

Air Conditioning Technical Data SB.RKXYQ-T8, SB.RKXYQ-T





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SB.RKXYQ-T8, SB.RKXYQ-T

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1

- · 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 cutains
- 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 our i-Net service: 24/7
 monitoring for maximum efficiency, extended lifetime, immediate
 service support thanks to failure prediction and a clear understanding
 of operability and usage





INVERTER

Inverter

VDAIKIN • VRV Systems • SB.RKXYQ-T8, SB.RKXYQ-T

1 Features

1 - 2 SB.RKXYQ-T

- Unique VRV heat pump for indoor installation
- Unrivalled flexibility because the unit is split up into two elements: the heat exchanger and the compressor
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- 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

- VRV configurator software for the fastest and most accurate commissioning, configuration and customisation
- 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
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Inverter

2-1 Technical	Specifications			SB.RKXYQ5T8	SB.RKXYQ8T	
System	Heat exchanger unit			RDXYQ5T8	RDXYQ8T	
	Compressor unit			RKXYQ5T8	RKXYQ8T	
Recommended comb	oinations			4 x FXSQ32A2VEB	4 x FXMQ50P7VEB	
Cooling capacity	Prated,c		kW	14.0 (1)	22.4 (1)	
Heating capacity	Prated,h		kW	10.4 (2)	12.9 (2)	
	Max.	6°CWB	kW	16.0 (3)	25.0 (3)	
SEER				5.1	4.9	
SCOP				3.8	3.6	
ηs,c			%	200.1	191.1	
ηs,h			%	149.3	140.9	
Space cooling	A Condition (35°C -	EERd		2.4	2.2	
	27/19)	Pdc	kW	14.0	22.4	
	B Condition (30°C -	EERd		4.0	3.7	
	27/19)	Pdc	kW	10.3	16.5	
	C Condition (25°C -	EERd	'	6.5	5.5	
	27/19)	Pdc	kW	6.6	10.6	
	D Condition (20°C -	EERd		9.4	10.5	
	27/19)	Pdc	kW	4.8	6.4	
Space heating	TBivalent	COPd (declared C	OP)	2.2	2.0	
(Average climate)		Pdh (declared heating cap)	kW	10.4	12.9	
		Tbiv (bivalent temperature) °C		-10.0		
	TOL	COPd (declared C	OP)	2.2	2.0	
		Pdh (declared heating cap)	kW	10.4	12.9	
		Tol (temperature operating limit)		-1	0.0	
	A Condition (-7°C)	COPd (declared C	OP)	2.4	2.3	
	A condition (-1 o)	Pdh (declared heating cap)	kW	9.2	11.4	
	B Condition (2°C)	COPd (declared C	·OP)	3.3	3.0	
	D condition (2 c)	Pdh (declared heating cap)	kW	5.6	6.9	
	C Condition (7°C)	COPd (declared C	:OP)	7.1	6.6	
	o condition (r c)	Pdh (declared heating cap)	kW	3.6	5.4	
	D Condition (12°C)	COPd (declared C	OP)	5.2	7.3	
	2 33(12 0)	Pdh (declared heating cap)	kW	4.1	6.0	
Capacity range		1 3/	HP	5	8	
	connectable indoor units	 S	+ +	10 (4)	17 (4)	
Indoor index	Min.			62.5	100.0	
connection	Max.			162.5	260.0	
Capacity control	Method				controlled	
Fan	External static	Max.	Pa		50	
i uil	pressure	Nom.	Pa		60	
Operation range	Cooling	Min.~Max.	°CDB		~46.0	
Operation range	Heating	Min.~Max.	°CWB		~15.5	
	Temperature	Min.	°CDB		~ 15.5 5	
	around casing		°CDB		5 35	
		Max.				
	Humidity around casing	Cooling Max.	%		30	
		Heating Max.	%		50	
Refrigerant	Туре				10A	
Refrigerant oil	Туре			Synthetic (ether) oil FVC50K	Synthetic (ether) oil FVC68D	

2-1 Technical Sp	pecifications				SB.RKXYQ5T8	SB.RKXYQ8T	
Piping connections	Between	Liquid	Туре		Braze co	onnection	
	Compressor module		OD	mm	12.7		
	(CM) and heat	Gas	s Type		Braze connection		
	exchanger module (HM)		OD	mm	19.1	22.2	
	(TIW)	Piping length	1		30	0.0	
	Between	Liquid	Туре		Braze co	onnection	
	Compressor module		OD	mm	9.	52	
	(CM) and indoor	Gas	Туре	•	Braze co	onnection	
	units (IU)		OD	mm	15.9	19.1	
	Total piping length	System	Actual	m	140 (5)	300 (5)	
Defrost method		Reversed cycle					
Safety devices	Item	01			High pressure switch		
		02			Fan driver overload protector		
		03			Inverter over	load protector	
		04			PC box	ard fuse	
		05			-	Earth leakage detector	
Cooling	Cdc (Degradation co				0.	25	
Heating	Cdh (Degradation he	ating)			0.	25	
Power consumption in	Off mode	Cooling		kW	0.045	0.043	
other than active		Heating	POFF	kW	0.055	0.050	
mode	Standby mode	Cooling	PSB	kW	0.045	0.043	
		Heating	PSB	kW	0.055	0.050	
	Thermostat-off	Cooling	PTO	kW	0.000	0.012	
	mode	Heating	PTO	kW	0.055	0.060	
Indication if the heater		<u>' </u>				10	
Supplementary heater	Back-up capacity	Heating	elbu	kW	0	.0	

 $Standard\ Accessories: Installation\ and\ operation\ manual;\ Quantity: 1;$

Standard Accessories : Connection pipes; Quantity : 4; Standard Accessories : Declaration of conformity; Quantity : 1;

Standard Accessories: Refrigerant label for F-gas regulation; Quantity: 1;

Standard Accessories: Tie-wraps; Quantity: 3; Standard Accessories: Screws; Quantity: 1; Standard Accessories: Drain hose; Quantity: 1; Standard Accessories: Hose band; Quantity: 1;

2-2 Electrical Specifications			SB.RKXYQ5T8	SB.RKXYQ8T
Current - 50Hz	Zmax	List	No requi	rements
Wiring connections -	For connection with indoor	Quantity	2	-
50Hz		Remark	F1,F2	-

Notes

- (1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m
- (2) For detailed contents of standard accessories, see installation/operation manual
- (3) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m
- (4) 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%).
- (5) 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. VRV IV 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 wih 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 \gt 16A and \gt 75A per phase

Ssc: Short-circuit power

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m. Data for standard efficiency series. Nominal air flow rate. ESP 30 Pa.

Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m. Data for standard efficiency series. Nominal air flow rate, ESP 30 Pa.

The sound power level is an absolute value indicating the power which a sound source generates.

Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to sound level drawings. Nominal air flow rate, ESP 60 Pa. Contains fluorinated greenhouse gases

2-3 Technic	al Specifications			RDXYQ8T	RKXYQ8T	RDXYQ5T8	RKXYQ5T8	
Dimensions	Unit	Height	mm	397	701	397	701	
		Width	mm	1,456	760	1,456	600	
		Depth	mm	1,044	554	1,044	554	
	Packed unit	Height	mm	1,245	825	1,245	838	
		Width	mm	1,604	875	1,604	720	
		Depth	mm	470	660	470	660	
	Ducting	Height	mm	298	-	298	-	
		Width	mm	1,196	-	1,196	-	
Weight	Unit kg		103	105	95	79		
	Packed unit kg		123	116	119	90		
Packing	Material			Carton				
	Weight kg		4.9	2.2	4.9	2.1		
Packing 2	Material		'		W	ood		
	Weight		kg	14.0	8.5	14.0	6.9	
Packing 3	Material		'	-	Plastic	-	Plastic	
	Weight		kg	-	0.3	-	0.3	
Casing	Colour		1	Unpainted	Daikin White	Unpainted	Daikin White	
	Material		Galvanised steel	Painted galvanized steel plate	Galvanised steel plate	Painted galvanize steel plate		

2-3 Technical Specifications					RDXYQ8T	RKXYQ8T	RDXYQ5T8	RKXYQ5T8	
Compressor	Quantity				-	1	-	1	
	Туре				-	G-type scroll compressor	-	Hermetically sealed swing compressor	
	Crankcase heater		V	N	-	33	-	33	
Fan	Quantity		•		3	-	2	-	
	Air flow rate Cooling Nom. m³/min				100		-		
Fan motor	or Quantity			3	-	2	-		
	Output			N	500	-	500	-	
Sound power level	Cooling	Nom.	d	BA	81	64	77.0	60.0	
Sound pressure level	Cooling	Nom.	d	BA	54	48	47	7.0	
Refrigerant	Туре	•	•			R-4	10A		
	GWP				-	2,087.5	-	2,087.5	
	Charge TCO ₂ eq			ΓCO ₂ eq	-	8.35	-	4.20	
			k	ιg	-	4.00	-	2.00	
Refrigerant oil	Туре		•		Daphne FVC68D Synthetic (ether) oil FV		er) oil FVC50K		
Piping connections	Drain	OD	n	nm	32	-	32	-	

2-4 Electrical	Specifications			RDXYQ8T	RKXYQ8T	RDXYQ5T8	RKXYQ5T8	
Power supply	Name	Name			Y1	V1	Y1	
	Phase			1N~	3N~	1N~	3N~	
	Frequency		Hz		•	50	•	
	Voltage		V	220-240	380-415	220-240	380-415	
Voltage range	Min.		%			10		
	Max.		%	10				
Current	Nominal running current (RLA) - 50Hz	Cooling	А	4.6	8.6	1.8	5.8	
Current - 50Hz	Starting current (MSC) - remark				-		•	
	Minimum circuit amps	Minimum circuit amps (MCA)		7.0	17.4	4.6	13.5	
	Maximum fuse amps	Maximum fuse amps (MFA)		10	20	10	16	
	Total overcurrent am	ps (TOCA)	Α	7.0	17.4	4.6	13.5	
	Full load amps (FLA)	Total	А	6.6	-	4.4	-	
Wiring connections -	For power supply	Quantity	•	3G	5G	3G	5G	
50Hz	For connection with	Quantity		-	2		-	
	indoor	Remark		-	F1,F2		-	

3 3 - 1 **Options** Options

SB.RKXYQ5T8

VRV4-i **Heat pump Option list**

Nr.	Item	SB.RKXYQ5T		SB.RKXYQ8T		
		Heat exchanger		Heat exchanger		
	<u> </u>	unit	Compressor unit	unit	Compressor unit	
l.	Refnet header	KHRQ2	2M29H	KHRQ2	2M29H	
II.	Refnet joint	KHRQ2	2M20T	KHRQ2	22M20T	
III.	Refnet joint		-		2M29T9	
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	DTA104	A61/62*	DTA104	A61/62*	
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 8To 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.

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SB.RKXYQ-T

VRV4-i Heat pump Option list

	Item	SB.RKXY	rQ5T	SB.RKXYQ8T		
NI.	item	Heat exchanger unit	Compressor unit	Heat exchanger unit	Compressor unit	
I.	Refnet header	KHRQ22		KHRQ22M29H		
II.	Refnet joint	KHRQ22	M20T	KHRQ22M20T		
	Refnet joint			KHRQ22M29T9		
la.	Cool/heat selector (switch)		KRC19-26		KRC19-26	
1b.	Cool/heat selector (fixing box)		KJB111A		KJB111A	
lc.	Cool/heat selector (cable)		EKCHSC			
1d.	Cool/heat selector (PCB)				BRP2A81	
2.	VRV configurator		EKPCCAB*		EKPCCAB*	
3.	Demand PCB	DTA104A	51/62*	DTA104	A61/62*	
4.	Drain pan heater	EKDPH1RDX		EKDPH1RDX		

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А

4 Combination table

4 - 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	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

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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.
Click here to access the capacity table viewer.

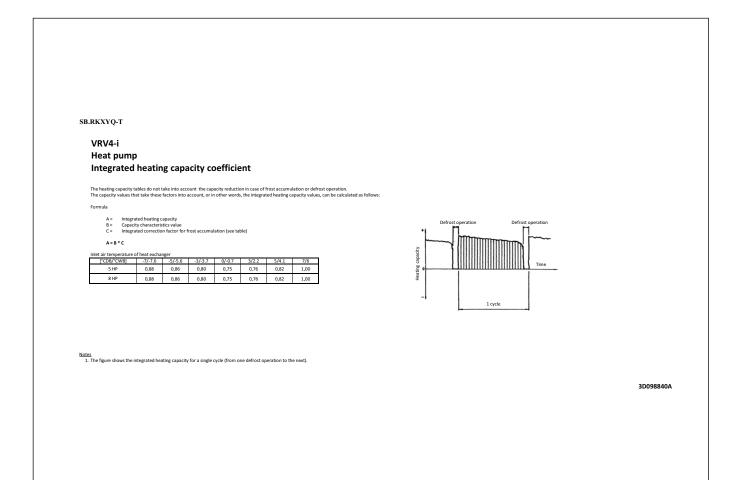


· For more information about all our tools we offer click here to see the overview on my.daikin.eu



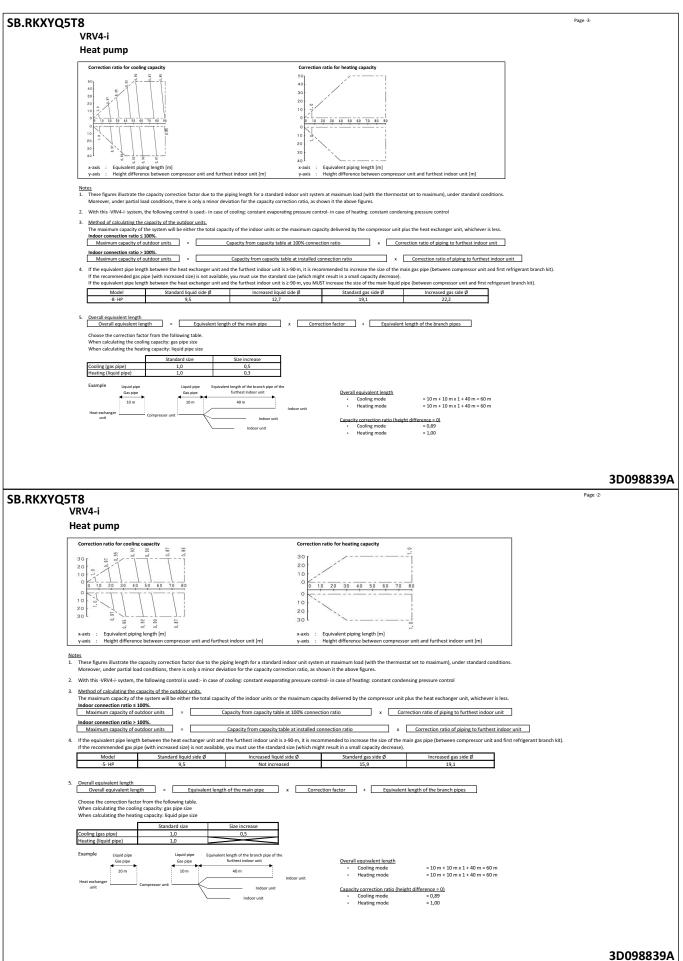
5 5 - 2

Capacity tables Integrated Heating Capacity Correction Factor



Capacity tables

Capacity Correction Factor



Capacity tables

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.

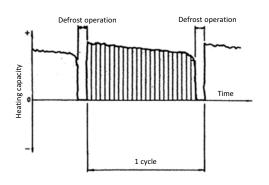
The capacity values that take these factors into account, or in other words, the integrated heating capacity values, can be calculated as follows:

Formula

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



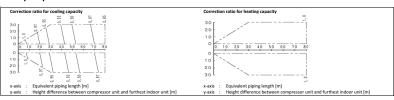
1. The figure shows the integrated heating capacity for a single cycle (from one defrost operation to the next).

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SB.RKXYQ5T

VRV4-i

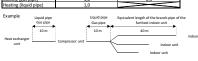
Heat pump



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 mit indoor connection ratio s 100%.

Maximum capacity of outdoor units = Capacity from capacity table at 101 x Correction ratio of piping to furthest indoor unit

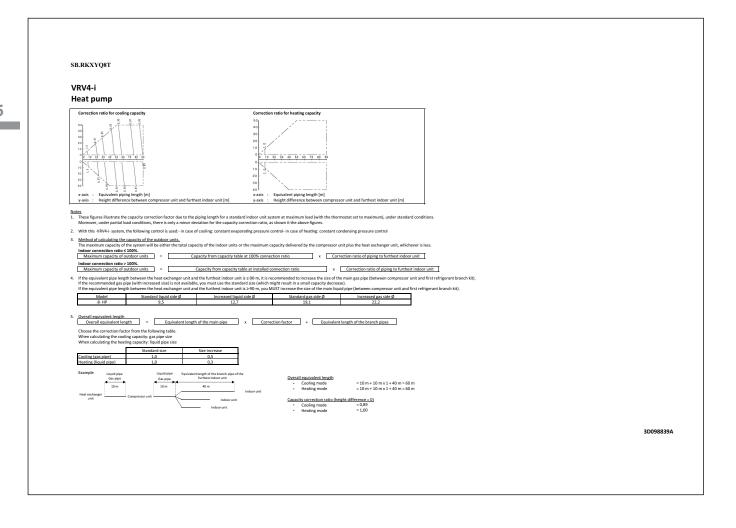


= 10 m + 10 m x 1 + 40 m = 60 m = 10 m + 10 m x 1 + 40 m = 60 m

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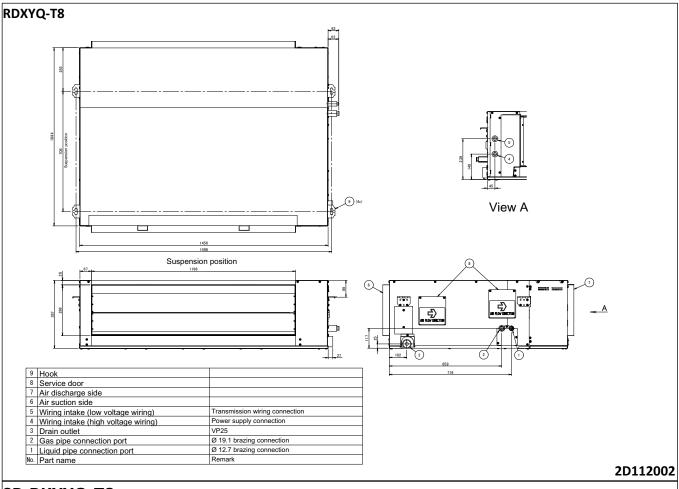
5 5 - 3

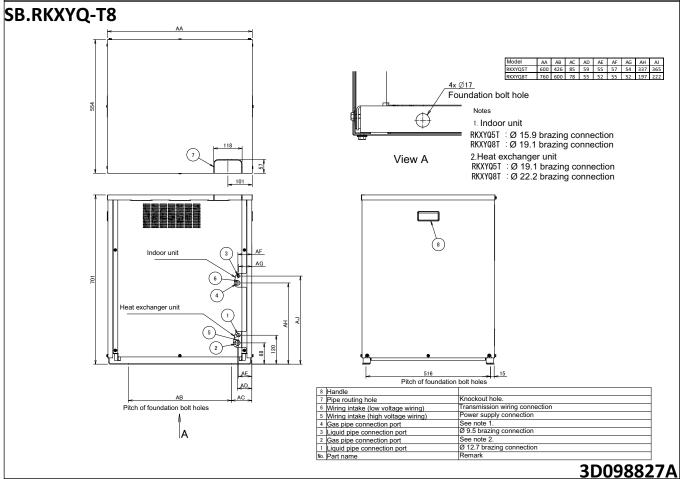
Capacity tables Capacity Correction Factor



6 Dimensional drawings

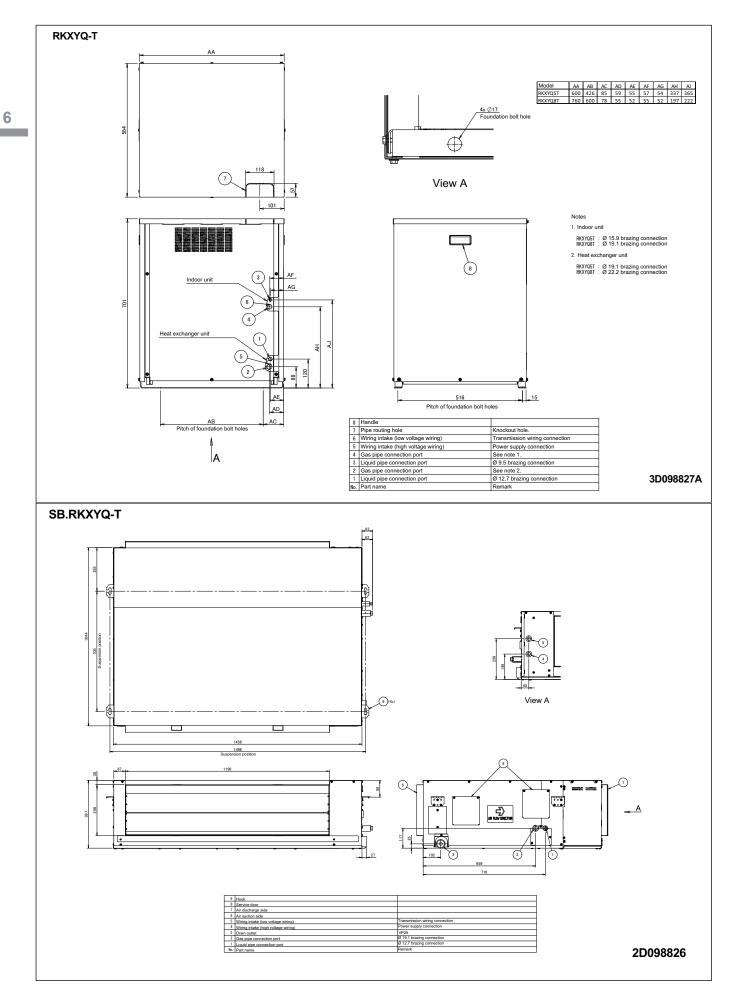
6 - 1 Dimensional Drawings





Dimensional drawingsDimensional Drawings

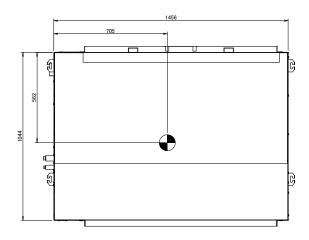
6 - 1

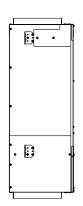


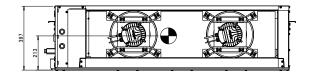
Centre of gravity Centre of Gravity

7 - 1

RDXYQ-T8

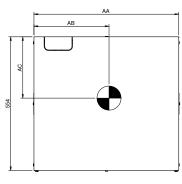




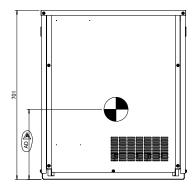


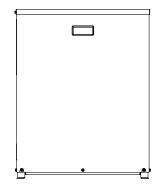
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SB.RKXYQ-T8



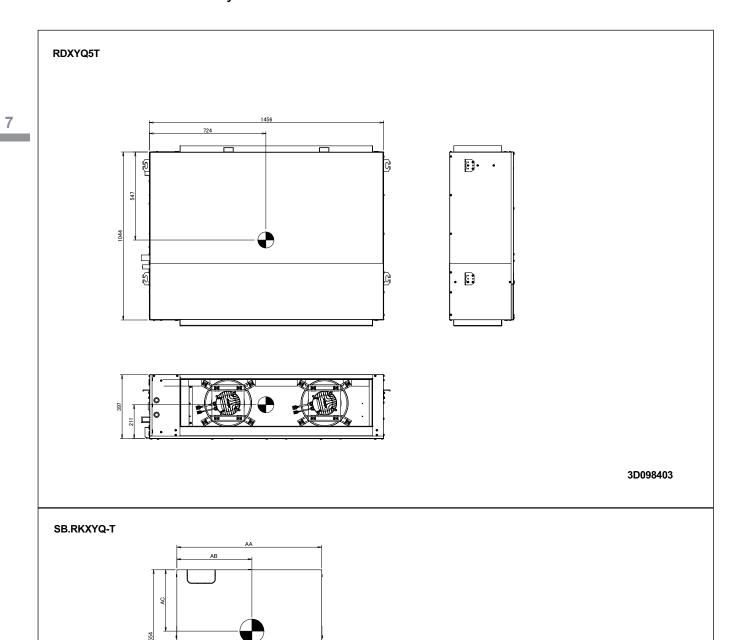
Model	AA	AB	AC	AD
RKXYQ5T	600	311	254	291
RKXYQ8T	760	450	256	292

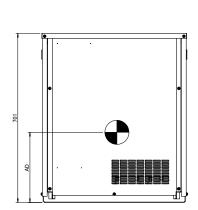


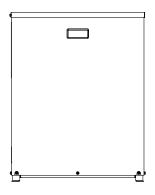


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Centre of gravity Centre of Gravity



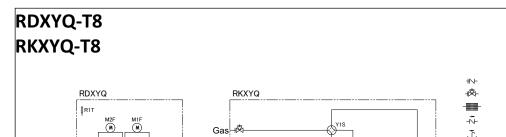


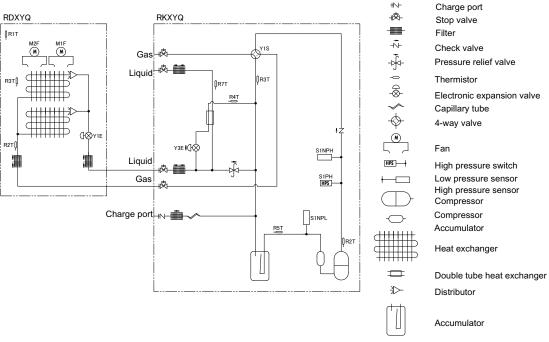


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8 Piping diagrams

8 - 1 Piping Diagrams





Cooling Heating

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SB.RKXYQ-T

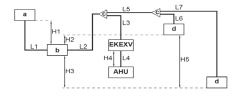
VRV4-i Heat pump Piping restrictions

Maximum piping length [m]								
Longest pipe After first branch								
	Actual / (E	Actual		EKEXV ← AHU				
a ↔ b b ↔ d				c ↔ d/AHU				
	L2+L3+L4	70/(90)	L3+L4	40				
30	L2+L5+L6	70/(90)	L5+L6	40	L4	5		
	L2+L5+L7	70/(90)	L5+L7	40				
	30	Actual / (E b é 12+13+14 30 12+15+16 12+15+17	Actual / (Equivalent) $b \leftrightarrow d$		Actual / (Equivalent) Actual b ← d c ← d/ANU 12+13+14 70/(90) 13+14 40 12+13+16 70/(90) 15+16 40 12+15+17 70/(90) 15+17 40			

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

Maximum neight difference [m]								
a ↔ b		b €	d €	→ d	EKEXV -	→ AHU		
H1	H1 ±10	H2	±30	105	105	H4		
n1	110	H3	±30	H5	±15	H4	- 15	

	Total piping length [m]				
Model	a ↔ b	$a \leftrightarrow b + b \leftrightarrow d$			
	L1	L1+L2+L3+L4+L5+L6+L7			
	30	115			
	25	120			
VRV4-i 5HP	20	125			
VKV4-I SHP	15	130			
	10	135			
	5	140			
VRV4-i 8HP	-	300			



Notes 1. VRV4-i-5HP:

If the equivalent pipe length between the heat exchanger unit and the furthest indoor unit is 250m, 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).

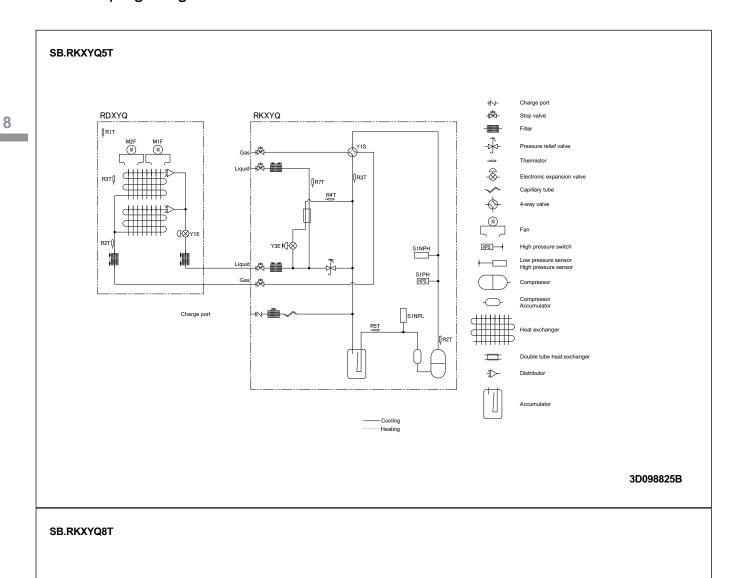
VRV4-38HP:

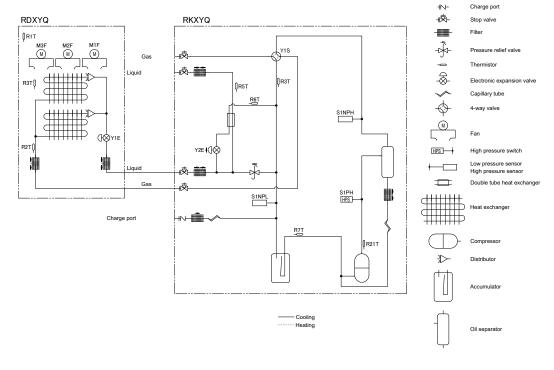
If the equivalent pipe length between the heat exchanger unit and the furthest indoor unit is 290m, it is recommended to increase the size of the main gas pipe (between compressor unit and first refrigerant branch kit if the recommended gas pipe (with increased size) is not available, you must use the 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 ≥50m, you MUST increase the size of the main liquid pipe (between compressor unit and first refrigerant branch kit)

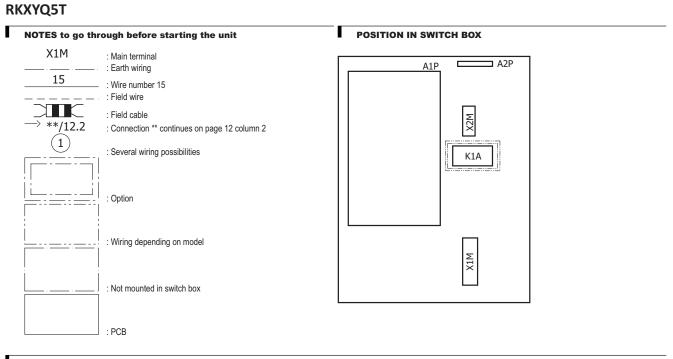
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8 - 1





Wiring diagramsWiring Diagrams - Single Phase 9 - 1



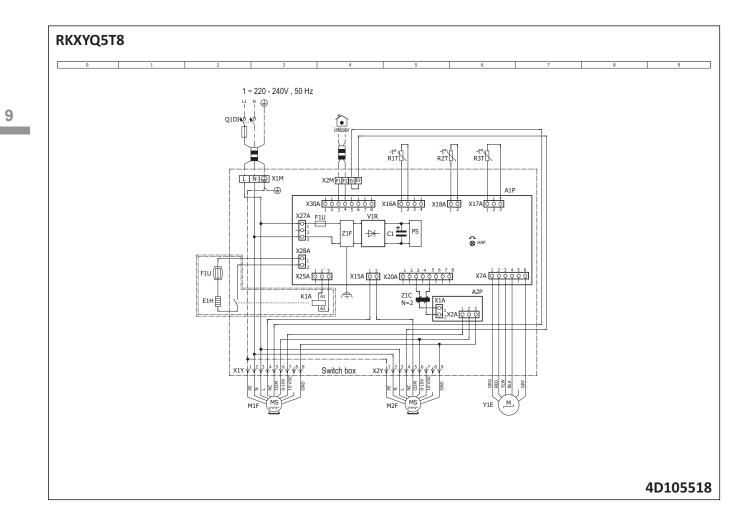
LEGEND

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	*	auxilary 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

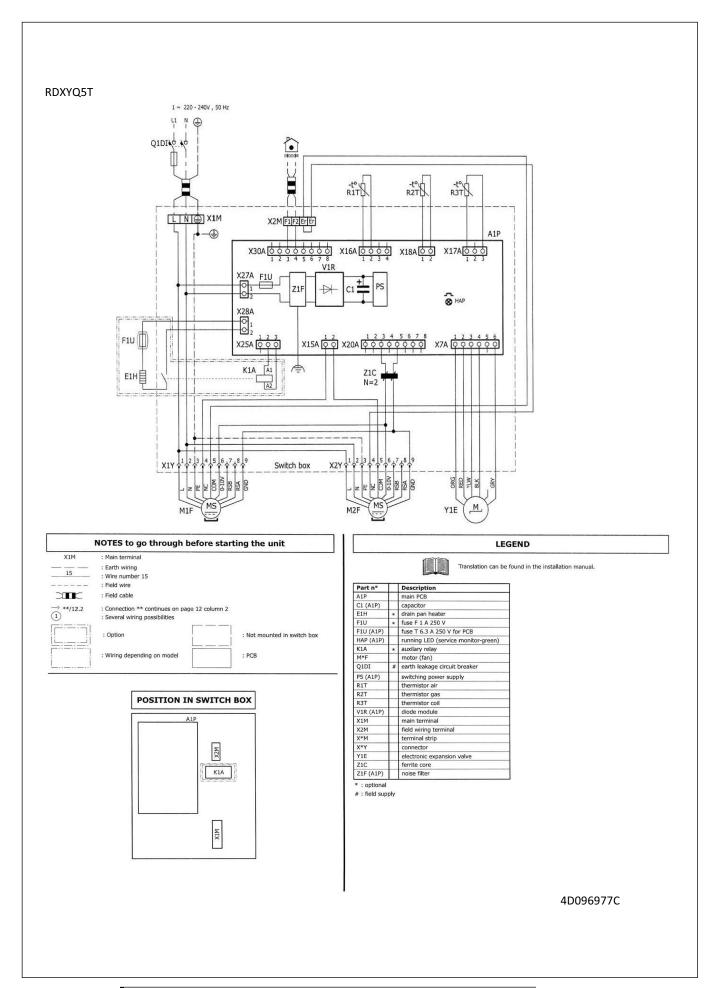
: field supply

Wiring diagramsWiring Diagrams - Single Phase 9 - 1



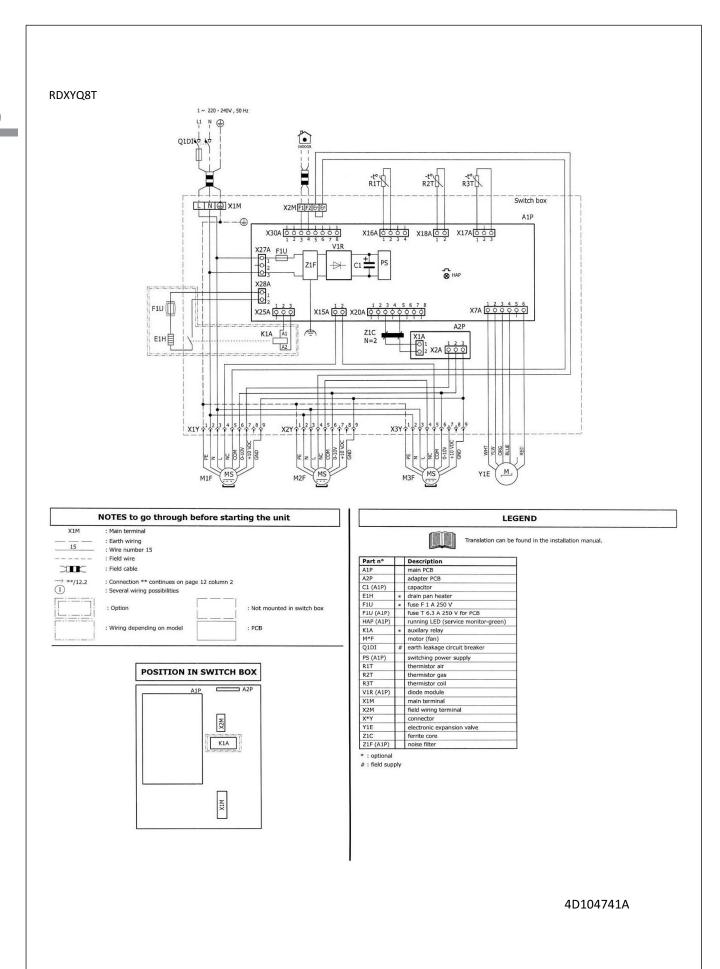
9 Wiring diagrams

9 - 1 Wiring Diagrams - Single Phase



9 Wiring diagrams

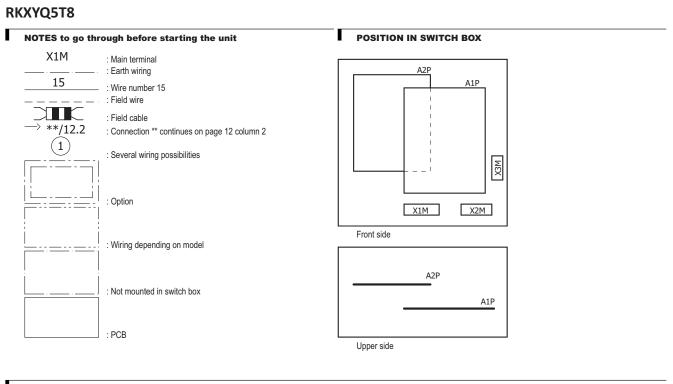
9 - 1 Wiring Diagrams - Single Phase



9

9 9 - 2

Wiring diagramsWiring Diagrams - Three Phase



LEGEND

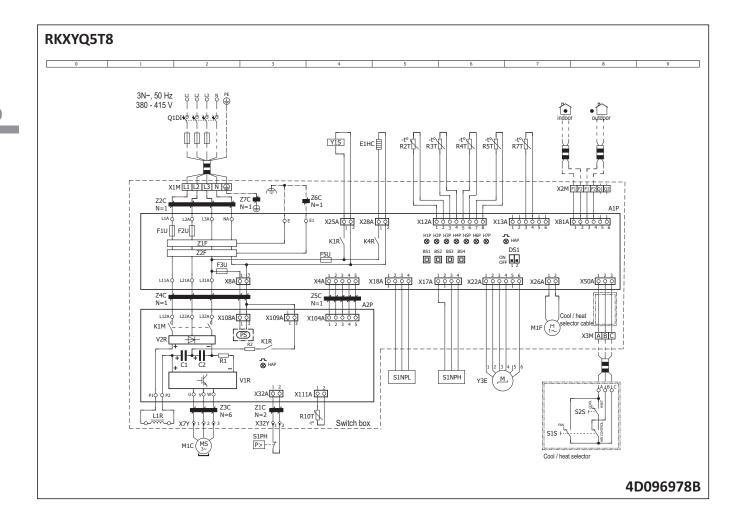
R2T

thermistor (discharge)

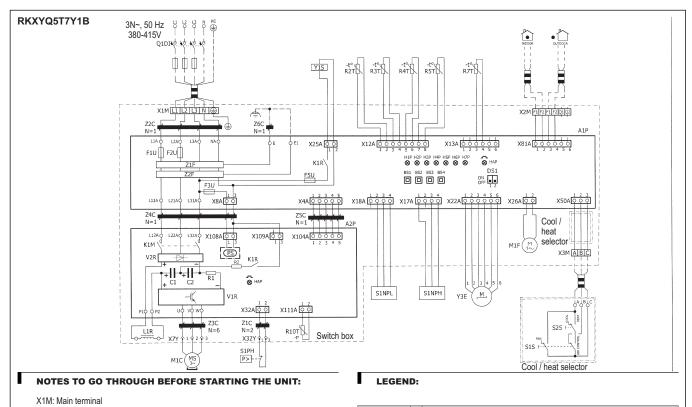
Part n°	Description	Part n°	Description
A1P	main PCB	R3T	thermistor (suction accumulatior)
A2P	inverter PCB (INV)	R4T	thermistor (subcool HE gas)
BS* (A1P)	push button	R5T	thermistor (suction compressor)
C* (A2P)	capacitor	R7T	thermistor (liquid)
DS1 (A1P)	dipswitch	R10T	thermistor (fin)
E1HC	crankcase 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	solenoïd 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	* : optional	
R* (A2P)	resistor	# : field suppl	y

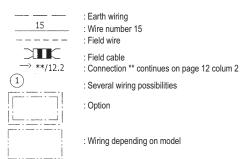
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Wiring diagramsWiring Diagrams - Three Phase 9 - 2



Wiring diagrams Wiring Diagrams - Three Phase 9 - 2

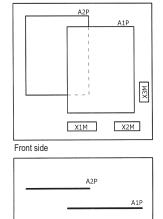




: Not mounted in switch box

POSITION IN SWITCH BOX:

: PCB



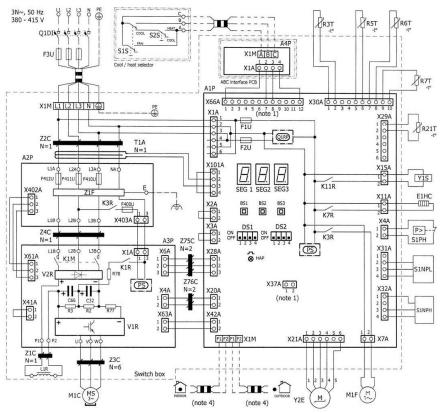
Upper side

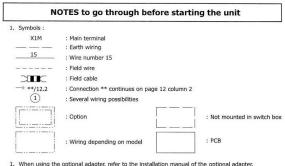
Part n°	TTC	Description
A1P		Main PCB
A2P	Hi	nverter PCB (INV)
BS* (A1P)		Push button
C* (A2P)		Capacitor
DS1 (A1P)		Dipswitch
F1U (A1P)	T IF	Fuse (T, 31.5A, 250V) for PCB
F2U (A1P)		Fuse (T, 31.5A, 250V) for PCB
F3U (A1P)	F	Fuse (T, 6.3A, 250V) for PCB
F5U (A1P)	F	Fuse (T, 6.3A, 250V) for PCB
H*P (A1P)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

^{*:} Optional #: Field supply

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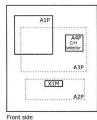


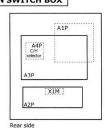




- 2. Refer to the installation or service manual on how to use BS1 \sim BS3 push buttons and DS1 \sim DS2 DIP switches.
- 3. Do not operate the unit by short-circuiting protection device (S1PH).
- For connection to indoor-outdoor transmission F1-F2 wiring, outdoor outdoor transmission F1-F2, refer to "service manual".

POSITION IN SWITCH BOX





LEGEND

Translation can be found in the installation manual.

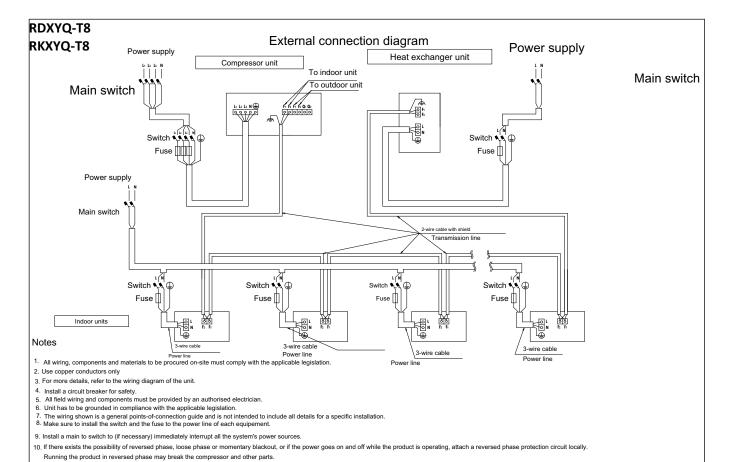
Part n°		Description	Part nº		Description
A1P		main PCB	R5T		thermistor (su
A2P		noise filter PCB	R6T		thermistor (he
A3P		inverter PCB	R7T		thermistor (su
A4P		cool/heat selector PCB	R* (A3P)		resistor
BS* (A1P)		push buttons	S1NPH		high pressure
		(mode , set, return)	S1NPL		low pressure s
C* (A3P)		capacitors	S1PH		high pressure
DS* (A1P)		dipswitch	S1S	*	air control swi
E1HC		crankcase heater	S2S	*	cool / heat sw
F*U (A1P)		fuse T 3,15 A 250 V	SEG1 SEG3		7-segment dis
F3U		field fuse	T1A		current sensor
F400U (A2P)		fuse T 6.3 A 250 V	V1R (A3P)		IGBT power m
F410U (A2P)		fuse T 40 A 500 V	V2R (A3P)		diode module
F411U (A2P)		fuse T 40 A 500 V	X37A	*	connector (po
F412U (A2P)		fuse T 40 A 500 V	X66A	*	connector
HAP (A1P)		running LED (service monitor-green)	-		(remote switc
K1M (A3P)		magnetic contactor	X1M		terminal strip
K*R (A*P)		magnetic relay	X*A		PCB connecto
L1R		reactor	X*M (A*P)		terminal strip
M1C		motor (compressor)	X*Y		connector
M1F		motor (fan)	Y2E		electronic exp
PS (A1P,A3P)		power supply	Y*S		solenoïd valve
Q1DI	#	earth leakage circuit breaker	Z*C		noise filter (fe
Q1RP (A1P)		phase reversal detect circuit	Z*F		noise filter
R21T		thermistor (M1C discharge)	* : optional		
R3T		thermistor (accumulator)	# : field supp	olv	

R5T		thermistor (subcool liquid. pipe)
R6T		thermistor (heat exchanger gas pipe)
R7T		thermistor (suction)
R* (A3P)		resistor
S1NPH		high pressure sensor
S1NPL		low pressure sensor
S1PH		high pressure switch (disch)
S1S	*	air control switch
S2S	*	cool / heat switch
SEG1 SEG3		7-segment display
T1A		current sensor
V1R (A3P)		IGBT power module
V2R (A3P)		diode module
X37A	*	connector (power supply for option PCB)
X66A	*	connector (remote switching cool/heat selector)
X1M		terminal strip (power supply)
X*A		PCB connector
X*M (A*P)		terminal strip on PCB
X*Y		connector
Y2E		electronic expansion valve
Y*S		solenoïd valve (4-way valve)
Z*C		noise filter (ferrit core)
Z*F		noise filter

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10 External connection diagrams

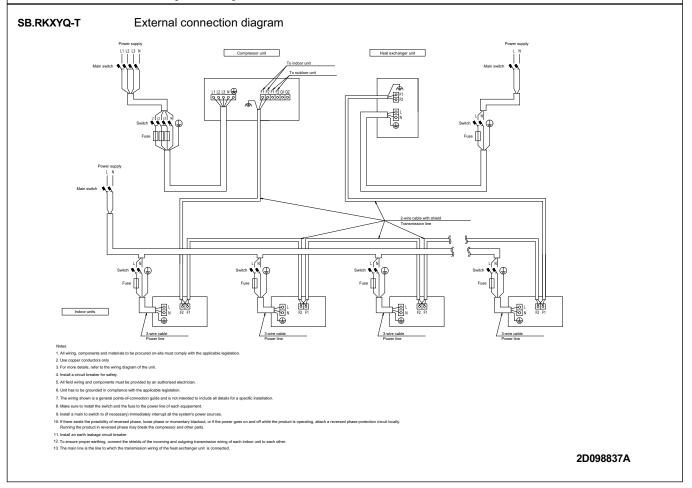
10 - 1 External Connection Diagrams



Install an earth leakage circuit breaker.
 To ensure proper earthing, connect the shields of the incoming and outgoing transmission wiring of each indoor unit to each other.

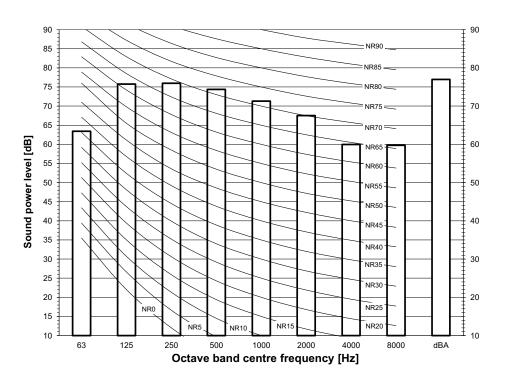
13. The main line is the line to which the transmission wiring of the heat exchanger unit is connected.

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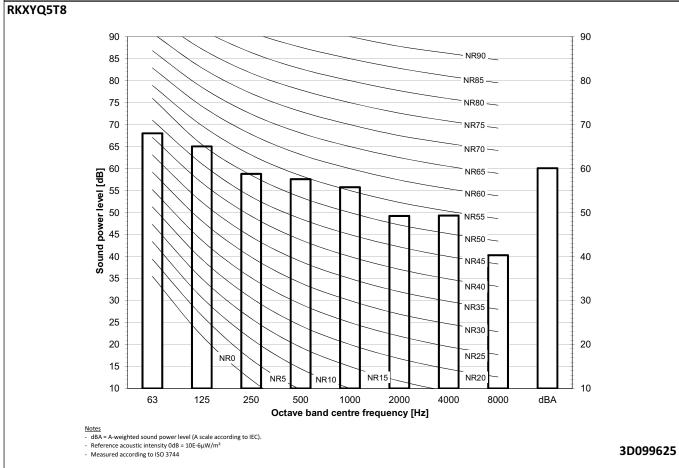
11



Notes

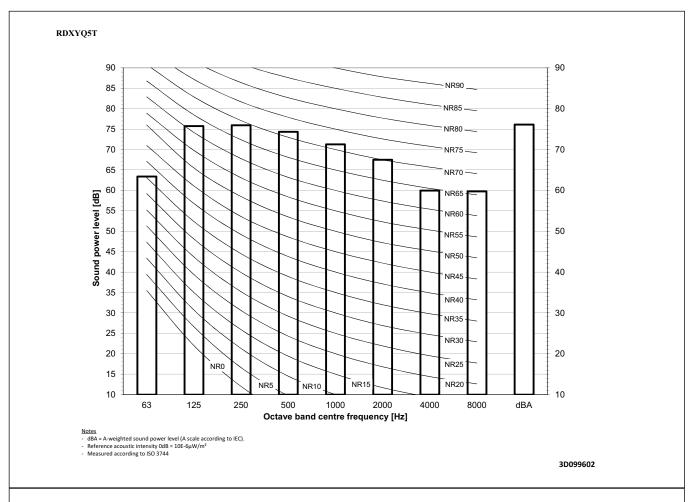
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = $\cdot 10E-6\mu W/m^2 \cdot$
- Measured according to ISO 3744

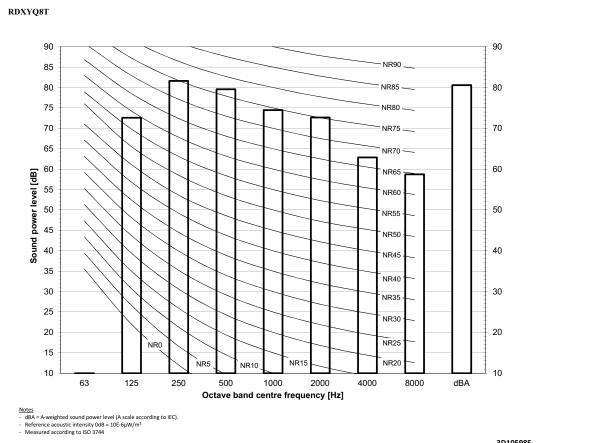
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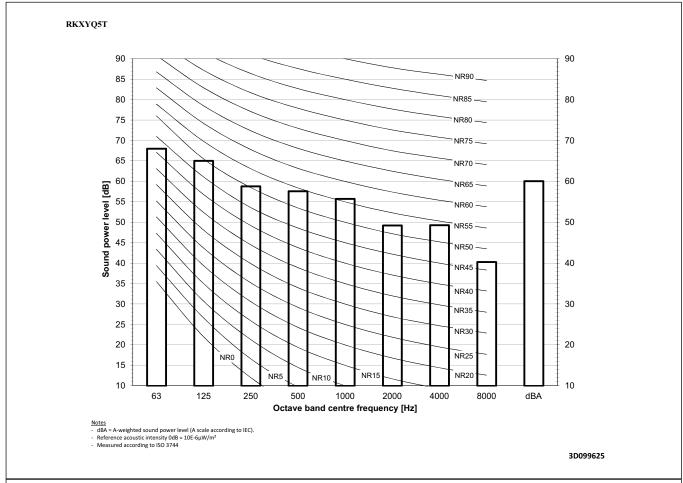


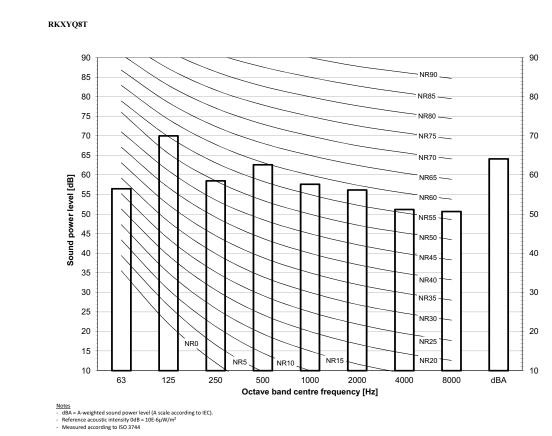
Sound data

11 - 1 Sound Power Spectrum



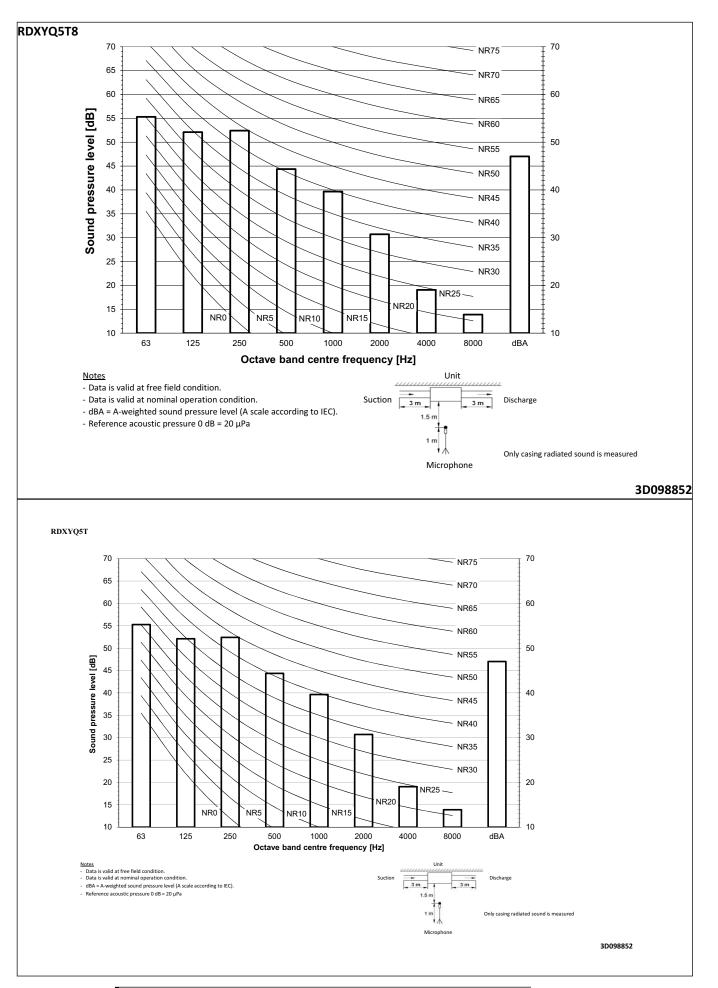


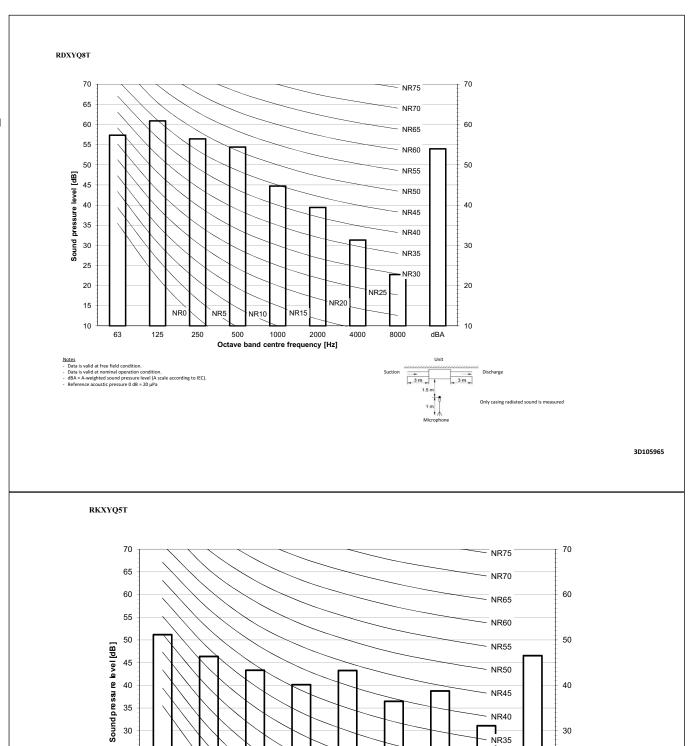


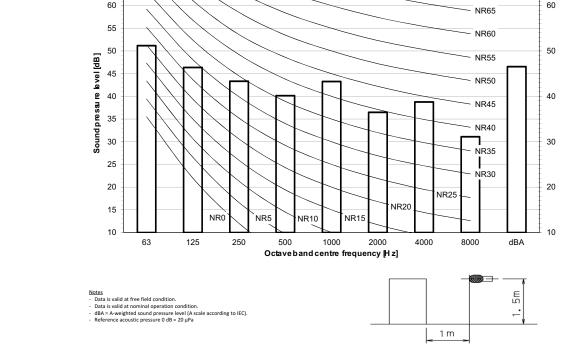


11 Sound data

11 - 2 Sound Pressure Spectrum

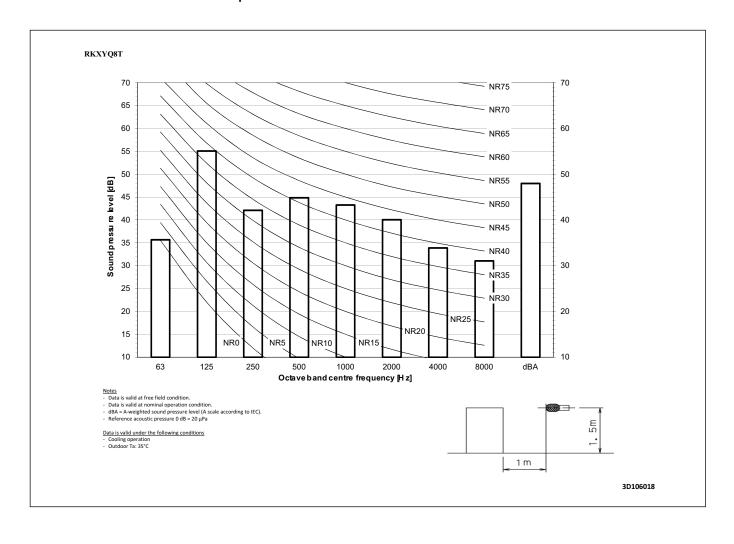






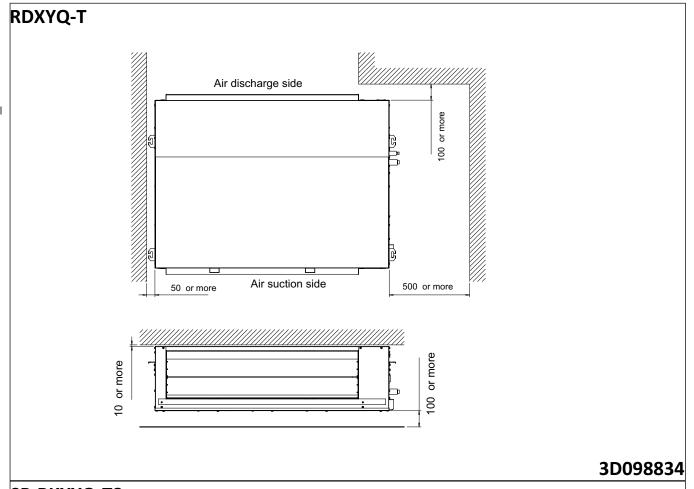
11 Sound data

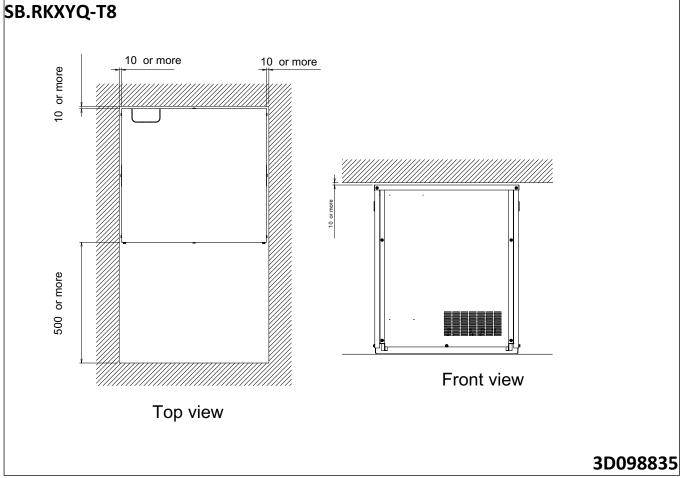
11 - 2 Sound Pressure Spectrum



12

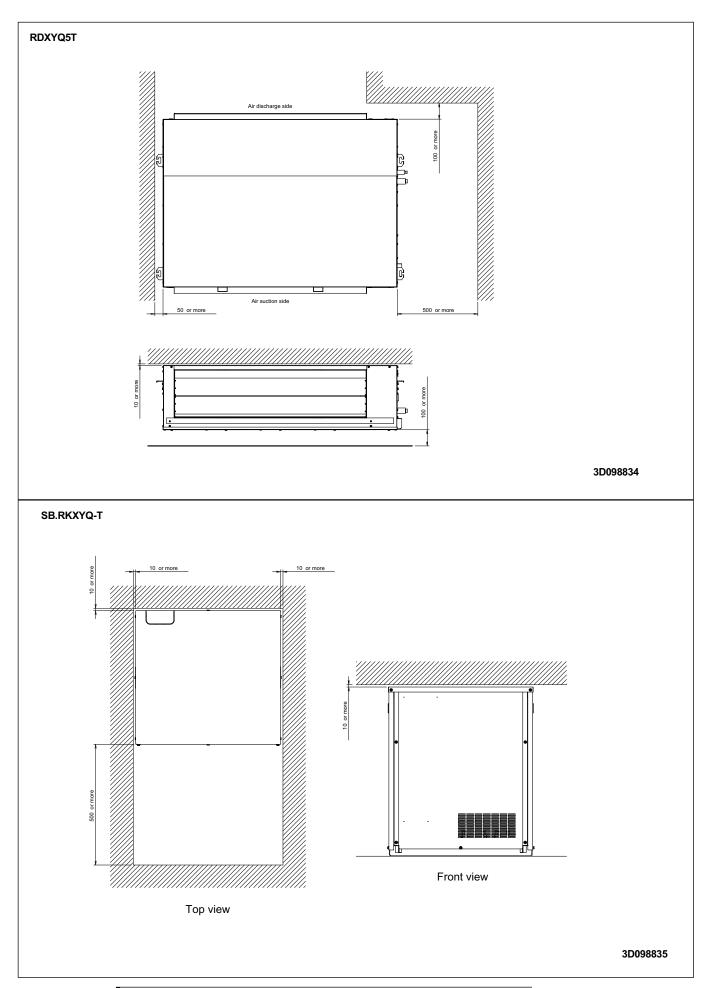
12 - 1 Installation Method





12 Installation

12 - 1 Installation Method



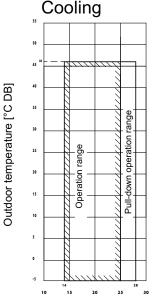
Operation range

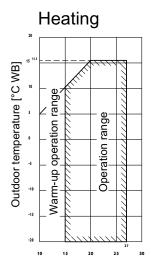
13 - 1 Operation Range

SB.RKXYQ-T8

13

- 1. These figures assume the following operation conditions Equivalent piping length: 10m Level difference: 0m
- 2. Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
- 3. 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.
- 4. If the outdoor temperature can drop below -7° C for more than 24 hours, it is recommended to install drain pan heater kit _____(EKJDPH1RDX)___.





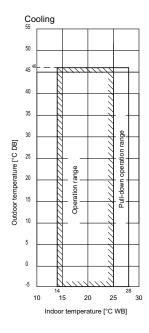
Indoor temperature [°C WB]

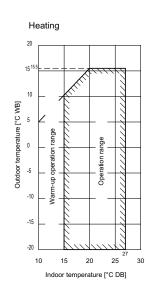
Indoor temperature [°C DB]

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SB.RKXYQ-T

- Notes
 1. These figures assume the following operation conditions
 Equivalent piping length: 10m
 Level difference: 0m
- 2. Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
- 3. 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
- 4. If the outdoor temperature can drop below -7°C for more than 24 hours, it is recommended to install drain pan heater kit _____(EKJDPH1RDX)_





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14

14 Appropriate Indoors

14 - 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

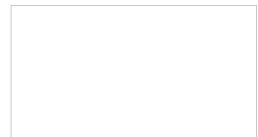
Outside the scope of ·ENER LOT21·

FXLQ20-25-32-40-50-63

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



Daikin Europe N.V. Naamloze Vennootschap - Zandvoordestraat 300, B-8400 Oostende - Belgium - www.daikin.eu - BE 0412 120 336 - RPR Oostende





DEN18





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