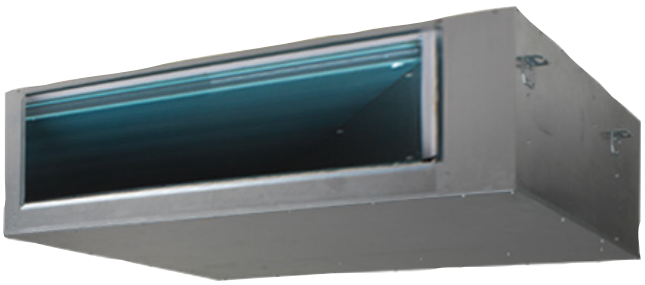
VRV IV heat pump for indoor installation Air Conditioning Technical Data SB.RKXYQ-T / SB.RKXYQ-T8



SB.RKXYQ8T
SB.RKXYQ5T8
RDXYQ8T7V1B
RKXYQ8T7Y1B
RKXYQ5T8Y1B
RDXYQ5T8V1B

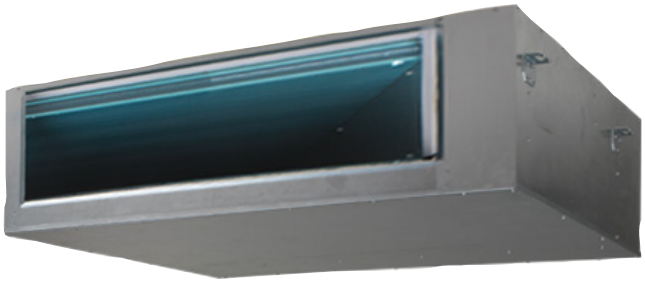
EEDEN22A

TABLE OF CONTENTS
SB.RKXYQ-T / SB.RKXYQ-T8

1 Features

1 - 1 SB.RKXYQ-T

- By choosing this product with LOOP by Daikin you support the reuse of refrigerant
- 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, extented lifetime and immediate service support thanks to failure prediction



INVERTER

Inverter

1 Features
1 - 2 SB.RKXYQ-T8

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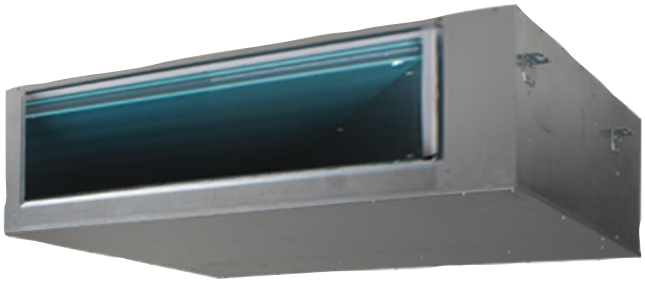

INVERTER
Inverter

2 Specifications

2 - 1 Specifications

Technical specifications System					SB.RKXYQ8T
System	Heat exchanger unit				RDXYQ8T
	Compressor unit				RKXYQ8T
Recommended combination					4 x FXMQ50P7VEB
Recommended combination 2					4 x FXSQ50A2VEB
Cooling capacity	Prated,c			kW	22.4 (1)
Heating capacity	Nom.	6°CWB		kW	22.4 (2)
	Prated,h			kW	12.9
	Max.	6°CWB		kW	25.0 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	kW	6.8 (2)
COP at nom. capacity	6°CWB			kW/kW	3.3
SCOP					3.6
SCOP recommended combination 2					3.5
SEER					4.9
SEER recommended combination 2					4.8
ηs,c				%	191.1
ηs,h				%	140.9
Space cooling	A Condition (35°C - 27/19)	EERd			2.2
		Pdc		kW	22.4
	B Condition (30°C - 27/19)	EERd			3.7
		Pdc		kW	16.5
	C Condition (25°C - 27/19)	EERd			5.5
		Pdc		kW	10.6
	D Condition (20°C - 27/19)	EERd			10.5
		Pdc		kW	6.4
Space cooling recommended combination 2	A Condition (35°C - 27/19)	EERd			2.1
		Pdc		kW	22.4
	B Condition (30°C - 27/19)	EERd			3.7
		Pdc		kW	16.5
	C Condition (25°C - 27/19)	EERd			5.6
		Pdc		kW	10.6
	D Condition (20°C - 27/19)	EERd			10.7
		Pdc		kW	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
Space heating (Average climate)	TOL	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
Space heating (Average climate) recommended combination 2	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)			5.9
		Pdh (declared heating cap)		kW	4.9
	D Condition (12°C)	COPd (declared COP)			7.2
		Pdh (declared heating cap)		kW	6.0
	TBivalent	COPd (declared COP)			2.0
		Pdh (declared heating cap)		kW	12.9
		Tbiv (bivalent temperature)		°C	-10.0
Capacity range				HP	8
Maximum number of connectable indoor units					17 (3)

2 Specifications

2 - 1 Specifications

Technical specifications System					SB.RKXYQ8T
Indoor index connection	Min.				100.0
	Max.				260.0
Heat exchanger	Air flow rate	Cooling	Rated	m^3/h	6,000
		Heating	Rated	m^3/h	6,000
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 casing	Cooling	Max.	%	80
		Heating	Max.	%	50
Sound power level	Cooling	Nom.		dBA	81.0 (4)
Refrigerant	Type				R-410A
	GWP				2,087.5
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 (5)
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 mode	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
		02			Fan driver overload protector
		03			Inverter overload protector
		04			PC board fuse
		05			Earth leakage detector

Electrical specifications System					SB.RKXYQ8T
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling		-
		Combination B	Cooling		-
	Zmax	List			No requirements
	Minimum Ssc value			kVa	3,329 (6)

2 Specifications

2 - 1 Specifications

Electrical specifications System				SB.RKXYQ8T
Power Performance	Power factor	Combination B	35°C ISO - Full load	-
			46°C ISO - Full load	-

(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)Sound power level is an absolute value that a sound source generates. |
(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |
(6)Refer to refrigerant pipe selection or installation manual |
(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |
(8)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |
(9)In accordance with EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply wih Ssc ≥ minimum Ssc value |
(10)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |
(11)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |
(12)TOCA means the total value of each OC set. |
(13)FLA means the nominal running current of the fan |
(14)Maximum allowable voltage range variation between phases is 2%. |
(15)Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
(16)Sound values are measured in a semi-anechoic room. |
(17)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 |
(18)Ssc: Short-circuit power |
(19)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	Nom.	6°CWB		kW	14.0 (2)
	Prated,h			kW	10.4
	Max.	6°CWB		kW	16.0 (2)
Power input - 50Hz	Heating	Nom.	6°CWB	kW	3.5 (2)
COP at nom. capacity	6°CWB			kW/kW	4.0
SCOP					3.8
SEER					5.1
ηs,c				%	200.1
ηs,h				%	149.3
Space cooling	A Condition (35°C - 27/19)	EERd			2.4
		Pdc		kW	14.0
	B Condition (30°C - 27/19)	EERd			4.0
		Pdc		kW	10.3
	C Condition (25°C - 27/19)	EERd			6.5
		Pdc		kW	6.6
	D Condition (20°C - 27/19)	EERd			9.4
		Pdc		kW	4.8
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 Condition (-7°C)	COPd (declared COP)			2.4
		Pdh (declared heating cap)		kW	9.2
	B Condition (2°C)	COPd (declared COP)			3.3
		Pdh (declared heating cap)		kW	5.6
	C Condition (7°C)	COPd (declared COP)			7.1
		Pdh (declared heating cap)		kW	3.6
	D Condition (12°C)	COPd (declared COP)			5.2
		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
Heat exchanger	Air flow rate	Cooling	Rated	m^3/h	3,300
		Heating	Rated	m^3/h	3,300
Fan	External static pressure	Max.		Pa	150
		Nom.		Pa	60

2 Specifications

2 - 1 Specifications

Technical specifications System					SB.RKXYQ5T8
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 casing	Cooling	Max.	%	80
		Heating	Max.	%	50
Sound power level	Cooling	Nom.		dBA	77.0 (4)
Refrigerant	Type				R-410A
	GWP				2,087.5
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 (5)
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 mode	Cooling	PCK	kW	0.000
		Heating	PCK	kW	0.055
	Off mode	Cooling	POFF	kW	0.045
		Heating	POFF	kW	0.055
Power consumption in other than active mode	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
		02			Fan driver overload protector
		03			Inverter overload protector
		04			PC board fuse

Electrical specifications System				SB.RKXYQ5T8
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	-
		Combination B	Cooling	-
	Zmax	List		No requirements
Power Performance	Power factor	Combination B	35°C ISO - Full load	-
			46°C ISO - Full load	-
Wiring connections - 50Hz	For connection with indoor	Quantity		2
		Remark		F1,F2

(1)Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; 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)Sound power level is an absolute value that a sound source generates. |
(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |
(6)Refer to refrigerant pipe selection or installation manual |

2 Specifications

2 - 1 Specifications

(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |
(8)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |
(9)In accordance with EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply wih Ssc ≥ minimum Ssc value |
(10)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |
(11)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |
(12)TOCA means the total value of each OC set. |
(13)FLA means the nominal running current of the fan |
(14)Maximum allowable voltage range variation between phases is 2%. |
(15)Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
(16)Sound values are measured in a semi-anechoic room. |
(17)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 |
(18)Ssc: Short-circuit power |
(19)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 article1.2 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 plate
Heat exchanger	Type				Cross fin coil
	Indoor side				Air
	Outdoor side				Air
	Air flow rate	Cooling	Rated	m^3/h	6,000
		Heating	Rated	m^3/h	6,000
Fan	Quantity				3
Fan motor	Quantity				3
Sound power level	Cooling	Nom.		dBA	81.0 (1)
Sound pressure level	Cooling	Nom.		dBA	54.0 (2)
Refrigerant	Type				R-410A
Refrigerant oil	Type				Synthetic (ether) oil 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 (7)
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling		-
		Combination B	Cooling		-
	Starting current (MSC) - remark				See note 8
	Minimum circuit amps (MCA)			A	7.0 (10)
	Maximum fuse amps (MFA)			A	10 (11)
	Total overcurrent amps (TOCA)			A	7.0 (12)
	Full load amps (FLA)	Total		A	6.6 (13)
Power Performance	Power factor	Combination B	35°C ISO - Full load		-
			46°C ISO - Full load		-
Wiring connections - 50Hz	For power supply	Quantity			3G

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

2 Specifications

2 - 1 Specifications

(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |
(6)Refer to refrigerant pipe selection or installation manual |
(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |
(8)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |
(9)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 |
(10)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |
(11)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |
(12)TOCA means the total value of each OC set. |
(13)FLA means the nominal running current of the fan |
(14)Maximum allowable voltage range variation between phases is 2%. |
(15)Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
(16)Sound values are measured in a semi-anechoic room. |
(17)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 |
(18)Ssc: Short-circuit power |
(19)For detailed contents of standard accessories, see installation/operation manual

Technical specifications Module				RKXYQ8T
PED	Category			Category II
	Most critical part	Name		Accumulator
		Ps*V	Bar*l	245
Dimensions	Unit	Height	mm	701
		Width	mm	760
		Depth	mm	554
	Packed unit	Height	mm	825
		Width	mm	890
		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			Hermetically sealed scroll compressor
	Crankcase heater		W	33
Sound power level	Cooling	Nom.	dBA	64.0 (1)
Sound pressure level	Cooling	Nom.	dBA	48.0 (2)
Refrigerant	Type			R-410A
	GWP			2,087.5
	Charge		kg	4.00
Refrigerant oil	Type			Synthetic (ether) oil FVC68D

Electrical specifications Module				RKXYQ8T
Power supply	Name			Y1
	Phase			3N~
	Frequency		Hz	50
	Voltage		V	380-415
Voltage range	Min.		%	-10
	Max.		%	10
Current	Nominal running current (RLA)	Cooling	A	8.6 (7)
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	-
		Combination B	Cooling	-
	Starting current (MSC) - remark			See note 8
	Minimum circuit amps (MCA)		A	17.4 (10)
	Maximum fuse amps (MFA)		A	20 (11)
	Total overcurrent amps (TOCA)		A	17.4 (12)
Power Performance	Power factor	Combination B	35°C ISO - Full load	-
			46°C ISO - Full load	-
Wiring connections - 50Hz	For power supply	Quantity		5G
	For connection with indoor	Quantity		2
		Remark		F1,F2

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

2 Specifications

2 - 1 Specifications

(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)Sound power level is an absolute value that a sound source generates. |
(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |
(6)Refer to refrigerant pipe selection or installation manual |
(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |
(8)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |
(9)In accordance with EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply wih Ssc ≥ minimum Ssc value |
(10)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |
(11)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |
(12)TOCA means the total value of each OC set. |
(13)FLA means the nominal running current of the fan |
(14)Maximum allowable voltage range variation between phases is 2%. |
(15)Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
(16)Sound values are measured in a semi-anechoic room. |
(17)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 |
(18)Ssc: Short-circuit power |
(19)For detailed contents of standard accessories, see installation/operation manual

Technical specifications Module				RKXYQ5T8
PED	Category			Category I
	Most critical part	Name		Compressor
		Ps*V	Bar*l	167
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
Packing	Material			Carton
	Weight		kg	2.1
Packing 2	Material			Wood
	Weight		kg	6.9
Packing 3	Material			Plastic
	Weight		kg	0.3
Casing	Colour			Daikin White
	Material			Painted galvanized steel plate
Compressor	Quantity			1
	Type			Hermetically sealed swing compressor
	Crankcase heater		W	33
Sound power level	Cooling	Nom.	dBA	60.0 (1)
Sound pressure level	Cooling	Nom.	dBA	47.0 (2)
Refrigerant	Type			R-410A
	GWP			2,087.5
	Charge		kg	2.00
Refrigerant oil	Type			Synthetic (ether) oil FVC50K

Electrical specifications Module				RKXYQ5T8
Power supply	Name			Y1
	Phase			3N~
	Frequency		Hz	50
	Voltage		V	380-415
Voltage range	Min.		%	-10
	Max.		%	10
Current	Nominal running current (RLA)	Cooling	A	5.8 (7)
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling	-
		Combination B	Cooling	-
	Starting current (MSC) - remark			See note 8
	Minimum circuit amps (MCA)		A	13.5 (10)
	Maximum fuse amps (MFA)		A	16 (11)
	Total overcurrent amps (TOCA)		A	13.5 (12)
Power Performance	Power factor	Combination B	35°C ISO - Full load	-
			46°C ISO - Full load	-
Wiring connections - 50Hz	For power supply	Quantity		5G

(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%). |

2 Specifications

2 - 1 Specifications

(4)Sound power level is an absolute value that a sound source generates. |
(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |
(6)Refer to refrigerant pipe selection or installation manual |
(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |
(8)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |
(9)In accordance with EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply wih Ssc ≥ minimum Ssc value |
(10)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |
(11)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |
(12)TOCA means the total value of each OC set. |
(13)FLA means the nominal running current of the fan |
(14)Maximum allowable voltage range variation between phases is 2%. |
(15)Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
(16)Sound values are measured in a semi-anechoic room. |
(17)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 |
(18)Ssc: Short-circuit power |
(19)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 article1.2 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	m^3/h	3,300
		Heating	Rated	m^3/h	3,300
Fan	Quantity				2
Fan motor	Quantity				2
Sound power level	Cooling	Nom.		dBA	77.0 (1)
Sound pressure level	Cooling	Nom.		dBA	47.0 (2)
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 (7)
Current - 50Hz	Nominal running current (RLA)	Combination A	Cooling		-
		Combination B	Cooling		-
	Starting current (MSC) - remark				See note 8
	Minimum circuit amps (MCA)			A	4.6 (10)
	Maximum fuse amps (MFA)			A	10 (11)
	Total overcurrent amps (TOCA)			A	4.6 (12)
	Full load amps (FLA)	Total		A	4.4 (13)
Power Performance	Power factor	Combination B	35°C ISO - Full load		-
			46°C ISO - Full load		-
Wiring connections - 50Hz	For power supply	Quantity			3G

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

2 Specifications

2 - 1 Specifications

(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)Sound power level is an absolute value that a sound source generates. |
(5)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings. |
(6)Refer to refrigerant pipe selection or installation manual |
(7)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB |
(8)MSC means the maximum current during start up of the compressor. This unit uses only inverter compressors. Starting current is always ≤ max. running current. |
(9)In accordance with EN/IEC 61000-3-12, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply wih Ssc ≥ minimum Ssc value |
(10)MCA must be used to select the correct field wiring size. The MCA can be regarded as the maximum running current. |
(11)MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). |
(12)TOCA means the total value of each OC set. |
(13)FLA means the nominal running current of the fan |
(14)Maximum allowable voltage range variation between phases is 2%. |
(15)Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
(16)Sound values are measured in a semi-anechoic room. |
(17)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 |
(18)Ssc: Short-circuit power |
(19)For detailed contents of standard accessories, see installation/operation manual

3 Options
3 - 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.

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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.
- You can access the capacity table viewer here:
  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

5 Capacity tables

5 - 2 Capacity Correction Factor

5

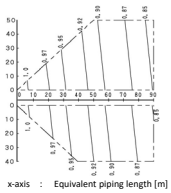
SB.RKXYQ5T8

Page ·3·

VRV4-i

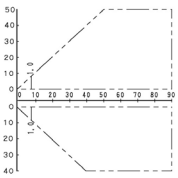
Heat pump

Correction ratio for cooling capacity



x-axis : Equivalent piping length [m]
y-axis : Height difference between compressor unit and furthest indoor unit [m]

Correction ratio for heating capacity



x-axis : Equivalent piping length [m]
y-axis : Height difference between compressor unit and furthest indoor unit [m]

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 it 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).

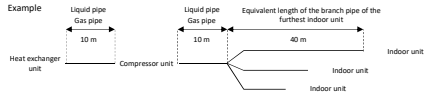
Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
·8· HP	9,5	12,7	19,1	22,2

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

Example



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

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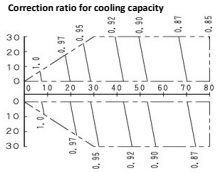
SB.RKXYQ5T8

Page ·2·

VRV4-i

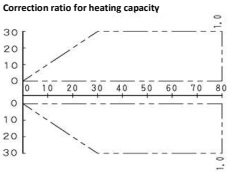
Heat pump

Correction ratio for cooling capacity



x-axis : Equivalent piping length [m]
y-axis : Height difference between compressor unit and furthest indoor unit [m]

Correction ratio for heating capacity



x-axis : Equivalent piping length [m]
y-axis : Height difference between compressor unit and furthest indoor unit [m]

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 it 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).

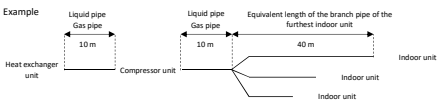
Model	Standard liquid side Ø	Increased liquid side Ø	Standard gas side Ø	Increased gas side Ø
·5· HP	9,5	Not increased	15,9	19,1

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	

Example



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

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5 Capacity tables
5 - 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:

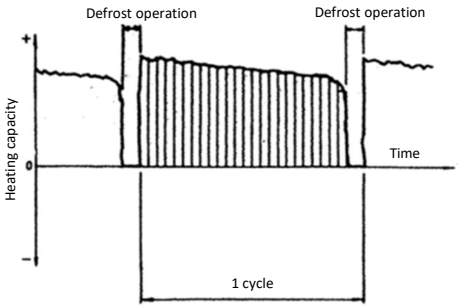
Formula

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

A = B * 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).

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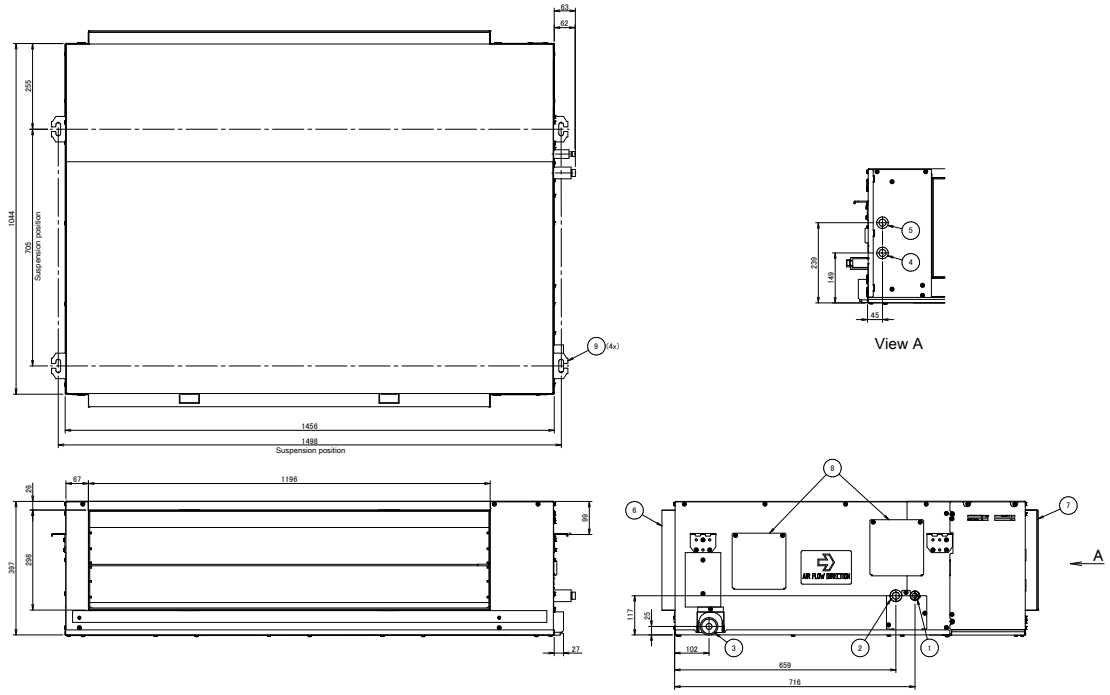
6 Dimensional drawings

6 - 1 Dimensional Drawings

SB.RKXYQ-T



No.	Part name	Remark
9	Hook	
8	Service door	
7	Air discharge side	
6	Air suction side	
5	Wiring intake (low voltage wiring)	Transmission wiring connection
4	Wiring intake (high voltage wiring)	Power supply connection
3	Drain outlet	VP25
2	Gas pipe connection port	Ø 19.1 brazing connection
1	Liquid pipe connection port	Ø 12.7 brazing connection

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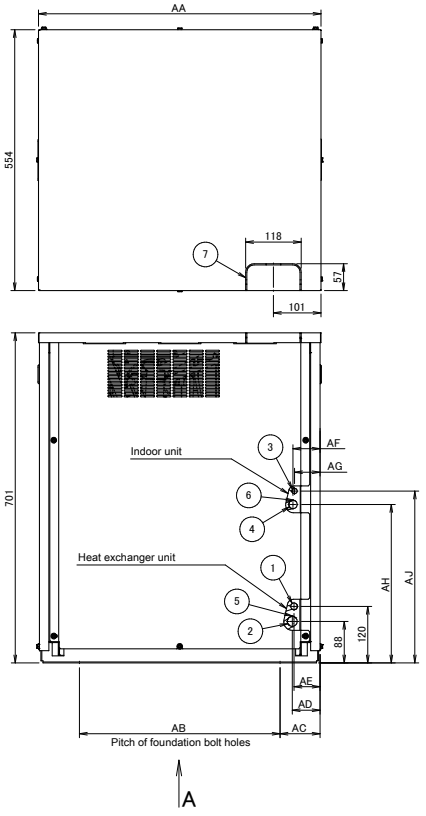
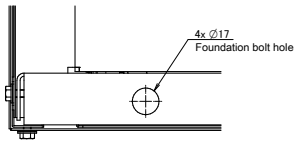
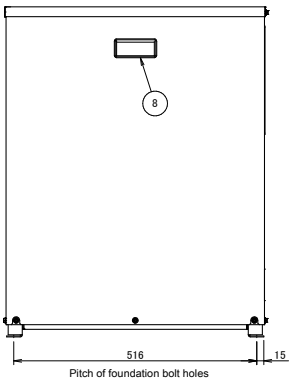
RKXYQ-T





View A

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

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

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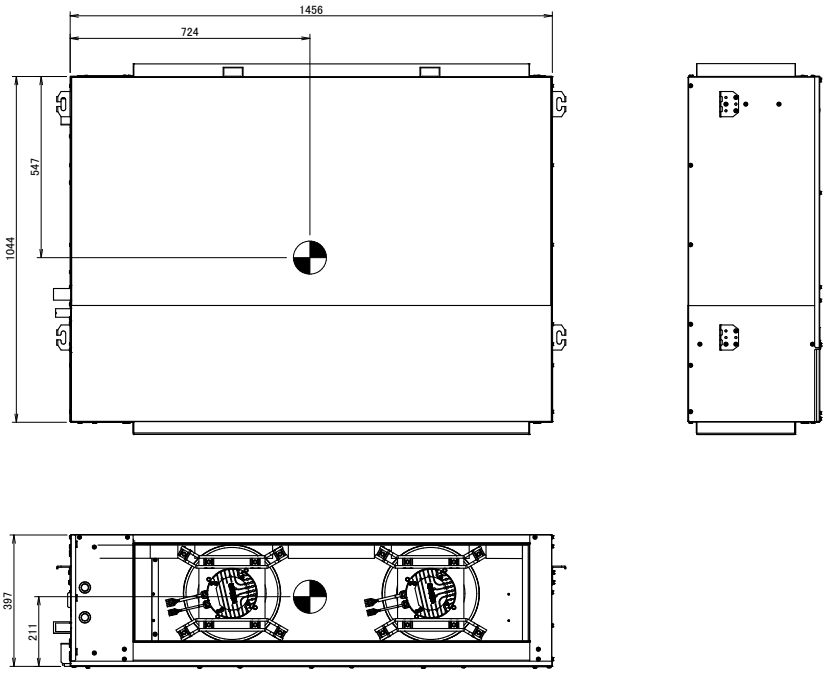
7 Centre of gravity

7 - 1 Centre of Gravity

RDXYQ5T



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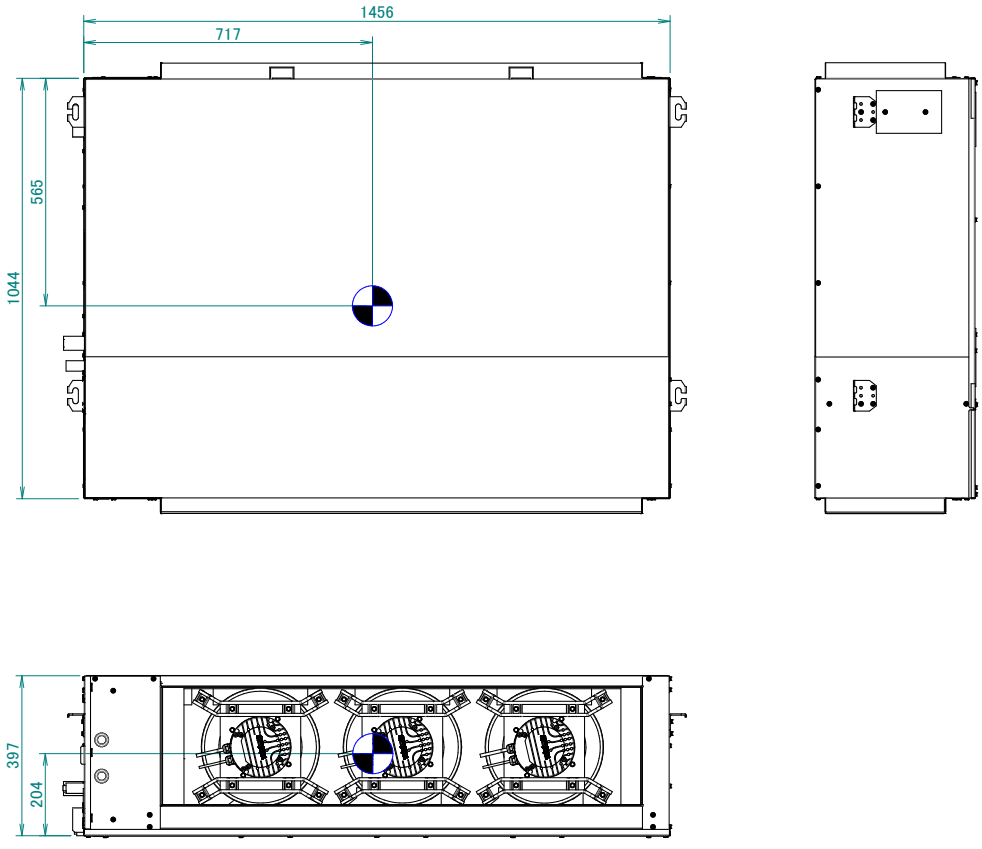
RDXYQ8T



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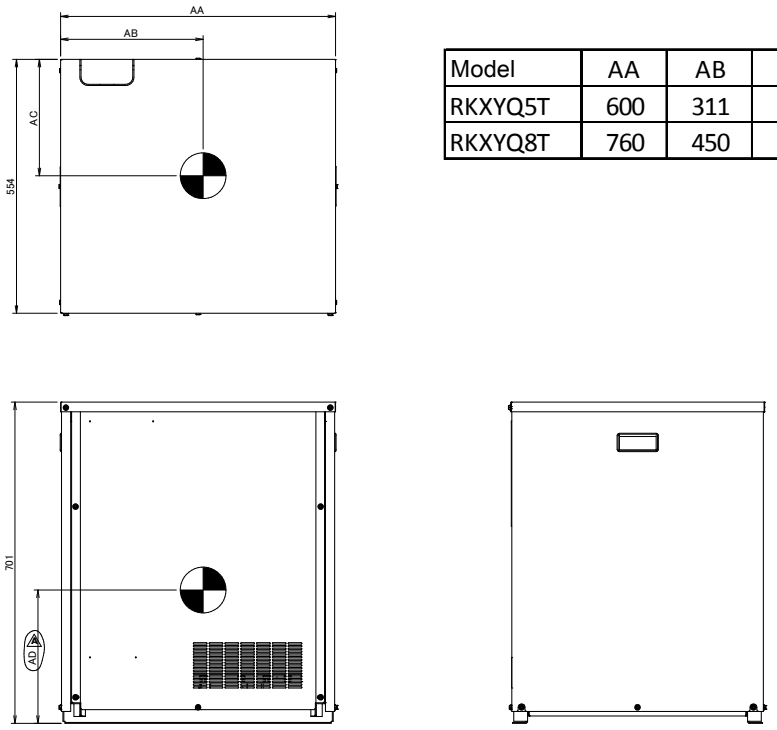
7 Centre of gravity

7 - 1 Centre of Gravity

SB.RKXYQ-T8



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

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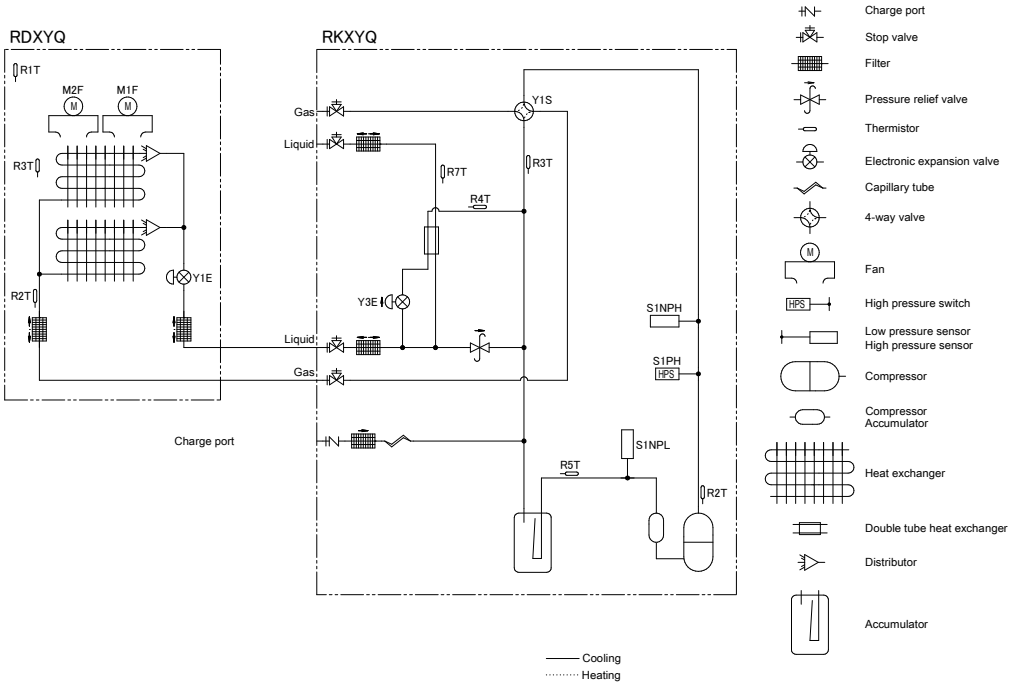
8 Piping diagrams

8 - 1 Piping Diagrams

SB.RKXYQ5T



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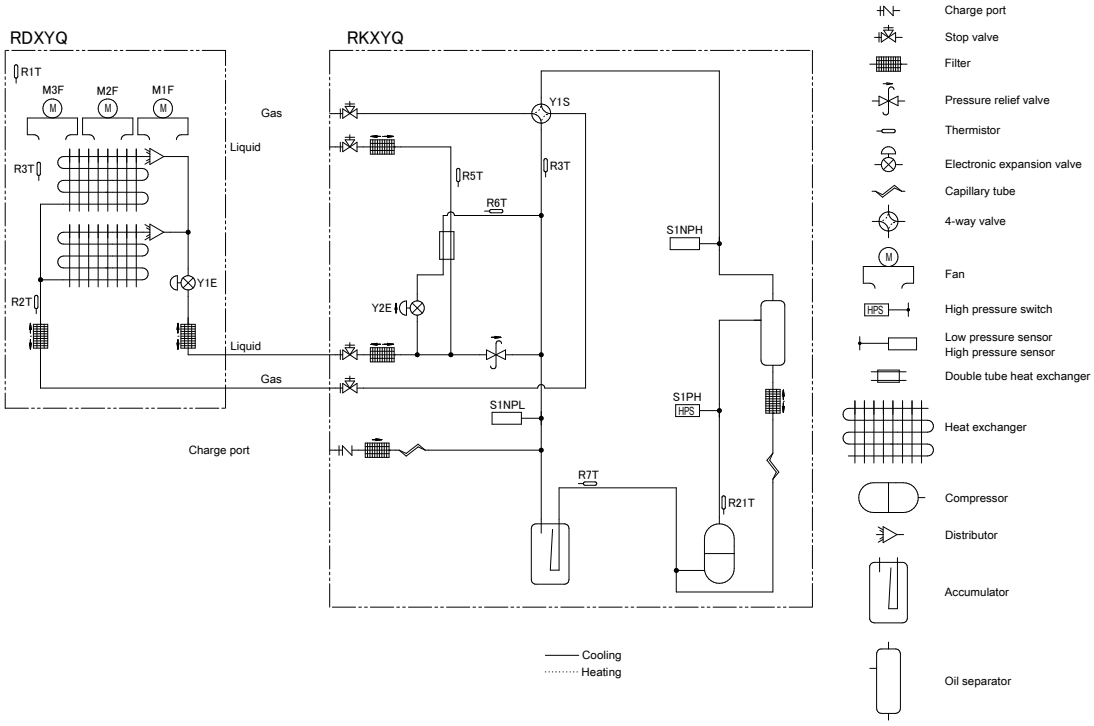
SB.RKXYQ8T

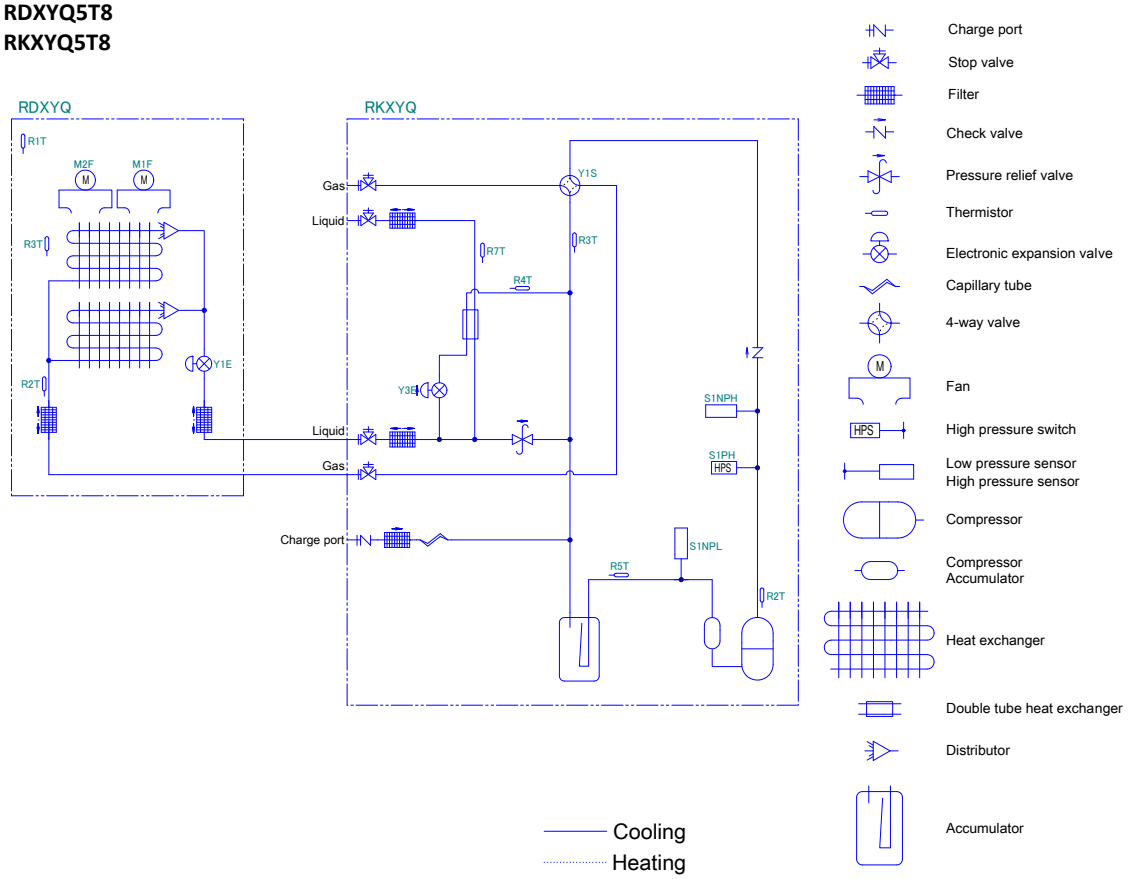


3D104510

8 Piping diagrams

8 - 1 Piping Diagrams

RDXYQ5T8
RKXYQ5T8

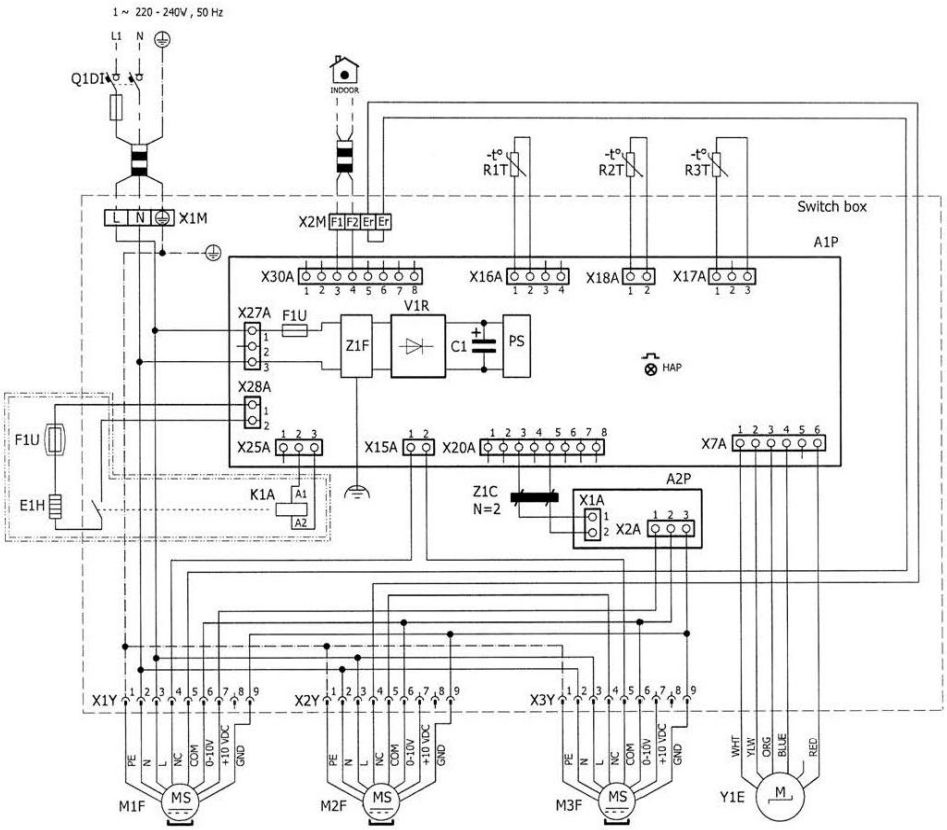


3D110524

9 Wiring diagrams

9 - 1 Wiring Diagrams - Single Phase

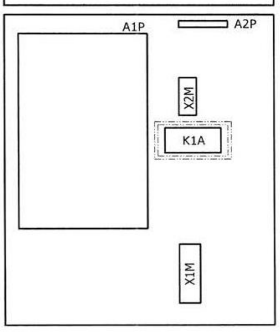
RDXYQ8T



NOTES to go through before starting the unit

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

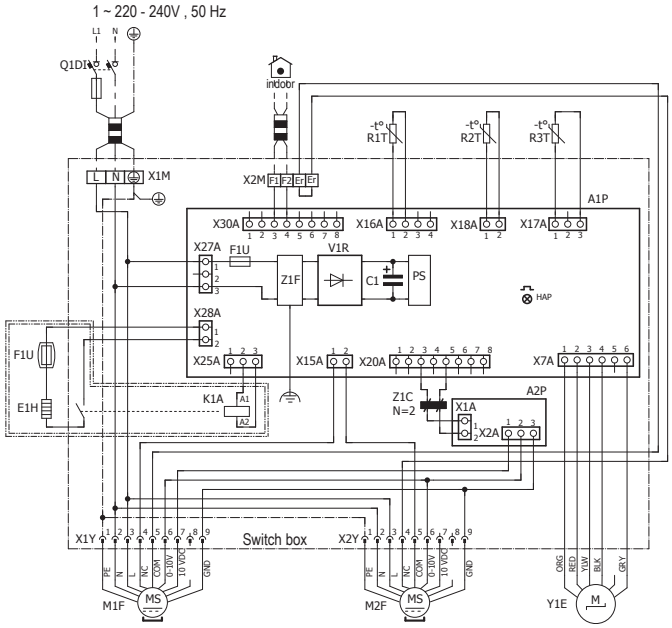
* : optional
\# : field supply

4D104741A

9 Wiring diagrams

9 - 1 Wiring Diagrams - Single Phase

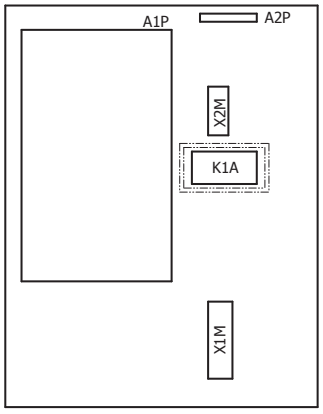
RDXYQ5T8



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	*	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

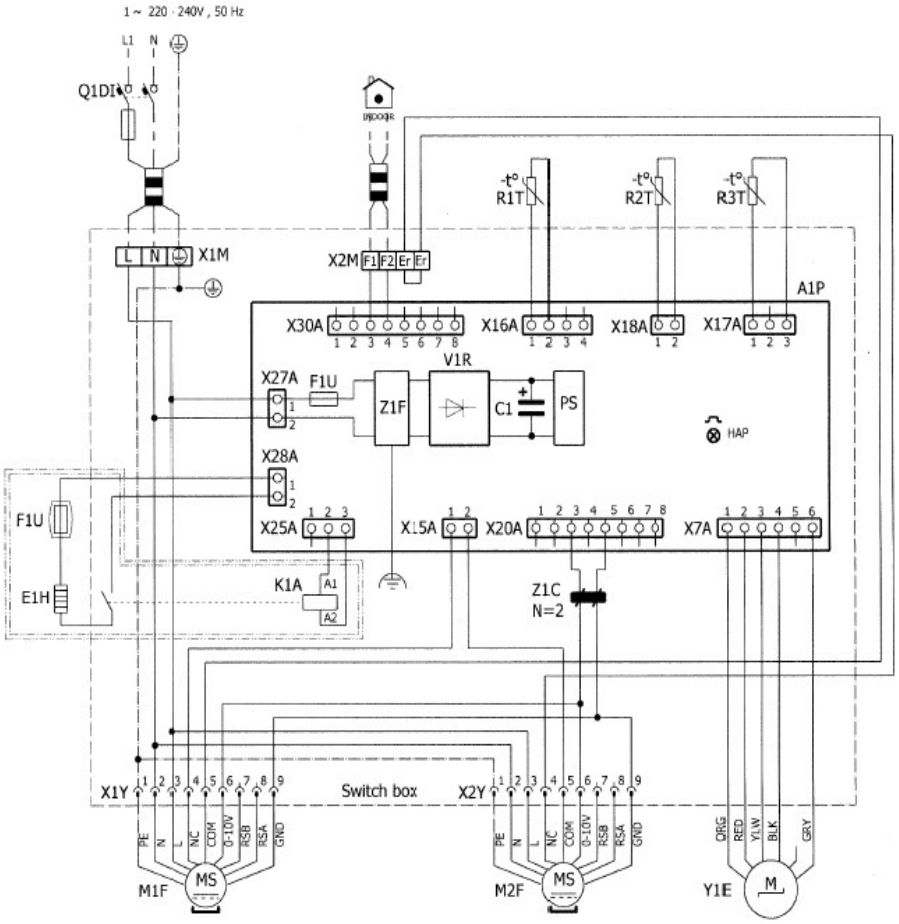
* : optional
\# : field supply

4D105518

9 Wiring diagrams

9 - 1 Wiring Diagrams - Single Phase

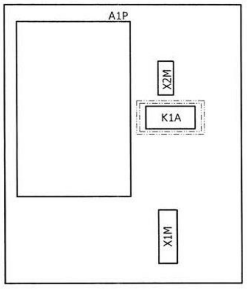
RDXYQ5T



NOTES to go through before starting the unit

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

POSITION IN SWITCH BOX



LEGEND

Translation can be found in the installation manual.

Part n°		Description
A1P		main 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*M		terminal strip
X*Y		connector
Y1E		electronic expansion valve
Z1C		ferrite core
Z1F (A1P)		noise filter

* : optional
# : field supply

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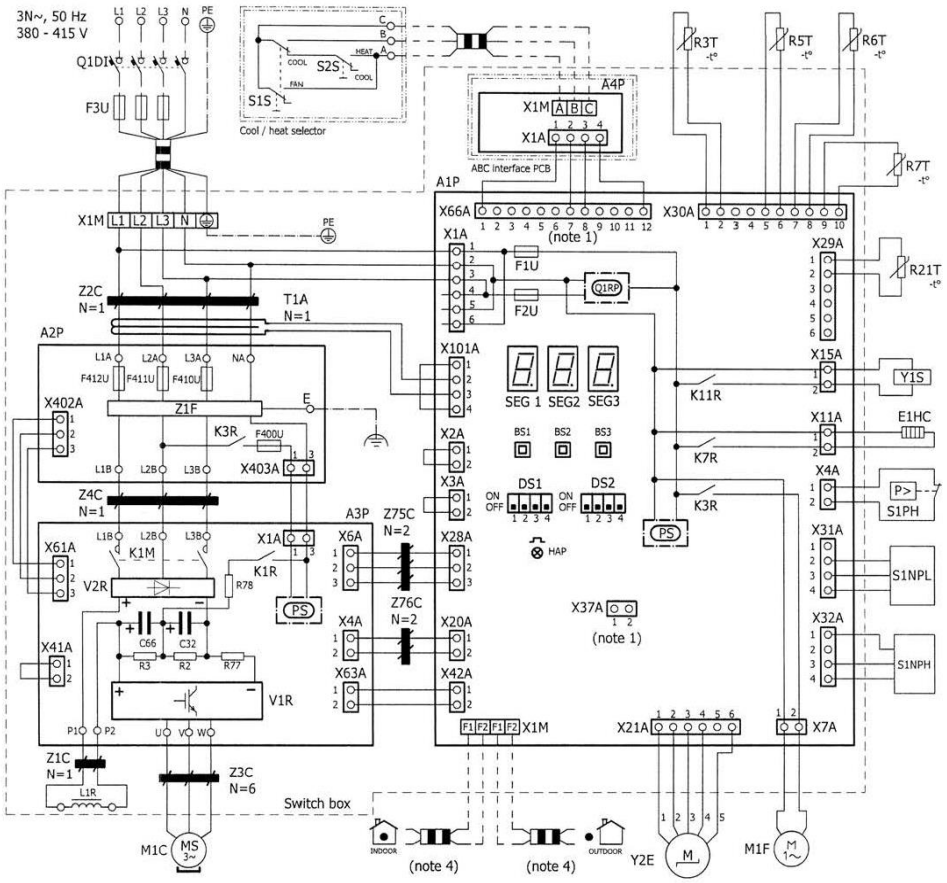
9 Wiring diagrams

9 - 2 Wiring Diagrams - Three Phase

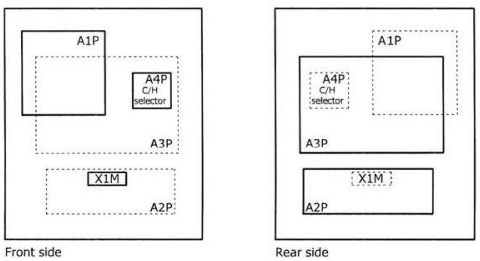
RKXYQ8T



NOTES to go through before starting the unit

1. Symbols :
   - 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
   - : 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
A1P		main PCB
A2P		noise filter PCB
A3P		inverter PCB
A4P		cool/heat selector PCB
BS* (A1P)		push buttons (mode , set, return)
C* (A3P)		capacitors
DS* (A1P)		dipswitch
E1HC		crankcase heater
F*U (A1P)		fuse T 3,15 A 250 V
F3U		field fuse
F400U (A2P)		fuse T 6.3 A 250 V
F410U (A2P)		fuse T 40 A 500 V
F411U (A2P)		fuse T 40 A 500 V
F412U (A2P)		fuse T 40 A 500 V
HAP (A1P)		running LED (service monitor-green)
K1M (A3P)		magnetic contactor
K*R (A*P)		magnetic relay
L1R		reactor
M1C		motor (compressor)
M1F		motor (fan)
PS (A1P,A3P)		power supply
Q1DI	#	earth leakage circuit breaker
Q1RP (A1P)		phase reversal detect circuit
R21T		thermistor (M1C discharge)
R3T		thermistor (accumulator)

Part n°		Description
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

* : optional
\# : field supply

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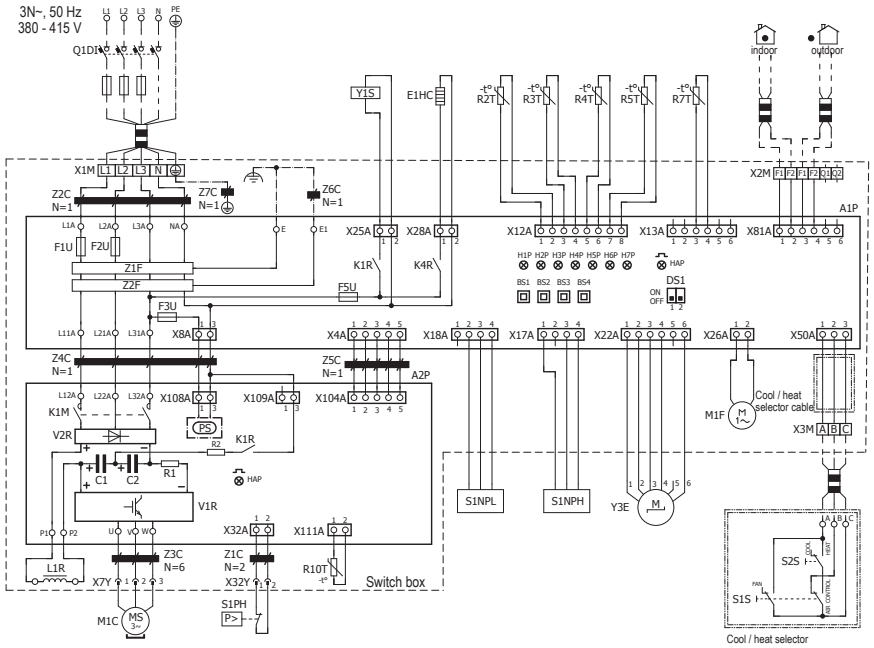
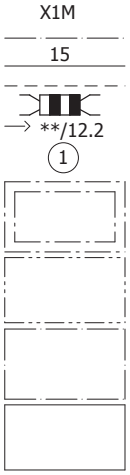
9 Wiring diagrams

9 - 2 Wiring Diagrams - Three Phase

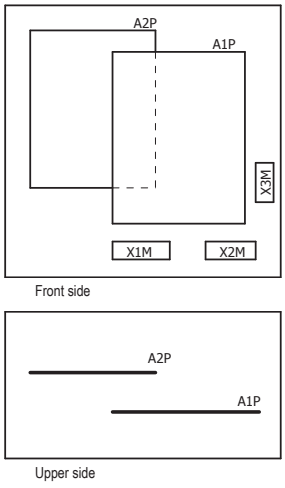
RKXYQ5T8



NOTES to go through before starting the unit



POSITION IN SWITCH BOX



LEGEND

Part n°		Description
A1P		main PCB
A2P		inverter PCB (INV)
BS* (A1P)		push button
C* (A2P)		capacitor
DS1 (A1P)		dipswitch
E1HC		crankcase heater
F1U (A1P)		fuse T 31,5 A 250 V for PCB
F2U (A1P)		fuse T 31,5 A 250 V for PCB
F3U (A1P)		fuse T 6,3 A 250 V for PCB
F5U (A1P)		fuse T 6,3 A 250 V 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
K4R (A1P)		magnetic relay (E1HC)
L1R		reactor
M1C		motor (compressor)
M1F		motor (FAN)
PS (A2P)		switching power supply
Q1DI		earth leakage circuit breaker
R* (A2P)		resistor
R2T		thermistor (discharge)

Part n°		Description
R3T		thermistor (suction accumulation)
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
Y1S		solenoïd valve (4 way valve)
Y3E		electronic expansion valve
Z*C		noise filter (ferrit core)
Z*F (A1P)		noise filter

* : optional
\# : field supply

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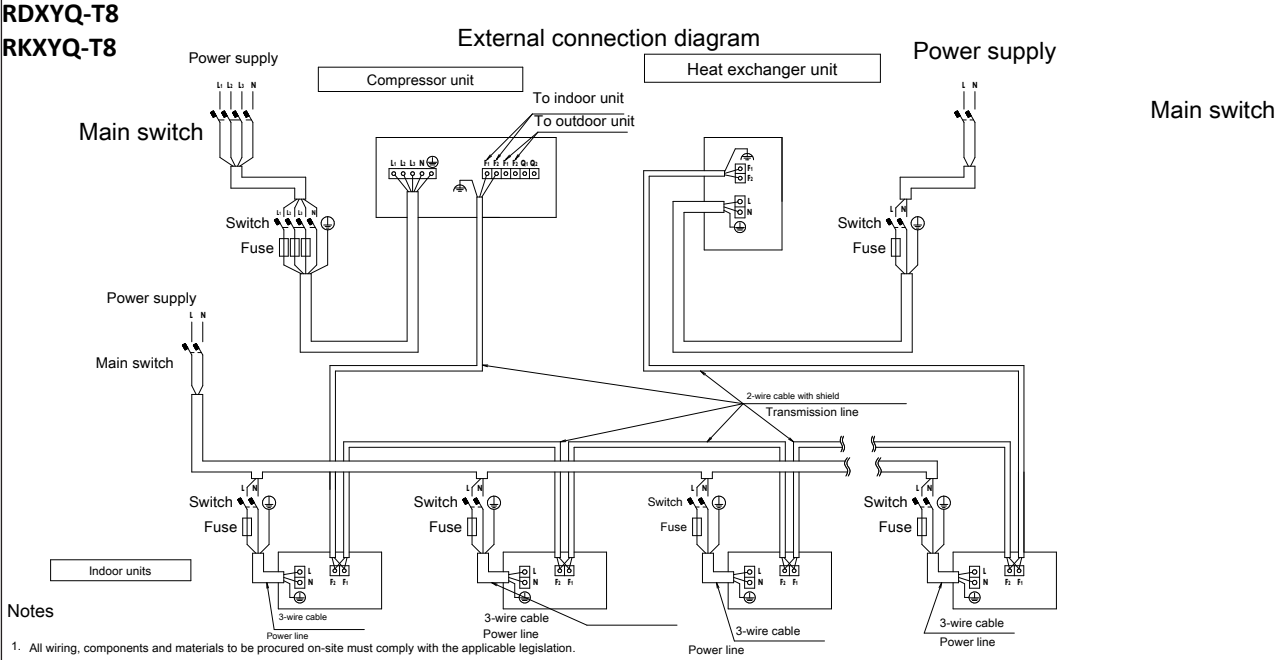
10 External connection diagrams

10 - 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 equipement.
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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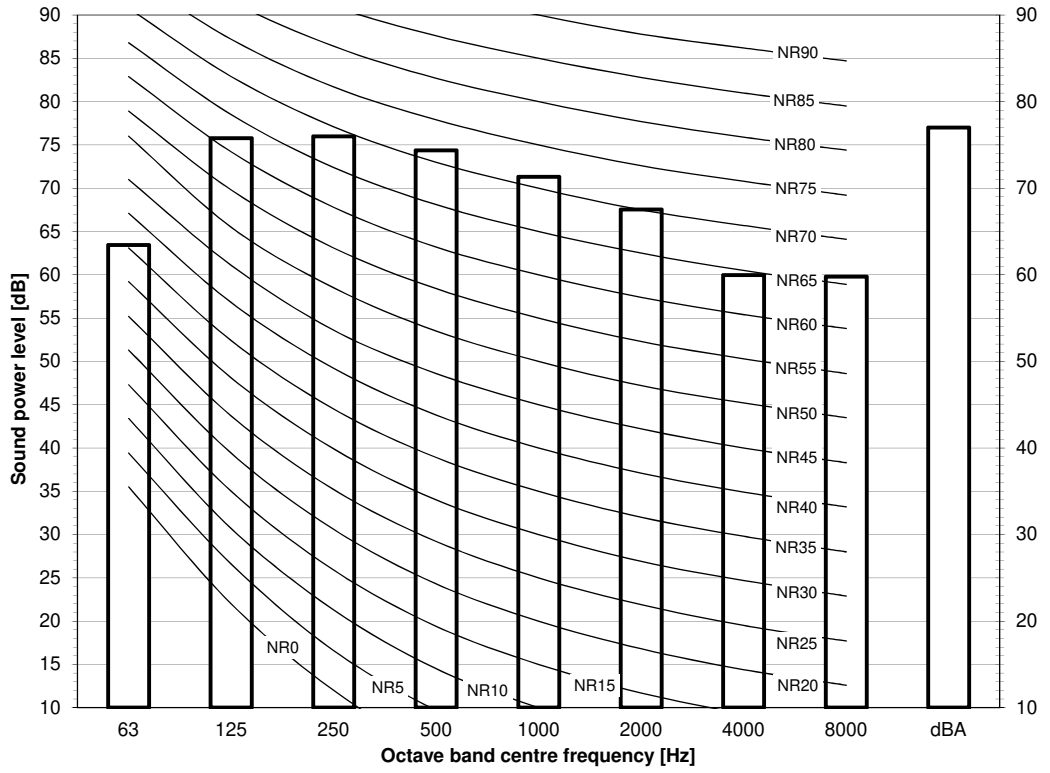
11 Sound data

11 - 1 Sound Power Spectrum

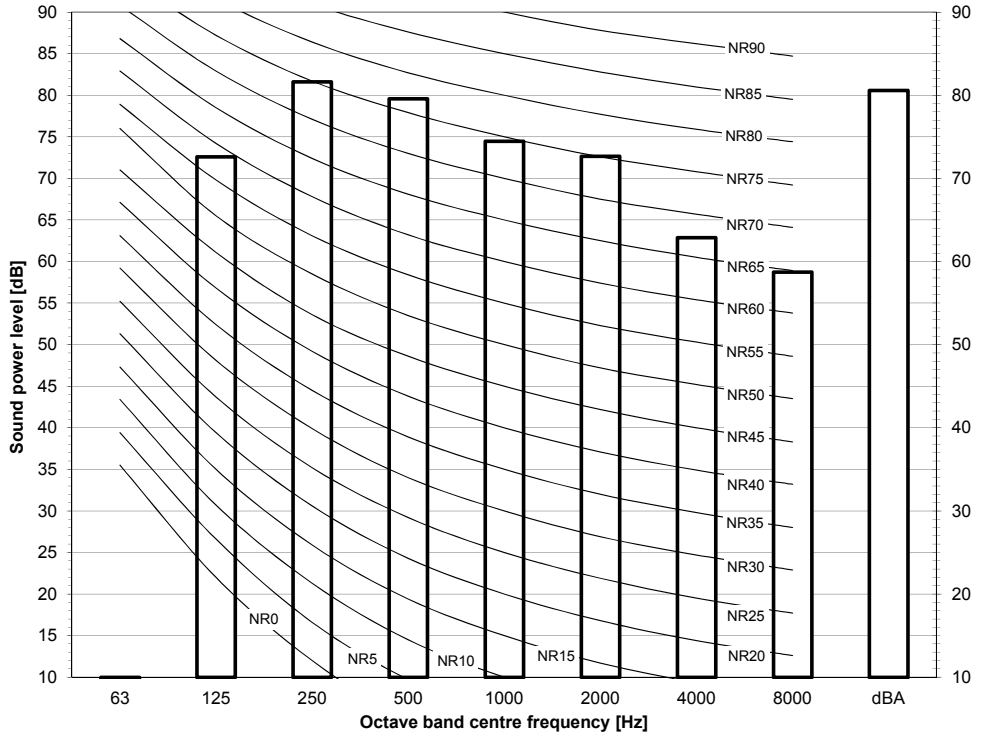
RDXYQ5T8
RDXYQ5T



Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = ·10E-6µW/m²·
- Measured according to ISO 3744

3D099602B

RDXYQ8T



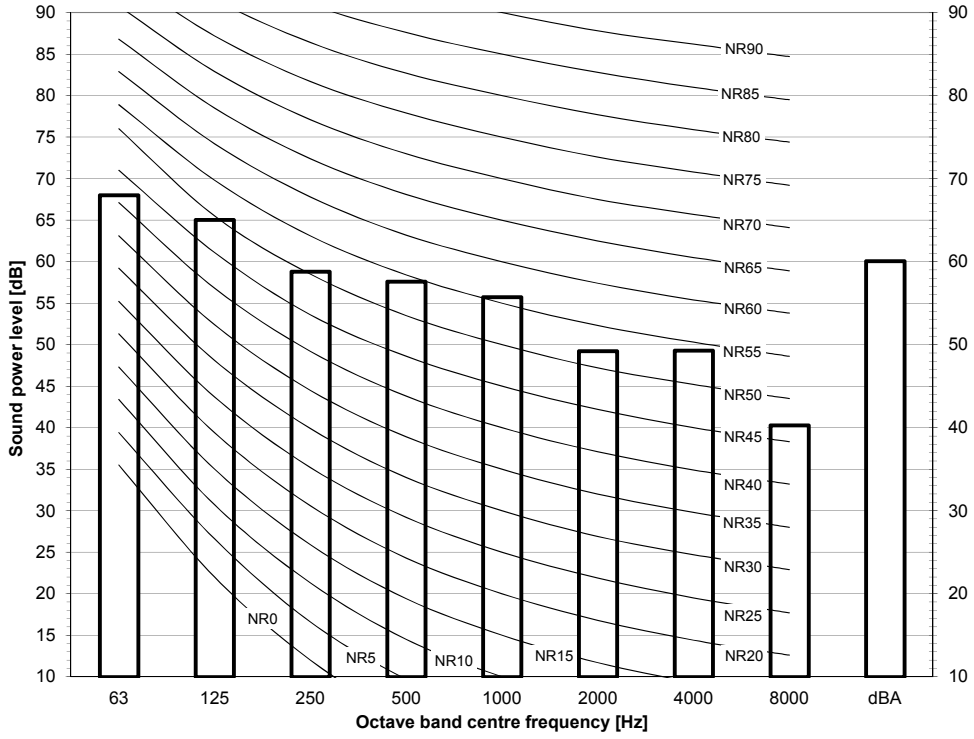
Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10E-6µW/m²
- Measured according to ISO 3744

3D105985

11 Sound data

11 - 1 Sound Power Spectrum

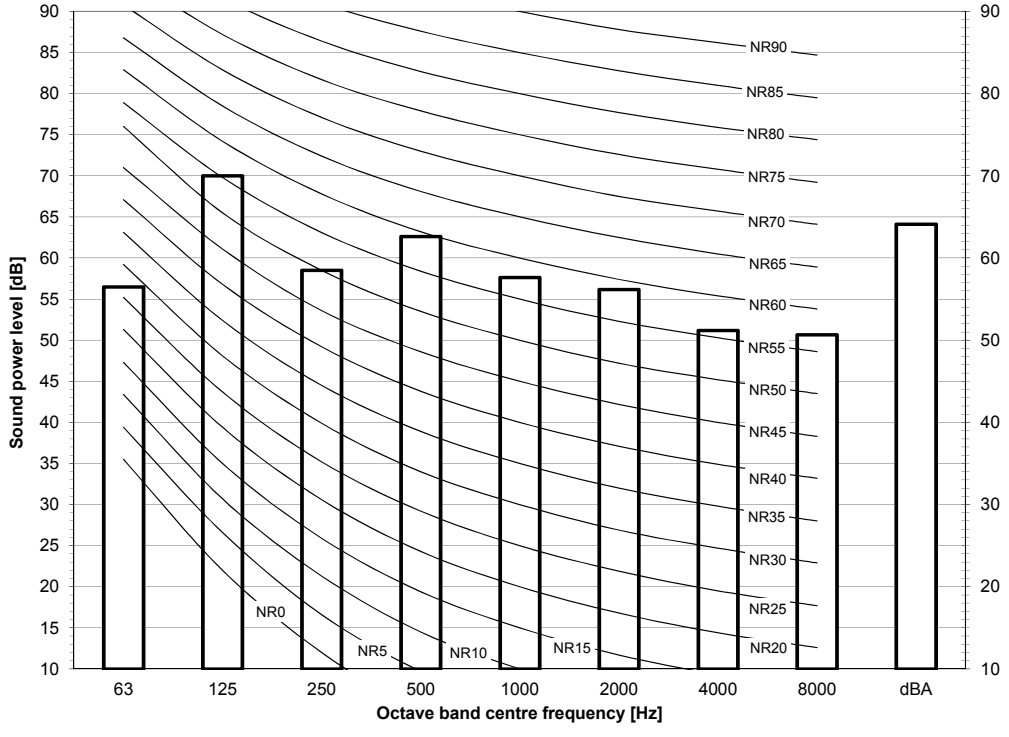
RKXYQ5T



Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10E-6µW/m²
- Measured according to ISO 3744

3D099625

RKXYQ8T



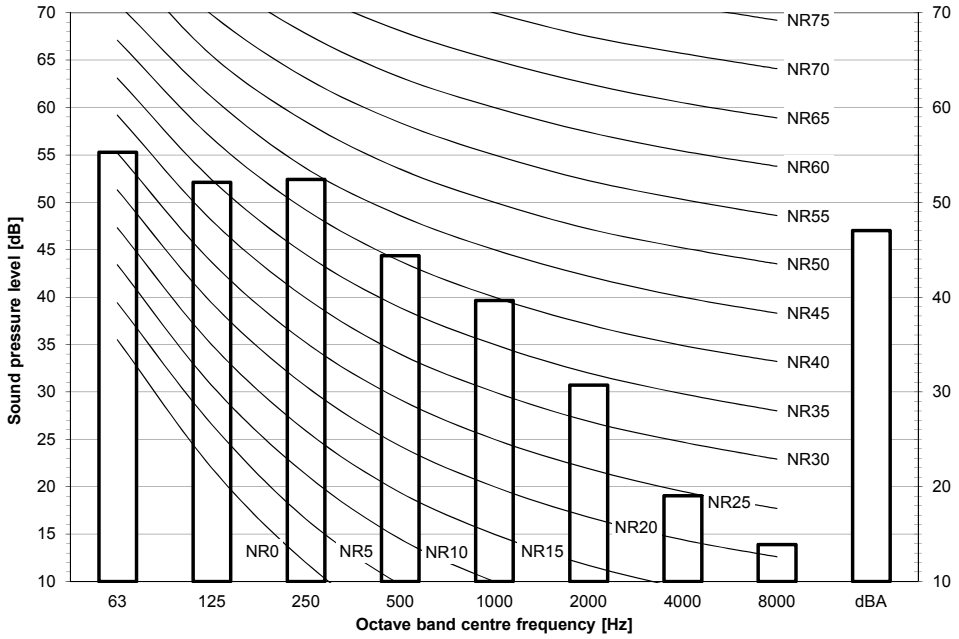
Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10E-6µW/m²
- Measured according to ISO 3744

3D106014

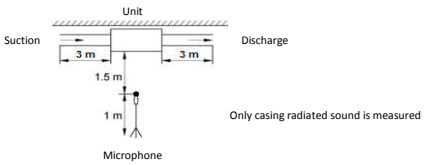
11 Sound data

11 - 2 Sound Pressure Spectrum

RDXYQ5T



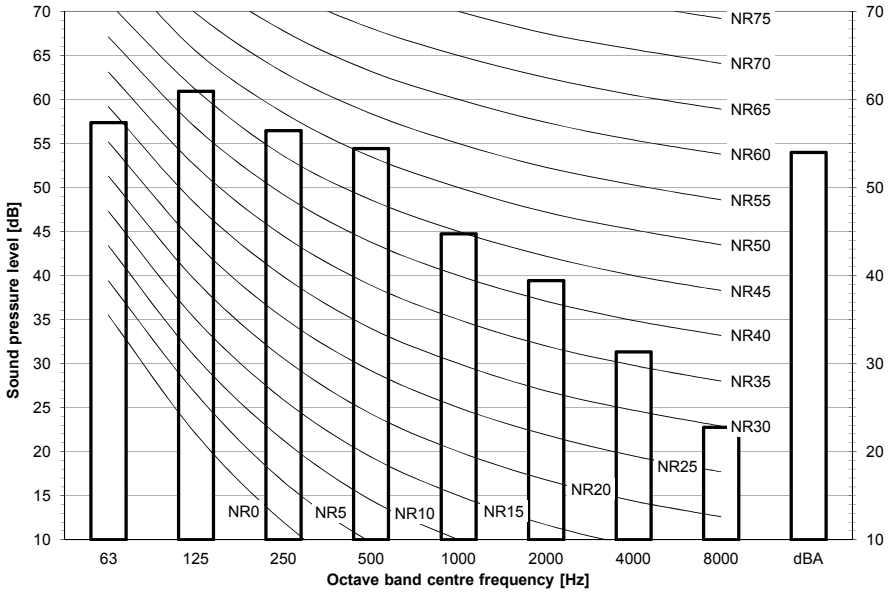
Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa



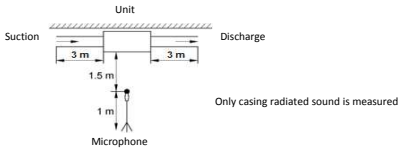
Only casing radiated sound is measured

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 µPa



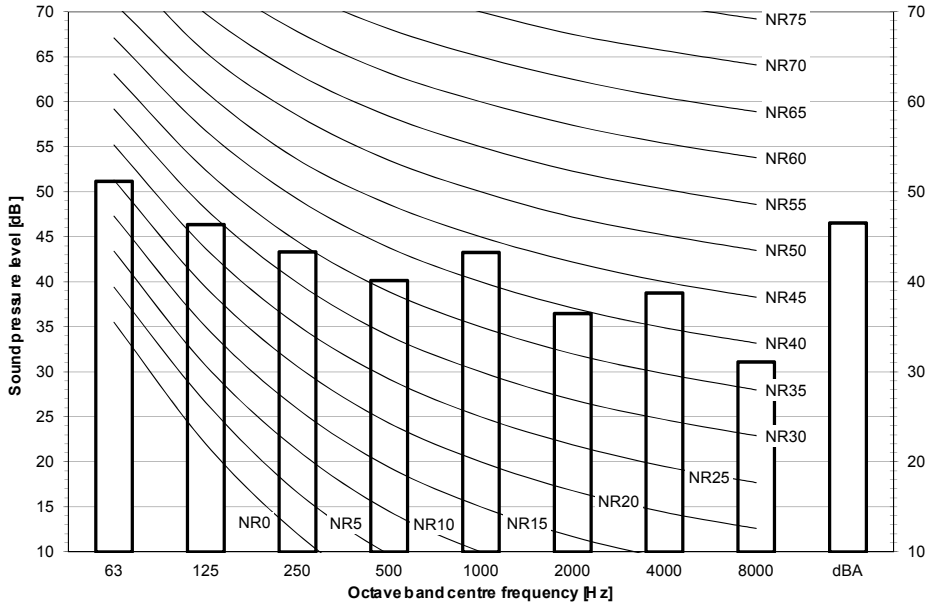
Only casing radiated sound is measured

3D105965

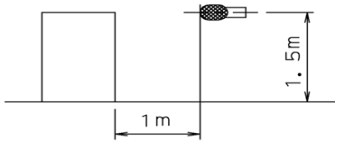
11 Sound data

11 - 2 Sound Pressure Spectrum

RKXYQ5T

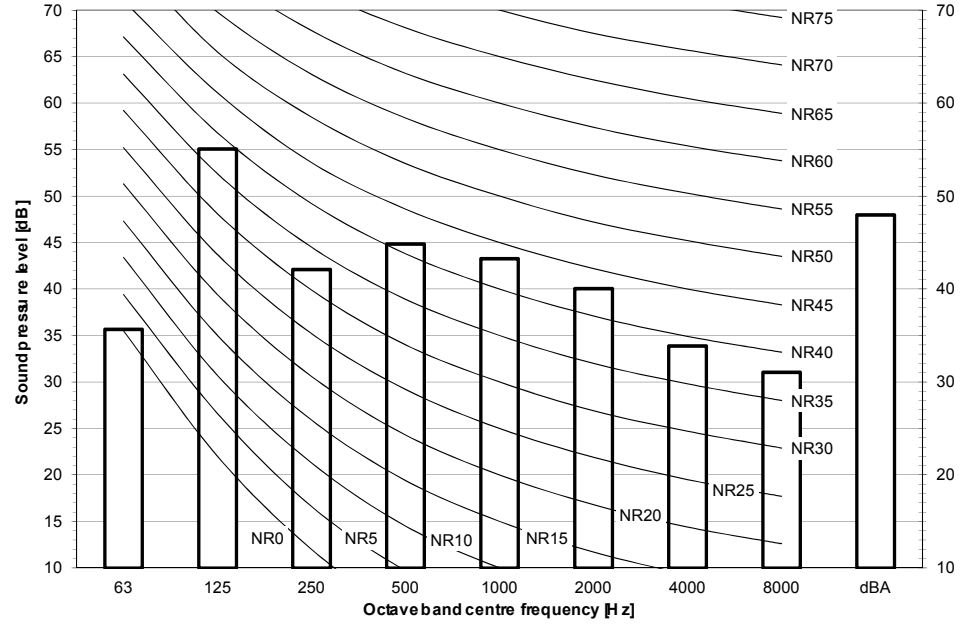


Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa



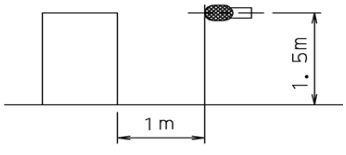
3D099621

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 µPa

Data is valid under the following conditions
- Cooling operation
- Outdoor Ta: 35°C

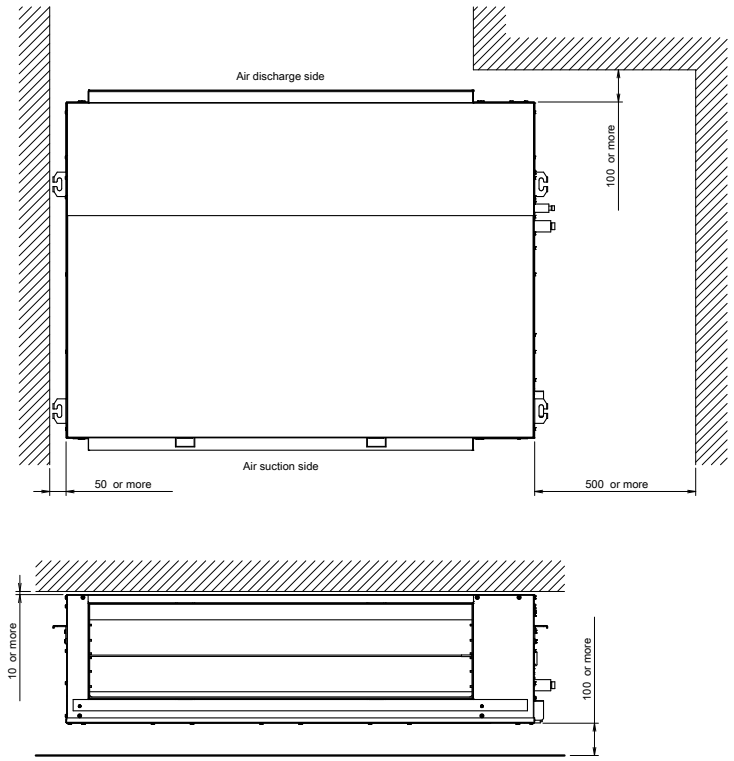


3D106018

12 Installation

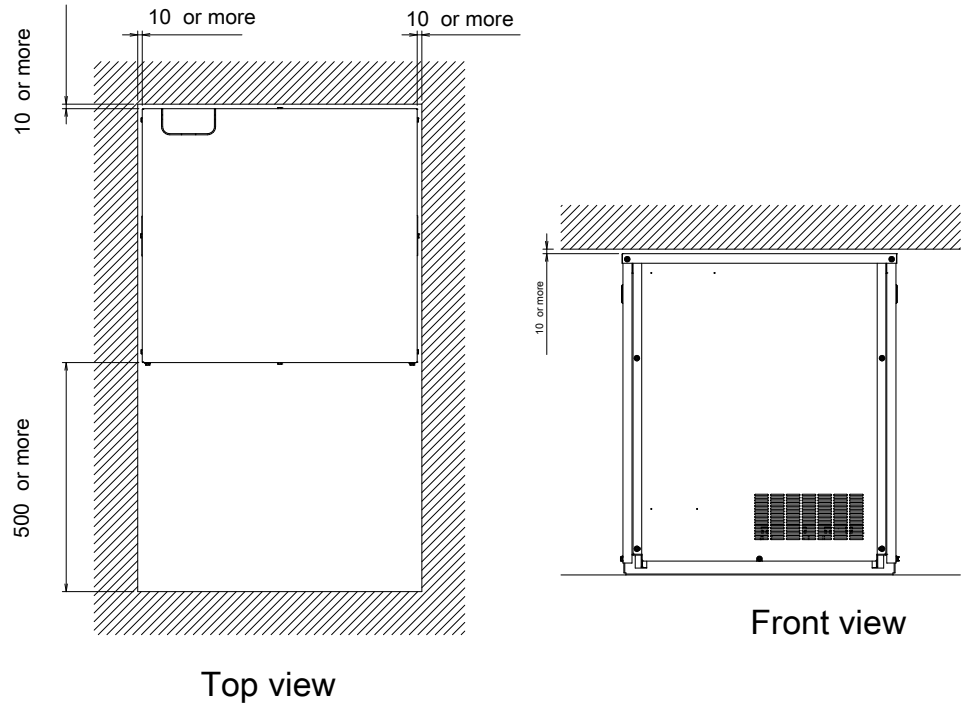
12 - 1 Installation Method

RDXYQ5T



3D098834

SB.RKXYQ-T8



3D098835

12 Installation

12 - 2 Refrigerant Pipe Selection

SB.RKXYQ-T

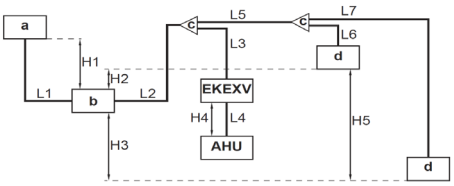
VRV4-i
Heat pump
Piping restrictions

Maximum piping length [m]							
Longest pipe				After first branch		EKEXV ↔ AHU	
Actual		Actual / (Equivalent)		Actual			
a ↔ b		b ↔ d		c ↔ d/AHU			
L1	30	L2+L3+L4	70/(90)	L3+L4	40	L4	5
		L2+L5+L6	70/(90)	L5+L6	40		
		L2+L5+L7	70/(90)	L5+L7	40		

See note 1.

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

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



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

Notes
1. VRV4-i-5HP:

   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-8HP:

   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).

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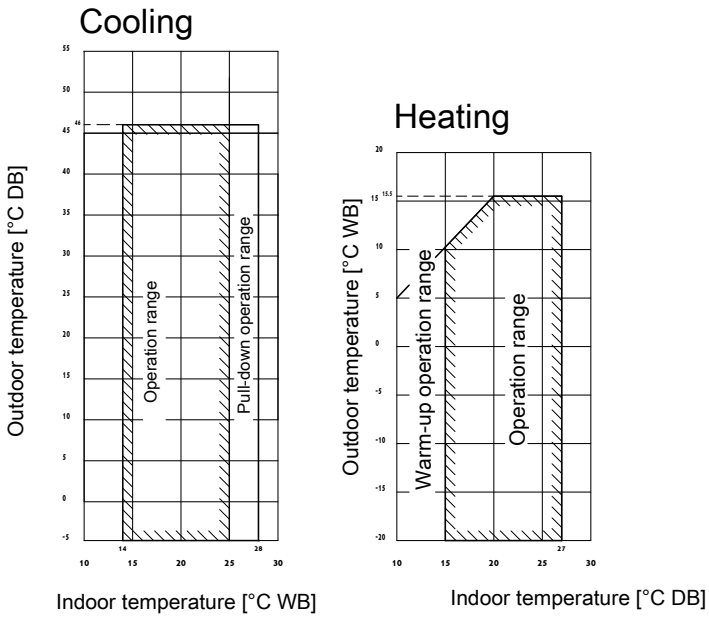
13 Operation range

13 - 1 Operation Range

SB.RKXYQ-T8

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 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
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
EKVDX32-50-80-100 + VAMJ8

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