

Air Conditioning  
Technical Data

# AZAS-MV1





# TABLE OF CONTENTS

## AZAS-MV1

1	Features .....	2
2	Specifications .....	3
	Capacity and Power input .....	3
	Capacity and Power input .....	3
	Capacity and Power input .....	3
	Technical Specifications .....	4
	Electrical Specifications .....	5
3	Electrical data .....	6
4	Options .....	7
5	Combination table .....	8
6	Capacity tables .....	9
	Cooling/Heating Capacity Tables .....	9
	Capacity Correction Factor .....	11
7	Dimensional drawings .....	12
8	Centre of gravity .....	13
9	Piping diagrams .....	15
10	Wiring diagrams .....	16
	Wiring Diagrams - Single Phase .....	16
11	Sound data .....	18
	Sound Power Spectrum .....	18
	Sound Pressure Spectrum - Cooling .....	20
	Sound Pressure Spectrum - Heating .....	22
	Sound Pressure Spectrum Quiet Mode .....	24
12	Installation .....	26
	Installation Method .....	26
13	Operation range .....	28

# 1 Features

Ideal solution for busy environments and small shops

- High efficiency: - Energy labels up to A+ (cooling) / A (heating) - compressor offers substantial efficiency improvements
- Choosing for an R-32 product, reduces the environmental impact with 68% compared to R-410A, leads directly to lower energy consumption thanks to its high energy efficiency and has a lower refrigerant charge
- Very compact and easy to install
- Replace existing systems with R-32 technology without needing to replace the piping
- Guarantees operation in heating mode down to -15°C and in cooling mode down to -5°C
- Refrigerant cooled PCB guarantees reliable cooling, as it is not influenced by ambient temperature.
- Piping length up to 30m
- Exclusively offered for pair applications



Inverter



Auto cooling-  
heating  
changeover

## 2 Specifications

2-1 Capacity and Power input			FCAG71A/ AZAS71M2V1B	FCAG100A/ AZAS100M7V1B	FCAG125A/ AZAS125M7V1B	FCAG140A/ AZAS140M7V1B	
Indoor unit			FCAG71AVEB	FCAG100AVEB	FCAG125AVEB	FCAG140AVEB	
Outdoor unit			AZAS71M2V1B	AZAS100M7V1B	AZAS125M7V1B	AZAS140M7V1B	
Cooling capacity	Nom.	kW	6.80 (1)	9.50 (1)	12.1 (1)	13.4 (1)	
Heating capacity	Nom.	kW	7.50 (2)	10.8 (2)	13.5 (2)	15.5 (2)	
Seasonal efficiency (according to EN14825)	Cooling	Energy efficiency class		A+		-	
		Pdesign	kW	6.80	9.50	12.1	13.0
		SEER		5.87	5.67	5.40	6.00
		Annual energy consumption	kWh	405	586	1,345	1,300
	Heating (Average climate)	Energy efficiency class		A		-	
		Pdesign	kW	4.50	6.00		7.80
		SCOP/A		4.00	3.85	3.80	4.31
		Annual energy consumption	kWh	1,575	2,182	2,211	2,534

### Notes

(1) Cooling: T2: indoor temp. 26,6°CDB, 19,4°CWB, outdoor temp. 48°CDB [Btu/hr/W]

(2) Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m.

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m.

2-2 Capacity and Power input			FBA71A/AZAS71M2V1B	FBA100A/ AZAS100M7V1B	FBA125A/ AZAS125M7V1B	FBA140A/ AZAS140M7V1B	
Indoor unit			FBA71A2VEB	FBA100A2VEB	FBA125A2VEB	FBA140A2VEB	
Outdoor unit			AZAS71M2V1B	AZAS100M7V1B	AZAS125M7V1B	AZAS140M7V1B	
Cooling capacity	Nom.	kW	6.80 (1)	9.50 (1)	12.1 (1)	13.4 (1)	
Heating capacity	Nom.	kW	7.50 (2)	10.8 (2)	13.5 (2)	15.5 (2)	
Seasonal efficiency (according to EN14825)	Cooling	Energy efficiency class		A		-	
		Pdesign	kW	6.80	9.50	12.1	13.0
		SEER		5.57	5.25	4.85	5.50
		Annual energy consumption	kWh	427	633	1,497	1,418
	Heating (Average climate)	Energy efficiency class		A		-	
		Pdesign	kW	4.50	6.00		7.80
		SCOP/A		3.81		3.55	3.85
		Annual energy consumption	kWh	1,654	2,205	2,366	2,836

### Notes

(1) Cooling: T2: indoor temp. 26,6°CDB, 19,4°CWB, outdoor temp. 48°CDB [Btu/hr/W]

(2) Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m.

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m.

2-3 Capacity and Power input			FAA71A/AZAS71M2V1B	FAA100A/AZAS100M7V1B	
Indoor unit			FAA71AUVEB	FAA100AUVEB	
Outdoor unit			AZAS71M2V1B	AZAS100M7V1B	
Cooling capacity	Nom.	kW	6.80 (1)	9.50 (1)	
Heating capacity	Nom.	kW	7.50 (2)	10.8 (2)	
Seasonal efficiency (according to EN14825)	Cooling	Energy efficiency class		A+	A
		Pdesign	kW	6.80	9.50
		SEER		5.77	5.25
		Annual energy consumption	kWh	412	633
	Heating (Average climate)	Energy efficiency class		A	
		Pdesign	kW	4.50	6.00
		SCOP/A		3.81	
		Annual energy consumption	kWh	1,654	2,205

## 2 Specifications

### Notes

(1) Cooling: T2: indoor temp. 26.6°CDB, 19.4°CWB, outdoor temp. 48°CDB [Btu/hr/W]

(2) Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m.

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m.

2

2-4 Technical Specifications					AZAS71M2V1B	AZAS100M7V1B	AZAS125M7V1B	AZAS140M7V1B
Capacity control	Method				Inverter controlled			
Casing	Colour				Ivory white			
	Material				Painted galvanized steel plate			
Dimensions	Unit	Height	mm		770	990		
		Width	mm		900	940		
		Depth	mm		320			
	Packed unit	Height	mm		900	1,170		
		Width	mm		980	1,015		
		Depth	mm		420	422		
Weight	Unit		kg	60	70		78	
	Packed unit		kg	64	78	79	87	
Packing	Weight		kg	4	9			
Heat exchanger	Fin	Type			WF fin			
		Treatment			Anti-corrosion treatment (PE)			
Compressor	Quantity				1			
	Type				Hermetically sealed swing compressor			
	Starting method				Inverter driven			
Fan	Type				Propeller			
	Discharge direction				Horizontal			
	Quantity				1			
	Air flow rate	Cooling	Nom.	m <sup>3</sup> /min	56	69	71	76
		Heating	Nom.	m <sup>3</sup> /min	50	82		
Fan motor	Quantity				1			
	Model				Brushless DC motor			
	Output			W	94	200		
	Drive				Direct drive			
	Speed	Cooling	Super low	rpm	-			
		Heating	Super low	rpm	-			
Sound power level	Cooling			dBA	65	70	71	73
	Heating			dBA	-			
Sound pressure level	Night quiet mode	Level 2	dBA	42	44			
	Cooling	Nom.	dBA	46	53		54	
	Heating	Nom.	dBA	47	57			
Operation range	Cooling	Ambient	Min.	°CDB	-5			
			Max.	°CDB	46			
	Heating	Ambient	Min.	°CWB	-15			
			Max.	°CWB	15.5			
Refrigerant	Type				R-32			
	Charge			kg	2.45	2.60	2.90	
				TCO <sub>2eq</sub>	1.65	1.76	1.96	
	Control				Expansion valve (electronic type)			
	GWP				675			
	Circuits	Quantity			1			

## 2 Specifications

2-4 Technical Specifications				AZAS71M2V1B	AZAS100M7V1B	AZAS125M7V1B	AZAS140M7V1B
Piping connections	Liquid	Quantity		1			
		Type		Flare connection			
		OD	mm	9.52			
	Gas	Quantity		1			
		Type		Flare connection			
		OD	mm	15.9			
	Drain	Quantity		3	5		
		Type		Hole			
		ID	mm	-			
		OD	mm	26			
	Piping length	OU - IU	Min.	m	5		
			Max.	m	30		
		System	Equivalent	m	50		
			Chargel ess	m	30		
Additional refrigerant charge			kg/m	See installation manual			
Level difference	IU - OU	Max.	m	30.0			
	IU - IU	Max.	m	0.5			
Heat insulation			Both liquid and gas pipes				
Refrigerant oil	Type		FW68DA				
	Charged volume		l	0.90		1.35	
Defrost method			Reversed cycle				
Defrost control			Sensor for outdoor heat exchanger temperature				
Safety devices	Item	01	High pressure switch				
		02	Low pressure switch				
		03	Fan driver overload protector				
		04	Fuse				
		05	Compressor motor thermal protector				

Standard Accessories : Tie-wraps; Quantity : 2;

Standard Accessories : Installation manual; Quantity : 1;

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

Standard Accessories : General safety precautions; Quantity : 1;

Standard Accessories : LOT10 Energy Label; Quantity : 1;

Standard Accessories : Peel off F-gas label; Quantity : 1;

2-5 Electrical Specifications				AZAS71M2V1B	AZAS100M7V1B	AZAS125M7V1B	AZAS140M7V1B
Power supply	Name		V1				
	Phase		1~				
	Frequency	Hz	50				
	Voltage	V	220-240				
Current - 50Hz	Maximum fuse amps (MFA)	A	20	25	32		
Current	Zmax	List	Complies to EN61000-3-11				
	Minimum Ssc value	kVa	Equipment complying with EN / IEC 61000-3-12 / (1) / See note 2				
Current - 60Hz	Maximum fuse amps (MFA)	A	-				
Wiring connections	For power supply	Remark	See installation manual outdoor unit				
	For connection with indoor	Remark	See installation manual outdoor unit				
Power supply intake			See installation manual outdoor unit				

### Notes

(1) European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current larger than 16A and ≤ 75A per phase.

(2) 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.

### 3 Electrical data

#### 3 - 1 Electrical Data

3

#### AZAS71-140MV1

Indoor	Outdoor	Power supply	Voltage range		MCA	TOCA	MFA	Compressor		OFM		IFM	
								MSC	RLA	kW	FLA	kW	FLA
FCAG71AVEB	AZAS71M2V1B	50Hz ~ 220-240V	Minimum: 198 V Maximum 264 V	17.4	—	20	—	15.4	0.094	0.9	0.054	0.4	
FBA71A2VEB	AZAS71M2V1B			17.5	—	20	—	15.4	0.094	0.9	0.070	0.5	
FAA71AUVEB	AZAS71M2V1B			17.4	—	20	—	15.4	0.094	0.9	0.048	0.4	
FCAG100AVEB	AZAS100M7V1B			21.5	—	25	—	19.0	0.200	1.0	0.117	0.7	
FBA100A2VEB	AZAS100M7V1B			21.8	—	25	—	19.0	0.200	1.0	0.127	1.0	
FAA100AUVEB	AZAS100M7V1B			21.2	—	25	—	19.0	0.200	1.0	0.064	0.4	
FCAG125AVEB	AZAS125M7V1B			27.8	—	32	—	24.7	0.200	1.0	0.168	1.0	
FBA125A2VEB	AZAS125M7V1B			28.3	—	32	—	24.7	0.200	1.0	0.187	1.5	
FCAG140AVEB	AZAS140M7V1B			27.0	—	32	—	24.0	0.200	1.0	0.168	1.0	
FBA140A2VEB	AZAS140M7V1B			27.6	—	32	—	24.0	0.200	1.0	0.187	1.5	
FCAG100AVEB	AZAS100M7Y1B	3N~ 50Hz 380-415V	Minimum: 342 V Maximum 456 V	14.2	—	16	—	12.0	0.200	1.0	0.117	0.7	
FBA100A2VEB	AZAS100M7Y1B			14.6	—	16	—	12.0	0.200	1.0	0.127	1.0	
FAA100AUVEB	AZAS100M7Y1B			13.9	—	16	—	12.0	0.200	1.0	0.064	0.4	
FCAG125AVEB	AZAS125M7Y1B			14.6	—	16	—	12.0	0.200	1.0	0.168	1.0	
FBA125A2VEB	AZAS125M7Y1B			15.1	—	16	—	12.0	0.200	1.0	0.187	1.5	
FCAG140AVEB	AZAS140M7Y1B			14.6	—	16	—	12.0	0.200	1.0	0.168	1.0	
FBA140A2VEB	AZAS140M7Y1B			15.1	—	16	—	12.0	0.200	1.0	0.187	1.5	

3D110014A

#### AZAS-MV1

#### AZAS-MY1

#### RZAG-MV1

#### RZAG-MY1

#### RZASG-MV1

#### RZASG-MY1

Symbols

- MCA: Minimum Circuit Ampere [A]
- TOCA: Total overcurrent amps [A]
- MFA: Maximum Fuse Ampere [A]
- MSC: Maximum current of the starting compressor [A]
- RLA: Rated load amps [A]
- OFM: Outdoor fan motor
- IFM: Indoor fan motor
- FLA: Full Load Ampere [A]
- KW: Fan motor rated output [kW]

Notes

1. The RLA is based on the following conditions.
  - Cooling
    - Indoor temperature 27.0°C DB / 19.0°C WB
    - Outdoor temperature 35.0°C DB
  - Heating
    - Indoor temperature 20.0°C DB
    - Outdoor temperature 7.0°C DB / 6.0°C WB
2. TOCA is the total value of each overcurrent set.
3. Voltage range
  - The units are suitable for use with electrical systems in which the voltage supplied to the unit terminals is not below or above the listed range limits.
4. The maximum allowable voltage that is unbalanced between phases is 2%.
5. MCA is the maximum input current.
  - The capacity of the MFA must be greater than that of the MCA.
  - Select the MFA according to the table.
6. Select the wire size according to the MCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interruptor.
  - Earth leakage circuit breaker

3D110014A



# 4 Options

## 4 - 1 Options

AZAS-MV1  
 AZAS-MY1  
 RZAG-MV1  
 RZAG-MY1  
 RZASG-MV1  
 RZASG-MY1

Available options for RZAG models

Option		Option kit			
		RZAG71M7V1B RZAG71M7Y1B	RZAG100M7V1B RZAG100M7Y1B	RZAG125M7V1B RZAG125M7Y1B	RZAG140M7V1B RZAG140M7Y1B
Bottom plate heater		EKBPH140L7			
Refrigerant branch piping	Twin	KHRQ22M20TA			
	Triple	-	KHRQ127H		
	Double twin	-	KHRQ22M20TA (3x)		
Demand adaptor kit		SB.KRP58M52			

Available options for RZASG models

Option		Option kit			
		RZASG71M2V1B	RZASG100M7V1B RZASG100M7Y1B	RZASG125M7V1B RZASG125M7Y1B	RZASG140M7V1B RZASG140M7Y1B
Bottom plate heater		-			
Refrigerant branch piping	Twin	KHRQ22M20TA			
	Triple	-	KHRQ127H		
	Double twin	-	KHRQ22M20TA (3x)		
Demand adaptor kit		SB.KRP58M52			

Available options for AZAS models

Option		Option kit			
		AZAS71M2V1B	AZAS100M7V1B AZAS100M7Y1B	AZAS125M7V1B AZAS125M7Y1B	AZAS140M7V1B AZAS140M7Y1B
Demand adaptor kit		SB.KRP58M52			

3D108867

# 5 Combination table

## 5 - 1 Combination Table

5

**AZAS-MV1**  
**AZAS-MY1**  
**RZAG-MV1**  
**RZAG-MY1**  
**RZASG-MV1**  
**RZASG-MY1**

Possible combinations

	71	100	125	140
2= Pair	35+35	50+50	60+60	71+71
2= Twin				
3= Triple		35+35+35 (*)	50+50+50 (*)	50+50+50 (*)
4= Double twin			35+35+35+35 (*)	35+35+35+35

(\*) See note 1.

Sky Air		High Cassette			Thin cassette				2x2 cassette			Duct (medium ESP)				Concealed floor standing type			Ceiling-mounted - 4-way blow			Wall mounted type		Duct (high ESP)		
Model		FCAHG71GVEB	FCAHG100GVEB	FCAHG125GVEB	FCAHG140GVEB	FCAG35AVEB	FCAG60AVEB	FCAG90AVEB	FCAG125AVEB	FCAG140AVEB	FFA60A2VEB	FFA60A2VEB	FFA60A2VEB	FBA71A2VEB	FBA100A2VEB	FBA125A2VEB	FBA140A2VEB	FNA35A2VEB	FNA60A2VEB	FNA60A2VEB	FUA71AVEB	FUA100AVEB	FUA125AVEB	FAA71AUVB	FAA100AUVB	FDA125A5VEB
RZAG71M7V1B	RZAG71M7Y1B	P				2					2						2				P					
RZAG100M7V1B	RZAG100M7Y1B		P			3	2				3	2					3	2				P				
RZAG125M7V1B	RZAG125M7Y1B			P		4	3	2			4	3	2				4	3	2							P
RZAG140M7V1B	RZAG140M7Y1B	2			P	4	3	2			4	3	2				4	3	2				2			
RZASG71M2V1B						2					2						2				P					
RZASG100M7V1B	RZASG100M7Y1B					3	2				3	2					3	2				P				
RZASG125M7V1B	RZASG125M7Y1B					4	3	2			4	3	2				4	3	2							P
RZASG140M7V1B	RZASG140M7Y1B					4	3	2			4	3	2				4	3	2			2				
AZAS71M2V1B																										
AZAS100M7V1B	AZAS100M7Y1B																									
AZAS125M7V1B	AZAS125M7Y1B																									
AZAS140M7V1B	AZAS140M7Y1B																									

Sky Air		Floor standing type				Slim duct		Ceiling-suspended					
Model		FVA71AMVEB	FVA100AMVEB	FVA125AMVEB	FVA140AMVEB	FDX103F3V1B	FDX140F3V1B	FHA35AVEB	FHA60AVEB	FHA71AVEB	FHA100AVEB	FHA125AVEB	FHA140AVEB
RZAG71M7V1B	RZAG71M7Y1B	P				2							
RZAG100M7V1B	RZAG100M7Y1B		P			3	2						
RZAG125M7V1B	RZAG125M7Y1B			P		4	3	2					
RZAG140M7V1B	RZAG140M7Y1B	2			P	4	3	2					
RZASG71M2V1B						2							
RZASG100M7V1B	RZASG100M7Y1B		P			3	2						
RZASG125M7V1B	RZASG125M7Y1B			P		4	3	2					
RZASG140M7V1B	RZASG140M7Y1B	2			P	4	3	2					
AZAS71M2V1B													
AZAS100M7V1B	AZAS100M7Y1B												
AZAS125M7V1B	AZAS125M7Y1B												
AZAS140M7V1B	AZAS140M7Y1B												

Notes

- Maximum capacity is limited based on outdoor unit capacity.
- When combining multiple indoor units, designate the unit whose remote controller is equipped with the most functions as the master unit.
- For the selection of the correct refnet kit, required to install a multi-combination, refer to the option list.

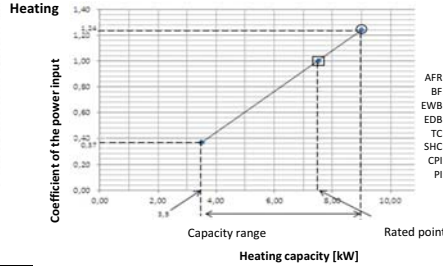
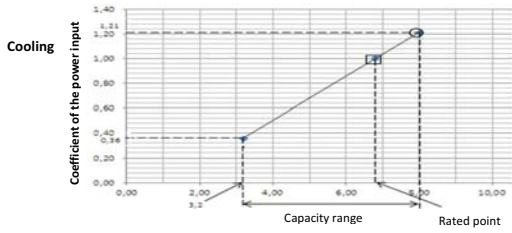
Twin : KHRQ(M)S8T  
 Triple : KHRQ(M)S8H  
 Double twin : KHRQ(M)S8T

**3D108868A**

# 6 Capacity tables

## 6 - 1 Cooling/Heating Capacity Tables

### AZAS71MV1



**Symbols**  
 AFR: Air flow rate [m<sup>3</sup>/min]  
 BF: Bypass factor  
 EWB: Entering wet-bulb temperature (°C WB)  
 EDB: Entering dry-bulb temperature (°C DB)  
 TC: Maximum total cooling/heating capacity [kW]  
 SHC: Sensible heat capacity [kW]  
 CPI: Coefficient of the power input  
 PI: Power input [kW]  
 compressor + indoor and outdoor fan motors

Cooling		Cooling capacity [kW]											
		Outdoor temperature [°C DB]											
Indoor		25			30			35			40		
°CWB	°CDB	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
16.0	22	3.29	4.95	0.92	7.26	4.99	1.08	7.50	5.21	1.20	7.30	5.06	1.32
18.0	25	8.37	5.43	1.00	8.11	5.32	1.11	7.83	5.19	1.21	7.52	5.04	1.34
19.0	27	8.54	5.41	1.01	8.26	5.31	1.11	8.00	5.18	1.21	7.68	5.03	1.34
19.5	27	8.63	5.40	1.01	8.37	5.30	1.11	8.08	5.17	1.21	7.76	5.03	1.34
22.0	30	9.07	5.33	1.03	8.80	5.23	1.12	8.51	5.12	1.22	8.18	4.97	1.35
24.0	32	9.43	5.25	1.03	9.16	5.16	1.13	8.85	5.06	1.23	8.51	4.90	1.36

- Notes**
- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
  - = Maximum at standard conditions  
 □ = Rated capacity and rated coefficient of the power input  
 The maximum capacity is not guaranteed except at standard conditions.
  - SHC is based on indoor units EWB & EDB.  
 SHC for other dry-bulb temperatures = SHC + SHC\*  
 SHC\* = SHC correction for other dry-bulb temperatures  
 = 0.02 x AFR (m<sup>3</sup>/min) x (1 - BF) x (DB\* - EDB)
  - The capacities are based on the following conditions:  
 Outdoor air: 85% RH  
 However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.  
 Corresponding refrigerant piping length: 5.0 m  
 Level difference: 0m
  - CPI is a percentage value compared to the rated value which is 1.00.
  - The error rate for this value is less than 5% and depends on the indoor unit type.
  - The heating performance takes into account the drop that occurs during defrost operation.
  - The air flow rate and bypass factor are mentioned in the table.

Indoor	Outdoor temperature [°C WB]											
	-15		-10		-5		0		5		10	
°CDB	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
16	5.14	0.89	5.68	0.94	6.22	0.98	6.75	1.03	9.02	1.08	9.72	1.13
18	5.14	0.92	5.67	0.97	6.21	1.02	6.74	1.07	9.01	1.12	9.70	1.18
20	5.13	0.96	5.67	1.01	6.20	1.06	6.73	1.11	9.00	1.17	9.69	1.23
21	5.13	0.98	5.66	1.03	6.20	1.08	6.73	1.13	9.00	1.19	9.69	1.25
22	5.12	0.99	5.66	1.04	6.19	1.10	6.73	1.15	8.99	1.22	9.68	1.28
24	5.12	1.03	5.65	1.09	6.19	1.14	6.72	1.20	8.98	1.26	9.66	1.32

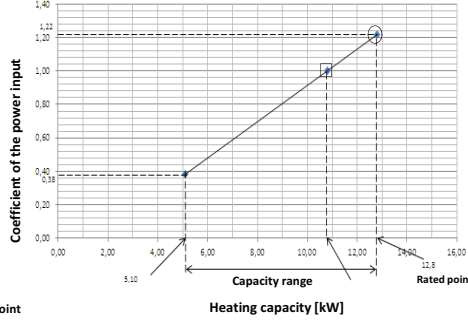
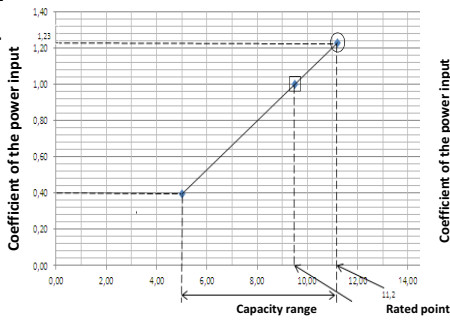
9. The rated power input for each model is mentioned in the table below.

Pair	FCAG71A	FAA71A	FBA71A
AFR (BF)	15.3 (0.14)	18.0 (0.16)	18.0 (0.13)

Pair	FCAG71A	FAA71A	FBA71A
Cooling	2,17	2,00	1,89
Heating	2,38	2,09	2,09

3D112148

### AZAS100MV1 AZAS100MY1



**Symbols**  
 AFR: Air flow rate [m<sup>3</sup>/min]  
 BF: Bypass factor  
 EWB: Entering wet-bulb temperature (°C WB)  
 EDB: Entering dry-bulb temperature (°C DB)  
 TC: Maximum total cooling/heating capacity [kW]  
 SHC: Sensible heat capacity [kW]  
 CPI: Coefficient of the power input  
 PI: Power input [kW]  
 compressor + indoor and outdoor fan motors

Indoor		Outdoor Temperature [°C DB]											
		25			30			35			40		
°CWB	°CDB	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
16.0	22	11.2	7.61	1.01	10.8	7.44	1.11	10.5	7.29	1.22	10.1	7.08	1.32
18.0	25	11.8	7.59	1.01	11.4	7.49	1.12	11.0	7.27	1.23	10.5	7.09	1.33
19.0	27	12.0	7.57	1.02	11.6	7.44	1.12	11.2	7.26	1.23	10.8	7.04	1.33
19.5	27	12.1	7.59	1.02	11.7	7.37	1.13	11.4	7.34	1.23	10.9	7.04	1.34
22.0	30	12.8	7.52	1.02	12.4	7.36	1.13	11.9	7.16	1.24	11.5	7.08	1.35
24.0	32	13.3	7.42	1.03	12.9	7.27	1.14	12.4	7.06	1.25	12.0	6.91	1.36

- Notes**
- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
  - = Maximum at standard conditions  
 □ = Rated capacity and rated coefficient of the power input  
 The maximum capacity is not guaranteed except at standard conditions.
  - SHC is based on indoor units EWB & EDB.  
 SHC for other dry-bulb temperatures = SHC + SHC\*  
 SHC\* = SHC correction for other dry-bulb temperatures  
 = 0.02 x AFR (m<sup>3</sup>/min) x (1 - BF) x (DB\* - EDB)
  - The capacities are based on the following conditions:  
 Outdoor air: 85% RH  
 However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.  
 Corresponding refrigerant piping length: 5.0 m  
 Level difference: 0m
  - CPI is a percentage value compared to the rated value which is 1.00.
  - The error rate for this value is less than 5% and depends on the indoor unit type.
  - The heating performance takes into account the drop that occurs during defrost operation.
  - The air flow rate and bypass factor are mentioned in the table.
9. The rated power input for each model is mentioned in the table below.

Pair	FCAG100A	FAA100A	FBA100A
AFR (BF)	22.8 (0.17)	26.0 (0.10)	29.0 (0.03)

Pair	FCAG100A	FAA100A	FBA100A
Cooling	2,92	3,52	2,97
Heating	3,45	3,98	3,32

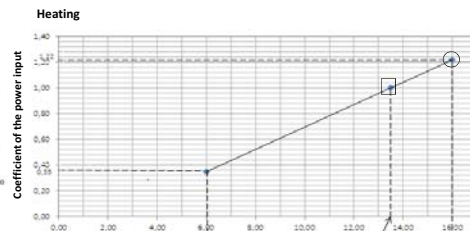
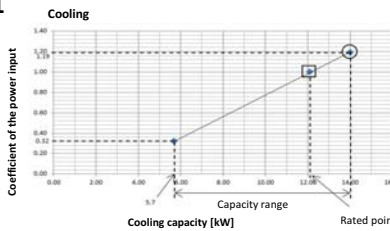
3D112149

# 6 Capacity tables

## 6 - 1 Cooling/Heating Capacity Tables

6

### AZAS125MV1 AZAS125MY1



**Symbols**  
 AFR: Air flow rate (m<sup>3</sup>/min)  
 BF: Bypass factor  
 EWB: Entering wet-bulb temperature (°C WB)  
 EDB: Entering dry-bulb temperature (°C DB)  
 TC: Maximum total cooling/heating capacity [kW]  
 SHC: Sensible heat capacity [kW]  
 CPI: Coefficient of the power input  
 Pi: Power input [kW]  
 compressor + indoor and outdoor fan motors

Indoor		Outdoor temperature (°C DB)											
		25			30			35			40		
°CWB	°CDB	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
16.0	22	14.10	9.54	0.97	13.60	9.30	1.08	13.10	9.12	1.18	12.60	8.78	1.28
18.0	25	14.70	9.50	0.97	14.20	9.32	1.08	13.70	9.09	1.19	13.20	8.83	1.30
19.0	27	15.00	9.52	0.99	14.50	9.34	1.09	14.00	9.06	1.19	13.50	8.87	1.29
19.5	27	15.20	9.52	0.99	14.70	9.26	1.09	14.20	9.08	1.19	13.60	8.81	1.30
22.0	30	16.00	9.39	0.99	15.50	9.14	1.09	14.90	8.95	1.20	14.40	8.74	1.31
24.0	32	16.70	9.31	1.00	16.10	9.09	1.11	15.50	8.83	1.21	15.00	8.63	1.32

Indoor		Outdoor temperature (°C WB)											
		-15.0		-10.0		-5.0		0.0		6.0		10.0	
°CDB	°CWB	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
16	10.7	0.93	1.18	0.99	1.26	1.02	1.30	1.05	1.60	1.12	1.73	1.18	1.28
18	10.7	0.97	1.18	1.02	1.25	1.07	1.29	1.10	1.60	1.17	1.73	1.23	1.28
20	10.7	1.01	1.18	1.07	1.25	1.11	1.29	1.14	<b>16.0</b>	<b>1.22</b>	1.73	1.28	1.28
21	10.7	1.03	1.18	1.09	1.25	1.13	1.29	1.16	1.60	1.24	1.73	1.31	1.28
22	10.7	1.04	1.18	1.10	1.25	1.14	1.29	1.18	1.60	1.27	1.73	1.33	1.28
24	10.7	1.09	1.18	1.15	1.25	1.19	1.29	1.23	1.60	1.31	1.73	1.38	1.28

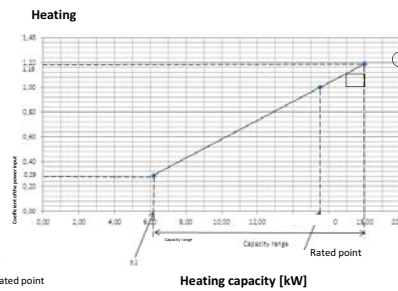
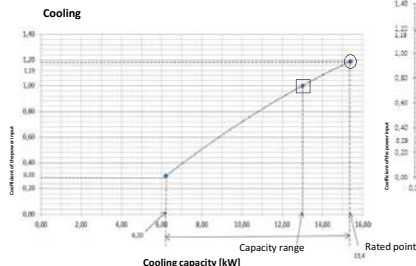
- Notes**
- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
  - = Maximum at standard conditions  
 □ = Rated capacity and rated coefficient of the power input  
 The maximum capacity is not guaranteed except at standard conditions.
  - SHC is based on indoor units EWB & EDB.  
 SHC for other dry-bulb temperatures = SHC + SHC\*  
 SHC\*=SHC correction for other dry-bulb temperatures  
 = 0.02 x AFR (m<sup>3</sup>/min) x (1-BF) x (DB\* - EDB)
  - The capacities are based on the following conditions:  
 Outdoor air: 85% RH  
 However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.  
 Corresponding refrigerant piping length: 5.0 m  
 Level difference: 0m
  - CPI is a percentage value compared to the rated value which is 1.00.
  - The error rate for this value is less than 5% and depends on the indoor unit type.
  - The heating performance takes into account the drop that occurs during defrost operation.
  - The air flow rate and bypass factor are mentioned in the table.
  - The rated power input for each model is mentioned in the table below.

Pair	FCAG125A	AVA125A	FBA125A
AFR	26.0	28.0	34.0
(BF)	(0.21)	(0.14)	(0.06)

Pair	FCAG125A	AVA125A	FBA125A
Cooling	5,28	5,11	5,26
Heating	3,44	3,60	3,23

3D112150

### AZAS140MV1 AZAS140MY1



**Symbols**  
 AFR: Air flow rate (m<sup>3</sup>/min)  
 BF: Bypass factor  
 EWB: Entering wet-bulb temperature (°C WB)  
 EDB: Entering dry-bulb temperature (°C DB)  
 TC: Maximum total cooling/heating capacity [kW]  
 SHC: Sensible heat capacity [kW]  
 CPI: Coefficient of the power input  
 Pi: Power input [kW]  
 compressor + indoor and outdoor fan motors

Indoor		Outdoor temperature (°C DB)											
		25			30			35			40		
°CWB	°CDB	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
16.0	22	15.5	10.47	0.98	14.9	10.25	1.06	14.4	10.03	1.18	13.9	9.69	1.28
18.0	25	16.2	10.55	0.98	15.6	10.21	1.08	15.1	10.01	1.19	14.5	9.71	1.30
19.0	27	16.6	10.43	0.99	16.0	10.18	1.08	<b>15.4</b>	<b>9.98</b>	<b>1.19</b>	14.8	9.76	1.30
19.5	27	16.7	10.49	0.99	16.1	10.16	1.10	15.6	10.00	1.19	15.0	9.66	1.30
22.0	30	17.6	10.37	0.99	17.0	10.16	1.10	16.4	9.83	1.21	15.8	9.60	1.31
24.0	32	18.4	10.20	1.00	17.7	10.00	1.11	17.0	9.67	1.22	16.4	9.47	1.32

Indoor		Outdoor temperature (°C WB)											
		-15.0		-10.0		-5.0		0.0		6.0		10.0	
°CDB	°CWB	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
16	11.6	0.91	1.27	0.97	1.36	1.00	1.39	1.03	1.80	1.09	1.94	1.16	1.28
18	11.6	0.95	1.27	1.00	1.36	1.04	1.39	1.07	1.80	1.14	1.94	1.21	1.28
20	11.6	0.99	1.27	1.05	1.35	1.09	1.39	1.11	<b>18.0</b>	<b>1.19</b>	1.94	1.25	1.28
21	11.5	1.00	1.27	1.06	1.35	1.11	1.39	1.13	1.80	1.21	1.94	1.28	1.28
22	11.5	1.02	1.27	1.08	1.35	1.12	1.39	1.16	1.80	1.24	1.94	1.30	1.28
24	11.5	1.07	1.26	1.12	1.35	1.17	1.39	1.20	1.80	1.29	1.94	1.35	1.28

- Notes**
- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
  - = Maximum at standard conditions  
 □ = Rated capacity and rated coefficient of the power input  
 The maximum capacity is not guaranteed except at standard conditions.
  - SHC is based on indoor units EWB & EDB.  
 SHC for other dry-bulb temperatures = SHC + SHC\*  
 SHC\*=SHC correction for other dry-bulb temperatures  
 = 0.02 x AFR (m<sup>3</sup>/min) x (1-BF) x (DB\* - EDB)
  - The capacities are based on the following conditions:  
 Outdoor air: 85% RH  
 However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.  
 Corresponding refrigerant piping length: 5.0 m  
 Level difference: 0m
  - CPI is a percentage value compared to the rated value which is 1.00.
  - The error rate for this value is less than 5% and depends on the indoor unit type.
  - The heating performance takes into account the drop that occurs during defrost operation.
  - The air flow rate and bypass factor are mentioned in the table.
  - The rated power input for each model is mentioned in the table below.

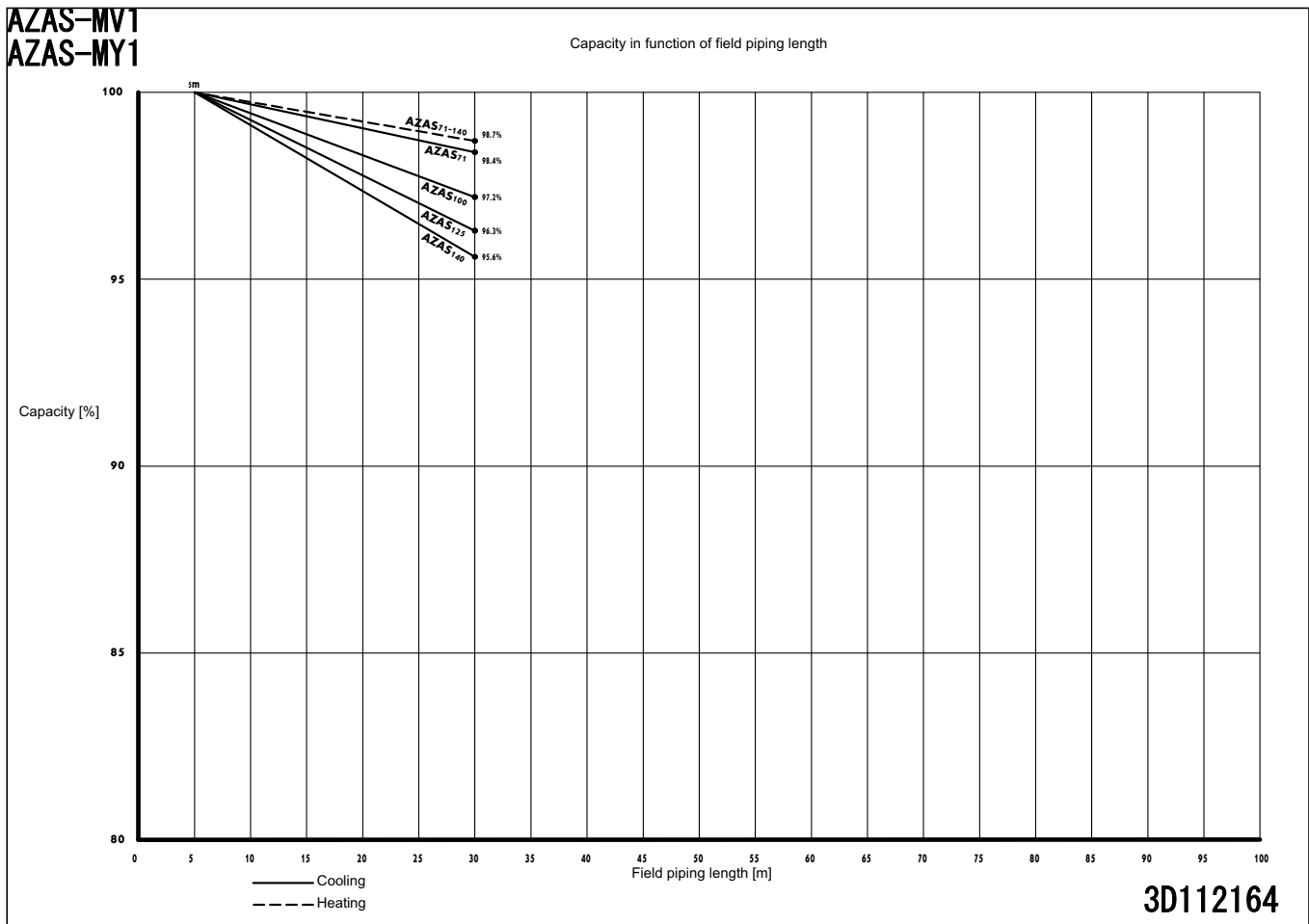
Pair	FCAG140A	FBA140A
AFR	26.0	34.0
(BF)	(0.23)	(0.06)

Pair	FCAG140A	FBA140A
Cooling	4,47	4,45
Heating	5,01	5,13

3D112151

# 6 Capacity tables

## 6 - 2 Capacity Correction Factor



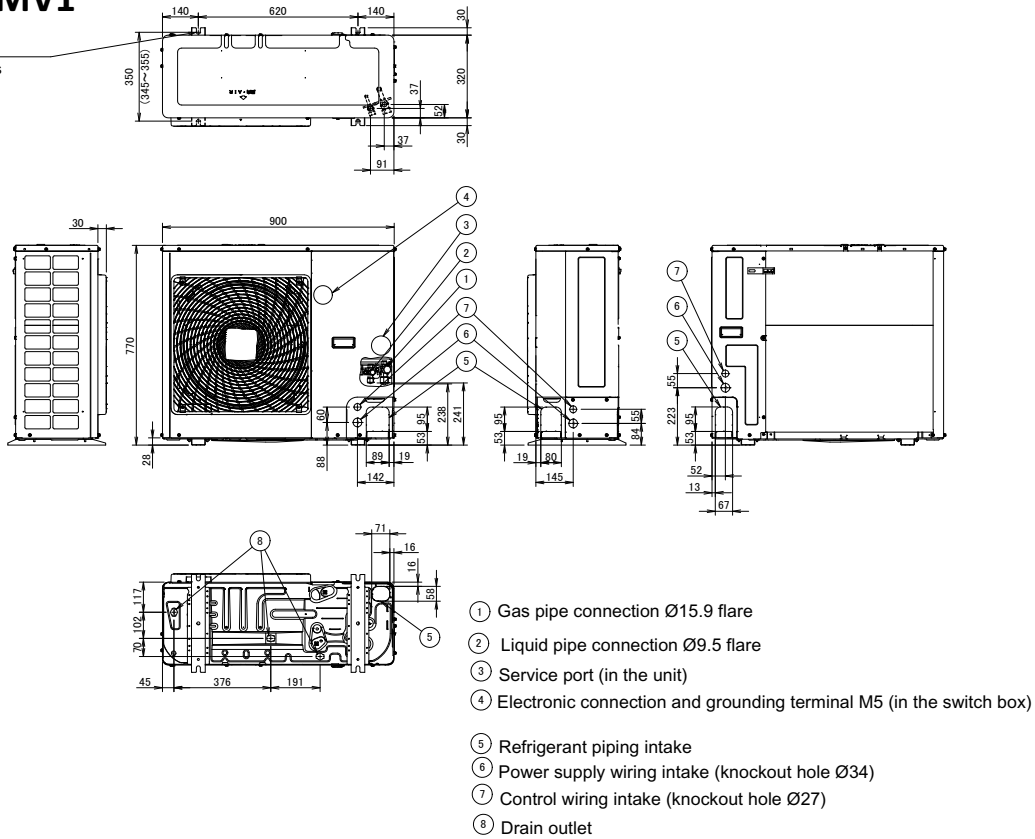
# 7 Dimensional drawings

## 7 - 1 Dimensional Drawings

7

### AZAS71MV1 RZASG71MV1

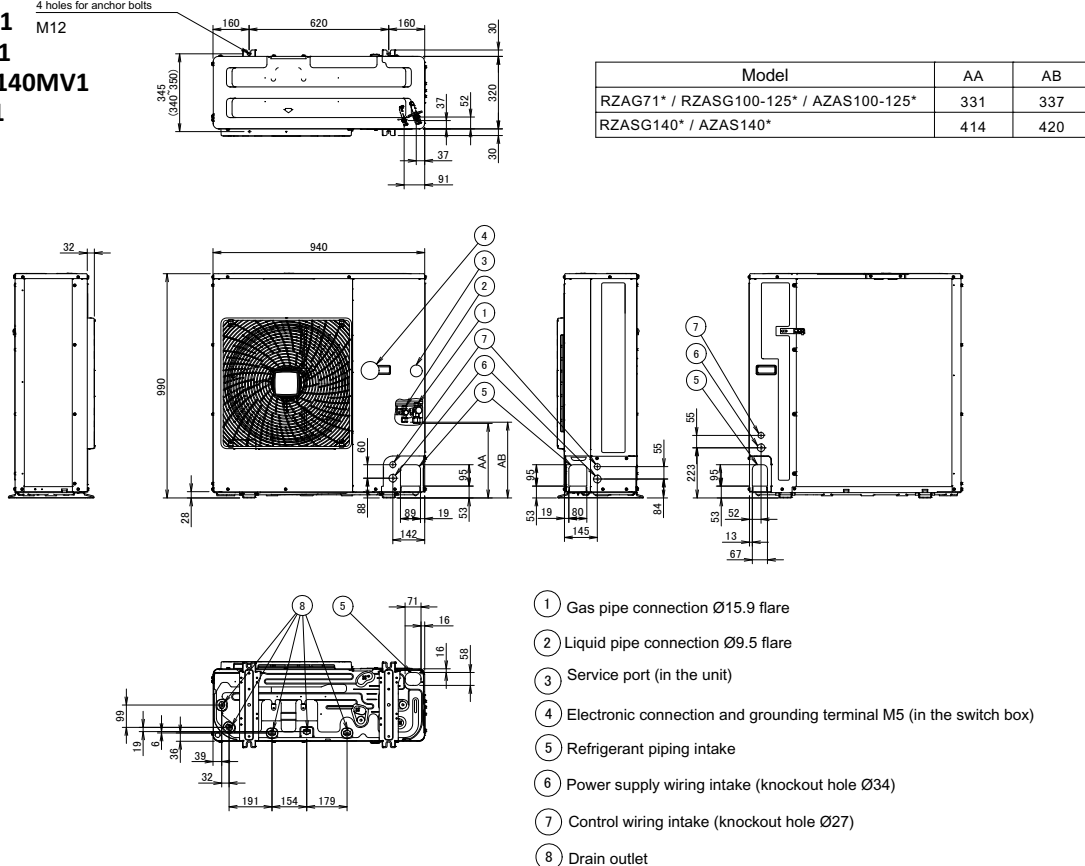
4 holes for anchor bolts  
M12



**3D110013**

### AZAS100-140MV1 AZAS-MY1 RZAG71MV1 RZAG71MY1 RZASG100-140MV1 RZASG-MY1

4 holes for anchor bolts  
M12



Model	AA	AB
RZAG71* / RZASG100-125* / AZAS100-125*	331	337
RZASG140* / AZAS140*	414	420

**3D110011**

# 8 Centre of gravity

## 8 - 1 Centre of Gravity

AZAS71MV1  
RZASG71MV1



4D110027

## 8 Centre of gravity

### 8 - 1 Centre of Gravity

8

**AZAS100-140MV1**

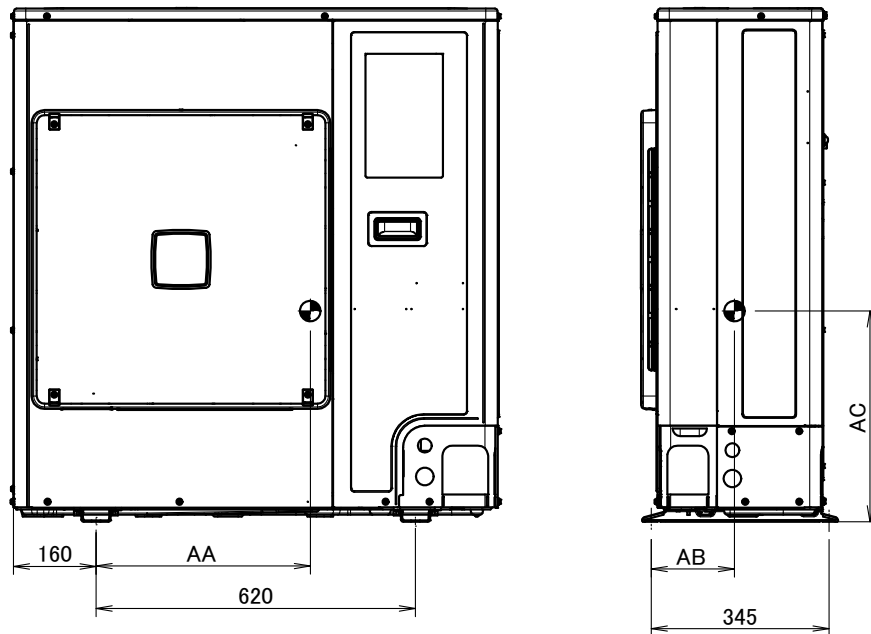
**AZAS-MY1**

**RZAG71MV1**

**RZAG71MY1**

**RZASG100-140MV1**

**RZASG-MY1**



Model	AA	AB	AC
RZAG71M7V*	414	163	407
RZAG71M7Y*	432	137	407
RZASG100-125M7V* / AZAS100-125M7V*	425	181	422
RZASG100-125M7Y* / AZAS100-125M7Y*	414	156	417
RZASG140M7V* / AZAS140M7V*	414	161	423
RZASG140M7Y* / AZAS140M7Y*	416	151	418

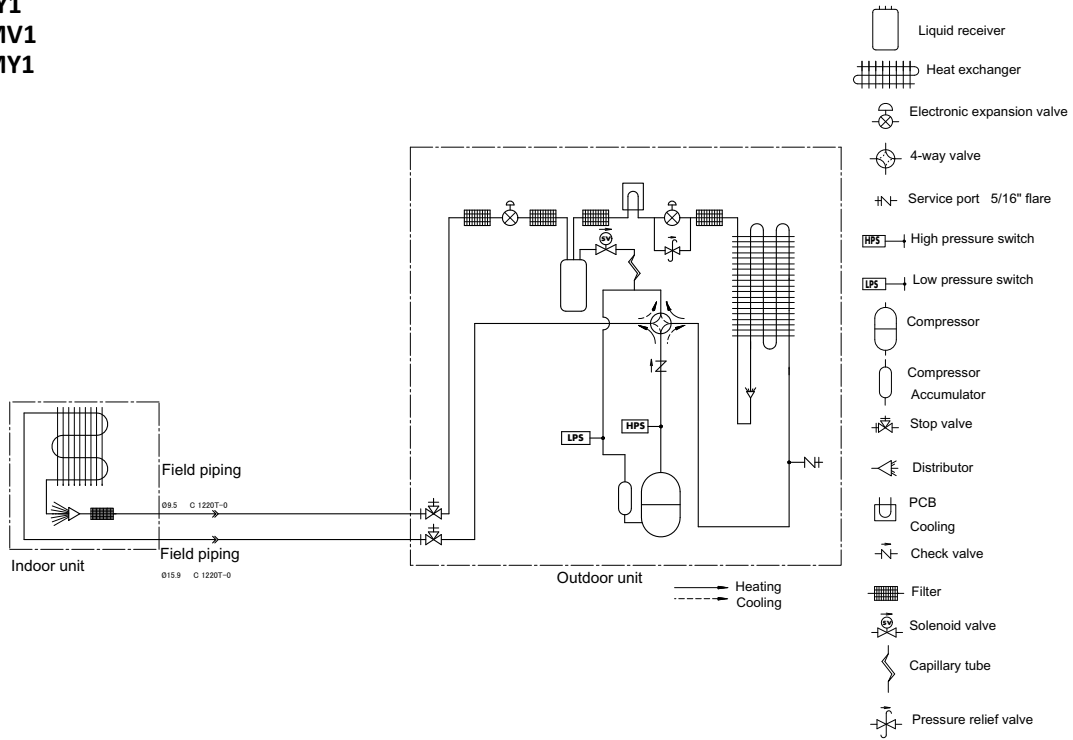
**4D110025**



# 9 Piping diagrams

## 9 - 1 Piping Diagrams

AZAS-MV1  
 AZAS-MY1  
 RZAG-MV1  
 RZAG-MY1  
 RZASG-MV1  
 RZASG-MY1



3D108855A

# 10 Wiring diagrams

## 10 - 1 Wiring Diagrams - Single Phase

10

**AZAS71MV1, RZASG71MV1**

**LEGEND**

Part n°	Description
A1P	Printed circuit board (main)
BS1-3 (A1P)	Push-button switch
DS1 (A1P)	Dipswitch
E1-3 (AAP)	Connector
F1U (A1P)	Fuse T 31.5 A 250 V
F2U (A1P)	Fuse T 6.3 A 250 V
F3U (A1P)	Fuse T 6.3 A 250 V
F6U (A1P)	Fuse T 5 A 250 V
HAP (A1P)	Light-emitting diode (service monitor is green)
K1R (A1P)	Magnetic relay (Y1S)
K2R (A1P)	Magnetic relay (Y2S)
K13R-K15R, K10R (A1P)	Magnetic relay
K11M (A1P)	Magnetic contactor
L (A1P)	Connector
M1C	Compressor motor
M1F	Fan motor
N (A1P)	Connector
PFC (A1P)	Power factor correction
PS (A1P)	Switching power supply
Q1D	Earth leakage circuit breaker (30mA)
Q1E	Overload protection
R1T	Thermistor (air)
R2T	Thermistor (discharge)
R3T	Thermistor (suction)
R4T	Thermistor (heat exchanger)
R5T	Thermistor (heat exchanger middle)
R6T	Thermistor (liquid)
R7T	Thermistor (fin)
R8 (A1P)	Resistor
S1PH	High pressure switch
S1PL	Low pressure switch
SEG1-3 (A1P)	7-segment display
TC1 (A1P)	Signal transceiver circuit
U, V, W (A1P)	Connector
V1D (A1P)	Diode
V*R (A1P)	Diode module
X*A (A1P)	Connector
X1M	Terminal strip
Y1E, Y3E	Electronic expansion valve
Y1-2S	Solenoid valve (4-way valve)
Z*C	Noise filter (ferrite core)
Z'F (A1P)	Noise filter

**NOTES**

1. Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS3 and DS1 switches.
2. When operating, do not short-circuit protection device(s) S1PH, S1PL and Q1E.
3. Refer to the combination table and the option manual for how to connect the wiring to X6A and X77A.
4. Colours: BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green.

**RZAG71MV1, RZASG100MV1, AZAS100MV1**

**LEGEND**

Part n°	Description
A1P	Printed circuit board (main)
BS1-3 (A1P)	Push-button switch
DS1 (A1P)	Dipswitch
E1-3 (AAP)	Connector
E1H	Bottom plate heater
F1U (A1P)	Fuse T 31.5 A 250 V
F2U (A1P)	Fuse T 6.3 A 250 V
F3U (A1P)	Fuse T 6.3 A 250 V
F6U (A1P)	Fuse T 5 A 250 V
F8-9U	Fuse F 1 A 250 V
HAP (A1P)	Light-emitting diode (service monitor is green)
K1R (A1P)	Magnetic relay (Y1S)
K2R (A1P)	Magnetic relay (Y2S)
K4R (A1P)	Magnetic relay (E1H)
K13R-K15R, K10R (A1P)	Magnetic relay
K11M (A1P)	Magnetic contactor
L (A1P)	Connector
M1C	Compressor motor
M1F	Fan motor
N (A1P)	Connector
PFC (A1P)	Power factor correction
PS (A1P)	Switching power supply
Q1D	Earth leakage circuit breaker (30mA)
Q1E	Overload protection
R1T	Thermistor (air)
R2T	Thermistor (discharge)
R3T	Thermistor (suction)
R4T	Thermistor (heat exchanger)
R5T	Thermistor (heat exchanger middle)
R6T	Thermistor (liquid)
R7T	Thermistor (fin)
R8 (A1P)	Resistor
S1PH	High pressure switch
S1PL	Low pressure switch
SEG1-3 (A1P)	7-segment display
TC1 (A1P)	Signal transceiver circuit
U, V, W (A1P)	Connector
V1D (A1P)	Diode
V*R (A1P)	Diode module
X1M	Terminal strip
Y1E, Y3E	Electronic expansion valve
Y1-2S	Solenoid valve (4-way valve)
Z*C	Noise filter (ferrite core)
Z'F (A1P)	Noise filter

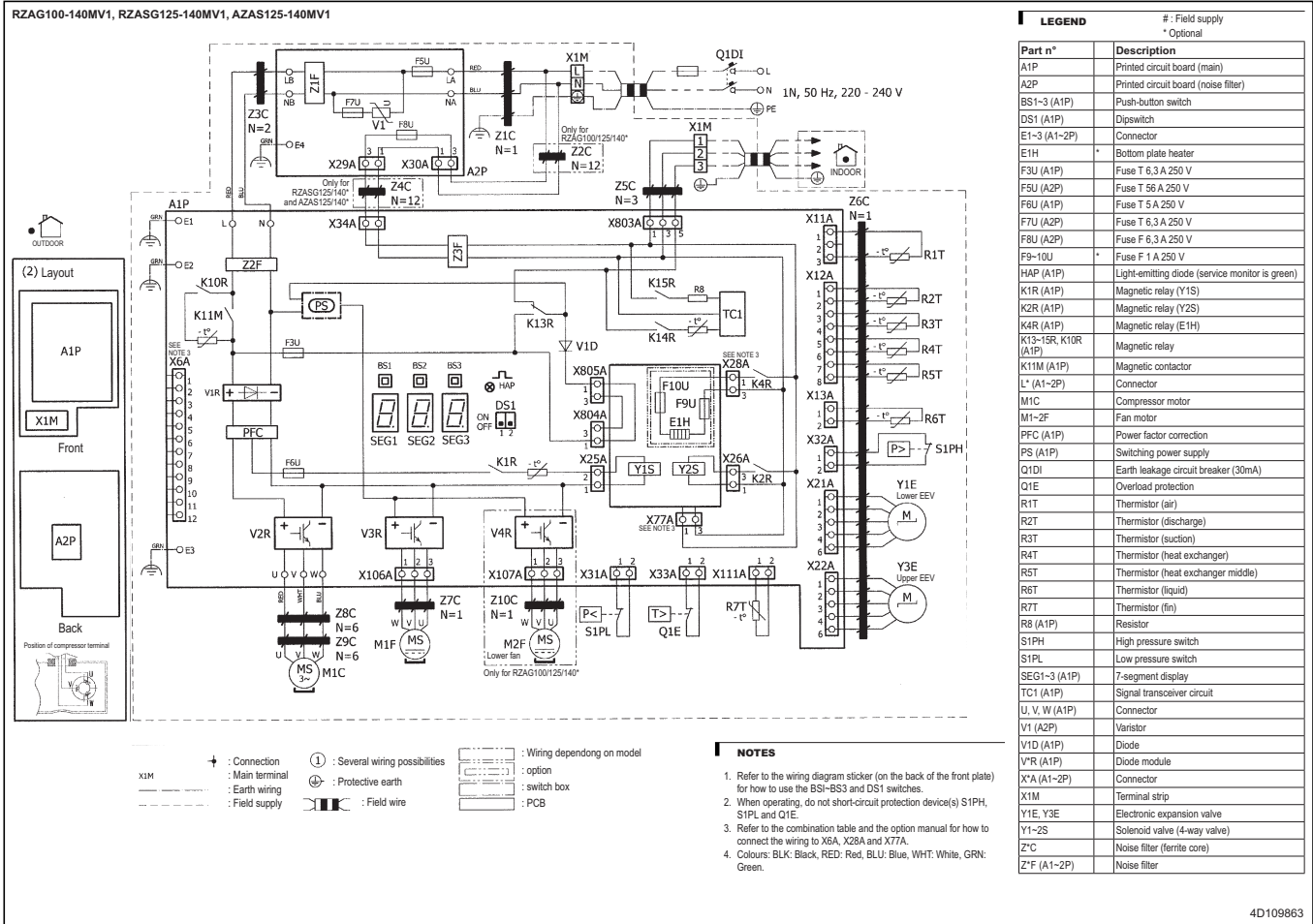
**NOTES**

1. Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS3 and DS1 switches.
2. When operating, do not short-circuit protection device(s) S1PH, S1PL and Q1E.
3. Refer to the combination table and the option manual for how to connect the wiring to X6A, X28A and X77A.
4. Colours: BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green.
5. Windings: L-N: 2 - Earth: 1

16

# 10 Wiring diagrams

## 10 - 1 Wiring Diagrams - Single Phase

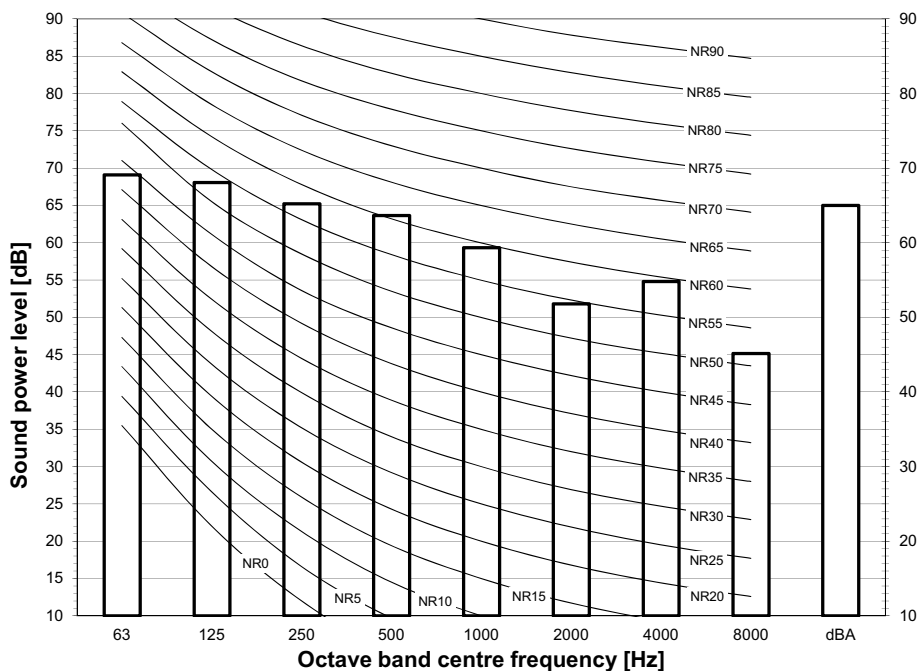


# 11 Sound data

## 11 - 1 Sound Power Spectrum

11

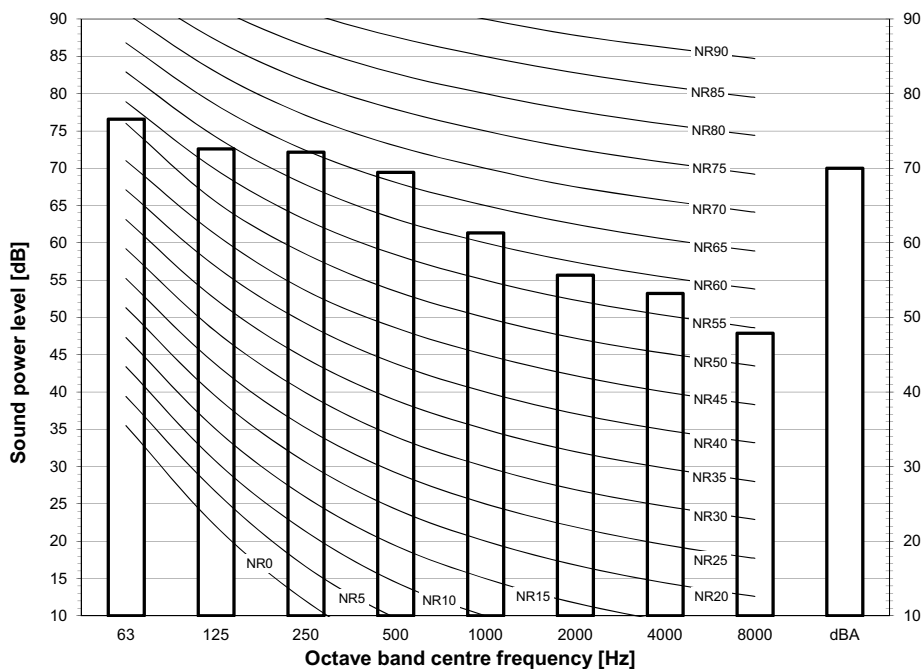
AZAS71MV1  
RZASG71MV1



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

3D110037

AZAS100MV1  
AZAS100MY1  
RZASG100MV1  
RZASG100MY1



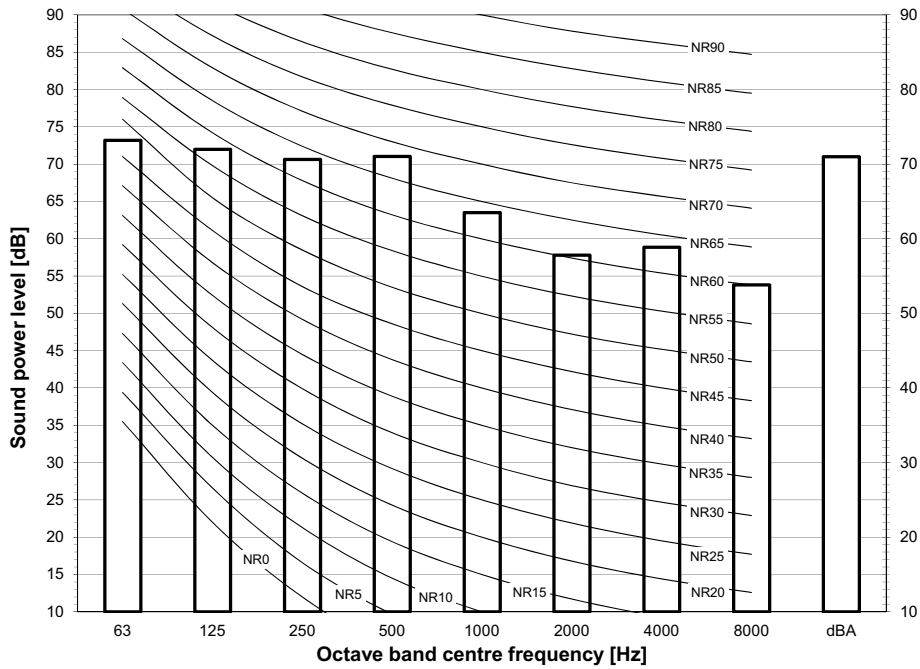
**Notes**  
 - dBA = A-weighted sound power level (A scale according to IEC).  
 - Reference acoustic intensity 0dB = 10E-6μW/m<sup>2</sup>  
 - Measured according to ISO 3744

3D110038

# 11 Sound data

## 11 - 1 Sound Power Spectrum

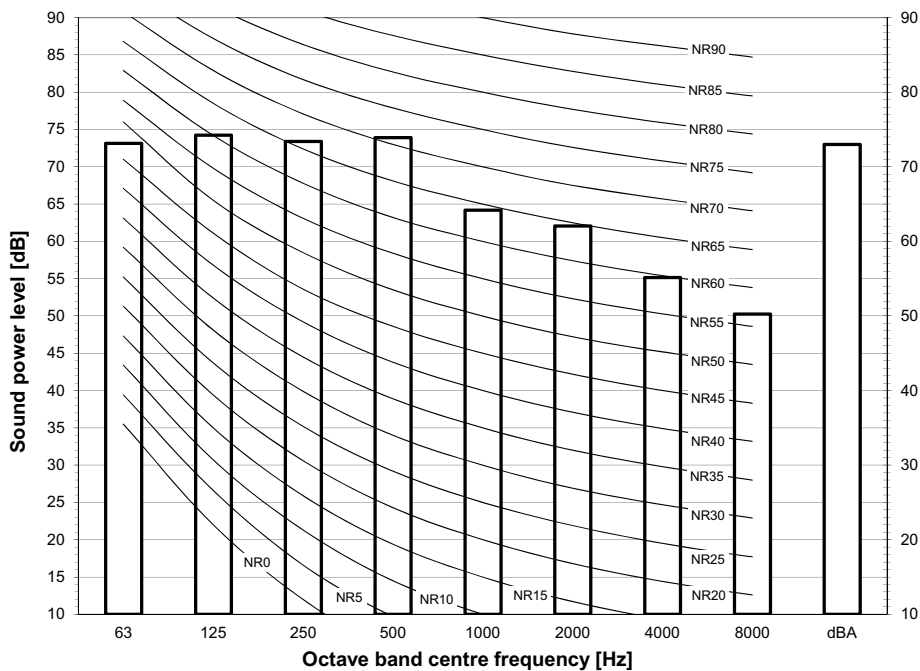
AZAS125MV1  
 AZAS125MY1  
 RZASG125MV1  
 RZASG125MY1



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

3D110039

AZAS140MV1  
 AZAS140MY1  
 RZASG140MV1  
 RZASG140MY1



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

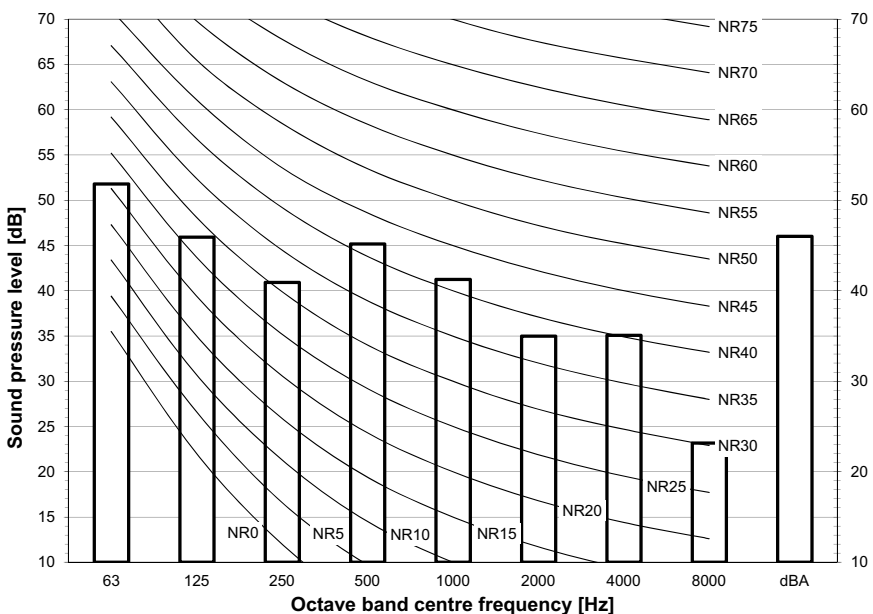
3D110040

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum - Cooling

11

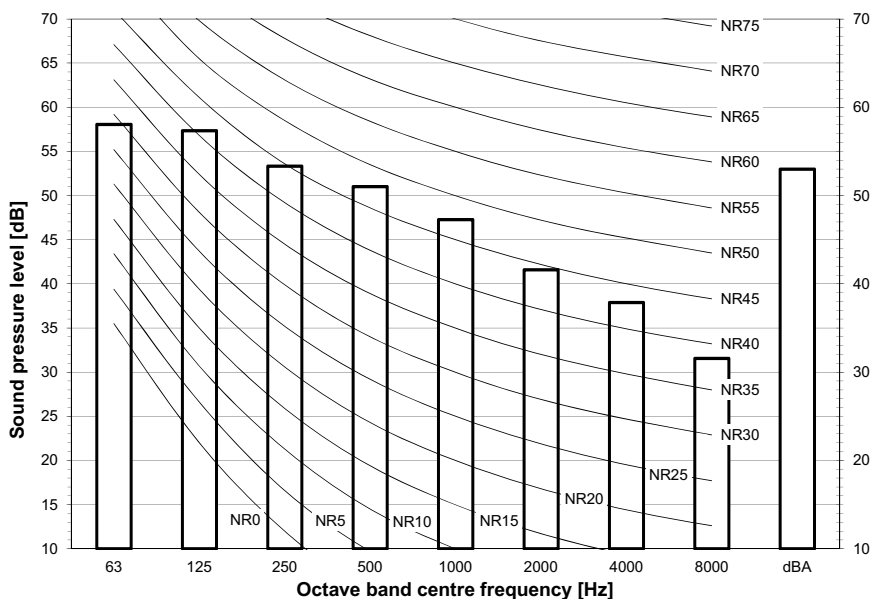
AZAS71MV1  
RZASG71MV1



- 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

3D110049

AZAS100MV1  
AZAS100MY1  
RZASG100MV1  
RZASG100MY1



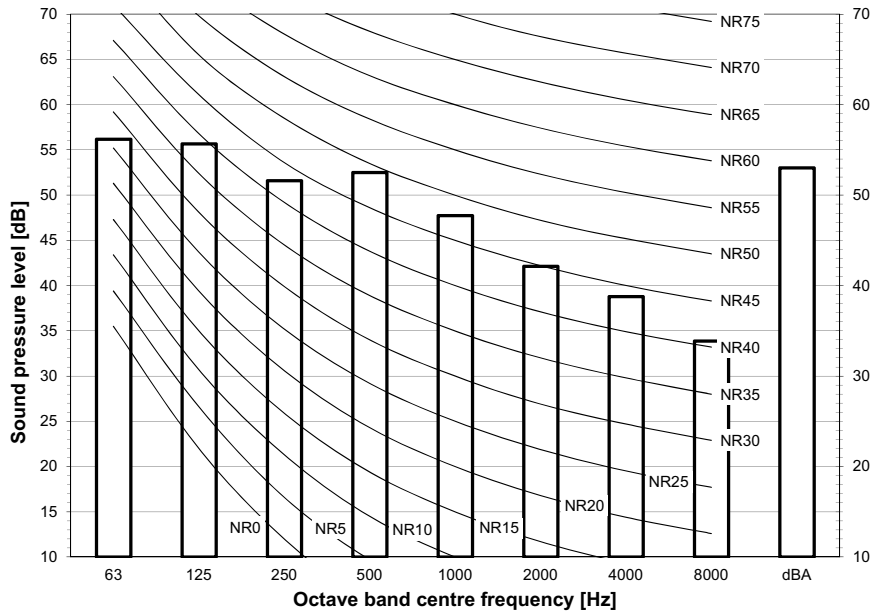
- Notes**
- Data is valid at free field condition.
  - Data is valid at nominal operation condition.
  - dBA = A-weighted sound pressure level (A scale according to IEC).
  - Reference acoustic pressure 0 dB = 20 μPa

3D110050

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum - Cooling

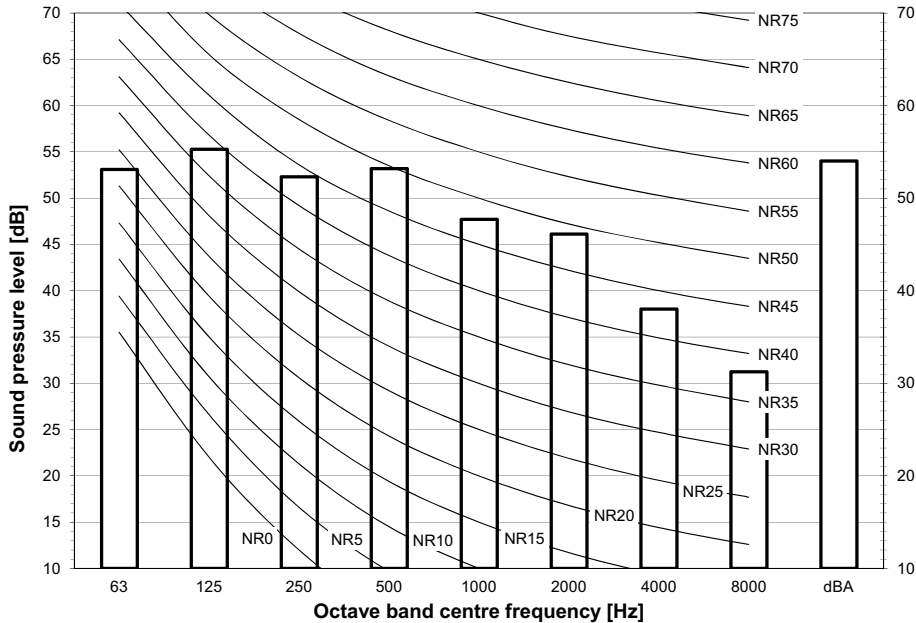
AZAS125MV1  
 AZAS125MY1  
 RZASG125MV1  
 RZASG125MY1



- 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

3D110051

AZAS140MV1  
 AZAS140MY1  
 RZASG140MV1  
 RZASG140MY1



- 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

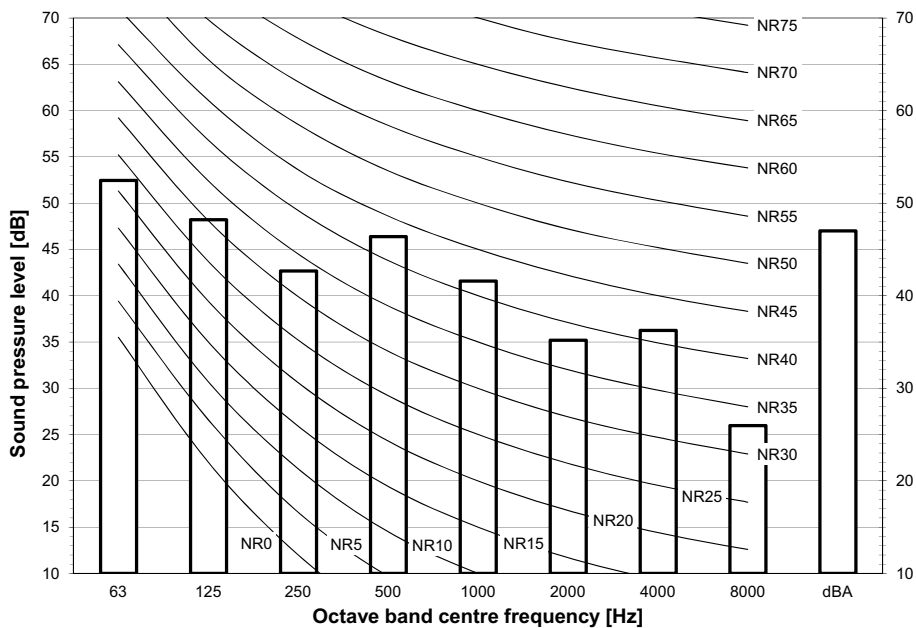
3D111310

# 11 Sound data

## 11 - 3 Sound Pressure Spectrum - Heating

11

AZAS71MV1  
RZASG71MV1

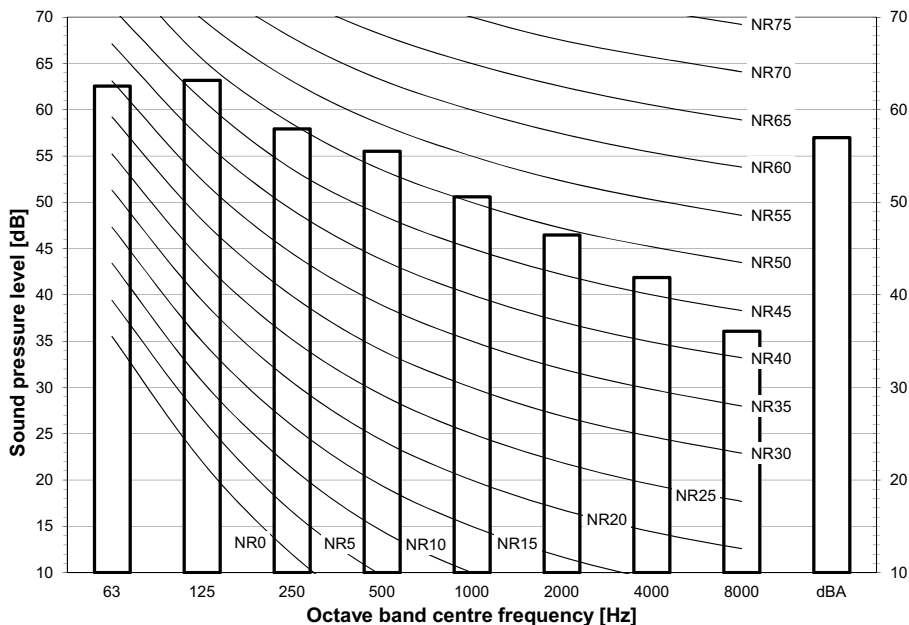


**Notes**

- 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

3D111293

AZAS100MV1  
AZAS100MY1  
RZASG100MV1  
RZASG100MY1



**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

3D111294

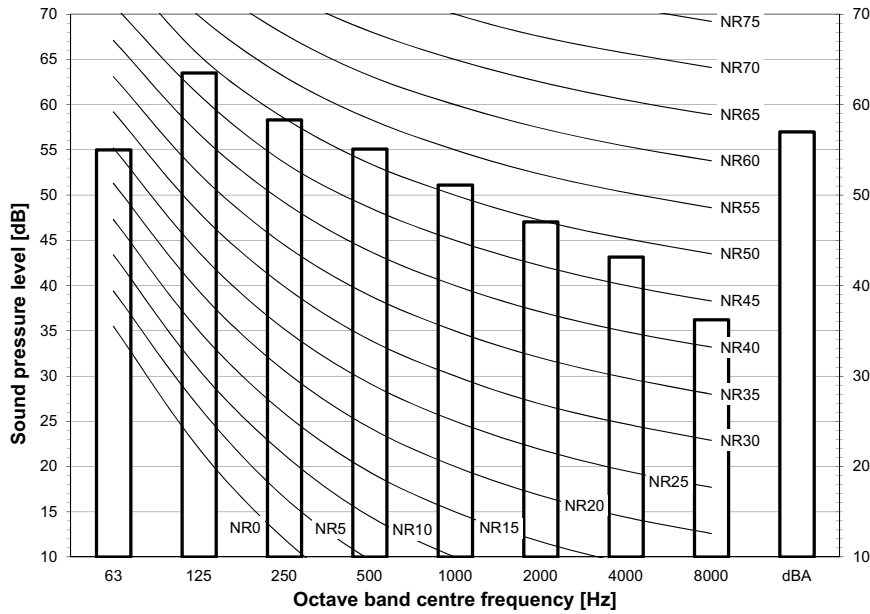
22



# 11 Sound data

## 11 - 3 Sound Pressure Spectrum - Heating

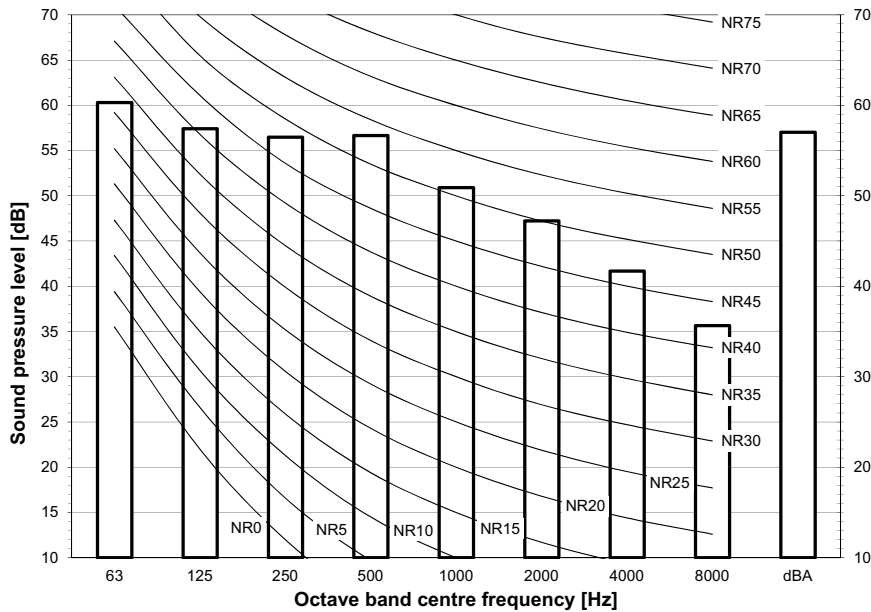
AZAS125MV1  
 AZAS125MY1  
 RZASG125MV1  
 RZASG125MY1



- 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

3D111295

AZAS140MV1  
 AZAS140MY1  
 RZASG140MV1  
 RZASG140MY1



- 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

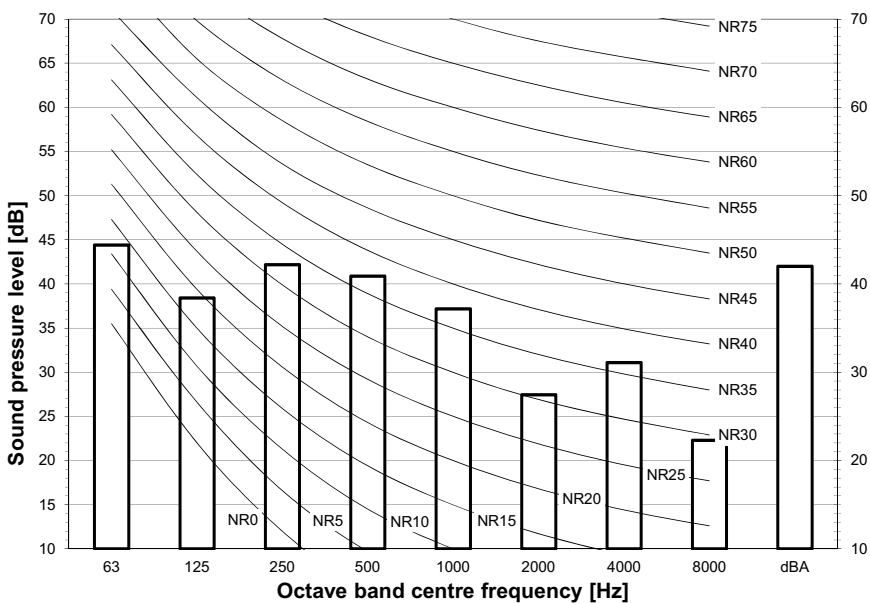
3D111296

# 11 Sound data

## 11 - 4 Sound Pressure Spectrum Quiet Mode

11

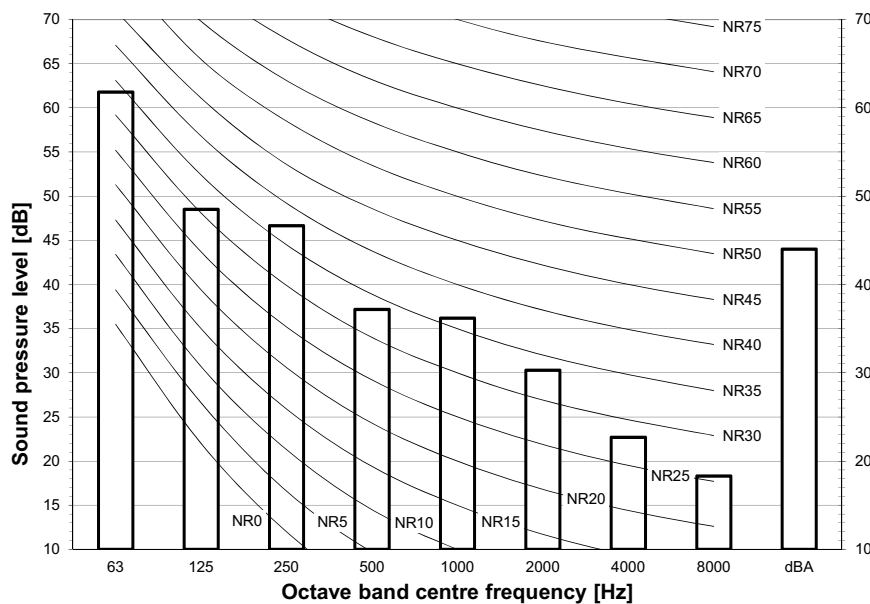
AZAS71MV1  
RZASG71MV1



- 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

3D111315

AZAS100MV1  
AZAS100MY1  
RZASG100MV1  
RZASG100MY1



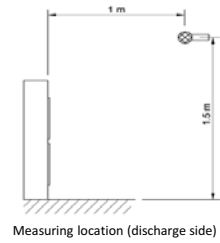
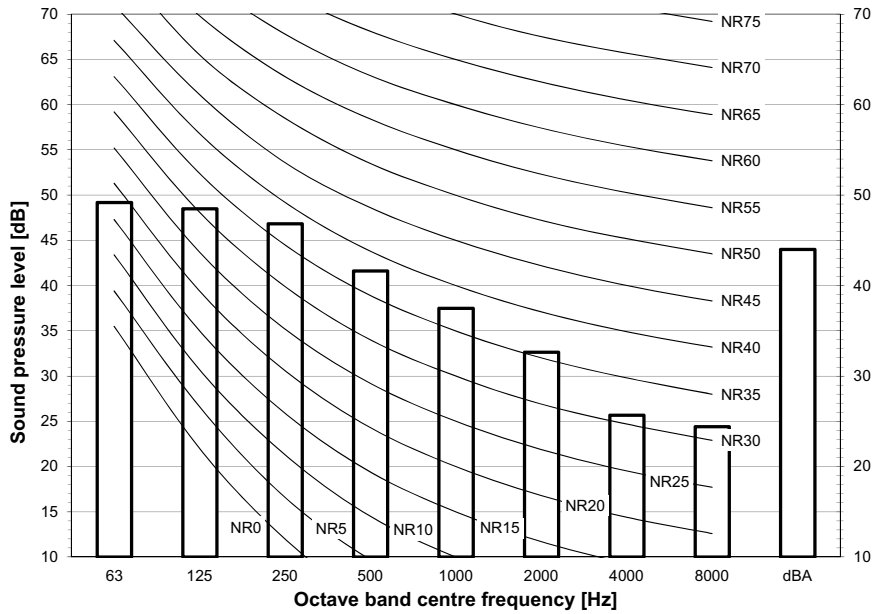
- Notes**
- Data is valid at free field condition.
  - Data is valid at nominal operation condition.
  - dBA = A-weighted sound pressure level (A scale according to IEC).
  - Reference acoustic pressure 0 dB = 20 μPa

3D111316

# 11 Sound data

## 11 - 4 Sound Pressure Spectrum Quiet Mode

AZAS125MV1  
 AZAS125MY1  
 RZASG125MV1  
 RZASG125MY1

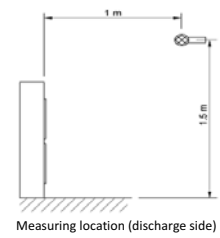
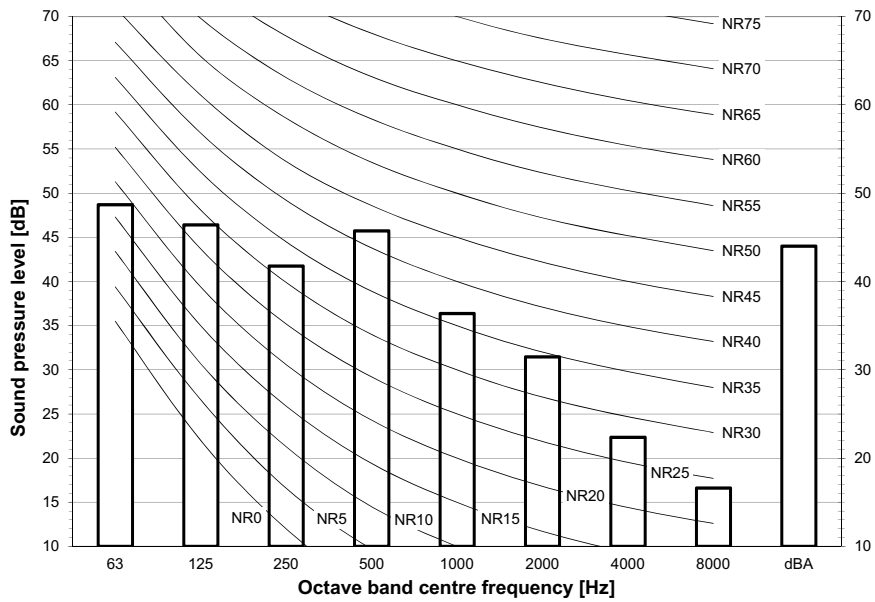


**Notes**

- 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

3D111317

AZAS140MV1  
 AZAS140MY1  
 RZASG140MV1  
 RZASG140MY1



**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

3D111318

# 12 Installation

## 12 - 1 Installation Method

RZAG-MV1  
 RZAG-MY1  
 RZASG-MV1  
 RZASG-MY1  
 AZAS-MV1  
 AZAS-MY1

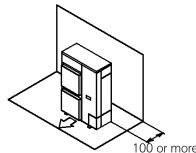
### Installation service space

The measure of these values is "mm".

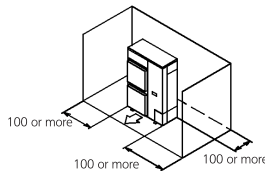
#### (A) When there are obstacles on suction sides.

• No obstacle above

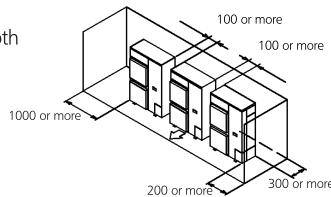
- ① Stand-alone installation
  - Obstacle on the suction side only



- Obstacle on both sides and suction side, too

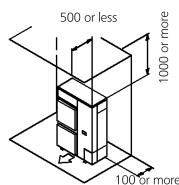


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides

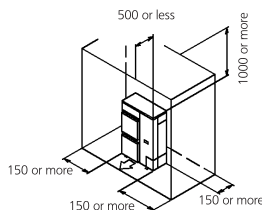


• Obstacle above, too.

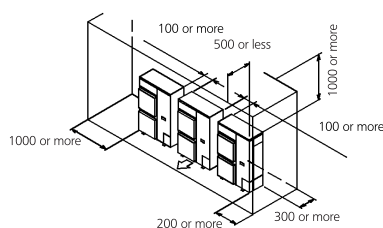
- ① Stand-alone installation
  - Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



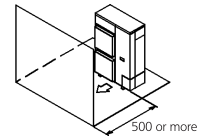
- ② Series installation (2 or more) (Note 1)
  - Obstacle on the suction side and both sides



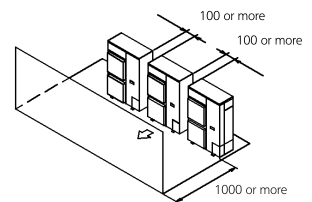
#### (B) When there are obstacles on discharge sides.

• No obstacle above

- ① Stand-alone installation
  - Obstacle on the discharge side only

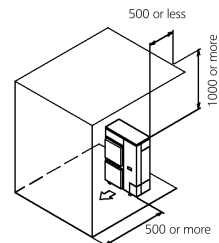


- ② Series installation (2 or more) (Note 1)
  - Obstacle on the discharge side only

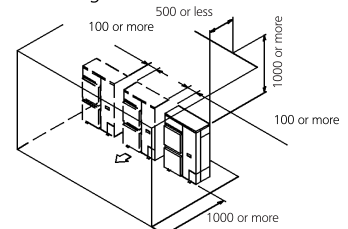


• Obstacle above, too

- ① Stand-alone installation
  - Obstacle on the discharge side only, too



- ② Series installation (2 or more) (Note 1)
  - Obstacle on the discharge side



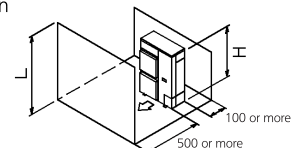
#### (C) When there are obstacles on both suction and discharge sides.

Pattern 1

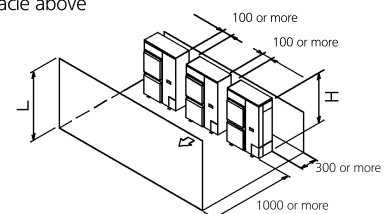
When the obstacles on the discharge side is higher than the unit. (L>H)  
 (There is no limit for the height of obstructions on the suction side.)

• No obstacle above

- ① Stand-alone installation
  - No obstacle above



- ② Series installation (2 or more) (Note 1)
  - No obstacle above



# 12 Installation

## 12 - 1 Installation Method

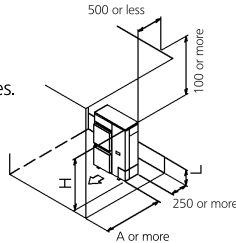
RZAG-MV1  
 RZAG-MY1  
 RZASG-MV1  
 RZASG-MY1  
 AZAS-MV1  
 AZAS-MY1

**● Obstacle above, too**

- ① Stand-alone installation (Note 2)
  - When there are obstacles on suction, discharge and top sides.

The relations between H, A and L are as follows.

	L	A
$L \leq H$	$L \leq 1/2 H$ $1/2 H < L \leq H$	750 or more 1000 or more
$L > H$	Set the stand as : $L \leq H$ Refer to the column of $L \leq H$ for A	



- ② Series installation (2 or more) (Note 1, 2)
  - When there are obstacles on suction, discharge and top sides.

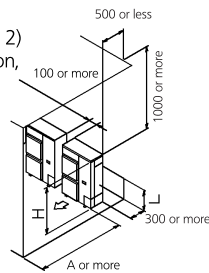
The relations between H, A and L are as follows.

	L	A
$L \leq H$	$L \leq 1/2 H$ $1/2 H < L \leq H$	1000 or more 1250 or more
$L > H$	Set the stand as : $L \leq H$ Refer to the column of $L \leq H$ for A	

Limit of series installation is 2 units.

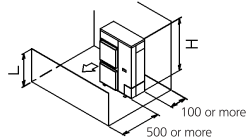
**Pattern 2**

When the obstacle on the discharge side is lower than the unit ( $L \leq H$ ) (There is no limit for the height of obstructions on the suction side.)



**● No obstacle above**

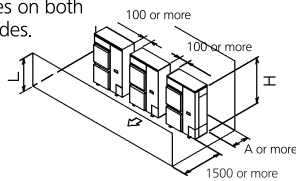
- ① Stand-alone installation
  - No obstacle above



- ② Series installation (2 or more) (Note 1, 2)
  - When there are obstacles on both suction and discharge sides.

The relations between H, A and L are as follows.

	L	A
$L \leq H$	$L \leq 1/2 H$ $1/2 H < L \leq H$	250 or more 300 or more

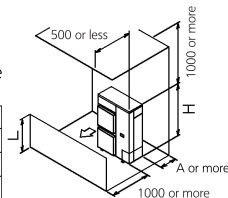


**● obstacle above**

- ① Stand-alone installation (Note 2)
  - When there are obstacles on suction, discharge and top sides.

The relations between H, A and L are as follows.

	L	A
$L \leq H$	$L \leq 1/2 H$ $1/2 H < L \leq H$	100 or more 200 or more
$L > H$	Set the stand as : $L \leq H$ Refer to the column of $L \leq H$ for A	

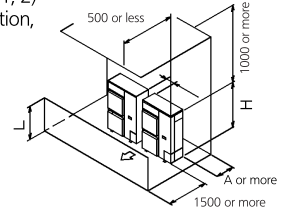


- ② Series installation (2 or more) (Note 1, 2)
  - When there are obstacles on suction, discharge and top sides.

The relations between H, A and L are as follows.

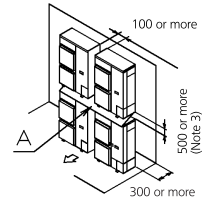
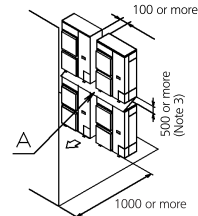
	L	A
$L \leq H$	$L \leq 1/2 H$ $1/2 H < L \leq H$	250 or more 300 or more
$L > H$	Set the stand as : $L \leq H$ Refer to the column of $L \leq H$ for A	

Limit of series installation is 2 units.



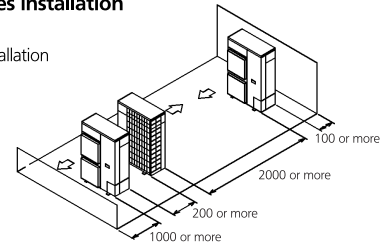
**(D) Double-decker installation**

- ① Obstacle on the discharge side. ( 1 )
  - Do not exceed two levels for stacked installation.
  - Install a roof cover similar to A (field supply), as outdoor units with downward drainage are prone to dripping and freezing.
  - Install the upper-level outdoor unit so that its bottom plate is a sufficient height above the roof cover. This is to prevent the buildup of ice on the underside of the bottom plate.
- ② Obstacle on the suction side. ( 1 )
  - Do not exceed two levels for stacked installation.
  - Install a roof cover similar to A (field supply), as outdoor units with downward drainage are prone to dripping and freezing.
  - Install the upper-level outdoor unit so that its bottom plate is a sufficient height above the roof cover. This is to prevent the buildup of ice on the underside of the bottom plate.



**(E) Multiple rows of series installation (on the rooftop, etc.)**

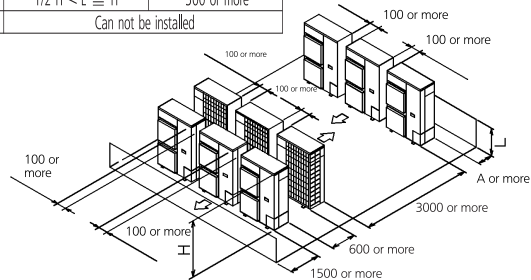
- ① One row of stand-alone installation



- ② Rows of series installation (2 or more)

The relations between H, A and L are as follows.

	L	A
$L \leq H$	$L \leq 1/2 H$ $1/2 H < L \leq H$	250 or more 300 or more
$L > H$	Can not be installed	



**NOTES**

- In case of the sideways piping, make a 100mm gap between the unit above.
- Close the bottom of the installation frame to prevent the discharged air from being bypassed.
- It is not necessary to install a roof cover if there is no danger of drainage dripping and freezing. In this case, the space between the upper and lower outdoor units should be at least 100mm. Close off the gap between the upper and lower units so there is no re-intake of discharged air.

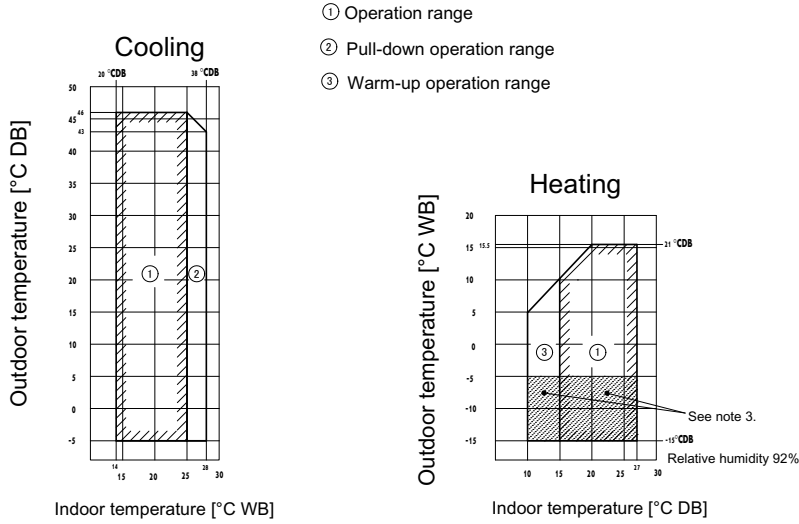
# 13 Operation range

## 13 - 1 Operation Range

13

**AZAS-MV1**

**AZAS-MY1**



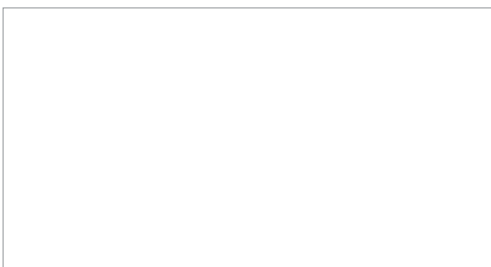
**Notes**

1. Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
2. To reduce the freeze-up operation (indoor de-icing) frequency, it is recommended to install the outdoor unit in a location not exposed to wind.
3. In case of high humidity conditions (> 92%) at ambient temperatures of < -5°C, a RZAG model should be used instead to avoid freeze-up of the outdoor unit.

**3D111298**



Daikin Europe N.V. Naamloze Vennootschap - Zandvoordestraat 300, B-8400 Oostende - Belgium - [www.daikin.eu](http://www.daikin.eu) - BE 0412 120 336 - RPR Oostende



EEDEN17 08/17



Daikin Europe N.V. participates in the Eurovent Certified Performance programme for Liquid Chilling Packages and Hydronic Heat Pumps, Fan Coil Units and Variable Refrigerant Flow systems. Check ongoing validity of certificate: [www.eurovent-certification.com](http://www.eurovent-certification.com)



The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V.. Daikin Europe N.V. has compiled the content of this leaflet to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this leaflet. All content is copyrighted by Daikin Europe N.V.