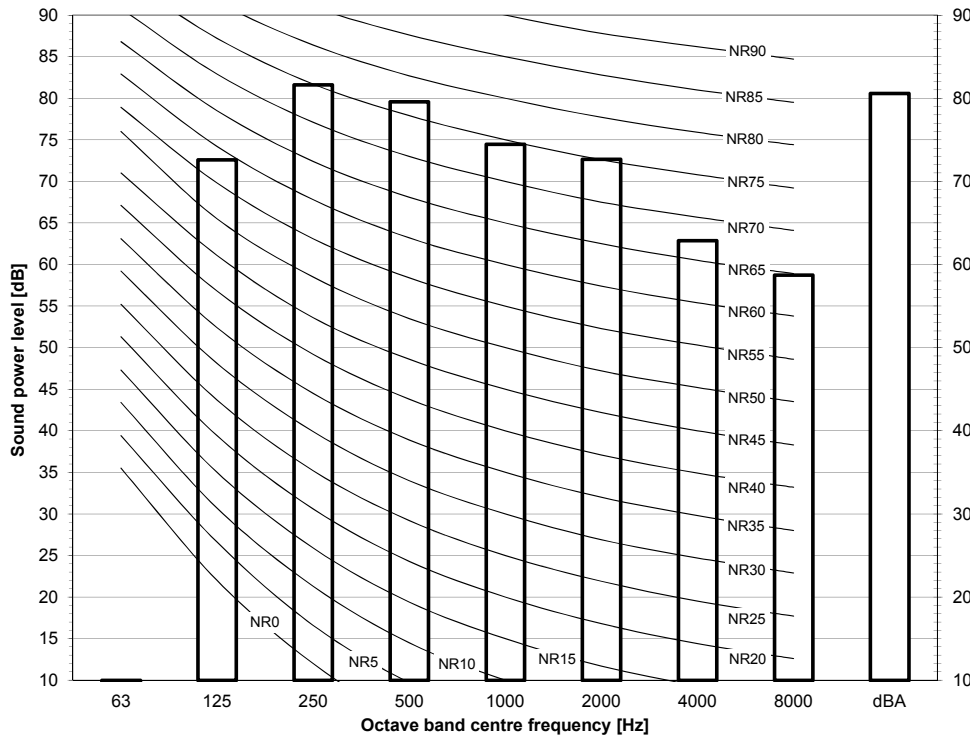
RDXYQ5T8  
RDXYQ5T



Notes  
- dBA = A-weighted sound power level (A scale according to IEC).  
- Reference acoustic intensity 0dB =  $10E-6 \mu W/m^2$ .  
- Measured according to ISO 3744

3D099602B

RDXYQ8T



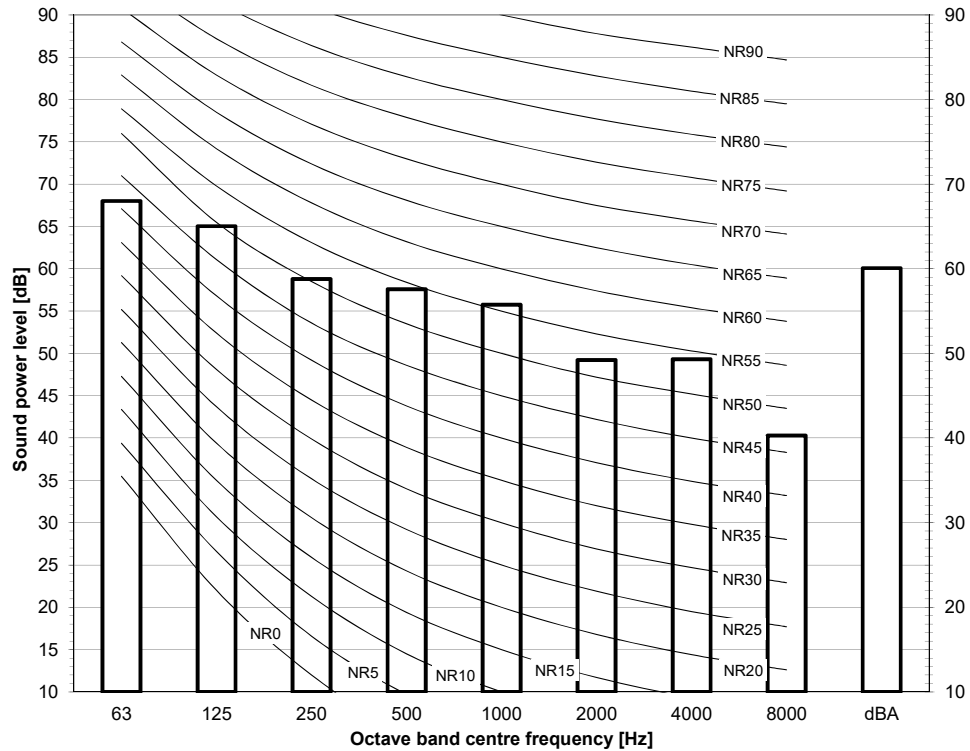
Notes  
- dBA = A-weighted sound power level (A scale according to IEC).  
- Reference acoustic intensity 0dB =  $10E-6 \mu W/m^2$ .  
- Measured according to ISO 3744

3D105985

# 9 Sound data

## 9 - 1 Sound Power Spectrum

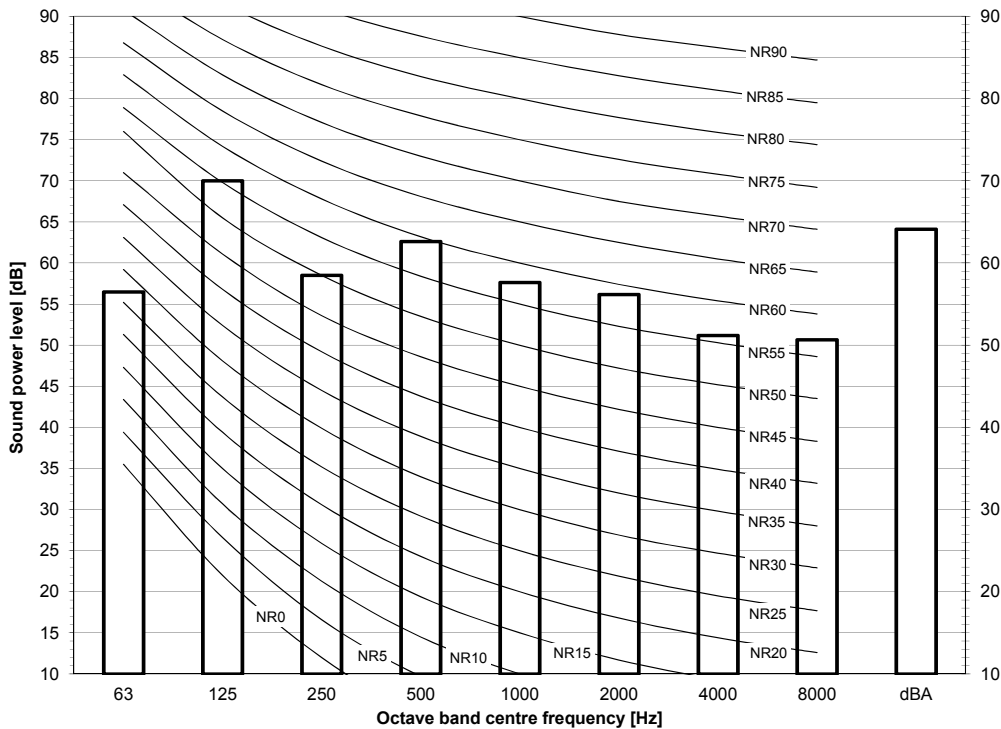
### RKXYQ5T8



Notes  
 - dBA = A-weighted sound power level (A scale according to IEC).  
 - Reference acoustic intensity  $0\text{ dB} = 10\text{E-}6\mu\text{W/m}^2$   
 - Measured according to ISO 3744

3D099625

### RKXYQ8T



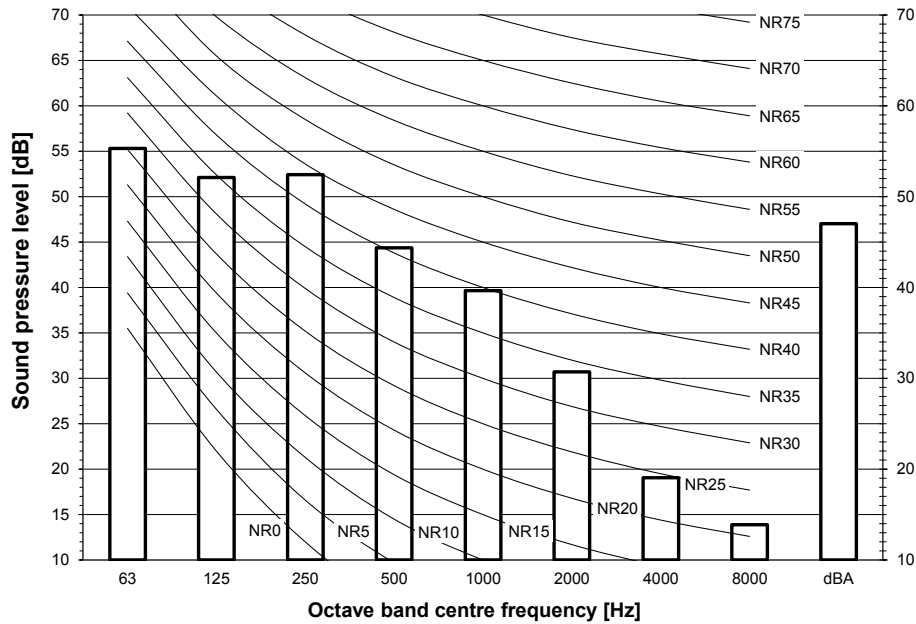
Notes  
 - dBA = A-weighted sound power level (A scale according to IEC).  
 - Reference acoustic intensity  $0\text{ dB} = 10\text{E-}6\mu\text{W/m}^2$   
 - Measured according to ISO 3744

3D106014

# 9 Sound data

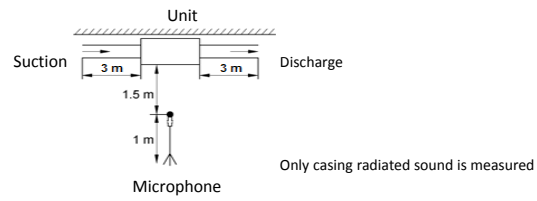
## 9 - 2 Sound Pressure Spectrum

### RDXYQ5T8



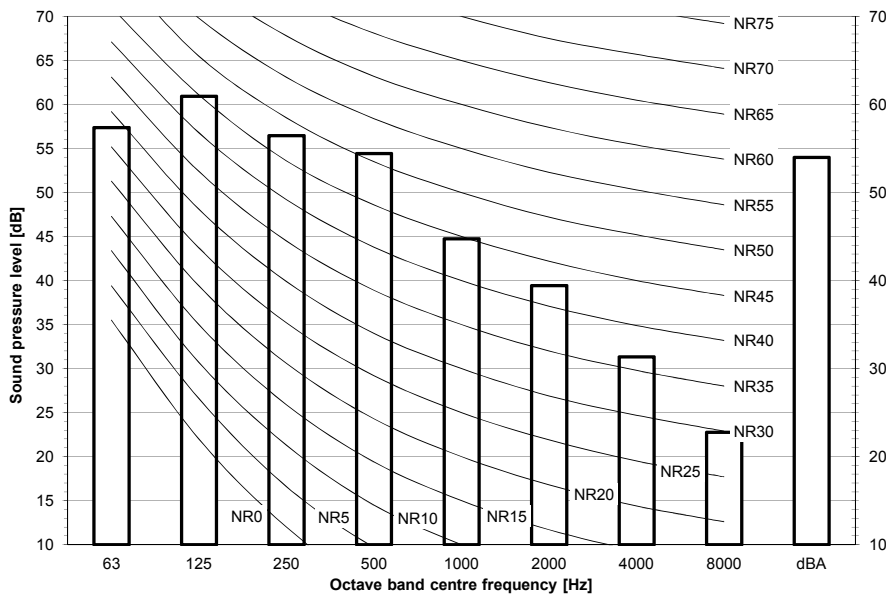
#### Notes

- 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



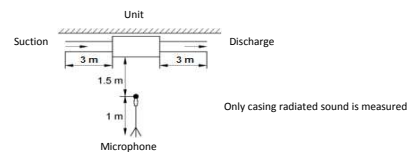
3D098852

### RDXYQ8T



#### 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



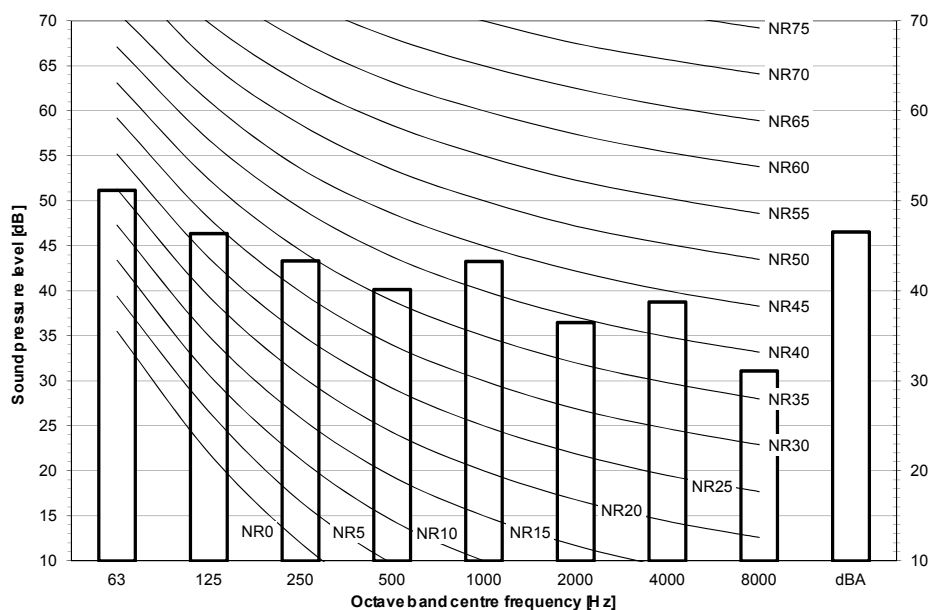
3D105965

# 9 Sound data

## 9 - 2 Sound Pressure Spectrum

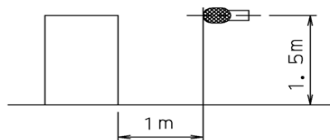
9

RKXYQ5T



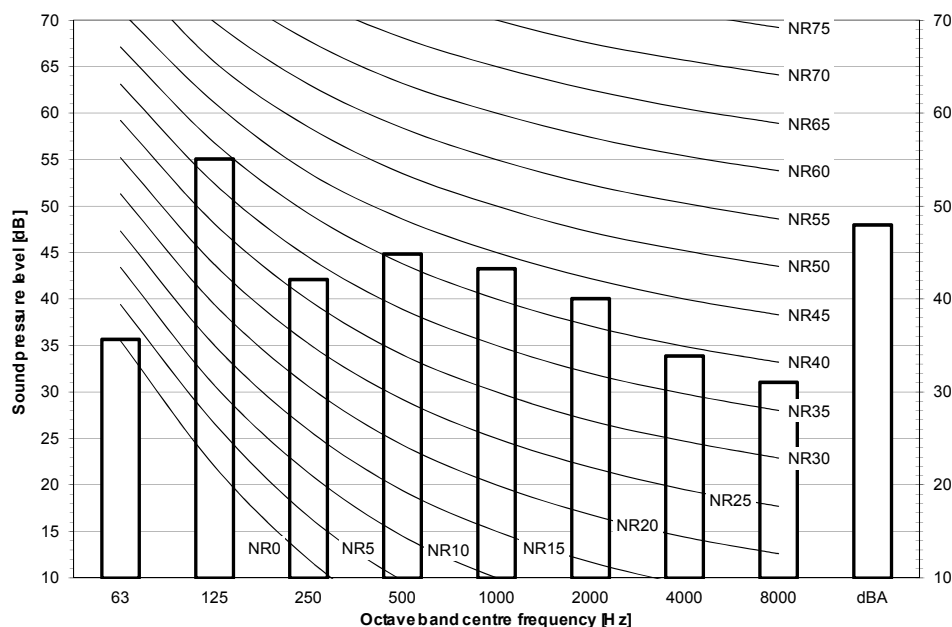
**Notes**

- 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



3D099621

RKXYQ8T

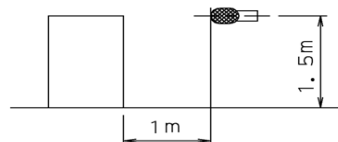


**Notes**

- 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

**Data is valid under the following conditions**

- Cooling operation
- Outdoor Ta: 35°C



3D106018

# 10 Installation

## 10 - 1 Refrigerant Pipe Selection

SB.RKXYQ-T

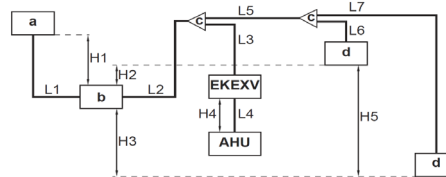
### VRV4-i Heat pump Piping restrictions

Maximum piping length [m]									
Longest pipe				After first branch				EEXV ↔ AHU	
Actual a ↔ b		Actual / (Equivalent) b ↔ d		Actual c ↔ d/AHU					
L1	30	L2+L3+L4	70/(90)	L3+L4	40				
		L2+L5+L6	70/(90)	L5+L6	40				
		L2+L5+L7	70/(90)	L5+L7	40				
		See note 1.							

a: Heat exchanger unit  
b: Compressor unit  
c: Refrigerant branch kit  
d: VRV DX indoor unit  
EEXV: Expansion valve kit  
AHU: Air handling unit (AHU)  
H1-H5: Height difference  
L1-L7: Piping length

Maximum height difference [m]							
a ↔ b		b ↔ d		d ↔ d		EEXV ↔ AHU	
H1	±10	H2	±30	H5	±15	H4	±5
		H3	±30				

Model	Total piping length [m]	
	a ↔ b	a ↔ b + b ↔ d
VRV4-i SHP	L1	L1+L2+L3+L4+L5+L6+L7
	30	115
	25	120
	20	125
	15	130
	10	135
VRV4-i SHP	5	140
	-	300



#### Notes

##### 1. VRV4-i SHP:

If the equivalent pipe length between the heat exchanger unit and the furthest indoor unit is ≥90m, it is recommended to increase the size of the main gas pipe (between compressor unit and first refrigerant branch kit).  
If the recommended gas pipe (with increased size) is not available, you must use the standard size (which might result in a small capacity decrease).

##### 2. VRV4-i SHP:

If the equivalent pipe length between the heat exchanger unit and the furthest indoor unit is ≥90m, it is recommended to increase the size of the main gas pipe (between compressor unit and first refrigerant branch kit).  
If the recommended gas pipe (with increased size) is not available, you must use the standard size (which might result in a small capacity decrease).

If the equivalent pipe length between the heat exchanger unit and the furthest indoor unit is ≥90m, you MUST increase the size of the main liquid pipe (between compressor unit and first refrigerant branch kit).

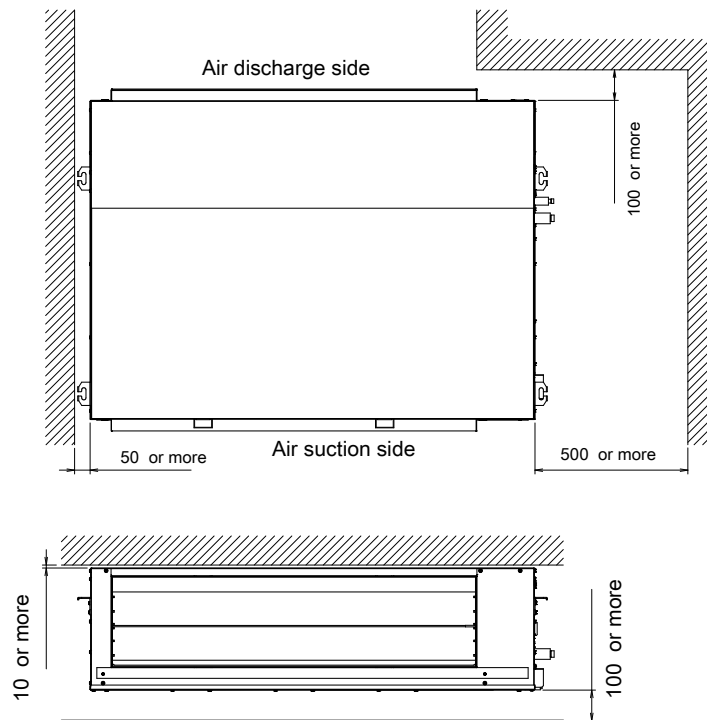
3D098836A

# 10 Installation

## 10 - 2 Installation Method

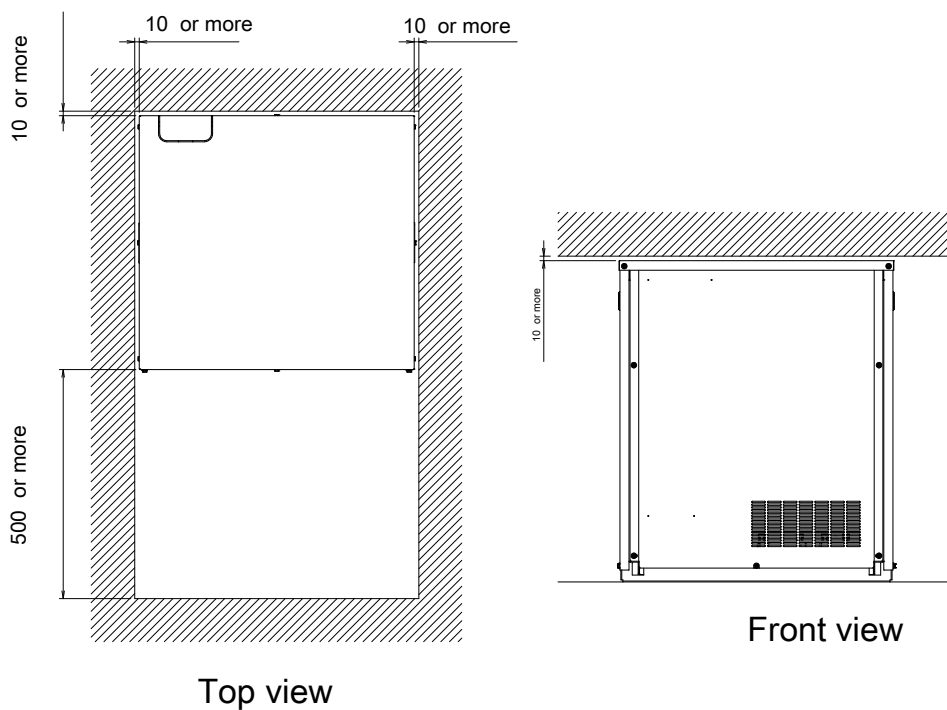
### RDXYQ-T

10



3D098834

### SB.RKXYQ-T8



3D098835

# 11 Appropriate Indoors

## 11 - 1 Appropriate Indoors

RKXYQ-T  
RDXYQ-T

**Recommended indoor units for ·RKXYQ\*T\* + RDXYQ\*T\*· outdoor units**

HP	5	8
	4xFXSQ32	4xFXMQ50

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

**Appropriate indoor units for ·RKXYQ\*T\* + RDXYQ\*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

**Outside the scope of ·ENER LOT21·**

EKEXV50-63-80-100-125-140-200 + EKEQM  
 VKM50-80-100  
 CYVS100-150-200-250  
 CYVM100-150-200-250  
 CYVL100-150-200-250

**3D113978**

# 12 Options

## 12 - 1 Options

### SB.RKXYQ5T8

#### VRV4-i Heat pump Option list

Nr.	Item	SB.RKXYQ5T		SB.RKXYQ8T	
		Heat exchanger unit	Compressor unit	Heat exchanger unit	Compressor unit
I.	Refnet header	KHRQ22M29H		KHRQ22M29H	
II.	Refnet joint	KHRQ22M20T		KHRQ22M20T	
III.	Refnet joint	-		KHRQ22M29T9	
1a.	Cool/heat selector (switch)	-	KRC19-26	-	KRC19-26
1b.	Cool/heat selector (fixing box)	-	KJB111A	-	KJB111A
1c.	Cool/heat selector (cable)	-	EKCHSC	-	-
1d.	Cool/heat selector (PCB)	-	-	-	BRP2A81
2.	VRV configurator	-	EKPCCAB*	-	EKPCCAB*
3.	Demand PCB	DTA104A61/62*		DTA104A61/62*	
4.	Drain pan heater	EKDPH1RDX	-	EKDPH1RDX	-

#### Notes

1. All options are kits
2. To mount option 1a, option 1b is required.
3. VRV4-i 5 To operate the cool/heat selector function, options 1a and 1c are both required.  
VRV4-i 8 To operate the cool/heat selector function, options 1a and 1d are both required.
4. If the outdoor temperature can drop below -7°C for more than 24 hours, it is recommended to install drain pan heater kit EKDPH1RDX.

**3D098831A**



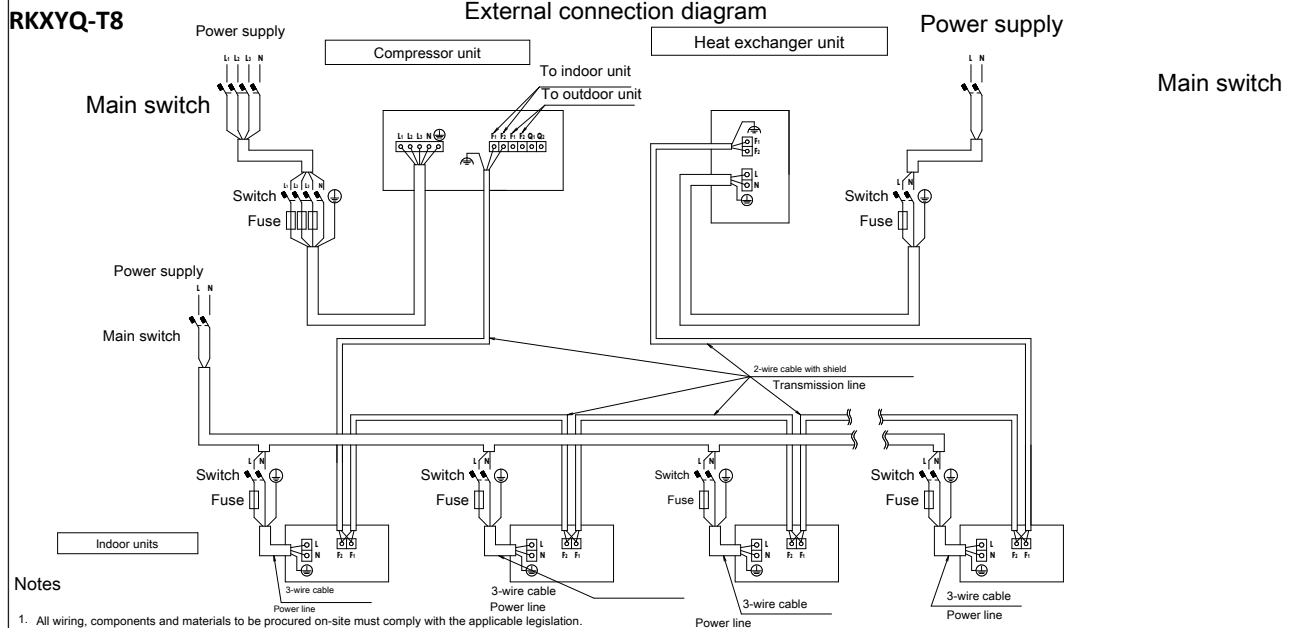
# 13 External connection diagrams

## 13 - 1 External Connection Diagrams

RDXYQ-T8

RKXYQ-T8

External connection diagram



### Notes

1. All wiring, components and materials to be procured on-site must comply with the applicable legislation.
2. Use copper conductors only.
3. For more details, refer to the wiring diagram of the unit.
4. Install a circuit breaker for safety.
5. All field wiring and components must be provided by an authorised electrician.
6. Unit has to be grounded in compliance with the applicable legislation.
7. The wiring shown is a general points-of-connection guide and is not intended to include all details for a specific installation.
8. Make sure to install the switch and the fuse to the power line of each equipment.
9. Install a main to switch to (if necessary) immediately interrupt all the system's power sources.
10. If there exists the possibility of reversed phase, loose phase or momentary blackout, or if 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. Install an earth leakage circuit breaker.
12. To ensure proper earthing, connect the shields of the incoming and outgoing transmission wiring of each indoor unit to each other.
13. The main line is the line to which the transmission wiring of the heat exchanger unit is connected.

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# 14 Operation range

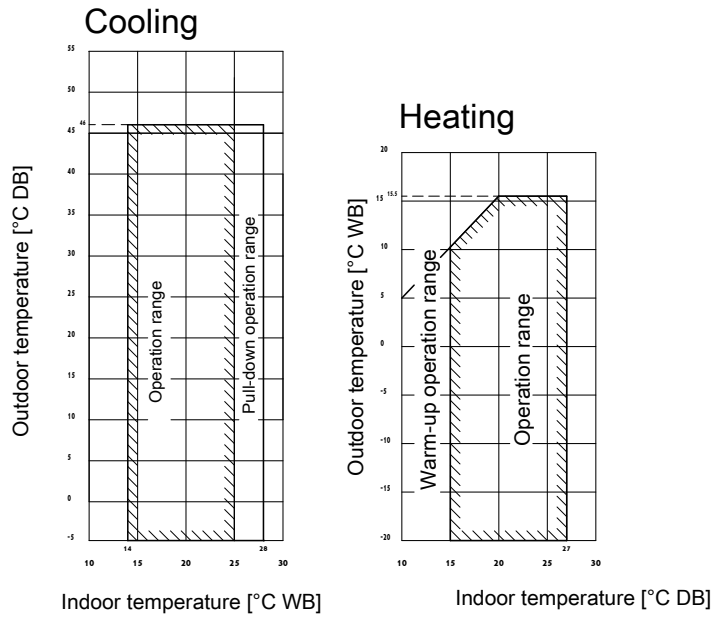
## 14 - 1 Operation Range

14

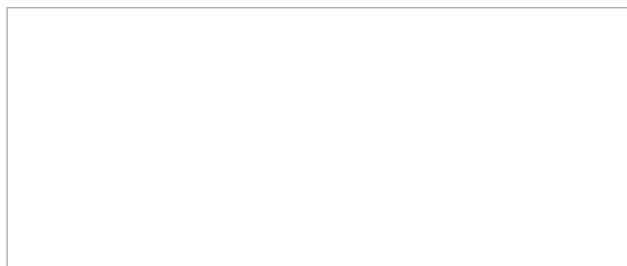
### SB.RKXYQ-T8

#### Notes

- These figures assume the following operation conditions  
Equivalent piping length: 10m  
Level difference: 0m
- 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 heat exchanger unit in a location not exposed to wind.
- If the outdoor temperature can drop below  $-7^{\circ}\text{C}$  for more than 24 hours, it is recommended to install drain pan heater kit \_\_\_\_\_ (EKJDPH1RDX)\_\_\_\_\_.



3D098833A



EEDEN20

10/2020



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