

Air Conditioning
Technical Data

RZASG-MV1



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RZASG-MV1

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1 Features

Technology and comfort combined for commercial applications

- 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 both heating and cooling mode down to -15°C
- Refrigerant cooled PCB guarantees reliable cooling, as it is not influenced by ambient temperature.
- Maximum piping length up to 50m, minimum piping length has no limitation
- Outdoor units for pair, twin, triple, double twin application



Inverter



Auto cooling-
heating
changeover

2 Specifications

2-1 Capacity and Power input			FCAG71B/RZASG71MV1	FCAG100B/ RZASG100MV1	FCAG125B/ RZASG125MV1	FCAG140B/ RZASG140MV1		
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)		
Space cooling	Energy efficiency class		A++		-			
	Capacity	Pdesign	kW	6.80	9.50	12.1	13.4	
	SEER			6.47	6.55	5.76	6.53	
	ηs,c		%	-		227	258	
	Annual energy consumption		kWh/a	368	507	1,261	1,231	
	A Condition (35°C - 27/19)	Pdc	kW	6.80	9.50	12.10	13.40	
		EERd		3.14	3.26	2.44	2.75	
		Power input	kW	2.17	2.92	4.95	4.88	
	B Condition (30°C - 27/19)	Pdc	kW	5.10	7.00	8.92	9.88	
		EERd		4.91	5.49	4.30	4.88	
		Power input	kW	1.04	1.28	2.07	2.03	
	C Condition (25°C - 27/19)	Pdc	kW	3.40	4.50	5.74	6.35	
		EERd		8.43	7.77	6.74	7.69	
		Power input	kW	0.40	0.58	0.85	0.83	
	D Condition (20°C - 27/19)	Pdc	kW	2.89	3.11	3.18	3.74	
EERd		12.54	11.16	10.49	12.01			
Power input		kW	0.23	0.28	0.30	0.31		
Space heating (Average climate)	Energy efficiency class		A+		-			
	Capacity	Pdesign	kW	4.50	6.00	7.80		
	SCOP/A			4.10	4.17	4.05	4.31	
	SCOPnet/A			4.10	4.17	4.05	4.31	
	ηs,h		%	-		159	169	
	Annual energy consumption		kWh/a	1,537	2,016	2,074	2,534	
	Required back up heating cap at design conditions		kW	0.00				
	TOL	Tol (temperature operating limit)		°C				-10
		Pdh (declared heating cap)	kW	4.50	6.00	7.80		
		COPd (declared COP)		2.37	2.52	2.59	2.26	
		Power input	kW	1.90	2.38	2.32	3.44	
	TBivalent	Tbiv (bivalent temperature)		°C				-10
		Pdh (declared heating cap)	kW	4.50	6.00	7.80		
		COPd (declared COP)		2.37	2.52	2.59	2.26	
		Power input	kW	1.90	2.38	2.32	3.44	
	A Condition (-7°C)	Pdh (declared heating cap)	kW	3.98	5.31	5.30	6.90	
		COPd (declared COP)		2.37	2.75	2.78	2.60	
		Power input	kW	1.68	1.93	1.91	2.65	
	B Condition (2°C)	Pdh (declared heating cap)	kW	2.42	3.23	4.20		
		COPd (declared COP)		4.21	3.97	3.88	4.32	
		Power input	kW	0.58	0.81	0.83	0.97	
	C Condition (7°C)	Pdh (declared heating cap)	kW	1.92	2.10	2.13	3.40	
		COPd (declared COP)		5.46	5.58	5.20	5.92	
		Power input	kW	0.35	0.38	0.41	0.57	
	D Condition (12°C)	Pdh (declared heating cap)	kW	2.29	2.50	2.55	3.99	
		COPd (declared COP)		6.91	6.95	6.66	7.26	
		Power input	kW	0.33	0.36	0.38	0.55	
Cooling	Cdc (Degradation cooling)		0.25					
Heating	Cdh (Degradation heating)		0.25					
Cooling function included			Yes					
Heating function included			Yes					

2 Specifications

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2-1 Capacity and Power input					FCAG71B/RZASG71MV1	FCAG100B/ RZASG100MV1	FCAG125B/ RZASG125MV1	FCAG140B/ RZASG140MV1
Average climate included					Yes			
Cold season included					No			
Warm season included					No			
Ecolabel logo					No			
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.012			
		Heating	POFF	kW	0.012			
	Standby mode	Cooling	PSB	kW	0.012			
		Heating	PSB	kW	0.012			
	Thermostat-off mode	Cooling	PTO	kW	0.000			
		Heating	PTO	kW	0.012			
Indication if the heater is equipped with a supplementary heater (pair application)					-		No	
Supplementary heater (pair application)	Back-up capacity	Heating	elbu	kW	-		0.0	

Notes

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

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

See separate drawing for operation range

See separate drawing for electrical data

2-2 Capacity and Power input				FBA71A9/RZASG71MV1	FBA100A/RZASG100MV1	FBA125A/RZASG125MV1	FBA140A/RZASG140MV1	
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)	
Space cooling	Energy efficiency class			A++	A+	-		
	Capacity	Pdesign	kW	6.80	9.50	12.1	13.4	
	SEER			6.19	5.83	5.49	5.81	
	ηs,c			-		217	229	
	Annual energy consumption			kWh/a	385	570	1,322	1,384
	A Condition (35°C - 27/19)	Pdc	kW	6.80	9.50	12.10	13.40	
		EERd		3.60	3.20	2.61	2.81	
		Power input		kW	1.89	2.97	4.64	4.76
	B Condition (30°C - 27/19)	Pdc	kW	5.02	7.00	8.92	9.88	
		EERd		5.30	5.13	4.34	4.66	
		Power input		kW	0.95	1.36	2.06	2.12
	C Condition (25°C - 27/19)	Pdc	kW	3.23	4.50	5.74	6.35	
		EERd		7.84	7.01	6.36	6.84	
		Power input		kW	0.41	0.64	0.90	0.93
D Condition (20°C - 27/19)	Pdc	kW	2.92	3.10	3.17	3.97		
	EERd		9.87	8.59	8.72	8.83		
	Power input		kW	0.30	0.36		0.45	

2 Specifications

2-2 Capacity and Power input					FBA71A9/RZASG71MV1	FBA100A/RZASG100MV1	FBA125A/RZASG125MV1	FBA140A/RZASG140MV1	
Space heating (Average climate)	Energy efficiency class				A+		A		
	Capacity	Pdesign	kW		4.50	6.00		7.80	
	SCOP/A				4.01	3.85	3.63	3.85	
	SCOPnet/A				4.01	3.85	3.63	3.85	
	ηs,h			%	-		142	151	
	Annual energy consumption			kWh/a	1,571	2,182	2,314	2,836	
	Required back up heating cap at design conditions				kW				0.00
	TOL	Tol (temperature operating limit)		°C		-10			
		Pdh (declared heating cap)		kW		4.50	6.00		7.80
		COPd (declared COP)				2.37	2.45	2.50	2.06
		Power input		kW		1.90	2.45	2.40	3.78
	TBivalent	Tbiv (bivalent temperature)		°C		-10			
		Pdh (declared heating cap)		kW		4.50	6.00		7.80
		COPd (declared COP)				2.37	2.45	2.50	2.06
		Power input		kW		1.90	2.45	2.40	3.78
	A Condition (-7°C)	Pdh (declared heating cap)		kW		3.98	5.31	5.30	6.90
		COPd (declared COP)				2.66	2.69	2.72	2.46
		Power input		kW		1.50	1.97	1.95	2.81
	B Condition (2°C)	Pdh (declared heating cap)		kW		2.42	3.23		4.20
		COPd (declared COP)				4.12	3.77	3.53	3.94
		Power input		kW		0.59	0.86	0.91	1.07
	C Condition (7°C)	Pdh (declared heating cap)		kW		2.06	2.26	2.27	3.50
		COPd (declared COP)				5.04	4.83	4.37	4.98
Power input		kW		0.41	0.47	0.52	0.70		
D Condition (12°C)	Pdh (declared heating cap)		kW		2.43	2.57	2.66	4.10	
	COPd (declared COP)				6.19	5.70	5.36	6.10	
	Power input		kW		0.39	0.45	0.50	0.67	
Cooling	Cdc (Degradation cooling)				0.25				
Heating	Cdh (Degradation heating)				0.25				
Cooling function included					Yes				
Heating function included					Yes				
Average climate included					Yes				
Cold season included					No				
Warm season included					No				
Ecolabel logo					No				
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.014				
		Heating	POFF	kW	0.014				
	Standby mode	Cooling	PSB	kW	0.014				
		Heating	PSB	kW	0.014				
	Thermostat-off mode	Cooling	PTO	kW	0.000				
		Heating	PTO	kW	0.014				
Indication if the heater is equipped with a supplementary heater (pair application)					-		No		
Supplementary heater (pair application)	Back-up capacity	Heating	elbu	kW	-		0.0		

2 Specifications

Notes

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

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

See separate drawing for operation range

See separate drawing for electrical data

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2-3 Capacity and Power input				FDA125A/RZASG125MV1	
Cooling capacity	Nom.		kW	12.1 (1)	
Heating capacity	Nom.		kW	13.5 (2)	
Space cooling	Capacity	Pdesign	kW	12.1	
	SEER			5.03	
	ηs,c		%	198	
	Annual energy consumption			kWh/a	1,444
	A Condition (35°C - 27/19)	Pdc	kW	12.10	
		EERd		2.56	
		Power input	kW	4.73	
	B Condition (30°C - 27/19)	Pdc	kW	8.92	
		EERd		4.03	
		Power input	kW	2.21	
	C Condition (25°C - 27/19)	Pdc	kW	5.74	
		EERd		5.89	
		Power input	kW	0.97	
D Condition (20°C - 27/19)	Pdc	kW	3.10		
	EERd		7.31		
	Power input	kW	0.42		

2 Specifications

2-3 Capacity and Power input					FDA125A/RZASG125MV1					
Space heating (Average climate)	Capacity	Pdesign	kW		6.00					
	SCOP/A				3.58					
	SCOPnet/A				3.58					
	ηs,h		%		140					
	Annual energy consumption		kWh/a		2,346					
	Required back up heating cap at design conditions		kW		0.00					
	TOL	Tol (temperature operating limit)	°C		-10					
			Pdh (declared heating cap)	kW		6.00				
				COPd (declared COP)		2.54				
				Power input		kW		2.36		
	TBivalent	Tbiv (bivalent temperature)	°C		-10					
			Pdh (declared heating cap)	kW		6.00				
				COPd (declared COP)		2.54				
				Power input		kW		2.36		
	A Condition (-7°C)	Pdh (declared heating cap)	kW		5.30					
			COPd (declared COP)		2.76					
			Power input		kW		1.92			
	B Condition (2°C)	Pdh (declared heating cap)	kW		3.23					
			COPd (declared COP)		3.54					
			Power input		kW		0.91			
C Condition (7°C)	Pdh (declared heating cap)	kW		2.29						
		COPd (declared COP)		4.27						
		Power input		kW		0.54				
D Condition (12°C)	Pdh (declared heating cap)	kW		2.65						
		COPd (declared COP)		5.00						
		Power input		kW		0.53				
Cooling	Cdc (Degradation cooling)				0.25					
Heating	Cdh (Degradation heating)				0.25					
Cooling function included					Yes					
Heating function included					Yes					
Average climate included					Yes					
Cold season included					No					
Warm season included					No					
Ecolabel logo					No					
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.015					
		Heating	POFF	kW	0.015					
	Standby mode	Cooling	PSB	kW	0.015					
		Heating	PSB	kW	0.015					
	Thermostat-off mode	Cooling	PTO	kW	0.000					
		Heating	PTO	kW	0.015					
Indication if the heater is equipped with a supplementary heater (pair application)					No					
Supplementary heater (pair application)	Back-up capacity	Heating	elbu	kW	0.0					

Notes

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

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

See separate drawing for operation range

See separate drawing for electrical data

2 Specifications

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2-4 Capacity and Power input			FHA71A9/RZASG71MV1	FHA100A/RZASG100MV1	FHA125A/RZASG125MV1	FHA140A/RZASG140MV1		
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)		
Space cooling	Energy efficiency class		A+		-			
	Capacity	Pdesign	kW	6.80	9.50	12.1	13.4	
	SEER			5.95	5.83		5.88	
	η _{s,c}		%	-		230	232	
	Annual energy consumption		kWh/a	400	570	1,246	1,368	
	A Condition (35°C - 27/19)	Pdc	kW	6.80	9.50	12.10	13.40	
		EERd		3.81	3.20	2.63	2.77	
		Power input	kW	1.78	2.97	4.60	4.84	
	B Condition (30°C - 27/19)	Pdc	kW	5.02	7.00	8.92	9.88	
		EERd		4.84	4.91	4.53	4.59	
		Power input	kW	1.04	1.43	1.97	2.15	
	C Condition (25°C - 27/19)	Pdc	kW	3.28	4.50	5.74	6.35	
		EERd		7.45	6.98	6.79	6.85	
		Power input	kW	0.44	0.64	0.85	0.93	
	D Condition (20°C - 27/19)	Pdc	kW	3.39	3.10	3.17	3.86	
		EERd		9.41	8.87	9.62	9.50	
Power input		kW	0.36	0.35	0.33	0.41		
Space heating (Average climate)	Energy efficiency class		A		-			
	Capacity	Pdesign	kW	4.50	6.00	7.80		
	SCOP/A			3.90	3.91	3.83	3.81	
	SCOPnet/A			3.90	3.91	3.83	3.81	
	η _{s,h}		%	-		150	149	
	Annual energy consumption		kWh/a	1,616	2,148	2,193	2,866	
	Required back up heating cap at design conditions		kW	0.00				
	TOL	Tol (temperature operating limit)		°C				-10
		Pdh (declared heating cap)	kW	4.50	6.00	7.80		
		COPd (declared COP)		2.21	2.49	1.98		
		Power input	kW	2.04	2.41	3.95		
	TBivalent	Tbiv (bivalent temperature)		°C				-10
		Pdh (declared heating cap)	kW	4.50	6.00	7.80		
		COPd (declared COP)		2.21	2.49	1.98		
		Power input	kW	2.04	2.41	3.95		
	A Condition (-7°C)	Pdh (declared heating cap)	kW	3.98	5.31	5.30	6.90	
		COPd (declared COP)		2.48	2.73	2.72	2.37	
		Power input	kW	1.61	1.94	1.95	2.91	
	B Condition (2°C)	Pdh (declared heating cap)	kW	2.42	3.23	4.20		
		COPd (declared COP)		3.89	3.77	3.68	3.92	
		Power input	kW	0.62	0.86	0.88	1.07	
	C Condition (7°C)	Pdh (declared heating cap)	kW	2.04	2.18	2.19	3.45	
		COPd (declared COP)		5.22	4.96	4.84	4.95	
		Power input	kW	0.39	0.44	0.45	0.70	
	D Condition (12°C)	Pdh (declared heating cap)	kW	2.41	2.57	2.58	4.05	
		COPd (declared COP)		6.57	6.14	6.00	6.07	
		Power input	kW	0.37	0.42	0.43	0.67	
Cooling	Cdc (Degradation cooling)		0.25					
Heating	Cdh (Degradation heating)		0.25					
Cooling function included			Yes					
Heating function included			Yes					
Average climate included			Yes					

2 Specifications

2-4 Capacity and Power input					FHA71A9/RZASG71MV1	FHA100A/RZASG100MV1	FHA125A/RZASG125MV1	FHA140A/RZASG140MV1
Cold season included					No			
Warm season included					No			
Ecolabel logo					No			
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.012			
		Heating	POFF	kW	0.012			
	Standby mode	Cooling	PSB	kW	0.012			
		Heating	PSB	kW	0.012			
	Thermostat-off mode	Cooling	PTO	kW	0.000			
		Heating	PTO	kW	0.012			
Indication if the heater is equipped with a supplementary heater (pair application)					-		No	
Supplementary heater (pair application)	Back-up capacity	Heating	elbu	kW	-		0.0	

Notes

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

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

See separate drawing for operation range

See separate drawing for electrical data

2-5 Capacity and Power input				FUA71A/RZASG71MV1	FUA100A/RZASG100MV1	FUA125A/RZASG125MV1	
Cooling capacity	Nom.		kW	6.80 (1)	9.50 (1)	12.1 (1)	
Heating capacity	Nom.		kW	7.50 (2)	10.8 (2)	13.5 (2)	
Space cooling	Energy efficiency class			A++	A+	-	
	Capacity	Pdesign	kW	6.80	9.50	12.1	
	SEER			6.16	5.83	5.49	
	ηs,c				-	217	
	Annual energy consumption			kWh/a	386	570	1,322
	A Condition (35°C - 27/19)	Pdc		kW	6.80	9.50	12.10
			EERd		3.84	3.20	2.35
			Power input		1.77	2.97	5.15
	B Condition (30°C - 27/19)	Pdc		kW	5.02	7.00	8.92
			EERd		4.98	4.81	4.24
			Power input		1.01	1.45	2.10
	C Condition (25°C - 27/19)	Pdc		kW	3.23	4.50	5.74
			EERd		7.82	7.04	6.48
			Power input		0.41	0.64	0.89
	D Condition (20°C - 27/19)	Pdc		kW	3.04	3.10	3.14
EERd			9.69	8.98	9.22		
Power input			0.31	0.35	0.34		

2 Specifications

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2-5 Capacity and Power input					FUA71A/RZASG71MV1	FUA100A/RZASG100MV1	FUA125A/RZASG125MV1		
Space heating (Average climate)	Energy efficiency class				A		A+		
	Capacity	Pdesign	kW		4.50				
	SCOP/A				3.90		4.01		
	SCOPnet/A				3.90		4.01		
	ηs,h		%		-		151		
	Annual energy consumption		kWh/a		1,615		2,095		
	Required back up heating cap at design conditions		kW		0.00				
	TOL	Tol (temperature operating limit)		°C		-10			
		Pdh (declared heating cap)		kW		4.50		6.00	
		COPd (declared COP)				2.23		2.56	
		Power input		kW		2.01		2.35	
	TBivalent	Tbiv (bivalent temperature)		°C		-10			
		Pdh (declared heating cap)		kW		4.50		6.00	
		COPd (declared COP)				2.23		2.56	
		Power input		kW		2.01		2.35	
	A Condition (-7°C)	Pdh (declared heating cap)		kW		3.98		5.31	
		COPd (declared COP)				2.51		2.79	
		Power input		kW		1.59		1.90	
	B Condition (2°C)	Pdh (declared heating cap)		kW		2.42		3.23	
		COPd (declared COP)				3.90		3.87	
		Power input		kW		0.62		0.83	
	C Condition (7°C)	Pdh (declared heating cap)		kW		2.07		2.19	
		COPd (declared COP)				5.17		5.10	
Power input		kW		0.40		0.43			
D Condition (12°C)	Pdh (declared heating cap)		kW		2.44		2.57		
	COPd (declared COP)				6.56		6.26		
	Power input		kW		0.37		0.41		
Cooling	Cdc (Degradation cooling)				0.25				
Heating	Cdh (Degradation heating)				0.25				
Cooling function included					Yes				
Heating function included					Yes				
Average climate included					Yes				
Cold season included					No				
Warm season included					No				
Ecolabel logo					No				
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.012				
		Heating	POFF	kW	0.012				
	Standby mode	Cooling	PSB	kW	0.012				
		Heating	PSB	kW	0.012				
	Thermostat-off mode	Cooling	PTO	kW	0.000				
		Heating	PTO	kW	0.012				
Indication if the heater is equipped with a supplementary heater (pair application)					-		No		
Supplementary heater (pair application)	Back-up capacity	Heating	elbu	kW	-		0.0		

2 Specifications

Notes

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

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

See separate drawing for operation range

See separate drawing for electrical data

2-6 Capacity and Power input				FAA71A/RZASG71MV1	FAA100A/RZASG100MV1	
Cooling capacity	Nom.	kW		6.80 (1)	9.50 (1)	
Heating capacity	Nom.	kW		7.50 (2)	10.8 (2)	
Space cooling	Energy efficiency class			A++	A+	
	Capacity	Pdesign	kW	6.80	9.50	
	SEER			6.41	5.83	
	Annual energy consumption			kWh/a	371	570
	A Condition (35°C - 27/19)	Pdc	kW	6.80	9.50	
		EERd		3.40	2.70	
		Power input	kW	2.00	3.52	
	B Condition (30°C - 27/19)	Pdc	kW	5.02	7.00	
		EERd		5.30	4.87	
		Power input	kW	0.95	1.44	
	C Condition (25°C - 27/19)	Pdc	kW	3.23	4.50	
		EERd		7.98	6.85	
		Power input	kW	0.40	0.66	
	D Condition (20°C - 27/19)	Pdc	kW	2.84	3.00	
EERd		11.17	10.23			
Power input		kW	0.25	0.29		

2 Specifications

2-6 Capacity and Power input					FAA71A/RZASG71MV1	FAA100A/RZASG100MV1	
Space heating (Average climate)	Energy efficiency class				A		
	Capacity	Pdesign	kW		4.50	6.00	
	SCOP/A				3.90	3.85	
	SCOPnet/A				3.90	3.85	
	Annual energy consumption			kWh/a	1,615	2,182	
	Required back up heating cap at design conditions				0.00		
	TOL	Tol (temperature operating limit)	°C		-10		
		Pdh (declared heating cap)	kW		4.50	6.00	
		COPd (declared COP)				2.16	2.31
		Power input	kW		2.08	2.60	
	TBivalent	Tbiv (bivalent temperature)	°C		-10		
		Pdh (declared heating cap)	kW		4.50	6.00	
		COPd (declared COP)				2.16	2.31
		Power input	kW		2.08	2.60	
	A Condition (-7°C)	Pdh (declared heating cap)	kW		3.98	5.31	
		COPd (declared COP)				2.44	2.55
		Power input	kW		1.63	2.08	
	B Condition (2°C)	Pdh (declared heating cap)	kW		2.42	3.23	
		COPd (declared COP)				3.90	3.68
		Power input	kW		0.62	0.88	
	C Condition (7°C)	Pdh (declared heating cap)	kW		2.02	2.12	
		COPd (declared COP)				5.26	5.09
		Power input	kW		0.38	0.42	
D Condition (12°C)	Pdh (declared heating cap)	kW		2.39	2.52		
	COPd (declared COP)				6.62	6.53	
	Power input	kW		0.36	0.39		
Cooling	Cdc (Degradation cooling)				0.25		
Heating	Cdh (Degradation heating)				0.25		
Cooling function included					Yes		
Heating function included					Yes		
Average climate included					Yes		
Cold season included					No		
Warm season included					No		
Ecolabel logo					No		
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.012		
		Heating	POFF	kW	0.012		
	Standby mode	Cooling	PSB	kW	0.012		
		Heating	PSB	kW	0.012		
	Thermostat-off mode	Cooling	PTO	kW	0.000		
		Heating	PTO	kW	0.012		

Notes

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

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

See separate drawing for operation range

See separate drawing for electrical data

2 Specifications

2-7 Capacity and Power input			FVA71A/RZASG71MV1	FVA100A/RZASG100MV1	FVA125A/RZASG125MV1	FVA140A/RZASG140MV1			
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)			
Space cooling	Energy efficiency class		A+		-				
	Capacity	Pdesign	kW	6.80	9.50	12.1	13.4		
	SEER			5.83	5.72	5.52	5.63		
	ηs,c		%	-		218	222		
	Annual energy consumption		kWh/a	408	581	1,314	1,428		
	A Condition (35°C - 27/19)	Pdc	kW	6.80	9.50	12.10	13.40		
		EERd		3.38	3.20	2.47	2.62		
		Power input	kW	2.01	2.97	4.90	5.12		
	B Condition (30°C - 27/19)	Pdc	kW	5.02	7.00	8.92	9.88		
		EERd		5.07	5.01	4.31	4.52		
		Power input	kW	0.99	1.40	2.07	2.19		
	C Condition (25°C - 27/19)	Pdc	kW	3.23	4.50	5.74	6.35		
		EERd		7.08	6.78	6.26	6.51		
		Power input	kW	0.46	0.66	0.92	0.98		
	D Condition (20°C - 27/19)	Pdc	kW	2.77	3.00	3.07	3.76		
		EERd		9.12	8.25	9.54	8.88		
Power input		kW	0.30	0.36	0.32	0.42			
Space heating (Average climate)	Energy efficiency class		A+		A		-		
	Capacity	Pdesign	kW	4.50	6.00		7.80		
	SCOP/A			4.04	3.83	3.64	3.81		
	SCOPnet/A			4.04	3.83	3.64	3.81		
	ηs,h		%	-		143	149		
	Annual energy consumption		kWh/a	1,559	2,193	2,308	2,866		
	Required back up heating cap at design conditions		kW	0.00					
	TOL	Tol (temperature operating limit)		°C		-10			
		Pdh (declared heating cap)		kW	4.50	6.00		7.80	
		COPd (declared COP)			2.26	2.46	2.37	1.99	
		Power input		kW	1.99	2.44	2.53	3.93	
	TBivalent	Tbiv (bivalent temperature)		°C		-10			
		Pdh (declared heating cap)		kW	4.50	6.00		7.80	
		COPd (declared COP)			2.26	2.46	2.37	1.99	
		Power input		kW	1.99	2.44	2.53	3.93	
	A Condition (-7°C)	Pdh (declared heating cap)		kW	3.98	5.31	5.30	6.90	
		COPd (declared COP)			2.55	2.70	2.60	2.38	
		Power input		kW	1.56	1.97	2.04	2.90	
	B Condition (2°C)	Pdh (declared heating cap)		kW	2.42	3.23		4.20	
		COPd (declared COP)			4.05	3.72	3.51	3.90	
		Power input		kW	0.60	0.87	0.92	1.08	
	C Condition (7°C)	Pdh (declared heating cap)		kW	2.01	2.20	2.19	3.47	
		COPd (declared COP)			5.41	4.81	4.57	4.99	
		Power input		kW	0.37	0.46	0.48	0.70	
	D Condition (12°C)	Pdh (declared heating cap)		kW	2.37	2.58	2.57	4.07	
		COPd (declared COP)			6.72	5.82	5.60	6.10	
		Power input		kW	0.35	0.44	0.46	0.67	
Cooling	Cdc (Degradation cooling)					0.25			
Heating	Cdh (Degradation heating)					0.25			
Cooling function included						Yes			
Heating function included						Yes			
Average climate included						Yes			

2 Specifications

2

2-7 Capacity and Power input					FVA71A/RZASG71MV1	FVA100A/RZASG100MV1	FVA125A/RZASG125MV1	FVA140A/RZASG140MV1
Cold season included					No			
Warm season included					No			
Ecolabel logo					No			
Power consumption in other than active mode	Off mode	Cooling	POFF	kW	0.012			
		Heating	POFF	kW	0.012			
	Standby mode	Cooling	PSB	kW	0.012			
		Heating	PSB	kW	0.012			
	Thermostat-off mode	Cooling	PTO	kW	0.000			
		Heating	PTO	kW	0.012			
Indication if the heater is equipped with a supplementary heater (pair application)					-	No		
Supplementary heater (pair application)	Back-up capacity	Heating	elbu	kW	-	0.0		

Notes

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

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

See separate drawing for operation range

See separate drawing for electrical data

2-8 Technical Specifications					RZASG71MV1	RZASG100MV1	RZASG125MV1	RZASG140MV1
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				
Fan	Type			Propeller				
	Discharge direction			Horizontal				
	Quantity			1				
	Air flow rate	Cooling	Nom.	m ³ /min	56	69	71	76
		Heating	Nom.	m ³ /min	50	82		
Fan motor	Quantity			1				
	Model			Brushless DC motor				
	Output		W	94	200			
	Drive			Direct drive				
Sound power level	Cooling		dBA	65	70	71	73	
	Heating		dBA	-	71 (1)		73 (1)	
Sound pressure level	Cooling	Nom.	dBA	46	53		54	
	Heating	Nom.	dBA	47	57			
Operation range	Cooling	Ambien t	Min.	°CDB	-15			
			Max.	°CDB	46			
	Heating	Ambien t	Min.	°CWB	-15			
			Max.	°CWB	15.5			

2 Specifications

2-8 Technical Specifications				RZASG71MV1	RZASG100MV1	RZASG125MV1	RZASG140MV1
Refrigerant	Type			R-32			
	Charge	kg		2.45	2.60		2.90
		TCO ₂ eq		1.65	1.76		1.96
	Control			Expansion valve (electronic type)			
	GWP			675			
Circuits	Quantity		1				
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			
		OD	mm	26			
	Piping length	OU - IU	Min.	m	5		
			Max.	m	50		
		System	Equivalent	m	70		
			Chargeless	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;

2-9 Electrical Specifications				RZASG71MV1	RZASG100MV1	RZASG125MV1	RZASG140MV1
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 / (2) / See note 3			
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				

2 Specifications

Notes

(1) According to ENER Lot 21

(2) 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 $\leq 75A$ per phase.

(3) Ssc: Short-circuit power

European/international technical standard setting the limits for harmonic currents produced by equipment connected to public low-voltage system with input current $\leq 16A$ per phase.

3 Electrical data

3 - 1 Electrical Data

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

Notes

- 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
- TOCA· is the total value of each overcurrent set.
- 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.
- The maximum allowable voltage that is unbalanced between phases is ·2·%.
- 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.
- Select the wire size according to the MCA.
- MFA· is used to select the circuit breaker and the ground fault circuit interruptor.

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]

Earth leakage circuit breaker

3D110014D

RZASG71-100MV1

Indoor	Outdoor	Power supply	Voltage range	MCA	TOCA	MFA	Compressor		OFM		IFM				
							MSC	RLA	kW	FLA	kW	FLA			
FCAG35BVEB	x2 RZASG71M2V1B	50Hz ~ 220-240V	Minimum: ·198 V· Maximum: ·264 V·	17,6	—	20	—	15,4	0,094	0,9	0,044 x2	0,3 x2			
FCAG71BVEB	RZASG71M2V1B			17,4	—	20	—	15,4	0,094	0,9	0,054	0,4			
FFA35A2VEB	x2 RZASG71M2V1B			17,8	—	20	—	15,4	0,094	0,9	0,050 x2	0,4 x2			
FBA35A2VEB	x2 RZASG71M2V1B			18,2	—	20	—	15,4	0,094	0,9	0,089 x2	0,6 x2			
FBA71A2VEB	RZASG71M2V1B			17,5	—	20	—	15,4	0,094	0,9	0,070	0,5			
FNA35A2VEB	x2 RZASG71M2V1B			17,3	—	20	—	15,4	0,094	0,9	0,034 x2	0,3			
FUA71AVEB	RZASG71M2V1B			17,9	—	20	—	15,4	0,094	0,9	0,046	0,9			
FAA71AUEB	RZASG71M2V1B			17,4	—	20	—	15,4	0,094	0,9	0,048	0,4			
FVA71AMVEB	RZASG71M2V1B			17,6	—	20	—	15,4	0,094	0,9	0,117	0,6			
FDXM35F3V1B	x2 RZASG71M2V1B			17,6	—	20	—	15,4	0,094	0,9	0,034 x2	0,3 x2			
FHA35AVEB	x2 RZASG71M2V1B			18,2	—	20	—	15,4	0,094	0,9	0,060 x2	0,6 x2			
FHA71AVEB	RZASG71M2V1B			17,8	—	20	—	15,4	0,094	0,9	0,091	0,8			
FCAG35BVEB	x3 RZASG100M7V1B			50Hz ~ 220-240V	Minimum: ·198 V· Maximum: ·264 V·	21,7	—	25	—	19,0	0,200	1,0	0,044 x3	0,3 x3	
FCAG50BVEB	x2 RZASG100M7V1B					21,4	—	25	—	19,0	0,200	1,0	0,039 x2	0,3 x2	
FCAG100BVEB	RZASG100M7V1B					21,5	—	25	—	19,0	0,200	1,0	0,117	0,7	
FFA35A2VEB	x3 RZASG100M7V1B					22,0	—	25	—	19,0	0,200	1,0	0,050 x3	0,4 x3	
FFA50A2VEB	x2 RZASG100M7V1B					21,6	—	25	—	19,0	0,200	1,0	0,050 x2	0,4 x2	
FBA35A2VEB	x3 RZASG100M7V1B					22,7	—	25	—	19,0	0,200	1,0	0,089 x3	0,6 x3	
FBA50A2VEB	x2 RZASG100M7V1B	22,0	—			25	—	19,0	0,200	1,0	0,089 x2	0,6 x2			
FBA100A2VEB	RZASG100M7V1B	21,8	—			25	—	19,0	0,200	1,0	0,127	1,0			
FNA35A2VEB	x3 RZASG100M7V1B	21,7	—			25	—	19,0	0,200	1,0	0,034 x3	0,3 x3			
FNA50A2VEB	x2 RZASG100M7V1B	21,8	—			25	—	19,0	0,200	1,0	0,060 x2	0,5 x2			
FUA100AVEB	RZASG100M7V1B	22,2	—			25	—	19,0	0,200	1,0	0,106	1,3			
FAA100AUEB	RZASG100M7V1B	21,2	—			25	—	19,0	0,200	1,0	0,064	0,4			
FVA100AMVEB	RZASG100M7V1B	22,0	—			25	—	19,0	0,200	1,0	0,238	1,2			
FDXM35F3V1B	x3 RZASG100M7V1B	21,7	—			25	—	19,0	0,200	1,0	0,034 x3	0,3 x3			
FDXM50F3V1B	x2 RZASG100M7V1B	21,8	—			25	—	19,0	0,200	1,0	0,060 x2	0,5 x2			
FHA35AVEB	x3 RZASG100M7V1B	22,7	—			25	—	19,0	0,200	1,0	0,060 x3	0,6 x3			
FHA50AVEB	x2 RZASG100M7V1B	22,0	—			25	—	19,0	0,200	1,0	0,060 x2	0,6 x2			
FHA100AVEB	RZASG100M7V1B	22,2	—			25	—	19,0	0,200	1,0	0,150	1,3			

3D110014D

3 Electrical data

3 - 1 Electrical Data

RZASG125-140MV1

Indoor		Outdoor	Power supply	Voltage range		MCA	TOCA	MFA	Compressor		OFM		IFM	
									MSC	RLA	kW	FLA	kW	FLA
FCAG35BVEB	x4	RZASG125M7V1B	50Hz - 220-240V	Minimum: -198 V. Maximum: 264 V.	28,0	-	32	-	24,7	0,200	1,0	0,044 x4	0,3 x4	
FCAG50BVEB	x3	RZASG125M7V1B			27,7	-	32	-	24,7	0,200	1,0	0,039 x3	0,3 x3	
FCAG60BVEB	x2	RZASG125M7V1B			27,4	-	32	-	24,7	0,200	1,0	0,044 x2	0,3 x2	
FCAG125BVEB		RZASG125M7V1B			27,8	-	32	-	24,7	0,200	1,0	0,168	1,0	
FFA35A2VEB	x4	RZASG125M7V1B			28,4	-	32	-	24,7	0,200	1,0	0,050 x4	0,4 x4	
FFA50A2VEB	x3	RZASG125M7V1B			28,0	-	32	-	24,7	0,200	1,0	0,050 x3	0,4 x3	
FFA60A2VEB	x2	RZASG125M7V1B			28,0	-	32	-	24,7	0,200	1,0	0,050 x2	0,6 x2	
FBA35A2VEB	x4	RZASG125M7V1B			29,2	-	32	-	24,7	0,200	1,0	0,089 x4	0,6 x4	
FBA50A2VEB	x3	RZASG125M7V1B			28,6	-	32	-	24,7	0,200	1,0	0,089 x3	0,6 x3	
FBA60A2VEB	x2	RZASG125M7V1B			27,8	-	32	-	24,7	0,200	1,0	0,070 x2	0,5 x2	
FBA125A2VEB		RZASG125M7V1B			28,3	-	32	-	24,7	0,200	1,0	0,187	1,5	
FNA35A2VEB	x4	RZASG125M7V1B			28,0	-	32	-	24,7	0,200	1,0	0,034 x4	0,3 x4	
FNA50A2VEB	x3	RZASG125M7V1B			28,3	-	32	-	24,7	0,200	1,0	0,060 x3	0,5 x3	
FNA60A2VEB	x2	RZASG125M7V1B			27,8	-	32	-	24,7	0,200	1,0	0,060 x2	0,5 x2	
FUA125AVEB		RZASG125M7V1B			28,2	-	32	-	24,7	0,200	1,0	0,106	1,4	
FDA125AVEB		RZASG125M7V1B			28,9	-	32	-	24,7	0,200	1,0	0,350	2,1	
FVA125AMVEB		RZASG125M7V1B			28,0	-	32	-	24,7	0,200	1,0	0,238	1,2	
FDXM35F3V1B	x4	RZASG125M7V1B			28,0	-	32	-	24,7	0,200	1,0	0,034 x4	0,3 x4	
FDXM50F3V1B	x3	RZASG125M7V1B			28,3	-	32	-	24,7	0,200	1,0	0,060 x3	0,5 x3	
FDXM60F3V1B	x2	RZASG125M7V1B			27,8	-	32	-	24,7	0,200	1,0	0,060 x2	0,5 x2	
FHA35AVEB	x4	RZASG125M7V1B			29,2	-	32	-	24,7	0,200	1,0	0,060 x4	0,6 x4	
FHA50AVEB	x3	RZASG125M7V1B			28,6	-	32	-	24,7	0,200	1,0	0,060 x3	0,6 x3	
FHA60AVEB	x2	RZASG125M7V1B			28,0	-	32	-	24,7	0,200	1,0	0,091 x2	0,6 x2	
FHA125AVEB		RZASG125M7V1B			28,3	-	32	-	24,7	0,200	1,0	0,150	1,5	
FCAG35BVEB	x4	RZASG140M7V1B	50Hz - 220-240V	Minimum: -198 V. Maximum: 264 V.	27,2	-	32	-	24,0	0,200	1,0	0,044 x4	0,3 x4	
FCAG50BVEB	x3	RZASG140M7V1B			26,9	-	32	-	24,0	0,200	1,0	0,039 x3	0,3 x3	
FCAG71BVEB	x2	RZASG140M7V1B			26,8	-	32	-	24,0	0,200	1,0	0,054 x2	0,4 x2	
FCAG140BVEB		RZASG140M7V1B			27,0	-	32	-	24,0	0,200	1,0	0,168	1,0	
FFA35A2VEB	x4	RZASG140M7V1B			27,7	-	32	-	24,0	0,200	1,0	0,050 x4	0,4 x4	
FFA50A2VEB	x3	RZASG140M7V1B			27,2	-	32	-	24,0	0,200	1,0	0,050 x3	0,4 x3	
FBA35A2VEB	x4	RZASG140M7V1B			28,5	-	32	-	24,0	0,200	1,0	0,089 x4	0,6 x4	
FBA50A2VEB	x3	RZASG140M7V1B			27,9	-	32	-	24,0	0,200	1,0	0,089 x3	0,6 x3	
FBA71A2VEB	x2	RZASG140M7V1B			27,0	-	32	-	24,0	0,200	1,0	0,070 x2	0,5 x2	
FBA140A2VEB		RZASG140M7V1B			27,6	-	32	-	24,0	0,200	1,0	0,187	1,5	
FNA35A2VEB	x4	RZASG140M7V1B			27,2	-	32	-	24,0	0,200	1,0	0,034 x4	0,3 x4	
FNA50A2VEB	x3	RZASG140M7V1B			27,6	-	32	-	24,0	0,200	1,0	0,060 x3	0,5 x3	
FUA71AVEB	x2	RZASG140M7V1B			27,9	-	32	-	24,0	0,200	1,0	0,046 x2	0,9 x2	
FAA71AUVEB	x2	RZASG140M7V1B			26,8	-	32	-	24,0	0,200	1,0	0,048 x2	0,4 x2	
FVA71AMVEB	x2	RZASG140M7V1B			27,2	-	32	-	24,0	0,200	1,0	0,117 x2	0,6 x2	
FVA140AMVEB		RZASG140M7V1B			27,5	-	32	-	24,0	0,200	1,0	0,276	1,4	
FDXM35F3V1B	x4	RZASG140M7V1B			27,2	-	32	-	24,0	0,200	1,0	0,034 x4	0,3 x4	
FDXM50F3V1B	x3	RZASG140M7V1B			27,6	-	32	-	24,0	0,200	1,0	0,060 x3	0,5 x3	
FHA35AVEB	x4	RZASG140M7V1B			28,5	-	32	-	24,0	0,200	1,0	0,060 x4	0,6 x4	
FHA50AVEB	x3	RZASG140M7V1B			27,9	-	32	-	24,0	0,200	1,0	0,060 x3	0,6 x3	
FHA71AVEB	x2	RZASG140M7V1B			27,7	-	32	-	24,0	0,200	1,0	0,091 x2	0,8 x2	
FHA140AVEB		RZASG140M7V1B			27,9	-	32	-	24,0	0,200	1,0	0,150	1,8	

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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		EKBP140L7			
Refrigerant branch piping	Twin	KHRQ(M)58T			
	Triple	-	KHRQ(M)58H		
	Double twin	-	KHRQ(M)58T (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	KHRQ(M)58T			
	Triple	-	KHRQ(M)58H		
	Double twin	-	KHRQ(M)58T (3x)		
Demand adaptor kit		SB.KRP58M52			

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5 Combination table

5 - 1 Combination Table

5

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

Possible combinations

P= Pair	71	100	125	140
2= Twin	35+35	50+50	60+60	71+71
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		FCAG7HVEB	FCAG100HVEB	FCAG125HVEB	FCAG140HVEB	FCAG38VEB	FCAG68VEB	FCAG78VEB	FCAG108VEB	FCAG128VEB	FCAG148VEB	FFAS5A2VEB	FFAS6A2VEB	FFAS8A2VEB	FBA5A2VEB	FBA6A2VEB	FBA7A2VEB	FBA10A2VEB	FBA12A2VEB	FBA14A2VEB	FNA35A2VEB	FNA50A2VEB	FNA60A2VEB	FUA7AVEB	FUA10AVEB	FUA12AVEB	FAA7AVEB	FAA10AVEB	FDA12SAVEB	
RZAG71M7V1B	RZAG71M7Y1B	P				2					2			2							2									
RZAG100M7V1B	RZAG100M7Y1B		P			3	2				3	2		3	2						3	2								
RZAG125M7V1B	RZAG125M7Y1B			P		4	3	2			4	3	2	4	3	2					4	3	2							
RZAG140M7V1B	RZAG140M7Y1B	2			P	4	3	2			4	3	2	4	3	2					4	3	2							
RZASG71M2V1B						2					2			2							2									
RZASG100M7V1B	RZASG100M7Y1B					3	2				3	2		3	2						3	2								
RZASG125M7V1B	RZASG125M7Y1B					4	3	2			4	3	2	4	3	2					4	3	2							
RZASG140M7V1B	RZASG140M7Y1B					4	3	2			4	3	2	4	3	2					4	3	2							
AZAS71M2V1B																														
AZAS100M7V1B	AZAS100M7Y1B																													
AZAS125M7V1B	AZAS125M7Y1B																													
AZAS140M7V1B	AZAS140M7Y1B																													

Sky Air		Floor standing type				Slim duct		Ceiling-suspended				Duct (medium ESP)	
Model		FVA71AMVEB	FVA100AMVEB	FVA125AMVEB	FVA140AMVEB	FDXMSF3V1B9	FDXMSF3V2B9	FHAS5AVEB	FHAS10AVEB	FHAS125AVEB	FHAS140AVEB	ADEA7A2VEB	ADEA10A2VEB
RZAG71M7V1B	RZAG71M7Y1B	P				2		2					
RZAG100M7V1B	RZAG100M7Y1B		P			3	2	3	2				
RZAG125M7V1B	RZAG125M7Y1B			P		4	3	4	3	2			
RZAG140M7V1B	RZAG140M7Y1B	2			P	4	3	4	3	2			
RZASG71M2V1B						2		2					
RZASG100M7V1B	RZASG100M7Y1B		P			3	2	3	2				
RZASG125M7V1B	RZASG125M7Y1B			P		4	3	4	3	2			
RZASG140M7V1B	RZASG140M7Y1B	2			P	4	3	4	3	2			
AZAS71M2V1B													P
AZAS100M7V1B	AZAS100M7Y1B												P
AZAS125M7V1B	AZAS125M7Y1B												P
AZAS140M7V1B	AZAS140M7Y1B												P

Notes

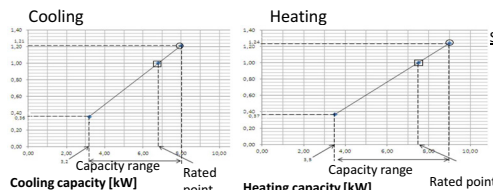
- Maximum capacity is limited based on outdoor unit capacity.
- When combining multiple indoor units, designate the unit whose remote controller is equipped with the most functions as the master unit.
- For the selection of the correct refnet kit, required to install a multi-combination, refer to the option list.
Twin : KHRQ(M)58T
Triple : KHRQ(M)58H
Double twin : KHRQ(M)58T
- ADEA·A2VEB· can only be used in combination with ·AZAS·M·V1B·

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6 Capacity tables

6 - 1 Cooling/Heating Capacity Tables

RZASG71MV1



Symbols

- AFR: Air flow rate [m³/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]

		Outdoor temperature [°C DB]																	
		25				30				35				40					
		TC	SHC	CPI	PI	TC	SHC	CPI	PI	TC	SHC	CPI	PI	TC	SHC	CPI	PI		
16.0	22	7.25	4.95	0.92	7.25	4.99	1.08	7.50	5.21	1.20	7.50	5.06	1.32	18.0	11.9	1.21	7.62	5.04	1.34
18.0	25	8.97	5.43	1.00	8.11	5.12	1.11	7.83	5.19	1.21	7.62	5.04	1.34	19.0	12.7	1.21	7.68	5.01	1.34
19.0	27	9.56	5.43	1.00	8.28	5.11	1.11	8.00	5.18	1.21	7.68	5.01	1.34	20.0	13.5	1.21	7.74	4.99	1.34
19.5	27	8.43	5.40	1.01	8.17	5.10	1.11	8.08	5.17	1.21	7.76	5.03	1.34	21.0	14.3	1.21	7.80	4.97	1.34
22.0	30	10.07	5.51	1.01	8.60	5.20	1.11	8.51	5.10	1.20	8.18	4.91	1.35	22.0	15.1	1.21	7.86	4.95	1.34
24.0	32	11.45	5.55	1.01	9.15	5.16	1.11	9.01	5.06	1.21	8.31	4.90	1.35	24.0	16.0	1.21	7.92	4.93	1.34

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 (m³/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: -0 m
- 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.

Heating

		Outdoor temperature [°C DB]											
		-15		-10		-5		0		5		10	
		TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
16	18	5.14	0.89	5.68	0.94	6.22	0.98	6.75	1.03	7.29	1.08	7.82	1.13
18	18	5.14	0.92	5.67	0.97	6.21	1.02	6.74	1.07	7.27	1.12	7.80	1.18
20	20	5.13	0.96	5.67	1.01	6.20	1.06	6.73	1.11	7.26	1.17	7.79	1.23
21	21	5.13	0.98	5.66	1.03	6.20	1.08	6.73	1.13	7.26	1.19	7.79	1.25
22	22	5.12	0.99	5.65	1.04	6.19	1.10	6.72	1.15	7.25	1.22	7.78	1.28
24	24	5.12	1.03	5.65	1.09	6.19	1.14	6.72	1.20	7.25	1.26	7.78	1.32

Pair

AFR (BF)	FCAG71B	FAA71A	FVA71A	FHA71A	FUA71A	FBA71A
	15.3 (0.14)	18.0 (0.16)	18.0 (0.16)	20.5 (0.13)	23.0 (0.24)	18.0 (0.13)

Twin

AFR (BF)	FCAG35B X 2	FHA35A X 2	FFA35A X 2	FDXM35F3 X 2	FBA35A X 2	FNA35A X 2
	12.5 x 2 (0.4 x 2)	14.0 x 2 (0.17 x 2)	10.0 x 2 (0.25 x 2)	8.7 x 2 (0.17 x 2)	15.0 x 2 (0.08 x 2)	8.7 x 2 (0.17 x 2)

Pair

	FCAG71B	FAA71A	FVA71A	FHA71A	FUA71A	FBA71A
Cooling	2,17	2,00	2,01	1,78	1,77	1,89
Heating	2,01	2,09	2,02	2,00	1,93	1,93

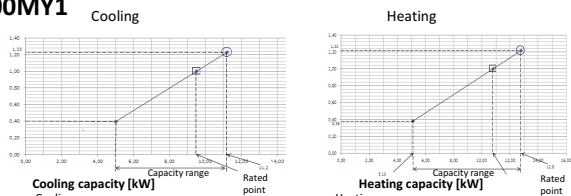
Twin

	FCAG35B X 2	FHA35A X 2	FFA35A X 2	FDXM35F3 X 2	FBA35A X 2	FNA35A X 2
Cooling	1,81	1,47	2,08	1,77	1,78	1,77
Heating	1,96	1,62	1,59	2,02	1,69	2,02

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RZASG100MV1

RZASG100MY1



Symbols

- AFR: Air flow rate [m³/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]

		Outdoor temperature [°C DB]																	
		25				30				35				40					
		TC	SHC	CPI	PI	TC	SHC	CPI	PI	TC	SHC	CPI	PI	TC	SHC	CPI	PI		
16.0	22	11.2	7.95	1.01	10.8	7.44	1.11	10.5	7.29	1.20	10.0	7.09	1.32	18.0	11.8	1.21	10.7	7.00	1.32
18.0	25	11.8	7.99	1.01	11.4	7.49	1.12	11.0	7.37	1.20	10.5	7.09	1.32	19.0	12.0	1.21	10.8	7.00	1.32
19.0	27	12.0	7.97	1.01	11.6	7.44	1.12	11.2	7.36	1.20	10.8	7.04	1.33	20.0	12.2	1.21	10.9	6.99	1.32
19.5	27	12.1	7.95	1.01	11.7	7.37	1.13	11.4	7.34	1.20	10.9	7.04	1.32	21.0	12.4	1.21	11.0	6.98	1.32
22.0	30	13.8	7.92	1.01	12.4	7.36	1.13	11.9	7.31	1.20	11.5	7.00	1.32	22.0	13.0	1.21	11.2	6.96	1.32
24.0	32	15.2	7.42	1.01	12.9	7.27	1.14	12.4	7.06	1.20	12.0	6.95	1.32	24.0	13.8	1.21	11.4	6.94	1.32

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 (m³/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: -0 m
- 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.

		Outdoor temperature [°C DB]											
		-15.0		-10.0		-5.0		0.0		5.0		10.0	
		TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
16	16	9.99	0.85	10.4	0.89	10.9	0.93	11.4	0.97	11.9	1.01	12.4	1.05
18	18	9.97	0.87	10.4	0.91	10.9	0.95	11.4	0.99	11.9	1.03	12.4	1.07
20	20	9.95	0.89	10.4	0.93	10.9	0.97	11.4	1.01	11.9	1.05	12.4	1.09
21	21	9.96	0.92	10.4	0.96	10.9	1.00	11.4	1.04	11.9	1.08	12.4	1.12
22	22	9.96	0.94	10.4	0.98	10.9	1.02	11.4	1.06	11.9	1.10	12.4	1.14
24	24	9.94	0.97	10.4	1.01	10.9	1.05	11.4	1.09	11.9	1.13	12.4	1.17

Pair

AFR (BF)	FCAG100B	FAA100A	FVA100A	FHA100A	FUA100A	FBA100A
	22.8 (0.17)	26.0 (0.10)	28.0 (0.20)	28.0 (0.09)	31.0 (0.20)	29.0 (0.03)

Twin

AFR (BF)	FCAG50B X 2	FHA50A9 X 2	FFA50A9 X 2	FDXM50F9 X 2	FBA50A9 X 2	FNA50A9 X 2
	12.6 x 2 (0.22 x 2)	15.0 x 2 (0.18 x 2)	12.0 x 2 (0.16 x 2)	15.8 x 2 (0.11 x 2)	15.0 x 2 (0.13 x 2)	16.0 x 2 (0.11 x 2)

Triple

AFR (BF)	FCAG35B X 3	FHA35A9 X 3	FFA35A9 X 3	FDXM35F9 X 3	FBA35A9 x 3	FNA35A9 X 3
	12.5 x 3 (0.4 x 3)	14.0 x 3 (0.17 x 3)	10.0 x 3 (0.25 x 3)	8.7 x 3 (0.17 x 3)	15.0 x 3 (0.08 x 3)	8.7 x 3 (0.17 x 3)

Pair

	FCAG100B	FAA100A	FVA100A	FHA100A	FUA100A	FBA100A
Cooling	2,92	3,52	2,97	2,97	2,97	2,97
Heating	2,92	2,85	2,43	2,86	2,85	2,26

Twin

	FCAG50B X 2	FHA50A9 X 2	FFA50A9 X 2	FDXM50F9 X 2	FBA50A9 X 2	FNA50A9 X 2
Cooling	2,57	2,97	3,39	2,44	2,86	2,44
Heating	2,37	2,23	2,33	2,41	2,19	2,23

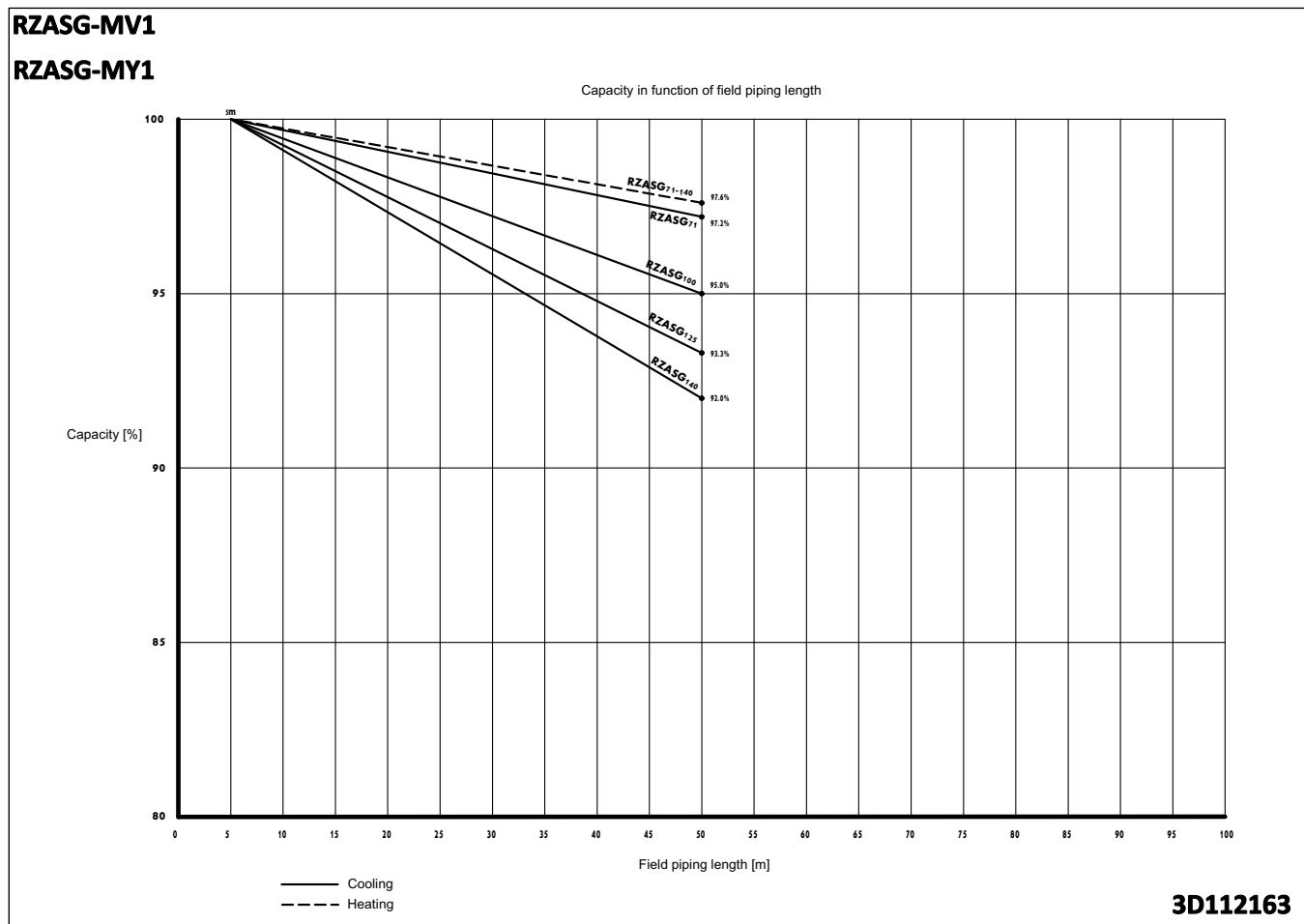
Triple

	FCAG35B X 3	FHA35A9 X 3	FFA35A9 X 3	FDXM35F9 X 3	FBA35A9 x 3	FNA35A9 X 3
Cooling	2,32	2,16	2,71	2,57	2,65	2,57
Heating	2,84	2,77	2,14	2,26	1,99	2,31

3D112145E

6 Capacity tables

6 - 2 Capacity Correction Factor



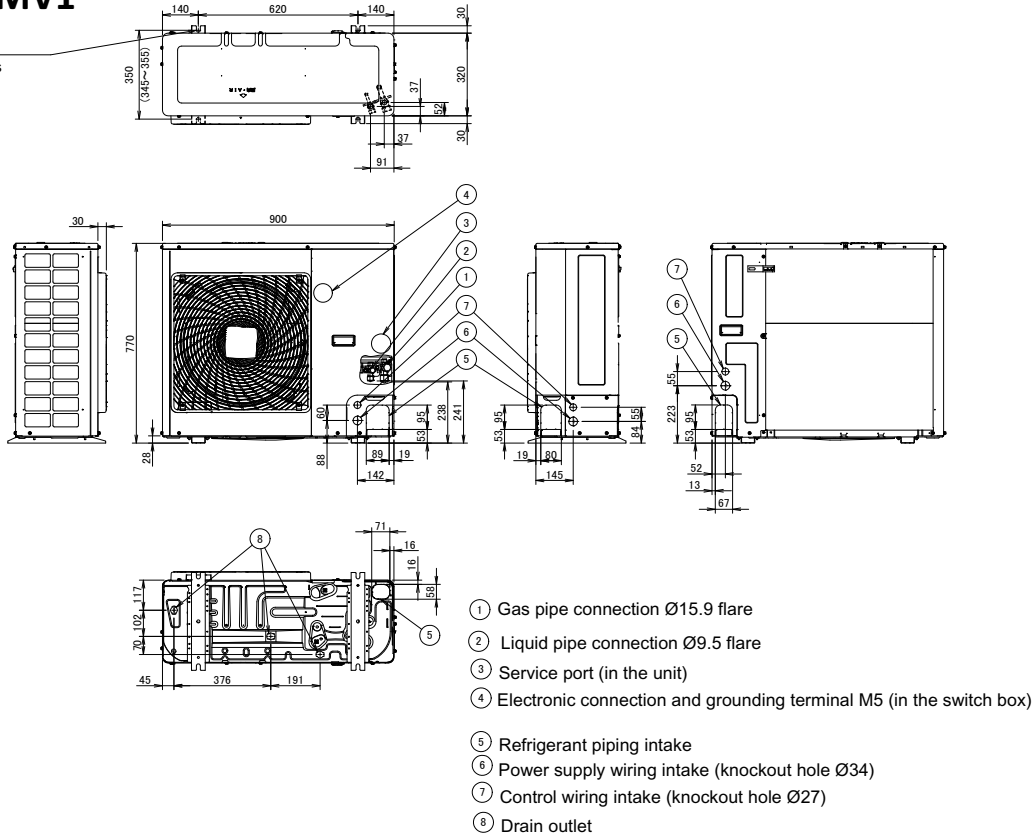
7 Dimensional drawings

7 - 1 Dimensional Drawings

7

AZAS71MV1 RZASG71MV1

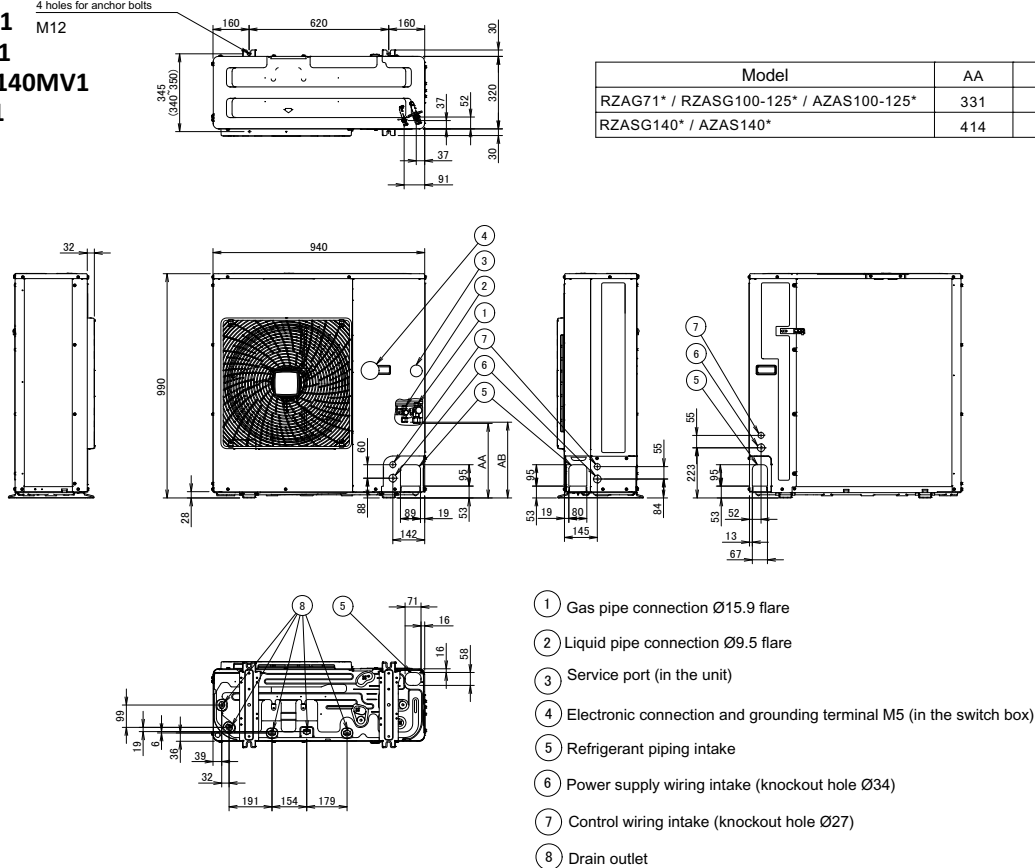
4 holes for anchor bolts
M12



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

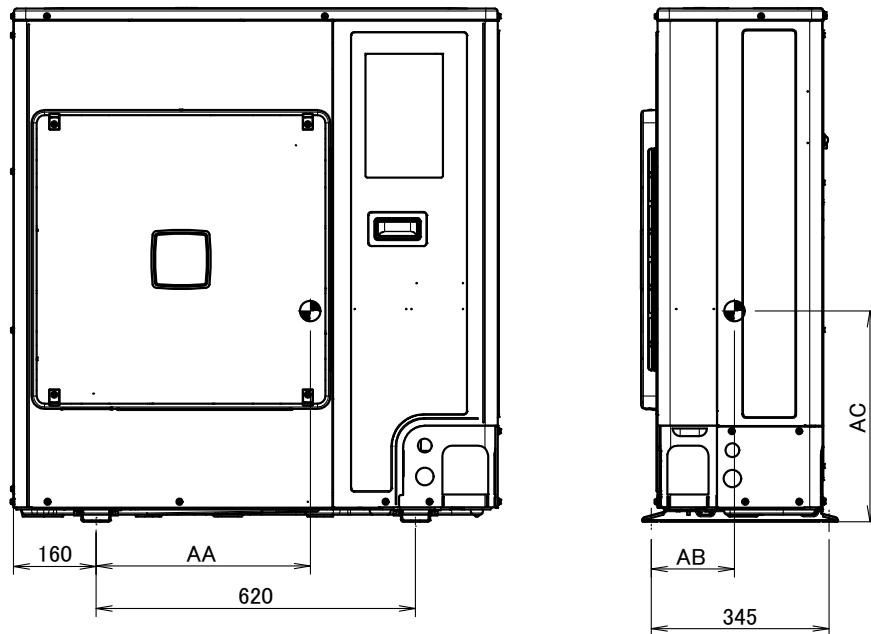
AZAS-MY1

RZAG71MV1

RZAG71MY1

RZASG100-140MV1

RZASG-MY1



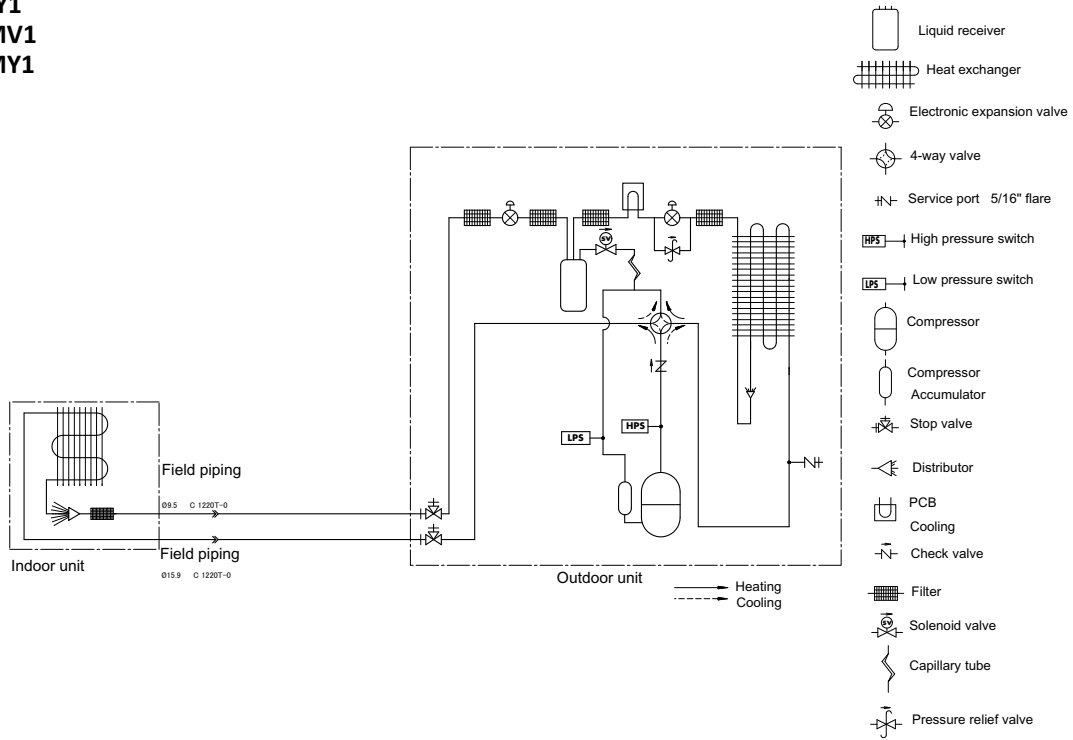
Model	AA	AB	AC
RZAG71M7V*	414	163	407
RZAG71M7Y*	432	137	407
RZASG100-125M7V* / AZAS100-125M7V*	425	181	422
RZASG100-125M7Y* / AZAS100-125M7Y*	414	156	417
RZASG140M7V* / AZAS140M7V*	414	161	423
RZASG140M7Y* / AZAS140M7Y*	416	151	418

4D110025

9 Piping diagrams

9 - 1 Piping Diagrams

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



Notes

- 1. The pipes between the branch and the indoor units should have the same size as the indoor connections.

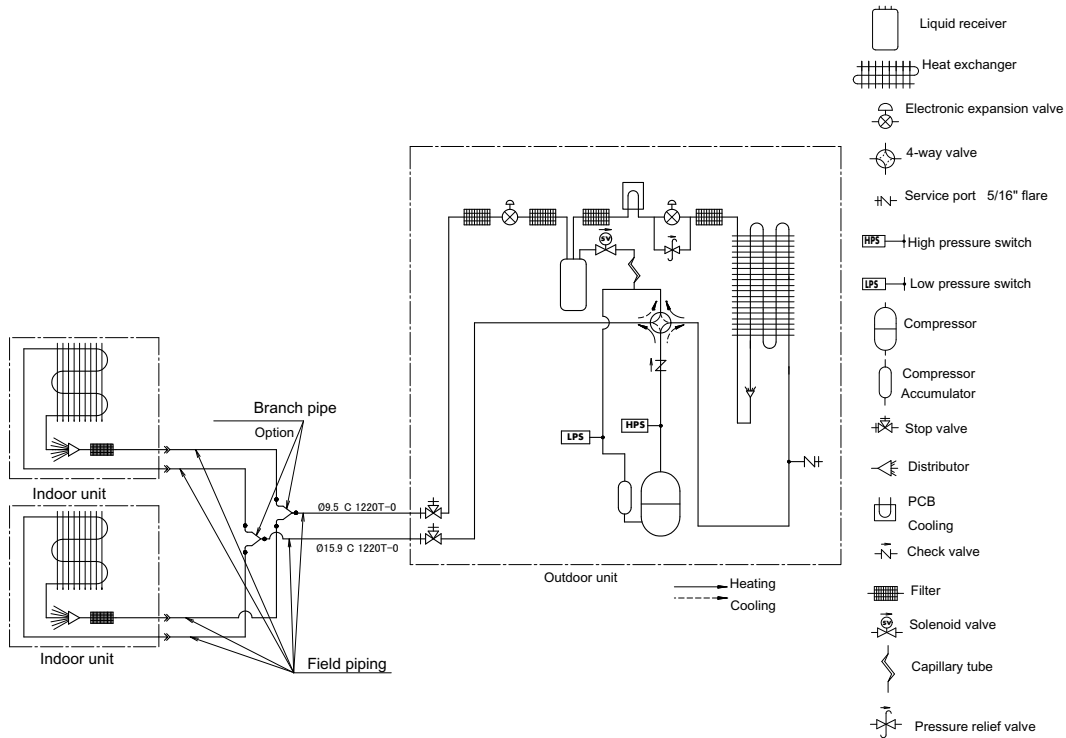
3D108855A

9 Piping diagrams

9 - 2 Piping Diagram Twin Application

9

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



Notes

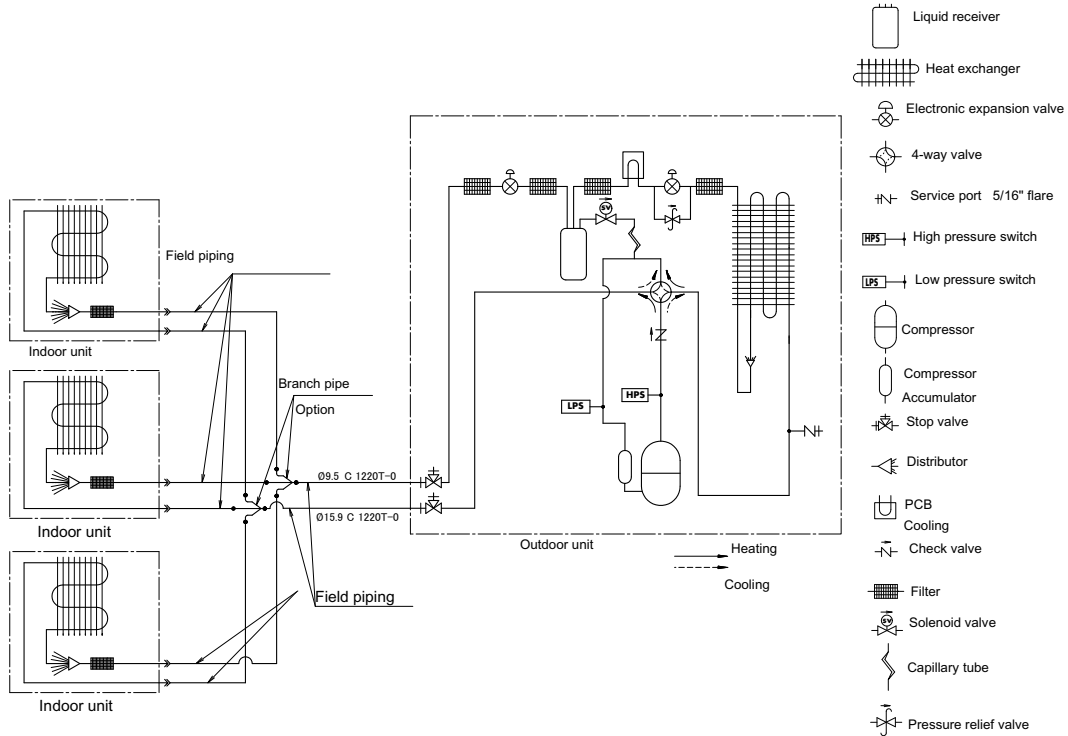
1. The pipes between the branch and the indoor units should have the same size as the indoor connections.

3D108856A

9 Piping diagrams

9 - 3 Piping Diagram Triple Application

RZAG100-140MV1
 RZAG100-140MY1
 RZASG100-140MV1
 RZASG-MY1



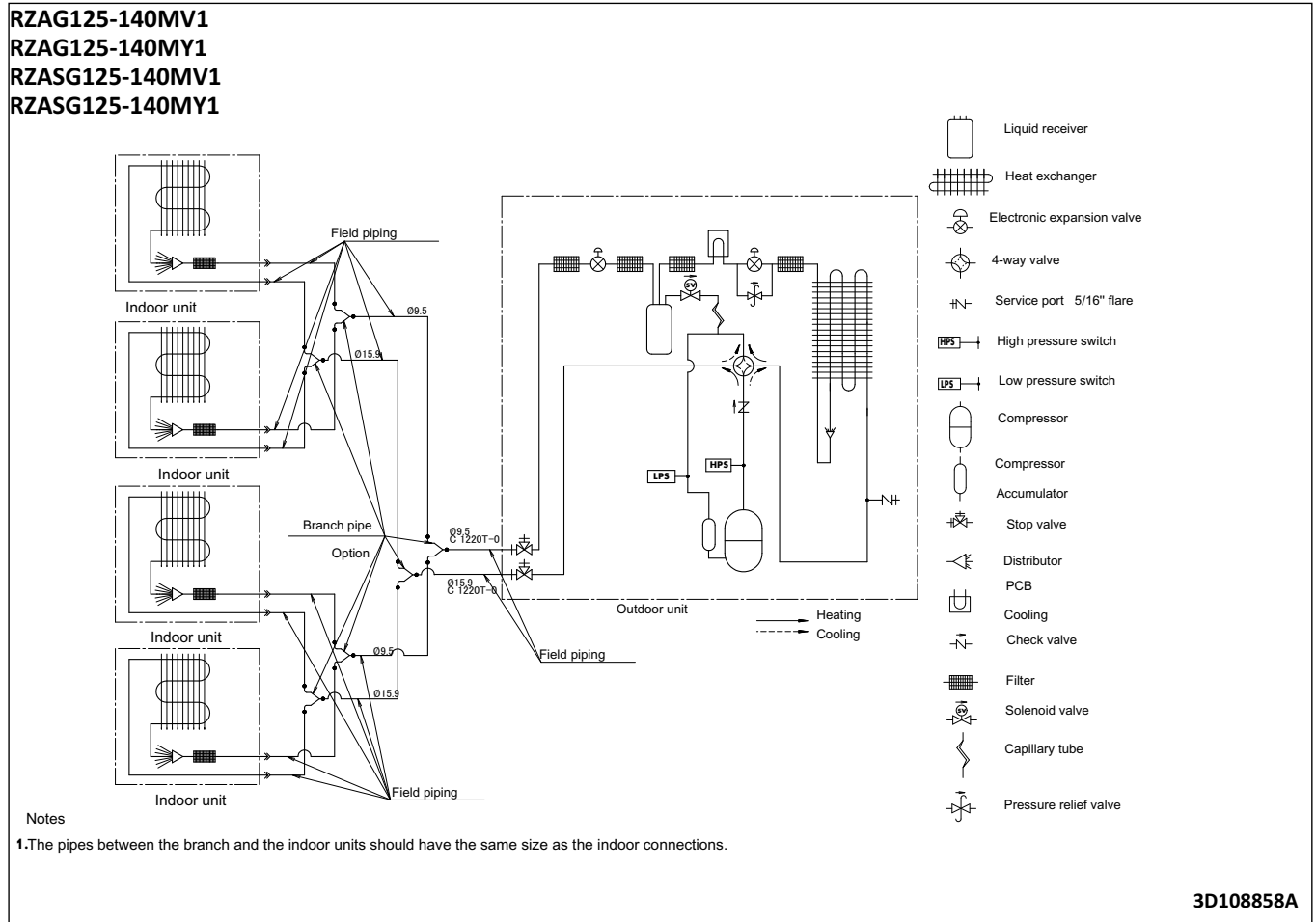
Notes
 1. The pipes between the branch and the indoor units should have the same size as the indoor connections.

3D108857A

9 Piping diagrams

9 - 4 Piping Diagram Double Twin Application

9

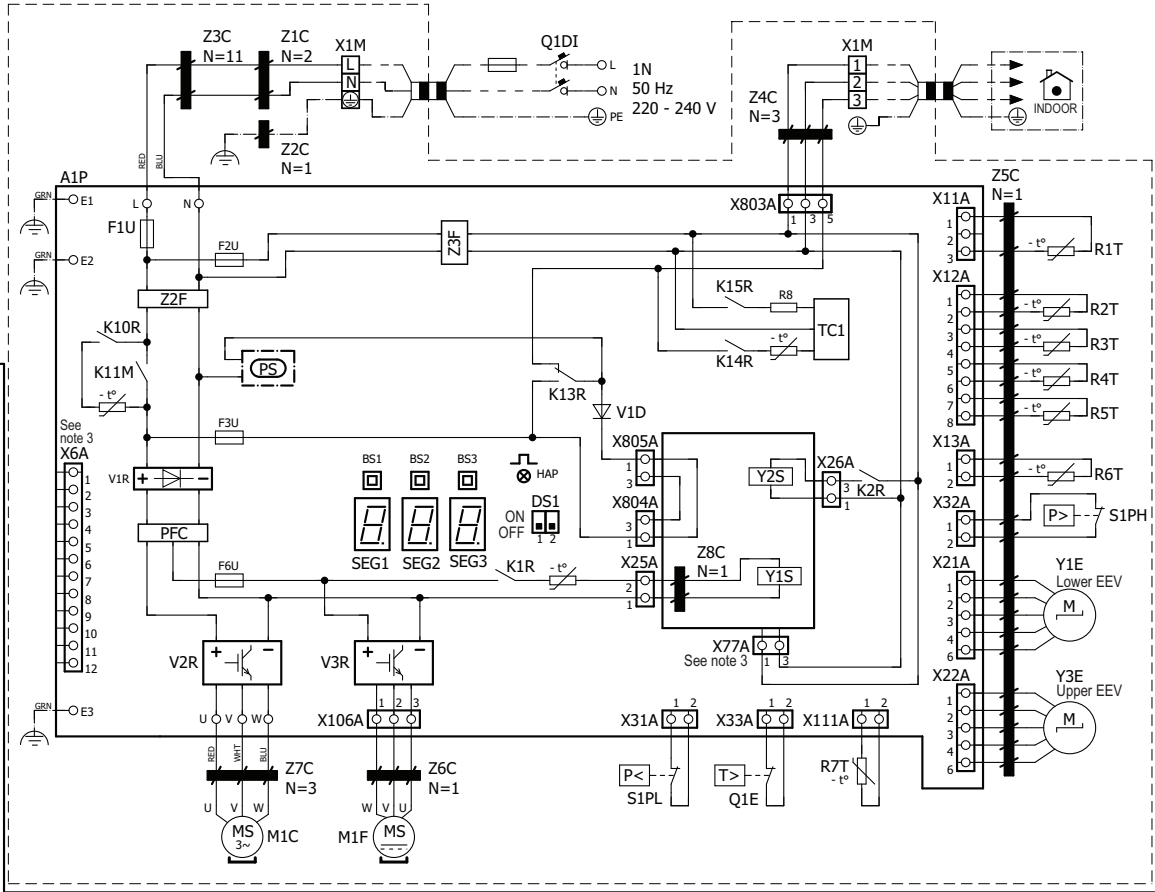


10 Wiring diagrams

10 - 1 Wiring Diagrams - Single Phase

AZAS71MV1 RZASG71MV1

(1) Connection diagram



(2) Layout



(3) NOTES

- : Connection
- : Main terminal
- : Earth wiring
- : Field supply
- : Option
- : switch box
- : PCB
- : Wiring depending on model
- : Protective earth
- : Field wire

(4) LEGEND

Part n°	Description
A1P	Printed circuit board (main)
BS1-3 (A1P)	Push-button switch
DS1(A1P)	Dipswitch
E1-3 (A1P)	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 250V
HAP (A1P)	Light-emitting diode (service monitor is green)
K1R (A1P)	Magnetic relay (Y1S)
K2R (A1P)	Magnetic relay (Y2S)
K13-15R, 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
Q1DI	Earth leakage circuit breaker (30mA)
Q1E	Overload protection

Part n°	Description
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

* : optional
: field supply

NOTES

- Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS3 and DS1 switches.
- When operating, do not short-circuit protection device(s) S1PH, S1PL and Q1E.
- Refer to the combination table and the option manual for how to connect the wiring to X6A and X77A.
- Colours: BLK:black; RED:red; BLU:blue; WHT:white; GRN:green

4D110098A

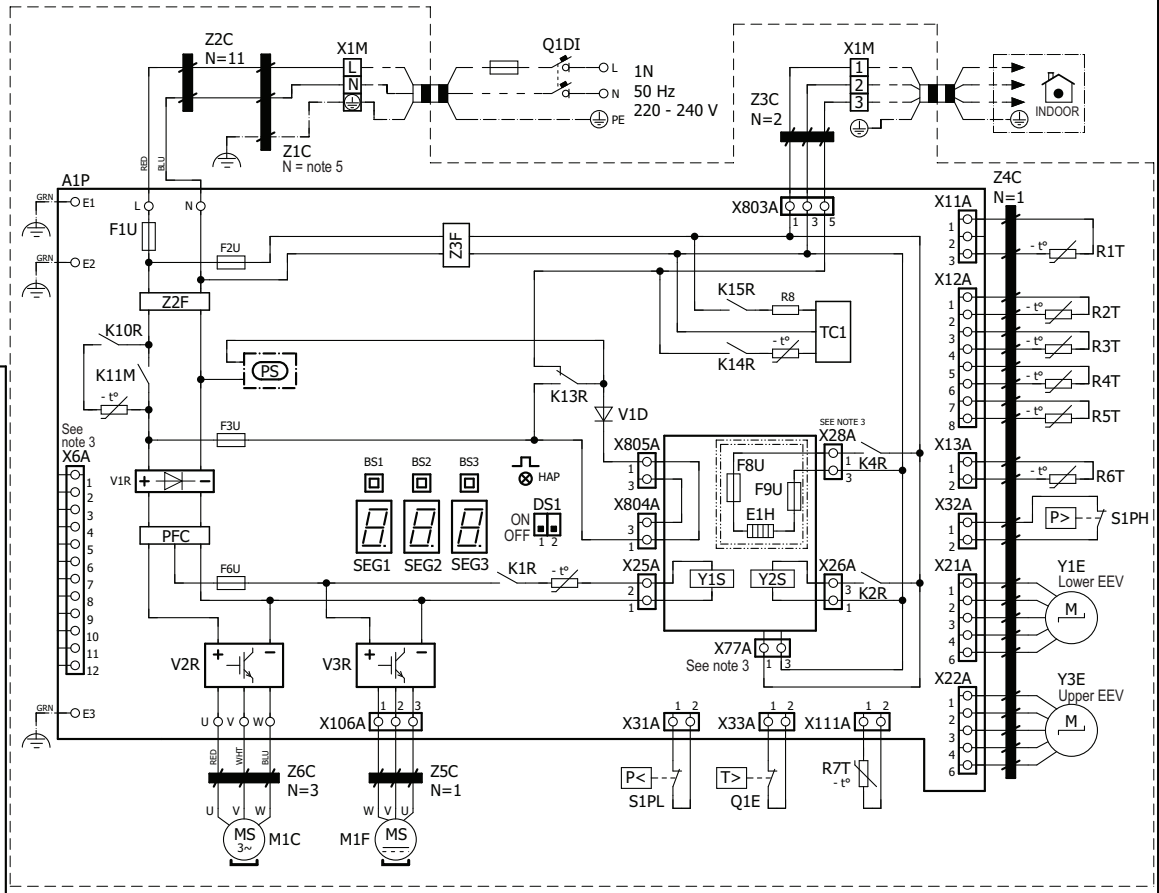
10 Wiring diagrams

10 - 1 Wiring Diagrams - Single Phase

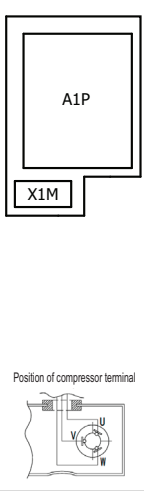
10

AZAS100MV1
RZAG71MV1
RZASG100MV1

(1) Connection diagram



(2) Layout



(3) NOTES

- : Connection
- : Main terminal
- : Earth wiring
- : Field supply
- : Option
- : switch box
- : PCB
- : Wiring depending on model
- : Protective earth
- : Field wire

(4) LEGEND

Part n°	Description
A1P	Printed circuit board (main)
BS1~3 (A1P)	Push-button switch
DS1(A1P)	Dipswitch
E1~3 (A1P)	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 250V
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)
K13~15R, 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
Q1DI	Earth leakage circuit breaker (30mA)

Part n°	Description
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

* : optional # : field supply

NOTES

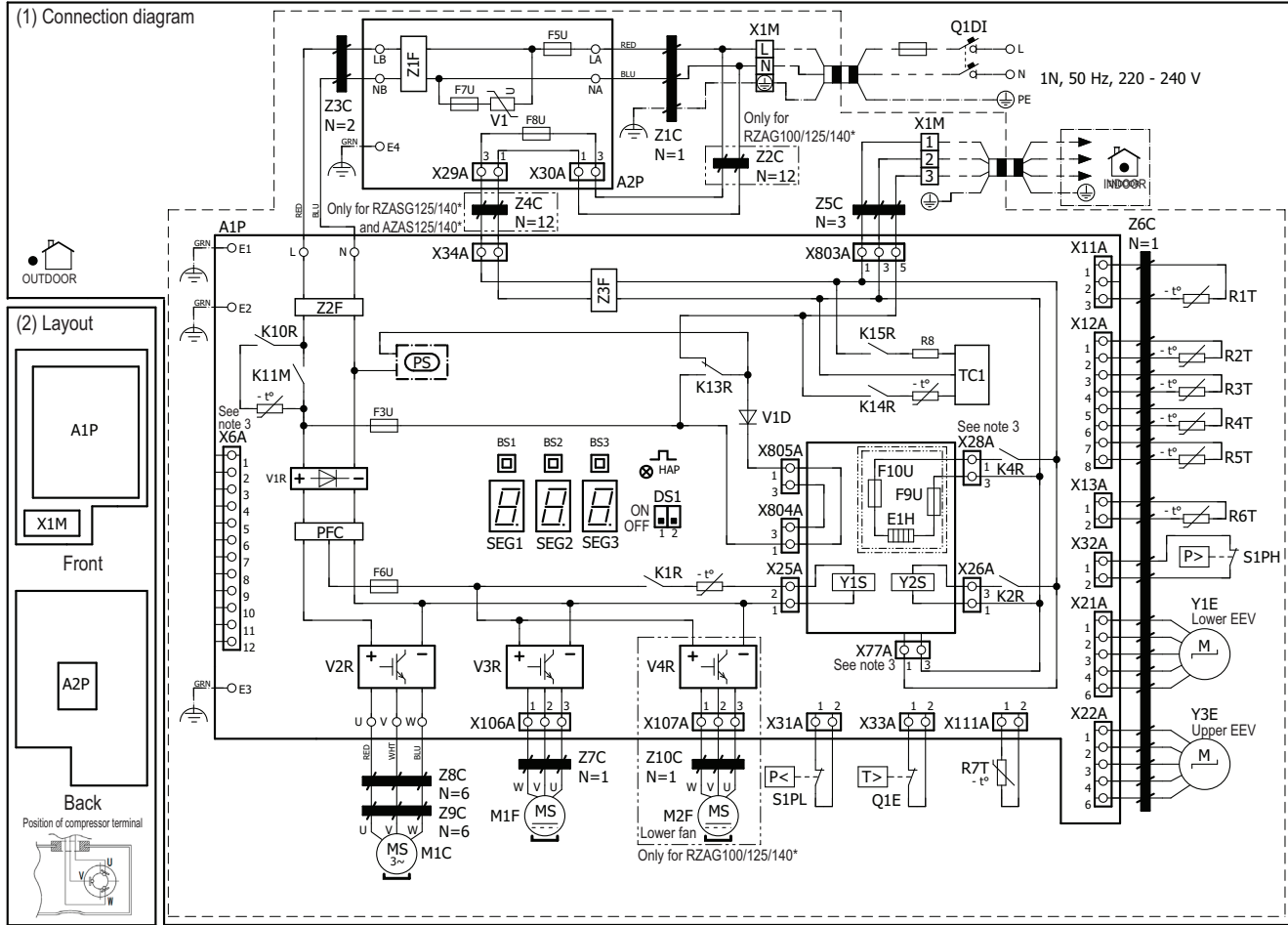
1. Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS3 and DS1 switches.
2. When operating, do not short-circuit protection device(s) S1PH, S1PL and Q1E.
3. Refer to the combination table and the option manual for how to connect the wiring to X6A, X28A and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

4D109936A

10 Wiring diagrams

10 - 1 Wiring Diagrams - Single Phase

AZAS125-140MV1
RZAG100-140MV1
RZASG125-140MV1



(3) NOTES

- ⬇ : Connection
- X1M : Main terminal
- : Earth wiring
- ⬆ : Field supply
- ① : Several wiring possibilities
- ⊕ : Protective earth
- : Field wire
- ⋯ : Wiring depending on model
- ⋯ : Option
- ⊞ : switch box
- ▭ : PCB

(4) LEGEND

Part n°	Description
A1P	Printed circuit board (main)
A2P	Printed circuit board (noise filter)
BS1-3 (A1P)	Push-button switch
DS1(A1P)	Dipswitch
E1-3 (A1~2P)	Connector
E1H	* Bottom plate heater
F3U (A1P)	Fuse T 6,3 A 250 V
F5U (A2P)	Fuse T 56 A 250V
F6U (A1P)	Fuse T 5 A 250V
F7U (A2P)	Fuse T 6,3 A 250 V
F8U (A2P)	Fuse T 6,3 A 250 V
F9-10U	* 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)
K13-15R, K10R (A1P)	Magnetic relay
K11M (A1P)	Magnetic contactor
L* (A1-2P)	Connector
M1C	Compressor motor
M1-2F	Fan motor
PFC (A1P)	Power factor correction
PS (A1P)	Switching power supply

Part n°	Description
Q1DI	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
V1 (A2P)	Varistor
V1D (A1P)	Diode
V*R (A1P)	Diode module
X*A (A1-2P)	Connector
X1M	Terminal strip
Y1E, Y3E	Electronic expansion valve
Y1-2S	Solenoid valve (4-way valve)
Z*C	Noise filter (ferrite core)
Z*F (A1-2P)	Noise filter

* : optional # : field supply

NOTES

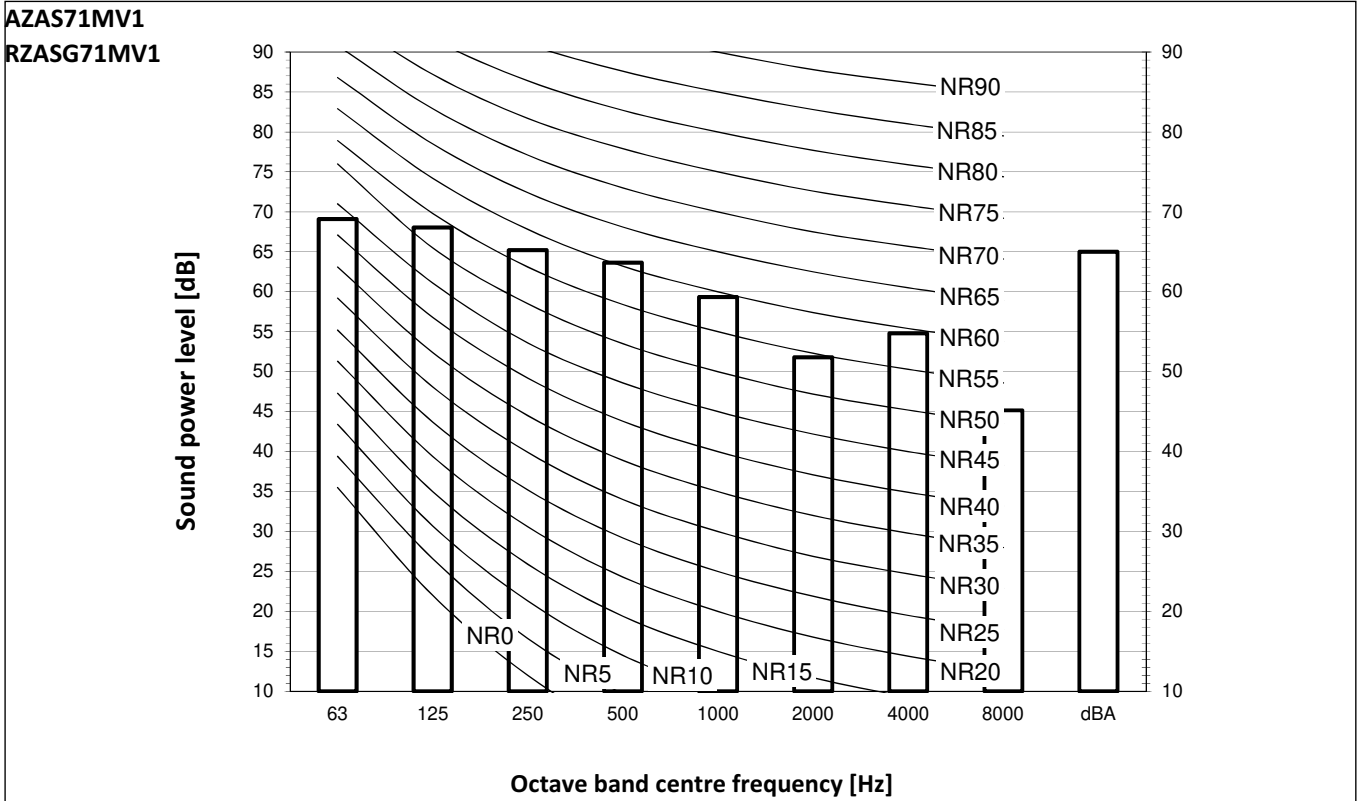
- Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS3 and DS1 switches.
- When operating, do not short-circuit protection device(s) S1PH, S1PL and Q1E.
- Refer to the combination table and the option manual for how to connect the wiring to X6A, X28A and X77A.
- Colours: BLK:black; RED:red; BLU:blue; WHT:white; GRN:green

4D109863A

11 Sound data

11 - 1 Sound Power Spectrum

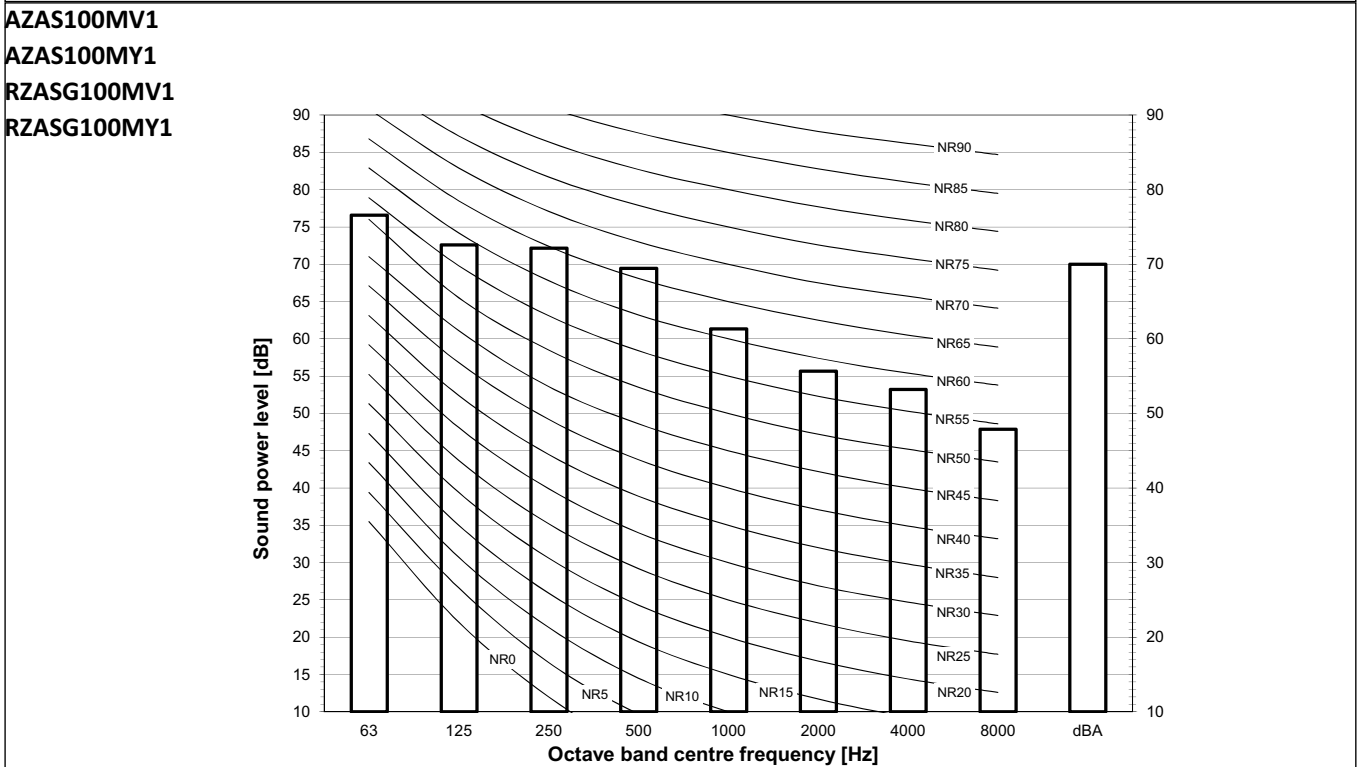
11



Notes

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

3D110037A



Notes

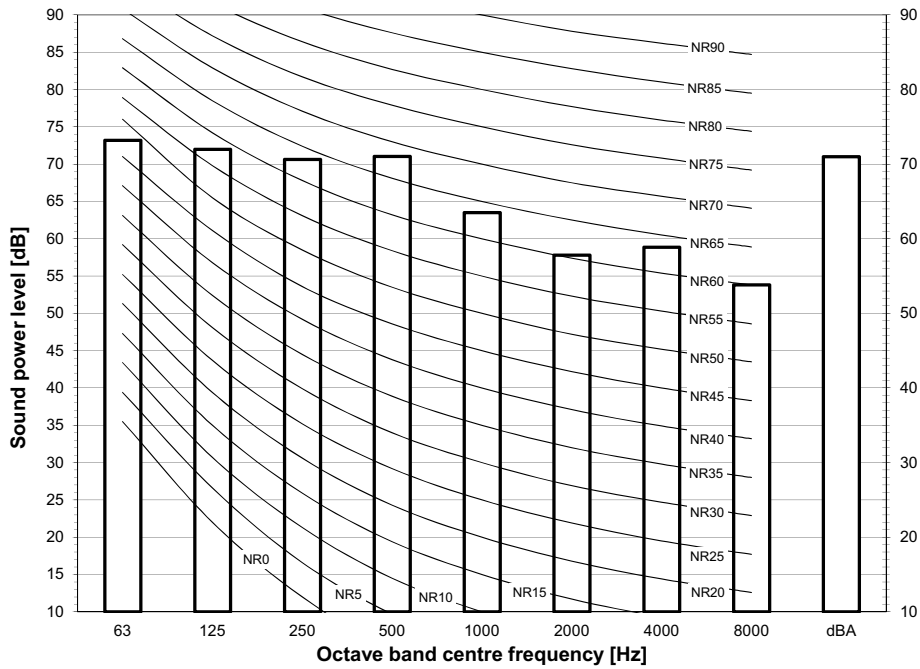
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = $10E-6\mu W/m^2$
- Measured according to ISO 3744

3D110038

11 Sound data

11 - 1 Sound Power Spectrum

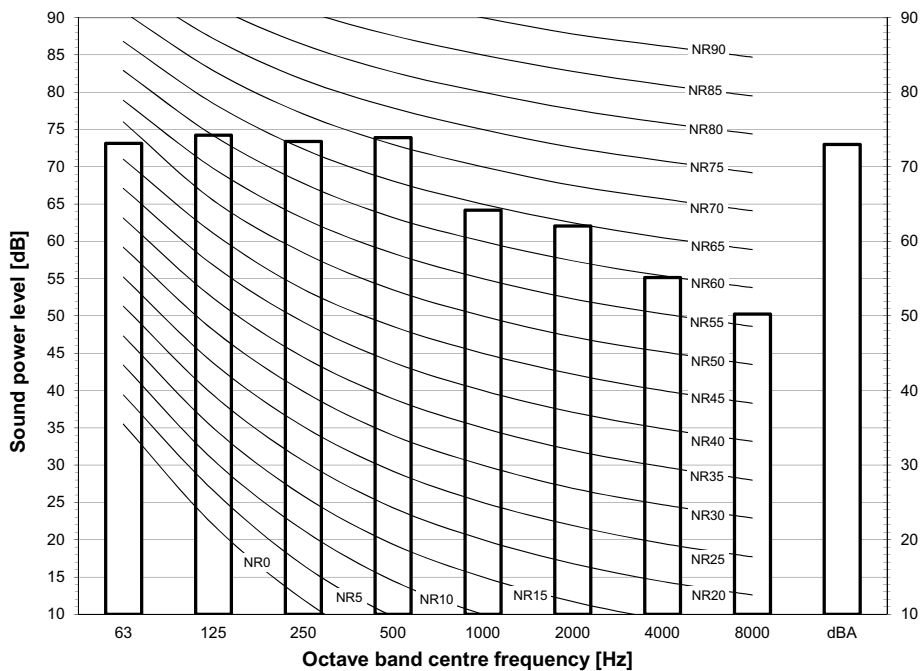
AZAS125MV1
 AZAS125MY1
 RZASG125MV1
 RZASG125MY1



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

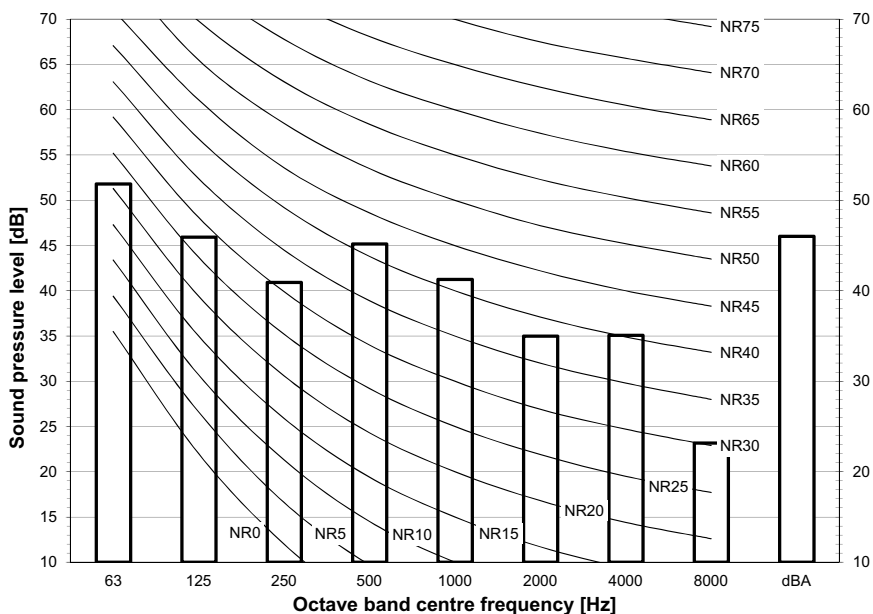
3D110040

11 Sound data

11 - 2 Sound Pressure Spectrum - Cooling

11

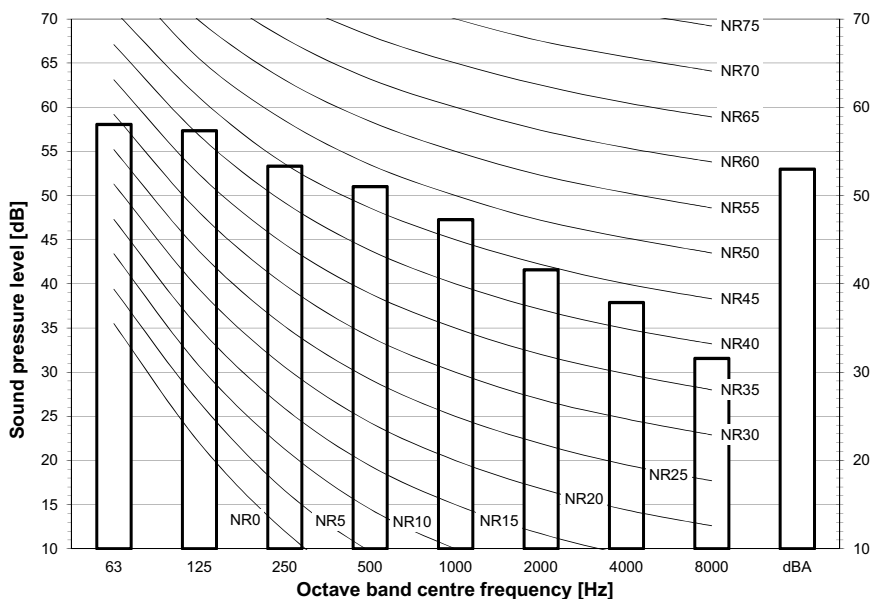
AZAS71MV1
RZASG71MV1



- 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



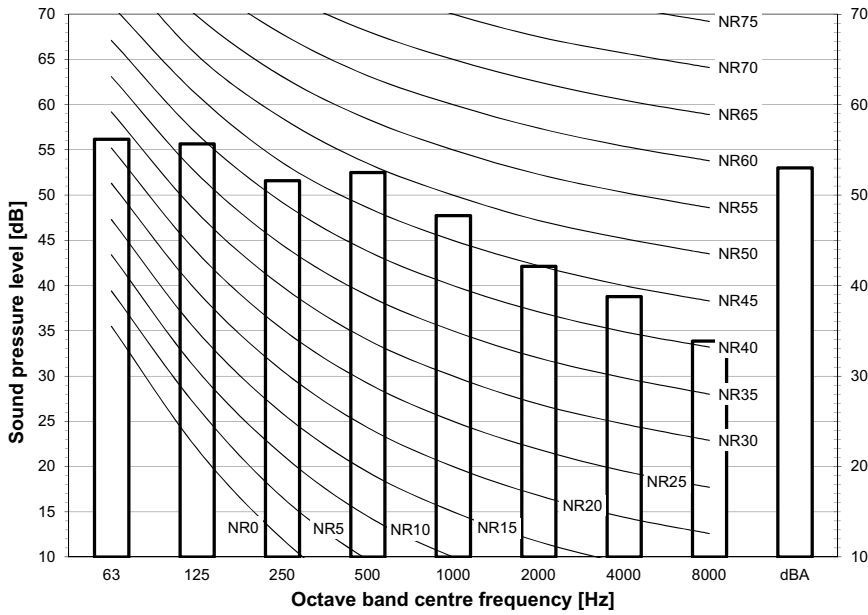
- Notes**
- Data is valid at free field condition.
 - Data is valid at nominal operation condition.
 - dBA = A-weighted sound pressure level (A scale according to IEC).
 - Reference acoustic pressure 0 dB = 20 µPa

3D110050

11 Sound data

11 - 2 Sound Pressure Spectrum - Cooling

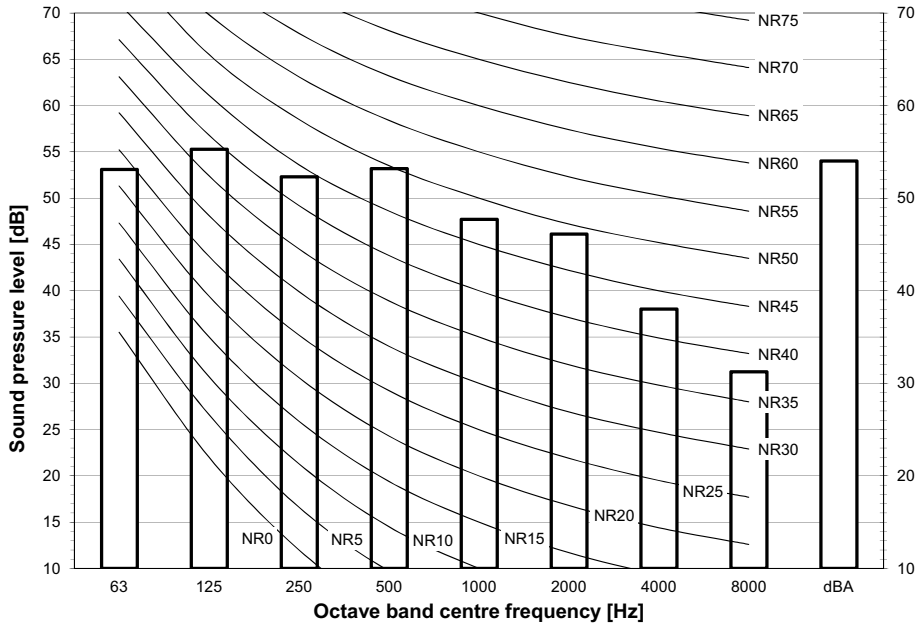
AZAS125MV1
 AZAS125MY1
 RZASG125MV1
 RZASG125MY1



- 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

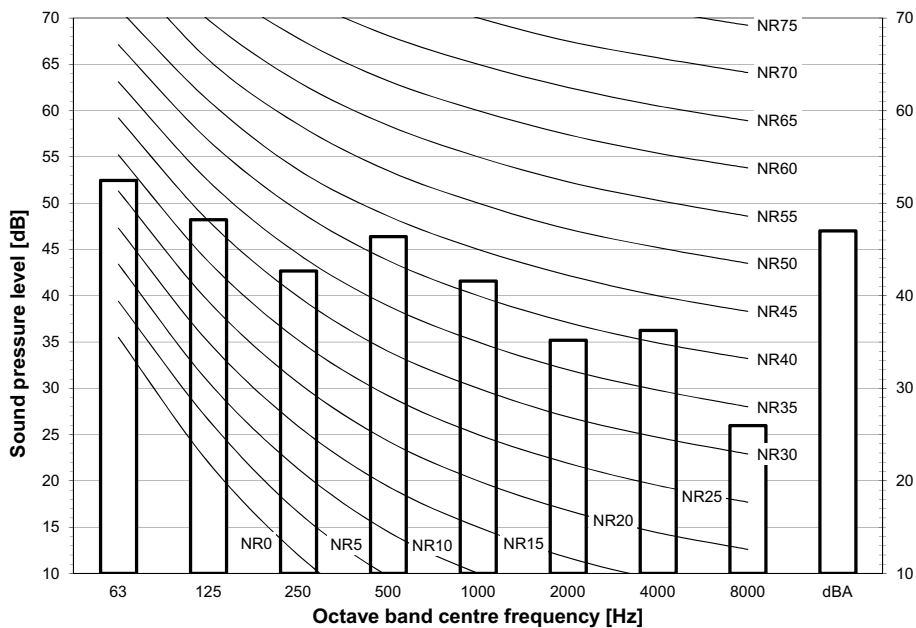
3D111310

11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

11

AZAS71MV1
RZASG71MV1

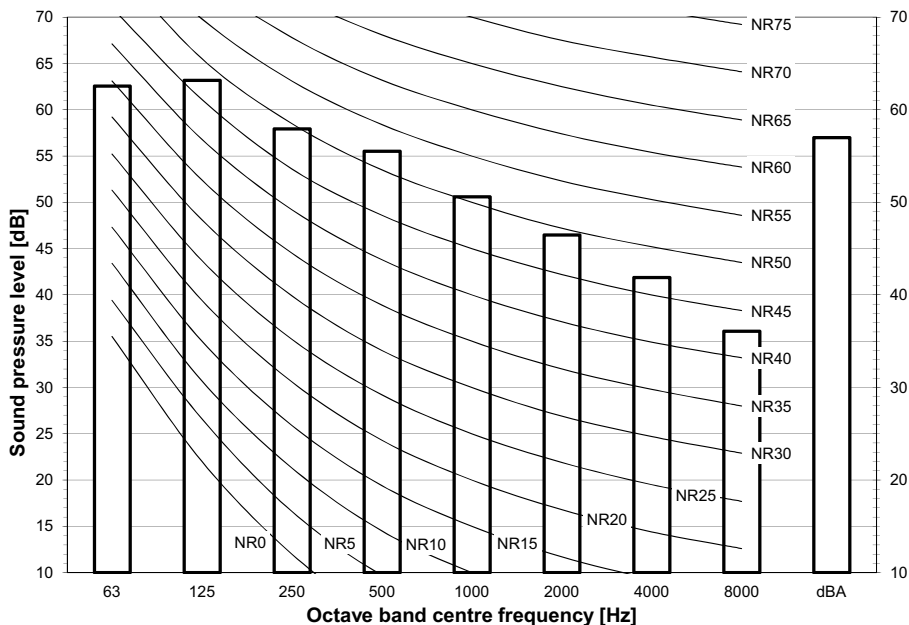


Notes

- 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

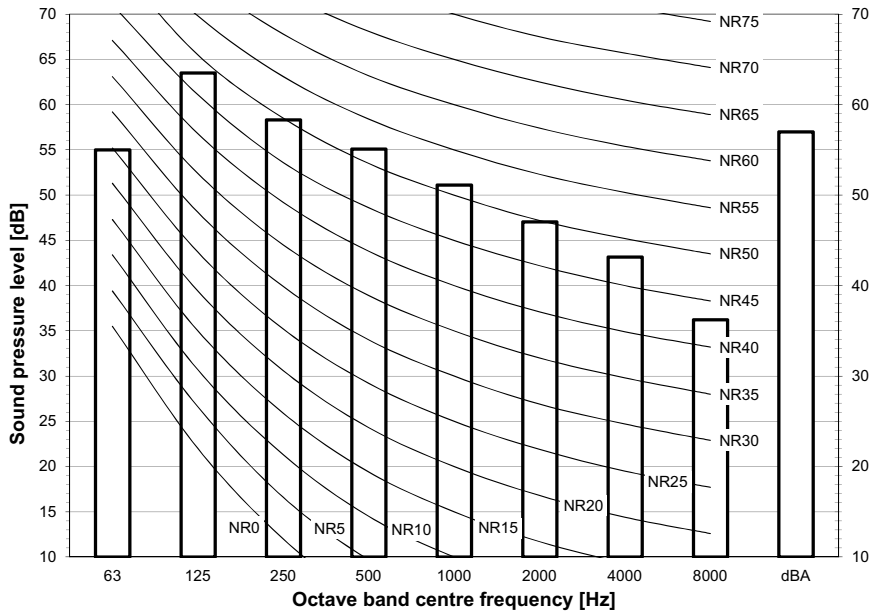
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 μPa

3D111294

11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

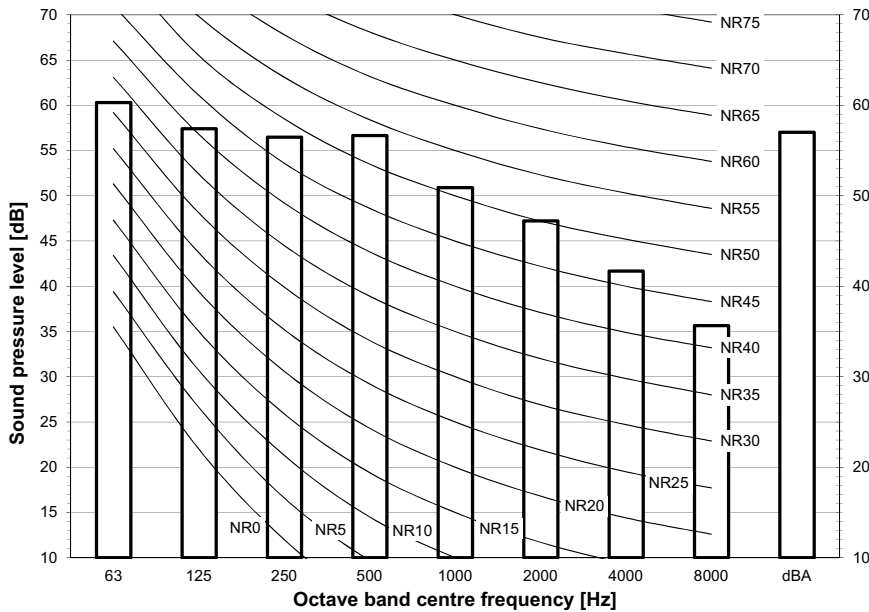
AZAS125MV1
 AZAS125MY1
 RZASG125MV1
 RZASG125MY1



- 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

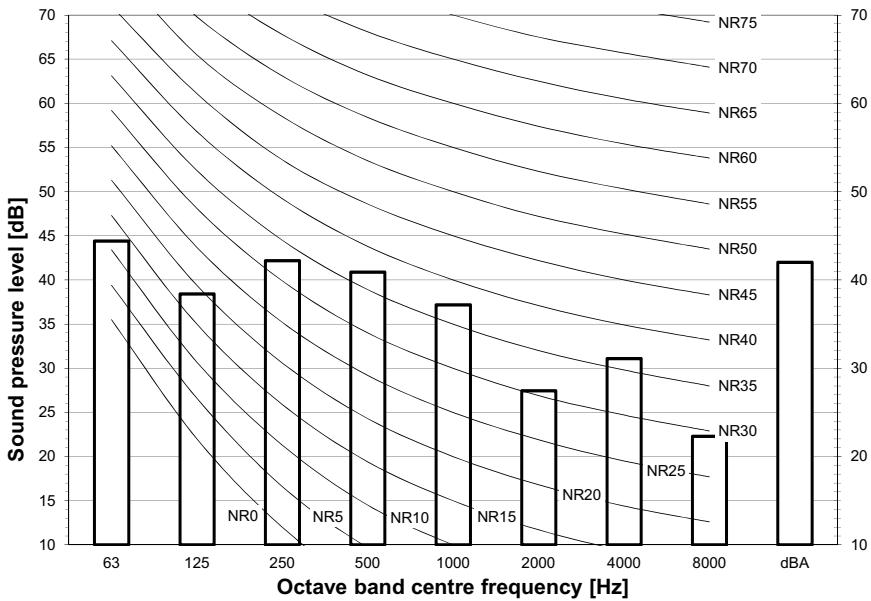
3D111296

11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode

11

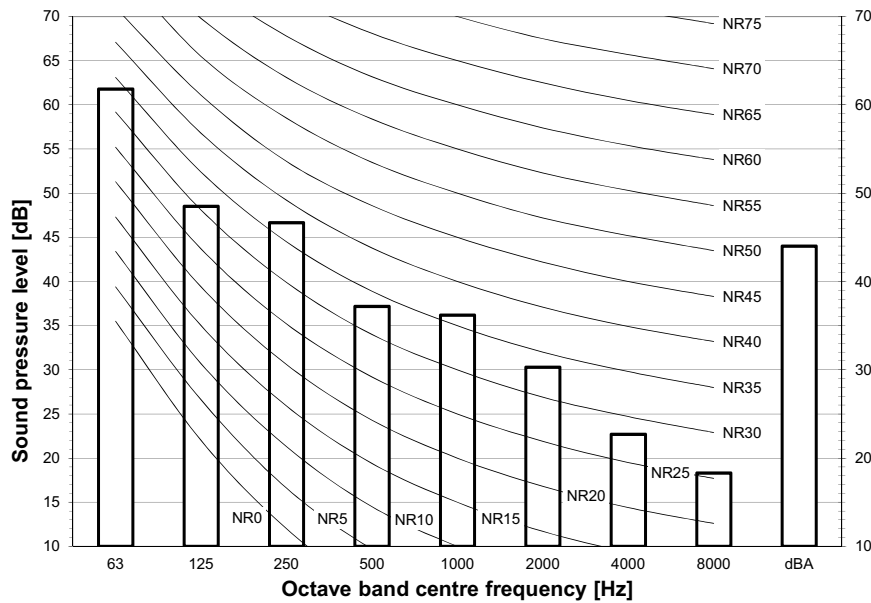
AZAS71MV1
RZASG71MV1



- 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 μ Pa

3D111315

AZAS100MV1
AZAS100MY1
RZASG100MV1
RZASG100MY1



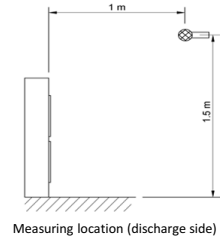
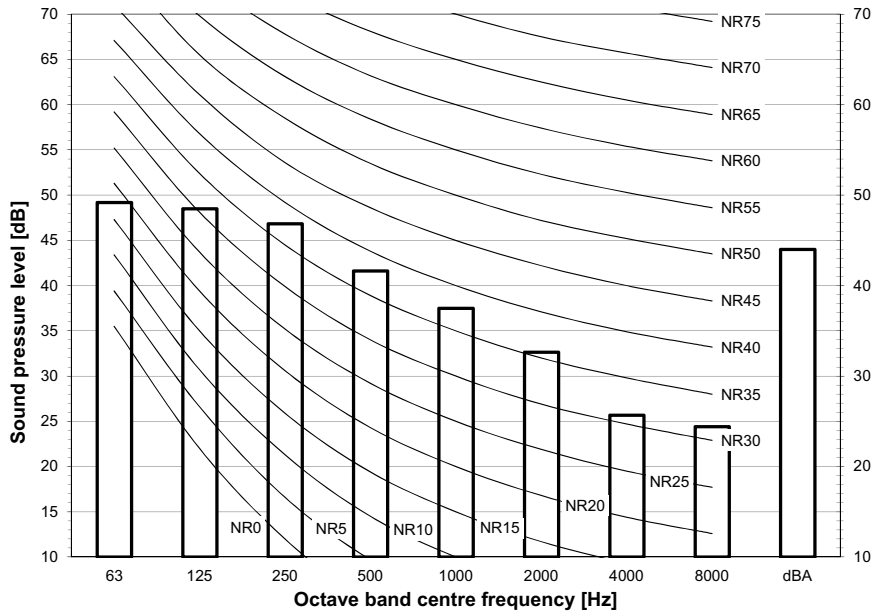
- Notes**
- Data is valid at free field condition.
 - Data is valid at nominal operation condition.
 - dBA = A-weighted sound pressure level (A scale according to IEC).
 - Reference acoustic pressure 0 dB = 20 μ Pa

3D111316

11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode

AZAS125MV1
 AZAS125MY1
 RZASG125MV1
 RZASG125MY1

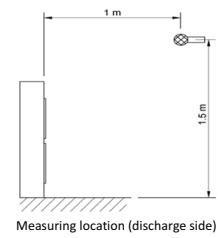
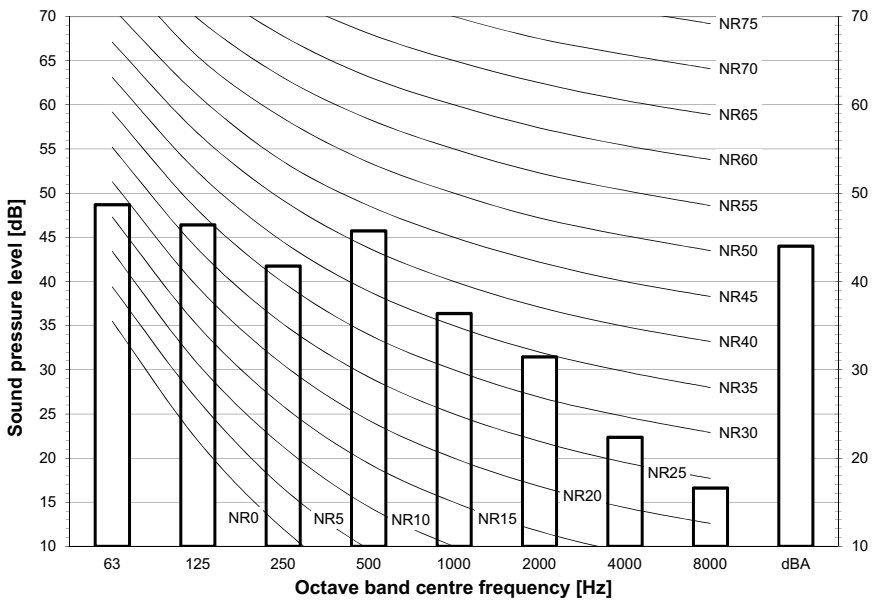


Notes

- 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

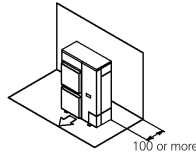
Installation service space

The measure of these values is "mm".

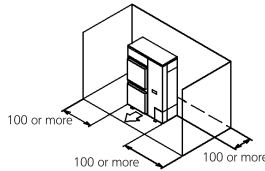
(A) When there are obstacles on suction sides.

• No obstacle above

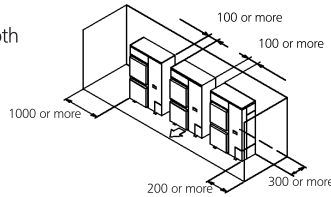
- ① Stand-alone installation
 - Obstacle on the suction side only



- Obstacle on both sides and suction side, too

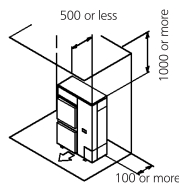


- ② Series installation (2 or more) (Note 1)
 - Obstacle on the suction side and both sides

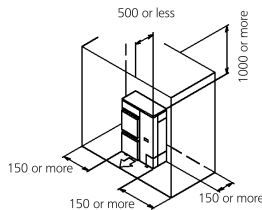


• Obstacle above, too.

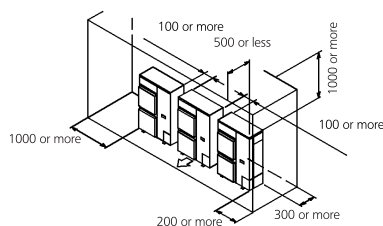
- ① Stand-alone installation
 - Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



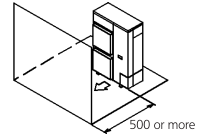
- ② Series installation (2 or more) (Note 1)
 - Obstacle on the suction side and both sides



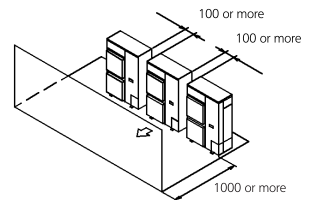
(B) When there are obstacles on discharge sides.

• No obstacle above

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

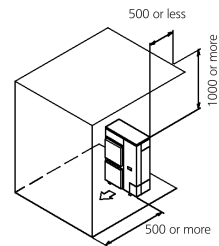


- ② Series installation (2 or more) (Note 1)
 - Obstacle on the discharge side only

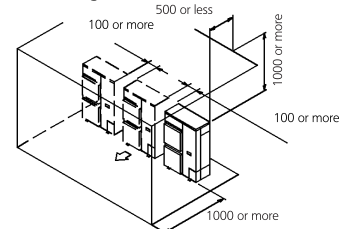


• Obstacle above, too

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



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



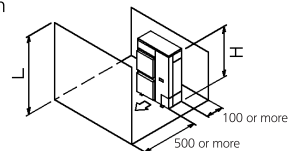
(C) When there are obstacles on both suction and discharge sides.

Pattern 1

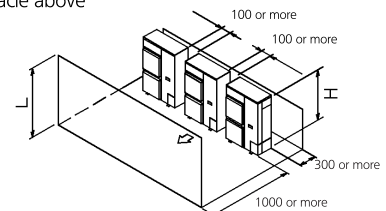
When the obstacles on the discharge side is higher than the unit. (L>H)
 (There is no limit for the height of obstructions on the suction side.)

• 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

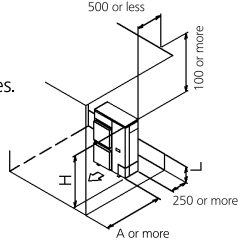
RZAG-MV1
 RZAG-MY1
 RZASG-MV1
 RZASG-MY1
 AZAS-MV1
 AZAS-MY1

• 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.

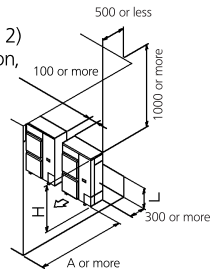
The relations between H, A and L are as follows.

	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.

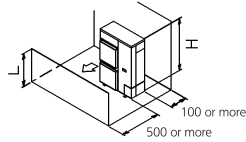
Pattern 2

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

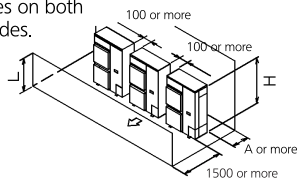


- ② Series installation (2 or more) (Note 1, 2)

- 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

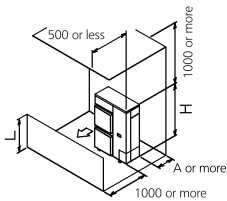


• obstacle above

- 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	



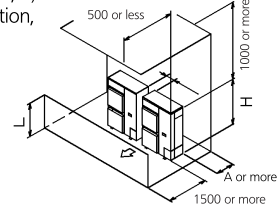
- ② Series installation (2 or more) (Note 1, 2)

- 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	

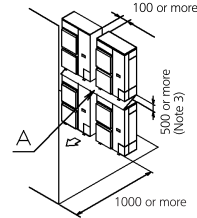
Limit of series installation is 2 units.



(D) Double-decker installation

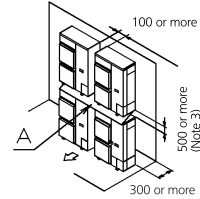
- ① Obstacle on the discharge side. (1)

- 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.



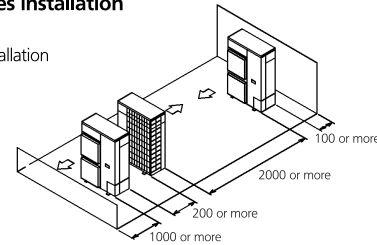
- ② Obstacle on the suction side. (1)

- 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.)

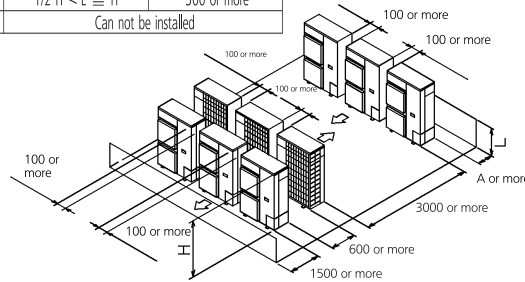
- ① One row of stand-alone installation



- 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

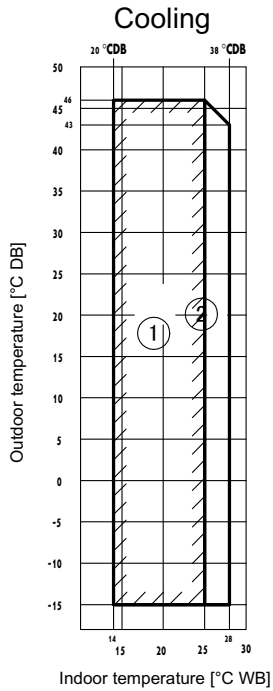
- In case of the sideways piping, make a 100mm gap between the unit above.
- Close the bottom of the installation frame to prevent the discharged air from being bypassed.
- It is not necessary to install a roof cover if there is no danger of drainage dripping and freezing. In this case, the space between 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

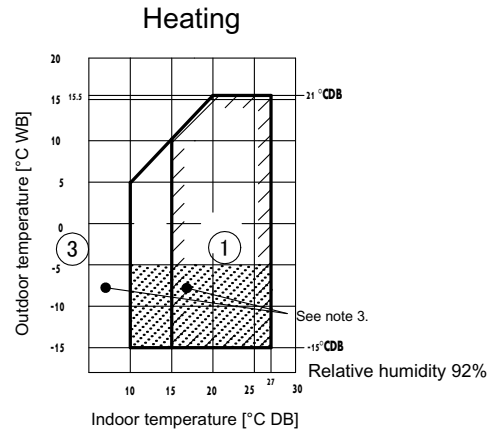
13 - 1 Operation Range

13

RZASG-MV1
RZASG-MY1



- ① Operation range
- ② Pull-down operation range
- ③ Warm-up operation range



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.

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14 Appropriate Indoors

14 - 1 Appropriate Indoors

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

Recommended combinations

ENER Lot 21

P= Pair
2= Twin
3= Triple
4= Double twin

Notes

1. -ADEA* can only be used in combination with -AZAS*M*V1B-

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		FCAHG71	FCAG100	FCAG125	FCAG140	FCAG35	FCAG50	FCAG60	FCAG71	FCAG100	FCAG125	FCAG140	FFA35	FFA50	FFA60	FBA35	FBA50	FBA60	FBA71	FBA100	FBA125	FBA140	FNA35	FNA50	FNA60	FUA71	FUA100	FUA125	FAA71	FAA100	FDA125	
RZAG125M7V1B	RZAG125M7Y1B			P		4										4																P
RZAG140M7V1B	RZAG140M7Y1B				P	4										4																P
RZASG125M7V1B	RZASG125M7Y1B					4										4																P
RZASG140M7V1B	RZASG140M7Y1B					4										4																P
AZAS125M7V1B	AZAS125M7Y1B																															P
AZAS140M7V1B	AZAS140M7Y1B																															P

Sky Air		Floor standing type				Slim duct			Ceiling-suspended					Duct (medium ESP)					Floor standing type			
Model		FVA71	FVA100	FVA125	FVA140	FDXM35	FDXM50	FDXM60	FHA35	FHA50	FHA60	FHA71	FHA100	FHA125	FHA140	ADEA35	ADEA50	ADEA60	ADEA71	ADEA100	ADEA125	AVA125
RZAG125M7V1B	RZAG125M7Y1B			P											P							
RZAG140M7V1B	RZAG140M7Y1B				P										P							
RZASG125M7V1B	RZASG125M7Y1B			P											P							
RZASG140M7V1B	RZASG140M7Y1B				P										P							
AZAS125M7V1B	AZAS125M7Y1B																				P	P
AZAS140M7V1B	AZAS140M7Y1B																					

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AZAS-MV1

AZAS-MY1

RZAG-MV1

RZASG-MV1

RZASG-MY1

ENER Lot 21
Appropriate indoor units

Connectable to -RZAG125M7V1B / RZAG125M7Y1B- and covered by -ENER Lot 21-

FCAG125	FCAG35	FFA35	FBA35	FNA35	FUA125	-	FDA125	FVA125	FDXM35	FHA35	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	-	FDXM50	FHA50	-	-
-	FCAG60	FFA60	FBA60	FNA60	-	-	-	-	FDXM60	FHA60	-	-
-	FCAG125	-	FBA125	-	-	-	-	-	-	FHA125	-	-

Connectable to -RZAG125M7V1B / RZAG125M7Y1B- and covered by -ENER Lot 21-

-	FCAG35	FFA35	FBA35	FNA35	FUA125	-	FDA125	FVA125	FDXM35	FHA35	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	-	FDXM50	FHA50	-	-
-	FCAG60	FFA60	FBA60	FNA60	-	-	-	-	FDXM60	FHA60	-	-
-	FCAG125	-	FBA125	-	-	-	-	-	-	FHA125	-	-

Connectable to -AZAS125M7V1B / AZAS125M7Y1B- and covered by -ENER Lot 21-

-	FCAG125	-	FBA125	-	-	-	-	-	-	-	AVA125	ADEA125
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Connectable to -RZAG140M7V1B / RZAG140M7Y1B- and covered by -ENER Lot 21-

FCAG140	FCAG35	FFA35	FBA35	FNA35	FUA71	FAA71	-	FVA71	FDXM35	FHA35	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	FVA140	FDXM50	FHA50	-	-
-	FCAG71	-	FBA71	-	-	-	-	-	-	FHA71	-	-
-	FCAG140	-	FBA140	-	-	-	-	-	-	FHA140	-	-

Connectable to -RZAG140M7V1B / RZAG140M7Y1B- and covered by -ENER Lot 21-

-	FCAG35	FFA35	FBA35	FNA35	FUA71	FAA71	-	FVA71	FDXM35	FHA35	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	FVA140	FDXM50	FHA50	-	-
-	FCAG71	-	FBA71	-	-	-	-	-	-	FHA71	-	-
-	FCAG140	-	FBA140	-	-	-	-	-	-	FHA140	-	-

Connectable to -AZAS140M7V1B / AZAS140M7Y1B- and covered by -ENER Lot 21-

-	FCAG140	-	FBA140	-	-	-	-	-	-	-	-	-
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ENER Lot 10
Appropriate indoor units

Connectable to -RZAG71M7V1B / RZAG71M7Y1B- and covered by -ENER Lot 10-

FCAG71	FCAG35	FFA35	FBA35	FNA35	FUA71	FAA71	-	FVA71	FDXM35	FHA35	-	-
-	FCAG71	-	FBA71	-	-	-	-	-	-	FHA71	-	-

Connectable to -RZASG71M2V1B- and covered by -ENER Lot 10-

-	FCAG35	FFA35	FBA35	FNA35	FUA71	FAA71	-	FVA71	FDXM35	FHA35	-	-
-	FCAG71	-	FBA71	-	-	-	-	-	-	FHA71	-	-

Connectable to -AZAS71M2V1B- and covered by -ENER Lot 10-

-	FCAG71	-	FBA71	-	-	FAA71	-	-	-	-	-	ADEA71
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Connectable to -RZAG100M7V1B / RZAG100M7Y1B- and covered by -ENER Lot 10-

FCAG100	FCAG35	FFA35	FBA35	FNA35	FUA100	FAA100	-	FVA100	FDXM35	FHA35	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	-	FDXM50	FHA50	-	-
-	FCAG100	-	FBA100	-	-	-	-	-	-	FHA100	-	-

Connectable to -RZASG100M7V1B / RZASG100M7Y1B- and covered by -ENER Lot 10-

-	FCAG35	FFA35	FBA35	FNA35	FUA100	FAA100	-	FVA100	FDXM35	FHA35	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	-	FDXM50	FHA50	-	-
-	FCAG100	-	FBA100	-	-	-	-	-	-	FHA100	-	-

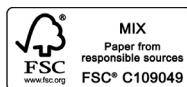
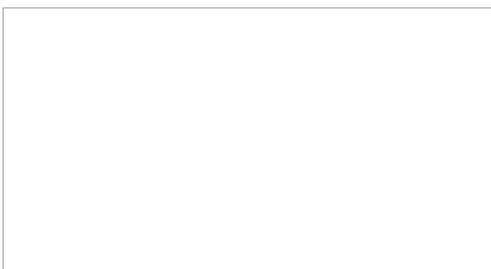
Connectable to -AZAS100M7V1B / AZAS100M7Y1B- and covered by -ENER Lot 10-

-	FCAG100	-	FBA100	-	-	FAA100	-	-	-	-	-	ADEA100
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