DAIKIN

EEDEN08-720

technical data

ERHQ011-016AA

Altherma

R-410A

Altherma

altherma by DAIKIN

Altherma

In all of us, a green heart

Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.

Het ISO14001 assures an effective environmental management system in order to help protect human health and the environment from potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.

Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.

Daikin units comply with the European regulations that guarantee the safety of the product.

Daikin Europe N.V. participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory.

DAIKIN EUROPE N.V.

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ERHQ011-016AA

1 Features

- Cost effective alternative to a fossil fuel boiler
- Low energy bills and low CO2 emissions
- Easy to install
- Total solution for year round comfort

2 Specifications

2-1 NOMINAL CAPACITY AND NOMINAL INPUT				ERHQ011AA	ERHQ014AA	ERHQ016AA
For combination indoor units + outdoor units	Indoor Units			EKHBH016AB		
Condition 1	Heating capacity	Nominal	kW	11.2	14.0	16.0
	Heating PI	Nominal	kW	2.46	3.17	3.83
	COP	Nominal		4.55	4.42	4.18
Nominal Capacity	Heating capacity	Nominal	kW	10.3	13.1	15.2
	Heating PI	Nominal	kW	3.06	3.88	4.66
	COP	Nominal		3.37	3.38	3.26
For combination indoor units + outdoor units	Indoor Units			EKHBX016AB		
Condition 1	Heating capacity	Nominal	kW	11.2	14.0	16.0
	Cooling capacity	Nominal	kW	13.9	17.3	17.8
	Heating PI	Nominal	kW	2.46	3.17	3.83
	Cooling PI	Nominal	kW	3.79	5.78	6.77
	COP	Nominal		4.55	4.42	4.18
	EER	Nominal		3.67	2.99	2.63
Nominal Capacity	Heating capacity	Nominal	kW	10.3	13.1	15.2
	Cooling capacity	Nominal	kW	10.0	12.5	13.1
	Heating PI	Nominal	kW	3.06	3.88	4.66
	Cooling PI	Nominal	kW	3.60	5.29	5.95
	COP	Nominal		3.37	3.38	3.26
	EER	Nominal		2.78	2.36	2.20
Notes				Condition 1: cooling Ta 35°C - LWE 18°C - heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)		
				Condition 2: cooling Ta 35°C - LWE 7°C (DT = 5°C) - heating Ta DB/WB 7°C/6°C - LWC 45°C (DT = 5°C)		

2-2 TECHNICAL SPECIFICATIONS				ERHQ011AA	ERHQ014AA	ERHQ016AA
Casing	Colour			Ivory white		
	Material			Painted galvanised steel plate		
Dimensions	Unit	Height	mm	1,170		
		Width	mm	900	900	900
		Depth	mm	320	320	320
	Packing	Height	mm	1,349		
		Width	mm	980	980	980
		Depth	mm	420	420	420
Weight	Unit		kg	103	103	103
	Packed Unit		kg	114	114	114
Packing	Material			EPS		
				Carton		
				Wood		
				PP (Straps)		
	Weight		kg	11	11	11
Heat Exchanger	Dimensions	Length	mm	857	857	857
		Nr of Rows		2	2	2
		Fin Pitch	mm	1.4	1.4	1.4
		Nr of Passes		6	6	6
		Face Area	m^2	0.98	0.98	0.98
		Nr of Stages		52	52	52
	Tube type			Hi-XSS(8)		
	Fin	Type		WF fin		
		Treatment		Anti-corrosion treatment (PE)		
Fan	Type			Propeller		
	Quantity			2	2	2
Air Flow Rate (nominal at 230V)	Heating	High	m^3/min	90	90	90
	Cooling	High	m^3/min	96	100	97

2 Specifications

2-2 TECHNICAL SPECIFICATIONS				ERHQ011AA	ERHQ014AA	ERHQ016AA
Fan	Discharge direction			Horizontal		
	Motor	Quantity		2	2	2
		Model		Brushless DC motor		
Motor	Speed (nominal)	Steps		8	8	8
		Heating	rpm	760	760	760
		Cooling	rpm	800	850	830
Fan	Motor	Output	W	70	70	70
		Drive		Direct drive		
Compressor	Quantity			1	1	1
	Motor	Model		JT100G-VD		
		Type		Hermetically sealed scroll compressor		
		Motor Output	W	2,200		
		Starting Method		Inverter driven		
		Crankcase Heater	W	33	33	33
Operation Range	Heating	Min	°CWB	-20	-20	-20
		Max	°CWB	35	35	35
	Cooling	Min	°CDB	10	10	10
		Max	°CDB	46	46	46
	Sanitary water	Min	°CDB	-20	-20	-20
		Max	°CDB	43	43	43
Sound Level (nominal)	Heating	Sound Power	dBA	64	64	66
		Sound Pressure	dBA	49	51	53
	Cooling	Sound Power	dBA	64	66	69
		Sound Pressure	dBA	50	52	54
Sound Level (Night quiet)	Heating	Sound Pressure	dBA	42	42	43
	Cooling	Sound Pressure	dBA	45	45	46
Refrigerant	Type			R-410A		
	Charge		kg	3.7	3.7	3.7
	Control			Expansion valve(electronic type)		
	Nr of Circuits			1	1	1
Refrigerant Oil	Type			Daphne FVC68D		
	Charged Volume		l	1.0	1.0	1.0
Piping connections	Liquid (OD)	Quantity		1	1	1
		Type		Flare connection		
		Diameter (OD)	mm	9,52		
	Gas	Quantity		1	1	1
		Type		Flare connection		
		Diameter (OD)	mm	15,9		
	Drain	Quantity		3	3	3
		Type		Hole		
		Diameter (OD)	mm	26	26	26
	Piping Length	Minimum	m	5	5	5
		Maximum	m	75	75	75
		Equivalent	m	95	95	95
		Chargeless	m	30	30	30
	Additional Refrigerant Charge		kg/m	See installation manual outdoor unit 4PW37976-1B		
	Installation height difference	Maximum	m	30	30	30
	Heat Insulation			Both liquid and gas pipes		

2 Specifications

2-2 TECHNICAL SPECIFICATIONS		ERHQ011AA	ERHQ014AA	ERHQ016AA
Defrost Method		Pressure equalising		
Defrost Control		Sensor for outdoor heat exchanger temperature		
Capacity Control Method		Inverter controlled		
Safety Devices		Fan motor thermal protector		
		Fuse		
		High pressure switch		
Standard Accessories	Item	Tie-wraps		
	Quantity	2	2	2
	Item	Installation manual		
	Quantity	1	1	1
Notes		The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value depending on the distance and acoustic environment. Refer to sound spectrum drawing for more information.		
		Down to 3m with recharging of the outdoor unit. Refer to the installation manual of the outdoor unit.		

2-3 ELECTRICAL SPECIFICATIONS				ERHQ011AA	ERHQ014AA	ERHQ016AA
Power Supply	Name			V3		
	Phase			1~		
	Frequency		Hz	50	50	50
	Voltage		V	230	230	230
	Voltage range	Minimum	V	-10%		
		Maximum	V	+10%		
Current	Minimum Ssc value		kVa	Equipment complying with EN/IEC 61000-S-12 (1)		
	Maximum running Current	Cooling	A	22.8	27.4	31.9
	Recomended fuses		A	32	32	32
Wiring connections	For Power Supply	Remark		See installation manual outdoor unit 4PW37976-1B		
	For connection with indoor	Remark		See installation manual outdoor unit 4PW37976-1B		
Power Supply Intake				Outdoor unit only		
Notes				(1) European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current > 16A smaller than or equal to 75A per phase.		

3 Capacity tables

3 - 1 Cooling capacity tables

Maximum Cooling Capacity

	Tamb (°C)	20		25		30		35		40		45	
	LWE (°C)	CC	PI	CC	PI	CC	PI	CC	PI	CC	PI	CC	PI
ERHQ11	7	11.7	2.56	11.2	2.86	10.6	3.21	10.0	3.60	9.39	4.03	8.75	4.50
	10	12.9	2.58	12.3	2.89	11.6	3.25	11.0	3.65	10.3	4.09	9.65	4.58
	13	14.1	2.59	13.4	2.92	12.8	3.29	12.1	3.70	11.3	4.15	10.6	4.65
	15	14.9	2.60	14.2	2.93	13.5	3.31	12.8	3.73	12.0	4.20	11.3	4.70
	18	16.2	2.61	15.5	2.96	14.7	3.35	13.9	3.79	13.1	4.26	12.3	4.78
	22	18.0	2.62	17.2	2.99	16.4	3.40	15.5	3.86	14.7	4.35	13.3	3.93
ERHQ14	7	14.5	3.85	13.9	4.27	13.2	4.75	12.5	5.29	11.7	5.90	11.1	5.92
	10	16.0	3.94	15.3	4.37	14.6	4.86	13.7	5.42	12.9	6.04	11.2	5.46
	13	17.6	4.02	16.8	4.47	15.9	4.98	15.0	5.55	14.1	6.18	11.9	5.04
	15	18.6	4.08	17.8	4.54	16.9	5.06	15.9	5.64	14.9	6.28	12.2	4.79
	18	20.2	4.17	19.3	4.65	18.4	5.18	17.3	5.78	16.2	6.44	12.9	4.42
	22	22.5	4.29	21.5	4.80	20.4	5.36	19.3	5.98	17.0	5.33	13.3	3.93
ERHQ16	7	15.3	4.37	14.7	4.84	13.9	5.37	13.1	5.95	12.2	6.59	11.1	5.92
	10	16.9	4.48	16.2	4.97	15.3	5.51	14.4	6.11	13.3	6.75	11.2	5.46
	13	18.5	4.60	17.7	5.10	16.7	5.66	15.7	6.27	14.6	6.93	11.9	5.04
	15	19.6	4.68	18.7	5.19	17.7	5.76	16.6	6.38	15.4	7.04	12.2	4.79
	18	21.0	4.97	20.0	5.52	18.9	6.12	17.8	6.77	16.4	6.69	12.9	4.42
	22	23.3	5.21	22.2	5.79	21.0	6.42	19.7	7.10	17.0	5.33	13.3	3.93

3TW57752-1B

Symbols

CC : Cooling capacity at maximum operating frequency, measured acc. Eurovent 6/C/003-2006 (kW)

PI : Power input (kW), measured acc. Eurovent 6/C/003-2006 (kW)

LWE : Leaving Water Evaporator temperature (°C)

Tamb : Ambient temperature (°C) RH=85%

Note

1 For the optional model with heatertape (V38) when ambient temperature becomes lower than 4°C: add power input of 95W

Conditions

1 **Cooling capacity**
Capacity is according to Eurovent rating standard 6/C/003-2006 and valid for chilled water range Dt = 3~8°C

2 **Power input**
Power input is total of indoor and outdoor unit, except the circulation pump; according to Eurovent rating standard 6/C/003-2006.
Pump power input to be added = 90 W (according EN14511).

3 Capacity tables

3 - 2 Heating capacity tables

Maximum Heating Capacity (Peak values)

Model	LWC	30		35		40		45		50		55	
	Tamb	HC	PI	HC	PI	HC	PI	HC	PI	HC	PI	HC	PI
ERHQ11	-20	5.66	2.17	5.48	2.37	5.44	2.61						
	-15	6.48	2.21	6.25	2.42	6.17	2.67						
	-7	8.04	2.24	7.74	2.46	7.63	2.72	7.50	3.02				
	-2	9.18	2.24	8.84	2.47	8.71	2.74	8.57	3.05	8.18	3.36		
	2	10.2	2.23	9.81	2.47	9.68	2.74	9.52	3.06	9.10	3.38	8.72	3.77
	7	11.6	2.21	11.2	2.46	10.8	2.74	10.3	3.06	9.94	3.42	9.53	3.82
	12	13.1	2.18	12.7	2.43	12.2	2.72	11.8	3.04	11.3	3.41	10.9	3.81
	15	14.1	2.15	13.6	2.41	13.2	2.70	12.7	3.03	12.2	3.40	11.7	3.81
	20	15.9	2.10	15.4	2.36	14.9	2.65	14.4	2.99	13.8	3.37	13.3	3.78
ERHQ14	-20	7.24	2.72	7.14	2.97	7.05	3.26						
	-15	8.19	2.78	8.01	3.04	7.85	3.34						
	-7	10.1	2.84	9.78	3.11	9.51	3.43	9.25	3.79				
	-2	11.5	2.87	11.1	3.14	11.1	3.47	10.7	3.74	10.4	4.14		
	2	12.7	2.87	12.3	3.16	12.2	3.48	11.8	3.76	11.4	4.17	11.1	4.62
	7	14.4	2.88	14.0	3.17	13.5	3.50	13.1	3.88	12.7	4.30	12.3	4.77
	12	16.3	2.86	15.9	3.16	15.4	3.50	14.9	3.89	14.4	4.32	13.9	4.79
	15	17.6	2.85	17.1	3.15	16.5	3.50	16.0	3.89	15.5	4.32	15.0	4.80
	20	19.9	2.82	19.3	3.13	18.7	3.48	18.1	3.87	17.5	4.31	17.0	4.80
ERHQ16	-20	8.35	3.25	8.31	3.54	8.27	3.89						
	-15	9.38	3.33	9.33	3.63	9.28	3.98						
	-7	11.5	3.42	11.3	3.73	11.1	4.10	10.9	4.52				
	-2	13.0	3.46	12.7	3.78	12.5	4.15	12.2	4.58	12.0	5.06		
	2	14.4	3.48	14.1	3.81	13.8	4.19	13.5	4.62	13.1	5.11	11.9	5.35
	7	16.3	3.50	16.0	3.83	15.6	4.22	15.2	4.66	14.8	5.15	13.4	5.40
	12	18.5	3.51	18.1	3.85	17.6	4.24	17.2	4.69	16.7	5.18	15.1	5.44
	15	20.0	3.51	19.5	3.86	19.0	4.25	18.5	4.69	18.0	5.20	16.6	5.75
	20	22.5	3.50	22.0	3.85	21.4	4.25	20.8	4.70	20.3	5.21	18.7	5.77

Maximum Heating Capacity (integrated values*)

Model	LWC	30		35		40		45		50		55	
	Tamb	HC	PI	HC	PI	HC	PI	HC	PI	HC	PI	HC	PI
ERHQ11	-20	5.04	2.17	4.88	2.37	4.84	2.61						
	-15	5.77	2.21	5.56	2.42	5.49	2.67						
	-7	6.89	2.24	6.63	2.46	6.54	2.72	6.43	3.02				
	-2	7.43	2.11	7.16	2.33	7.06	2.58	6.94	2.87	6.63	3.17		
	2	8.16	2.16	7.86	2.39	7.75	2.65	7.63	2.96	7.29	3.26	6.99	3.64
	7	11.6	2.21	11.2	2.46	10.8	2.74	10.3	3.06	9.94	3.42	9.53	3.82
	12	13.1	2.18	12.7	2.43	12.2	2.72	11.8	3.04	11.3	3.41	10.9	3.81
	15	14.1	2.15	13.6	2.41	13.2	2.70	12.7	3.03	12.2	3.40	11.7	3.81
	20	15.9	2.10	15.4	2.36	14.9	2.65	14.4	2.99	13.8	3.37	13.3	3.78
ERHQ14	-20	6.45	2.72	6.35	2.97	6.28	3.26						
	-15	7.29	2.78	7.13	3.04	6.99	3.34						
	-7	8.06	2.84	7.84	3.11	7.62	3.43	7.42	3.79				
	-2	9.27	2.70	9.00	2.96	8.95	3.26	8.65	3.52	8.38	3.90		
	2	10.0	2.78	9.71	3.05	9.65	3.37	9.32	3.64	9.02	4.03	8.73	4.47
	7	14.4	2.88	14.0	3.17	13.5	3.50	13.1	3.88	12.7	4.30	12.3	4.77
	12	16.3	2.86	15.9	3.16	15.4	3.50	14.9	3.89	14.4	4.32	13.9	4.79
	15	17.6	2.85	17.1	3.15	16.5	3.50	16.0	3.89	15.5	4.32	15.0	4.80
	20	19.9	2.82	19.3	3.13	18.7	3.48	18.1	3.87	17.5	4.31	17.0	4.80
ERHQ16	-20	7.44	3.25	7.39	3.54	7.36	3.86						
	-15	8.35	3.33	8.30	3.63	8.26	3.98						
	-7	8.91	3.34	8.77	3.64	8.63	4.00	8.49	4.41				
	-2	10.5	3.26	10.3	3.56	10.1	3.91	9.91	4.31	9.71	4.77		
	2	11.1	3.15	10.9	3.45	10.6	3.79	10.4	4.18	10.2	4.62	9.19	4.84
	7	16.3	3.50	16.0	3.83	15.6	4.22	15.2	4.66	14.8	5.15	13.4	5.40
	12	18.5	3.51	18.1	3.85	17.6	4.24	17.2	4.69	16.7	5.18	15.1	5.44
	15	20.0	3.51	19.5	3.86	19.0	4.25	18.5	4.69	18.0	5.20	16.6	5.75
	20	22.5	3.50	22.0	3.85	21.4	4.25	20.8	4.70	20.3	5.21	18.7	5.77

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Symbols

HC : Heating capacity at maximum operating frequency, measured acc. Eurovent 6/C/003-2006 (kW)

PI : Power input (kW), measured acc. Eurovent 6/C/003-2006 (kW)

LWC : Leaving Water Condensor temperature (°C)

Tamb : Ambient temperature (°C) RH=85%

Note

1 For the optional model with heatertape (V38) when ambient temperature becomes lower than 4°C: add power input of 95W

Conditions

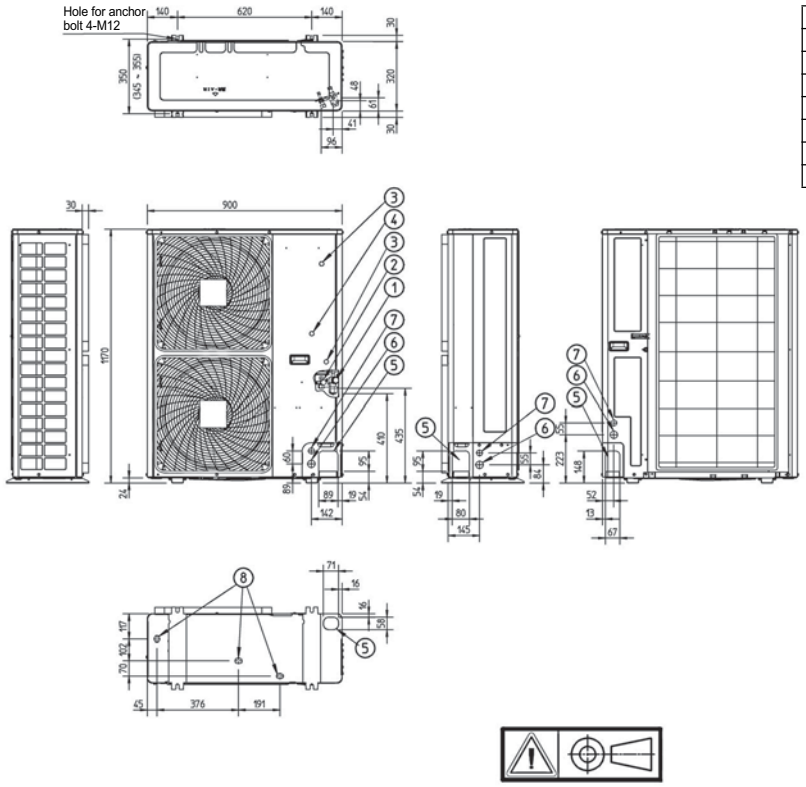
1 **Heating capacity**
Capacity is according to Eurovent rating standard 6/C/003-2006 and valid for chilled water range Dt = 3~8°C

2 **Power input**
Power input is total of indoor and outdoor unit, except the circulation pump; according to Eurovent rating standard 6/C/003-2006.
Pump power input to be added = 90 W (according EN14511).

4 Dimensional drawing & centre of gravity

4 - 1 Dimensional drawing

ERHQ011-016



1	Gas pipe connection ∅15.9 flare
2	Liquid pipe connection ∅9.5 flare
3	Service port (in the unit)
4	Grounding terminal M5 (in switch box)
5	Refrigerant piping intake
6	Power supply wiring intake (knock out hole ∅34)
7	control wiring intake (knock out hole ∅27)
8	Drain outlet

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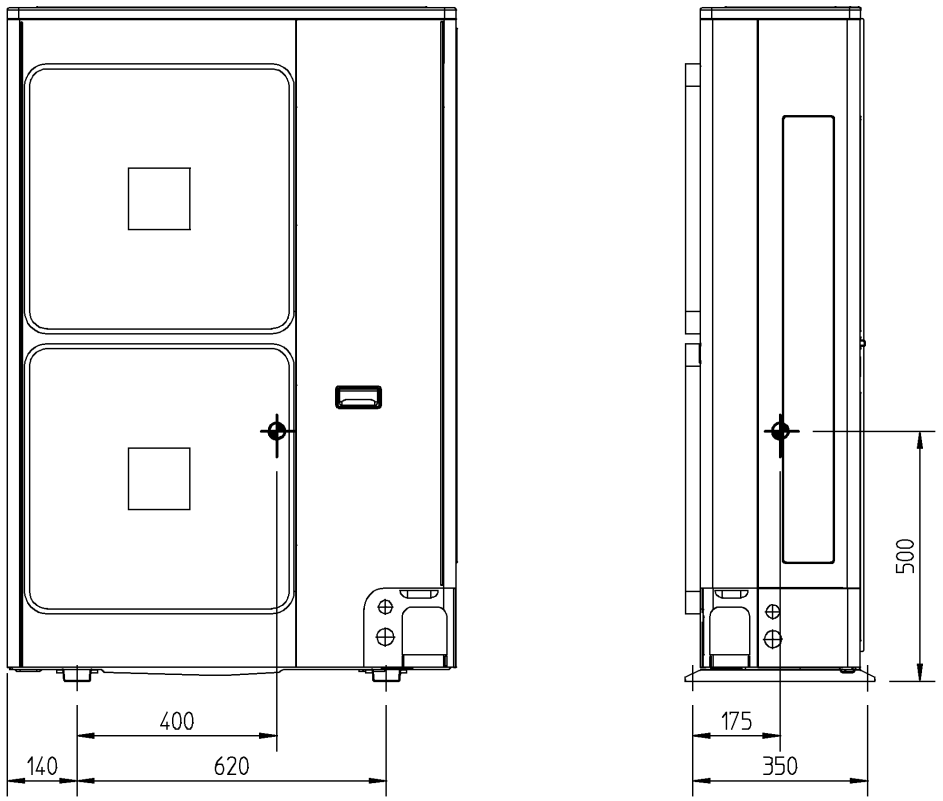
4 Dimensional drawing & centre of gravity

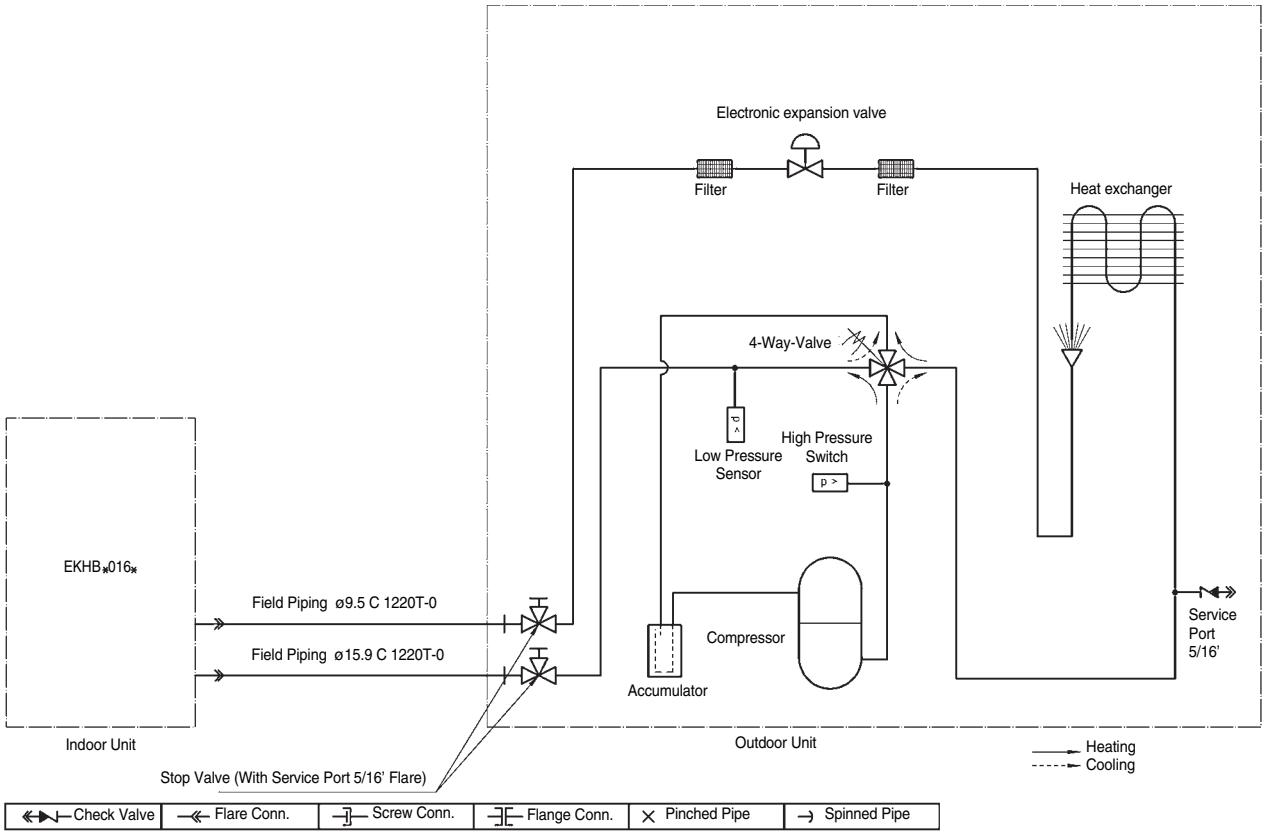
4 - 2 Centre of gravity

ERHQ011-016



5 Piping diagram

ERHQ



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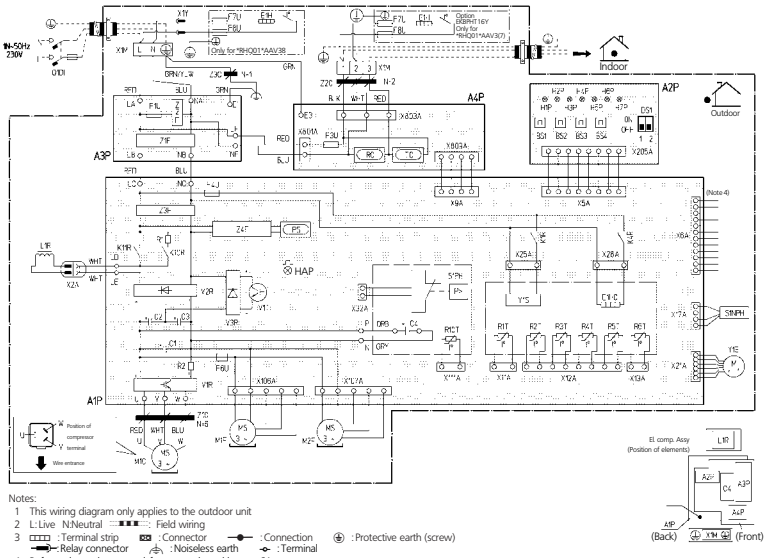
6 Wiring diagram

6 - 1 Wiring diagram

ERHQ011-016AAV3



A1P	Printed circuit board (Main)
A2P	Printed circuit board (INV)
A3P	Printed circuit board (Noise filter)
A4P	Printed circuit board
BS1–BS4	Push button switch
C1–C4	Capacitor
DS1	DIP switch
E1H	Electrical heatertape (fuse: 5A/250V)
E1HC	Crankcase heater
F1U, F3U, F4U	Fuse (T 6.3A/250V)
F6U	Fuse (T 5.0A/250V)
H1P–7P (A2P)	Light emitting diode (service monitor green)
HAP (A1P)	Light emitting diode (service monitor green)
K1R	Magnetic relay (Y1S)
K4R	Magnetic relay (E1HC)
K10R	Magnetic relay
K11R	Magnetic relay
L1R	Reactor
M1C	Motor (Compressor)
M1F	Motor (Fan) (upper)
M2F	Motor (Fan) (lower)
PS	Switching power supply
Q1DI	Field earth leakage breaker (300mA)
R1	Resistor
R2	Resistor
R1T	Thermistor (Air)
R2T	Thermistor (Discharge)
R3T	Thermistor (Suction)
R4T	Thermistor (Heat exchanger)
R5T	Thermistor (heat exchanger middle)
R6T	Thermistor (Liquid)
RC	Signal receiver circuit
R10T	Thermistor (Fin)
S1NPH	Pressure sensor
S1PH	Pressure switch (High)
TC	Signal transmission circuit
V1R	Power module
V2R, V3R	Diode module
V1T	IGBT
X1M	Terminal strip for power source
Y1E	Electronic expansion valve
Y1S	Solenoid valve (4 way valve)
Z1C–Z3C	Noise filter (ferrity core)
Z1F–Z4F	Noise filter
Optional Connector	
X1Y	Connector

Notes:
1 This wiring diagram only applies to the outdoor unit
2 L: Live N: Neutral : Field wiring
3 : Terminal strip : Connector : Connection : Protective earth (screw)
Relay connector : Noiseless earth : Terminal
4 Refer to the option manual, for connecting wiring to x6A.
5 Refer to the "Wiring diagram sticker" (on back of front plate) on how to use BS1– BS4 and DS1 switch.
6 Do not operate the unit by short-circuiting protection device S1PH
7 Colors: BLK: black, RED: red, BLU: blue, WHT: white, YLW: yellow, ORG: orange, BRN: brown, GRN: green
8 Confirm the method of setting the selector switches by service. When the unit is shipped by factory all switches are set to be off.
9

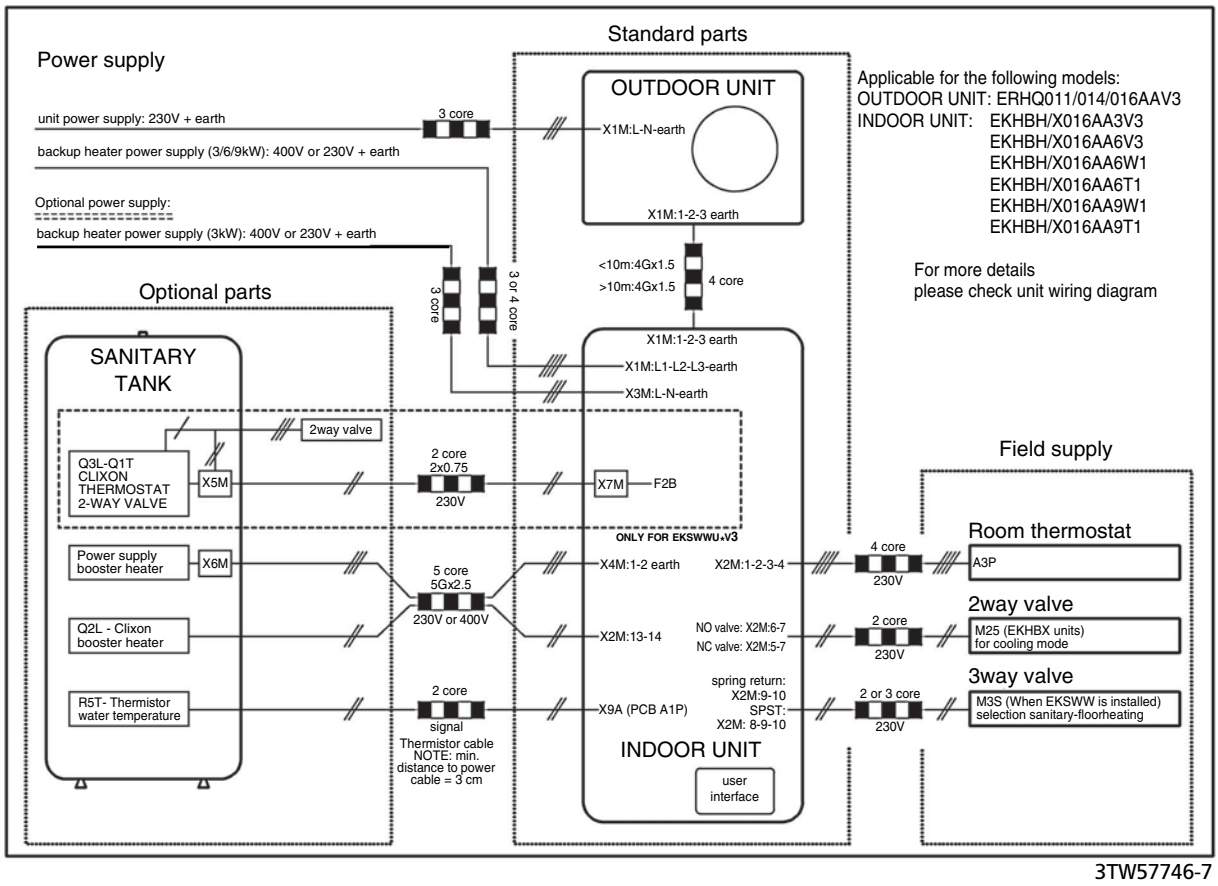
Option

Wiring dependent on model

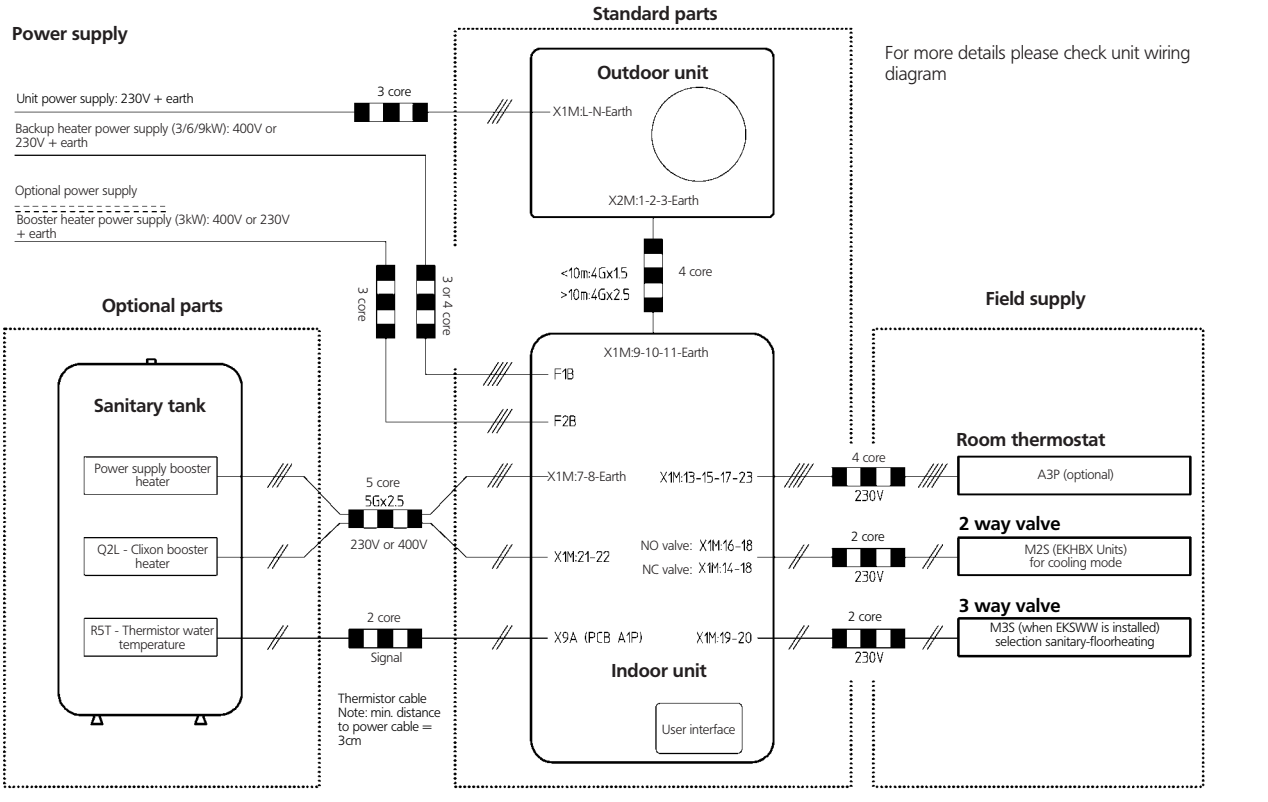
2TW57986-1A

6 Wiring diagram

6 - 2 External connection diagram



EKHB-A

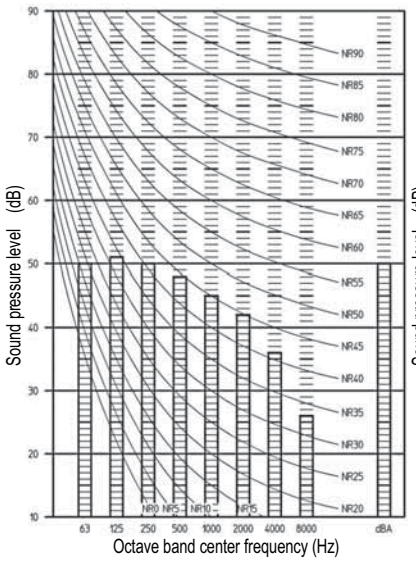


7 Sound data

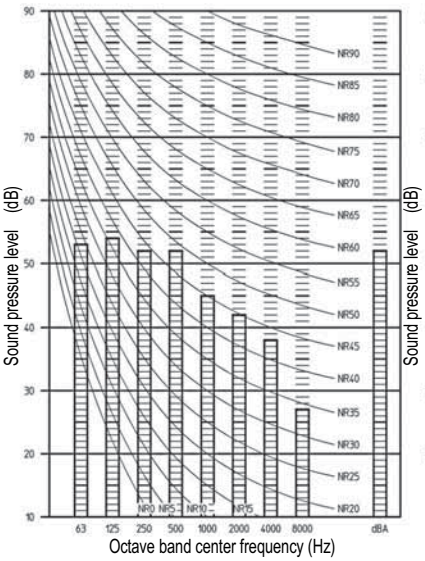
7 - 1 Sound pressure spectrum

ERHQ011-016

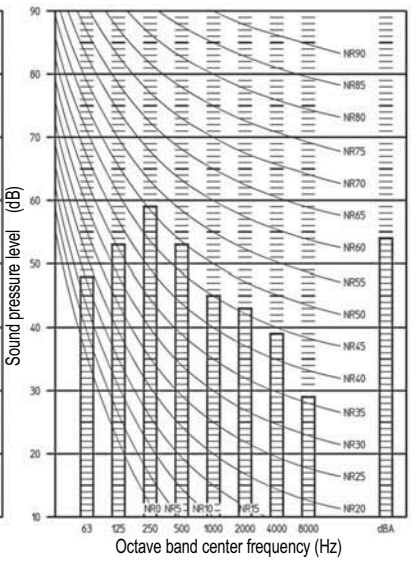
ERHQ011AAV3 COOLING



ERHQ014AAV3 COOLING



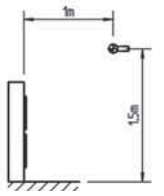
ERHQ016AAV3 COOLING



3TW57767-1A

NOTES

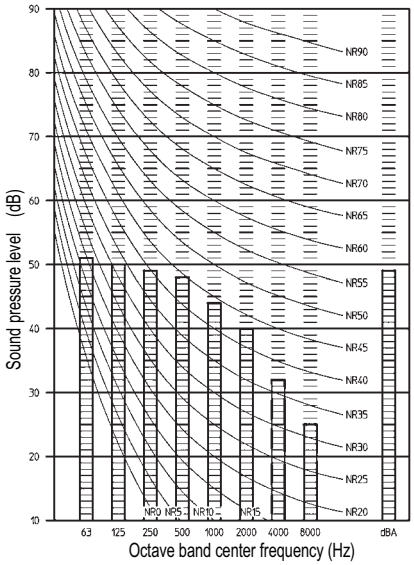
1 Data is valid at free field condition (measured in a semi-anachoic room).
2 dBA = A-Weighted sound pressure level. (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20µPa.
4 If sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.



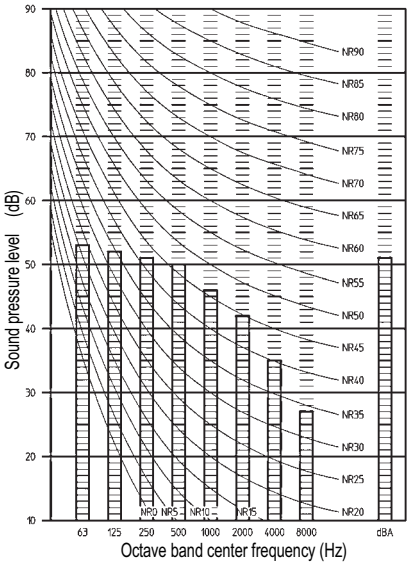
Measuring location (Discharge side)

ERHQ011-016

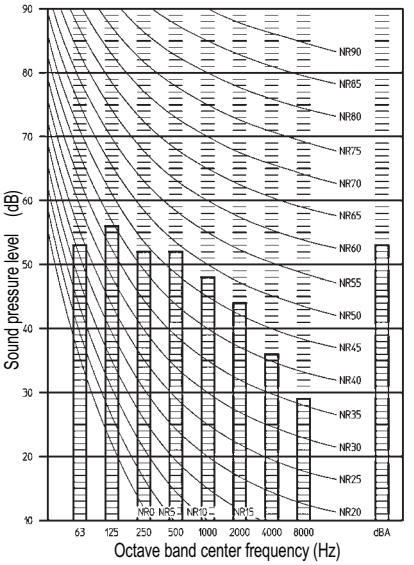
ERHQ011AAV3 HEATING



ERHQ014AAV3 HEATING



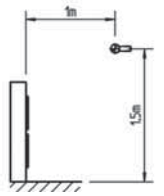
ERHQ016AAV3 HEATING



3TW57767-2A

NOTES

1 Data is valid at free field condition (measured in a semi-anachoic room).
2 dBA = A-Weighted sound pressure level. (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20µPa.
4 If sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.

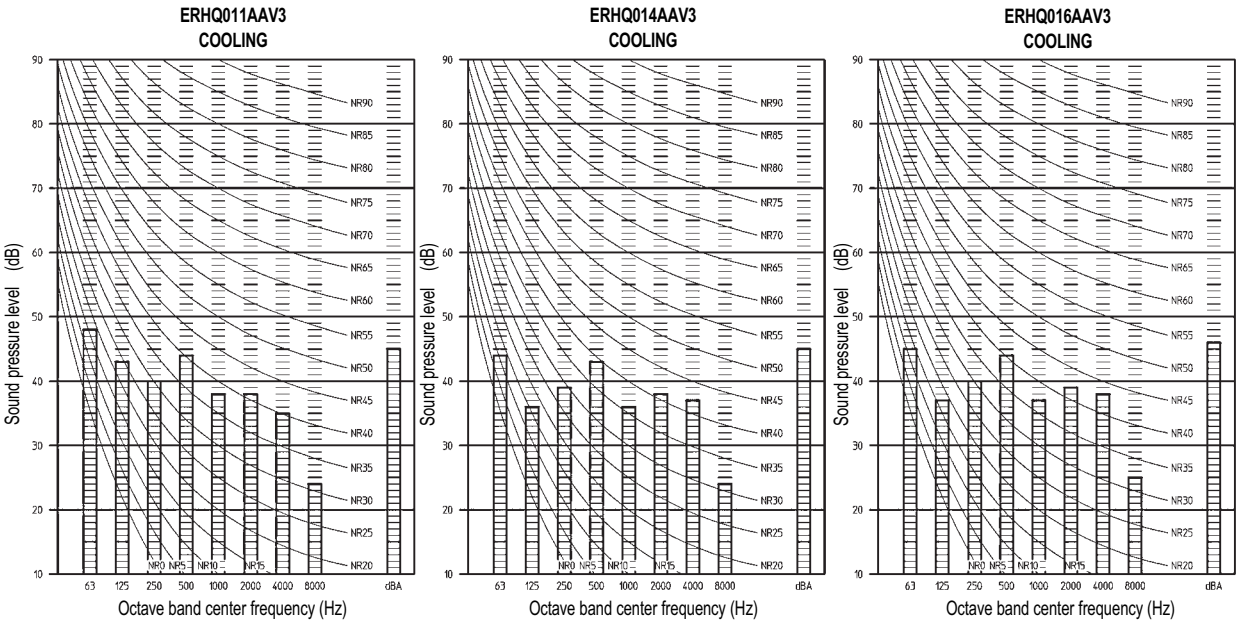


Measuring location (Discharge side)

7 Sound data

7 - 2 Sound pressure spectrum quiet mode

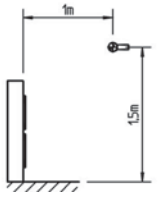
ERHQ011-016



3TW57767-3

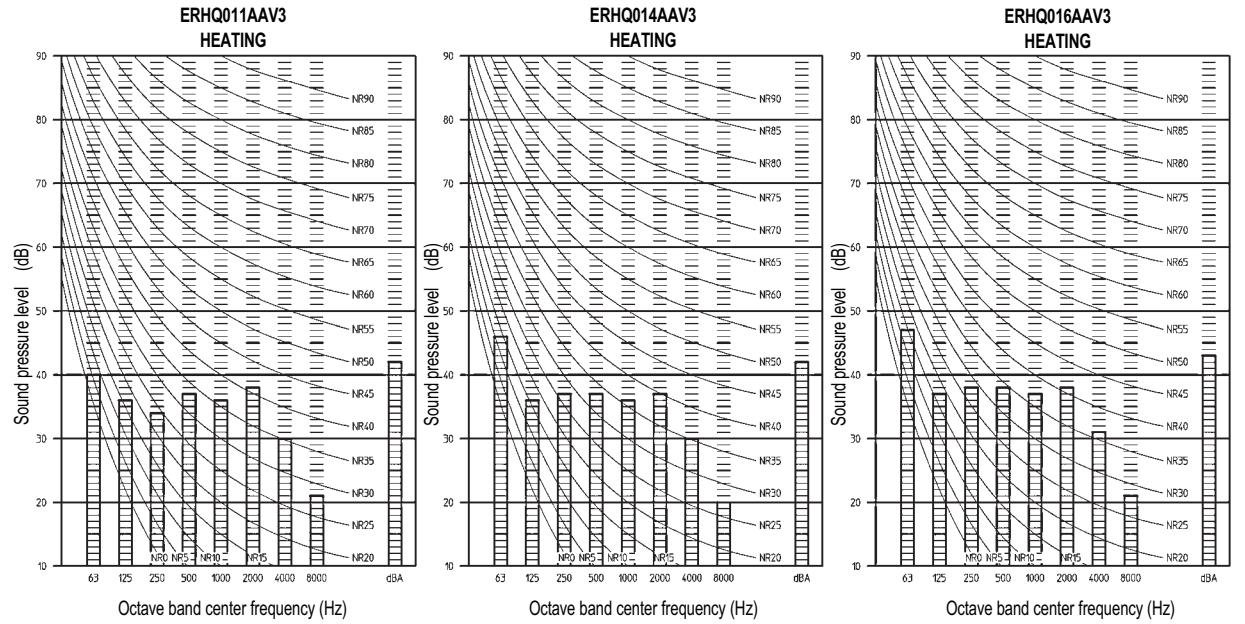
NOTES

1 Data is valid at free field condition (measured in a semi-anachoic room).
2 dBA = A-Weighted sound pressure level. (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20µPa.
4 If sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.



Measuring location
(Discharge side)

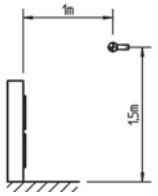
ERHQ011-016



3TW57767-4

NOTES

1 Data is valid at free field condition (measured in a semi-anachoic room).
2 dBA = A-Weighted sound pressure level. (A-scale according to IEC)
3 Reference acoustic pressure 0dB = 20µPa.
4 If sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.



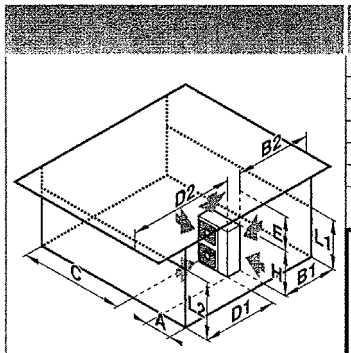
Measuring location
(Discharge side)

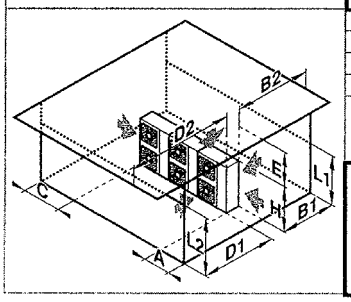
8 Installation

8 - 1 Service space

ERHQ011-016

A. Non stacked installation





							A	B1	B2	C	D1	D2	E	L1/L2	
✓								≥50(100)							
✓		✓	✓				≥100	≥100		≥100					
✓				✓				≥100				≤500	≥1000		
✓		✓	✓	✓			≥150	≥150		≥150		≤500	≥1000		
	✓										≥500				
	✓			✓					≤500		≥500		≥1000		
✓	✓				L1<L2			≥50(100)			≥500				
					L2<L1			≥50(100)			≥500				
✓	✓			✓	L1<L2	L1≤H		≥150(250)	≤500		≥750		≥1000	0<L1≤1/2H	1
											≥1000			0<L1≤1/2H	
						H<L1		L1≤H							
					L2<L1	L2≤H		≥50(100)			≥500 (1000)	≥500	≥1000	0<L2≤1/2H	
								≥100(200)						1/2H<L2≤H	
						H<L2		L2≤H							
✓		✓	✓				≥200	≥200(300)		≥1000					
✓		✓	✓	✓			≥200	≥200(300)		≥1000		≤500	≥1000		
	✓										≥1000				
	✓			✓					≤500		≥1000		≥1000		
✓	✓				L1<L2			≥200(300)			≥1000				
					L2<L1			≥150(250)			≥1000			0<L2≤1/2H	
								≥200(300)			(1500)			1/2H<L2≤H	
✓	✓			✓	L1<L2	L1≤H		≥200(300)	≤500		≥1000		≥1000	0<L1≤1/2H	1
											≥1250			1/2H<L1≤H	
						H<L1		L1≤H							
					L2<L1	L2≤H		≥150(250)			≥1000 (1500)	≤500	≥1000	0<L2≤1/2H	2
								≥200(300)						1/2H<L2≤H	
						H<L2		L2≤H							

Legend Unit: mm

- Suction side obstacle
- Discharge side obstacle
- Left side obstacle
- Right side obstacle
- Top side obstacle
- ✓ Obstacle is present

1 In these cases, close the bottom of the installation frame to prevent discharged air from being bypassed.

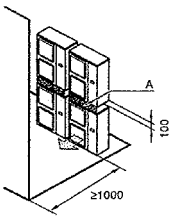
2 In these cases, only 2 units can be installed.

This situation is not allowed.

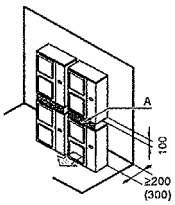
Figures between ( ) indicate the dimensions only for the 100-125-140 class models.

B. Stacked installation

1. Obstacles exist in front of the outlet side



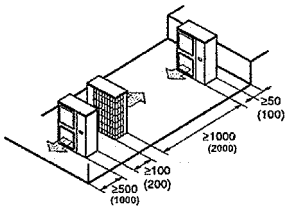
2. Obstacles exist in front of the air inlet



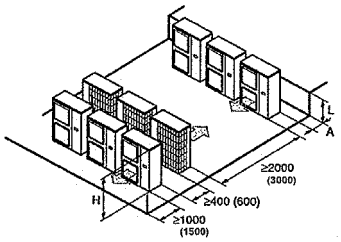
Do not stack more than one unit.
About 100mm is required as the dimension for laying the upper outdoor unit's drain pipe.
Get the portion A sealed so that air from the outlet does not bypass.

C. Multiple-row installation

1. Installation of one unit per row



2. Installing multiple units (2 units or more) in lateral connection per row



Relation of dimensions of H, A, and L are shown in the table below.

	L	A
L ≤ H	0 < L ≤ 1/2 H	150 (250)
	1/2 H < L	200 (300)
H < L	Installation impossible	

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9 Operation range

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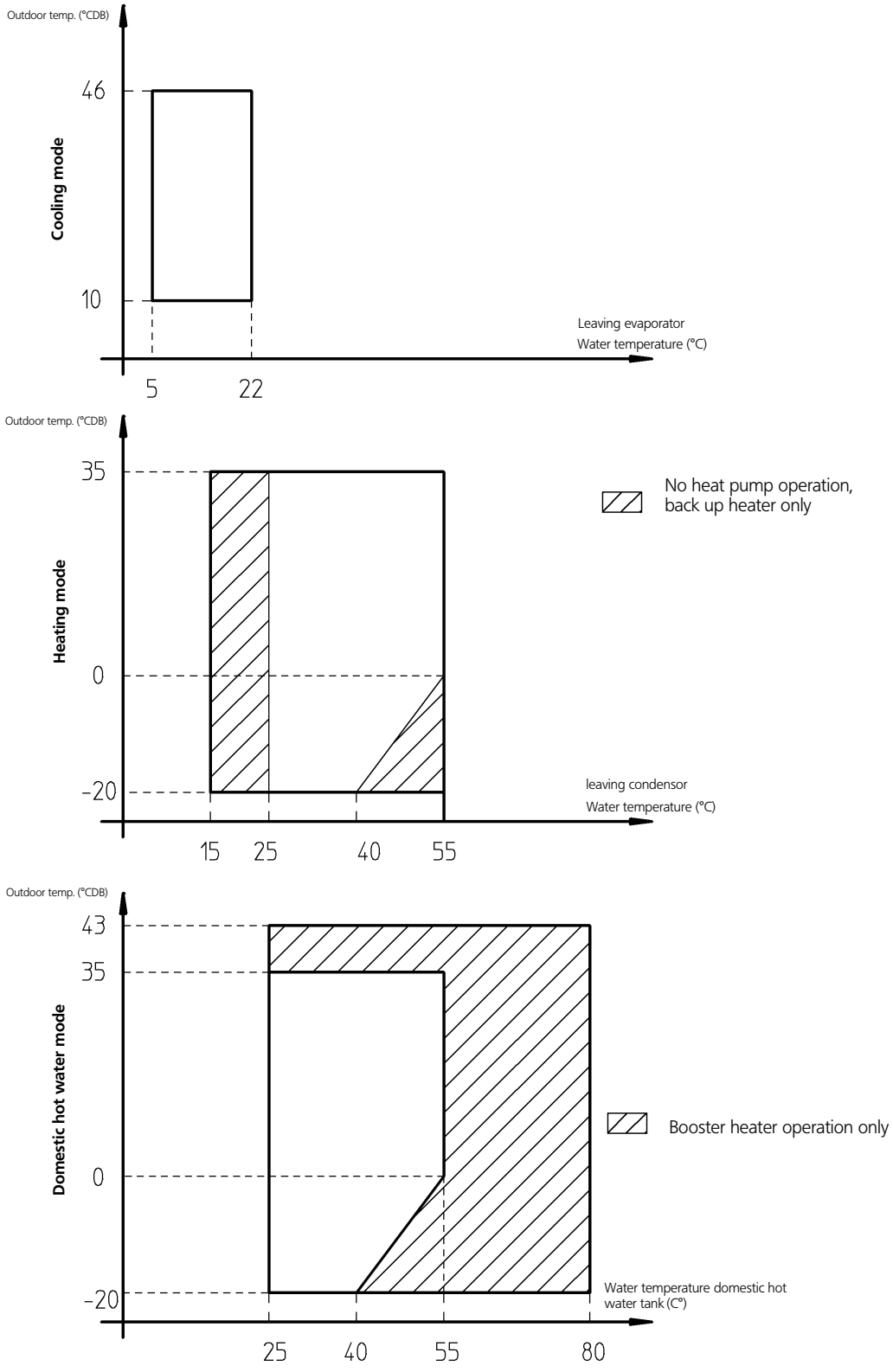

4TW57753-1A