

Air Conditioning
Technical Data

RZASG-MY1



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RZASG-MY1

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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				FCAG100B/RZASG100MY1	FCAG125B/RZASG125MY1	FCAG140B/RZASG140MY1		
Cooling capacity	Nom.		kW	9.50 (1)	12.1 (1)	13.4 (1)		
Heating capacity	Nom.		kW	10.8 (2)	13.5 (2)	15.5 (2)		
Space cooling	Energy efficiency class			A++	-			
	Capacity	Pdesign	kW	9.50	12.1	13.4		
	SEER			6.55	5.76	6.53		
	ηs,c		%	-	227	258		
	Annual energy consumption		kWh/a	507	1,261	1,231		
	A Condition (35°C - 27/19)	Pdc	kW	9.50	12.10	13.40		
		EERd		3.26	2.44	2.75		
		Power input	kW	2.92	4.95	4.88		
	B Condition (30°C - 27/19)	Pdc	kW	7.00	8.92	9.88		
		EERd		5.49	4.30	4.88		
		Power input	kW	1.28	2.07	2.03		
	C Condition (25°C - 27/19)	Pdc	kW	4.50	5.74	6.35		
		EERd		7.77	6.74	7.69		
		Power input	kW	0.58	0.85	0.83		
	D Condition (20°C - 27/19)	Pdc	kW	3.11	3.18	3.74		
EERd		11.16	10.49	12.01				
Power input		kW	0.28	0.30	0.31			
Space heating (Average climate)	Energy efficiency class			A+	-			
	Capacity	Pdesign	kW	6.00		7.80		
	SCOP/A			4.17	4.05	4.31		
	SCOPnet/A			4.17	4.05	4.31		
	ηs,h		%	-	159	169		
	Annual energy consumption		kWh/a	2,016	2,074	2,534		
	Required back up heating cap at design conditions		kW	0.00				
	TOL	Tol (temperature operating limit)	°C	-10				
			kW	6.00		7.80		
			COPd (declared COP)			2.52	2.59	2.26
			Power input	kW	2.38	2.32	3.44	
	TBivalent	Tbiv (bivalent temperature)	°C	-10				
			kW	6.00		7.80		
			COPd (declared COP)			2.52	2.59	2.26
			Power input	kW	2.38	2.32	3.44	
	A Condition (-7°C)	Pdh (declared heating cap)	kW	5.31	5.30	6.90		
			COPd (declared COP)			2.75	2.78	2.60
			Power input	kW	1.93	1.91	2.65	
	B Condition (2°C)	Pdh (declared heating cap)	kW	3.23		4.20		
			COPd (declared COP)			3.97	3.88	4.32
			Power input	kW	0.81	0.83	0.97	
	C Condition (7°C)	Pdh (declared heating cap)	kW	2.10	2.13	3.40		
			COPd (declared COP)			5.58	5.20	5.92
			Power input	kW	0.38	0.41	0.57	
	D Condition (12°C)	Pdh (declared heating cap)	kW	2.50	2.55	3.99		
			COPd (declared COP)			6.95	6.66	7.26
			Power input	kW	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				
Average climate included				Yes				

2 Specifications

2-1 Capacity and Power input					FCAG100B/RZASG100MY1	FCAG125B/RZASG125MY1	FCAG140B/RZASG140MY1
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				FBA100A/RZASG100MY1	FBA125A/RZASG125MY1	FBA140A/RZASG140MY1
Cooling capacity	Nom.		kW	9.50 (1)	12.1 (1)	13.4 (1)
Heating capacity	Nom.		kW	10.8 (2)	13.5 (2)	15.5 (2)
Space cooling	Energy efficiency class			A+	-	
	Capacity	Pdesign	kW	9.50	12.1	13.4
	SEER			5.83	5.49	5.81
	ηs,c		%	-	217	229
	Annual energy consumption			kWh/a	570	1,322
	A Condition (35°C - 27/19)	Pdc	kW	9.50	12.10	13.40
		EERd		3.20	2.61	2.81
		Power input	kW	2.97	4.64	4.76
	B Condition (30°C - 27/19)	Pdc	kW	7.00	8.92	9.88
		EERd		5.13	4.34	4.66
		Power input	kW	1.36	2.06	2.12
	C Condition (25°C - 27/19)	Pdc	kW	4.50	5.74	6.35
		EERd		7.01	6.36	6.84
		Power input	kW	0.64	0.90	0.93
	D Condition (20°C - 27/19)	Pdc	kW	3.10	3.17	3.97
		EERd		8.59	8.72	8.83
		Power input	kW	0.36		0.45

2 Specifications

2-2 Capacity and Power input					FBA100A/RZASG100MY1	FBA125A/RZASG125MY1	FBA140A/RZASG140MY1		
Space heating (Average climate)	Energy efficiency class				A		-		
	Capacity	Pdesign	kW		6.00		7.80		
	SCOP/A				3.85	3.63	3.85		
	SCOPnet/A				3.85	3.63	3.85		
	ηs,h		%		-	142	151		
	Annual energy consumption		kWh/a		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	6.00		7.80		
					COPd (declared COP)		2.45	2.50	2.06
					Power input		2.45	2.40	3.78
	TBivalent	Tbiv (bivalent temperature)	°C		-10				
			Pdh (declared heating cap)	kW	6.00		7.80		
					COPd (declared COP)		2.45	2.50	2.06
					Power input		2.45	2.40	3.78
	A Condition (-7°C)	Pdh (declared heating cap)	kW	5.31		5.30	6.90		
				COPd (declared COP)		2.69	2.72	2.46	
				Power input		1.97	1.95	2.81	
	B Condition (2°C)	Pdh (declared heating cap)	kW	3.23		4.20			
				COPd (declared COP)		3.77	3.53	3.94	
				Power input		0.86	0.91	1.07	
	C Condition (7°C)	Pdh (declared heating cap)	kW	2.26		3.50			
				COPd (declared COP)		4.83	4.37	4.98	
				Power input		0.47	0.52	0.70	
	D Condition (12°C)	Pdh (declared heating cap)	kW	2.57		4.10			
				COPd (declared COP)		5.70	5.36	6.10	
				Power input		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

2-3 Capacity and Power input				FDA125A/RZASG125MY1
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/RZASG125MY1					
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				
				Pd _h (declared heating cap)	kW	6.00				
						COP _d (declared COP)			2.54	
						Power input		kW		2.36
	TBivalent		T _{biv} (bivalent temperature)	°C		-10				
				Pd _h (declared heating cap)	kW	6.00				
						COP _d (declared COP)			2.54	
						Power input		kW		2.36
	A Condition (-7°C)		Pd _h (declared heating cap)	kW	5.30					
					COP _d (declared COP)				2.76	
					Power input		kW		1.92	
	B Condition (2°C)		Pd _h (declared heating cap)	kW	3.23					
					COP _d (declared COP)				3.54	
					Power input		kW		0.91	
	C Condition (7°C)		Pd _h (declared heating cap)	kW	2.29					
					COP _d (declared COP)				4.27	
					Power input		kW		0.54	
	D Condition (12°C)		Pd _h (declared heating cap)	kW	2.65					
					COP _d (declared COP)				5.00	
					Power input		kW		0.53	
	Cooling	C _{dc} (Degradation cooling)				0.25				
	Heating	C _{dh} (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

2

2-4 Capacity and Power input				FHA100A/RZASG100MY1	FHA125A/RZASG125MY1	FHA140A/RZASG140MY1
Cooling capacity	Nom.		kW	9.50 (1)	12.1 (1)	13.4 (1)
Heating capacity	Nom.		kW	10.8 (2)	13.5 (2)	15.5 (2)
Space cooling	Energy efficiency class			A+		-
	Capacity	Pdesign	kW	9.50	12.1	13.4
	SEER			5.83		5.88
	ηs,c		%	-	230	232
	Annual energy consumption		kWh/a	570	1,246	1,368
	A Condition (35°C - 27/19)	Pdc	kW	9.50	12.10	13.40
		EERd		3.20	2.63	2.77
		Power input	kW	2.97	4.60	4.84
	B Condition (30°C - 27/19)	Pdc	kW	7.00	8.92	9.88
		EERd		4.91	4.53	4.59
		Power input	kW	1.43	1.97	2.15
	C Condition (25°C - 27/19)	Pdc	kW	4.50	5.74	6.35
		EERd		6.98	6.79	6.85
		Power input	kW	0.64	0.85	0.93
	D Condition (20°C - 27/19)	Pdc	kW	3.10	3.17	3.86
		EERd		8.87	9.62	9.50
Power input		kW	0.35	0.33	0.41	
Space heating (Average climate)	Energy efficiency class			A		-
	Capacity	Pdesign	kW	6.00		7.80
	SCOP/A			3.91	3.83	3.81
	SCOPnet/A			3.91	3.83	3.81
	ηs,h		%	-	150	149
	Annual energy consumption		kWh/a	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	6.00		7.80
		COPd (declared COP)		2.49	1.98	
		Power input	kW	2.41		3.95
	TBivalent	Tbiv (bivalent temperature)	°C	-10		
		Pdh (declared heating cap)	kW	6.00		7.80
		COPd (declared COP)		2.49	1.98	
		Power input	kW	2.41		3.95
	A Condition (-7°C)	Pdh (declared heating cap)	kW	5.31	5.30	6.90
		COPd (declared COP)		2.73	2.72	2.37
		Power input	kW	1.94	1.95	2.91
	B Condition (2°C)	Pdh (declared heating cap)	kW	3.23		4.20
		COPd (declared COP)		3.77	3.68	3.92
		Power input	kW	0.86	0.88	1.07
	C Condition (7°C)	Pdh (declared heating cap)	kW	2.18	2.19	3.45
		COPd (declared COP)		4.96	4.84	4.95
		Power input	kW	0.44	0.45	0.70
	D Condition (12°C)	Pdh (declared heating cap)	kW	2.57	2.58	4.05
		COPd (declared COP)		6.14	6.00	6.07
		Power input	kW	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					FHA100A/RZASG100MY1	FHA125A/RZASG125MY1	FHA140A/RZASG140MY1
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				FUA100A/RZASG100MY1	FUA125A/RZASG125MY1
Cooling capacity	Nom.	kW		9.50 (1)	12.1 (1)
Heating capacity	Nom.	kW		10.8 (2)	13.5 (2)
Space cooling	Energy efficiency class			A+	-
	Capacity	Pdesign	kW	9.50	12.1
	SEER			5.83	5.49
	ηs,c		%	-	217
	Annual energy consumption		kWh/a	570	1,322
	A Condition (35°C - 27/19)	Pdc	kW	9.50	12.10
		EERd		3.20	2.35
		Power input		2.97	5.15
	B Condition (30°C - 27/19)	Pdc	kW	7.00	8.92
		EERd		4.81	4.24
		Power input		1.45	2.10
	C Condition (25°C - 27/19)	Pdc	kW	4.50	5.74
		EERd		7.04	6.48
		Power input		0.64	0.89
	D Condition (20°C - 27/19)	Pdc	kW	3.10	3.14
		EERd		8.98	9.22
		Power input		0.35	0.34

2 Specifications

2-5 Capacity and Power input					FUA100A/RZASG100MY1		FUA125A/RZASG125MY1	
Space heating (Average climate)	Energy efficiency class				A+		-	
	Capacity	Pdesign	kW		6.00			
	SCOP/A				4.01		3.84	
	SCOPnet/A				4.01		3.84	
	ηs,h		%		-		151	
	Annual energy consumption		kWh/a		2,095		2,188	
	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)		2.56		2.52		
		Power input	kW		2.35		2.38	
	TBivalent	Tbiv (bivalent temperature)	°C		-10			
		Pdh (declared heating cap)	kW		6.00			
		COPd (declared COP)		2.56		2.52		
		Power input	kW		2.35		2.38	
	A Condition (-7°C)	Pdh (declared heating cap)	kW		5.31		5.30	
		COPd (declared COP)		2.79		2.76		
		Power input	kW		1.90		1.92	
	B Condition (2°C)	Pdh (declared heating cap)	kW		3.23			
		COPd (declared COP)		3.87		3.70		
		Power input	kW		0.83		0.87	
	C Condition (7°C)	Pdh (declared heating cap)	kW		2.19		2.21	
		COPd (declared COP)		5.10		4.81		
		Power input	kW		0.43		0.46	
	D Condition (12°C)	Pdh (declared heating cap)	kW		2.57		2.59	
		COPd (declared COP)		6.26		5.89		
		Power input	kW		0.41		0.44	
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

2-6 Capacity and Power input				FAA100A/RZASG100MY1
Cooling capacity	Nom.	kW		9.50 (1)
Heating capacity	Nom.	kW		10.8 (2)
Space cooling	Energy efficiency class			A+
	Capacity	Pdesign	kW	9.50
	SEER			5.83
	Annual energy consumption			570
	A Condition (35°C - 27/19)	Pdc	kW	9.50
		EERd		2.70
		Power input	kW	3.52
	B Condition (30°C - 27/19)	Pdc	kW	7.00
		EERd		4.87
		Power input	kW	1.44
	C Condition (25°C - 27/19)	Pdc	kW	4.50
		EERd		6.85
		Power input	kW	0.66
	D Condition (20°C - 27/19)	Pdc	kW	3.00
		EERd		10.23
		Power input	kW	0.29

2 Specifications

2-6 Capacity and Power input					FAA100A/RZASG100MY1				
Space heating (Average climate)	Energy efficiency class				A				
	Capacity		Pdesign		kW		6.00		
	SCOP/A				3.85				
	SCOPnet/A				3.85				
	Annual energy consumption			kWh/a		2,182			
	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)				2.31			
		Power input		kW		2.60			
	TBivalent	Tbiv (bivalent temperature)		°C		-10			
		Pdh (declared heating cap)		kW		6.00			
		COPd (declared COP)				2.31			
		Power input		kW		2.60			
	A Condition (-7°C)	Pdh (declared heating cap)		kW		5.31			
		COPd (declared COP)				2.55			
		Power input		kW		2.08			
	B Condition (2°C)	Pdh (declared heating cap)		kW		3.23			
		COPd (declared COP)				3.68			
		Power input		kW		0.88			
	C Condition (7°C)	Pdh (declared heating cap)		kW		2.12			
		COPd (declared COP)				5.09			
		Power input		kW		0.42			
	D Condition (12°C)	Pdh (declared heating cap)		kW		2.52			
		COPd (declared COP)				6.53			
		Power input		kW		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				FAV100A/RZASG100MY1	FVA125A/RZASG125MY1	FVA140A/RZASG140MY1	
Cooling capacity	Nom.		kW	9.50 (1)	12.1 (1)	13.4 (1)	
Heating capacity	Nom.		kW	10.8 (2)	13.5 (2)	15.5 (2)	
Space cooling	Energy efficiency class			A+	-		
	Capacity	Pdesign	kW	9.50	12.1	13.4	
	SEER			5.72	5.52	5.63	
	ηs,c		%	-	218	222	
	Annual energy consumption		kWh/a	581	1,314	1,428	
	A Condition (35°C - 27/19)	Pdc	kW	9.50	12.10	13.40	
		EERd		3.20	2.47	2.62	
		Power input	kW	2.97	4.90	5.12	
	B Condition (30°C - 27/19)	Pdc	kW	7.00	8.92	9.88	
		EERd		5.01	4.31	4.52	
		Power input	kW	1.40	2.07	2.19	
	C Condition (25°C - 27/19)	Pdc	kW	4.50	5.74	6.35	
		EERd		6.78	6.26	6.51	
		Power input	kW	0.66	0.92	0.98	
	D Condition (20°C - 27/19)	Pdc	kW	3.00	3.07	3.76	
EERd		8.25	9.54	8.88			
Power input		kW	0.36	0.32	0.42		
Space heating (Average climate)	Energy efficiency class			A	-		
	Capacity	Pdesign	kW	6.00		7.80	
	SCOP/A			3.83	3.64	3.81	
	SCOPnet/A			3.83	3.64	3.81	
	ηs,h		%	-	143	149	
	Annual energy consumption		kWh/a	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	6.00		7.80
			COPd (declared COP)		2.46	2.37	1.99
			Power input	kW	2.44	2.53	3.93
	TBivalent	Tbiv (bivalent temperature)	°C	-10			
			Pdh (declared heating cap)	kW	6.00		7.80
			COPd (declared COP)		2.46	2.37	1.99
			Power input	kW	2.44	2.53	3.93
	A Condition (-7°C)	Pdh (declared heating cap)	kW	5.31	5.30	6.90	
			COPd (declared COP)		2.70	2.60	2.38
			Power input	kW	1.97	2.04	2.90
	B Condition (2°C)	Pdh (declared heating cap)	kW	3.23		4.20	
			COPd (declared COP)		3.72	3.51	3.90
			Power input	kW	0.87	0.92	1.08
	C Condition (7°C)	Pdh (declared heating cap)	kW	2.20	2.19	3.47	
			COPd (declared COP)		4.81	4.57	4.99
			Power input	kW	0.46	0.48	0.70
	D Condition (12°C)	Pdh (declared heating cap)	kW	2.58	2.57	4.07	
			COPd (declared COP)		5.82	5.60	6.10
			Power input	kW	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

2-7 Capacity and Power input					FAV100A/RZASG100MY1	FVA125A/RZASG125MY1	FVA140A/RZASG140MY1
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					RZASG100MY1		RZASG125MY1		RZASG140MY1		
Capacity control	Method				Inverter controlled						
Casing	Colour				Ivory white						
	Material				Painted galvanized steel plate						
Dimensions	Unit	Height		mm		990					
		Width		mm		940					
		Depth		mm		320					
	Packed unit	Height		mm		1,170					
		Width		mm		1,015					
		Depth		mm		422					
Weight	Unit			kg		70			77		
	Packed unit			kg		78			85		
Packing	Weight			kg		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.	m³/min		69		71		76	
		Heating	Nom.	m³/min		82					
Fan motor	Quantity				1						
	Model				Brushless DC motor						
	Output			W		200					
	Drive				Direct drive						
Sound power level	Cooling			dBA		70		71		73	
	Heating			dBA		-		71 (1)		73 (1)	
Sound pressure level	Cooling	Nom.		dBA		53			54		
	Heating	Nom.		dBA		57					
Operation range	Cooling	Ambient	Min.	°CDB		-15					
			Max.	°CDB		46					
	Heating	Ambient	Min.	°CWB		-15					
			Max.	°CWB		15.5					

2 Specifications

2-8 Technical Specifications				RZASG100MY1	RZASG125MY1	RZASG140MY1	
Refrigerant	Type			R-32			
	Charge		kg	2.60		2.90	
			TCO ₂ eq	1.76		1.96	
	Control			Expansion valve (electronic type)			
	GWP			675			
Piping connections	Circuits	Quantity		1			
		Liquid		1			
	Type	Flare connection					
		OD	mm	9.52			
		Gas	Quantity		1		
	Type		Flare connection				
	OD		mm	15.9			
	Drain	Quantity		5			
		Type		Hole			
		OD	mm	26			
	Piping length	OU - IU	Min.	m	5		
			Max.	m	50		
		System	Equivalent	m	70		
			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;

2-9 Electrical Specifications			RZASG100MY1	RZASG125MY1	RZASG140MY1
Power supply	Name		Y1		
	Phase		3~		
	Frequency	Hz	50		
	Voltage	V	380-415		
Current - 50Hz	Maximum fuse amps (MFA)	A	16		
Current	Zmax	List	Complies to EN61000-3-11		
	Minimum Ssc value	kVa	Equipment complying with EN / IEC 61000-3-2 / (2) / See note 4		
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) Ssc: Short-circuit power

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

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 $\leq 75\text{A}$ per phase.

3 Electrical data

3 - 1 Electrical Data

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

3D110014D

RZASG100MY1

Indoor		Outdoor		Power supply	Voltage range		MCA	TOCA	MFA	Compressor		OFM		IFM	
										MSC	RLA	kW	FLA	kW	FLA
FCAG35BVEB	x3	RZASG100M7Y1B		3N~ 50Hz 380-415V	Minimum: 342 V· Maximum: 456 V·		13,0	—	16	—	10,6	0,200	1,0	0,044 x3	0,3 x3
FCAG50BVEB	x2	RZASG100M7Y1B					12,7	—	16	—	10,6	0,200	1,0	0,039 x2	0,3 x2
FCAG100BVEB		RZASG100M7Y1B					14,2	—	16	—	12,0	0,200	1,0	0,117	0,7
FFA35A2VEB	x3	RZASG100M7Y1B					13,3	—	16	—	10,6	0,200	1,0	0,050 x3	0,4 x3
FFA50A2VEB	x2	RZASG100M7Y1B					12,9	—	16	—	10,6	0,200	1,0	0,050 x2	0,4 x2
FBA35A2VEB	x3	RZASG100M7Y1B					13,9	—	16	—	10,6	0,200	1,0	0,089 x3	0,6 x3
FBA50A2VEB	x2	RZASG100M7Y1B					13,3	—	16	—	10,6	0,200	1,0	0,089 x2	0,6 x2
FBA100A2VEB		RZASG100M7Y1B					14,6	—	16	—	12,0	0,200	1,0	0,127	1,0
FNA35A2VEB	x3	RZASG100M7Y1B					13,0	—	16	—	10,6	0,200	1,0	0,034 x3	0,3 x3
FNA50A2VEB	x2	RZASG100M7Y1B					13,1	—	16	—	10,6	0,200	1,0	0,060 x2	0,5 x2
FUA100AVEB		RZASG100M7Y1B					14,9	—	16	—	12,0	0,200	1,0	0,106	1,3
FAA100AUEB		RZASG100M7Y1B					13,9	—	16	—	12,0	0,200	1,0	0,064	0,4
FVA100AMVEB		RZASG100M7Y1B					14,8	—	16	—	12,0	0,200	1,0	0,238	1,2
FDXM35F3V1B	x3	RZASG100M7Y1B					13,0	—	16	—	10,6	0,200	1,0	0,034 x3	0,3 x3
FDXM50F3V1B	x2	RZASG100M7Y1B					13,1	—	16	—	10,6	0,200	1,0	0,060 x2	0,5 x2
FHA35AVEB	x3	RZASG100M7Y1B					13,9	—	16	—	10,6	0,200	1,0	0,060 x3	0,6 x3
FHA50AVEB	x2	RZASG100M7Y1B					13,3	—	16	—	10,6	0,200	1,0	0,060 x2	0,6 x2
FHA100AVEB		RZASG100M7Y1B					14,9	—	16	—	12,0	0,200	1,0	0,150	1,3

3D110014D

3 Electrical data

3 - 1 Electrical Data

RZASG125-140MY1

R23-140MY1						Compressor				OFM		IFM				
Indoor		Outdoor		Power supply	Voltage range		MCA	TOCA	MFA	MSC	RLA	kW	FLA	kW	FLA	
FCAG35BVEB	x4	RZASG125M7Y1B		3N~ 50Hz 380-415V	Minimum: 342 V. Maximum: 456 V.	12,2	—	16	—	9,5	0,200	1,0	0,044 x4	0,3 x4		
FCAG50BVEB	x3	RZASG125M7Y1B				13,0	—	16	—	10,6	0,200	1,0	0,039 x3	0,3 x3		
FCAG60BVEB	x2	RZASG125M7Y1B				12,7	—	16	—	10,6	0,200	1,0	0,044 x2	0,3 x2		
FCAG125BVEB		RZASG125M7Y1B				14,6	—	16	—	12,0	0,200	1,0	0,168	1,0		
FFA35A2VEB	x4	RZASG125M7Y1B				12,6	—	16	—	9,5	0,200	1,0	0,050 x4	0,4 x4		
FFA50A2VEB	x3	RZASG125M7Y1B				13,3	—	16	—	10,6	0,200	1,0	0,050 x3	0,4 x3		
FFA60A2VEB	x2	RZASG125M7Y1B				13,3	—	16	—	10,6	0,200	1,0	0,050 x2	0,6 x2		
FBA35A2VEB	x4	RZASG125M7Y1B				13,4	—	16	—	9,5	0,200	1,0	0,089 x4	0,6 x4		
FBA50A2VEB	x3	RZASG125M7Y1B				13,9	—	16	—	10,6	0,200	1,0	0,089 x3	0,6 x3		
FBA60A2VEB	x2	RZASG125M7Y1B				13,1	—	16	—	10,6	0,200	1,0	0,070 x2	0,5 x2		
FBA125A2VEB		RZASG125M7Y1B				15,1	—	16	—	12,0	0,200	1,0	0,187	1,5		
FNA35A2VEB	x4	RZASG125M7Y1B				12,2	—	16	—	9,5	0,200	1,0	0,034 x4	0,3 x4		
FNA50A2VEB	x3	RZASG125M7Y1B				13,6	—	16	—	10,6	0,200	1,0	0,060 x3	0,5 x3		
FNA60A2VEB	x2	RZASG125M7Y1B				13,1	—	16	—	10,6	0,200	1,0	0,060 x2	0,5 x2		
FUA125AVEB		RZASG125M7Y1B				15,0	—	16	—	12,0	0,200	1,0	0,106	1,4		
FDA125A5VEB		RZASG125M7Y1B				15,7	—	16	—	12,0	0,200	1,0	0,350	2,1		
FVA125AMVEB		RZASG125M7Y1B				14,8	—	16	—	12,0	0,200	1,0	0,238	1,2		
FDXM35F3V1B	x4	RZASG125M7Y1B				12,2	—	16	—	9,5	0,200	1,0	0,034 x4	0,3 x4		
FDXM50F3V1B	x3	RZASG125M7Y1B				13,6	—	16	—	10,6	0,200	1,0	0,060 x3	0,5 x3		
FDXM60F3V1B	x2	RZASG125M7Y1B				13,1	—	16	—	10,6	0,200	1,0	0,060 x2	0,5 x2		
FHA35AVEB	x4	RZASG125M7Y1B				13,4	—	16	—	9,5	0,200	1,0	0,060 x4	0,6 x4		
FHA50AVEB	x3	RZASG125M7Y1B				13,9	—	16	—	10,6	0,200	1,0	0,060 x3	0,6 x3		
FHA60AVEB	x2	RZASG125M7Y1B				13,3	—	16	—	10,6	0,200	1,0	0,091 x2	0,6 x2		
FHA125AVEB		RZASG125M7Y1B				15,1	—	16	—	12,0	0,200	1,0	0,150	1,5		
FCAG35BVEB	x4	RZASG140M7Y1B		3N~ 50Hz 380-415V	Minimum: 342 V. Maximum: 456 V.	12,2	—	16	—	9,5	0,200	1,0	0,044 x4	0,3 x4		
FCAG50BVEB	x3	RZASG140M7Y1B				12,9	—	16	—	10,5	0,200	1,0	0,039 x3	0,3 x3		
FCAG71BVEB	x2	RZASG140M7Y1B				14,4	—	16	—	12,0	0,200	1,0	0,054 x2	0,4 x2		
FCAG140BVEB		RZASG140M7Y1B				14,6	—	16	—	12,0	0,200	1,0	0,168	1,0		
FFA35A2VEB	x4	RZASG140M7Y1B				12,6	—	16	—	9,5	0,200	1,0	0,050 x4	0,4 x4		
FFA50A2VEB	x3	RZASG140M7Y1B				13,2	—	16	—	10,5	0,200	1,0	0,050 x3	0,4 x3		
FBA35A2VEB	x4	RZASG140M7Y1B				13,4	—	16	—	9,5	0,200	1,0	0,089 x4	0,6 x4		
FBA50A2VEB	x3	RZASG140M7Y1B				13,8	—	16	—	10,5	0,200	1,0	0,089 x3	0,6 x3		
FBA71A2VEB	x2	RZASG140M7Y1B				14,6	—	16	—	12,0	0,200	1,0	0,070 x2	0,5 x2		
FBA140A2VEB		RZASG140M7Y1B				15,1	—	16	—	12,0	0,200	1,0	0,187	1,5		
FNA35A2VEB	x4	RZASG140M7Y1B				12,2	—	16	—	9,5	0,200	1,0	0,034 x4	0,3 x4		
FNA50A2VEB	x3	RZASG140M7Y1B				13,5	—	16	—	10,5	0,200	1,0	0,060 x3	0,5 x3		
FUA71AVEB	x2	RZASG140M7Y1B				15,4	—	16	—	12,0	0,200	1,0	0,046 x2	0,9 x2		
FAA71AUVEB	x2	RZASG140M7Y1B				14,4	—	16	—	12,0	0,200	1,0	0,048 x2	0,4 x2		
FVA71AMVEB	x2	RZASG140M7Y1B				14,8	—	16	—	12,0	0,200	1,0	0,117 x2	0,6 x2		
FVA140AMVEB		RZASG140M7Y1B				15,0	—	16	—	12,0	0,200	1,0	0,276	1,4		
FDXM35F3V1B	x4	RZASG140M7Y1B				12,2	—	16	—	9,5	0,200	1,0	0,034 x4	0,3 x4		
FDXM50F3V1B	x3	RZASG140M7Y1B				13,5	—	16	—	10,5	0,200	1,0	0,060 x3	0,5 x3		
FHA35AVEB	x4	RZASG140M7Y1B				13,4	—	16	—	9,5	0,200	1,0	0,060 x4	0,6 x4		
FHA50AVEB	x3	RZASG140M7Y1B				13,8	—	16	—	10,5	0,200	1,0	0,060 x3	0,6 x3		
FHA71AVEB	x2	RZASG140M7Y1B				15,2	—	16	—	12,0	0,200	1,0	0,091 x2	0,8 x2		
FHA140AVEB		RZASG140M7Y1B				15,4	—	16	—	12,0	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

4

Available options for RZAG models

Option		Option kit			
		RZAG71M7V1B	RZAG100M7V1B	RZAG125M7V1B	RZAG140M7Y1B
Bottom plate heater		RZAG71M7Y1B	RZAG100M7Y1B	RZAG125M7Y1B	RZAG140M7V1B
Refrigerant branch piping		EKBPH140L7			
		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	RZASG125M7V1B	RZASG140M7V1B
Bottom plate heater		RZASG100M7Y1B	RZASG125M7Y1B	RZASG140M7Y1B	
Refrigerant branch piping	Twin	-			
	Triple	-	KHRQ(M)58T		
	Double twin	-	KHRQ(M)58H		
Demand adaptor kit		SB.KRP58M52			
		KHRQ(M)58T (3x)			

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5 - 1 Combination Table

AZAS-MY1

RZAG-MV1

RZAG-MY1

RZASG-MV1

RZASG-MY1

Possible combinations

S	71	100	125	140
P= Pair				
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 (big ESP)
Model	FCAG71MEB FCAGHG100H/EB FCAGHG125H/EB FCAGHG140H/EB FCAGHG35B/EB FCAGHG50B/EB FCAGHG60B/EB FCAGHG71B/EB FCAGHG100B/EB FCAGHG125B/EB FCAGHG140B/EB	FCAG71MEB FCAGHG100H/EB FCAGHG125H/EB FCAGHG140H/EB FCAGHG35B/EB FCAGHG50B/EB FCAGHG60B/EB FCAGHG71B/EB FCAGHG100B/EB FCAGHG125B/EB FCAGHG140B/EB	FCAG71MEB FCAGHG100H/EB FCAGHG125H/EB FCAGHG140H/EB FCAGHG35B/EB FCAGHG50B/EB FCAGHG60B/EB FCAGHG71B/EB FCAGHG100B/EB FCAGHG125B/EB FCAGHG140B/EB	FCAG71MEB FCAGHG100H/EB FCAGHG125H/EB FCAGHG140H/EB FCAGHG35B/EB FCAGHG50B/EB FCAGHG60B/EB FCAGHG71B/EB FCAGHG100B/EB FCAGHG125B/EB FCAGHG140B/EB	FCAG71MEB FCAGHG100H/EB FCAGHG125H/EB FCAGHG140H/EB FCAGHG35B/EB FCAGHG50B/EB FCAGHG60B/EB FCAGHG71B/EB FCAGHG100B/EB FCAGHG125B/EB FCAGHG140B/EB	FCAG71MEB FCAGHG100H/EB FCAGHG125H/EB FCAGHG140H/EB FCAGHG35B/EB FCAGHG50B/EB FCAGHG60B/EB FCAGHG71B/EB FCAGHG100B/EB FCAGHG125B/EB FCAGHG140B/EB	FCAG71MEB FCAGHG100H/EB FCAGHG125H/EB FCAGHG140H/EB FCAGHG35B/EB FCAGHG50B/EB FCAGHG60B/EB FCAGHG71B/EB FCAGHG100B/EB FCAGHG125B/EB FCAGHG140B/EB	FCAG71MEB FCAGHG100H/EB FCAGHG125H/EB FCAGHG140H/EB FCAGHG35B/EB FCAGHG50B/EB FCAGHG60B/EB FCAGHG71B/EB FCAGHG100B/EB FCAGHG125B/EB FCAGHG140B/EB	FCAG71MEB FCAGHG100H/EB FCAGHG125H/EB FCAGHG140H/EB FCAGHG35B/EB FCAGHG50B/EB FCAGHG60B/EB FCAGHG71B/EB FCAGHG100B/EB FCAGHG125B/EB FCAGHG140B/EB
RZAG71M7Y1B	RZAG71M7Y1B	P	2	2	2	2	P	P	P
RZAG100M7Y1B	RZAG100M7Y1B	P	3	3	3	3	P	P	P
RZAG125M7Y1B	RZAG125M7Y1B	P	4	4	4	4	P	P	P
RZAG140M7Y1B	RZAG140M7Y1B	2	4	4	4	4	P	P	P
RZASG71M2Y1B	RZASG71M2Y1B	2	2	2	2	2	P	P	P
RZASG100M7Y1B	RZASG100M7Y1B	3	3	3	3	3	P	P	P
RZASG125M7Y1B	RZASG125M7Y1B	4	4	4	4	4	P	P	P
RZASG140M7Y1B	RZASG140M7Y1B	4	4	4	4	4	P	P	P
AZAS71M2V1B	AZAS71M2V1B	2	2	2	2	2	P	P	P
AZAS100M7Y1B	AZAS100M7Y1B	3	3	3	3	3	P	P	P
AZAS125M7Y1B	AZAS125M7Y1B	4	4	4	4	4	P	P	P
AZAS140M7Y1B	AZAS140M7Y1B	4	4	4	4	4	P	P	P

[illegible]

Notes

1. Maximum capacity is limited based on outdoor unit capacity.
2. When combining multiple indoor units, designate the unit whose remote controller is equipped with the most functions as the master unit.
3. 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
4. *A4EVA*Z2VEB can only be used in combination with *AZAS**M*V1E-

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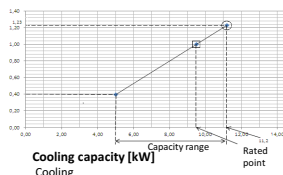
6 Capacity tables

6 - 1 Cooling/Heating Capacity Tables

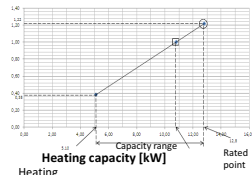
RZASG100MV1

RZASG100MY1

Cooling



Heating



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]

Cooling				Outdoor temperature [°C DB]								Heating			
25				35				45							
TC		SHC	CPI	TC		SHC	CPI	TC		SHC	CPI	TC		SHC	CPI
TDB	TDB	HW	WV	—	HW	WV	—	HW	WV	—	HW	WV	—	HW	WV
16.0	22	11.2	7.65	1.00	11.08	7.44	1.11	1.05	7.59	1.20	1.01	7.00	1.50	1.00	1.50
18.0	25	11.6	7.59	1.01	11.4	7.40	1.12	1.10	7.27	1.23	1.05	7.00	1.50	1.03	1.53
20.0	27	12.0	7.57	1.02	11.6	7.40	1.12	11.2	7.26	1.23	1.08	7.04	1.53	1.04	1.53
22.0	27	12.4	7.59	1.02	11.7	7.39	1.13	11.4	7.24	1.23	1.09	7.04	1.53	1.04	1.53
24.0	30	12.6	7.59	1.02	12.4	7.36	1.13	11.9	7.16	1.24	1.10	7.04	1.53	1.05	1.53
26.0	32	13.3	7.42	1.03	12.9	7.27	1.14	12.4	7.06	1.25	1.12	6.91	1.50	1.06	1.50

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				10.0			
TC	SHC	CPI	PI	TC	SHC	CPI	PI	TC	SHC	CPI	PI	TC	SHC	CPI	PI	TC	SHC	CPI	PI
16	0.86	0.93	0.45	0.99	1.01	1.02	1.04	1.06	1.08	1.12	1.08	1.10	1.12	1.14	1.16	1.18	1.20	1.22	1.24
18	0.87	0.97	0.44	1.02	1.03	1.07	1.03	1.10	1.12	1.09	1.12	1.15	1.17	1.19	1.21	1.23	1.25	1.27	1.29
20	0.86	1.01	0.43	1.07	1.00	1.11	1.03	1.14	1.12	1.09	1.10	1.13	1.15	1.17	1.19	1.21	1.23	1.25	1.27
21	0.86	1.03	0.42	1.09	1.00	1.13	1.03	1.16	1.12	1.09	1.10	1.13	1.15	1.17	1.19	1.21	1.23	1.25	1.27
22	0.85	1.04	0.42	1.10	1.00	1.14	1.03	1.19	1.12	1.09	1.10	1.13	1.15	1.17	1.19	1.21	1.23	1.25	1.27
24	0.84	1.09	0.41	1.18	1.00	1.19	1.03	1.24	1.12	1.09	1.10	1.13	1.15	1.17	1.19	1.21	1.23	1.25	1.27

Pair

	FCAG100B	FAA100A	FVA100A	FHA100A	FUA100A	FBA100A
AFR (BF)	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

	FCAG50B X 2	FHA50A9 X 2	FFA50A9 X 2	FDXM50F9 X 2	FBA50A9 X 2	FNA50A9 X 2
AFR (BF)	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

	FCAG35B X 3	FHA35A9 X 3	FFA35A9 X 3	FDXM35F9 X 3	FBA35A9 x 3	FNA35A9 X 3
AFR (BF)	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

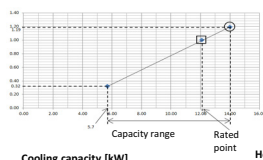
	FCAG35B X 3	FHA35A9 X 3	FFA35A9 X 3	FDXM35F9 X 3	FBA35A9 x 3	FNA35A9 X 3
Cooling	2,32	2,16	2,71	2,57	2,65	2,57
Heating	2,84	2,77	2,14	2,26	1,99	2,31

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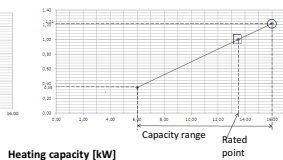
RZASG125MV1

RZASG125MY1

Cooling



Heating



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]

Cooling capacity [kW]													
Cooling													
Outdoor temperature [°C DB]													
25				35				40					
TC	SHC	CPI	PI	TC	SHC	CPI	PI	TC	SHC	CPI	PI		
16.0	2.2	1.12	7.00	1.0	1.08	7.44	1.11	1.05	7.59	1.20	1.01	7.00	1.50
18.0	2.5	1.12	7.50	1.0	1.14	7.90	1.15	1.10	7.97	1.25	1.05	7.00	1.50
20.0	2.7	1.20	7.50	1.0	1.16	7.94	1.15	1.12	7.96	1.28	1.08	7.00	1.50
22.0	2.7	1.20	7.50	1.0	1.17	7.97	1.15	1.14	7.98	1.29	1.09	7.00	1.50
24.0	2.7	1.20	7.50	1.0	1.18	7.98	1.15	1.15	7.99	1.30	1.10	7.00	1.50
26.0	2.7	1.20	7.50	1.0	1.19	8.00	1.15	1.16	8.01	1.31	1.11	7.00	1.50
28.0	2.7	1.20	7.50	1.0	1.20	8.02	1.15	1.17	8.03	1.32	1.12	7.00	1.50
30.0	2.7	1.20	7.50	1.0	1.21	8.04	1.15	1.18	8.05	1.33	1.13	7.00	1.50
32.0	2.7	1.20	7.50	1.0	1.22	8.06	1.15	1.19	8.07	1.34	1.14	7.00	1.50
34.0	2.7	1.20	7.50	1.0	1.23	8.08	1.15	1.20	8.09	1.35	1.15	7.00	1.50

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

Heating											
Outdoor temperature [°C DB]											
-15.0				-10.0				-5.0			
TC	SHC	CPI	PI	TC	SHC	CPI	PI	TC	SHC	CPI	PI
16.0	0.87	0.97	0.44	1.02	1.03	1.07	1.03	1.10	1.12	1.09	1.12
18.0	0.87	1.01	0.43	1.07	1.00	1.11	1.03	1.14	1.12	1.09	1.10
20.0	0.86	1.03	0.42	1.09	1.00	1.13	1.03	1.16	1.12	1.09	1.10
22.0	0.86	1.04	0.42	1.10	1.00	1.14	1.03	1.19	1.12	1.09	1.10
24.0	0.85	1.09	0.41	1.18	1.00	1.19	1.03	1.24	1.12	1.09	1.10

Pair

	AFR (BF)	26.0 (0.21)	39.0 (0.16)	28.0 (0.16)	31.0 (0.14)	32.5 (0.19)	34.0 (0.06)
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Twin

	FCAG60B X 2	FHA60A X 2	FFA60A X 2	FDXM60F3 X 2	FBA60A X 2	FNA60A X 2
AFR (BF)	13.6 x 2 (0.2 x 2)	19.5 x 2 (0.20 x 2)	14.5 x 2 (0.11 x 2)	16.0 x 2 (0.12 x 2)	18.0 x 2 (0.18 x 2)	16.0 x 2 (0.12 x 2)

Triple

	FCAG50B X 3	FHA50A X 3	FFA50A X 3	FDXM50F3 X 3	FBA50A X 3	FNA50A X 3
AFR (BF)	12.6 x 3 (0.22 x 3)	15.0 x 3 (0.18 x 3)	12.0 x 3 (0.16 x 3)	15.8 x 3 (0.11 x 3)	15.0 x 3 (0.13 x 3)	16.0 x 3 (0.11 x 3)

Double twin

	FCAG35B X 4	FHA35A X 4	FFA35A X 4	FDXM35F3 X 4	FBA35A X 4	FNA35A X 4
AFR (BF)	12.5 x 4 (0.4 x 4)	14.0 x 4 (0.17 x 4)	10.0 x 4 (0.25 x 4)	8.7 x 4 (0.17 x 4)	15.0 x 4 (0.08 x 4)	8.7 x 4 (0.17 x 4)

Cooling	4,95	4,73	4,90	4,60	5,15	4,63
Heating	3,15	3,31	3,64	3,49	3,38	3,37

Twin

	FCAG60B X 2	FHA60A X 2	FFA60A X 2	FDXM60F3 X 2	FBA60A X 2	FNA60A X 2
Cooling	4,15	6,21	6,01	3,87	4,28	3,87
Heating	3,31	3,13	3,19	3,47	2,99	3,47

Triple

	FCAG50B X 3	FHA50A X 3	FFA50A X 3	FDXM50F3 X 3	FBA50A X 3	FNA50A X 3
Cooling	3,74	4,42	4,65	3,37	4,08	3,37
Heating	2,87	2,87	2,90	3,13	2,89	3,13

Double twin

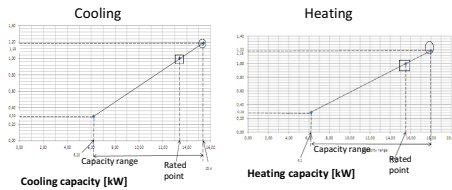
	FCAG35B X 4	FHA35A X 4	FFA35A X 4	FDXM35F3 X 4	FBA35A X 4	FNA35A X 4
Cooling	3,34	2,89	4,00	3,80	3,83	3,80
Heating	2,73	2,81	2,88	3,15	2,90	3,13

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6 Capacity tables

6 - 1 Cooling/Heating Capacity Tables

RZASG140MV1 RZASG140MY1



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]
- compressor + indoor and outdoor fan motors

Cooling											
Outdoor temperature (°C DB)											
TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
18.0	11.6	0.91	12.7	10.0	0.87	10.0	10.0	0.80	10.0	10.0	0.74
16.0	11.6	0.90	12.7	10.0	0.86	10.0	10.0	0.79	10.0	10.0	0.73
14.0	11.6	0.89	12.7	10.0	0.85	10.0	10.0	0.78	10.0	10.0	0.72
12.0	11.6	0.88	12.7	10.0	0.84	10.0	10.0	0.77	10.0	10.0	0.71
10.0	11.6	0.87	12.7	10.0	0.83	10.0	10.0	0.76	10.0	10.0	0.70
8.0	11.6	0.86	12.7	10.0	0.82	10.0	10.0	0.75	10.0	10.0	0.69
6.0	11.6	0.85	12.7	10.0	0.81	10.0	10.0	0.74	10.0	10.0	0.68
4.0	11.6	0.84	12.7	10.0	0.80	10.0	10.0	0.73	10.0	10.0	0.67
2.0	11.6	0.83	12.7	10.0	0.79	10.0	10.0	0.72	10.0	10.0	0.66
0.0	11.6	0.82	12.7	10.0	0.78	10.0	10.0	0.71	10.0	10.0	0.65

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* = -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.

Pair

	FCAG140B	FVA140A	FHA140A	FBA140A
AFR	26.0	30.0	34.0	34.0
(BF)	(0.23)	(0.18)	(0.17)	(0.06)

Twin

	FCAG71B X 2	FAA71A X 2	FHA71A X 2	FUA71A X 2	FBA71A X 2	FVA71A X 2
AFR	15.3 x 2	18.0 x 2	20.5 x 2	23.0 x 2	18.0 x 2	18.0 x 2
(BF)	(0.14 x 2)	(0.16 x 2)	(0.13 x 2)	(0.24 x 2)	(0.13 x 2)	(0.16 x 2)

Triple

	FCAG50B X 3	FHA50A X 3	FFA50A X 3	FDXM50F3 X 3	FBA50A X 3	FNA50A X 3
AFR	12.6 x 3	15.0 x 3	12.0 x 3	15.8 x 3	15.0 x 3	16.0 x 3
(BF)	(0.22 x 3)	(0.18 x 3)	(0.16 x 3)	(0.11 x 3)	(0.13 x 3)	(0.11 x 3)

Double twin

	FCAG35B X 4	FHA35A X 4	FFA35A X 4	FDXM35F3 X 4	FBA35A X 4	FNA35A X 4
AFR	12.5 x 4	14.0 x 4	10.0 x 4	8.7 x 4	15.0 x 4	8.7 x 4
(BF)	(0.4 x 4)	(0.20 x 4)	(0.25 x 4)	(0.17 x 4)	(0.08 x 4)	(0.17 x 4)

Pair

	FCAG140B	FVA140A	FHA140A	FBA140A
Cooling	4,88	5,12	4,84	4,76
Heating	4,16	4,42	3,60	3,89

Twin

	FCAG71B X 2	FAA71A X 2	FHA71A X 2	FUA71A X 2	FBA71A X 2	FVA71A X 2
Cooling	3,87	4,14	3,91	3,62	3,82	4,52
Heating	3,82	3,97	3,63	3,50	3,72	4,23

Triple

	FCAG50B X 3	FHA50A X 3	FFA50A X 3	FDXM50F3 X 3	FBA50A X 3	FNA50A X 3
Cooling	3,39	4,14	4,32	2,86	3,91	2,86
Heating	3,48	3,51	3,59	3,91	3,51	3,91

Double twin

	FCAG35B X 4	FHA35A X 4	FFA35A X 4	FDXM35F3 X 4	FBA35A X 4	FNA35A X 4
Cooling	3,05	3,06	3,66	3,65	3,51	3,65
Heating	4,12	3,47	3,44	3,96	4,19	3,96

3D112147B

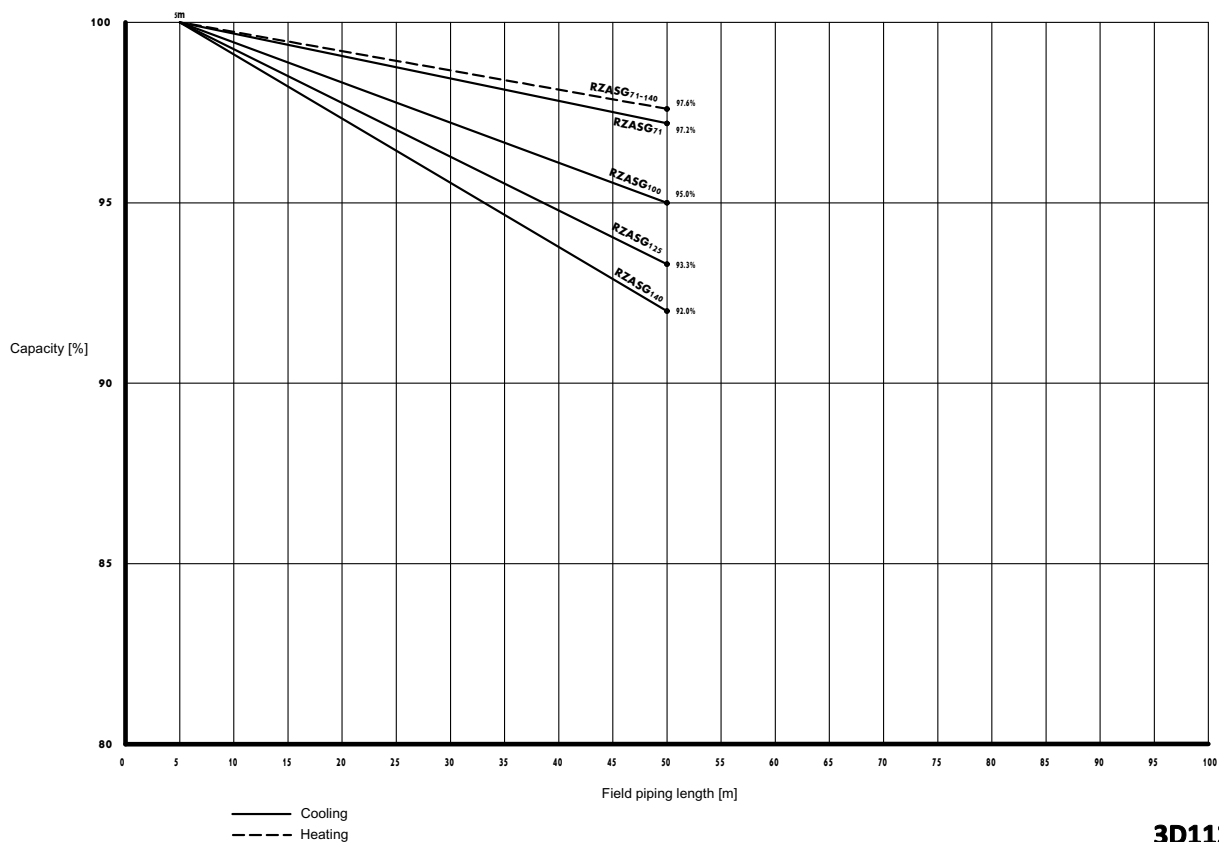
6 Capacity tables

6 - 2 Capacity Correction Factor

RZASG-MV1

RZASG-MY1

Capacity in function of field piping length



3D112163

8 Centre of gravity

8 - 1 Centre of Gravity

AZAS100-140MV1

AZAS-MY1

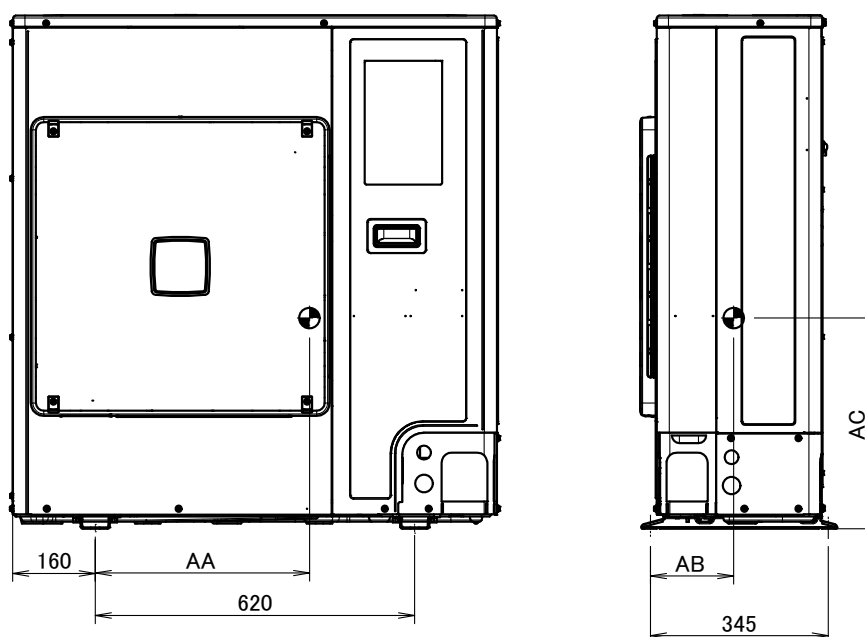
RZAG71MV1

RZAG71MY1

RZASG100-140MV1

RZASG-MY1

8



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

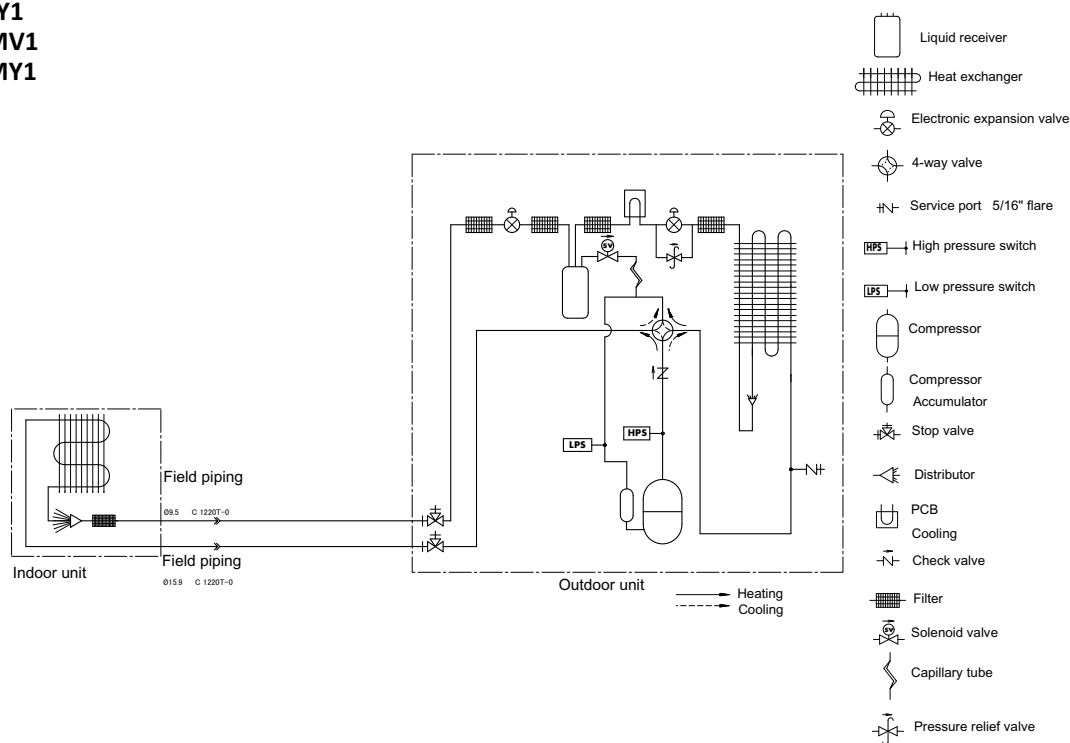
4D110025

9 Piping diagrams

9 - 1 Piping Diagrams

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

9

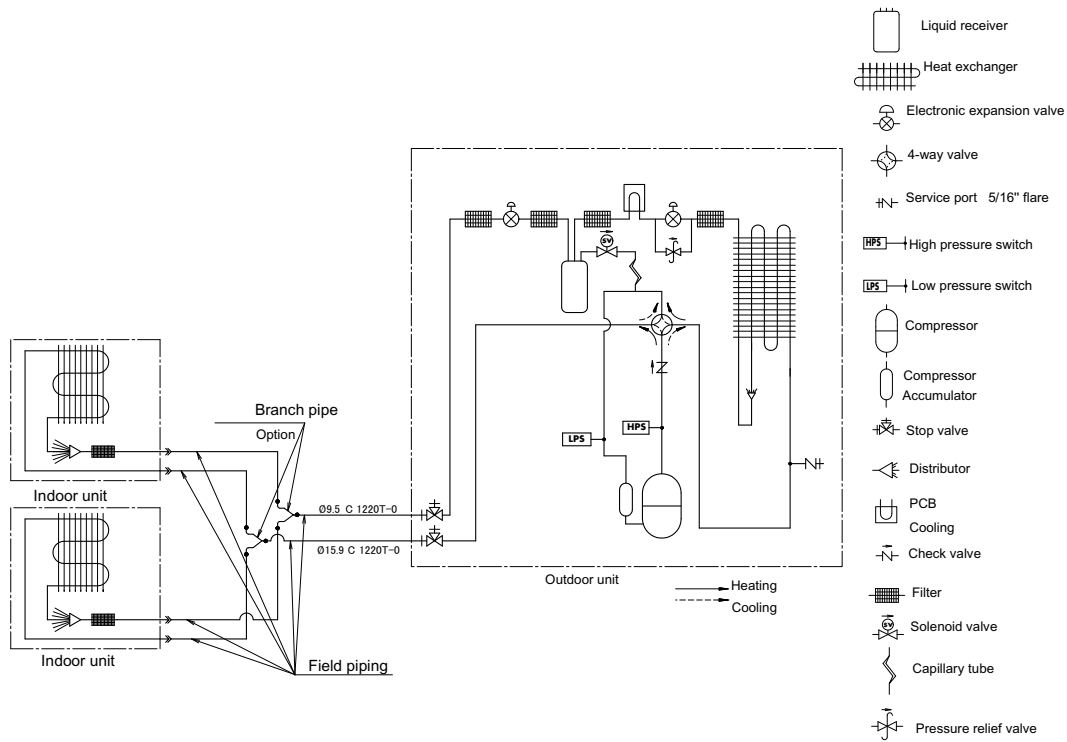


3D108855A

9 Piping diagrams

9 - 2 Piping Diagram Twin Application

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

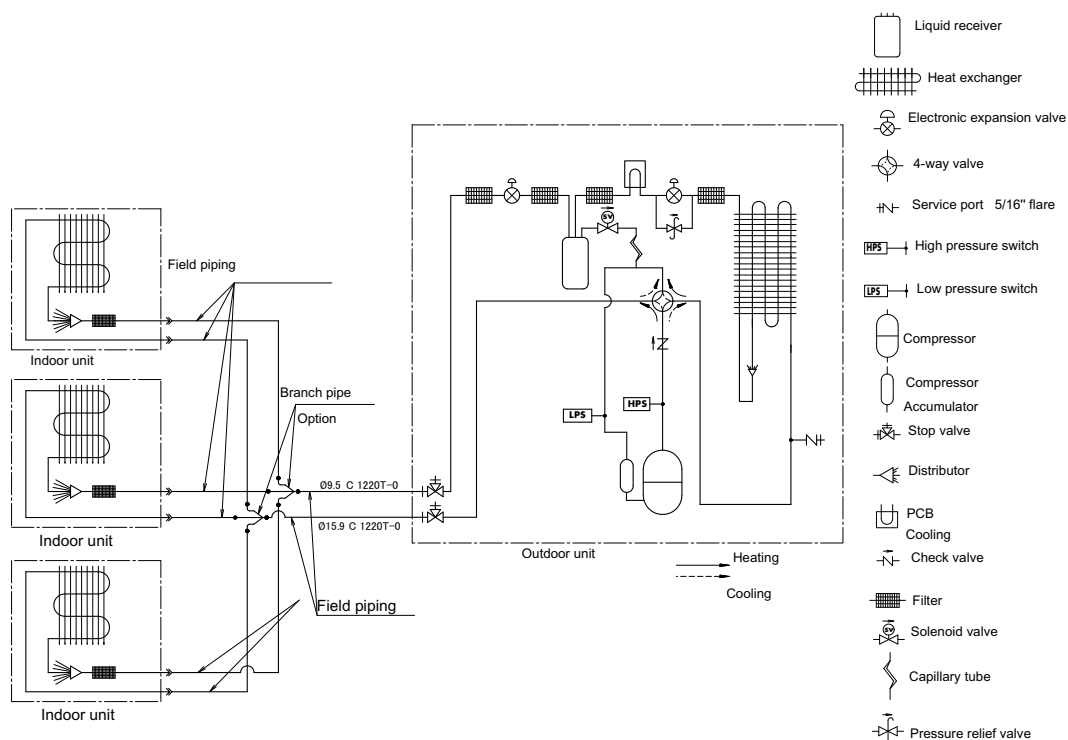


3D108856A

9 Piping diagrams

9 - 3 Piping Diagram Triple Application

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



Notes

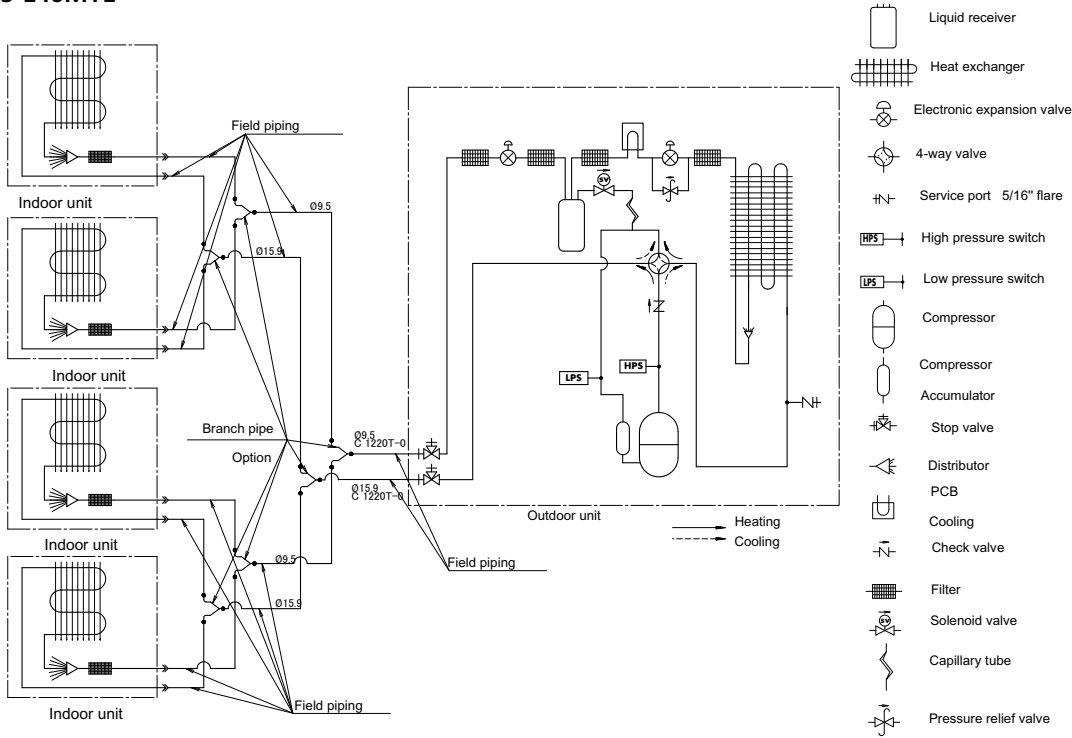
1. The pipes between the branch and the indoor units should have the same size as the indoor connections.

3D108857A

9 Piping diagrams

9 - 4 Piping Diagram Double Twin Application

RZAG125-140MV1
RZAG125-140MY1
RZASG125-140MV1
RZASG125-140MY1



Notes

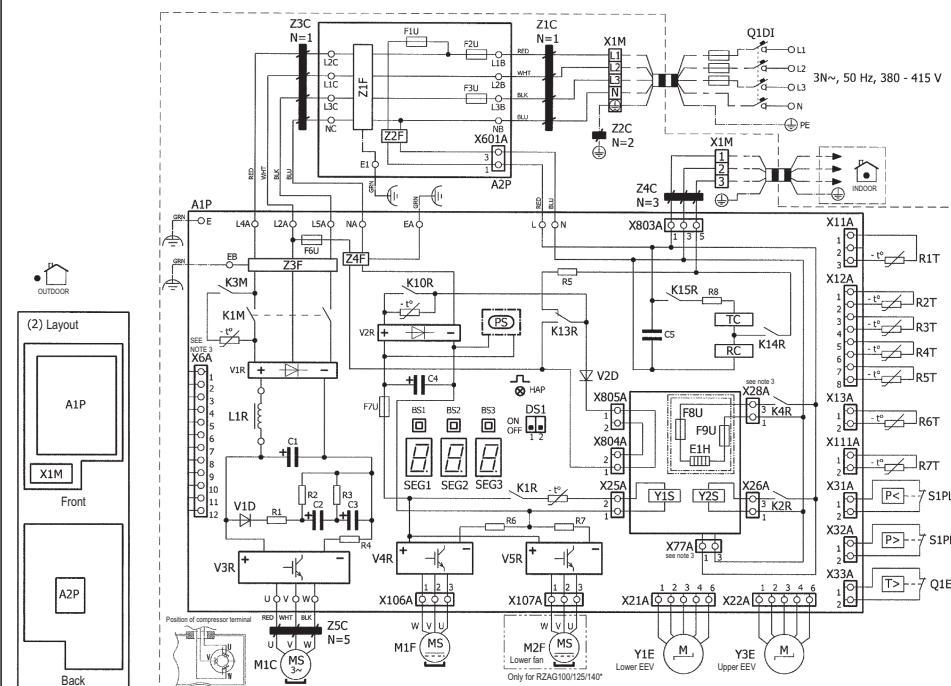
- 1.The pipes between the branch and the indoor units should have the same size as the indoor connections.

3D108858A

10 Wiring diagrams

10 - 1 Wiring Diagrams - Three Phase

RZAG-MY1, RZASG-MY1, AZAS-MY1



+ : Connection
 X1M : Main terminal
 --- : Earth wiring
 --- : Field supply
 [] : Option
 [] : Switch box
 [] : PCB
 [] : Wiring depending on model
 [] : Protective earth
 [] : Field wire

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 X5A, X28A and X77A.
4. Colours: BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green.

LEGEND

: Field supply
* : Optional

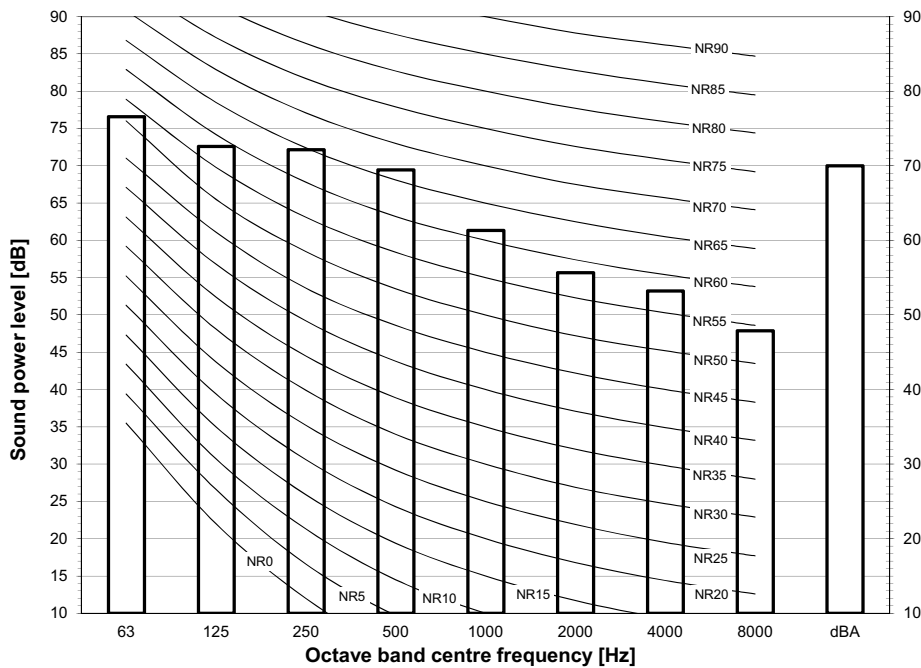
Part n°	Description
A1P	Printed circuit board (main)
A2P	Printed circuit board (noise filter)
BS1-BS3 (A1P)	Push-button switch
C1-C5 (A1P)	Capacitor
DS1 (A1P)	Dipswitch
E1H	Bottom plate heater
F1U (A2P)	Fuse T 6.3 A 250 V
F2U, F3U (A2P)	Fuse T 30 A 500 V
F6U (A1P)	Fuse T 6.3 A 250 V
F7U (A1P)	Fuse T 5 A 250 V
F8U, F9U	Fuse T 1 A 250 V
HAP (A1P)	Light-emitting diode (service monitor is green)
K1M, K3M (A1P)	Magnetic contactor
K1R (A1P)	Magnetic relay (Y1S)
K2R (A1P)	Magnetic relay (Y2S)
K4R (A1P)	Magnetic relay (E1H)
K13R-K15R (A1P)	Magnetic relay
L1R	Reactor
M1C	Compressor motor
M1F, M2F	Fan motor
PS (A1P)	Switching power supply
Q1DI	Earth leakage circuit breaker (30mA)
Q1E	Overload protection
R1-R8 (A1P)	Resistor
R1T	Thermistor (air)
R2T	Thermistor (discharge)
R3T	Thermistor (suction)
R4T	Thermistor (heat exchanger)
R5T	Thermistor (heat exchanger middle)
R6T	Thermistor (liquid)
R7T	Thermistor (fin)
RC (A1P)	Signal receiver circuit
S1PH	High pressure switch
S1PL	Low pressure switch
SEG1-SEG3 (A1P)	7-segment display
TC (A1P)	Signal transmission circuit
V1D, V2D (A1P)	Diode
V1R, V2R (A1P)	Diode module
V3R-V5R (A1P)	IGBT power module
X1M	Terminal strip
Y1E, Y3E	Electronic expansion valve
Y1S, Y2S	Solenoid valve (4-way valve)
Z1C-Z5C	Noise filter (ferrite core)
Z1F-Z4F (A1P-A2P)	Noise filter
L'A, L'B, NA, NBE*, U, V, W, X'A (A1P, A2P)	Connector

4D109448

11 Sound data

11 - 1 Sound Power Spectrum

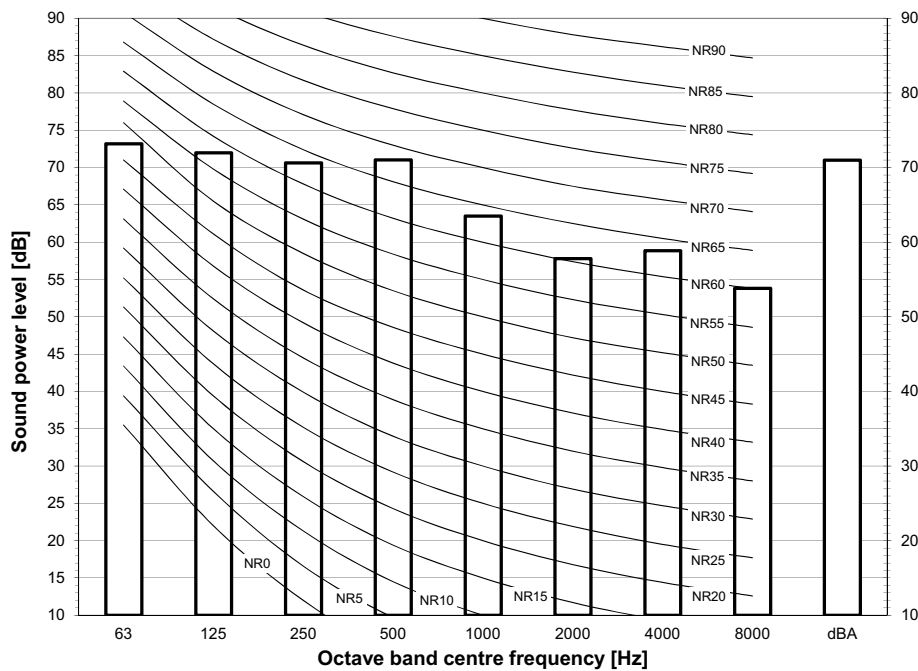
AZAS100MV1
AZAS100MY1
RZASG100MV1
RZASG100MY1



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

3D110038

AZAS125MV1
AZAS125MY1
RZASG125MV1
RZASG125MY1



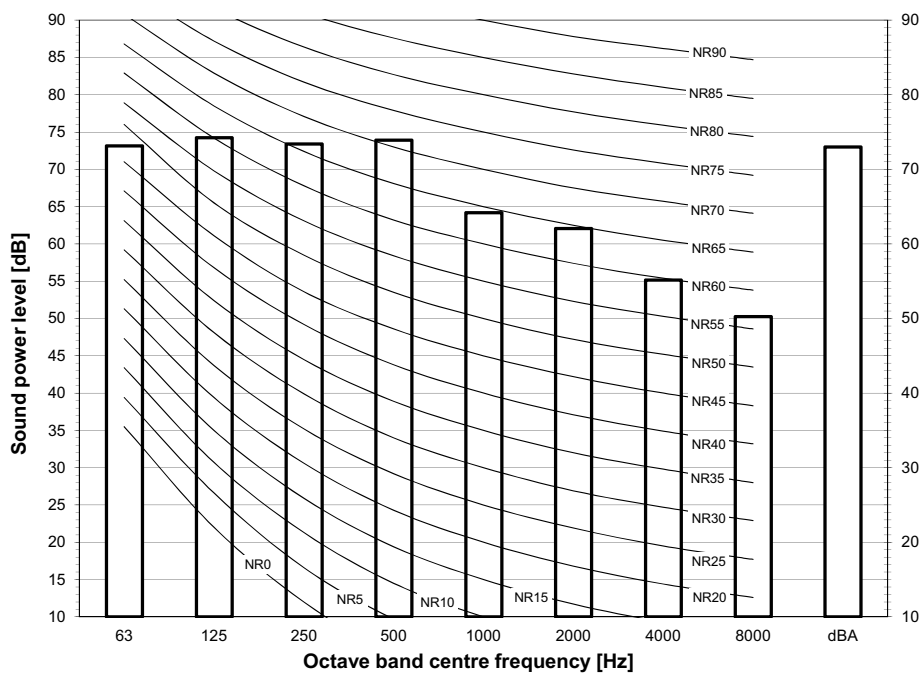
Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10E-6μW/m²
- Measured according to ISO 3744

3D110039

11 Sound data

11 - 1 Sound Power Spectrum

AZAS140MV1
AZAS140MY1
RZASG140MV1
RZASG140MY1



Notes

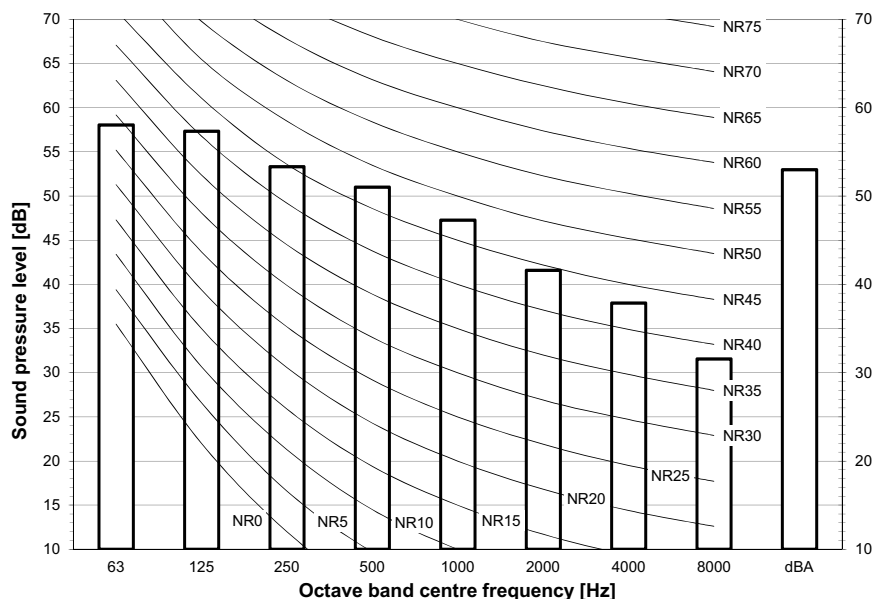
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10^{-6} W/m^2
- Measured according to ISO 3744

3D110040

11 Sound data

11 - 2 Sound Pressure Spectrum - Cooling

AZAS100MV1
AZAS100MY1
RZASG100MV1
RZASG100MY1

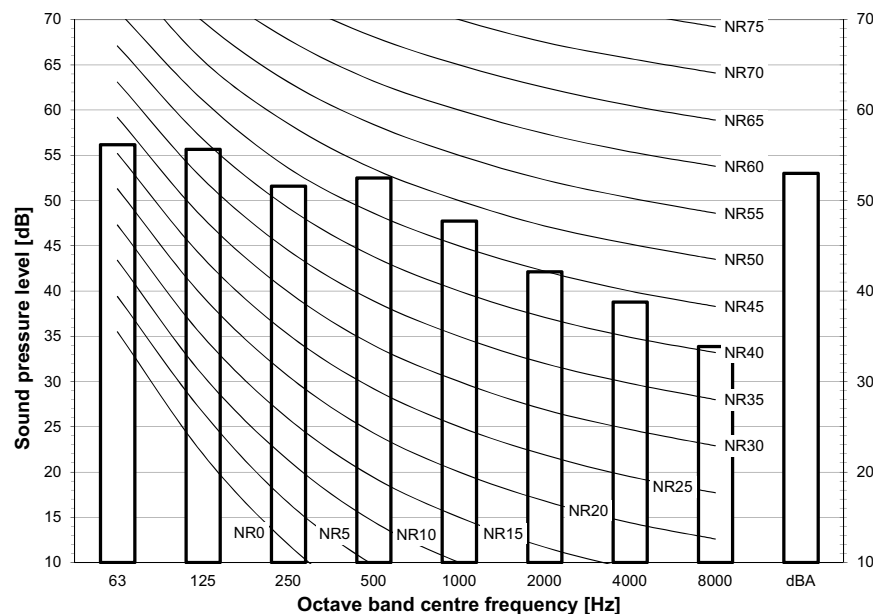


Notes

- 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

3D110050

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 μ Pa

3D110051

11 Sound data

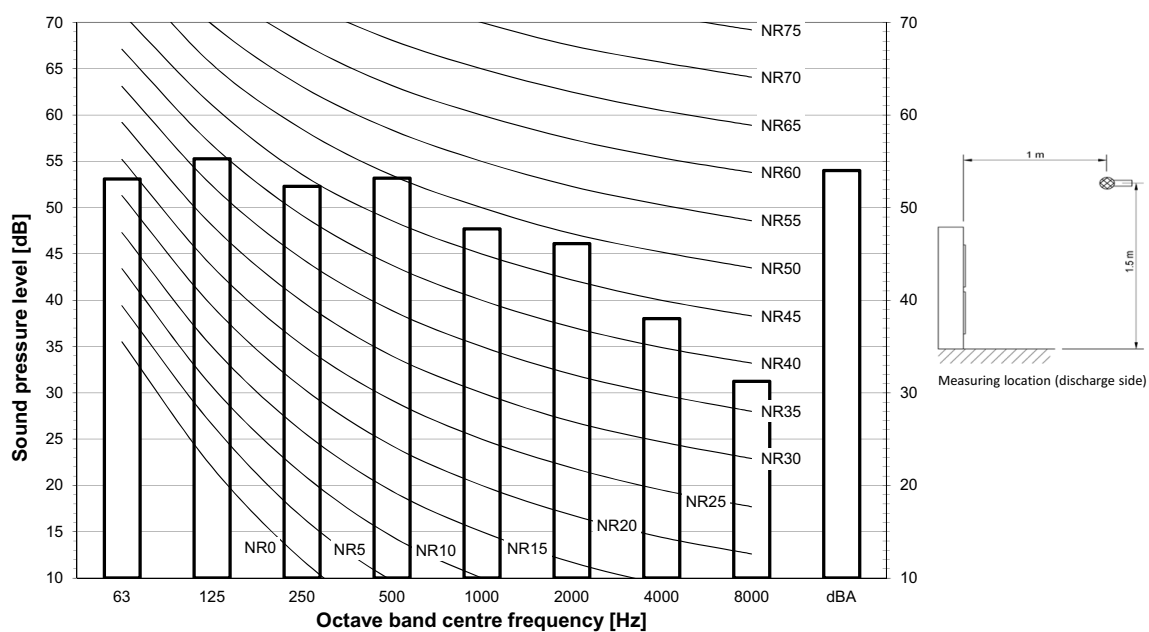
11 - 2 Sound Pressure Spectrum - Cooling

AZAS140MV1

AZAS140MY1

RZASG140MV1

RZASG140MY1



Notes

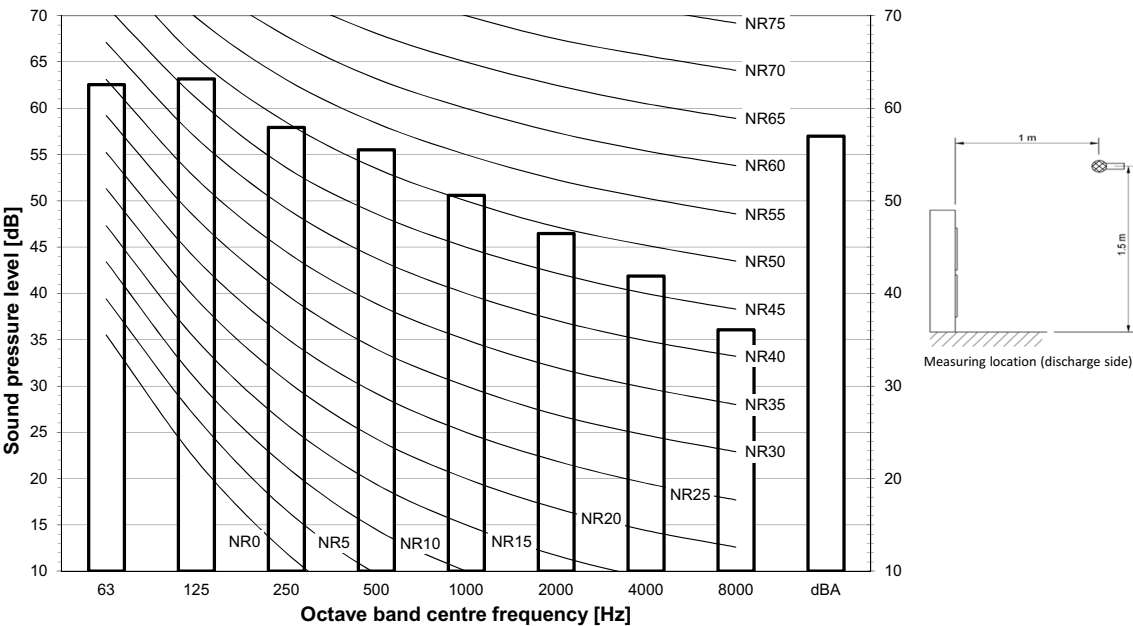
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 μ Pa

3D111310

11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

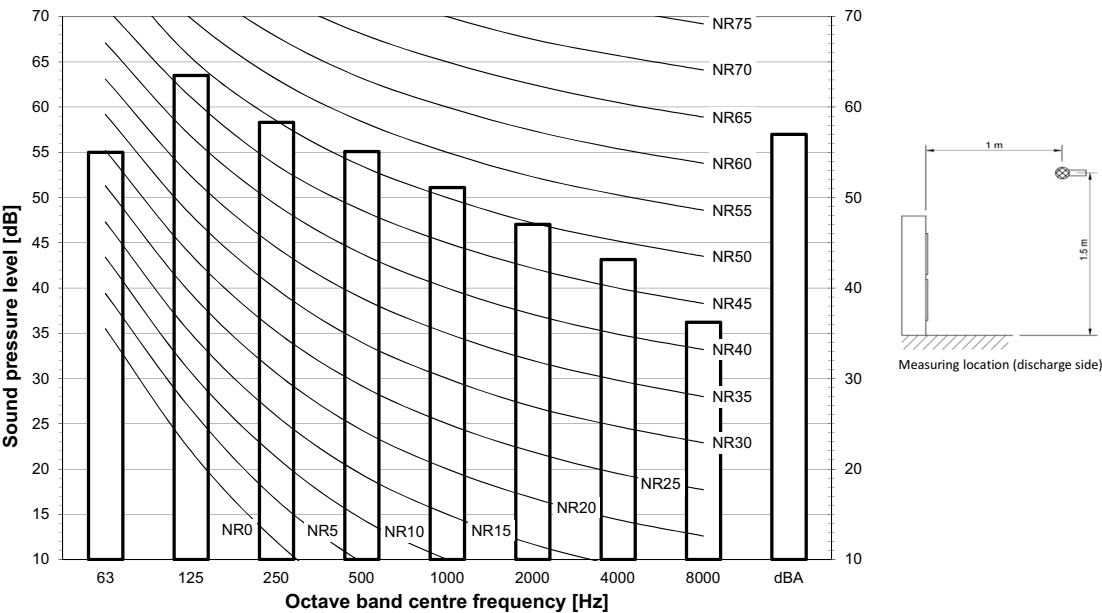
AZAS100MV1
AZAS100MY1
RZASG100MV1
RZASG100MY1



- 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

AZAS125MV1
AZAS125MY1
RZASG125MV1
RZASG125MY1



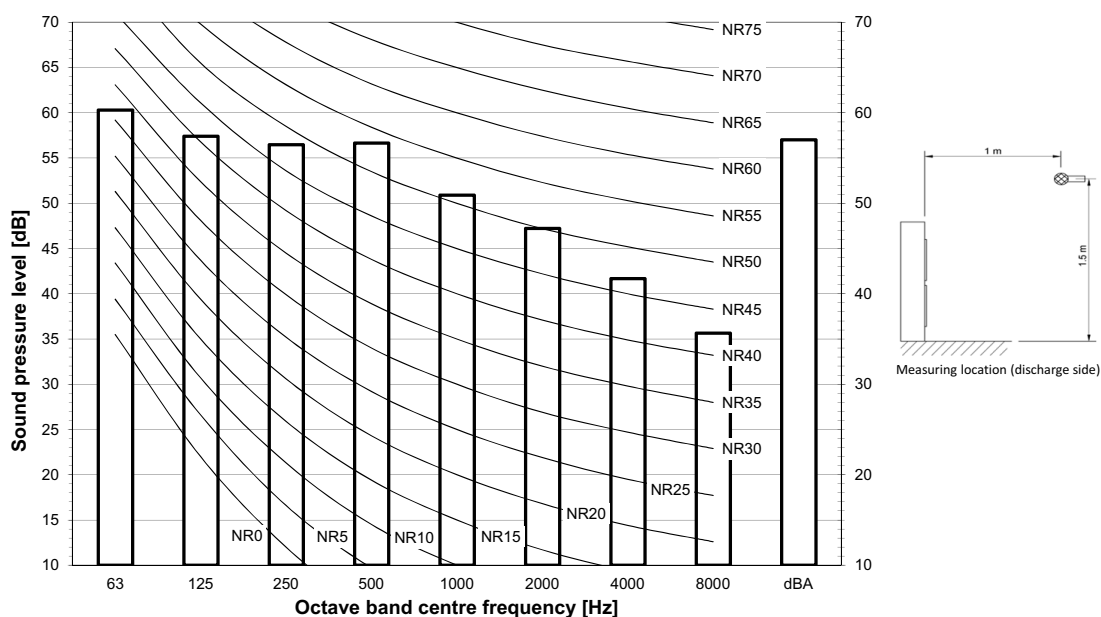
- Notes**
- Data is valid at free field condition.
 - Data is valid at nominal operation condition.
 - dBA = A-weighted sound pressure level (A scale according to IEC).
 - Reference acoustic pressure 0 dB = 20 µPa

3D111295

11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

AZAS140MV1
AZAS140MY1
RZASG140MV1
RZASG140MY1



Notes

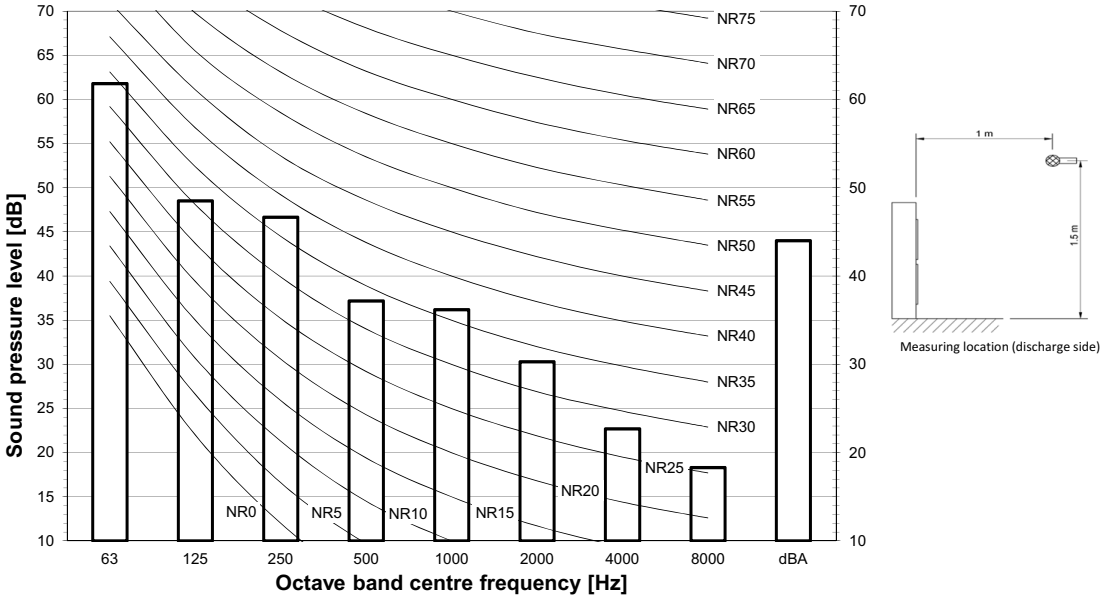
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 μ Pa

3D111296

11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode

AZAS100MV1
 AZAS100MY1
 RZASG100MV1
 RZASG100MY1

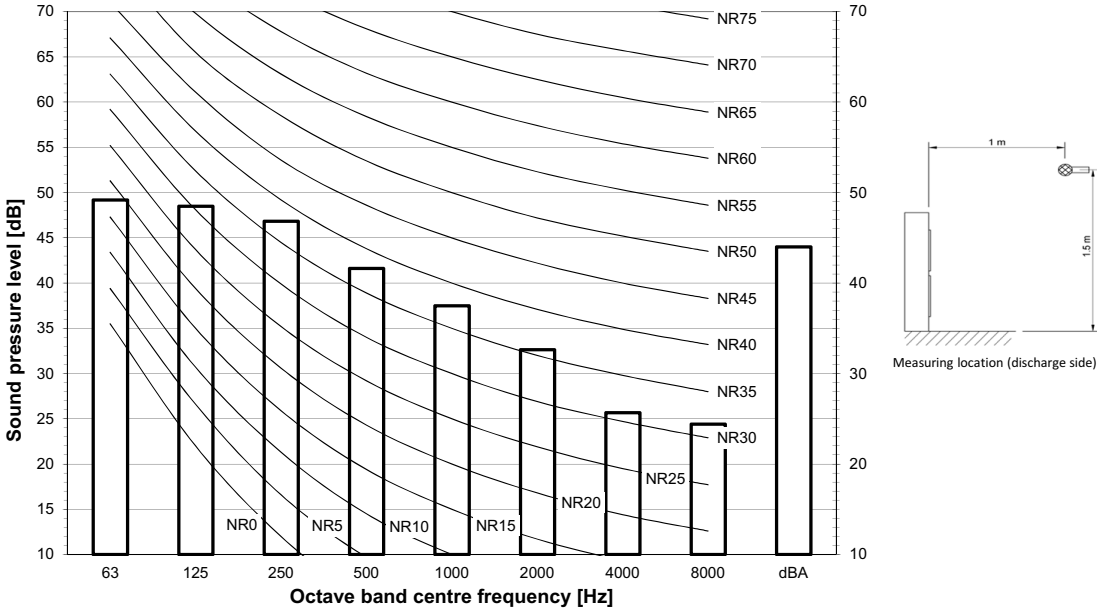


Notes

- 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

AZAS125MV1
 AZAS125MY1
 RZASG125MV1
 RZASG125MY1



Notes

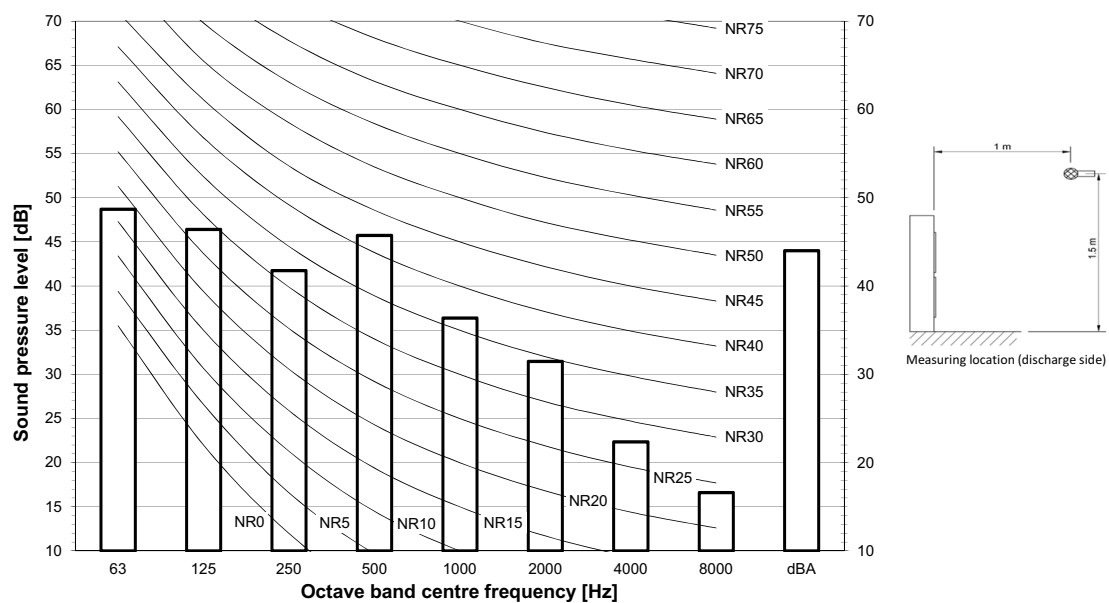
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

3D111317

11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode

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 μ Pa

3D111318

12 Installation

12 - 1 Installation Method

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

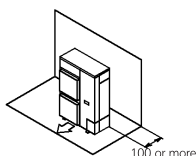
Installation service space

The measure of these values is "mm".

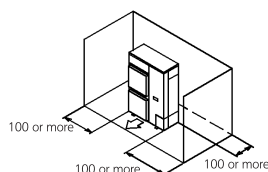
(A) When there are obstacles on suction sides.

• No obstacle above

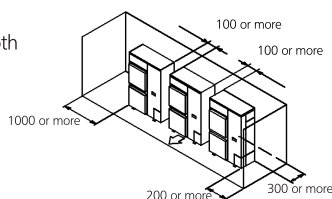
- ① Stand-alone installation
 - Obstacle on the suction side only



- Obstacle on both sides and suction side, too

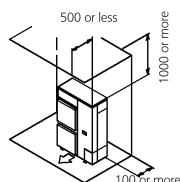


- ② Series installation (2 or more) (Note 1)
 - Obstacle on the suction side and both sides

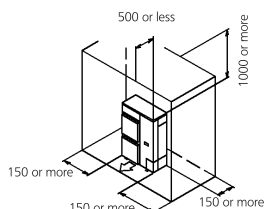


• Obstacle above, too.

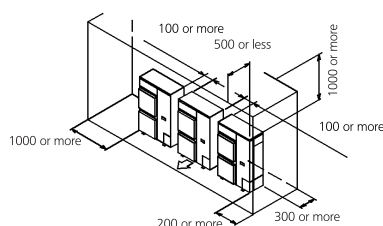
- ① Stand-alone installation
 - Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



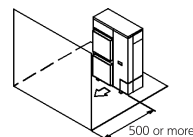
- ② Series installation (2 or more) (Note 1)
 - Obstacle on the suction side and both sides



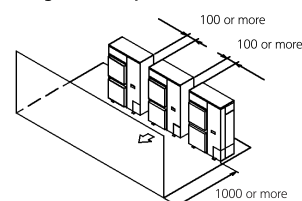
(B) When there are obstacles on discharge sides.

• No obstacle above

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

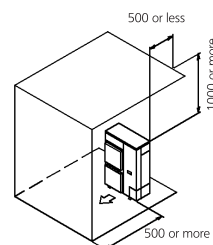


- ② Series installation (2 or more) (Note 1)
 - Obstacle on the discharge side only

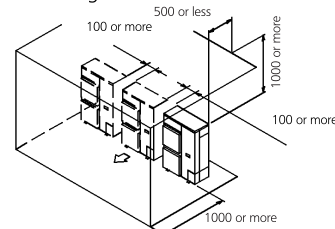


• Obstacle above, too

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



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



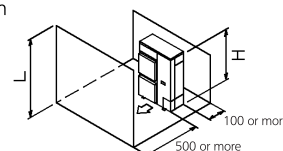
(C) When there are obstacles on both suction and discharge sides.:

Pattern 1

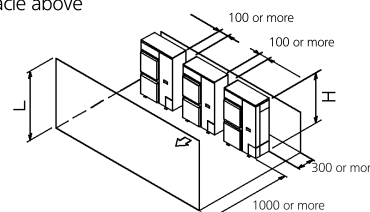
When the obstacles on the discharge side is higher than the unit. (L>H)
(There is no limit for the height of obstructions on the suction side.)

• No obstacle above

- ① Stand-alone installation
 - No obstacle above



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



3D069554

12 Installation

12 - 1 Installation Method

12

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

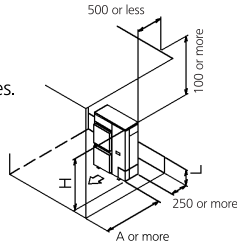
• Obstacle above, too

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.

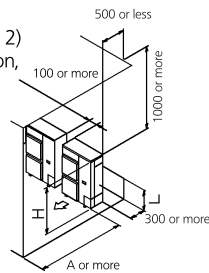
The relations between H, A and L are as follows.

	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

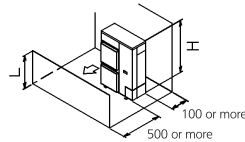
When the obstacle on the discharge side is lower than the unit ($L \leq H$)
(There is no limit for the height of obstructions on the suction side.)



• No obstacle above

① Stand-alone installation

- No obstacle above

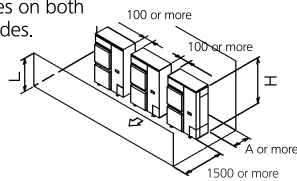


② Series installation (2 or more) (Note 1, 2)

- 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



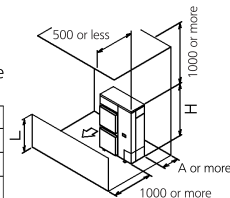
• obstacle above

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	



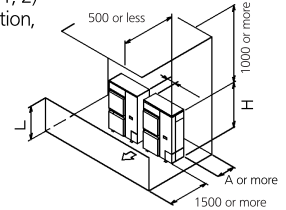
② Series installation (2 or more) (Note 1, 2)

- 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	

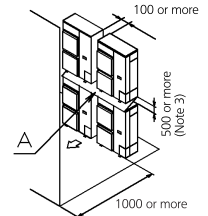
Limit of series installation is 2 units.



(D) Double-decker installation

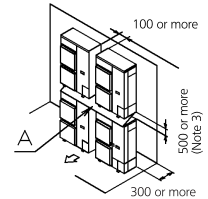
① Obstacle on the discharge side. (1)

- 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.



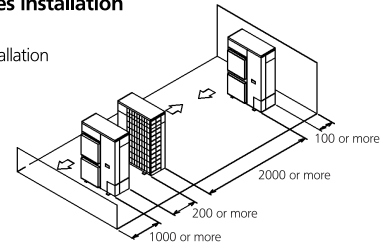
② Obstacle on the suction side. (1)

- 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.)

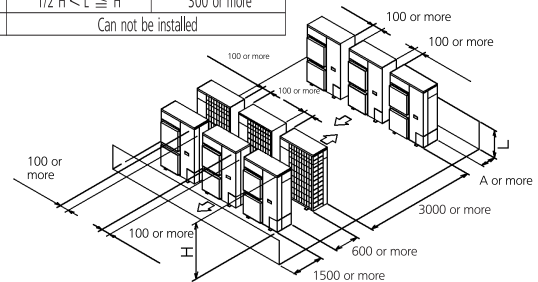
① One row of stand-alone installation



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

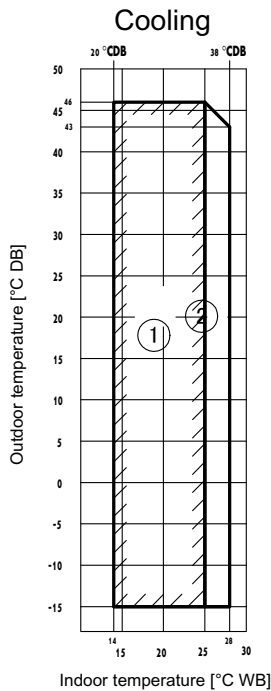
- In case of the sideways piping, make a 100mm gap between the unit above.
- Close the bottom of the installation frame to prevent the discharged air from being bypassed.
- It is not necessary to install a roof cover if there is no danger of drainage dripping and freezing. In this case, the space between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

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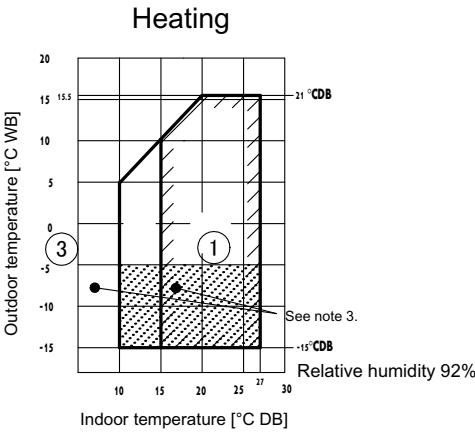
13 Operation range

13 - 1 Operation Range

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

14

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		FCAG71	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					P					4					P							P			P
RZAG140M7V1B	RZAG140M7Y1B				P	4						P				4						P									P
RZASG125M7V1B	RZASG125M7Y1B					4					P					4					P							P			P
RZASG140M7V1B	RZASG140M7Y1B					4						P				4						P					P				P
AZAS125M7V1B	AZAS125M7Y1B										P										P										
AZAS140M7V1B	AZAS140M7Y1B											P										P									

Sky Air		Floor standing type				Slim duct			Ceiling-suspended					Duct (medium ESP)					Floor standing type			
Model		FVA71	FVA100	FVA125	FVA140	FDX135	FDX150	FDX160	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-

-	FCAG35	FFA35	FBA35	FNA35	FUA125	-	-	-	FDA125	FVA125	FDX135	FHA35	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	-	-	-	FDX150	FHA50	-	-
-	FCAG60	FFA60	FBA60	FNA60	-	-	-	-	-	-	FDX160	FHA60	-	-
-	FCAG125	-	FBA125	-	-	-	-	-	-	-	-	FHA125	-	-

Connectable to -RZASG125M7V1B / RZASG125M7Y1B- and covered by -ENER Lot 21-

-	FCAG35	FFA35	FBA35	FNA35	FUA125	-	-	-	FDA125	FVA125	FDX135	FHA35	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	-	-	-	FDX150	FHA50	-	-
-	FCAG60	FFA60	FBA60	FNA60	-	-	-	-	-	-	FDX160	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-

FCAG71	FCAG35	FFA35	FBA35	FNA35	FUA71	FAA71	-	FVA71	FDX135	FHA35	-	-	-	-
FCAG140	FCAG50	FFA50	FBA50	FNA50	-	-	-	FVA140	FDX150	FHA50	-	-	-	-
-	FCAG71	-	FBA71	-	-	-	-	-	-	FHA71	-	-	-	-
-	FCAG140	-	FBA140	-	-	-	-	-	-	FHA140	-	-	-	-

Connectable to -RZASG140M7V1B / RZASG140M7Y1B- and covered by -ENER Lot 21-

-	FCAG35	FFA35	FBA35	FNA35	FUA71	FAA71	-	FVA71	FDX135	FHA35	-	-	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	FVA140	FDX150	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	FDX135	FHA35	-	-	-	-
-	FCAG71	-	FBA71	-	-	-	-	-	-	FHA71	-	-	-	-

Connectable to -RZASG71M7V1B- and covered by -ENER Lot 10-

-	FCAG35	FFA35	FBA35	FNA35	FUA71	FAA71	-	FVA71	FDX135	FHA35	-	-	-	-
-	FCAG71	-	FBA71	-	-	-	-	-	-	FHA71	-	-	-	-

Connectable to -AZAS71M7V1B- 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	FDX135	FHA35	-	-	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	-	FDX150	FHA50	-	-	-	-
-	FCAG100	-	FBA100	-	-	-	-	-	-	FHA100	-	-	-	-

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

-	FCAG35	FFA35	FBA35	FNA35	FUA100	FAA100	-	FVA100	FDX135	FHA35	-	-	-	-
-	FCAG50	FFA50	FBA50	FNA50	-	-	-	-	FDX150	FHA50	-	-	-	-
-	FCAG100	-	FBA100	-	-	-	-	-	-	FHA100	-	-	-	-

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

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