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DAIKIN

Sky Air

Air Conditioning
Technical Data

RZASG-MV1

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RZASG-MV1

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				FCAG71A/RZASG71MV1	FCAG100A/ RZASG100MV1	FCAG125A/ RZASG125MV1	FCAG140A/ RZASG140MV1
Indoor unit				FCAG71AVEB	FCAG100AVEB	FCAG125AVEB	FCAG140AVEB
Outdoor unit				RZASG71M2V1B	RZASG100M7V1B	RZASG125M7V1B	RZASG140M7V1B
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	A+	-	
	Capacity	Pdesign	kW	4.50	6.00		7.80
	SCOP/A			4.00	4.17	4.05	4.31
	SCOPnet/A			4.00	4.17	4.05	4.31
	ηs,h		%	-		159	169
	Annual energy consumption		kWh/a	1,575	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)		2.31	2.52	2.59	2.26
		Power input	kW	1.94	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)		2.31	2.52	2.59	2.26
		Power input	kW	1.94	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)		2.31	2.75	2.78	2.60
		Power input	kW	1.72	1.93	1.91	2.65
	B Condition (2°C)	Pdh (declared heating cap)	kW	2.42	3.23		4.20
		COPd (declared COP)		4.10	3.97	3.88	4.32
		Power input	kW	0.59	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)		5.32	5.58	5.20	5.92
		Power input	kW	0.36	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)		6.74	6.95	6.66	7.26
		Power input	kW	0.34	0.36	0.38	0.55
Pto (Thermostat off)			W	12 / 0	0 / 12	-	
Cooling	Cdc (Degradation cooling)			0.25			

2 Specifications

2-1 Capacity and Power input					FCAG71A/RZASG71MV1	FCAG100A/ RZASG100MV1	FCAG125A/ RZASG125MV1	FCAG140A/ RZASG140MV1
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	POFF		W	12			
	Standby mode	Cooling	PSB	W	12			
		Heating	PSB	W	12			
	Thermostat-off mode	PTO	Heating	W	-		12	
			Cooling	W	-		0	
	Crankcase heater mode	PCK		W	0			
Indication if the heater is equipped with a supplementary heater (pair application)					-		No	

Notes

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

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

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

Cooling: indoor temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m

2-2 Capacity and Power input				FBA71A/RZASG71MV1	FBA100A/RZASG100MV1	FBA125A/RZASG125MV1	FBA140A/RZASG140MV1
Indoor unit				FBA71A2VEB	FBA100A2VEB	FBA125A2VEB	FBA140A2VEB
Outdoor unit				RZASG71M2V1B	RZASG100M7V1B	RZASG125M7V1B	RZASG140M7V1B
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					FBA71A/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
Pto (Thermostat off)				W	14 / 0		-	
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	Thermostat-off mode	PTO	Heating	W	-		14	
			Cooling	W	-		0	
	Standby mode	Cooling	PSB	W	14			
		Heating	PSB	W	14			
	Crankcase heater mode	PCK		W	0			
	Off mode	POFF		W	14			
Indication if the heater is equipped with a supplementary heater (pair application)					-		No	

2 Specifications

Notes

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

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

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

Cooling: indoor temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m

2-3 Capacity and Power input				FDA125A/RZASG125MV1
Indoor unit				FDA125A5VEB
Outdoor unit				RZASG125M7V1B
Cooling capacity	Nom.		kW	12.1
Heating capacity	Nom.		kW	13.5
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	POFF		W	15
	Standby mode	Cooling	PSB	W	15
		Heating	PSB	W	15
	Thermostat-off mode	PTO	Heating	W	15
			Cooling	W	0
	Crankcase heater mode	PCK		W	0
Indication if the heater is equipped with a supplementary heater (pair application)					No

2-4 Capacity and Power input			FAA71A/RZASG71MV1	FAA100A/RZASG100MV1
Indoor unit			FAA71AUVEB	FAA100AUVEB
Outdoor unit			RZASG71M2V1B	RZASG100M7V1B
Cooling capacity	Nom.	kW	6.80 (1)	9.50 (1)
Heating capacity	Nom.	kW	7.50 (2)	10.8 (2)

2 Specifications

2-4 Capacity and Power input				FAA71A/RZASG71MV1	FAA100A/RZASG100MV1
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
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		kW	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
Pto (Thermostat off)			W	12 / 0	0 / 12
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	

2 Specifications

2-4 Capacity and Power input					FAA71A/RZASG71MV1	FAA100A/RZASG100MV1
Power consumption in other than active mode	Off mode	POFF		W	12	
	Standby mode	Cooling	PSB	W	12	
		Heating	PSB	W	12	
	Crankcase heater mode	PCK		W	0	

Notes

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

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

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

2-5 Capacity and Power input				FHA71A/RZASG71MV1	FHA100A/RZASG100MV1	FHA125A/RZASG125MV1	FHA140A/RZASG140MV1
Indoor unit				FHA71AVEB	FHA100AVEB	FHA125AVEB	FHA140AVEB
Outdoor unit				RZASG71M2V1B	RZASG100M7V1B	RZASG125M7V1B	RZASG140M7V1B
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
	ηs,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

2 Specifications

2-5 Capacity and Power input					FHA71A/RZASG71MV1	FHA100A/RZASG100MV1	FHA125A/RZASG125MV1	FHA140A/RZASG140MV1
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
	ηs,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
Pto (Thermostat off)				W	12 / 0	0 / 12	-	
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	POFF		W	12			
	Standby mode	Cooling	PSB	W	12			
		Heating	PSB	W	12			
	Thermostat-off mode	PTO	Heating	W	-		12	
			Cooling	W	-		0	
	Crankcase heater mode	PCK		W	0			
Indication if the heater is equipped with a supplementary heater (pair application)					-		No	

2 Specifications

Notes

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

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

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

Cooling: indoor temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m

2-6 Capacity and Power input				FUA71A/RZASG71MV1	FUA100A/RZASG100MV1	FUA125A/RZASG125MV1
Indoor unit				FUA71AVEB	FUA100AVEB	FUA125AVEB
Outdoor unit				RZASG71M2V1B	RZASG100M7V1B	RZASG125M7V1B
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	kW	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	kW	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	kW	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	kW	0.31	0.35	0.34

2 Specifications

2-6 Capacity and Power input					FUA71A/RZASG71MV1	FUA100A/RZASG100MV1	FUA125A/RZASG125MV1
Space heating (Average climate)	Energy efficiency class				A	A+	-
	Capacity	Pdesign		kW	4.50	6.00	
	SCOP/A				3.90	4.01	3.84
	SCOPnet/A				3.90	4.01	3.84
	ηs,h			%	-		151
	Annual energy consumption			kWh/a	1,615	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	4.50	6.00	
		COPd (declared COP)			2.23	2.56	2.52
		Power input		kW	2.01	2.35	2.38
	TBivalent	Tbiv (bivalent temperature)		°C	-10		
		Pdh (declared heating cap)		kW	4.50	6.00	
		COPd (declared COP)			2.23	2.56	2.52
		Power input		kW	2.01	2.35	2.38
	A Condition (-7°C)	Pdh (declared heating cap)		kW	3.98	5.31	5.30
		COPd (declared COP)			2.51	2.79	2.76
		Power input		kW	1.59	1.90	1.92
	B Condition (2°C)	Pdh (declared heating cap)		kW	2.42	3.23	
		COPd (declared COP)			3.90	3.87	3.70
		Power input		kW	0.62	0.83	0.87
	C Condition (7°C)	Pdh (declared heating cap)		kW	2.07	2.19	2.21
		COPd (declared COP)			5.17	5.10	4.81
		Power input		kW	0.40	0.43	0.46
	D Condition (12°C)	Pdh (declared heating cap)		kW	2.44	2.57	2.59
		COPd (declared COP)			6.56	6.26	5.89
		Power input		kW	0.37	0.41	0.44
Pto (Thermostat off)				W	12 / 0	0 / 12	-
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	POFF		W	12		
	Standby mode	Cooling	PSB	W	12		
		Heating	PSB	W	12		
	Thermostat-off mode	PTO	Heating	W	-		12
			Cooling	W	-		0
	Crankcase heater mode	PCK		W	0		
Indication if the heater is equipped with a supplementary heater (pair application)					-		No

2 Specifications

Notes

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

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

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

Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m (horizontal); level difference: 0m

2-7 Capacity and Power input				FVA71A/RZASG71MV1	FAV100A/RZASG100MV1	FVA125A/RZASG125MV1	FVA140A/RZASG140MV1
Indoor unit				FVA71AMVEB	FVA100AMVEB	FVA125AMVEB	FVA140AMVEB
Outdoor unit				RZASG71M2V1B	RZASG100M7V1B	RZASG125M7Y1B	RZASG140M7V1B
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

2 Specifications

2-7 Capacity and Power input					FVA71A/RZASG71MV1	FAV100A/RZASG100MV1	FVA125A/RZASG125MV1	FVA140A/RZASG140MV1
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
Pto (Thermostat off)				W	12 / 0	0 / 12	-	
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	POFF		W	12			
	Standby mode	Cooling	PSB	W	12			
		Heating	PSB	W	12			
	Thermostat-off mode	PTO	Heating	W	-		12	
			Cooling	W	-		0	
	Crankcase heater mode	PCK		W	0			
Indication if the heater is equipped with a supplementary heater (pair application)					-		No	

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.

Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m (horizontal); level difference: 0m

Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m

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	Ambient	Min.	°CDB	-15			
			Max.	°CDB	46			
	Heating	Ambient	Min.	°CWB	-15			
			Max.	°CWB	15.5			
Refrigerant	Type				R-32			
	Charge			kg	2.45	2.60		2.90
				TCO_2eq	1.65	1.76		1.96
	Control				Expansion valve (electronic type)			
	GWP				675			
	Circuits	Quantity			1			

2 Specifications

2-8 Technical Specifications					RZASG71MV1	RZASG100MV1	RZASG125MV1	RZASG140MV1
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 (2)			
			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 / (3) / 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			

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 ≤ 16A per phase.

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

(4) Ssc: Short-circuit power

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

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RZASG71-100MV1

Indoor		Outdoor	Power supply	Voltage range		MCA	TOCA	MFA	Compressor MSC	Compressor RLA	OFM kW	OFM FLA	IFM kW	IFM FLA
FCAG35AVEB	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
FCAG71AVEB		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
FAA71AUVEB		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
FCAG35AVEB	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
FCAG50AVEB	x2	RZASG100M7V1B				21,4	–	25	–	19,0	0,200	1,0	0.039 x2	0.3 x2
FCAG100AVEB		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
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
FAA100AUVEB		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

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3 Electrical data

3 - 1 Electrical Data

RZASG125-140MV1

Indoor		Outdoor	Power supply	Voltage range		MCA	TOCA	MFA	Compressor MSC	Compressor RLA	OFM kW	OFM FLA	IFM kW	IFM FLA
FCAG35AVEB	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
FCAG50AVEB	x3	RZASG125M7V1B				27,7	–	32	–	24,7	0,200	1,0	0.039 x3	0.3 x3
FCAG60AVEB	x2	RZASG125M7V1B				27,4	–	32	–	24,7	0,200	1,0	0.044 x2	0.3 x2
FCAG125AVEB		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
FDA125A5VEB		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
FCAG35AVEB	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
FCAG50AVEB	x3	RZASG140M7V1B				26,9	–	32	–	24,0	0,200	1,0	0.039 x3	0.3 x3
FCAG71AVEB	x2	RZASG140M7V1B				26,8	–	32	–	24,0	0,200	1,0	0.054 x2	0.4 x2
FCAG140AVEB		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	RZAG140M7Y1B RZAG140M7V1B
Bottom plate heater		EKBPH140L7			
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

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

Possible combinations

	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 (high ESP)
Model		FCAHG71G1VEB	FCAHG100G1VEB	FCAHG125G1VEB	FCAHG140G1VEB	FCAG35AVEB	FCAG50AVEB	FCAG60AVEB	FCAG71AVEB	FCAG100AVEB	FCAG125AVEB	FCAG140AVEB	FFA35A2VEB	FFA50A2VEB	FFA60A2VEB	FBA35A2VEB	FBA50A2VEB	FBA60A2VEB	FBA71A2VEB	FBA100A2VEB	FBA125A2VEB	FBA140A2VEB	FNA35A2VEB	FNA50A2VEB	FNA60A2VEB	FUA71AVEB	FUA100AVEB	FUA125AVEB	FAA71AUVEB	FAA100AUVEB	FDA125A5VEB
RZAG71M7V1B	RZAG71M7Y1B	P				2			P				2			2			P				2			P			P		
RZAG100M7V1B	RZAG100M7Y1B		P			3	2			P			3	2		3	2			P			3	2			P			P	
RZAG125M7V1B	RZAG125M7Y1B			P		4	3	2			P		4	3	2	4	3	2			P		4	3	2			P			P
RZAG140M7V1B	RZAG140M7Y1B	2			P	4	3		2			P	4	3		4	3		2			P	4	3		2			2		
RZASG71M2V1B						2			P				2			2			P				2			P			P		
RZASG100M7V1B	RZASG100M7Y1B					3	2			P			3	2						P			3	2			P			P	
RZASG125M7V1B	RZASG125M7Y1B					4	3	2			P		4	3	2	4	3	2			P		4	3	2			P			P
RZASG140M7V1B	RZASG140M7Y1B					4	3		2			P	4	3		4	3		2			P	4	3		2			2		
AZAS71M2V1B									P										P										P		
AZAS100M7V1B	AZAS100M7Y1B									P										P										P	
AZAS125M7V1B	AZAS125M7Y1B										P										P										
AZAS140M7V1B	AZAS140M7Y1B											P										P									

Sky Air		Floor standing type				Slim duct			Ceiling-suspended						
Model		FVA71AMVEB	FVA100AMVEB	FVA125AMVEB	FVA140AMVEB	FDXM35F3V1B	FDXM50F3V1B	FDXM60F3V1B	FHA35AVEB	FHA50AVEB	FHA60AVEB	FHA71AVEB	FHA100AVEB	FHA125AVEB	FHA140AVEB
RZAG71M7V1B	RZAG71M7Y1B	P				2			2			P			
RZAG100M7V1B	RZAG100M7Y1B		P			3	2		3	2			P		
RZAG125M7V1B	RZAG125M7Y1B			P		4	3	2	4	3	2			P	
RZAG140M7V1B	RZAG140M7Y1B	2			P	4	3		4	3		2			P
RZASG71M2V1B		P				2			2			P			
RZASG100M7V1B	RZASG100M7Y1B		P			3	2		3	2			P		
RZASG125M7V1B	RZASG125M7Y1B			P		4	3	2	4	3	2			P	
RZASG140M7V1B	RZASG140M7Y1B	2			P	4	3		4	3		2			P
AZAS71M2V1B															
AZAS100M7V1B	AZAS100M7Y1B														
AZAS125M7V1B	AZAS125M7Y1B														
AZAS140M7V1B	AZAS140M7Y1B														

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

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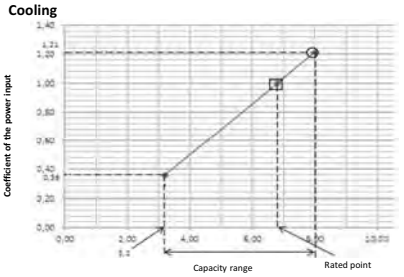
6 Capacity tables

6 - 1 Cooling/Heating Capacity Tables

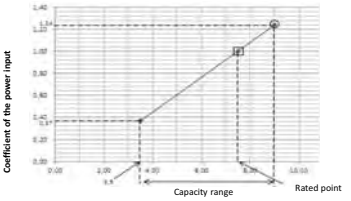
RZASG71MV1

Cooling



Cooling capacity [kW]

Heating



Heating capacity [kW]

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

Indoor		Outdoor temperature [°C DB]											
		25			30			35			40		
		TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
°CWB	°CDB	kW	kW	—	kW	kW	—	kW	kW	—	kW	kW	—
16.0	22	7.29	4.95	0.92	7.28	4.99	1.08	7.50	5.21	1.20	7.20	5.06	1.32
18.0	25	8.37	5.43	1.00	8.11	5.32	1.11	7.83	5.19	1.21	7.52	5.04	1.34
19.0	27	8.54	5.41	1.01	8.28	5.31	1.11	**8.00**	**5.18**	**1.21**	7.68	5.03	1.34
19.5	27	8.63	5.40	1.01	8.37	5.30	1.11	8.08	5.17	1.21	7.76	5.03	1.34
22.0	30	9.07	5.33	1.03	8.80	5.23	1.12	8.51	5.12	1.22	8.18	4.97	1.35
24.0	32	9.43	5.25	1.03	9.15	5.16	1.13	8.85	5.05	1.23	8.51	4.90	1.36

Heating

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

Notes
1. The ratings shown are net capacities which include a deduction for indoor fan motor heat.
2. ○ = Maximum at standard conditions
   □ = Rated capacity and rated coefficient of the power input
   The maximum capacity is not guaranteed except at standard conditions.
3. 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)
4. The capacities are based on the following conditions:
   Outdoor air: 85% RH
   However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.
   Corresponding refrigerant piping length: 5.0 m
   Level difference: 0m
5. CPI is a percentage value compared to the rated value which is 1.00.
6. The error rate for this value is less than 5% and depends on the indoor unit type.
7. The heating performance takes into account the drop that occurs during defrost operation.
8. The air flow rate and bypass factor are mentioned in the table.
9. The rated power input for each model is mentioned in the table below.

Pair

	FCAG71A	FAA71A	FVA71A	FHA71A	FUA71A	FBA71A
AFR	15.3	18.0	18.0	20.5	23.0	18.0
(BF)	(0.14)	(0.16)	(0.16)	(0.13)	(0.24)	(0.13)

Twin

	FCAG35A X 2	FHA35A X 2	FFA35A X 2	FDXM35F3 X 2	FBA35A X 2	FNA35A X 2
AFR	12.5 x 2	14.0 x 2	10.0 x 2	8,7 x 2	15.0 x 2	8,7 x 2
(BF)	(0.4 x 2)	(0.17 x 2)	(0.25 x 2)	(0.17 x 2)	(0.08 x 2)	(0.17 x 2)

Pair

	FCAG71A	FAA71A	FVA71A	FHA71A	FUA71A	FBA71A
Cooling	2,17	2,00	2,01	1,78	1,77	1,89
Heating	2,38	2,09	2,25	2,00	1,85	2,09

Twin

	FCAG35A 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	1,89	1,55	2,80	2,02	1,62	2,02

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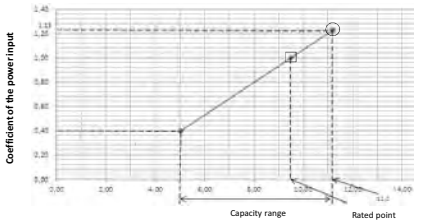
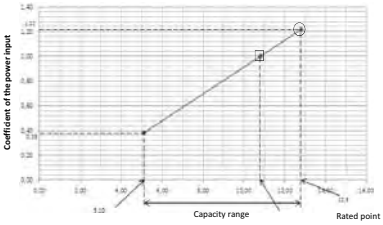
RZASG100MV1
RZASG100MY1

Cooling



Cooling capacity [kW]

Heating



Heating capacity [kW]

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

Indoor		Outdoor temperature [°C DB]											
		25			30			35			40		
		TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
°CWB	°CDB	kW	kW	—	kW	kW	—	kW	kW	—	kW	kW	—
16.0	22	11.2	7.61	1.05	10.8	7.44	1.11	10.5	7.29	1.22	10.1	7.09	1.32
18.0	25	11.8	7.59	1.06	11.4	7.49	1.12	11.0	7.27	1.23	10.5	7.09	1.33
19.0	27	12.0	7.57	1.06	11.6	7.44	1.12	**11.2**	**7.26**	**1.23**	10.8	7.04	1.33
19.5	27	12.1	7.59	1.06	11.7	7.37	1.13	11.4	7.34	1.23	10.9	7.04	1.34
22.0	30	12.8	7.52	1.02	12.4	7.36	1.13	11.9	7.16	1.24	11.5	7.00	1.35
24.0	32	13.3	7.42	1.03	12.9	7.27	1.14	12.4	7.06	1.25	12.0	6.91	1.36

Heating

Indoor	Outdoor temperature [°C WB]											
	-15.0		-10.0		-5.0		0.0		6.0		10.0	
	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
°CDB	kW	—	kW	—	kW	—	kW	—	kW	—	kW	—
16	8.58	0.93	9.45	0.99	10.1	1.02	10.4	1.05	12.8	1.12	13.8	1.18
18	8.57	0.97	9.44	1.02	10.0	1.07	10.3	1.10	12.8	1.17	13.8	1.23
20	8.56	1.01	9.43	1.07	10.0	1.11	10.3	1.14	**12.8**	**1.22**	13.8	1.28
21	8.56	1.03	9.42	1.09	10.0	1.13	10.3	1.16	12.8	1.24	13.8	1.30
22	8.55	1.04	9.42	1.10	10.0	1.14	10.3	1.18	12.8	1.26	13.8	1.33
24	8.54	1.09	9.41	1.15	10.0	1.19	10.3	1.23	12.8	1.31	13.8	1.38

Notes
1. The ratings shown are net capacities which include a deduction for indoor fan motor heat.
2. ○ = Maximum at standard conditions
   □ = Rated capacity and rated coefficient of the power input
   The maximum capacity is not guaranteed except at standard conditions.
3. 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)
4. The capacities are based on the following conditions:
   Outdoor air: 85% RH
   However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.
   Corresponding refrigerant piping length: 5.0 m
   Level difference: 0m
5. CPI is a percentage value compared to the rated value which is 1.00.
6. The error rate for this value is less than 5% and depends on the indoor unit type.
7. The heating performance takes into account the drop that occurs during defrost operation.
8. The air flow rate and bypass factor are mentioned in the table.
9. The rated power input for each model is mentioned in the table below.

Pair

	FCAG100A	FAA100A	FVA100A	FHA100A	FUA100A	FBA100A
AFR	22.8	26.0	28.0	28.0	31.0	29.0
(BF)	(0.17)	(0.10)	(0.20)	(0.09)	(0.20)	(0.03)

Twin

	FCAG50A X 2	FHA50A X 2	FFA50A X 2	FDXM50F3 X 2	FNA50A X 2
AFR	12.6 x 2	15.0 x 2	12.0 x 2	15.8 x 2	16.0 x 2
(BF)	(0.22 x 2)	(0.18 x 2)	(0.16 x 2)	(0.11 x 2)	(0.11 x 2)

Triple

	FCAG35A X 3	FHA35A X 3	FFA35A X 3	FDXM35F3 X 3	FNA35A X 3
AFR	12.5 x 3	14.0 x 3	10.0 x 3	8.7 x 3	8.7 x 3
(BF)	(0.4 x 3)	(0.17 x 3)	(0.25 x 3)	(0.17 x 3)	(0.17 x 3)

Pair

	FCAG100A	FAA100A	FVA100A	FHA100A	FUA100A	FBA100A
Cooling	2,92	3,52	2,97	2,97	2,97	2,97
Heating	3,45	3,98	3,47	3,43	3,20	3,32

Twin

	FCAG50A X 2	FHA50A X 2	FFA50A X 2	FDXM50F3 X 2	FNA50A X 2
Cooling	2,57	2,97	3,39	2,44	2,44
Heating	3,33	3,26	3,89	2,96	2,96

Triple

	FCAG35A X 3	FHA35A X 3	FFA35A X 3	FDXM35F3 X 3	FNA35A X 3
Cooling	2,32	2,16	2,71	2,57	2,57
Heating	2,73	2,66	3,87	3,13	3,13

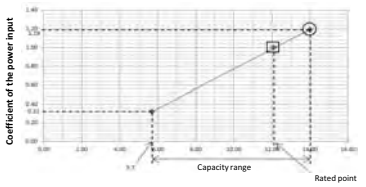
3D112145

6 Capacity tables

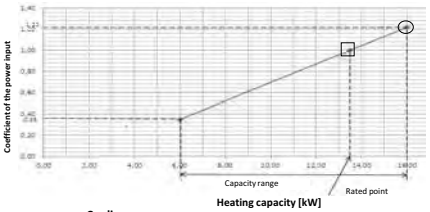
6 - 1 Cooling/Heating Capacity Tables

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]
compressor + indoor and outdoor fan motors

1. The ratings shown are net capacities which include a deduction for indoor fan motor heat.
2. ○ = Maximum at standard conditions
   □ = Rated capacity and rated coefficient of the power input
   The maximum capacity is not guaranteed except at standard conditions.
3. SHC is based on indoor units EWB & EDB.
   SHC for other dry-bulb temperatures = SHC + SHC*
   Not SHC = SHC correction for other dry-bulb temperatures
   = 0.02 x AFR (m³/min) x (1-BF) x (DB* - EDB)
4. The capacities are based on the following conditions:
   Outdoor air: 85% RH
   However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.
   Corresponding refrigerant piping length: 5.0 m
   Level difference: 0m
5. CPI is a percentage value compared to the rated value which is 1.00.
6. The error rate for this value is less than 5% and depends on the indoor unit type.
7. The heating performance takes into account the drop that occurs during defrost operation.
8. The air flow rate and bypass factor are mentioned in the table.
9. The rated power input for each model is mentioned in the table below.

Cooling

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

Heating

Indoor		Outdoor temperature [°C WB] −15.0		−10.0		−5.0		0.0		6.0		10.0	
		TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
°CDB		kW	—	kW	—	kW	—	kW	—	kW	—	kW	—
16		10.7	0.93	11.8	0.99	12.6	1.02	13.0	1.05	16.0	1.12	17.3	1.18
18		10.7	0.97	11.8	1.02	12.5	1.07	12.9	1.10	16.0	1.17	17.3	1.23
20		10.7	1.01	11.8	1.07	12.5	1.11	12.9	1.14	**16.0**	**1.22**	17.3	1.28
21		10.7	1.03	11.8	1.09	12.5	1.13	12.9	1.16	16.0	1.24	17.3	1.31
22		10.7	1.04	11.8	1.10	12.5	1.14	12.9	1.18	16.0	1.27	17.3	1.33
24		10.7	1.09	11.8	1.15	12.5	1.19	12.9	1.23	16.0	1.31	17.3	1.38

Pair

	FCAG125A	FDA125A	FVA125A	FHA125A	FUA125A	FBA125A
AFR	26.0	39.0	28.0	31.0	32.5	34.0
(BF)	(0.21)	(0.16)	(0.16)	(0.14)	(0.19)	(0.06)

Twin

	FCAG60A X 2	FHA60A X 2	FFA60AX 2	FDXM60F3 X 2	FBA60A X 2	FNA60A X 2
AFR	13.6 x 2	19.5 x 2	14.5 x 2	16.0 x 2	18.0 x 2	16.0 x 2
(BF)	(0.2 x 2)	(0.20 x 2)	(0.11 x 2)	(0.12 x 2)	(0.18 x 2)	(0.12 x 2)

Triple

	FCAG50A 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

	FCAG35A X 4	FHA35A X 4	FFA35A X 4	FDXM35F3 X 4	FBA35A X 4	FNA35AX 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)	(0.17 x 4)	(0.25 x 4)	(0.17 x 4)	(0.08 x 4)	(0.17 x 4)

Pair

	FCAG125A	FDA125A	FVA125A	FHA125A	FUA125A	FBA125A
Cooling	4,95	4,73	5,11	4,79	5,37	4,84
Heating	3,44	3,18	3,60	3,35	3,24	3,23

Twin

	FCAG60A X 2	FHA60A X 2	FFA60AX 2	FDXM60F3 X 2	FBA60A X 2	FNA60A X 2
Cooling	4,15	6,21	6,01	3,87	4,28	3,87
Heating	3,29	3,23	3,39	3,29	3,15	3,29

Triple

	FCAG50A 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	2,94	2,94	3,18	2,92	3,08	2,92

Double twin

	FCAG35A X 4	FHA35A X 4	FFA35A X 4	FDXM35F3 X 4	FBA35A X 4	FNA35AX 4
Cooling	3,34	2,89	4,00	3,80	3,83	3,80
Heating	2,63	2,75	3,33	3,20	2,80	3,20

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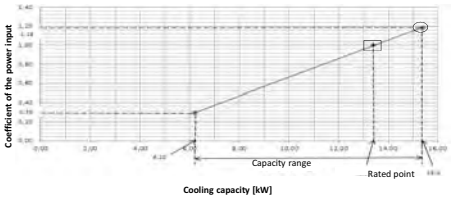
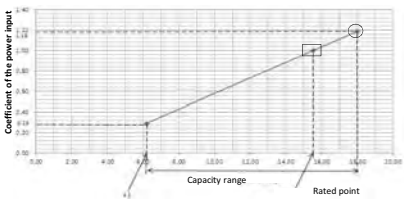
RZASG140MV1
RZASG140MY1

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]
compressor + indoor and outdoor fan motors

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

Cooling

Indoor		Outdoor temperature [°C DB] 25			30			35			40		
		TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
°CWB	°CDB	kW	kW	—	kW	kW	—	kW	kW	—	kW	kW	—
16.0	22	15.5	10.47	0.98	14.9	10.25	1.08	14.4	10.03	1.18	13.9	9.69	1.28
18.0	25	16.2	10.55	0.98	15.6	10.21	1.09	15.1	10.01	1.19	14.5	9.71	1.30
19.0	27	16.6	10.43	0.99	16.0	10.18	1.09	**15.4**	**9.98**	**1.19**	14.8	9.76	1.30
19.5	27	16.7	10.49	0.99	16.1	10.16	1.10	15.6	10.00	1.19	15.0	9.66	1.30
22.0	30	17.6	10.37	0.99	17.0	10.16	1.10	16.4	9.83	1.21	15.8	9.60	1.31
24.0	32	18.4	10.20	1.00	17.7	10.00	1.11	17.0	9.67	1.22	16.4	9.47	1.32

Heating

Indoor		Outdoor temperature [°C WB] −15.0		−10.0		−5.0		0.0		6.0		10.0	
		TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
°CDB		kW	—	kW	—	kW	—	kW	—	kW	—	kW	—
16		11.6	0.91	12.7	0.97	13.6	1.00	13.9	1.03	18.0	1.09	19.4	1.16
18		11.6	0.95	12.7	1.00	13.6	1.04	13.9	1.07	18.0	1.14	19.4	1.21
20		11.6	0.99	12.7	1.05	13.5	1.09	13.9	1.11	**18.0**	**1.19**	19.4	1.25
21		11.5	1.00	12.7	1.06	13.5	1.11	13.9	1.13	18.0	1.21	19.4	1.28
22		11.5	1.02	12.7	1.09	13.5	1.12	13.9	1.16	18.0	1.24	19.4	1.30
24		11.5	1.07	12.6	1.12	13.5	1.17	13.9	1.20	18.0	1.29	19.4	1.35

Pair

	FCAG140A	FVA140A	FHA140A	FBA140A
AFR	26.0	30.0	34.0	34.0
(BF)	(0.23)	(0.18)	(0.17)	(0.06)

Twin

	FCAG71A 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 x2)	(0.13 x2)	(0.16 x2)

Triple

	FCAG50A 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

	FCAG35A 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

	FCAG140A	FVA140A	FHA140A	FBA140A
Cooling	4,88	5,12	4,84	4,76
Heating	5,01	5,43	5,59	5,13

Twin

	FCAG71A 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	4,72	4,85	4,58	4,22	5,01	5,21

Triple

	FCAG50A 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	4,34	4,21	5,15	4,12	4,43	4,12

Double twin

	FCAG35A 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	3,97	3,58	5,62	4,93	4,03	4,93

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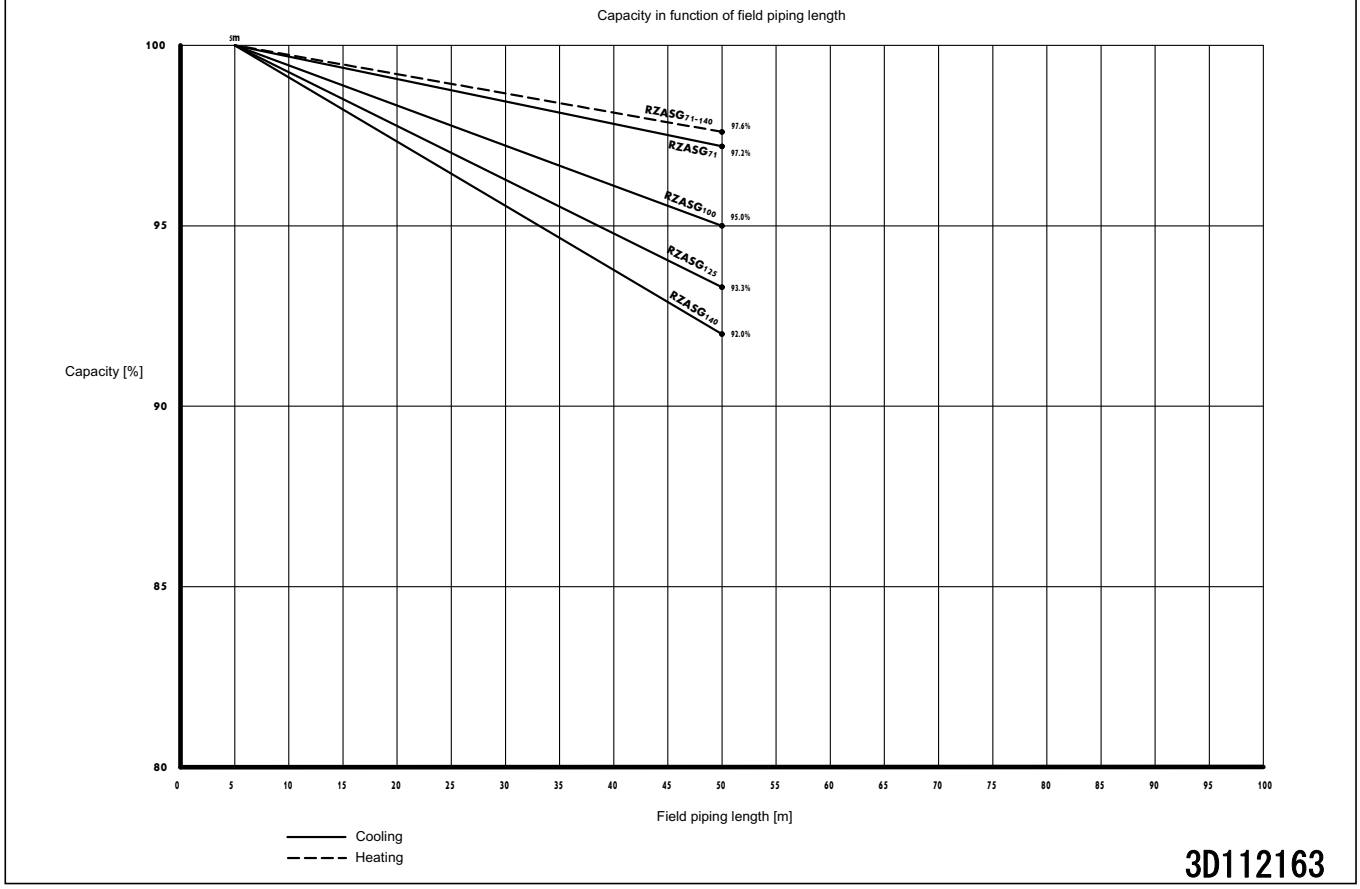
6 Capacity tables

6 - 2 Capacity Correction Factor

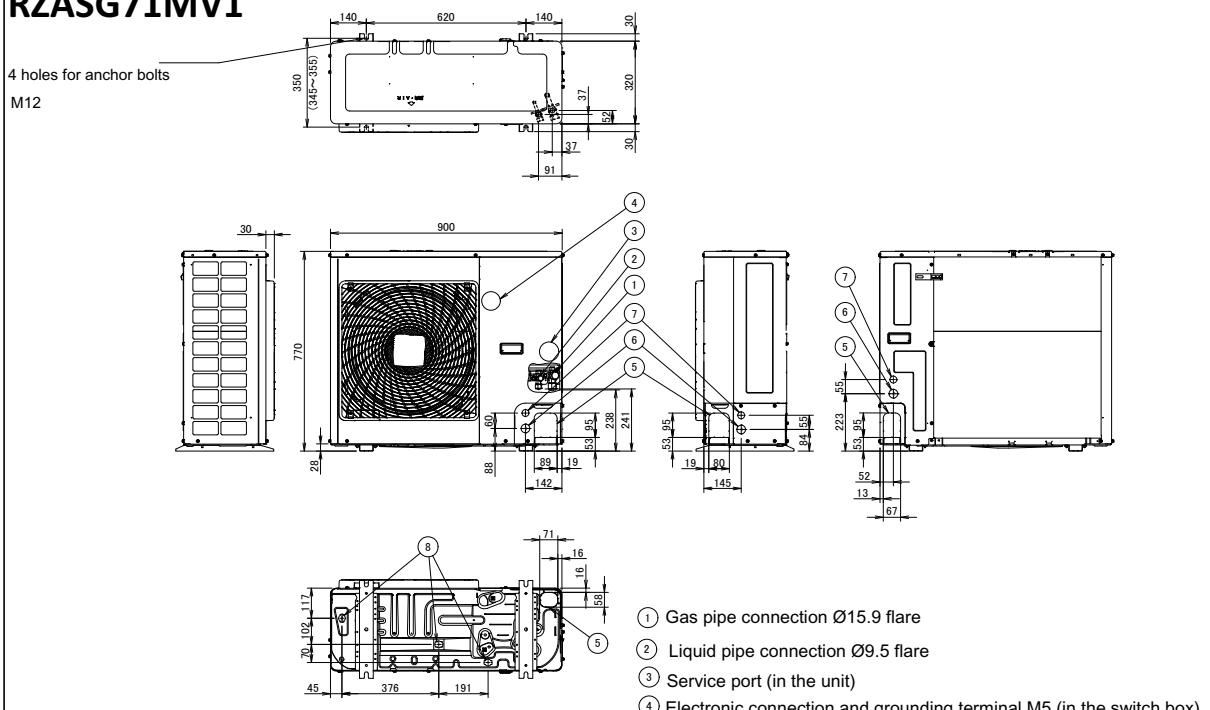
RZASG-MV1
RZASG-MY1



7 Dimensional drawings

7 - 1 Dimensional Drawings

AZAS71MV1
RZASG71MV1



1. Gas pipe connection Ø15.9 flare
2. Liquid pipe connection Ø9.5 flare
3. Service port (in the unit)
4. Electronic connection and grounding terminal M5 (in the switch box)
5. Refrigerant piping intake
6. Power supply wiring intake (knockout hole Ø34)
7. Control wiring intake (knockout hole Ø27)
8. Drain outlet

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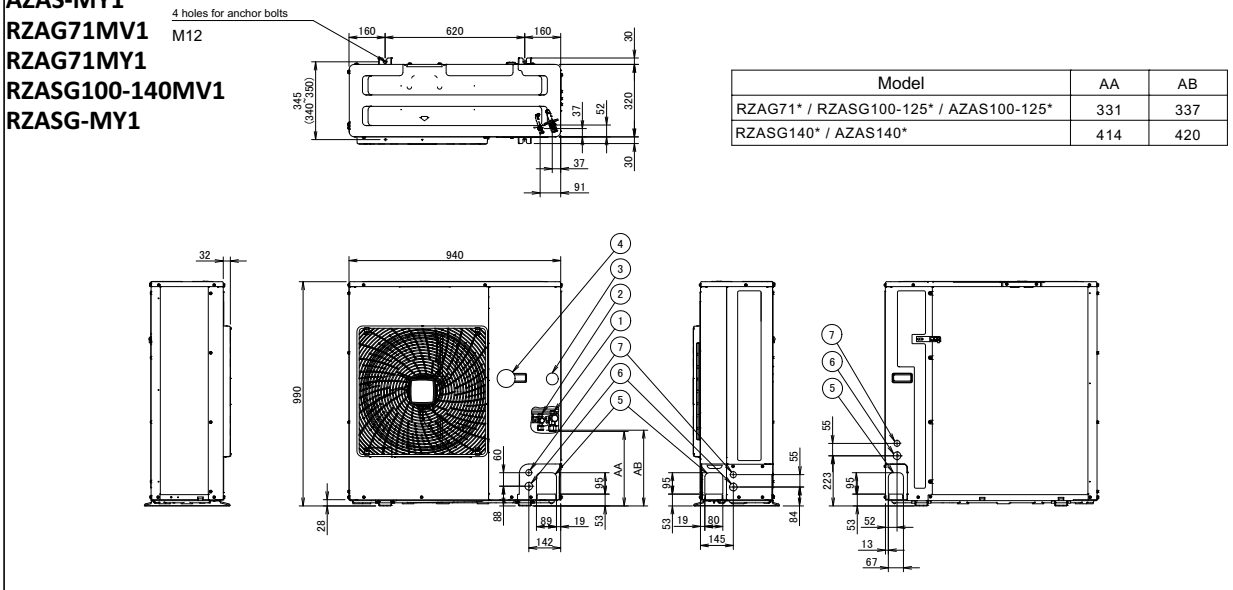
AZAS100-140MV1
AZAS-MY1
RZAG71MV1
RZAG71MY1
RZASG100-140MV1
RZASG-MY1



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

1. Gas pipe connection Ø15.9 flare
2. Liquid pipe connection Ø9.5 flare
3. Service port (in the unit)
4. Electronic connection and grounding terminal M5 (in the switch box)
5. Refrigerant piping intake
6. Power supply wiring intake (knockout hole Ø34)
7. Control wiring intake (knockout hole Ø27)
8. Drain outlet

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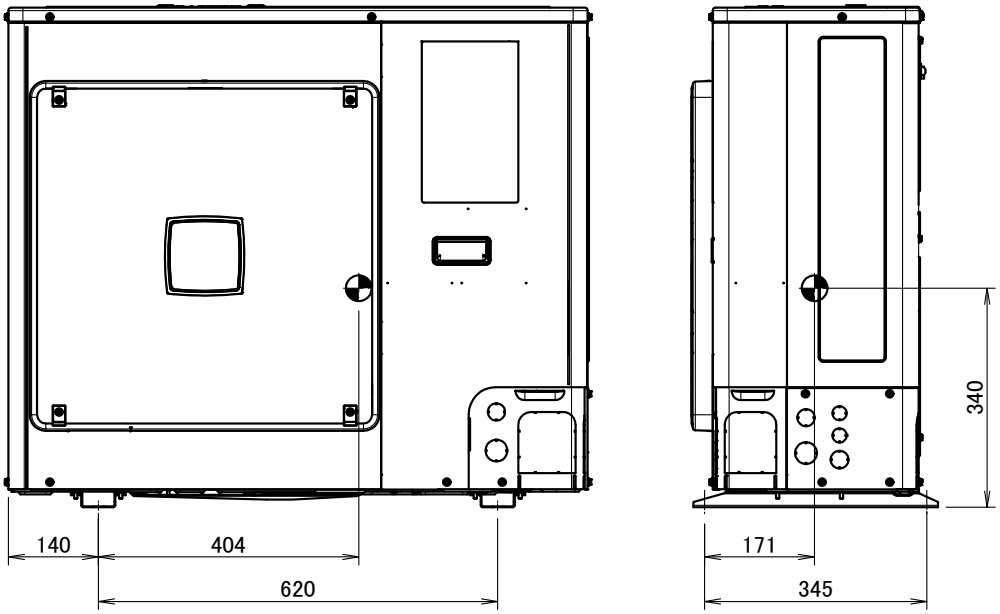
8 Centre of gravity

8 - 1 Centre of Gravity

AZAS71MV1
RZASG71MV1



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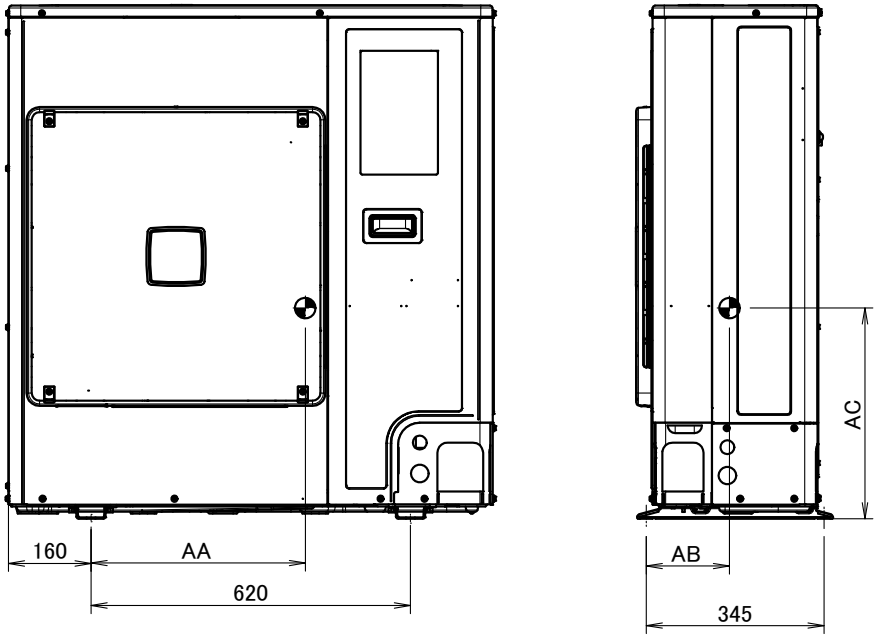
8 Centre of gravity

8 - 1 Centre of Gravity

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



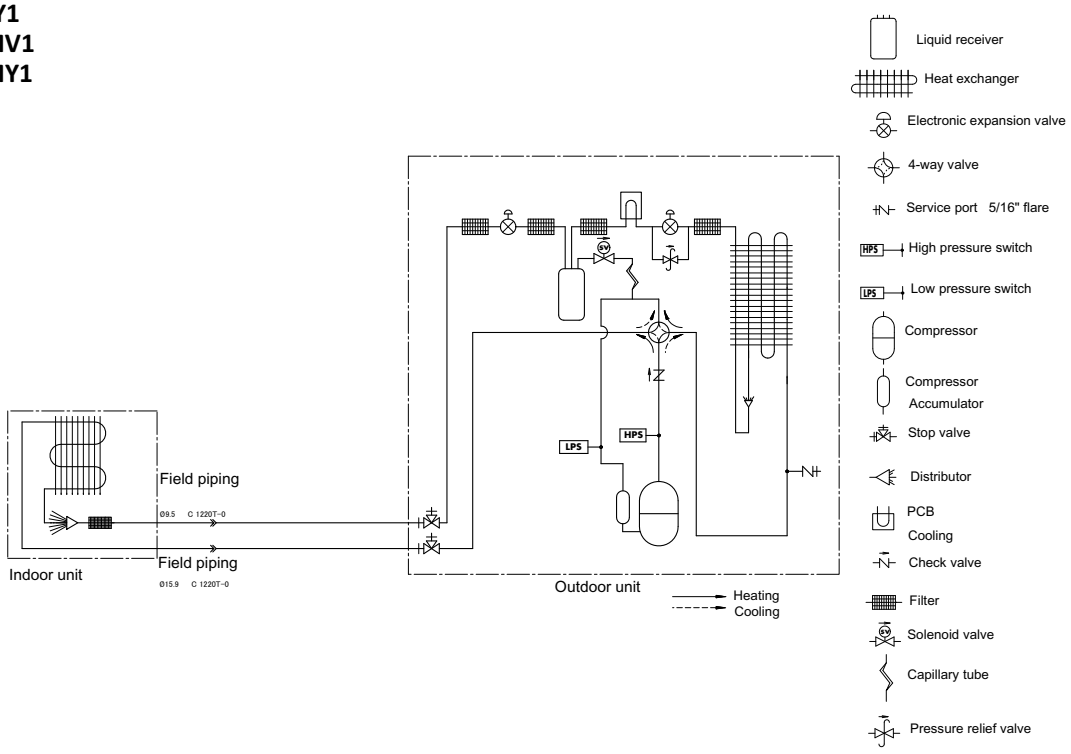
Model	AA	AB	AC
RZAG71M7V*	414	163	407
RZAG71M7Y*	432	137	407
RZASG100-125M7V* / AZAS100-125M7V*	425	181	422
RZASG100-125M7Y* / AZAS100-125M7Y*	414	156	417
RZASG140M7V* / AZAS140M7V*	414	161	423
RZASG140M7Y* / AZAS140M7Y*	416	151	418

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.

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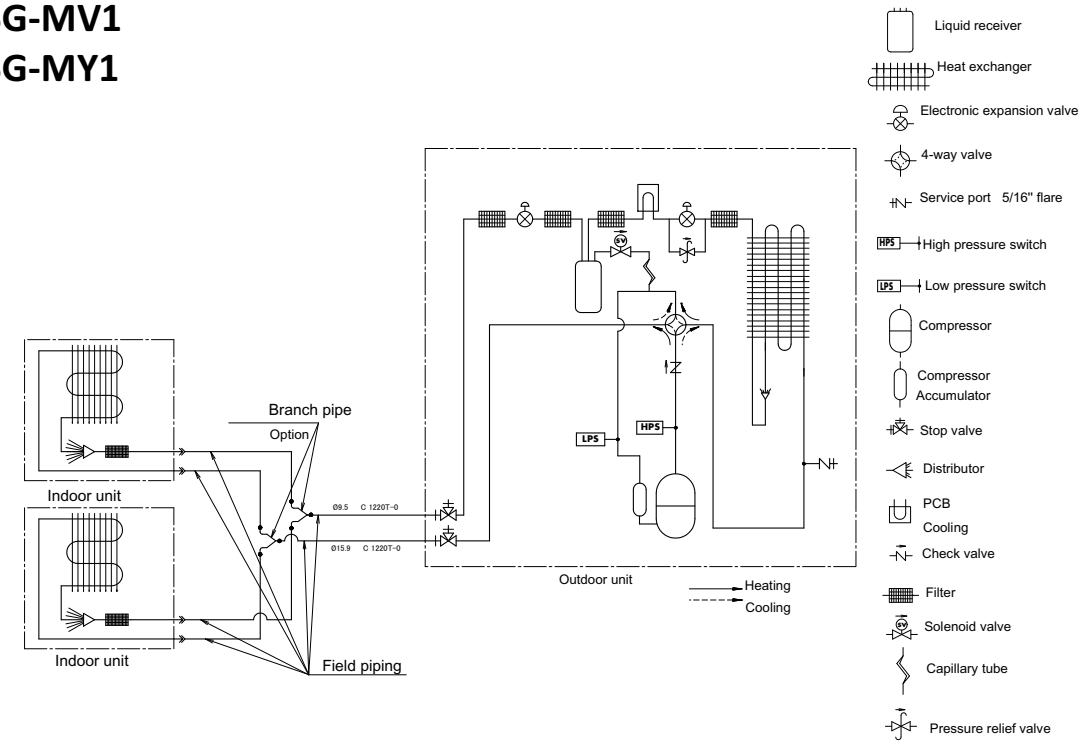
9 Piping diagrams

9 - 2 Piping Diagram Twin Application

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.

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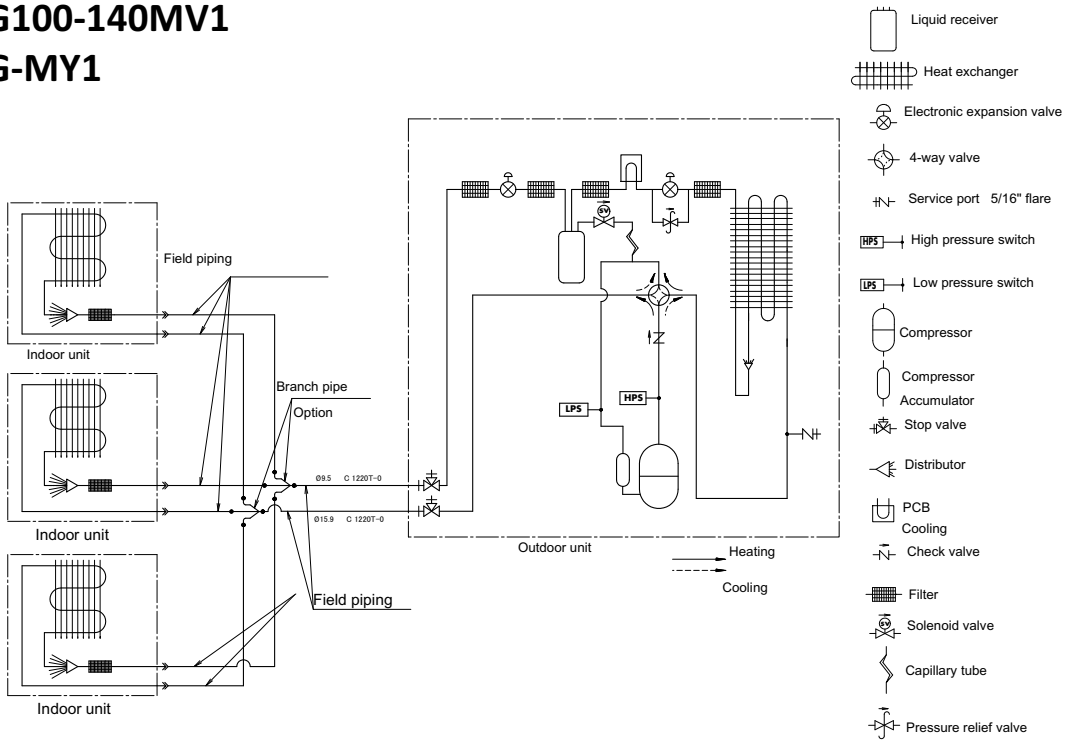
9 Piping diagrams

9 - 3 Piping Diagram Triple Application

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



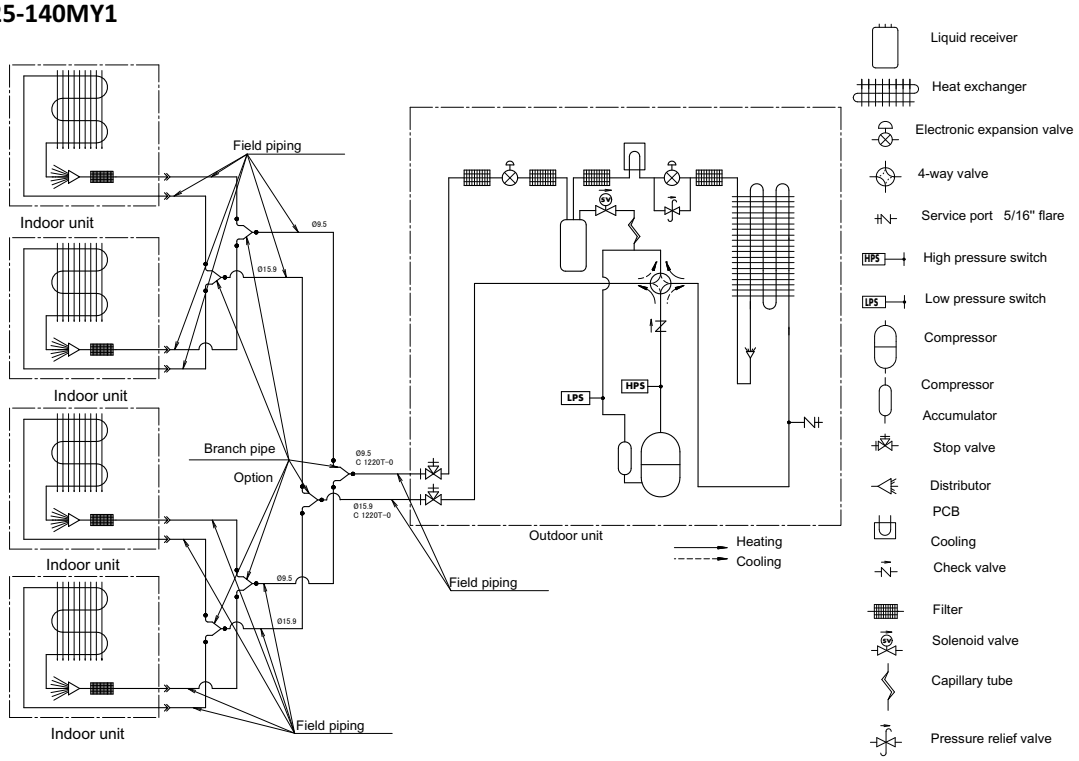
Notes
1. The pipes between the branch and the indoor units should have the same size as the indoor connections.

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.

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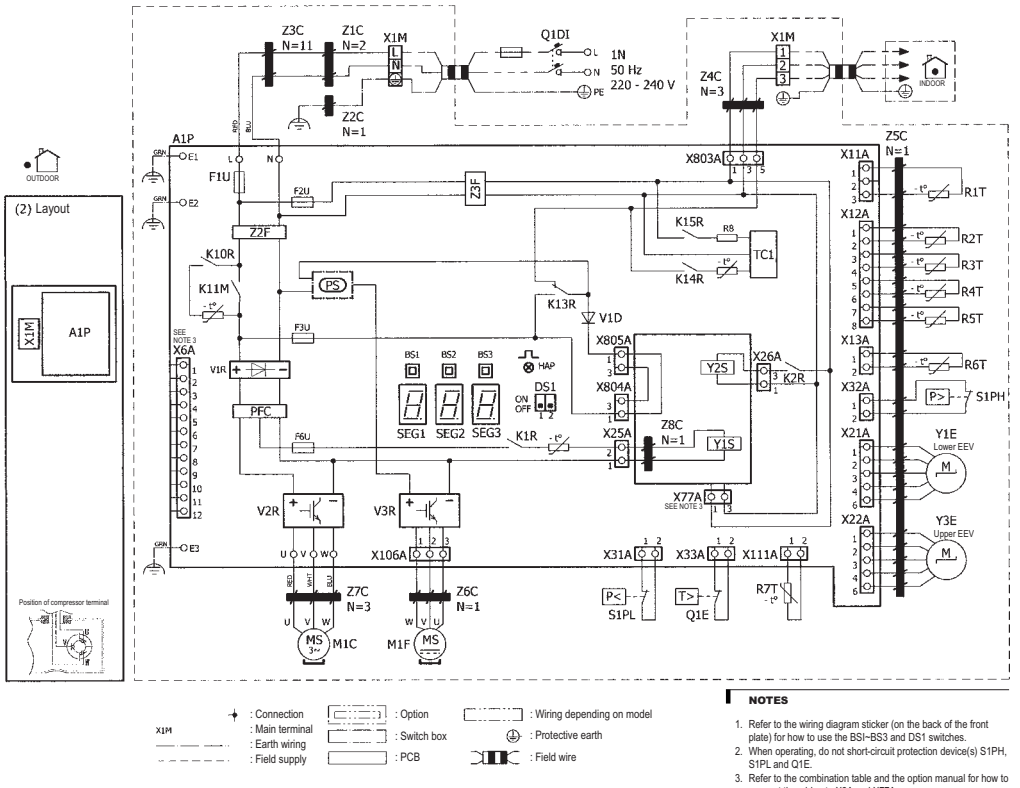
10 Wiring diagrams

10 - 1 Wiring Diagrams - Single Phase

AZAS71MV1, RZASG71MV1



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

NOTES

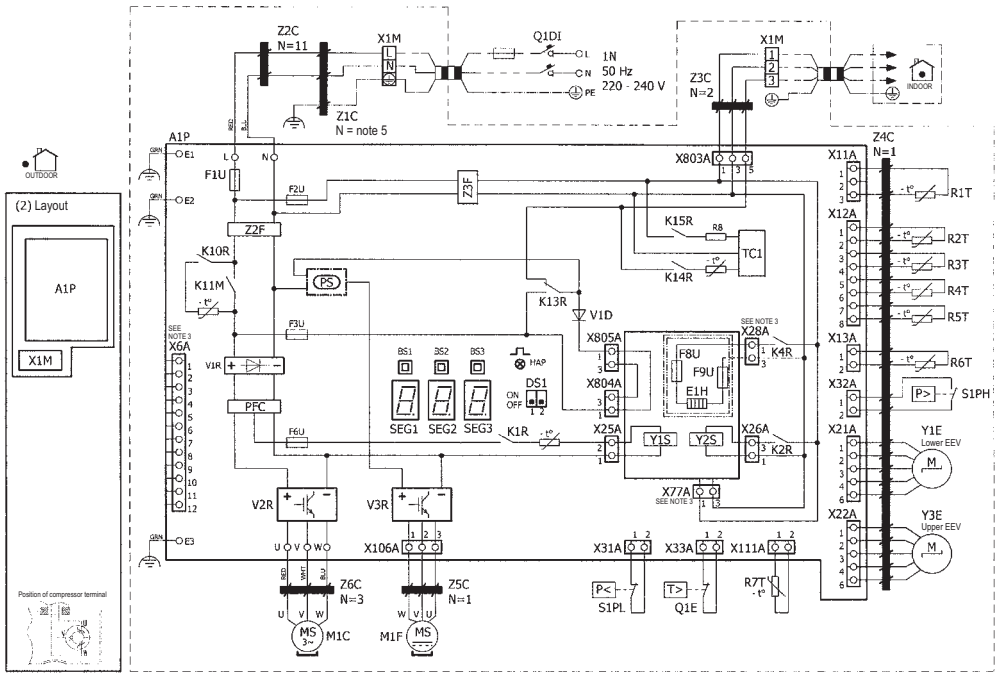
1. Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BSI~BS3 and DS1 switches.
2. When operating, do not short-circuit protection device(s) S1PH, S1PL and Q1E.
3. Refer to the combination table and the option manual for how to connect the wiring to X6A and X77A.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

LEGEND # : Field supply * Optional

Part n°		Description
A1P		Printed circuit board (main)
BS1~3 (A1P)		Push-button switch
DS1 (A1P)		Dipswitch
E1~3 (AAP)		Connector
F1U (A1P)		Fuse T 31,5 A 250 V
F2U (A1P)		Fuse T 6,3 A 250 V
F3U (A1P)		Fuse T 6,3 A 250 V
F6U (A1P)		Fuse T 5 A 250 V
HAP (A1P)		Light-emitting diode (service monitor is green)
K1R (A1P)		Magnetic relay (Y1S)
K2R (A1P)		Magnetic relay (Y2S)
K13R~K15R, K10R (A1P)		Magnetic relay
K11M (A1P)		Magnetic contactor
L (A1P)		Connector
M1C		Compressor motor
M1F		Fan motor
N (A1P)		Connector
PFC (A1P)		Power factor correction
PS (A1P)		Switching power supply
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
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

4D110098

RZAG71MV1, RZASG100MV1, AZAS100MV1



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

NOTES

1. Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BSI~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

LEGEND # : Field supply * Optional

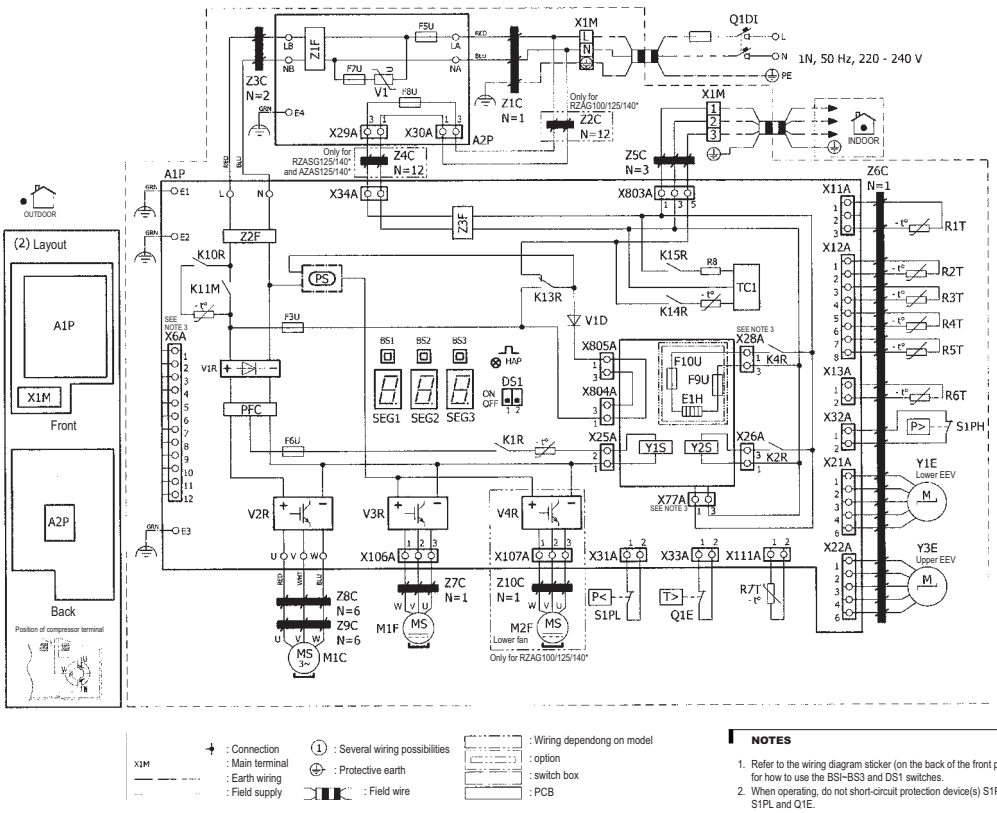
Part n°		Description
A1P		Printed circuit board (main)
BS1~3 (A1P)		Push-button switch
DS1 (A1P)		Dipswitch
E1~3 (AAP)		Connector
E1H	*	Bottom plate heater
F1U (A1P)		Fuse T 31,5 A 250 V
F2U (A1P)		Fuse T 6,3 A 250 V
F3U (A1P)		Fuse T 6,3 A 250 V
F6U (A1P)		Fuse T 5 A 250 V
F8~9U	*	Fuse F 1 A 250 V
HAP (A1P)		Light-emitting diode (service monitor is green)
K1R (A1P)		Magnetic relay (Y1S)
K2R (A1P)		Magnetic relay (Y2S)
K4R (A1P)		Magnetic relay (E1H)
K13R~K15R, K10R (A1P)		Magnetic relay
K11M (A1P)		Magnetic contactor
L (A1P)		Connector
M1C		Compressor motor
M1F		Fan motor
N (A1P)		Connector
PFC (A1P)		Power factor correction
PS (A1P)		Switching power supply
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
V1D (A1P)		Diode
V*R (A1P)		Diode module
X1M		Terminal strip
Y1E, Y3E		Electronic expansion valve
Y1~2S		Solenoid valve (4-way valve)
Z*C		Noise filter (ferrite core)
Z*F (A1P)		Noise filter

4D109936

10 Wiring diagrams

10 - 1 Wiring Diagrams - Single Phase

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



LEGEND

: Field supply
* Optional

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 250 V
F6U (A1P)		Fuse T 5 A 250 V
F7U (A2P)		Fuse T 6,3 A 250 V
F8U (A2P)		Fuse F 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
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

NOTES

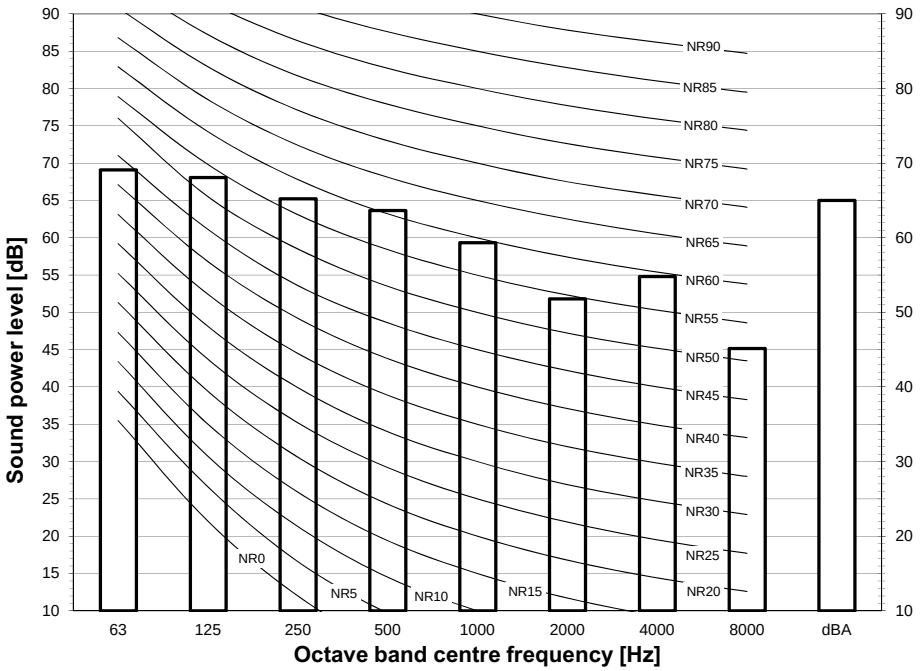
1. Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BSI~BS3 and DS1 switches.
2. When operating, do not short-circuit protection device(s) S1PH, S1PL and Q1E.
3. Refer to the combination table and the option manual for how to connect the wiring to X6A, X28A and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

4D109863

11 Sound data

11 - 1 Sound Power Spectrum

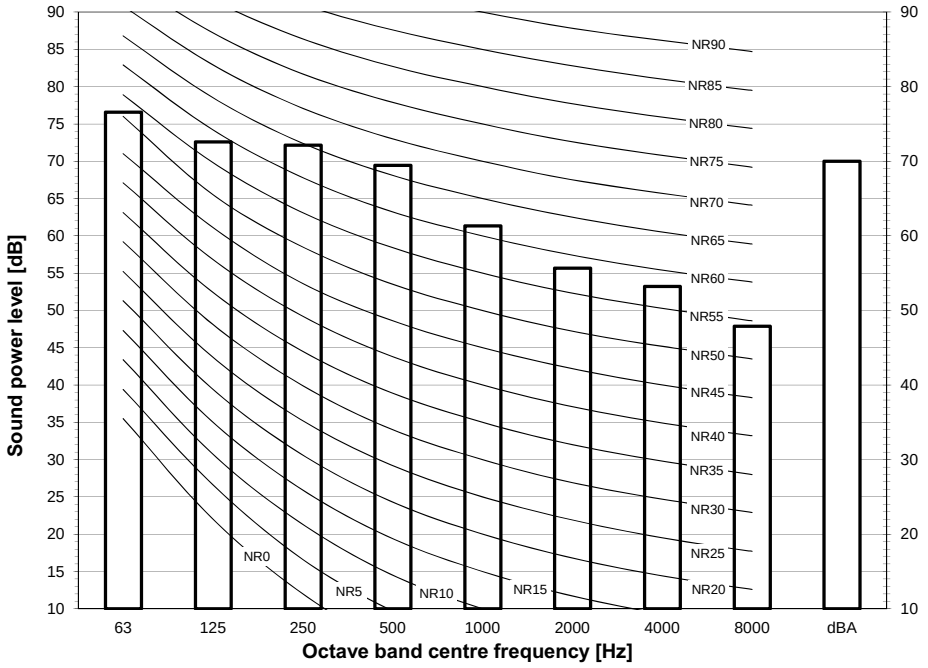
AZAS71MV1
RZASG71MV1



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

3D110037

AZAS100MV1
AZAS100MY1
RZASG100MV1
RZASG100MY1



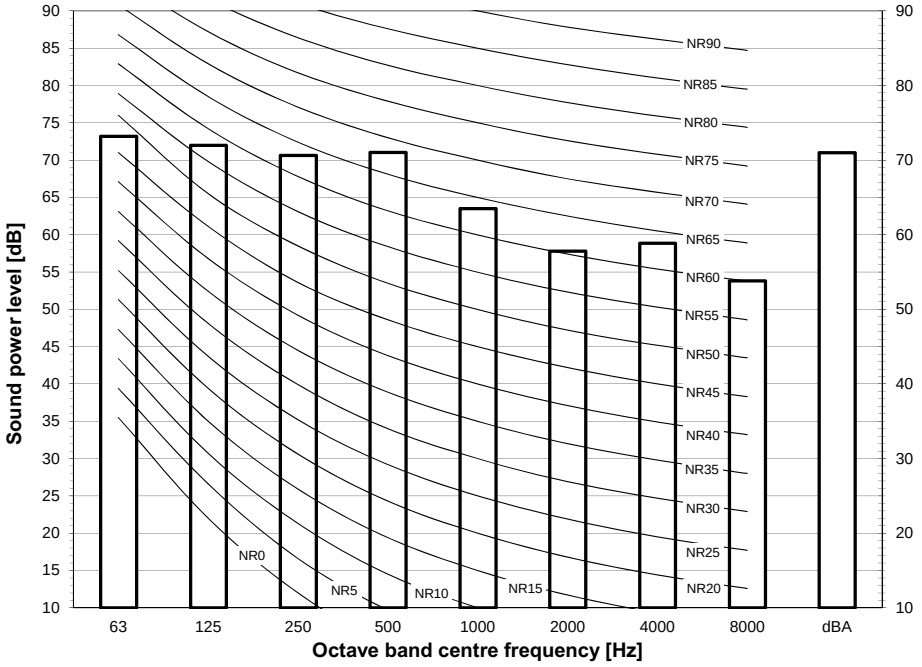
Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10E-6µW/m²
- Measured according to ISO 3744

3D110038

11 Sound data

11 - 1 Sound Power Spectrum

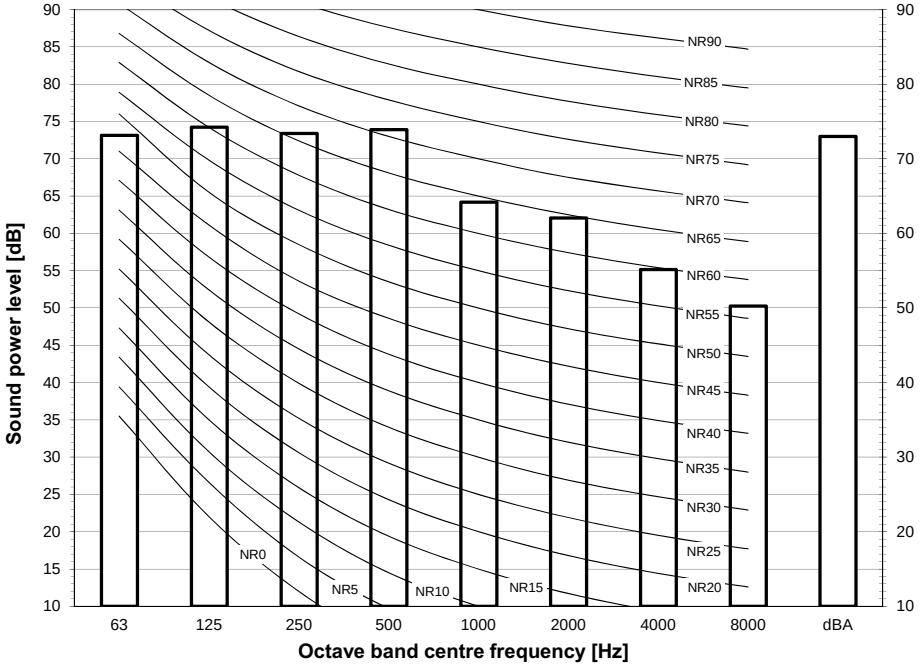
AZAS125MV1
AZAS125MY1
RZASG125MV1
RZASG125MY1



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



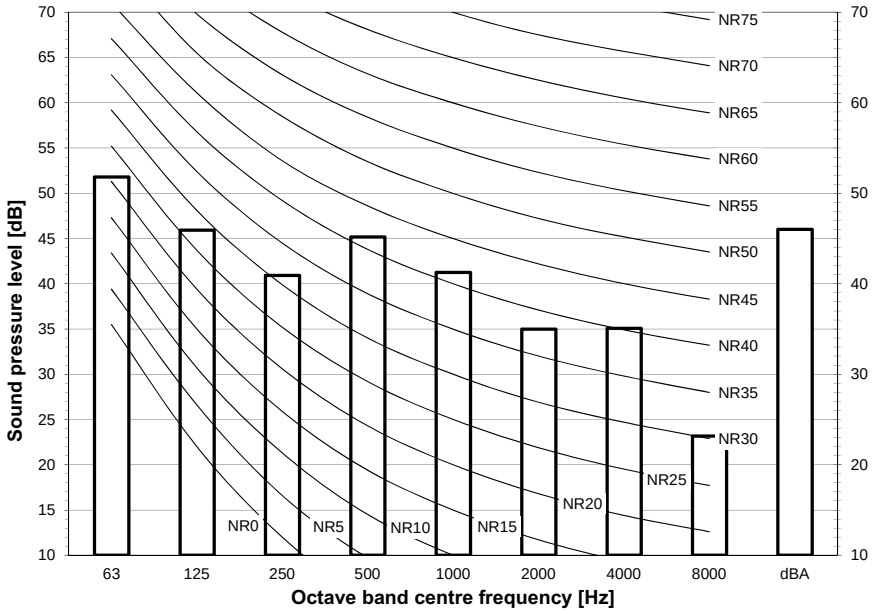
Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10E-6µW/m²
- Measured according to ISO 3744

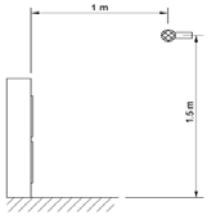
3D110040

11 Sound data

11 - 2 Sound Pressure Spectrum - Cooling

AZAS71MV1
RZASG71MV1



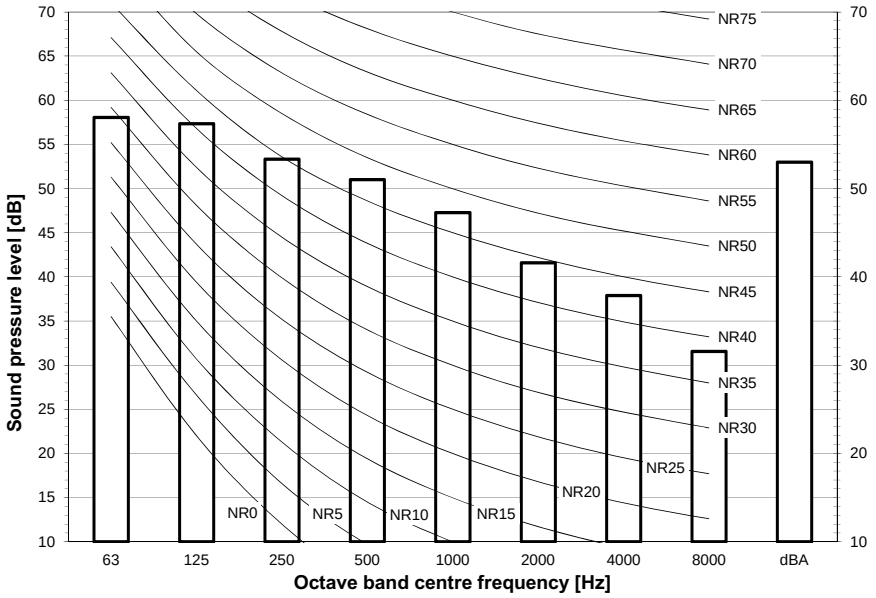


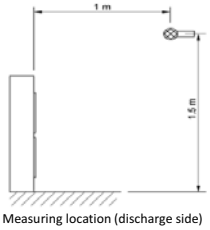
Measuring location (discharge side)

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





Measuring location (discharge side)

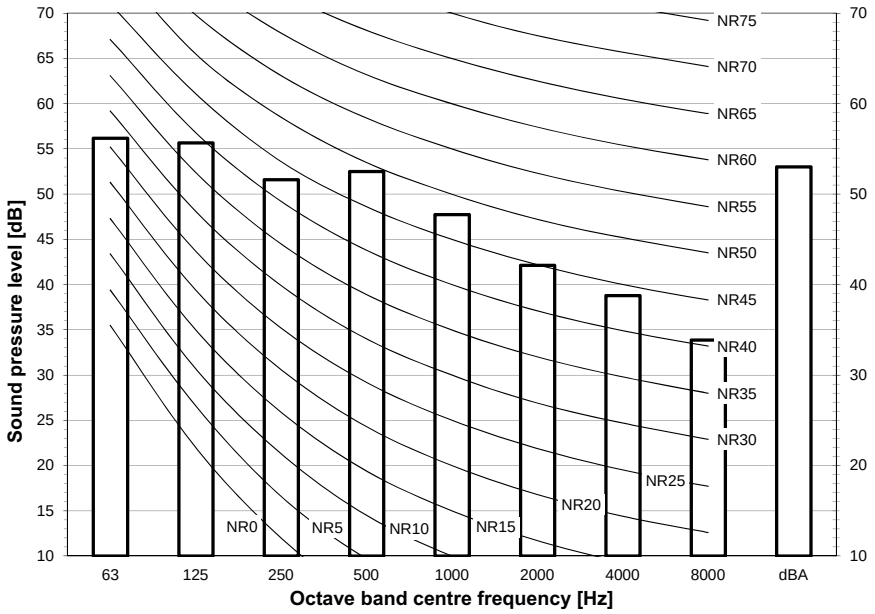
Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

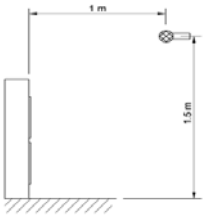
3D110050

11 Sound data

11 - 2 Sound Pressure Spectrum - Cooling

AZAS125MV1
AZAS125MY1
RZASG125MV1
RZASG125MY1



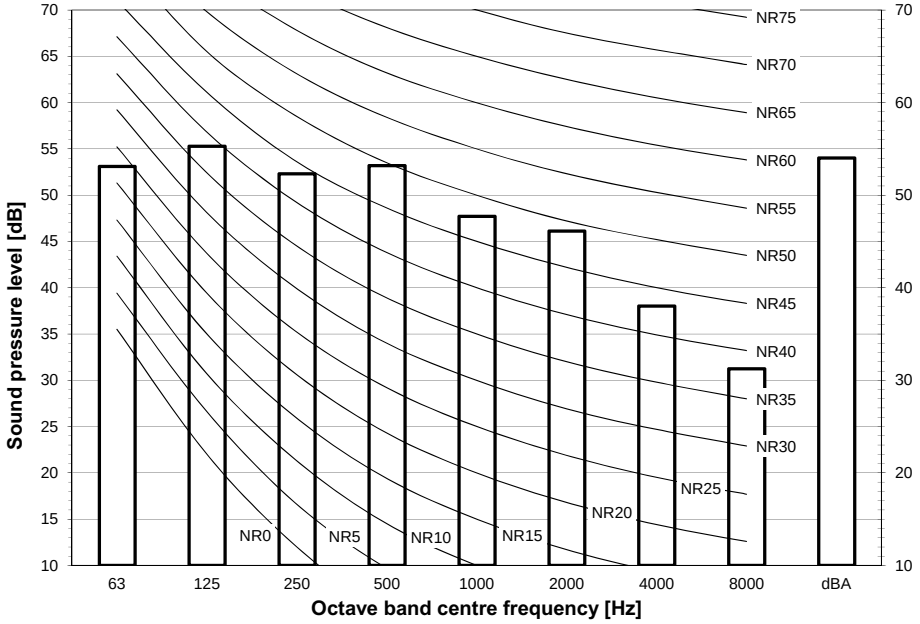


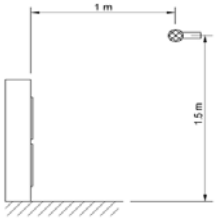
Measuring location (discharge side)

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





Measuring location (discharge side)

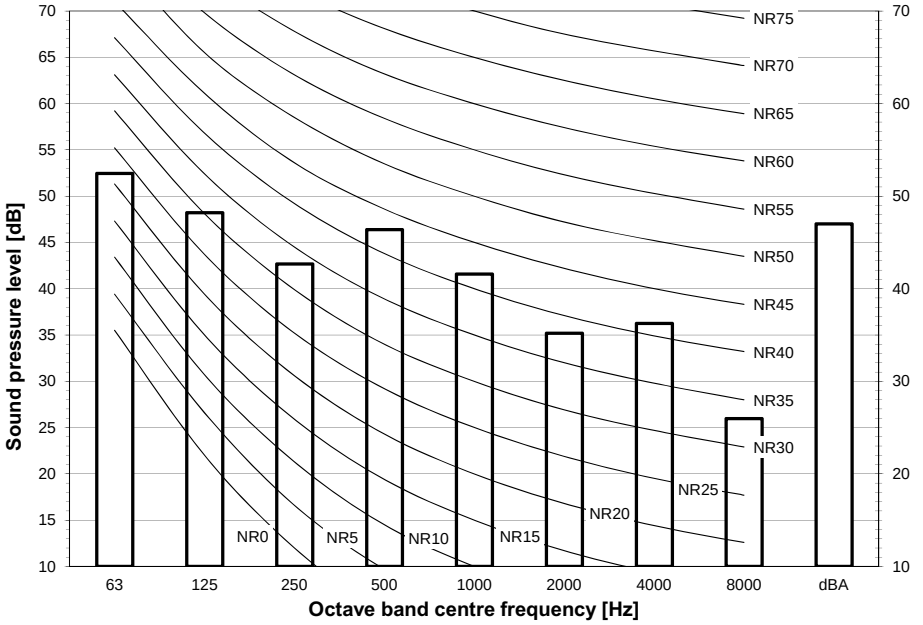
Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

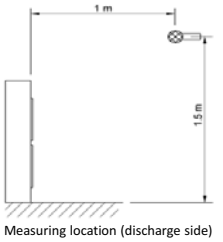
3D111310

11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

AZAS71MV1
RZASG71MV1



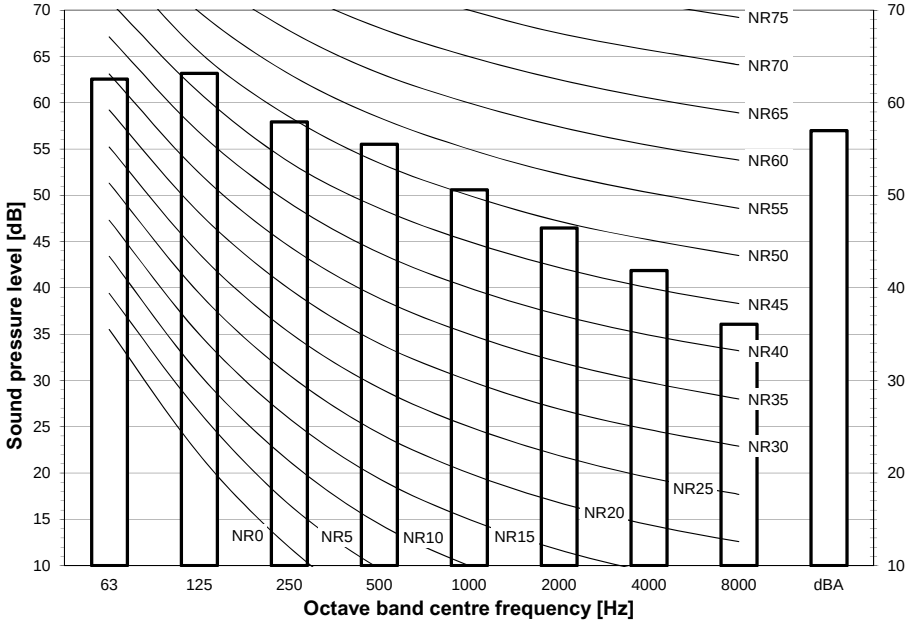


Measuring location (discharge side)

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



Measuring location (discharge side)

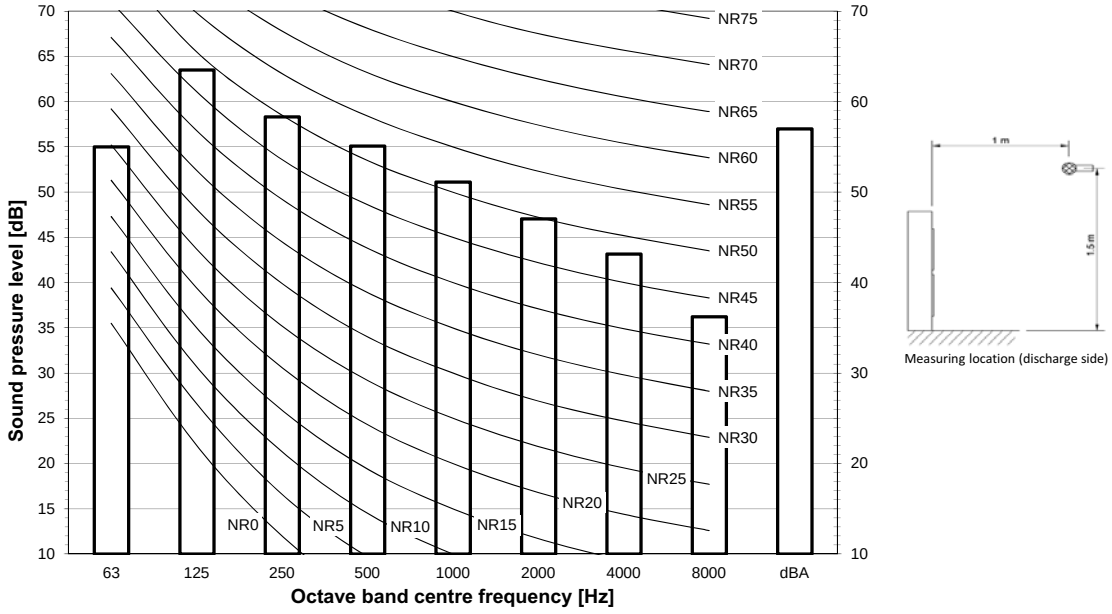
Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

3D111294

11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

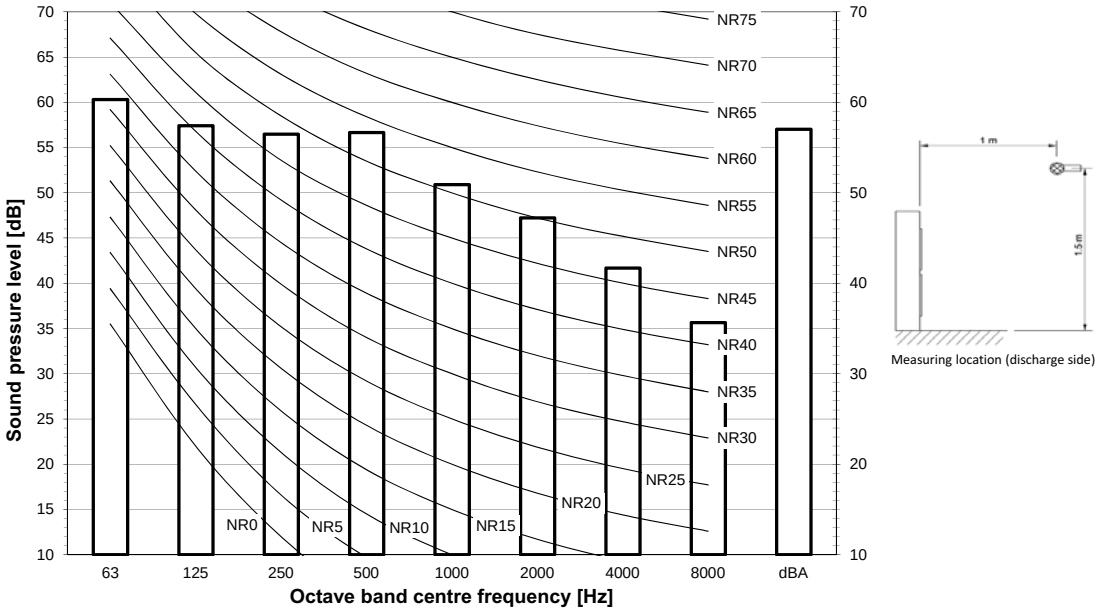
AZAS125MV1
AZAS125MY1
RZASG125MV1
RZASG125MY1



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



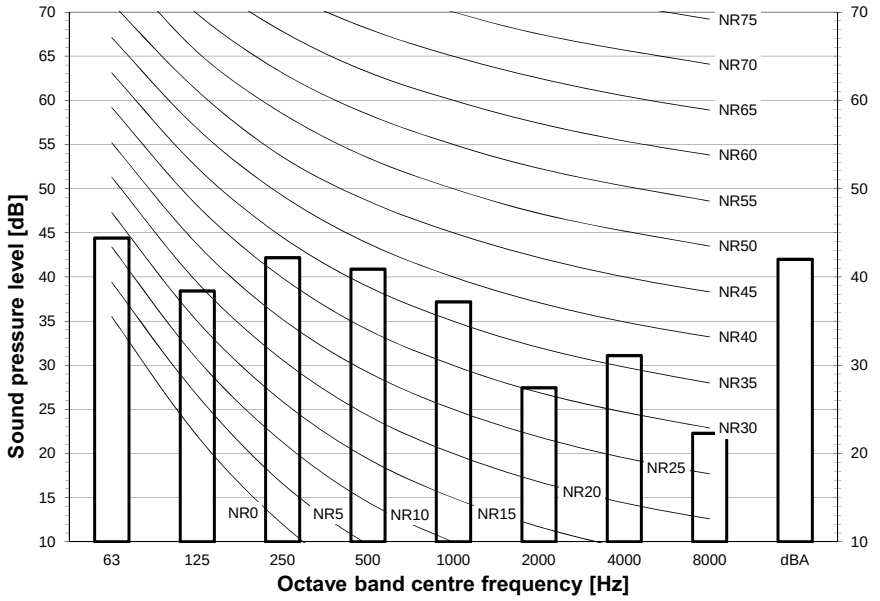
Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

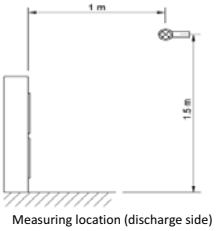
3D111296

11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode

AZAS71MV1
RZASG71MV1



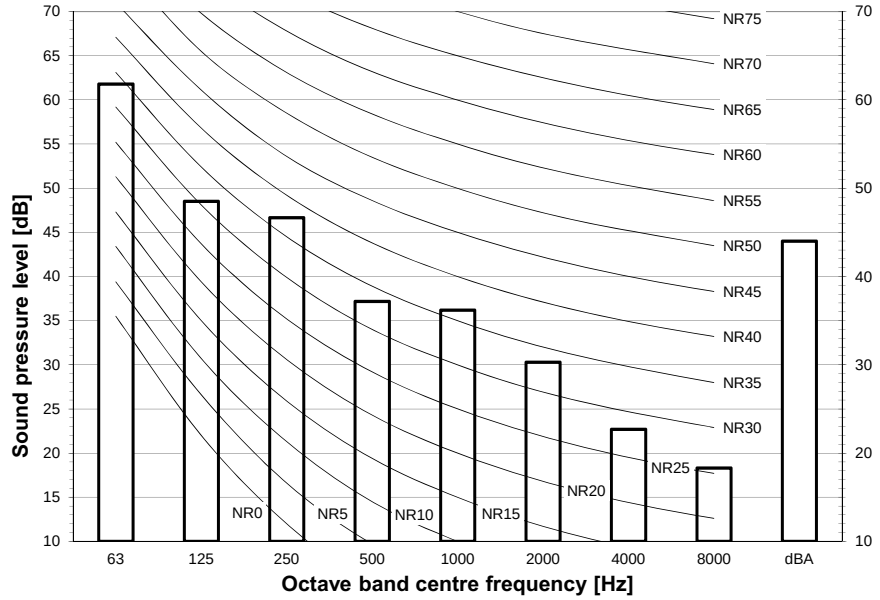


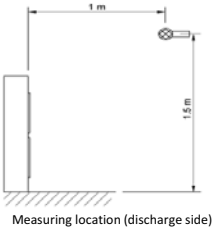
Measuring location (discharge side)

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

3D111315

AZAS100MV1
AZAS100MY1
RZASG100MV1
RZASG100MY1





Measuring location (discharge side)

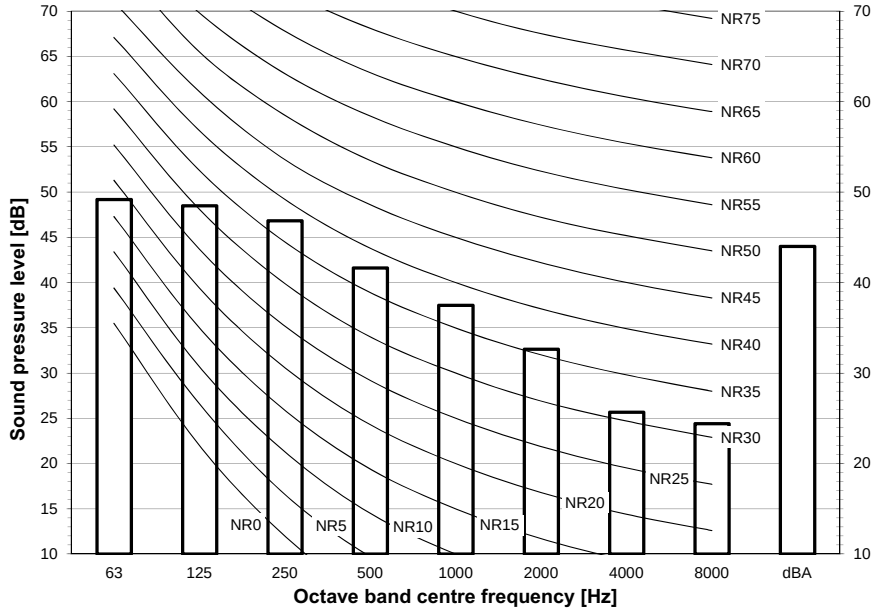
Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

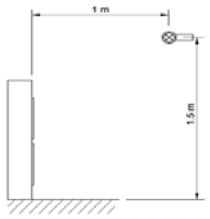
3D111316

11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode

AZAS125MV1
AZAS125MY1
RZASG125MV1
RZASG125MY1



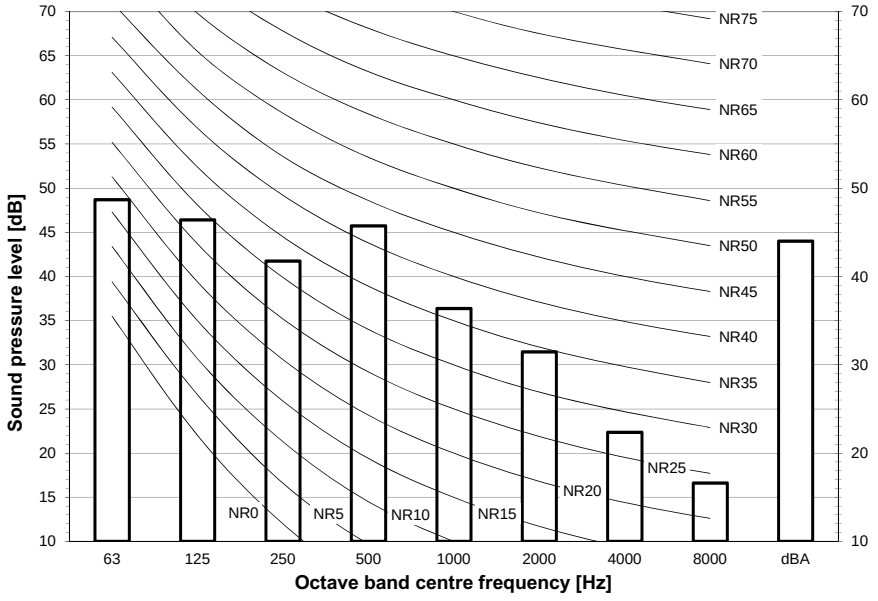


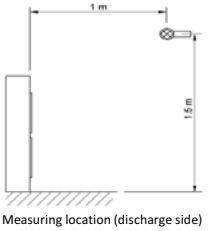
Measuring location (discharge side)

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





Measuring location (discharge side)

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

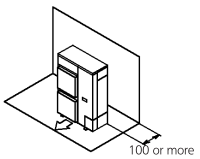
Installation service space

The measure of these values is "mm".

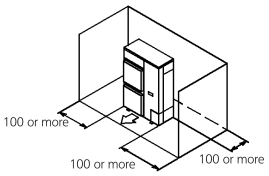
(A) When there are obstacles on suction sides.

● **No obstacle above**

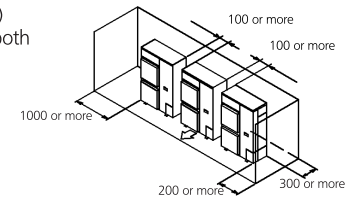
① Stand-alone installation
- Obstacle on the suction side only



- Obstacle on both sides and suction side, too

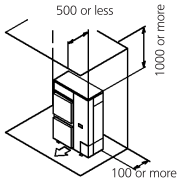


② Series installation (2 or more) (Note 1)
- Obstacle on the suction side and both sides

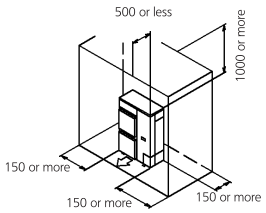


● **Obstacle above, too.**

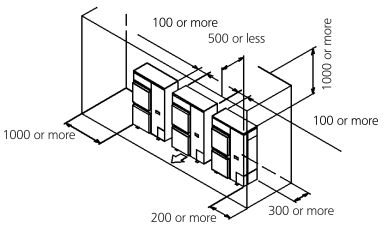
① Stand-alone installation
- Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



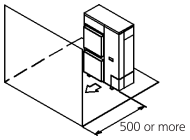
② Series installation (2 or more) (Note 1)
- Obstacle on the suction side and both sides



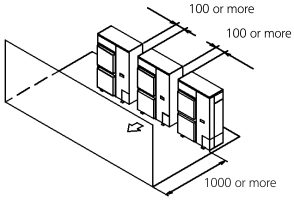
(B) When there are obstacles on discharge sides.

● **No obstacle above**

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

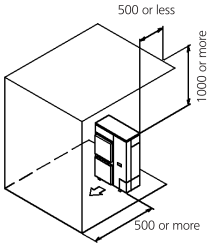


② Series installation (2 or more) (Note 1)
- Obstacle on the discharge side only

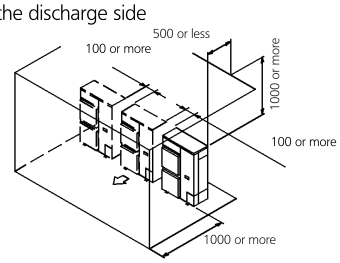


● **Obstacle above, too**

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



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



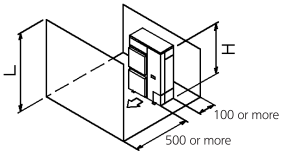
(C) When there are obstacles on both suction and discharge sides.:

Pattern 1

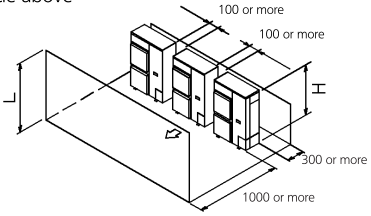
When the obstacles on the discharge side is higher than the unit. (L>H)
(There is no limit for the height of obstructions on the suction side.)

● **No obstacle above**

① Stand-alone installation
- No obstacle above



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



3D069554

12 Installation

12 - 1 Installation Method

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

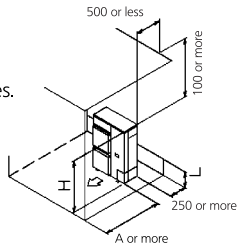
12

- **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 ≦ H	L ≦ 1/2 H	750 or more
	1/2 H < L ≦ H	1000 or more
L > H	Set the stand as : L ≦ H Refer to the column of L ≦ H for A	

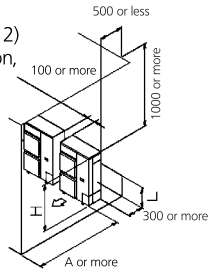


② Series installation (2 or more) (Note 1, 2)
- When there are obstacles on suction, discharge and top sides.

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

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

Limit of series installation is 2 units.

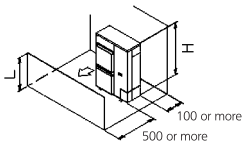


Pattern 2

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

- **No obstacle above**

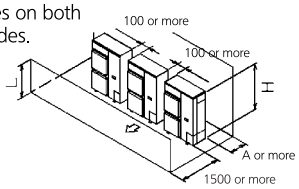
① Stand-alone installation
- No obstacle above



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 ≦ 1/2 H	250 or more
1/2 H < L ≦ H	300 or more

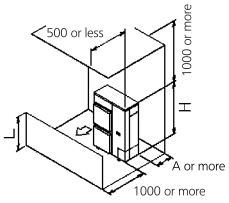


- **obstacle above**

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

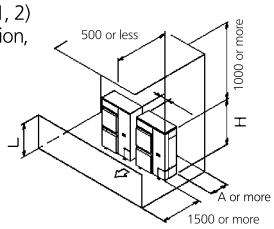


② Series installation (2 or more) (Note 1, 2)
- When there are obstacles on suction, discharge and top sides.

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

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

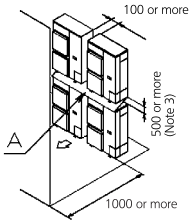
Limit of series installation is 2 units.

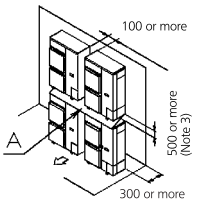


(D) Double-decker installation

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.

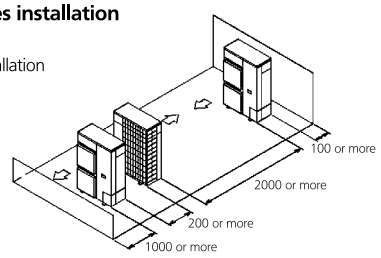
② Obstacle on the suction side. (1)
- Do not exceed two levels for stacked installation.
- Install a roof cover similar to A (field supply), as outdoor units with downward drainage are prone to dripping and freezing.
- Install the upper-level outdoor unit so that its bottom plate is a sufficient height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





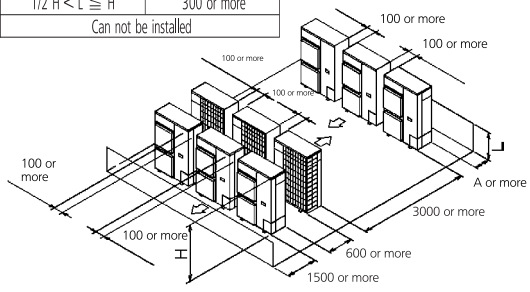
(E) Multiple rows of series installation (on the rooftop, etc.)

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 ≦ H	L ≦ 1/2 H	250 or more
	1/2 H < L ≦ H	300 or more
L > H	Can not be installed	



NOTES

1 In case of the sideway's piping, make a 100mm gap between the unit above.
2 Close the bottom of the installation frame to prevent the discharged air from being bypassed.
3 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 reintake of discharged air.

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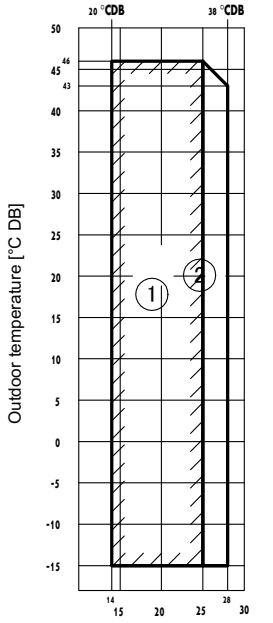
13 Operation range

13 - 1 Operation Range

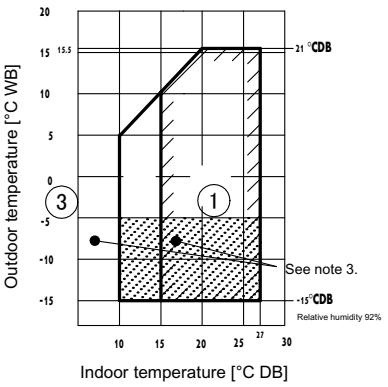
RZASG-MV1
RZASG-MY1

Cooling



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

Heating



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.

3D110021

14 Appropriate Indoors

14 - 1 Appropriate Indoors

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

ENER Lot 21
Recommended combinations

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	FCAHG100	FCAHG125	FCAHG140	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										
RZASG125M7V1B	RZASG125M7Y1B					4					P					4					P							P			P	
RZASG140M7V1B	RZASG140M7Y1B					4						P				4						P										
AZAS125M7V1B	AZAS125M7Y1B										P										P											
AZAS140M7V1B	AZAS140M7Y1B											P										P										

Sky Air		Floor standing type				Slim duct			Ceiling-suspended							Floor standing type
Model		FVA71	FVA100	FVA125	FVA140	FDXM35	FDXM50	FDXM60	FHA35	FHA50	FHA60	FHA71	FHA100	FHA125	FHA140	AVA125
RZAG125M7V1B	RZAG125M7Y1B			P										P		
RZAG140M7V1B	RZAG140M7Y1B				P										P	
RZASG125M7V1B	RZASG125M7Y1B			P										P		
RZASG140M7V1B	RZASG140M7Y1B				P										P	
AZAS125M7V1B	AZAS125M7Y1B															P
AZAS140M7V1B	AZAS140M7Y1B															

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

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14 Appropriate Indoors

14 - 1 Appropriate Indoors

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

ENER Lot 21
Appropriate indoor units

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

FCAHG125	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 ·RZASG125M7V1B / RZASG125M7Y1B· 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

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

FCAHG71	FCAG35	FFA35	FBA35	FNA35	FUA71	FAA71	-	FVA71	FDXM35	FHA35	-
FCAHG140	FCAG50	FFA50	FBA50	FNA50	-	-	-	FVA140	FDXM50	FHA50	-
-	FCAG71	-	FBA71	-	-	-	-	-	-	FHA71	-
-	FCAG140	-	FBA140	-	-	-	-	-	-	FHA140	-

Connectable to ·RZASG140M7V1B / RZASG140M7Y1B· 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	-	-	-	-	-	-	-	-

ENER Lot 10
Appropriate indoor units

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

FCAHG71	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	-	-	-	-	-

Connectable to ·RZAG100M7V1B / RZAG100M7Y1B· and covered by ·ENER Lot 10·

FCAHG100	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	-	-	-	-	-

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EEDEN18 02/18

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MUB 062 560EC Multibox

Centrifugal box fan, insulated, flexible outlet

Item number: 230500

Variant: 400V 3~ 50/60Hz - Straight air flow

- 100 % speed controllable
- Integrated electronic motor protection
- Low noise level
- Flexible airflow direction due to removable panels
- Installation in any mounting position
- Safe and maintenance free operation
- Energy-saving
- Potentiometer included for ease of commissioning
- RS-485 interfaces for networking via MODBUS RTU from size 355
- AMCA-certified performance curves

The MUB-EC fans are driven by EC-external rotor motors. These are energy saving motors with high efficiency. The power electronics are integrated in the motor housing. From size 355 all models have one potential-free terminal for error message.
All motors are suitable to be used for 50/60Hz. The input voltage for single phase units can vary between 200 and 277V, for three phase units between 380 and 480V. Speed control by a 0-10V signal.
The fans are delivered with a pre-wired potentiometer (0-10 V) that allowes you to easily find the desired working point.
All models are equipped with impellers with backward curved blades, manufactured from polypropylen PP .The casing consists of an aluminium frame with fibreglass reinforced plastic corners of PA6; highly shock-resistant.
The double skin panels are manufactured from galvanized steel with 30 mm mineralwool insulation. To avoid condensation the profile is provided with a separate chamber to fix the screws.
The panels are removable, any outlet side can be chosen, allowing flexible ventilation solutions.
The Multibox can also be used as extract- or supply air unit in air handling units. Installation in any mounting position is possible.
MUB with additional modules (filters, heaters etc.) are available as air handling units "K025, K042 or K062" on request!
The MUB-EC series in sizes 315 to 710 is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Technical parameters

Nominal data		
Voltage (nominal)	400	V
Frequency	50; 60	Hz
Phases	3~	
Input power	2,644	W
Input current	3.82	A
Impeller speed	1,703	rpm
Air flow	max 9,896	m³/h
Temperature of transported air	max 60	°C
Max temperature of transported air, when speed controlled	60	°C

Protection/Classification	
Enclosure class, motor	IP55
Insulation class	F

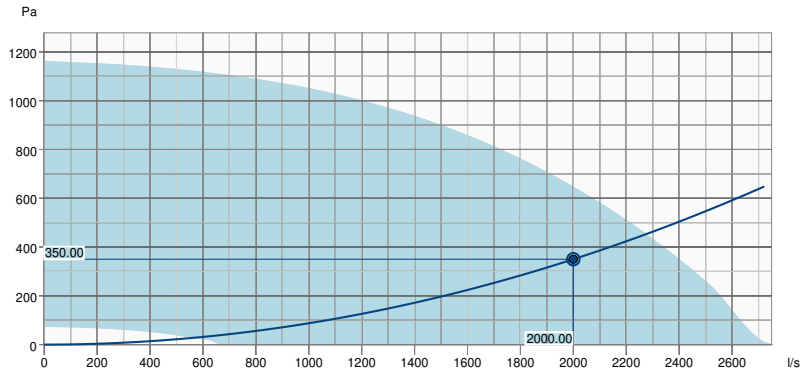
Data according to ErP	
ErP ready	ErP 2018

Dimensions and weights	
Weight	81.5 kg

others	
Motor type	EC

Performance

Performance curve

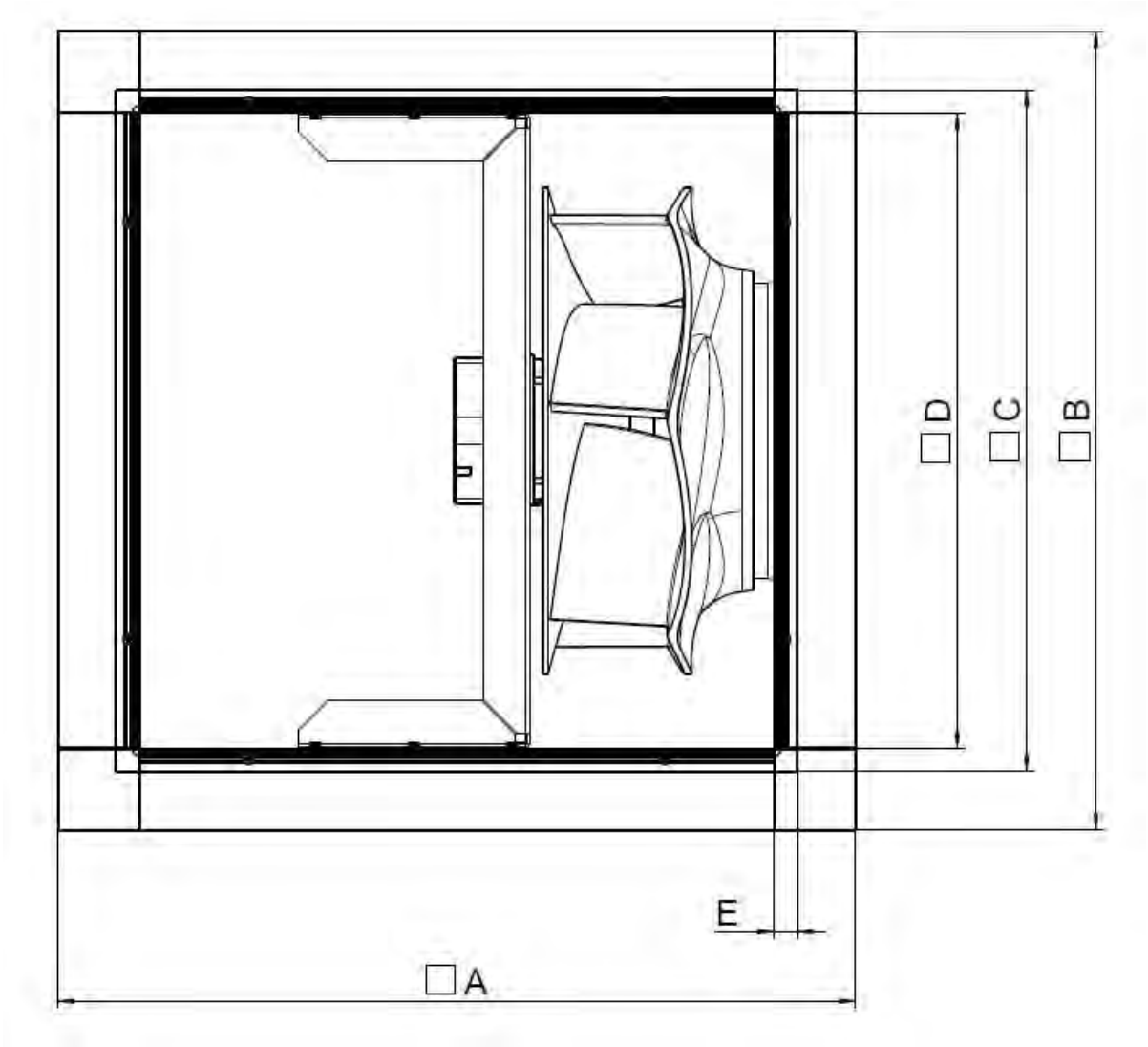


Hydraulic data	
Required air flow	2000.00 l/s
Required static pressure	350 Pa
Working air flow	2000.00 l/s
Working static pressure	350 Pa
Air density	1.204 kg/m³
Power	1770.6 W
Fan control - RPM	1498 rpm
Current	2.66 A
SFP	0.885 kW/m³/s
Control voltage	8.8 V
Supply voltage	400 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	55	63	68	75	77	75	72	67	82
Outlet	dB(A)	57	64	70	77	79	76	73	68	83
Surrounding	dB(A)	39	51	54	48	51	50	44	35	58
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	51
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	37

Dimension

MUB 062	□A	□B	□C	□D	E
560/630	820	820	720	678	21



Acoustic

The Level of Casing-Breakout-Noise depends on the quality of shielding the acoustic inlet and outlet noises.
The shown Level of Casing-Breakout-Noise will be reached only in case of 100 % shielding the acoustic inlet and outlet noise and a correspondingly low environment noise.

Ecodesign

Product		
Trade name	Systemair	
Product name	MUB 062 560EC	

Ecodesign		
ErP compliance	2018	
Unit category	NRVU	
Drive	Integrated VSD	
Unit type	UVU	
Heat recovery type	None	
Temperature ratio (UVU)	Not applicable	
qv nom	1.65	m^3/s
P nom	2.647	kW
Ps nom	835	Pa
Fan efficiency	52	%
External Leakage	5	%
Sound power level LWA	85	dB(A)

'Quietly'
Celebrating
36 Years
of Success

ISO 9001:2015

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NOICO
NOISE CONTROL & LOUVRE SYSTEMS

Noico Limited,
Patrick House,
Station Road,
Hook, RG27 9HU
Tel: 01256 766207
Fax: 01256 768413
E-mail: sales@noico.co.uk
Web site: www.noico.co.uk

A

Spiritus Technical Services Ltd

Date: 30/09/2022
Ref: 4-2209023A

For the attention of Craig Ballantyne

Dear Sirs

Re: Ottolenghi – 32-34 Rosslyn Hill - Acoustic Enclosure

We outline below our interpretation of the current project requirements with a specification for your consideration.

Scope of Work

The acoustic enclosure will need to fix back to necessary secondary support steelwork which we have included within our scope of work at this stage. This steelwork will typically be vertical box section posts. Please note this secondary support steelwork will need to fix down to a suitable structure (concrete slab/base or primary steelwork) which is to be provided by others (not Noico).

Acoustic Enclosure 3000mm wide x 1311mm deep x 2488mm high

Condenser 3-off Samsung AC100RXADKG/EU, 1-off Danfoss OP-MSBM034AJW05E & 1-off Daikin RZASG125MV1

1no. Inlet Roof Elevation: 3000mm wide x 1311mm deep – 150mm Acoustic Louvre
1no. Front Discharge Elevation: 3000mm wide x 2488mm high – 150mm Acoustic Louvre
Front discharge louvres to be split into three removeable sections on the width and split in half on the height.
Both sides and rear of the enclosure to be solid acoustic panels 50mm thick

Construction & Finish

The proposed acoustic louvres outlined in our scope of work will utilise our standard construction of 150 mm deep acoustic louvres and PS50 acoustic panels. No special or bespoke construction details have therefore been included at this stage. All elements will be fabricated from steel with a Polyester Powder Coated finish to a standard non-metallic dark grey **(RAL number – exact colour to be agreed).**

The underside of the louvre blades and internal face of the panel will have an absorptive face constructed from perforated/expanded steel with a galvanised finish – no other finish to be applied.

Sandwiched between the solid face and the perforate face will be an inorganic, non-toxic inert mineral fibre infill that also has a tissue face on the front face and a galvanised steel bird mesh will also be provided. Nominal 12mm opening within the mesh.

Due to the size and weight of all elements, and from a Health & Safety perspective, all elements will need to be supplied in suitable modules to ease both manufacture and installation.

The panel/louvred elements of the enclosure and in particular roof will not provide a water tight construction to the plant enclosure and so the plant area will need to be suitably water-proofed by others (not Noico Ltd).

The louvred roof of the enclosure itself cannot also be walked upon – it is not man safe – and for reference our whole installation is not designed to support any other materials or services.

systemair

MUB 062 560EC Multibox

Centrifugal box fan, insulated, flexible outlet

Item number: 230500

Variant: 400V 3~ 50/60Hz - 90° air flow

- 100 % speed controllable
- Integrated electronic motor protection
- Low noise level
- Flexible airflow direction due to removable panels
- Installation in any mounting position
- Safe and maintenance free operation
- Energy-saving
- Potentiometer included for ease of commissioning
- RS-485 interfaces for networking via MODBUS RTU from size 355
- AMCA-certified performance curves

The MUB-EC fans are driven by EC-external rotor motors. These are energy saving motors with high efficiency. The power electronics are integrated in the motor housing. From size 355 all models have one potential-free terminal for error message.
All motors are suitable to be used for 50/60Hz. The input voltage for single phase units can vary between 200 and 277V, for three phase units between 380 and 480V. Speed control by a 0-10V signal.
The fans are delivered with a pre-wired potentiometer (0-10 V) that allowes you to easily find the desired working point.
All models are equipped with impellers with backward curved blades, manufactured from polypropylen PP .The casing consists of an aluminium frame with fibreglass reinforced plastic corners of PA6; highly shock-resistant.
The double skin panels are manufactured from galvanized steel with 30 mm mineralwool insulation. To avoid condensation the profile is provided with a separate chamber to fix the screws.
The panels are removable, any outlet side can be chosen, allowing flexible ventilation solutions.
The Multibox can also be used as extract- or supply air unit in air handling units. Installation in any mounting position is possible.
MUB with additional modules (filters, heaters etc.) are available as air handling units "K025, K042 or K062" on request!
The MUB-EC series in sizes 315 to 710 is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Technical parameters

Nominal data		
Voltage (nominal)	400	V
Frequency	50; 60	Hz
Phases	3~	
Input power	2,662	W
Input current	3.91	A
Impeller speed	1,708	rpm
Air flow	max 10,861	m³/h
Temperature of transported air	max 60	°C
Max temperature of transported air, when speed controlled	60	°C

Protection/Classification	
Enclosure class, motor	IP55
Insulation class	F

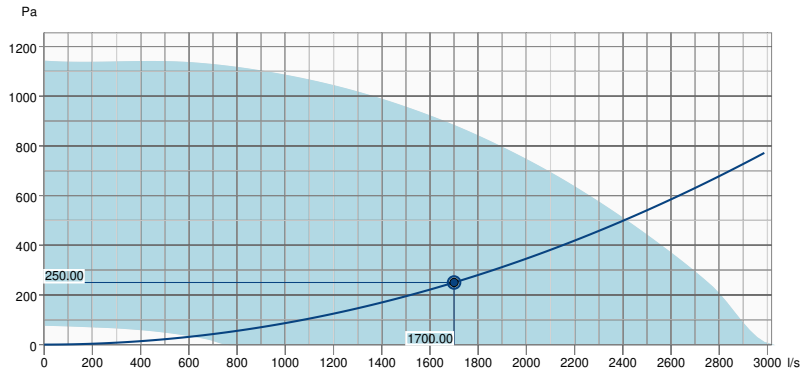
Data according to ErP	
ErP ready	ErP 2018

Dimensions and weights	
Weight	81.5 kg

others	
Motor type	EC

Performance

Performance curve

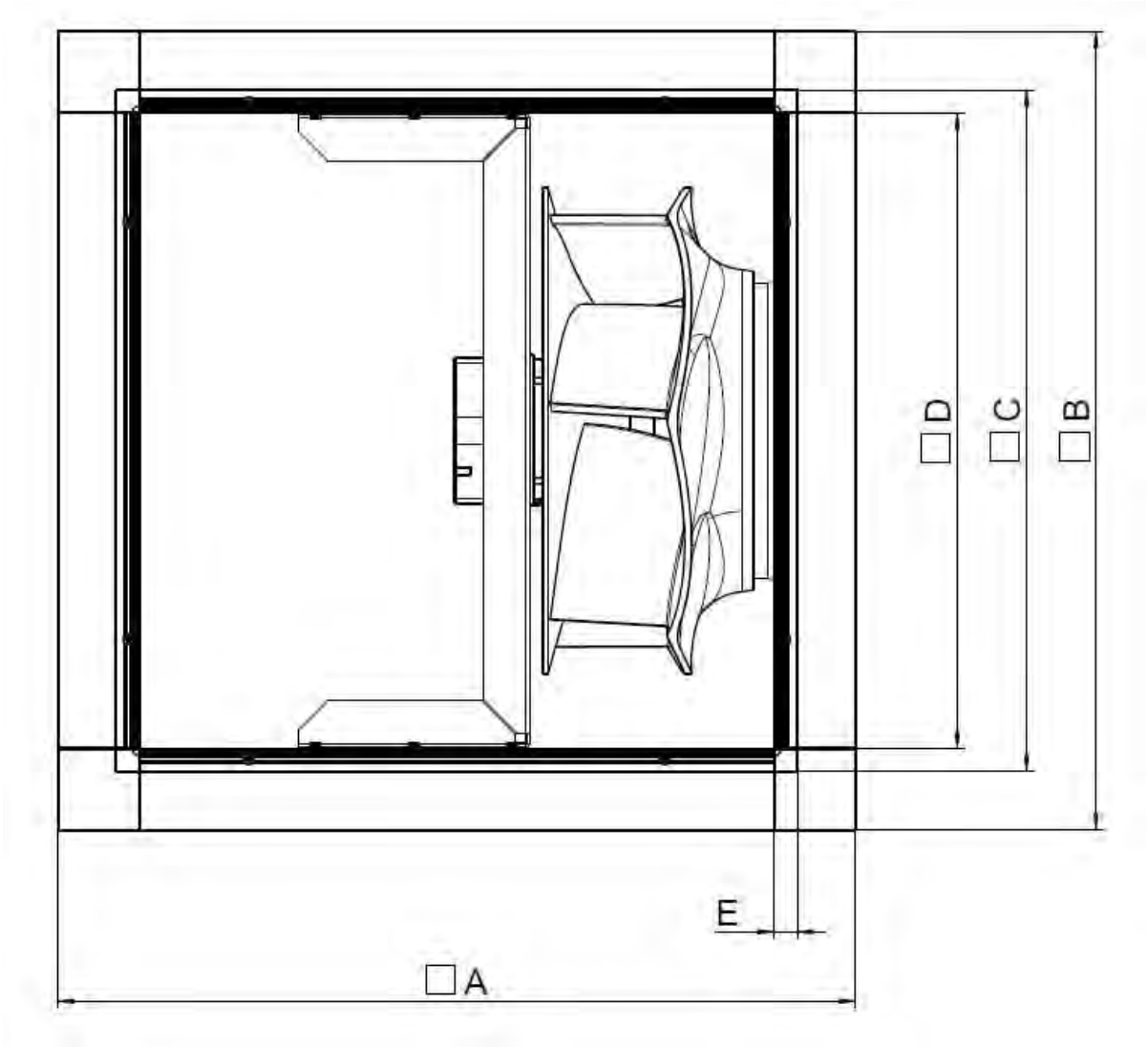


Hydraulic data	
Required air flow	1700.00 l/s
Required static pressure	250 Pa
Working air flow	1700.00 l/s
Working static pressure	250 Pa
Air density	1.204 kg/m³
Power	935.6 W
Fan control - RPM	1195 rpm
Current	1.55 A
SFP	0.550 kW/m³/s
Control voltage	7.1 V
Supply voltage	400 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	52	63	66	73	74	71	69	63	79
Outlet	dB(A)	53	64	68	74	75	73	71	64	80
Surrounding	dB(A)	35	52	50	45	47	46	41	31	56
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	49
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	35

Dimension

MUB 062	□A	□B	□C	□D	E
560/630	820	820	720	678	21



Acoustic

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Ecodesign

Product		
Trade name	Systemair	
Product name	MUB 062 560EC	

Ecodesign		
ErP compliance	2018	
Unit category	NRVU	
Drive	Integrated VSD	
Unit type	UVU	
Heat recovery type	None	
Temperature ratio (UVU)	Not applicable	
qv nom	1.81	m^3/s
P nom	2.658	kW
Ps nom	835	Pa
Fan efficiency	56.9	%
External Leakage	5	%
Sound power level LWA	85	dB(A)

systemair

prio 200EC circ. duct fan

Axial circular duct fan, <125W
Item number: 78186
Variant: 230V 1~ 50/60Hz

EC-motors, high level of efficiency
Low SFP values
100% speed controllable
Integrated motor protection
Can be installed in any position
Compact design
Low sound level
Potentiometer included for ease of commissioning
EC fans are intelligent devices using integrated motor electronics, ensuring that the motor always runs at optimal load. With EC motors the proportion of energy utilized effectively is higher, which as a result reduces the energy usage considerably, compared with AC motors.
Another special feature of EC fans is their energy-saving potential not only at full load, but especially when speed controlled, i.e. at part load. When operating at part-load, the energy used is much lower than with an asynchronous motor of equivalent output.
Reduced energy usage guarantees a drop in operating costs.
The prioAir series is designed for installation in ducts. The prioAir models have 25 mm long spigot connections in acc. with EN 1506:1997. The fans have aerodynamically optimized impellers and guide vanes. Motor protection is integrated in the electronics of the motor. The air tight casing (tightness class C in acc. with EN12237:2003) is manufactured from special composite material.
The mounting clamp facilitates easy installation and removal, and prevents the transfer of vibrations to the duct. Mounting bracket to the wall or ceiling as accessory.
For installation in damp locations we recommend to use a run-on timer. The fans are delivered with a pre-wired potentiometer (0-10 V) that allowes you to easily find the required working point.

Technical parameters

Nominal data		
Voltage (nominal)	230	V
Frequency	50; 60	Hz
Phases	1~	
Input power	117	W
Input current	0.921	A
Impeller speed	3,463	rpm
Air flow	max 1,318	m³/h
Temperature of transported air	max 55	°C
Max temperature of transported air, when speed controlled	55	°C

Sound data		
Sound pressure level at 3m (20m² Sabin)	52	dB(A)

Protection/Classification		
Enclosure class, motor	IP44	
Insulation class	B	

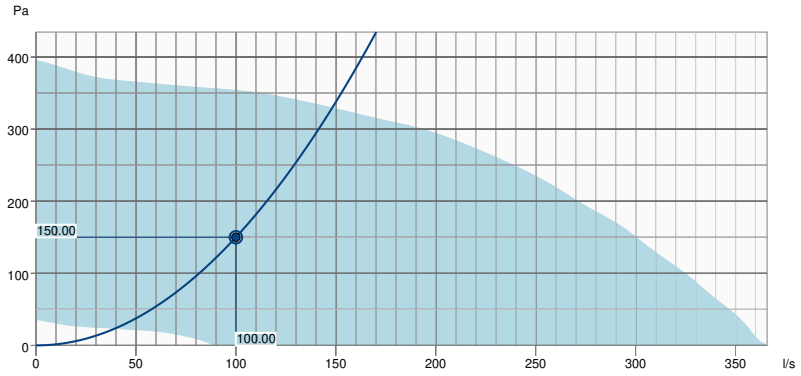
Data according to ErP		
ErP ready	Not ErP relevant	

Dimensions and weights		
Duct dimension; Circular, inlet	200	mm
Duct dimension; Circular, outlet	200	mm
Weight	2.4	kg

others		
Duct connection type	Circular	
Motor type	EC	

Performance

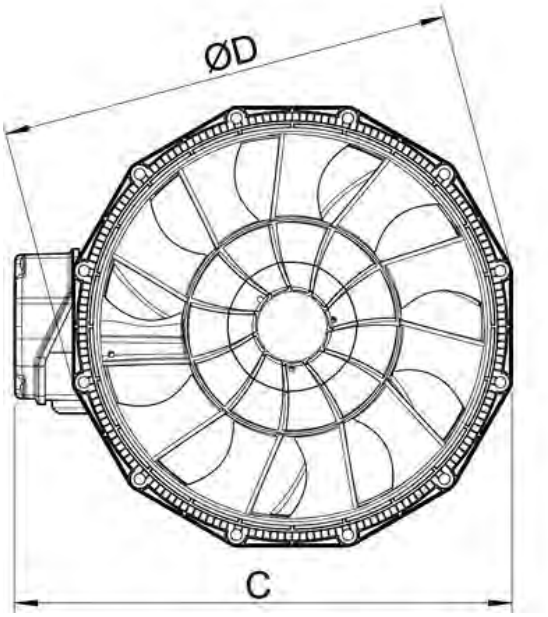
Performance curve

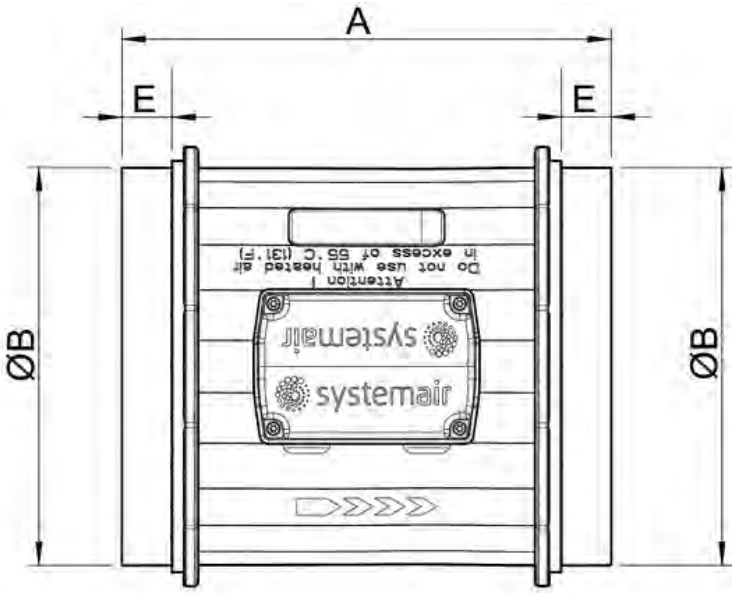


Hydraulic data	
Required air flow	100.00 l/s
Required static pressure	150 Pa
Working air flow	100.00 l/s
Working static pressure	150 Pa
Air density	1.204 kg/m³
Power	40.5 W
Fan control - RPM	2402 rpm
Current	0.32 A
SFP	0.405 kW/m³/s
Control voltage	5.9 V
Supply voltage	230 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	42	56	63	61	61	58	53	43	68
Outlet	dB(A)	40	53	52	57	57	55	50	43	62
Surrounding	dB(A)	<10	23	33	42	45	42	33	19	48
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	41
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	27

Dimension





	A	øB	C	øD	E
prio 200	245	199	249	227	25