



Sky Air Alpha-series
Air Conditioning
Technical Data
RZAG-NY1



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RZAG-NY1

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1 Features

1 - 1 RZAG-NY1

Industry leading technology in the most compact casing ever

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- › Unique, low-height single fan range
- › Compact dimensions allow almost unnoticeable installation
- › Market-leading serviceability and handling, thanks to wide access area, 7-segment display and additional handle
- › Top efficiency: - Energy labels up to A++ in both cooling and 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
- › The perfect balance in efficiency and comfort thanks to Variable Refrigerant Temperature: top seasonal efficiency throughout most of the year and quick reaction speed on the hottest days.
- › Suits high sensible, infrastructure cooling applications
- › Replace existing systems with R-32 technology without needing to replace the piping
- › Guarantees operation in both heating and cooling mode down to -20°C
- › Refrigerant cooled PCB guarantees reliable cooling, as it is not influenced by ambient temperature.
- › Maximum piping length up to 85m
- › Outdoor units for pair, twin, triple, double twin application



Infrastructure cooling



Inverter



Auto cooling-heating changeover

2 Specifications

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Technical Specifications					RZAG71NY1	RZAG100NY1	RZAG125NY1	RZAG140NY1	
Casing	Colour				Ivory white				
	Material				Painted galvanized steel plate				
Dimensions	Unit	Height	mm	870					
		Width	mm	1,100					
		Depth	mm	460					
	Packed unit	Height	mm	1,050					
		Width	mm	1,205					
		Depth	mm	569					
Weight	Unit	kg	81	85	94				
	Packed unit	kg	92	96	105				
Packing	Weight	kg	10						
Heat exchanger	Fin	Type	WF fin						
	Treatment		Anti-corrosion treatment (PE)						
Fan	Type				Propeller				
	Discharge direction				Horizontal				
	Quantity				1				
	Air flow rate	Cooling	Nom.	m ³ /min	68	67	80	87	
Heating			Nom.	m ³ /min	75	82	80	87	
Partial		m ³ /min	-	-	45 (1)				
Fan motor	Quantity				1				
	Model				Brushless DC motor				
	Output				234 W				
	Drive				Direct drive				
Compressor	Quantity				1				
	Type				Hermetically sealed swing compressor				
Operation range	Cooling	Ambient	Min.	°CDB	-20				
			Max.	°CDB	52				
	Heating	Ambient	Min.	°CWB	-20				
			Max.	°CWB	18				
Sound power level	Cooling		dB(A)	64	66	69	70		
	Heating		dB(A)	-	-	68 (1)	71 (1)		
Sound pressure level	Cooling	Nom.	dB(A)	46	47	49	50		
	Heating	Nom.	dB(A)	48	50	52			
Refrigerant	Type				R-32				
	Charge				kg	3.20	3.70		
	Charge				TCO ₂ Eq	2.16	2.50		
Refrigerant	Control				Expansion valve (electronic type)				
	GWP				675				
	Circuits	Quantity	1						
Refrigerant oil	Type				FW68DA				
	Charged volume				l	0.9	1.4		
Piping connections	Liquid	Quantity				1			
		Type				Flare connection			
		OD	mm	10					
	Gas	Quantity				1			
		Type				Flare connection			
		OD	mm	15.9					
	Drain	Quantity				8			
		Type				Hole			
		OD	mm	26					
	Piping length	OU - IU	Min.	m	3				
			Max.	m	55	85			
		System	Equivalent	m	75	100			
			Chargeless	m	40				
	Additional refrigerant charge				kg/m	See installation manual			
	Level difference	IU - OU	Max.	m	30				
	Level difference	IU - IU		m	0.5				
Heat insulation				Both liquid and gas pipes					
Defrost method				Reversed cycle					
Defrost control				Sensor for outdoor heat exchanger temperature					
Capacity control	Method				Inverter controlled				
PED	Category				Category II				
	Most critical part	Name				Accumulator			
		Ps*V	Bar*l	136.5	143.0				
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;

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Standard accessories: General safety precautions;Quantity: 1;

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

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

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Electrical Specifications			RZAG71NY1	RZAG100NY1	RZAG125NY1	RZAG140NY1
Power supply	Name			Y1		
	Phase			3~		
	Frequency	Hz		50		
	Voltage	V		380-415		
	Voltage range	V		342 457		
Current	Zmax	List	Complies to EN61000-3-11			
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			
Current - 50Hz	Maximum fuse amps (MFA)	A	16			

(1)According to ENER Lot 21

Technical specifications			FCAHG71H + RZAG71NY1	FCAHG100H + RZAG71NY1	FCAHG100H + RZAG100NY1	FCAHG140H + RZAG100NY1	FCAHG125H + RZAG125NY1	FCAHG140H + RZAG140NY1
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		7.90	7.05	7.70	7.49	8.02	7.93
	ηs,c	%	-				318	314
	Annual energy consumption	kWh/a	301	338	432	444	905	1,014
Space heating (Average climate)	Energy efficiency class		A+		A++		-	
	Capacity Pdesign	kW	4.70		9.52			
	SCOP/A		4.56	4.20	4.75	4.70	4.53	4.44
	SCOPnet/A		4.56	4.20	4.75	4.70	4.53	4.44
	ηs,h	%	-				178	175
		Annual energy consumption	kWh/a	1,443	1,567	2,805	2,836	2,943
	Required back up heating cap at design conditions	kW	0.00					
Space cooling	A Condi- tion (35°C - 27/19)	Pdc	6.80		9.50		12.10	13.40
		EERd	4.13	4.14	4.23	4.04	3.84	3.68
	B Condi- tion (30°C - 27/19)	Pdc	1.65	1.64	2.25	2.35	3.15	3.64
		Power input	5.01	5.03	7.00	7.03	8.92	9.88
	C Condi- tion (25°C - 27/19)	Pdc	5.96	6.00	6.14	5.96	5.81	5.77
		Power input	0.84		1.14	1.18	1.54	1.71
	D Condi- tion (20°C - 27/19)	Pdc	3.22	3.20	4.50	4.46	5.74	6.35
		EERd	10.19	8.66	9.32	9.12	9.63	9.37
		Pdc	0.32	0.37	0.48	0.49	0.60	0.68
		Power input	2.64	2.72	3.71	3.59		3.61
		EERd	14.60	10.83	12.87	12.38	13.99	14.07
		Power input	0.18	0.25		0.29		0.26
Space heating (Average climate)	TOL	Tol (temperature operating limit)	°C					
		Pdh (declared heating cap)	4.70		9.52			
		COPd (declared COP)	2.91	2.94	2.79	2.77	2.22	2.23
	TBivalent	Power input	1.62	1.60	3.42	3.43	4.29	4.27
		Tbiv (bivalent temperature)	°C					
		Pdh (declared heating cap)	4.70		9.52			
		COPd (declared COP)	2.91	2.94	2.79	2.77	2.22	2.23
		Power input	1.62	1.60	3.42	3.43	4.29	4.27
		Power input	4.16	4.14	8.42	8.38		8.42
	A Con- dition (-7°C)	COPd (declared COP)	3.28	3.30	3.14	3.13	2.84	2.80
		Power input	1.27	1.25	2.69	2.68	2.97	3.01
		Power input						
B Condi- tion (2°C)	Pdh (declared heating cap)	2.53	2.54	5.13	5.14		5.13	
	COPd (declared COP)	4.53	4.30	4.79	4.76	4.58	4.42	
	Power input	0.56	0.59	1.07	1.08	1.12	1.16	
C Condi- tion (7°C)	Pdh (declared heating cap)	1.79	1.89	3.30	3.33		3.30	
	COPd (declared COP)	5.43	4.73	5.81	5.71	5.79	5.78	
	Power input	0.33	0.40	0.57	0.58		0.57	
D Con- dition (12°C)	Pdh (declared heating cap)	2.01	2.11	2.58		2.60		
	COPd (declared COP)	6.79	5.75	6.86	6.64	6.62	6.60	
	Power input	0.30	0.37	0.38		0.39		

2 Specifications

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Technical specifications					FCAHG71H + RZAG71NY1	FCAHG100H + RZAG71NY1	FCAHG100H + RZAG100NY1	FCAHG140H + RZAG100NY1	FCAHG125H + RZAG125NY1	FCAHG140H + RZAG140NY1
Power consumption in other than active mode	Crank-case heater mode	Cooling	PCK	kW	0.000					
		Heating	PCK	kW	0.000					
	Off mode	Cooling	POFF	kW	0.009					
		Heating	POFF	kW	0.009					
	Standby mode	Cooling	PSB	kW	0.009					
		Heating	PSB	kW	0.009					
	Thermo-stat-off mode	Cooling	PTO	kW	0.005					
		Heating	PTO	kW	0.013					
Indication if the heater is equipped with a supplementary heater (pair application)								No		
Supplementary heater (pair application)	Back-up capacity	Heating	elbu	kW	0.0					
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		

(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.

Technical specifications					FCAG71B + RZAG71NY1	FCAG100B + RZAG71NY1	FCAG100B + RZAG100NY1	FCAG140B + RZAG100NY1	FCAG125B + RZAG125NY1	FCAG140B + RZAG140NY1		
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				6.83	7.50	7.14	7.86	7.15	6.80		
	ηs,c	%			-							
	Annual energy consumption	kWh/a			348	317	466	423	1,016	1,182		
Space heating (Average climate)	Energy efficiency class				A+							
	Capacity	Pdesign	kW			4.70		7.80		9.52		
	SCOP/A				4.22	4.45	4.53	4.66	4.34			
	SCOPnet/A				4.22	4.45	4.53	4.66	4.34			
	ηs,h	%			-							
	Annual energy consumption	kWh/a			1,560	1,479	2,413	2,343	3,071			
Required back up heating cap at design conditions				kW							0.00	
Space cooling	A Condi- tion (35°C - 27/19)	Pdc	kW			6.80		9.50		12.10	13.40	
			EERd	3.54	4.14	3.59	4.13	3.32	3.12			
	B Condi- tion (30°C - 27/19)	Pdc	kW			5.03		7.03		8.92	9.88	
			EERd	5.43	5.65	5.83	5.76	5.65	4.47			
	C Condi- tion (25°C - 27/19)	Pdc	kW			3.20		4.46		5.74	6.35	
			EERd	8.32	9.57	8.18	9.72	7.87	8.17			
	D Condi- tion (20°C - 27/19)	Pdc	kW			2.40		3.31		3.25	3.32	
			EERd	12.31	13.42	13.03	14.70	12.77	13.55			
	Space heating (Average climate)	TOL	Tol (temperature operating limit) °C				-10					
			PdH (declared heating cap) kW				4.70		7.80		9.52	
			COPd (declared COP)				2.54	2.88	2.51	2.73	1.91	1.93
			Power input kW				1.85	1.63	3.11	2.85	4.98	4.93
TBivalent		Tbiv (bivalent temperature) °C				-10						
		PdH (declared heating cap) kW				4.70		7.80		9.52		
		COPd (declared COP)				2.54	2.88	2.51	2.73	1.91	1.93	
		Power input kW				1.85	1.63	3.11	2.85	4.98	4.93	
A Con- dition (-7°C)		PdH (declared heating cap) kW				4.13	4.14	6.86		8.43	8.42	
		COPd (declared COP)				2.96	3.25	2.87	3.04	2.59	2.52	

2 Specifications

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Technical specifications				FCAG71B + RZAG71NY1	FCAG100B + RZAG71NY1	FCAG100B + RZAG100NY1	FCAG140B + RZAG100NY1	FCAG125B + RZAG125NY1	FCAG140B + RZAG140NY1	
Space heating (Average climate)	A Con- dition (-7°C)	Power input	kW	1.40	1.27	2.39	2.26	3.25	3.34	
	B Condi- tion (2°C)	Pdh (declared heating cap)	kW	2.54		4.21		5.12		
		COPd (declared COP)		4.23	4.46	4.37	4.65	4.29	4.33	
		Power input	kW	0.60	0.57	0.96	0.91	1.20	1.18	
	C Condi- tion (7°C)	Pdh (declared heating cap)	kW	1.77	1.80	2.73		3.29		
		COPd (declared COP)		5.11	5.30	6.01	5.82	5.92		
		Power input	kW	0.35	0.34	0.45	0.47	0.56		
	D Condi- tion (12°C)	Pdh (declared heating cap)	kW	1.96	2.02	2.47	2.51	2.52		
		COPd (declared COP)		6.01	6.60	7.75	7.16	6.94		
		Power input	kW	0.33	0.31	0.32	0.35	0.36		
Power consump- tion in other than active mode	Crank- case heater mode	Cooling PCK	kW	0.000						
		Heating PCK	kW	0.000						
	Off mode	Cooling POFF	kW	0.009						
		Heating POFF	kW	0.009						
	Standby mode	Cooling PSB	kW	0.009						
		Heating PSB	kW	0.009						
	Thermo- stat-off mode	Cooling PTO	kW	0.005						
		Heating PTO	kW	0.013						
	Indication if the heater is equipped with a supplementary heater (pair application)				No					
	Supplementary heater (pair appli- cation)	Back-up capacity	Heating elbu	kW	0.0					
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						

(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.

Technical specifications				FBA71A9 + RZAG71NY1	FBA100A + RZAG71NY1	FBA100A + RZAG100NY1	FBA140A + RZAG100NY1	FBA125A + RZAG125NY1	FBA140A + RZAG140NY1	
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+	A++		-		
	Capacity	Pdesign	kW	6.80		9.50		12.1	13.4	
	SEER			6.50	5.81	6.47	6.39	6.56	6.42	
	ηs,c		%	-		-		259	254	
	Annual energy consumption		kWh/a	366	410	514	520	1,107	1,252	
Space heating (Average climate)	Energy efficiency class			A+		-		-		
	Capacity	Pdesign	kW	4.70		7.80		9.52		
	SCOP/A			4.20	4.06	4.36	4.20	4.37	4.34	
	SCOPnet/A			4.20	4.06	4.36	4.20	4.37	4.34	
	ηs,h		%	-		-		172	171	
	Annual energy consumption		kWh/a	1,566	1,621	2,505	2,600	3,050	3,070	
Required back up heating cap at design conditions				0.00						
Space cooling	A Condi- tion (35°C - 27/19)	Pdc	kW	6.80		9.50		12.10	13.40	
		EERd		3.40	4.15	3.69	4.18	3.27	2.86	
	B Condi- tion (30°C - 27/19)	Power input	kW	2.00	1.64	2.58	2.27	3.70	4.69	
		Pdc	kW	5.03		7.03		8.92	9.88	
	C Condi- tion (25°C - 27/19)	EERd		5.07	4.39	4.92	4.69	4.95	4.64	
		Power input	kW	0.99	1.15	1.43	1.50	1.80	2.13	
	D Condi- tion (20°C - 27/19)	Pdc	kW	3.20		4.46		4.47	5.74	6.35
		EERd		7.94	7.06	7.80	7.62	7.45	7.47	
	E Condi- tion (15°C - 27/19)	Power input	kW	0.40	0.45	0.57	0.59	0.77	0.85	
		Pdc	kW	2.44	2.68	3.33	3.66	3.34	3.50	
F Condi- tion (10°C - 27/19)	EERd		12.41	9.51	11.22	11.10	11.49	12.13		
	Power input	kW	0.20	0.28	0.30	0.33	0.29			

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Technical specifications				FBA71A9 + RZAG71NY1	FBA100A + RZAG71NY1	FBA100A + RZAG100NY1	FBA140A + RZAG100NY1	FBA125A + RZAG125NY1	FBA140A + RZAG140NY1	
Space heating (Average climate)	TOL	Tol (temperature operating limit) °C		-10						
		Pdh (declared heating cap) kW	4.70		7.80		9.52			
		COPd (declared COP)	2.50	2.69	2.46	2.52	1.97	2.01		
	TBivalent	Power input kW	1.88	1.75	3.17	3.09	4.83	4.74		
		Tbiv (bivalent temperature) °C	-10							
		Pdh (declared heating cap) kW	4.70		7.80		9.52			
	A Condi-tion (-7°C)	COPd (declared COP)	2.50	2.69	2.46	2.52	1.97	2.01		
		Power input kW	1.88	1.75	3.17	3.09	4.83	4.74		
		Pdh (declared heating cap) kW	4.14		6.87		6.86		8.42	8.43
	Space heating (Average climate)	A Condi-tion (-7°C)	COPd (declared COP)	2.92	3.04	2.82	2.80	2.67	2.58	
Power input kW			1.42	1.36	2.43	2.45	3.15	3.26		
B Condi-tion (2°C)		Pdh (declared heating cap) kW	2.54		4.21		5.12			
		COPd (declared COP)	4.21	4.10	4.33	4.20	4.37	4.32		
		Power input kW	0.60	0.62	0.97	1.00	1.17	1.18		
C Condi-tion (7°C)		Pdh (declared heating cap) kW	1.76	1.83	2.73		3.29			
		COPd (declared COP)	5.12	4.74	5.47	5.16	5.76	5.83		
		Power input kW	0.34	0.39	0.50	0.53	0.57			
D Condi-tion (12°C)		Pdh (declared heating cap) kW	1.96	2.05	2.51	2.55		2.56		
		COPd (declared COP)	6.12	5.85	6.91	6.28	6.73	6.86		
	Power input kW	0.32	0.35	0.36	0.41	0.38	0.37			
Power consump-tion in other than active mode	Crank-case heater mode	Cooling PCK kW	0.000							
		Heating PCK kW	0.000							
	Off mode	Cooling POFF kW	0.011							
		Heating POFF kW	0.011							
	Standby mode	Cooling PSB kW	0.011							
		Heating PSB kW	0.011							
	Thermo-stat-off mode	Cooling PTO kW	0.005							
		Heating PTO kW	0.015							
	Indication if the heater is equipped with a supplementary heater (pair application)				No					
	Supplementary heater (pair appli-cation)	Back-up capacity	Heating elbu kW	0.0						
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						

(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.

Technical specifications				FDA125A + RZAG125NY1
Cooling capacity	Nom.		kW	12.1 (1)
Heating capacity	Nom.		kW	13.5 (2)
Space cooling	Capacity	Pdesign	kW	12.1
			SEER	6.59
	ηs,c	%	261	
	Annual energy consumption	kWh/a	1,102	
Space heating (Average climate)	Capacity	Pdesign	kW	9.52
			SCOP/A	4.35
	SCOPnet/A	4.35		
	ηs,h	%	171	
	Annual energy consumption	kWh/a	3,064	
	Required back up heating cap at design conditions	kW	0.00	

2 Specifications

1 - 1 RZAG-NY1

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Technical specifications				FDA125A + RZAG125NY1	
Space cooling	A Condition (35°C -27/19)	Pdc	kW	12.10	
		EERd		3.25	
		Power input	kW	3.73	
	B Condition (30°C -27/19)	Pdc	kW	8.92	
		EERd		4.99	
		Power input	kW	1.79	
	C Condition (25°C -27/19)	Pdc	kW	5.73	
		EERd		7.67	
		Power input	kW	0.75	
	D Condition (20°C -27/19)	Pdc	kW	3.34	
EERd			11.04		
Power input		kW	0.30		
Space heating (Average climate)	TOL	Tol (temperature operating limit)	°C	-10	
		Pdh (declared heating cap)	kW	9.52	
		COPd (declared COP)		1.99	
	TBivalent	Tbiv (bivalent temperature)	°C	-10	
		Pdh (declared heating cap)	kW	9.52	
		COPd (declared COP)		1.99	
	A Condition (-7°C)	Pdh (declared heating cap)	kW	4.78	
		COPd (declared COP)		8.42	
		Power input	kW	2.69	
	B Condition (2°C)	Pdh (declared heating cap)	kW	3.13	
		COPd (declared COP)		5.12	
		Power input	kW	4.33	
	Space heating (Average climate)	B Condition (2°C)	COPd (declared COP)		4.33
			Power input	kW	1.18
			Pdh (declared heating cap)	kW	3.29
C Condition (7°C)		COPd (declared COP)		5.73	
		Power input	kW	0.58	
		Pdh (declared heating cap)	kW	2.58	
D Condition (12°C)		COPd (declared COP)		6.68	
		Power input	kW	0.39	
		Pdh (declared heating cap)	kW	0.000	
Power consumption in other than active mode	Crank-case heater mode	Cooling PCK	kW	0.000	
		Heating PCK	kW	0.000	
	Off mode	Cooling POFF	kW	0.012	
		Heating POFF	kW	0.012	
	Standby mode	Cooling PSB	kW	0.012	
		Heating PSB	kW	0.012	
	Thermostat-off mode	Cooling PTO	kW	0.005	
		Heating PTO	kW	0.016	
	Indication if the heater is equipped with a supplementary heater (pair application)				No
	Supplementary heater (pair application)	Back-up capacity	Heating elbu	kW	0.0
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	

(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.

Technical specifications				FAA71B + RZAG71NY1	FAA100B + RZAG71NY1	FAA100B + RZAG100NY1
Cooling capacity	Nom.		kW	6.80	6.80 (1)	9.50
	Nom.		Btu/h	23,200	-	32,400
	Nom.		kcal/h	5,847	-	8,169
Heating capacity	Nom.		kW	7.50	7.50 (2)	10.80
	Nom.		Btu/h	25,600	-	36,900
	Nom.		kcal/h	6,449	-	9,286
Power input	Cooling	Nom.	kW	2.08	-	2.93
	Heating	Nom.	kW	2.19	-	3.41

2 Specifications

1 - 1 RZAG-NY1

Technical specifications					FAA71B + RZAG71NY1	FAA100B + RZAG71NY1	FAA100B + RZAG100NY1	
Nominal efficiency	EER				3.27	-	3.24	
	COP				3.42	-	3.17	
	Annual energy consumption	kWh			1,040	-	1,466	
	Energy labeling	Cooling			A	-	A	
	Energy labeling	Heating			B	-	D	
Space cooling	Energy efficiency class				A++			
	Capacity Pdesign	kW			6.80		9.50	
	SEER				6.58	6.43	6.42	
	Annual energy consumption	kWh/a			362	370	518	
Space heating (Average climate)	Energy efficiency class				A+			
	Capacity Pdesign	kW			4.70		7.80	
	SCOP/A				4.20	4.10	4.01	
	SCOPnet/A				4.20	4.10	4.01	
	Pdh Heating capacity at -10°	kW			4.70	-	7.80	
	Annual energy consumption	kWh/a			1,567	1,605	2,725	
	Required back up heating cap at design conditions	kW				0.00		
Space cooling	A Condi- tion (35°C - 27/19)	Pdc EERd	kW		6.80		9.50	
					3.27	3.47	3.24	
		Power input	kW		2.08	1.96	2.93	
	B Condi- tion (30°C - 27/19)	Pdc EERd	kW		5.02	5.03	7.00	
					5.04	5.22	4.59	
		Power input	kW		1.00	0.96	1.53	
	C Condi- tion (25°C - 27/19)	Pdc EERd	kW		3.23	3.20	4.51	
					8.40	7.90	7.56	
		Power input	kW		0.38	0.40	0.60	
	D Condi- tion (20°C - 27/19)	Pdc EERd	kW		2.59	2.48	3.10	
					11.70	10.59	13.20	
		Power input	kW		0.22		0.23	
	Space heating (Average climate)	TOL	Tol (temperature operating limit)	°C			-10	
		Pdh (declared heating cap)	kW		4.70		7.80	
		COPd (declared COP)			2.51	2.74	2.19	
		Power input	kW		1.87	1.71	3.56	
TBivalent		Tbiv (bivalent temperature)	°C			-10		
		Pdh (declared heating cap)	kW		4.70		7.80	
		COPd (declared COP)			2.51	2.74	2.19	
		Power input	kW		1.87	1.71	3.56	
A Con- dition (-7°C)		Pdh (declared heating cap)	kW		4.16	4.14	6.91	
		COPd (declared COP)			2.60	3.07	2.32	
		Power input	kW		1.60	1.35	2.98	
B Condi- tion (2°C)		Pdh (declared heating cap)	kW		2.57	2.54	4.20	
		COPd (declared COP)			4.28	4.11	4.06	
		Power input	kW		0.60	0.62	1.03	
C Condi- tion (7°C)		Pdh (declared heating cap)	kW		1.83	1.79	2.70	
		COPd (declared COP)			5.26	4.81	5.24	
		Power input	kW		0.35	0.37	0.52	
D Con- dition (12°C)		Pdh (declared heating cap)	kW		2.23	2.02	2.43	
		COPd (declared COP)			7.10	5.94	6.37	
		Power input	kW		0.31	0.34	0.38	
Power consump- tion in other than active mode		Crank- case heater mode	Cooling PCK	kW			0.000	
			Heating PCK	kW			0.000	
		Off mode	Cooling POFF	kW			0.009	
		Heating POFF	kW			0.009		
	Standby mode	Cooling PSB	kW			0.009		
		Heating PSB	kW			0.009		
	Thermo- stat-off mode	Cooling PTO	kW			0.005		
		Heating PTO	kW			0.013		
	Indication if the heater is equipped with a supplementary heater (pair application)					No	-	
	Supplementary heater (pair appli- cation)	Back-up capacity	Heating elbu	kW		0.0	-	
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			

2 Specifications

1 - 1 RZAG-NY1

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Technical specifications					FAA71B + RZAG71NY1	FAA100B + RZAG71NY1	FAA100B + RZAG100NY1
Warm season included					No		
Eurovent	Sound power level outdoor	Cooling	Nom.	dBa	64	-	66
	Sound power level indoor	Cooling	Nom.	dBa	61	-	65
	Piping length	Cooling	Measuring condition	m	7.50	-	

(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.

Technical specifications				FHA71A9 + RZAG71NY1	FHA100A + RZAG71NY1	FHA100A + RZAG100NY1	FHA140A + RZAG100NY1	FHA125A + RZAG125NY1	FHA140A + RZAG140NY1
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			7.11	6.69	6.42	7.35	7.14	6.42
	ηs,c		%	-					
	Annual energy consumption		kWh/a	335	356	518	453	1,017	1,253
Space heating (Average climate)	Energy efficiency class			A+					
	Capacity Pdesign		kW	4.70		7.80		9.52	
	SCOP/A			4.32	4.26	4.61	4.50	4.20	4.30
	SCOPnet/A			4.32	4.26	4.61	4.50	4.20	4.30
	ηs,h		%	-					
	Annual energy consumption		kWh/a	1,523	1,545	2,369	2,429	3,174	3,100
	Required back up heating cap at design conditions		kW	0.00					
Space cooling	A Condi- tion (35°C -27/19)	Pdc EERd Power input	kW	6.80		9.50		12.10	13.40
				3.75	4.02	4.10	4.05	3.40	3.11
			kW	1.81	1.69	2.31	2.34	3.56	4.31
	B Condi- tion (30°C -27/19)	Pdc EERd Power input	kW	5.03		7.03		8.92	9.87
				5.46	5.34	4.92	6.03	5.55	4.94
			kW	0.92	0.94	1.43	1.17	1.61	2.00
	C Condi- tion (25°C -27/19)	Pdc EERd Power input	kW	3.20		4.47		5.73	6.35
				8.99	8.27	7.62	8.88	8.20	7.48
			kW	0.36	0.39	0.59	0.50	0.70	0.85
	D Condi- tion (20°C -27/19)	Pdc EERd Power input	kW	2.48		3.54		3.36	3.35
				12.58	10.71	10.27	11.63	12.00	10.13
			kW	0.20	0.24	0.34	0.31	0.28	0.33
Space heating (Average climate)	TOL	Tol (temperature operating limit)	°C	-10					
		Pdh (declared heating cap)	kW	4.70		7.80		9.52	
		COPd (declared COP)		2.43	2.90	2.65	2.85	1.87	2.13
		Power input	kW	1.93	1.62	2.94	2.73	5.10	4.47
	TBivalent	Tbiv (bivalent temperature)	°C	-10					
		Pdh (declared heating cap)	kW	4.70		7.80		9.52	
		COPd (declared COP)		2.43	2.90	2.65	2.85	1.87	2.13
		Power input	kW	1.93	1.62	2.94	2.73	5.10	4.47
	A Condi- tion (-7°C)	Pdh (declared heating cap)	kW	4.14		6.86		8.42	
		COPd (declared COP)		2.95	3.26	3.03	3.15	2.55	2.70
Space heating (Average climate)	A Condi- tion (-7°C)	Power input	kW	1.40	1.27	2.27	2.18	3.30	3.11
	B Condi- tion (2°C)	Pdh (declared heating cap)	kW	2.54		4.21		5.12	
		COPd (declared COP)		4.44	4.32	4.61	4.57	4.26	4.33
		Power input	kW	0.57	0.59	0.91	0.92	1.20	1.18
	C Condi- tion (7°C)	Pdh (declared heating cap)	kW	1.79		2.73		3.29	
		COPd (declared COP)		5.15	4.90	5.70	5.30	5.49	5.54
		Power input	kW	0.35	0.38	0.48	0.52	0.60	0.59
	D Condi- tion (12°C)	Pdh (declared heating cap)	kW	1.97		2.54		2.55	
		COPd (declared COP)		5.99	6.00	7.06	6.21	6.13	6.25
		Power input	kW	0.33	0.34	0.36		0.42	

2 Specifications

1 - 1 RZAG-NY1

Technical specifications					FHA71A9 + RZAG71NY1	FHA100A + RZAG71NY1	FHA100A + RZAG100NY1	FHA140A + RZAG100NY1	FHA125A + RZAG125NY1	FHA140A + RZAG140NY1
Power consumption in other than active mode	Crank-case heater mode	Cooling	PCK	kW				0.000		
		Heating	PCK	kW				0.000		
	Off mode	Cooling	POFF	kW				0.009		
		Heating	POFF	kW				0.009		
	Standby mode	Cooling	PSB	kW				0.009		
		Heating	PSB	kW				0.009		
	Thermo-stat-off mode	Cooling	PTO	kW				0.005		
		Heating	PTO	kW				0.013		
Indication if the heater is equipped with a supplementary heater (pair application)								No		
Supplementary heater (pair application)	Back-up capacity	Heating	elbu	kW				0.0		
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		

(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.

Technical specifications				FUA71A + RZAG71NY1	FUA100A + RZAG71NY1	FUA100A + RZAG100NY1	FUA125A + RZAG125NY1	
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++			-	
	Capacity	Pdesign	kW	6.80		9.50	12.1	
	SEER			7.02	6.89	6.42	6.39	
	η _{s,c}		%		-		253	
	Annual energy consumption		kWh/a	339	345	518	1,136	
Space heating (Average climate)	Energy efficiency class			A+			-	
	Capacity	Pdesign	kW	4.70		7.80	9.52	
	SCOP/A			4.20	4.28	4.50	4.26	
	SCOPnet/A			4.20	4.28	4.50	4.26	
	η _{s,h}		%		-		167	
	Annual energy consumption		kWh/a	1,567	1,538	2,427	3,129	
Required back up heating cap at design conditions				0.00				
Space cooling	A Condi- tion (35°C -27/19)	Pdc	kW	6.80		9.50	12.10	
		EERd		3.83	4.02	3.57	3.02	
	B Condi- tion (30°C -27/19)	Power input	kW	1.77	1.69	2.66	4.00	
		Pdc	kW	5.03		7.03	8.91	
	C Condi- tion (25°C -27/19)	EERd		5.34	5.65	4.93	5.08	
		Power input	kW	0.94	0.89	1.43	1.76	
	D Condi- tion (20°C -27/19)	Pdc	kW	3.20	3.19	4.46	5.74	
		EERd		8.83	8.54	7.75	7.22	
	E Condi- tion (15°C -27/19)	Power input	kW	0.36	0.37	0.58	0.79	
		Pdc	kW	2.59	2.64	3.36	3.23	
F Condi- tion (10°C -27/19)	EERd		12.48	10.88	10.65	10.56		
	Power input	kW	0.21	0.24	0.32	0.31		
Space heating (Average climate)	TOL	Tol (temperature operating limit)		°C				-10
		Pdh (declared heating cap)	kW	4.70		7.80	9.52	
		COPd (declared COP)		2.58	2.95	2.62	1.97	
	Power input	kW	1.82	1.59	2.97	4.83		
	TBivalent	Tbiv (bivalent temperature)		°C				-10
		Pdh (declared heating cap)	kW	4.70		7.80	9.52	
		COPd (declared COP)		2.58	2.95	2.62	1.97	
	Power input	kW	1.82	1.59	2.97	4.83		
	A Condi- tion (-7°C)	Pdh (declared heating cap)	kW	4.14		6.86	8.43	
		COPd (declared COP)		2.99	3.31	3.00	2.66	

2 Specifications

1 - 1 RZAG-NY1

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Technical specifications				FUA71A + RZAG71NY1	FUA100A + RZAG71NY1	FUA100A + RZAG100NY1	FUA125A + RZAG125NY1	
Space heating (Average climate)	A Con- dition (-7°C)	Power input	kW	1.38	1.25	2.29	3.17	
	B Condi- tion (2°C)	Pdh (declared heating cap)	kW	2.54		4.21	5.12	
		COPd (declared COP)		4.27	4.36	4.53	4.31	
		Power input	kW	0.60	0.58	0.93	1.19	
	C Condi- tion (7°C)	Pdh (declared heating cap)	kW	1.80	1.86	2.73	3.29	
		COPd (declared COP)		5.03	4.87	5.47		
		Power input	kW	0.36	0.38	0.50	0.60	
	D Condi- tion (12°C)	Pdh (declared heating cap)	kW	2.00	2.09	2.55	2.58	
		COPd (declared COP)		6.00	5.94	6.76	6.18	
		Power input	kW	0.33	0.35	0.38	0.42	
Power consump- tion in other than active mode	Crank- case heater mode	Cooling PCK	kW	0.000				
		Heating PCK	kW	0.000				
	Off mode	Cooling POFF	kW	0.009				
		Heating POFF	kW	0.009				
	Standby mode	Cooling PSB	kW	0.009				
		Heating PSB	kW	0.009				
	Thermo- stat-off mode	Cooling PTO	kW	0.005				
		Heating PTO	kW	0.013				
	Indication if the heater is equipped with a supplementary heater (pair application)				No			
	Supplementary heater (pair appli- cation)	Back-up capacity	Heating elbu	kW	0.0			
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				

(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.

Technical specifications				FVA71A + RZAG71NY1	FVA100A + RZAG71NY1	FVA100A + RZAG100NY1	FVA140A + RZAG100NY1	FVA125A + RZAG125NY1	FVA140A + RZAG140NY1
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			6.34	6.41	6.40	6.43	6.41	6.12
	ηs,c		%	-		-		253	242
	Annual energy consumption		kWh/a	376	371	520	517	1,133	1,314
Space heating (Average climate)	Energy efficiency class			A+				-	
	Capacity	Pdesign	kW	4.70		7.80		9.52	
	SCOP/A			4.05	4.03	4.20	4.05	4.15	3.94
	SCOPnet/A			4.05	4.03	4.20	4.05	4.15	3.94
	ηs,h		%	-		-		163	155
	Annual energy consumption		kWh/a	1,625	1,634	2,600	2,697	3,209	3,383
Required back up heating cap at design conditions			0.00						
Space cooling	A Condi- tion (35°C - 27/19)	Pdc	kW	6.80		9.50		12.10	13.40
		EERd		3.27	3.95	3.57	3.93	3.21	3.03
		Power input	kW	2.08	1.72	2.66	2.42	3.77	4.42
	B Condi- tion (30°C - 27/19)	Pdc	kW	5.03		7.03		8.92	9.87
		EERd		5.15	5.40	5.21	5.13	5.23	4.89
		Power input	kW	0.98	0.93	1.35	1.37	1.70	2.02
	C Condi- tion (25°C - 27/19)	Pdc	kW	3.20		4.46		5.73	6.35
		EERd		7.53	7.81	7.67	7.63	7.07	6.90
		Power input	kW	0.42	0.41	0.58	0.59	0.81	0.92
	D Condi- tion (20°C - 27/19)	Pdc	kW	2.33	2.61	3.20	3.54	3.23	3.24
		EERd		11.27	9.56	9.85	10.01	10.28	9.46
		Power input	kW	0.21	0.27	0.33	0.35	0.31	0.34

2 Specifications

1 - 1 RZAG-NY1

Technical specifications				FVA71A + RZAG71NY1	FVA100A + RZAG71NY1	FVA100A + RZAG100NY1	FVA140A + RZAG100NY1	FVA125A + RZAG125NY1	FVA140A + RZAG140NY1
Space heating (Average climate)	TOL	Tol (temperature operating limit) °C		-10					
		Pdh (declared heating cap) kW	4.70		7.80		9.52		
		COPd (declared COP)	2.42	2.85	2.45	2.57	1.86		
		Power input kW	1.94	1.65	3.19	3.04	5.11		
	TBivalent	Tbiv (bivalent temperature) °C		-10					
		Pdh (declared heating cap) kW	4.70		7.80		9.52		
		COPd (declared COP)	2.42	2.85	2.45	2.57	1.86		
		Power input kW	1.94	1.65	3.19	3.04	5.11		
	A Con- dition (-7°C)	Pdh (declared heating cap) kW	4.14		6.86		8.43	8.42	
		COPd (declared COP)	2.83	3.18	2.82	2.84	2.55	2.42	
Space heating (Average climate)	A Con- dition (-7°C)	Power input kW	1.46	1.30	2.43	2.42	3.30	3.48	
		Pdh (declared heating cap) kW	2.54		4.21		5.12		
	B Condi- tion (2°C)	COPd (declared COP)	4.07	4.11	4.21	4.11	4.20	3.99	
		Power input kW	0.62		1.00	1.02	1.22	1.28	
	C Condi- tion (7°C)	Pdh (declared heating cap) kW	1.76	1.88	2.73		3.29		
		COPd (declared COP)	4.92	4.54	5.13	4.77	5.42	5.12	
		Power input kW	0.36	0.41	0.53	0.57	0.61	0.64	
	D Con- dition (12°C)	Pdh (declared heating cap) kW	1.96	2.10	2.56	2.60	2.57	2.61	
		COPd (declared COP)	5.77	5.48	6.22	5.58	6.00	5.67	
		Power input kW	0.34	0.38	0.41	0.47	0.43	0.46	
Power consump- tion in other than active mode	Crank- case heater mode	Cooling PCK kW	0.000						
		Heating PCK kW	0.000						
	Off mode	Cooling POFF kW	0.009						
		Heating POFF kW	0.009						
	Standby mode	Cooling PSB kW	0.009						
		Heating PSB kW	0.009						
	Thermo- stat-off mode	Cooling PTO kW	0.005						
		Heating PTO kW	0.013						
Indication if the heater is equipped with a supplementary heater (pair application)				No					
Supplementary heater (pair appli- cation)	Back-up capacity	Heating elbu kW	0.0						
		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					

(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.

3 Electrical data

3 - 1 Electrical Data

RZAG-NV1

RZAG-NY1

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

3D120944E

3 Electrical data

3 - 1 Electrical Data

RZAG-NV1

RZAG-NY1

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

3D120943D

4 Options

4 - 1 Options

RZAG-NV1
RZAG-NY1
4

Available options for ·RZAG· models

Option		Option kit			
		RZAG71N7V1B	RZAG100N7V1B	RZAG125N7V1B	RZAG140N7V1B
		RZAG71N7Y1B	RZAG100N7Y1B	RZAG125N7Y1B	RZAG140N7Y1B
		RZAG71N2V1B	RZAG100N2V1B	RZAG125N2V1B	RZAG140N2V1B
		RZAG71N2Y1B	RZAG100N2Y1B	RZAG125N2Y1B	RZAG140N2Y1B
Bottom plate heater		EKBPH140N			
Refrigerant branch piping	Twin	KHRQ(M)58T			
	Triple	KHRQ(M)58H			
	Double twin	-		KHRQ(M)58T (3x)	
Demand adaptor kit (1)		SB.KRP58M52 (KRP58M51 + EKMKA2)			
Sound reduction kit		EKLN140A1			

Notes

- (1) To mount ·KRP58M51·, an additional mounting kit (·EKMKA2·) needs to be used (obligatory).
 This will be offered as sales bom SB.·KRP58M52· = ·KRP58M51· + ·EKMKA2·

3D120932C

5 Combination table

5 - 1 Combination Table

RZAG-NV1

RZAG-NY1

Possible combinations

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

OU_IO_ID	FAA71BUBV1B	FAA100BUBV1B	FBA100A2VEB	FBA125A2VEB	FBA140A2VEB	FBA35A2VEB9	FBA50A2VEB9	FBA60A2VEB9	FBA71A2VEB9	FCAG35BVEB	FCAG50BVEB	FCAG60BVEB	FCAG71BVEB	FCAG100BVEB	FCAG125BVEB	FCAG140BVEB	FCAHG71HVEB	FCAHG100HVEB	FCAHG125HVEB	FCAHG140HVEB	FDA125A5VEB	FXM35F3V1B9	FXM50F3V1B9	FXM60F3V1B9	FFA35A2VEB9	FFA50A2VEB9	FFA60A2VEB9	FHA100AVEB9	FHA125AVEB9	FHA140AVEB9	FHA35AVEB99	FHA50AVEB99	FHA60AVEB99	FHA71AVEB99	FNA35A2VEB9	FNA50A2VEB9	FNA60A2VEB9	FUA71AVEB9	FUA100AVEB9	FUA125AVEB9	FVA71AMVEB	FVA100AMVEB	FVA125AMVEB	FVA140AMVEB				
RZAG71N7V1B	P					2			P 2				P				P					2			2										2			P 2			P							
RZAG100N7V1B	P	P				3 2				3 2			P					P				3 2		3 2			P								3 2				3 2			P			P			
RZAG125N7V1B			P			4 3 2				4 3 2			P					P			P	4 3 2	4 3 2	4 3 2			P								4 3 2				4 3 2			P			P			
RZAG140N7V1B	2			P		4 3		2		4 3		2			P 2			P			P	4 3	4 3	4 3				P						4 3			2	4 3		2		2			P			
RZAG71N7Y1B	P					2			P 2				P									2		2												2			P 2			P						
RZAG100N7Y1B	P	P				3 2				3 2			P					P				3 2	3 2	3 2			P								3 2				3 2			P			P			
RZAG125N7Y1B			P			4 3 2				4 3 2			P					P			P	4 3 2	4 3 2	4 3 2			P								4 3 2				4 3 2			P			P			
RZAG140N7Y1B	2			P		4 3		2		4 3		2			P 2			P			P	4 3	4 3	4 3				P							4 3			2	4 3		2		2			P		

Notes

- When combining multiple indoor units, designate the unit whose remote controller is equipped with the most functions as the master unit.

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RZAG-NV1

RZAG-NY1

Possible combinations

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

OU_IO_ID	FAA71BUBV1B	FAA100BUBV1B	FBA100A2VEB	FBA125A2VEB	FBA35A2VEB9	FBA50A2VEB9	FBA71A2VEB9	FCAG35BVEB	FCAG50BVEB	FCAG60BVEB	FCAG71BVEB	FCAG100BVEB	FCAG125BVEB	FCAG140BVEB	FCAHG71HVEB	FCAHG100HVEB	FCAHG125HVEB	FCAHG140HVEB	FXM35F3V1B9	FXM50F3V1B9	FXM60F3V1B9	FFA35A2VEB9	FFA50A2VEB9	FFA60A2VEB9	FHA100AVEB9	FHA125AVEB9	FHA140AVEB9	FHA35AVEB99	FHA50AVEB99	FHA71AVEB99	FUA71AVEB9	FUA100AVEB9	FVA71AMVEB	FVA100AMVEB	FVA125AMVEB	FVA140AMVEB												
RZAG71N7V1B		P	P			3 2			3 2			P									3 2	3 2	3 2			P											3 2					P						
RZAG100N7V1B	2			P		4 3 2		4 3 2					P		2				P	4 3	4 3	4 3				P										4 3 2		2							P			
RZAG125N7V1B	2			P		4 3 2		4 3 2					P		2				P	4 3	4 3	4 3				P										4 3 2		2							P			
RZAG140N7V1B	2			P		4 3 2		4 3 2					P		2				P	4 3	4 3	4 3				P										4 3 2		2							P			
RZAG71N7Y1B		P	P			3 2			3 2				P						P	3 2	3 2	3 2				P													3 2				P			P		
RZAG100N7Y1B	2			P		4 3 2		4 3 2					P		2				P	4 3	4 3	4 3				P										4 3 2		2		2					P			
RZAG125N7Y1B	2			P		4 3 2		4 3 2					P		2				P	4 3	4 3	4 3				P										4 3 2		2		2					P			
RZAG140N7Y1B	2			P		4 3 2		4 3 2					P		2				P	4 3	4 3	4 3				P										4 3 2		2		2					P			

Notes

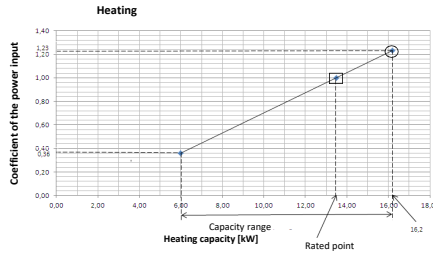
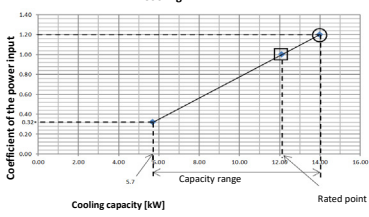
- When combining multiple indoor units, designate the unit whose remote controller is equipped with the most functions as the master unit.

3D120929B

6 Capacity tables
6 - 1 Cooling/Heating Capacity Tables

RZAG125NV1

RZAG125NY1



- 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

Table with columns for Indoor (°C WB, °C DB), Outdoor temperature (°C DB) at 25, 30, 35, 40, and various capacity metrics (TC, SHC, CPI, kW).

Table with columns for Indoor (°C DB) and Outdoor temperature (°C WB) at -15.0, -10.0, -5.0, 0.0, 5.0, 10.0, and various capacity metrics (TC, CPI, kW).

- Notes
1. The ratings shown are net capacities which include a deduction for indoor fan motor heat.
2. Maximum at standard conditions
3. SHC is based on indoor units -EWB & 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.

- Notes
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.

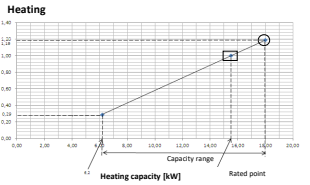
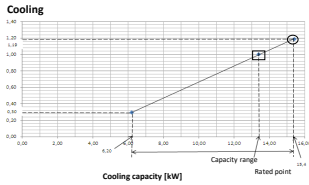
Table listing model configurations for Pair, Twin, Triple, and Double twin setups with AFR and (BF) values.

Table listing model configurations for Pair, Twin, Triple, and Double twin setups with Cooling and Heating capacity and (BF) values.

3D125182

RZAG140NV1

RZAG140NY1



- 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 capacity table for RZAG140 series with columns for Indoor, Outdoor temperature (25, 30, 35, 40), and capacity metrics.

Heating capacity table for RZAG140 series with columns for Indoor, Outdoor temperature (-15, -10, -5, 0, 5, 10), and capacity metrics.

- Notes
1. The ratings shown are net capacities which include a correction for indoor fan motor heat.
2. Maximum at standard conditions
3. SHC is based on indoor units -EWB & 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.

- Notes
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.

Table listing model configurations for Pair, Twin, Triple, and Double twin setups for RZAG140 series.

Table listing model configurations for Pair, Twin, Triple, and Double twin setups with Cooling and Heating capacity for RZAG140 series.

3D125183B

6 Capacity tables

6 - 1 Cooling/Heating Capacity Tables

RZAG125NV1 RZAG125NY1

Performance characteristics for ·EDP· room

Table with columns for Indoor, Outdoor temperature [°C DB], and various capacity metrics (TC, SHC, CPI) for different indoor conditions (RH, CWB, CDB) and outdoor temperatures (-20 to 40 °C).

Symbols

TC: Maximum total cooling capacity [kW]

SHC: Sensible heat capacity [kW]

CPI: Coefficient of the power input

PI: Power input [kW]

compressor + indoor and outdoor fan motors

RH: Relative humidity [%]

Notes

- 1. The ratings shown are net capacities which include a deduction for indoor fan motor heat.
2. The capacities are based on the following conditions: Outdoor air: 85% RH- Corresponding refrigerant piping length: ·5.0 m Level difference: 0m
3. For EDP applications, it is recommended to use outdoor unit setting 2-57-2.
4. CPI is a percentage value compared to the rated value which is 1.00.
5. The error rate for this value is less than 5% and depends on the indoor unit type.
6. The rated power input for each model is mentioned in the table below.

Table with 5 columns for Pair (FCAG140H, FCAG140B, FVA140A, FHA140A, FBA140A) and Cooling capacity values (3.09, 3.07, 3.17, 3.05, 2.99).

Table with 5 columns for Twin (FCAG71HX2, FCAG71BX2, FHA71Ax2, FUA71Ax2, FAA71Bx2, FBA71Ax2) and Cooling capacity values (2.57, 2.79, 2.68, 2.69, 2.88, 2.64).

Table with 5 columns for Triple (FCAG50Bx3, FFA50Ax3, FFA50Ax3, FDXM50Fx3, FBA50Ax3) and Cooling capacity values (2.57, 2.79, 2.97, 2.36, 2.74).

Table with 5 columns for Double (FCAG35Bx4, FHA35Ax4, FFA35Ax4, FDXM35Fx4, FBA35Ax4) and Cooling capacity values (2.51, 2.45, 2.71, 2.55, 2.96).

3D125186A

RZAG140NV1 RZAG140NY1

Performance characteristics for ·EDP· room

Table with columns for Indoor, Outdoor temperature [°C DB], and various capacity metrics (TC, SHC, CPI) for different indoor conditions (RH, CWB, CDB) and outdoor temperatures (-20 to 40 °C).

Symbols

TC: Maximum total cooling capacity [kW]

SHC: Sensible heat capacity [kW]

CPI: Coefficient of the power input

PI: Power input [kW]

compressor + indoor and outdoor fan motors

RH: Relative humidity [%]

Notes

- 1. The ratings shown are net capacities which include a deduction for indoor fan motor heat.
2. The capacities are based on the following conditions: Outdoor air: 85% RH- Corresponding refrigerant piping length: ·5.0 m Level difference: 0m
3. For EDP applications, it is recommended to use outdoor unit setting 2-57-2.
4. CPI is a percentage value compared to the rated value which is 1.00.
5. The error rate for this value is less than 5% and depends on the indoor unit type.
6. The rated power input for each model is mentioned in the table below.

Table with 5 columns for Pair (FCAG140H, FCAG140B, FVA140A, FHA140A, FBA140A) and Cooling capacity values (3.64, 4.29, 4.42, 4.31, 4.69).

Table with 5 columns for Twin (FCAG71HX2, FCAG71BX2, FHA71Ax2, FUA71Ax2, FAA71Bx2, FBA71Ax2) and Cooling capacity values (2.89, 3.15, 3.01, 3.02, 3.27, 2.97).

Table with 5 columns for Triple (FCAG50Bx3, FFA50Ax3, FFA50Ax3, FDXM50Fx3, FBA50Ax3) and Cooling capacity values (2.88, 3.04, 3.37, 2.65, 3.06).

Table with 5 columns for Double twin (FCAG35Bx4, FHA35Ax4, FFA35Ax4, FDXM35Fx4, FBA35Ax4) and Cooling capacity values (3.08, 2.73, 3.04, 2.87, 3.32).

3D125187A

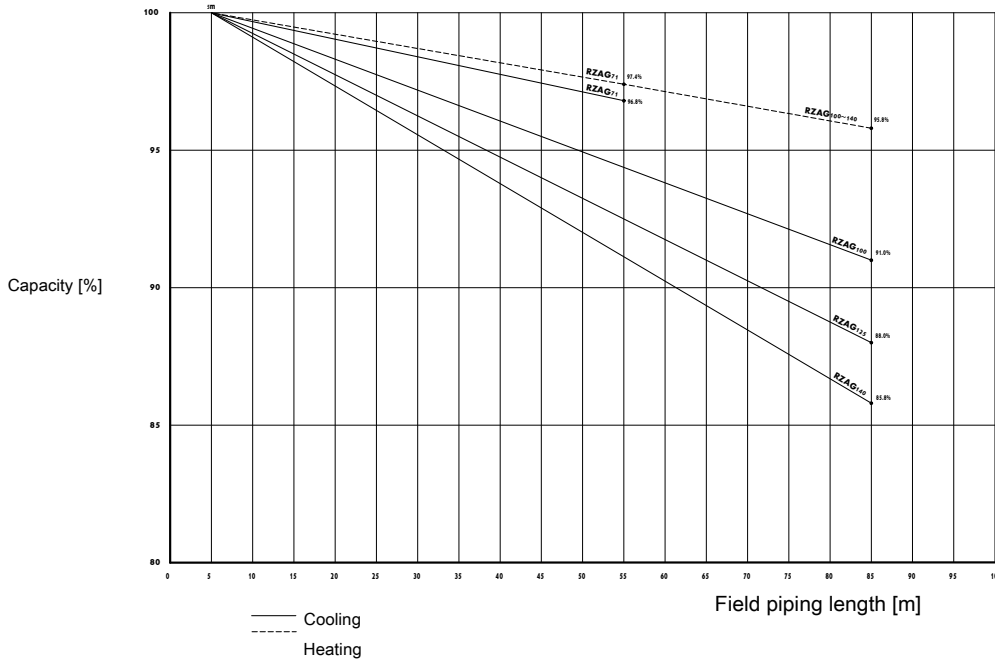
6 Capacity tables

6 - 2 Capacity Correction Factor

6

RZAG-NV1
RZAG-NY1

Capacity in function of field piping length

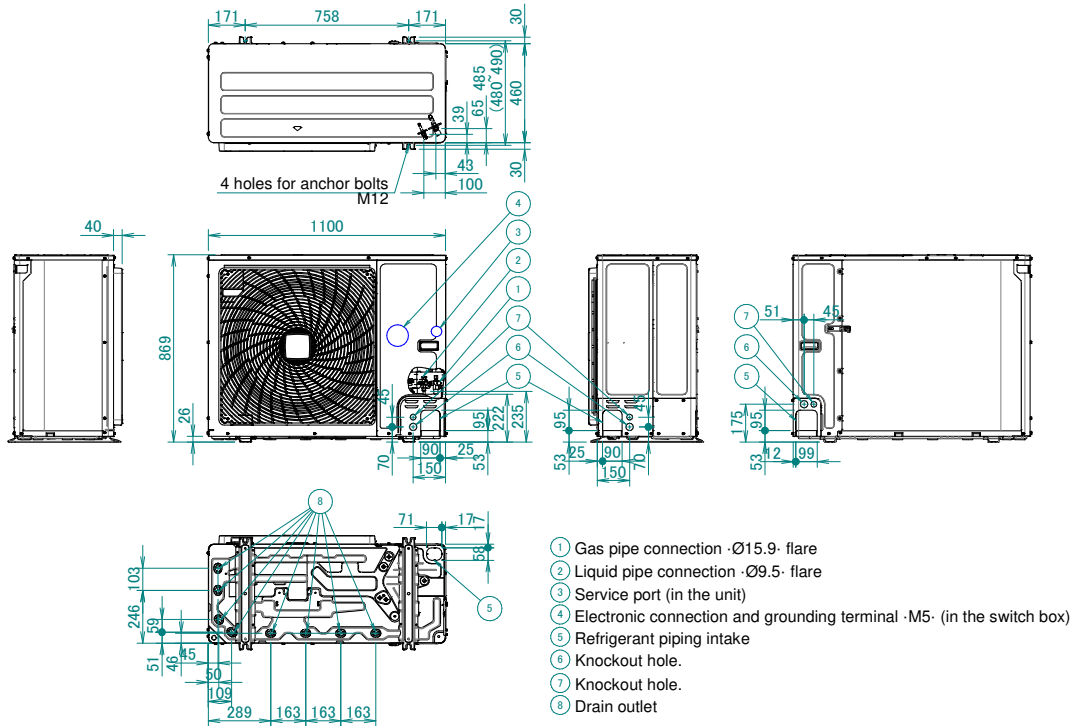


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7 Dimensional drawings

7 - 1 Dimensional Drawings

RZAG-NV1
RZAG-NY1



3D120936

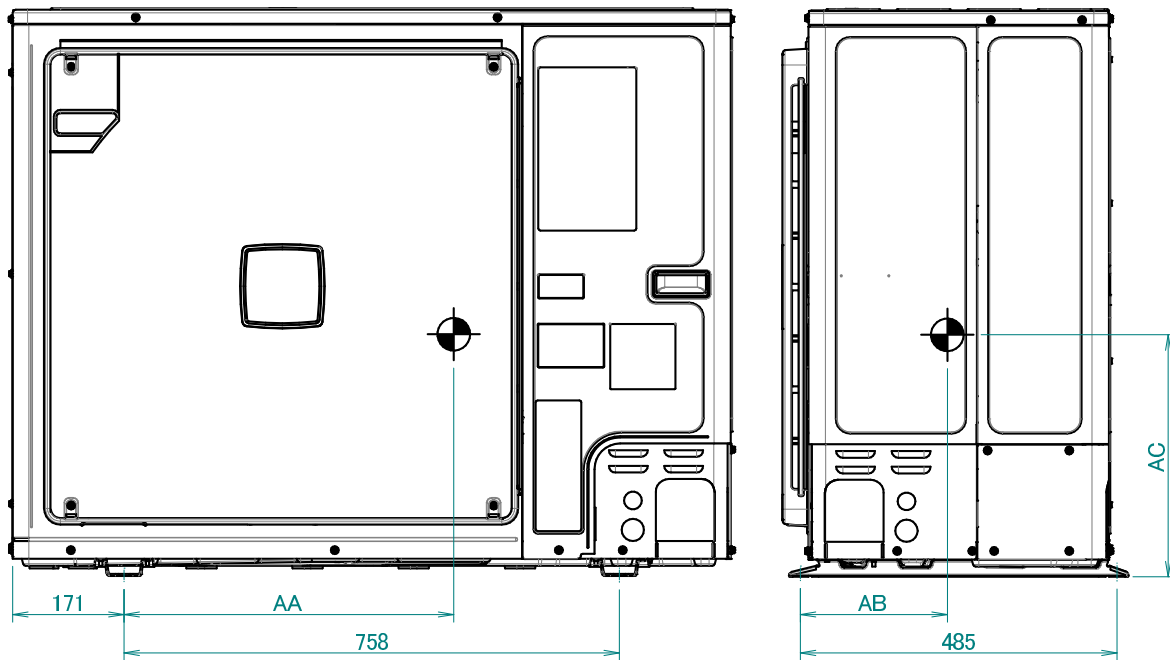
8 Centre of gravity

8 - 1 Centre of Gravity

8

RZAG-NV1

RZAG-NY1



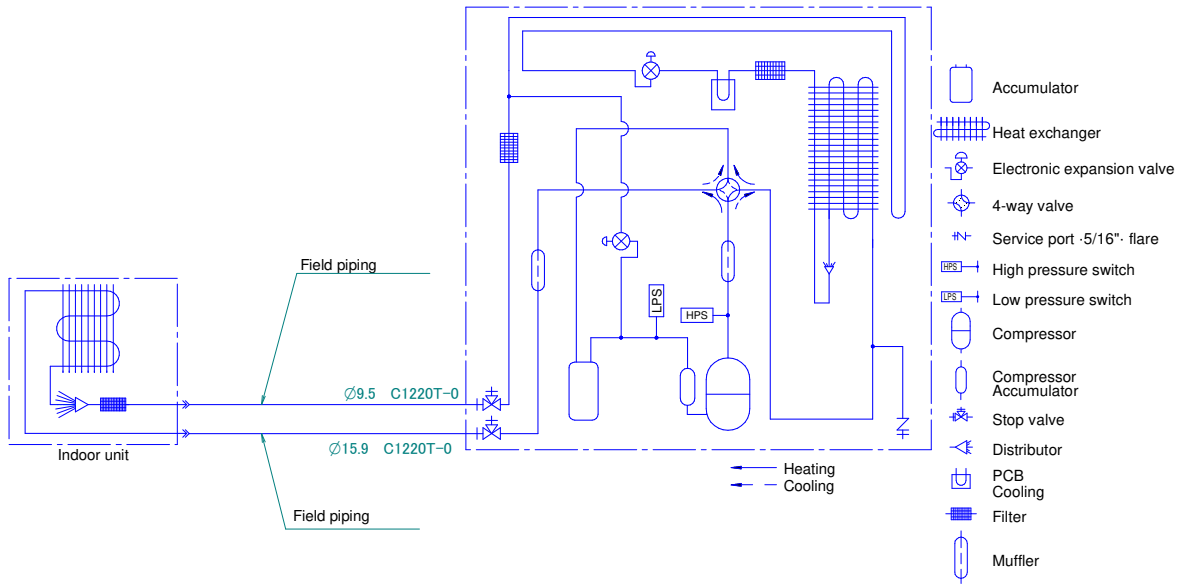
Model	AA	AB	AC
RZAG71N2/7V1B	520.3	238.7	357.8
RZAG71N2/7Y1B	525.9	224.7	359.8
RZAG100N2/7V1B	499.7	239.3	367.6
RZAG100N2/7Y1B	511.2	223.5	362.5
RZAG125/140N2/7V1B	486.3	229.2	371.8
RZAG125/140N2/7Y1B	493.4	215.8	372.2
RXYSA4/5/6A7V1B	530.4	249.9	389.0
RXYSA4/5/6A7Y1B			

4D120933C

9 Piping diagrams

9 - 1 Piping Diagrams

RZAG-NV1
RZAG-NY1



Notes

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

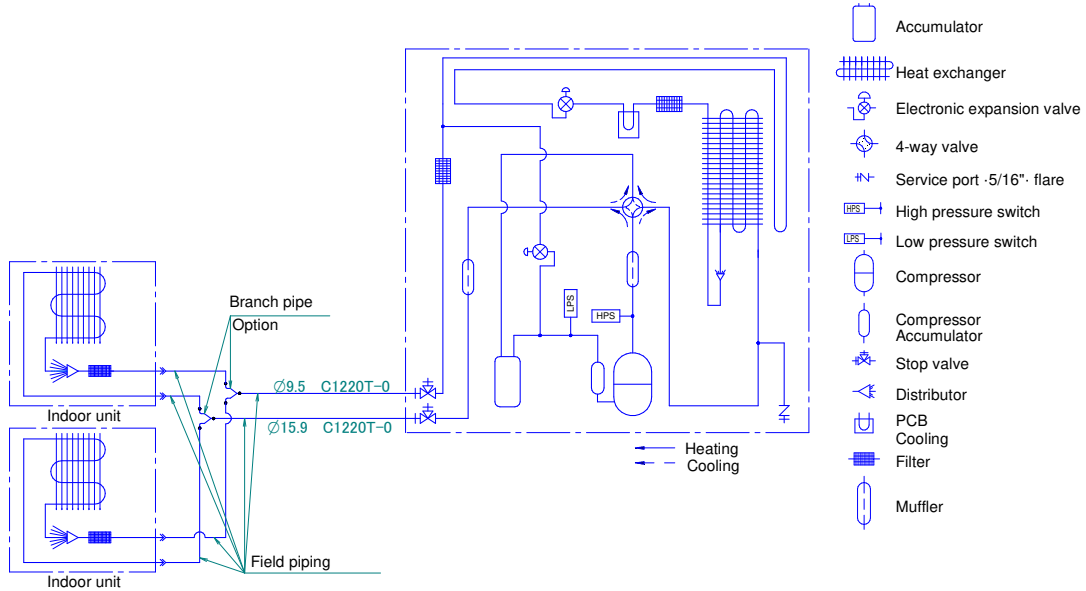
3D120907

9 Piping diagrams

9 - 2 Piping Diagram Twin Application

9

RZAG-NV1
RZAG-NY1



Notes

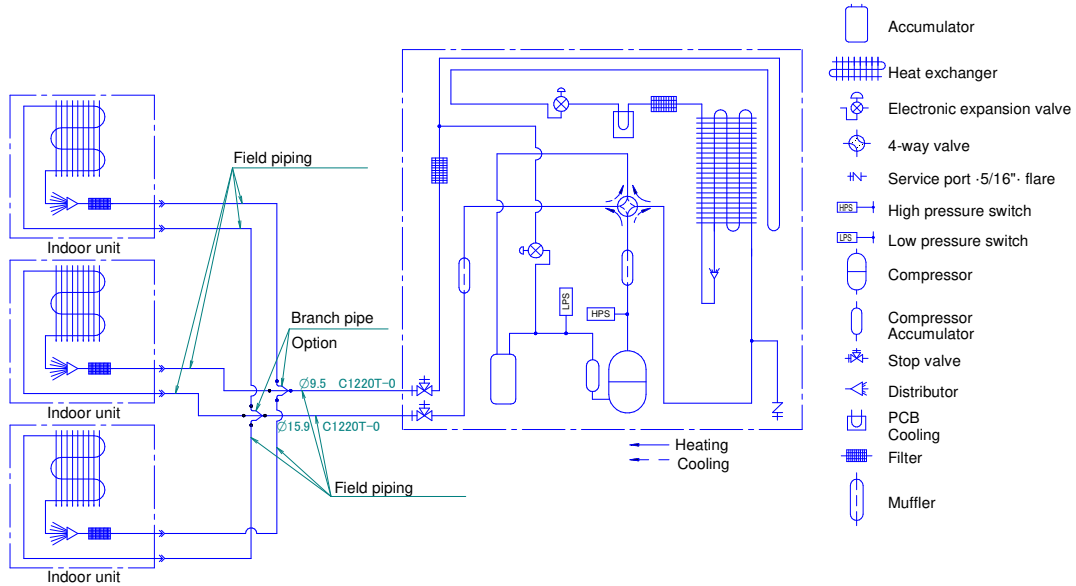
1. The pipes between the branch and the indoor units should have the same size as the indoor connections.

3D120913

9 Piping diagrams

9 - 3 Piping Diagram Triple Application

RZAG100-140NV1
RZAG100-140NY1



Notes

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

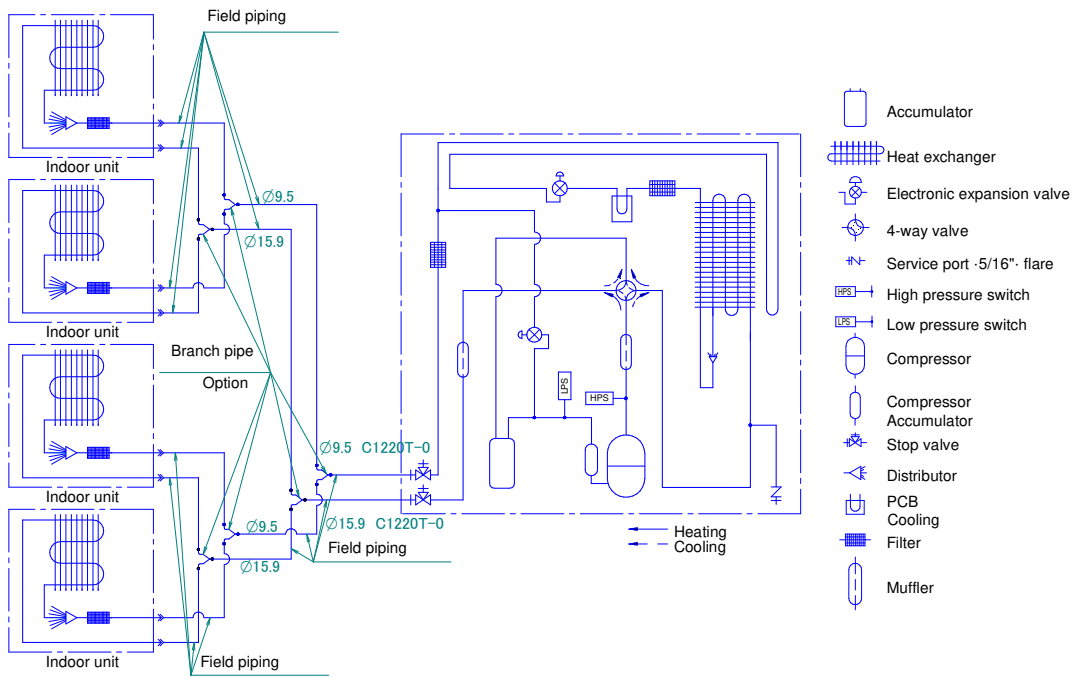
3D120914

9 Piping diagrams

9 - 4 Piping Diagram Double Twin Application

9

RZAG125-140NV1
RZAG125-140NY1



Notes

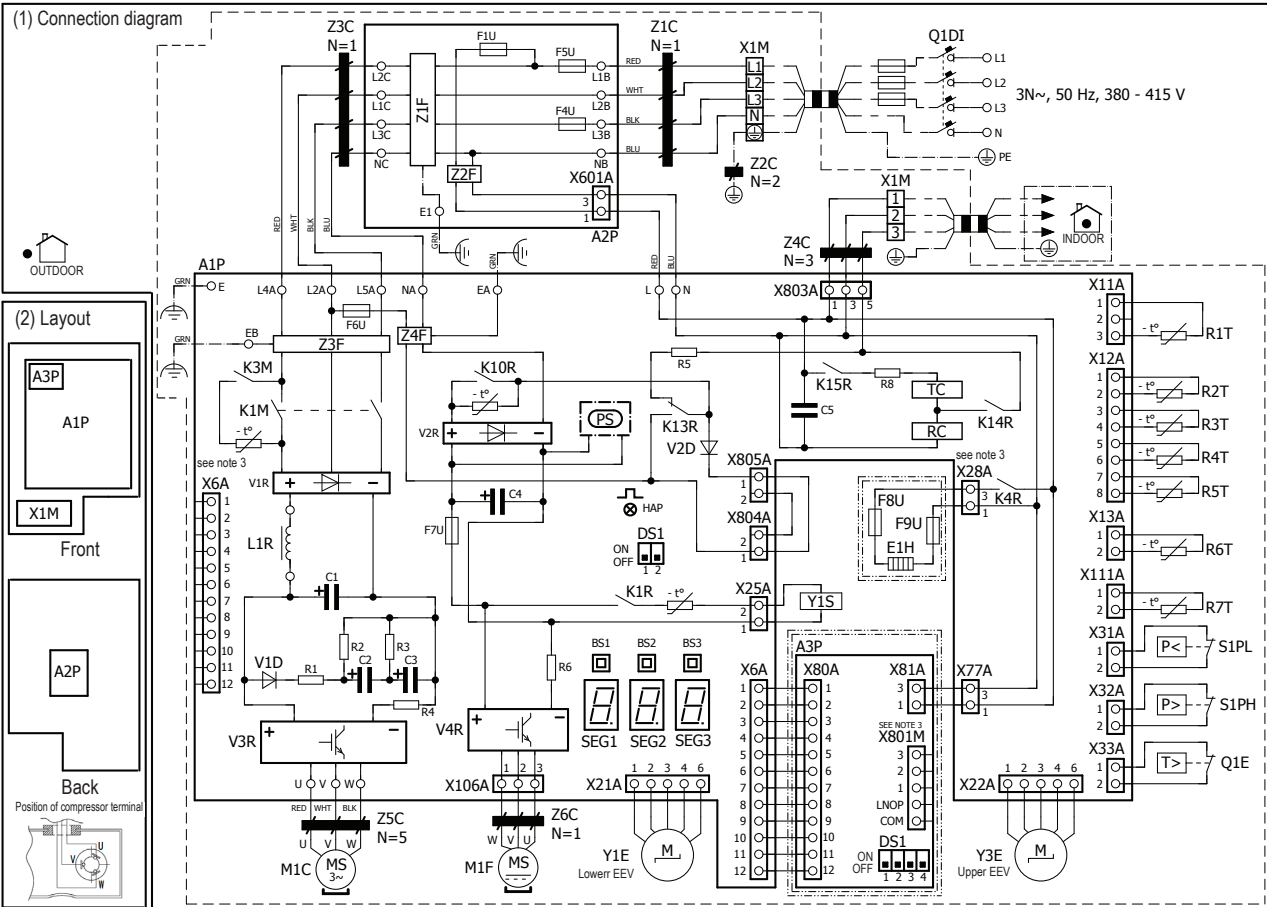
1. The pipes between the branch and the indoor units should have the same size as the indoor connections.

3D120915

10 Wiring diagrams

10 - 1 Wiring Diagrams - Single Phase

RZAG-NY1



(3) NOTES

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

(4) LEGEND

Part n°	Description
A1P	Printed circuit board (main)
A2P	Printed circuit board (noise filter)
A3P	* Printed circuit board (demand)
BS1-3 (A1P)	Push-button switch
C1-C5 (A1P)	Capacitor
DS1 (A1P, A3P)	Dipswitch
E1H	* Bottom plate heater
F1U (A2P)	Fuse T 6,3 A 250 V
F4U, F5U (A2P)	Fuse T 30 A 500 V
F6U (A1P)	Fuse T 6,3 A 250 V
F7U (A1P)	Fuse T 5 A 250 V
F8U, F9U	* Fuse F 1 A 250 V
HAP (A1P)	Light-emitting diode (service monitor is green)
K1M, K3M (A1P)	Magnetic contactor
K1R (A1P)	Magnetic relay (Y1S)
K4R (A1P)	Magnetic relay (E1H)
K10R	Magnetic relay
K13R-K15R (A1P)	Magnetic relay
L1R	Reactor
M1C	Compressor motor
M1F	Fan motor
PS (A1P)	Switching power supply
Q1DI	Earth leakage circuit breaker (30mA)

Part n°	Description
Q1E	Overload protection
R1-R6, R8 (A1P)	Resistor
R1T	Thermistor (air)
R2T	Thermistor (discharge)
R3T	Thermistor (suction)
R4T	Thermistor (heat exchanger)
R5T	Thermistor (heat exchanger middle)
R6T	Thermistor (liquid)
R7T	Thermistor (fin)
RC (A1P)	Signal receiver circuit
S1PH	High pressure switch
S1PL	Low pressure switch
SEG1-SEG3 (A1P)	7-segment display
TC (A1P)	Signal transmission circuit
V1D, V2D (A1P)	Diode
V1R, V2R (A1P)	Diode module
V3R, V4R (A1P)	IGBT power module
X1M	Terminal strip
Y1E, Y3E	Electronic expansion valve
Y1S	Solenoid valve (4-way valve)
Z1C-Z6C	Noise filter (ferrite core)
Z1F-Z4F (A1P-A2P)	Noise filter
L*A, L*B, NA, NB E*, U, V, W, X*A (A1P, A2P)	Connector

* : optional
: field supply

NOTES

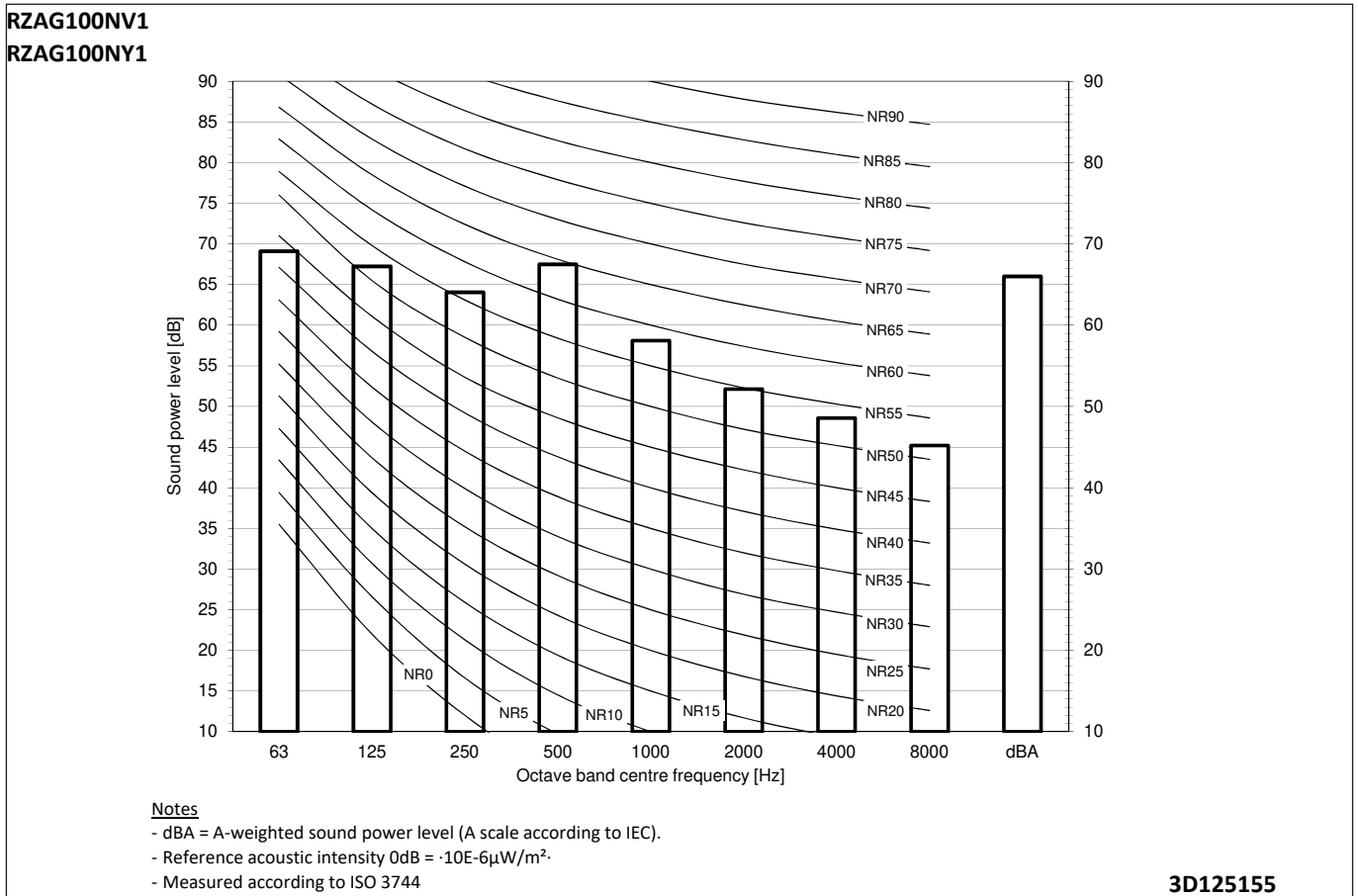
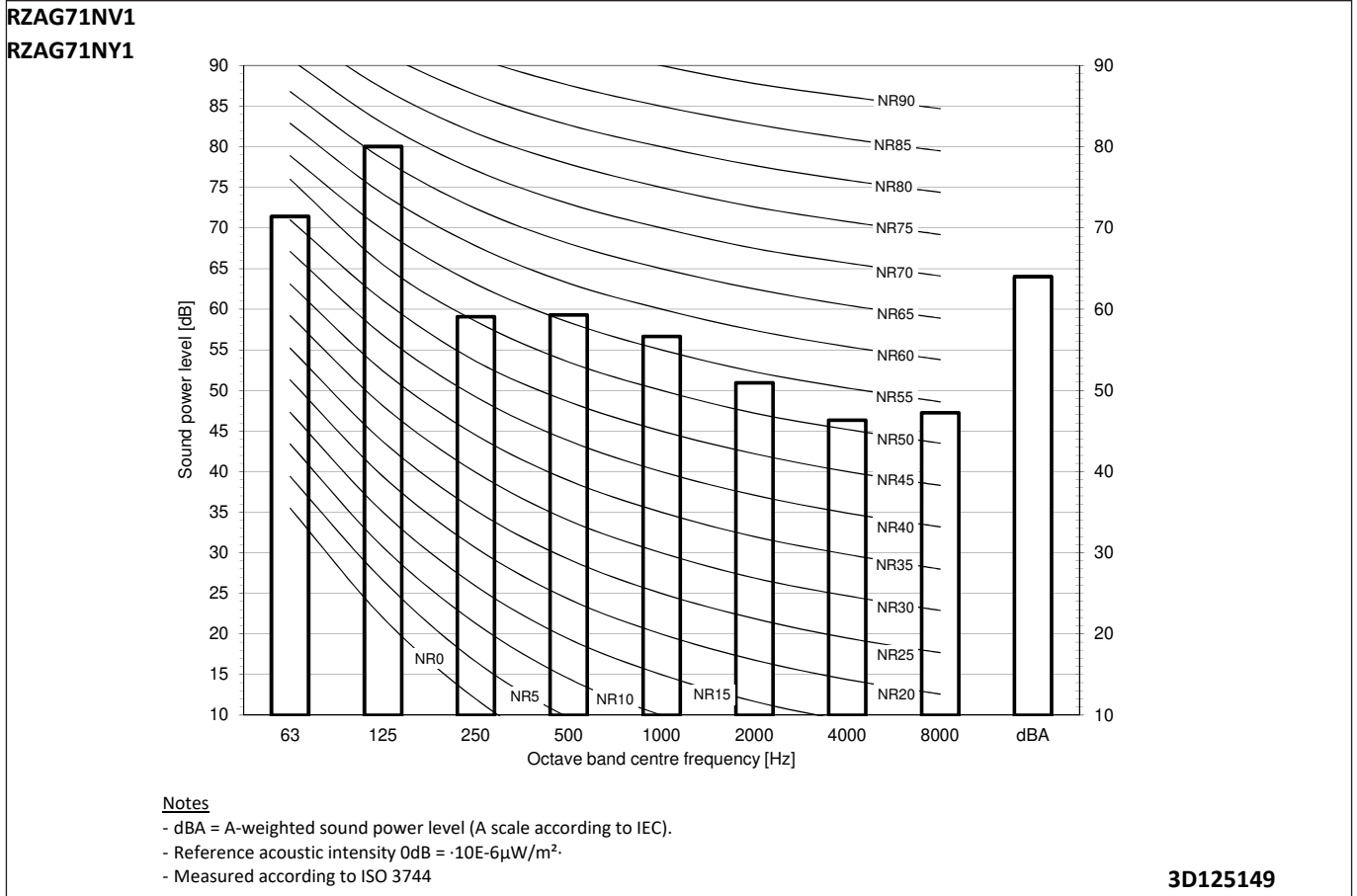
- Refer to the wiring diagram sticker (on the back of the front plate) for how to use the BS1-BS3 and DS1 switches.
- When operating, do not short-circuit protection device(s) S1PH, S1PL and Q1E.
- Refer to the combination table and the option manual for how to connect the wiring to X28A and X801M.
- Colours: BLK:black; RED:red; BLU:blue; WHT:white; GRN:green

4D120911

11 Sound data

11 - 1 Sound Power Spectrum

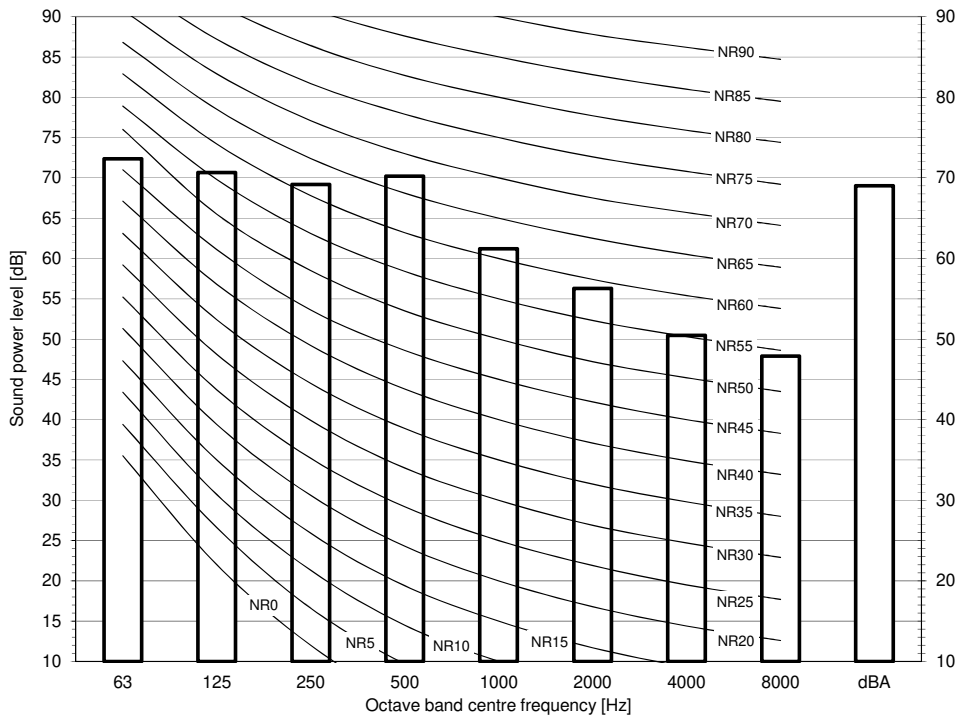
11



11 Sound data

11 - 1 Sound Power Spectrum

RZAG125NV1
RZAG125NY1

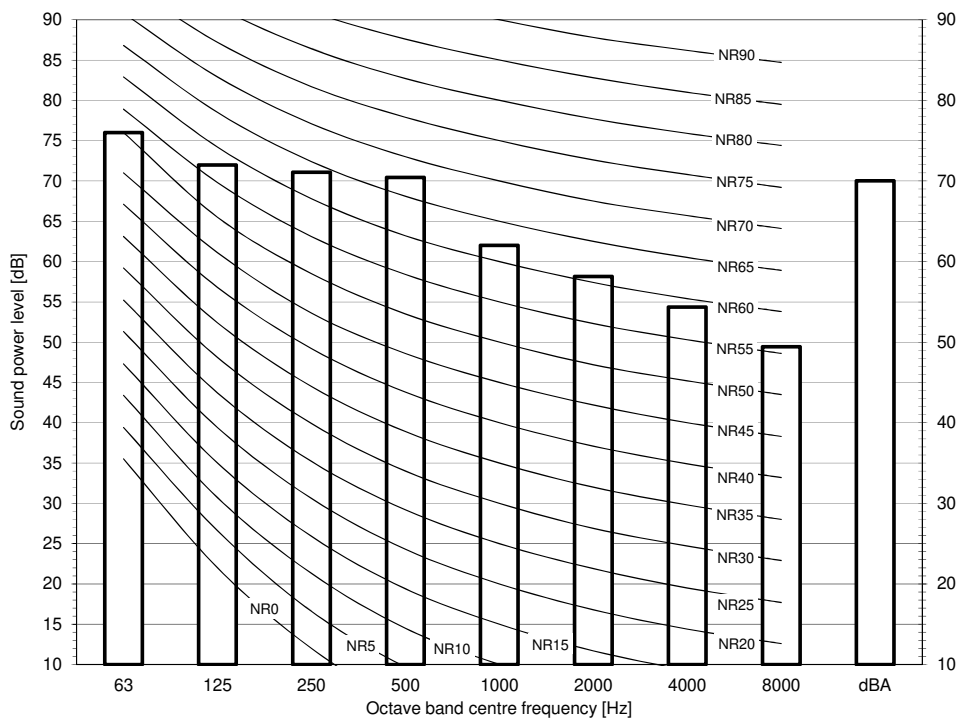


Notes

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

3D125161

RZAG140NV1
RZAG140NY1



Notes

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

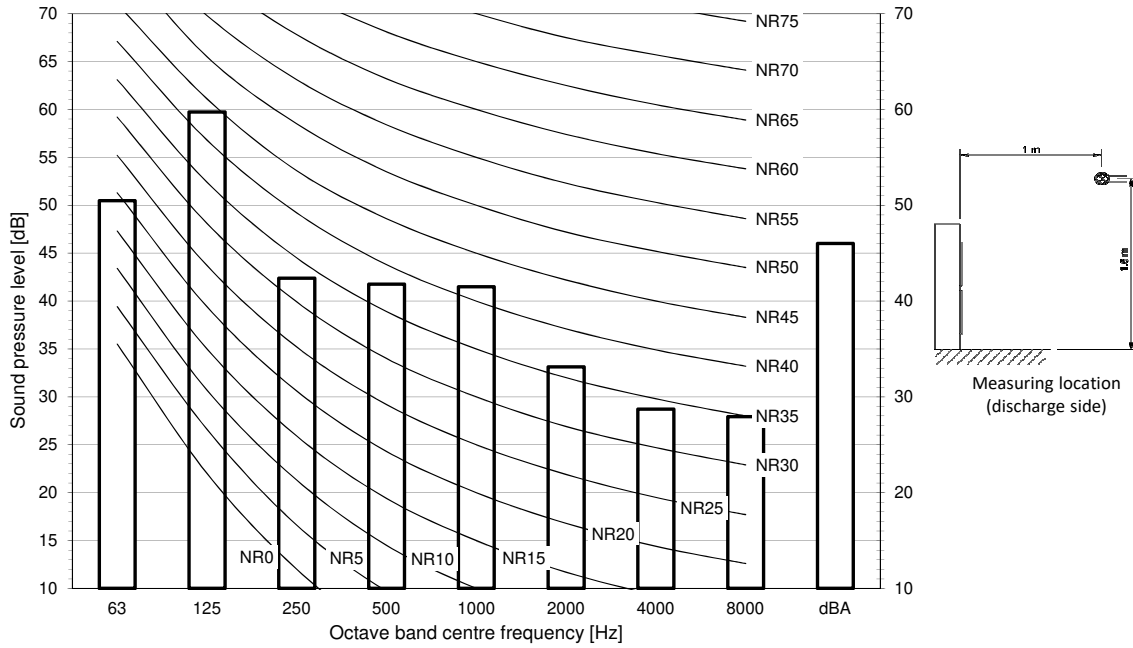
3D125167

11 Sound data

11 - 2 Sound Pressure Spectrum - Cooling

11

RZAG71NV1
RZAG71NY1

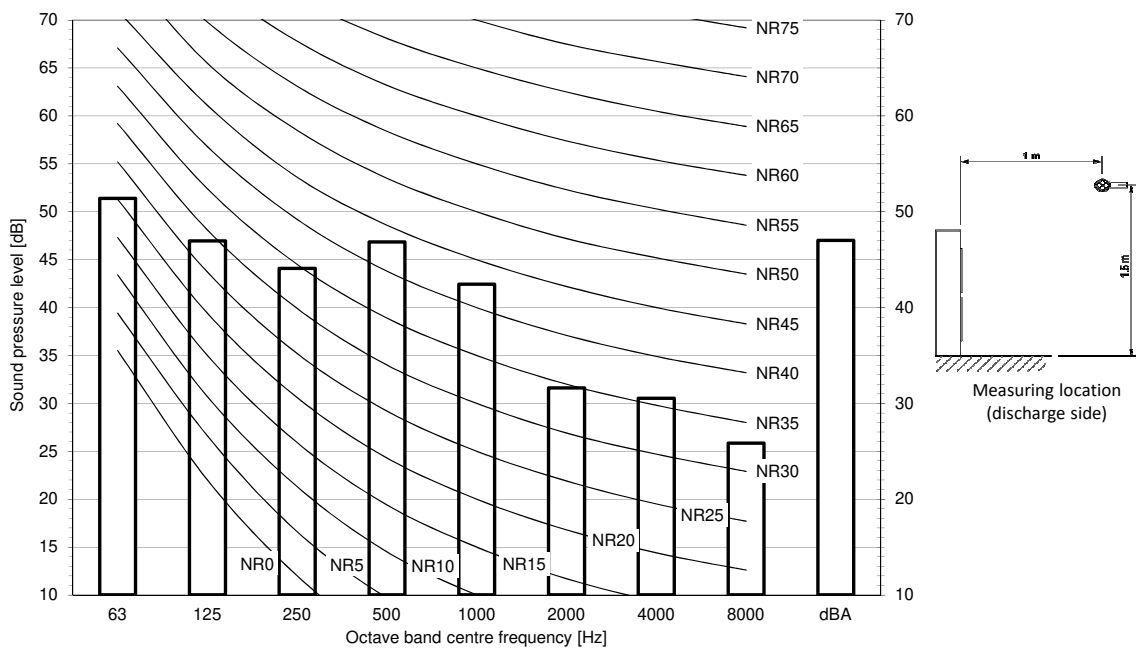


Notes

- 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

3D125147

RZAG100NV1
RZAG100NY1



Notes

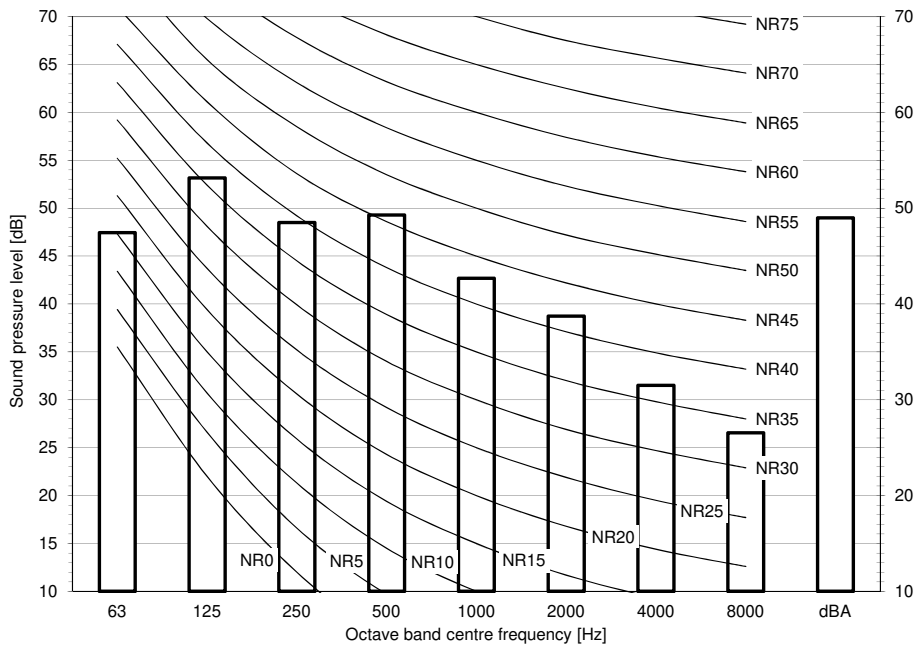
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

3D125153

11 Sound data

11 - 2 Sound Pressure Spectrum - Cooling

RZAG125NV1
RZAG125NY1

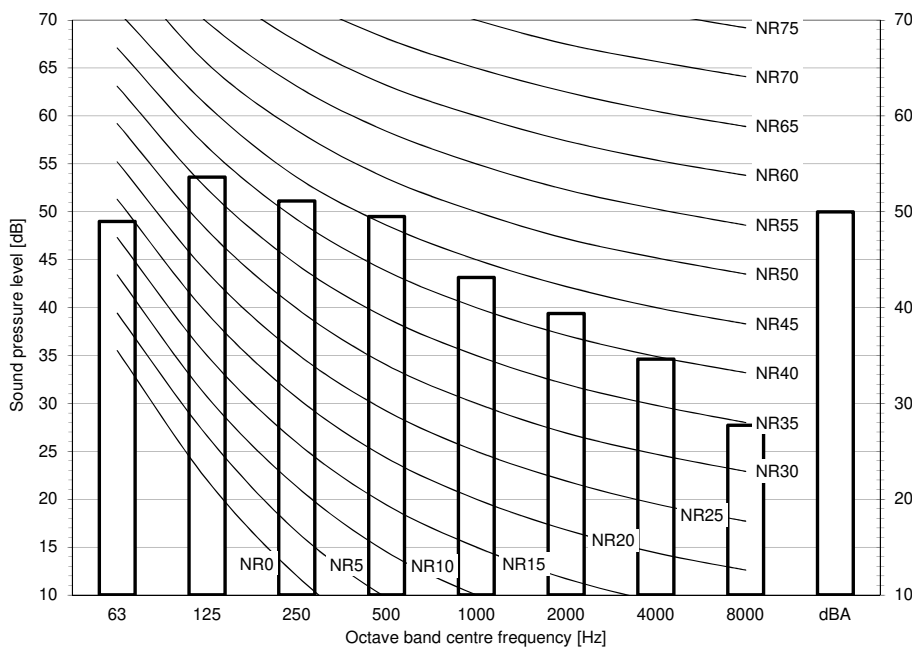


Notes

- 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

3D125159

RZAG140NV1
RZAG140NY1



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

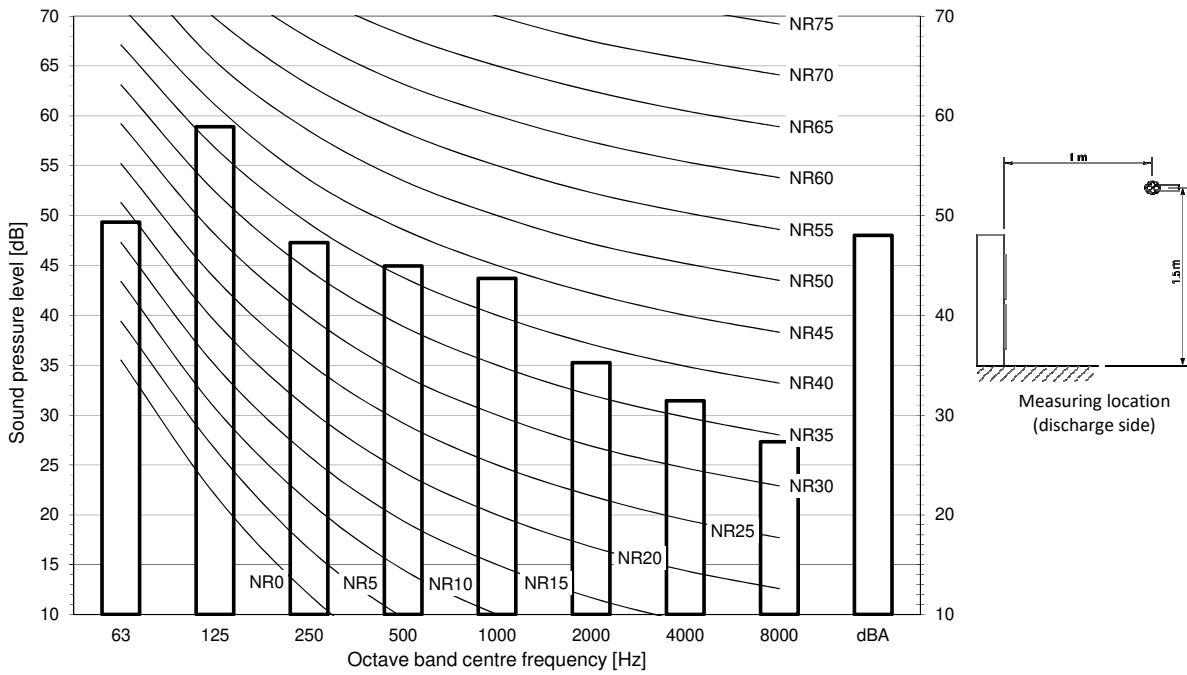
3D125165

11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

11

RZAG71NV1
RZAG71NY1

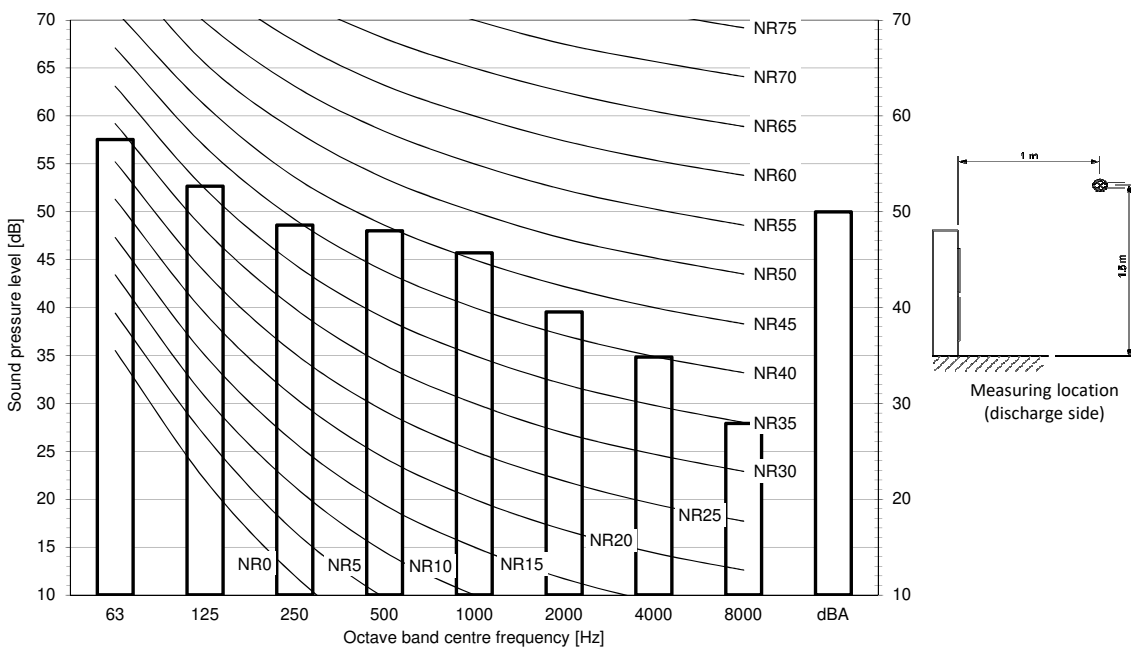


Notes

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

3D125148

RZAG100NV1
RZAG100NY1



Notes

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

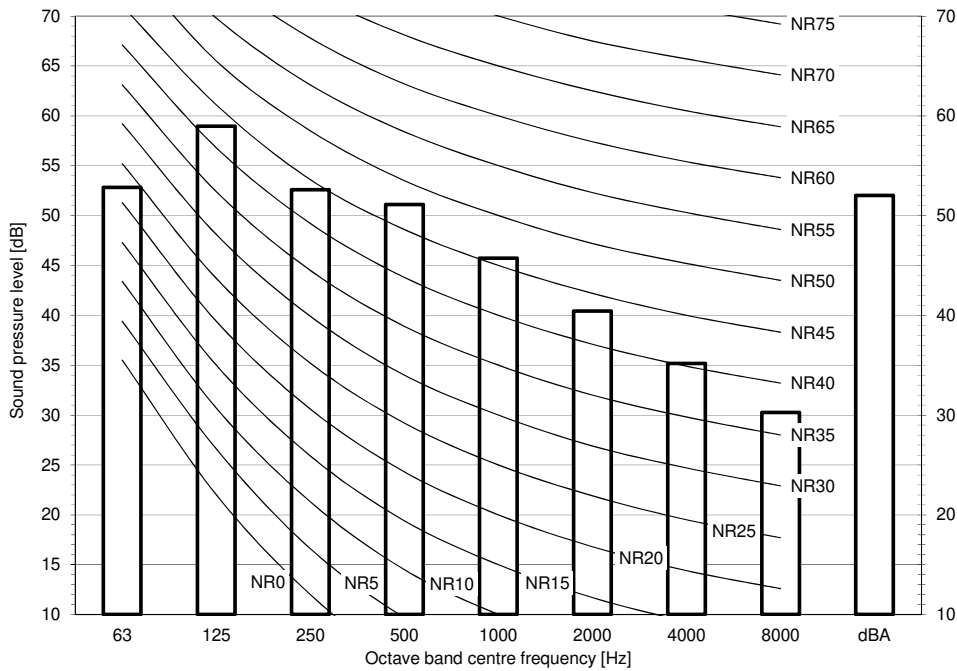
3D125154

11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

RZAG125NV1

RZAG125NY1



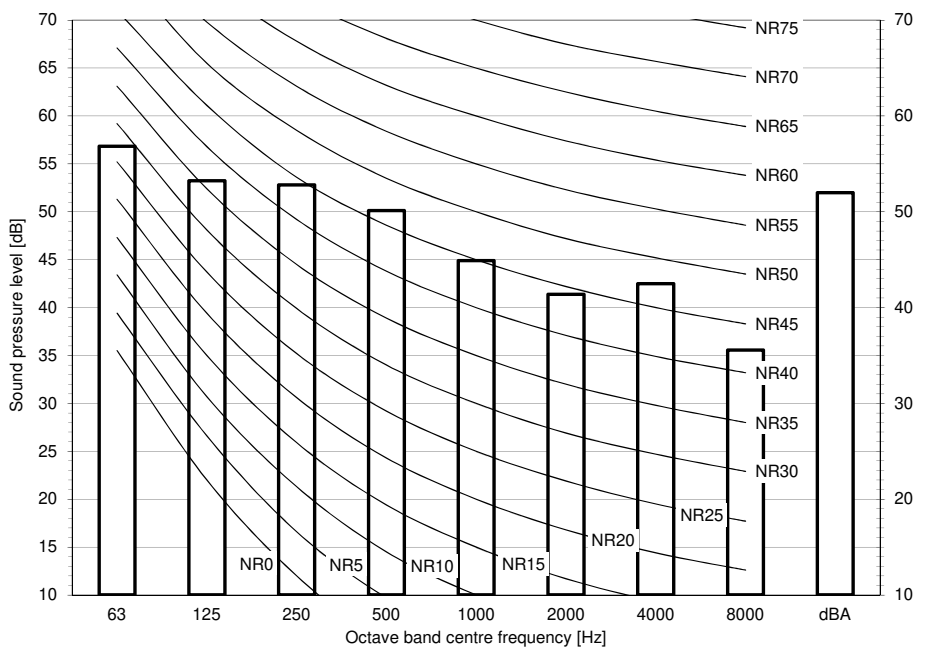
Notes

- 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

3D125160

RZAG140NV1

RZAG140NY1



Notes

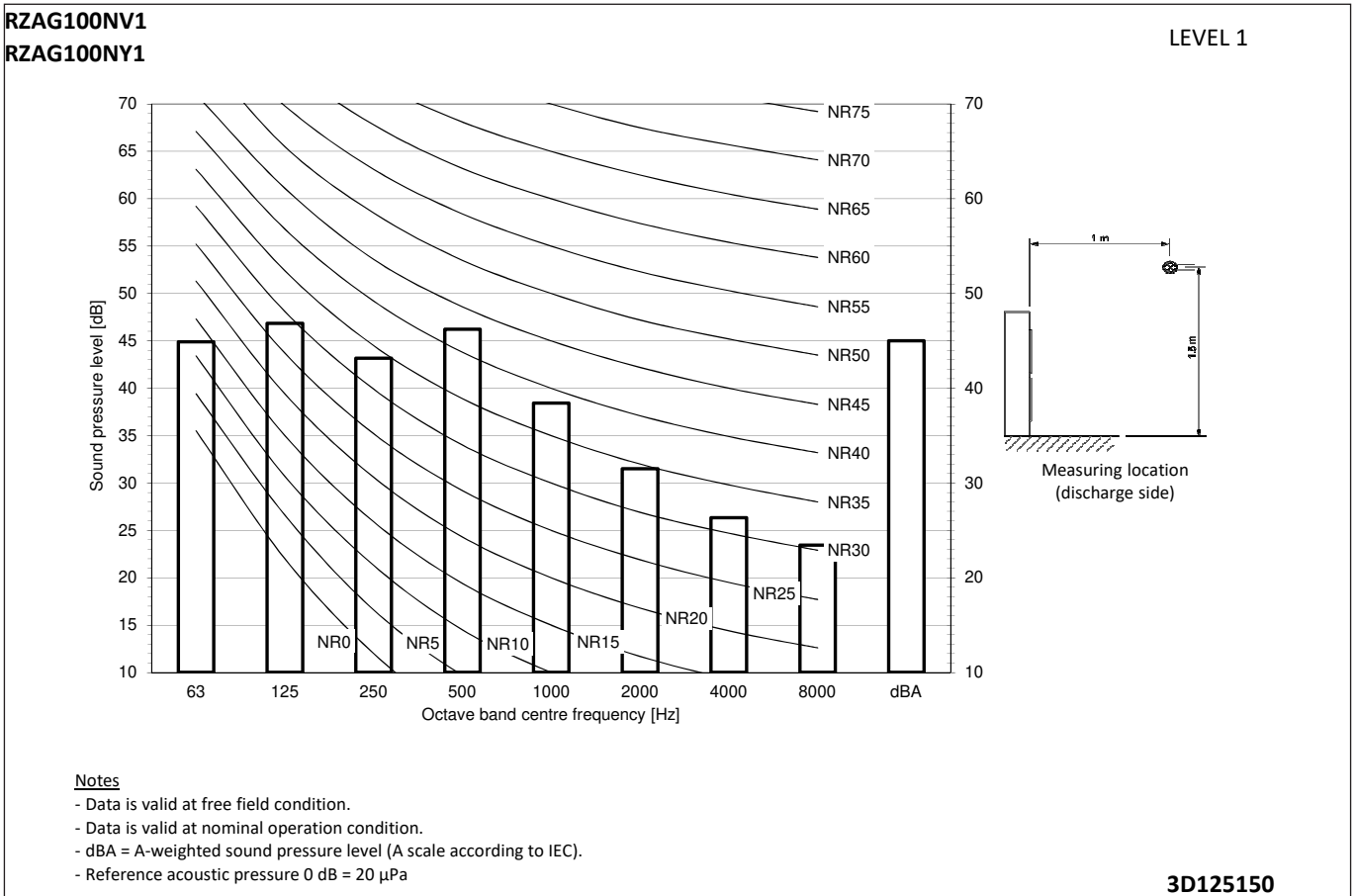
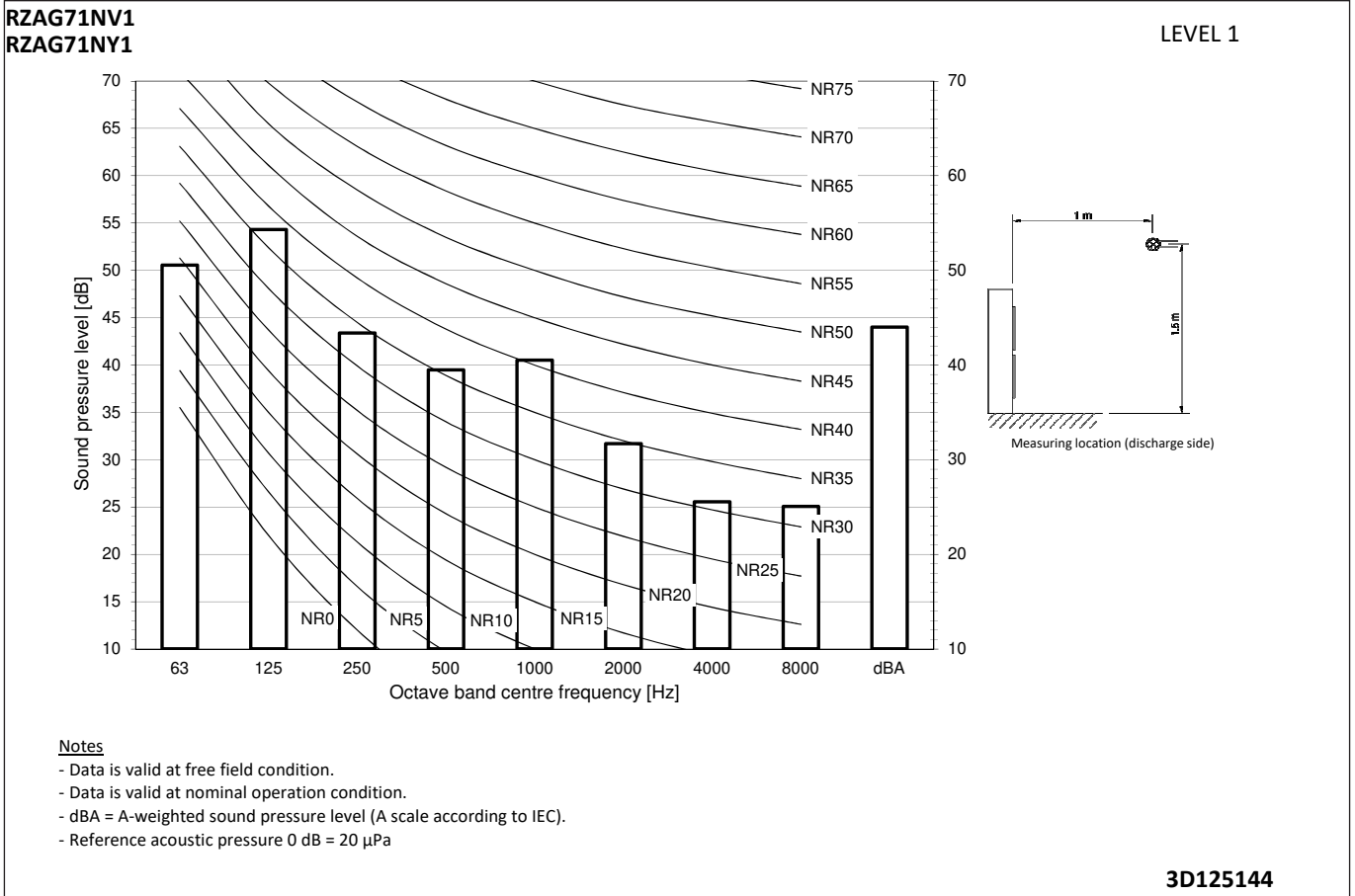
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 μPa

3D125166

11 Sound data

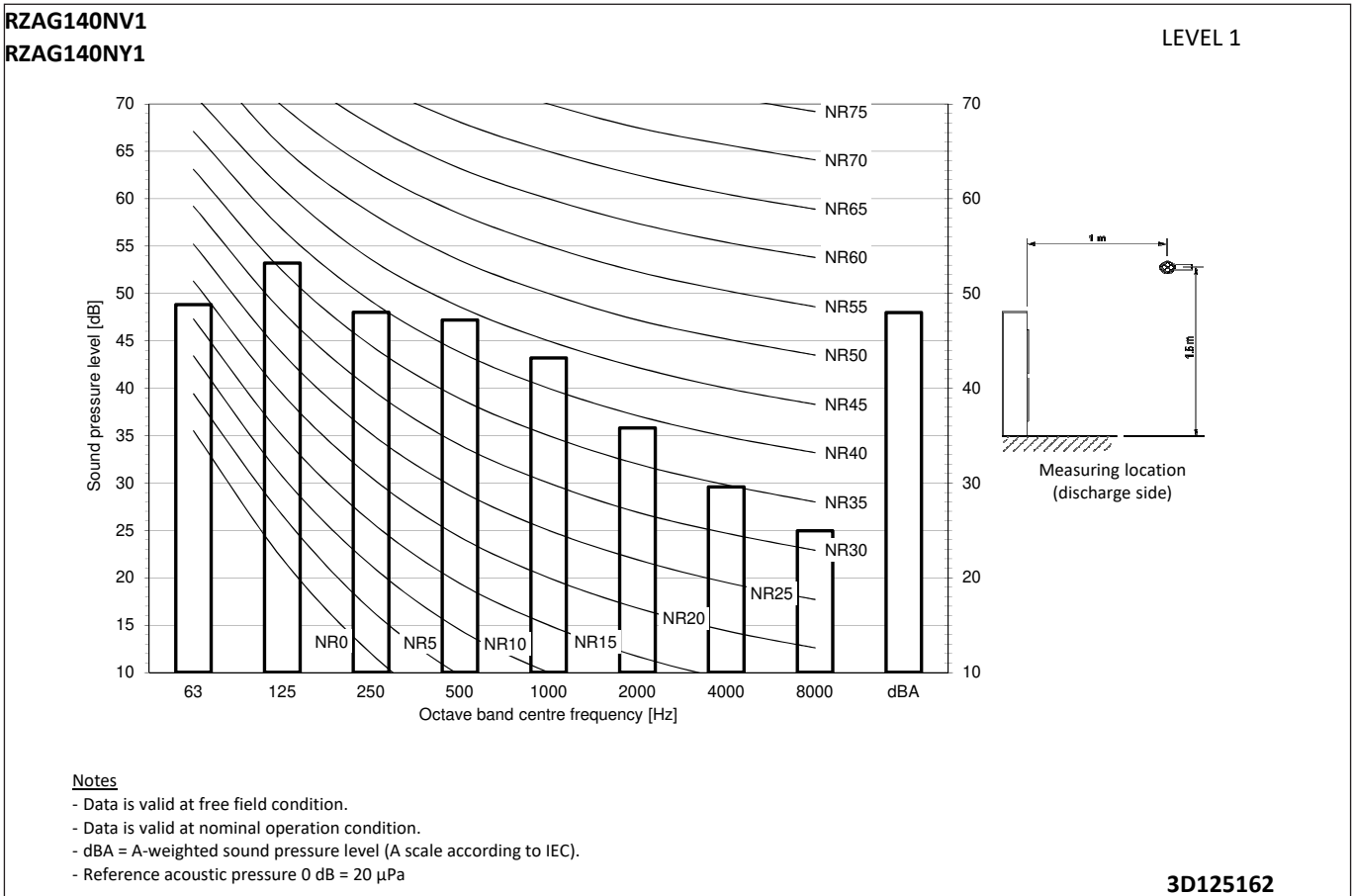
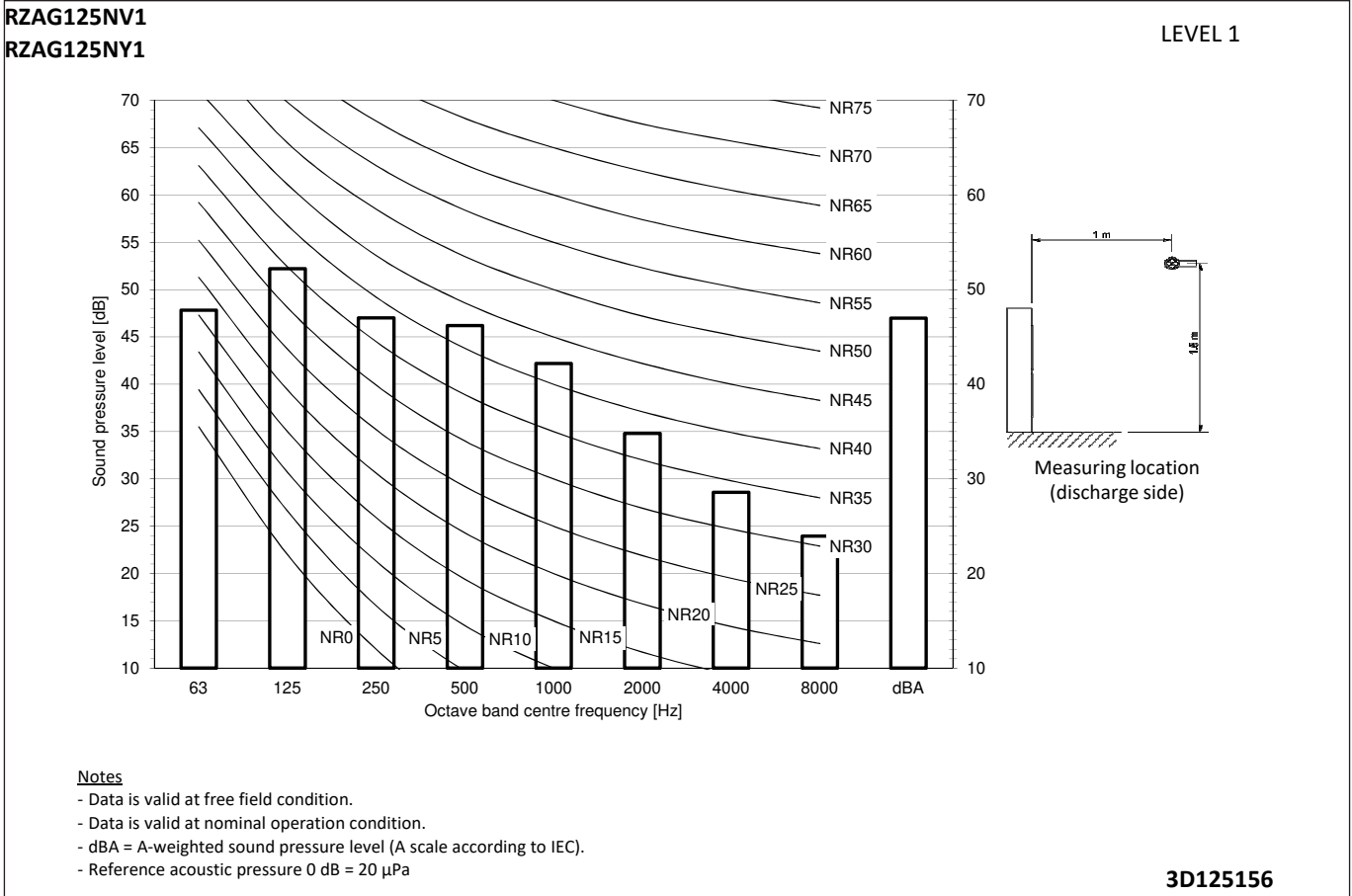
11 - 4 Sound Pressure Spectrum Quiet Mode Level 1

11



11 Sound data

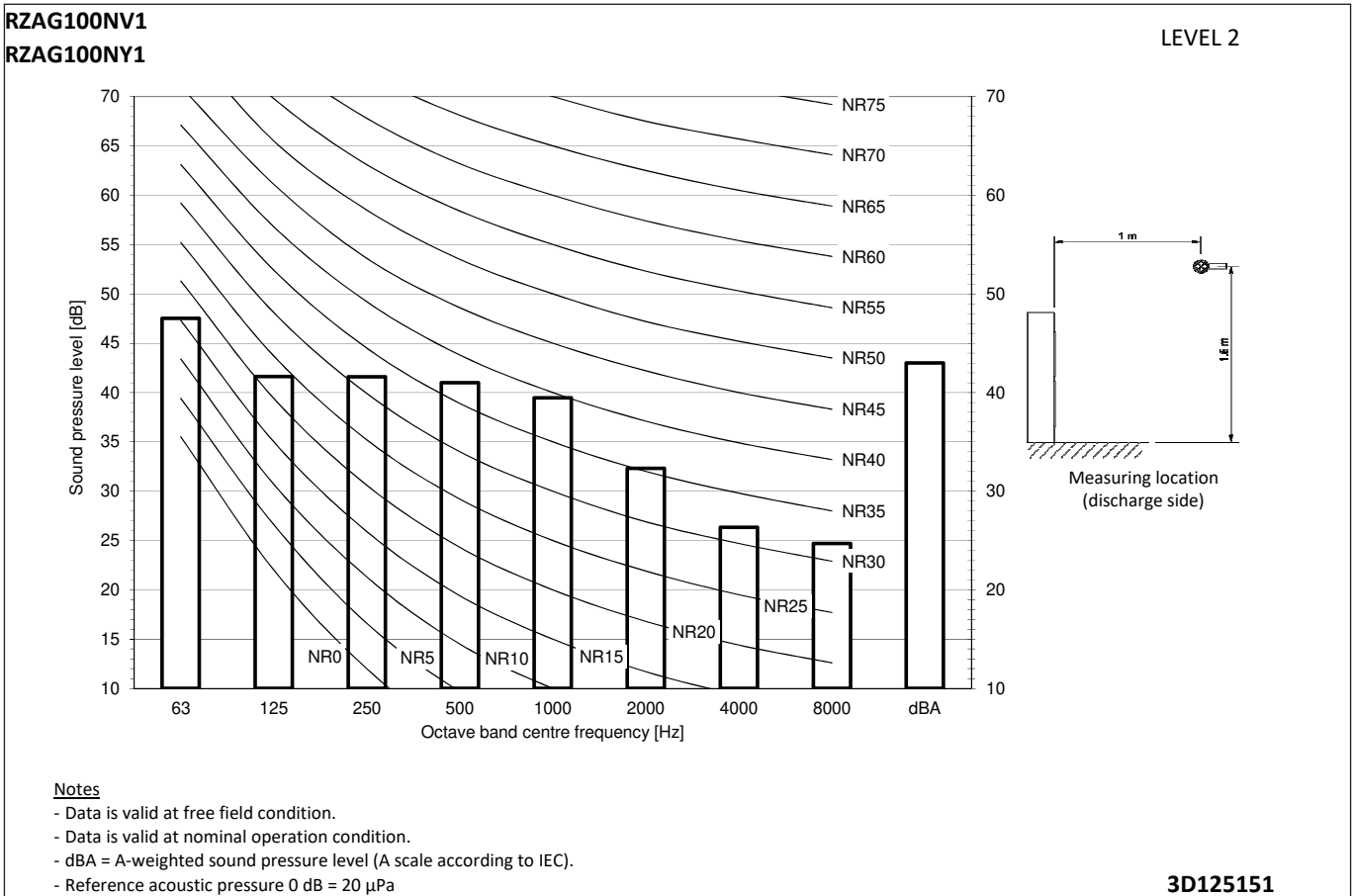
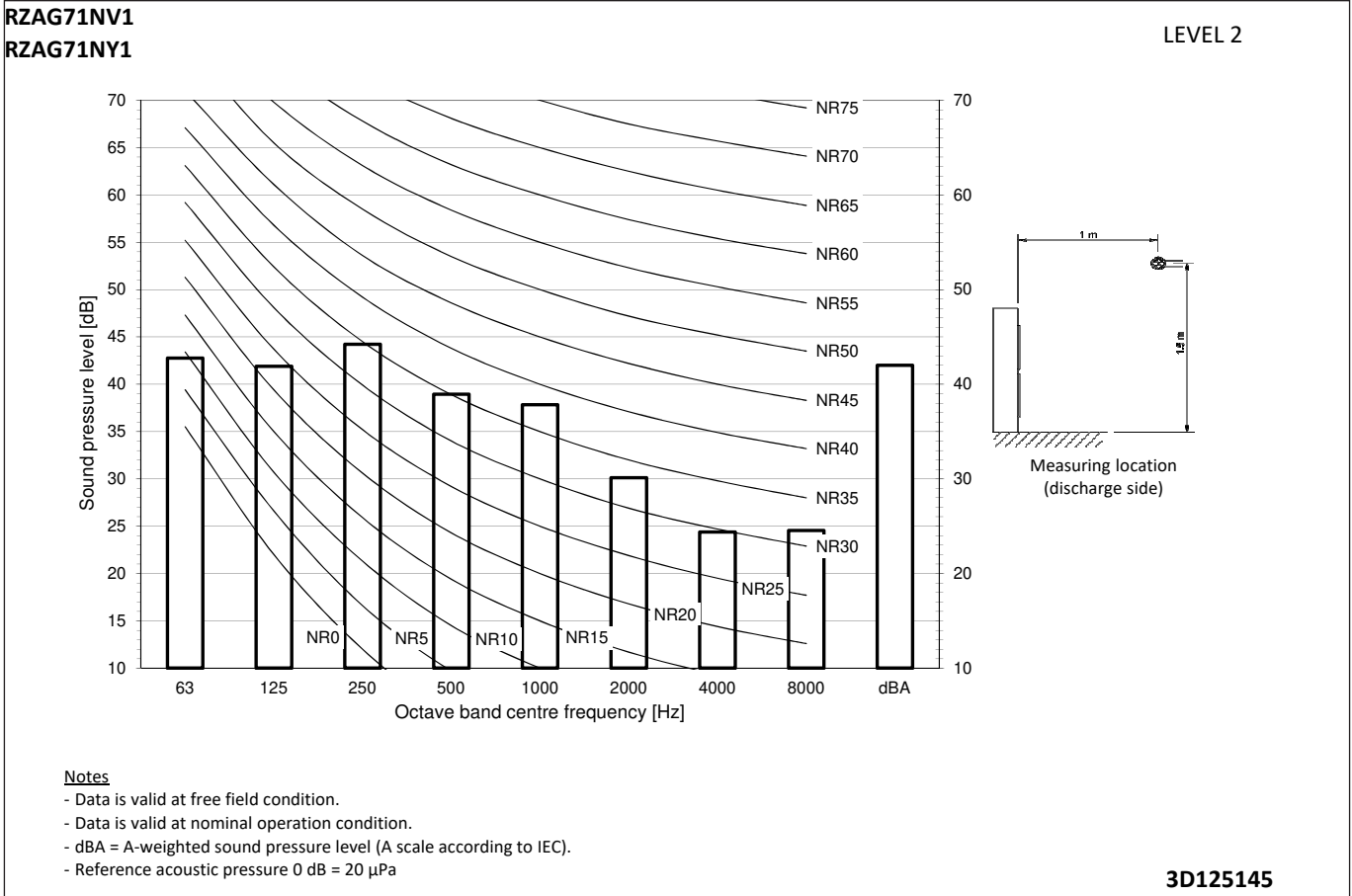
11 - 4 Sound Pressure Spectrum Quiet Mode Level 1



11 Sound data

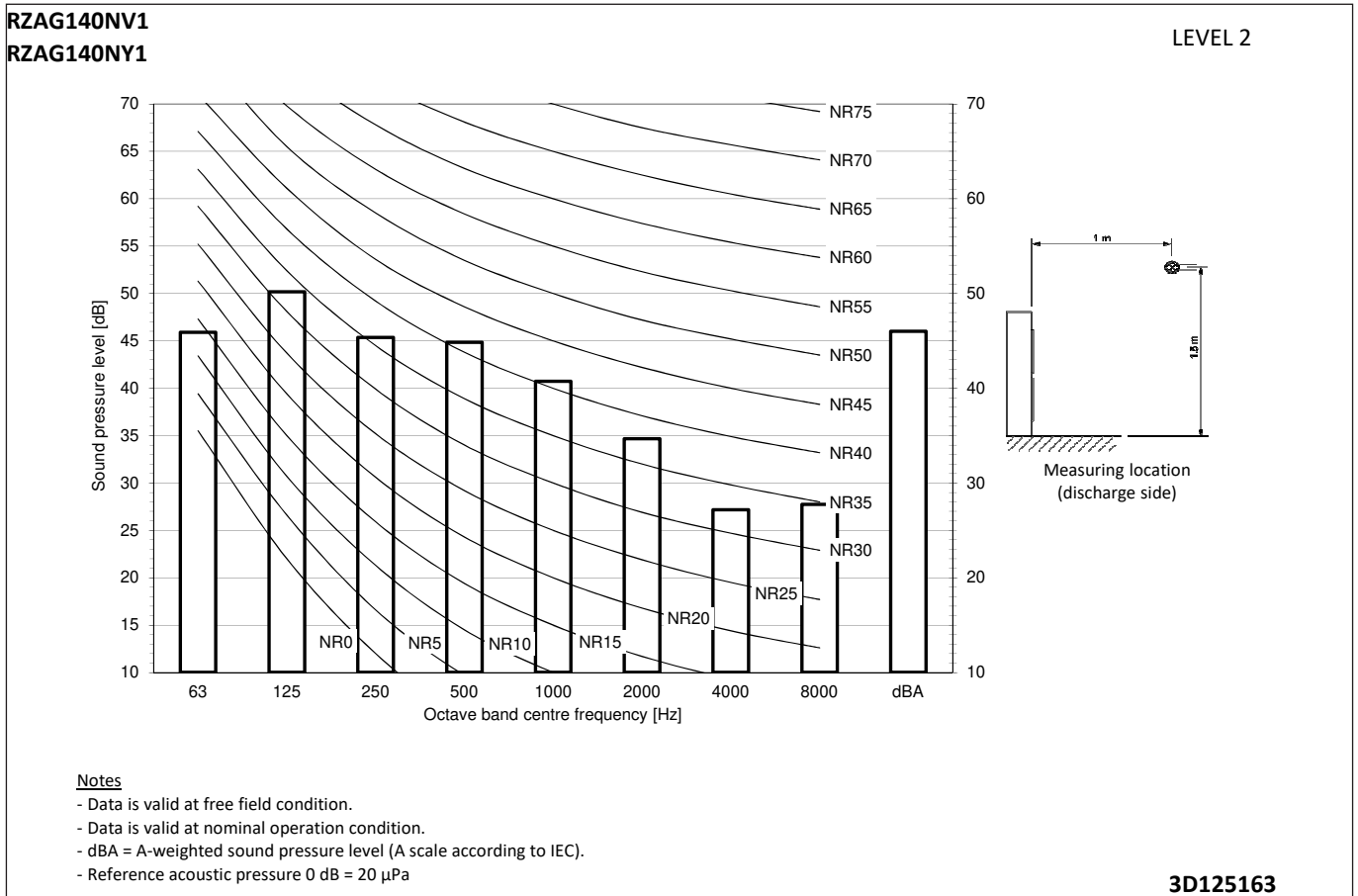
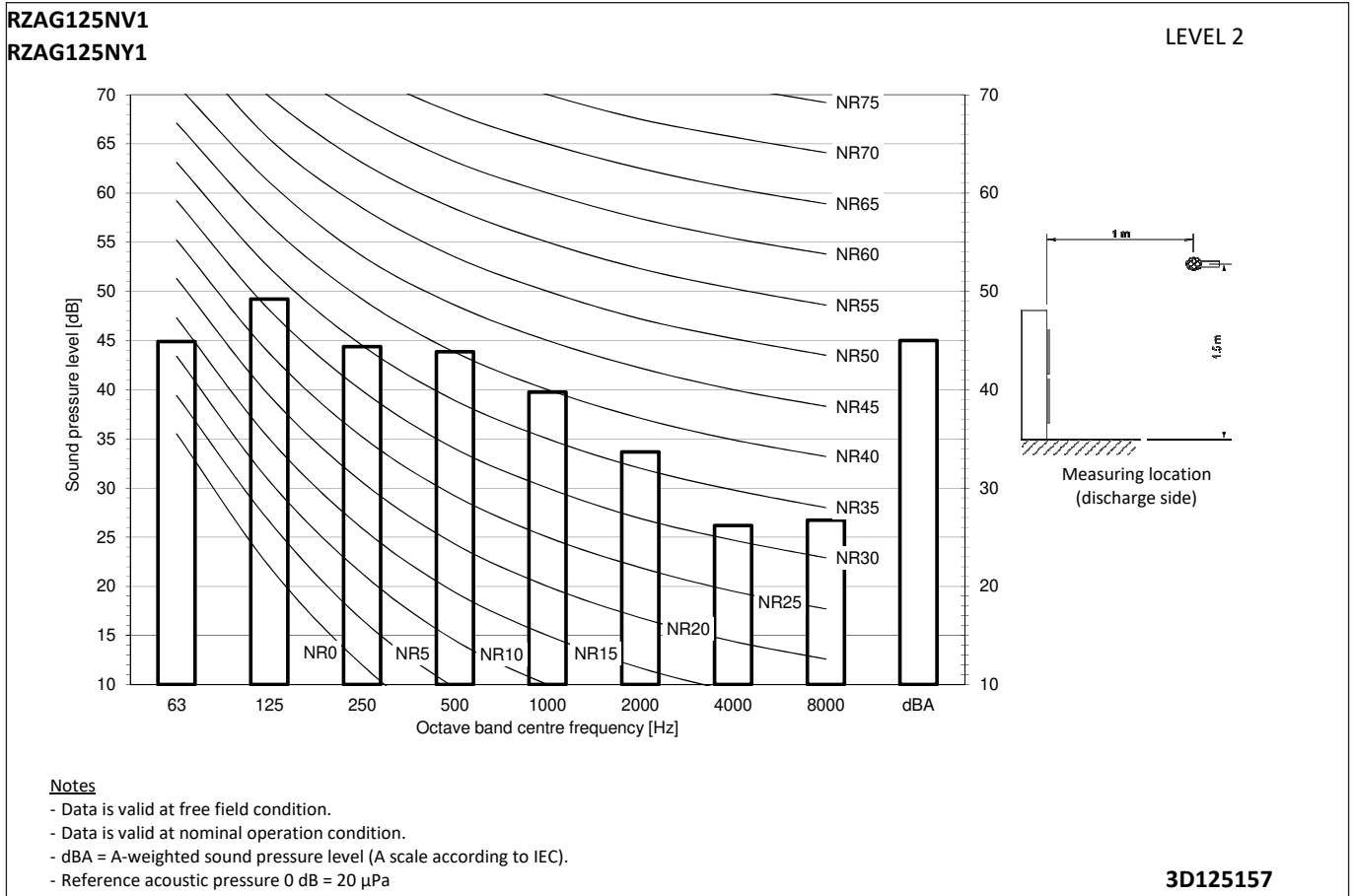
11 - 5 Sound Pressure Spectrum Quiet Mode Level 2

11



11 Sound data

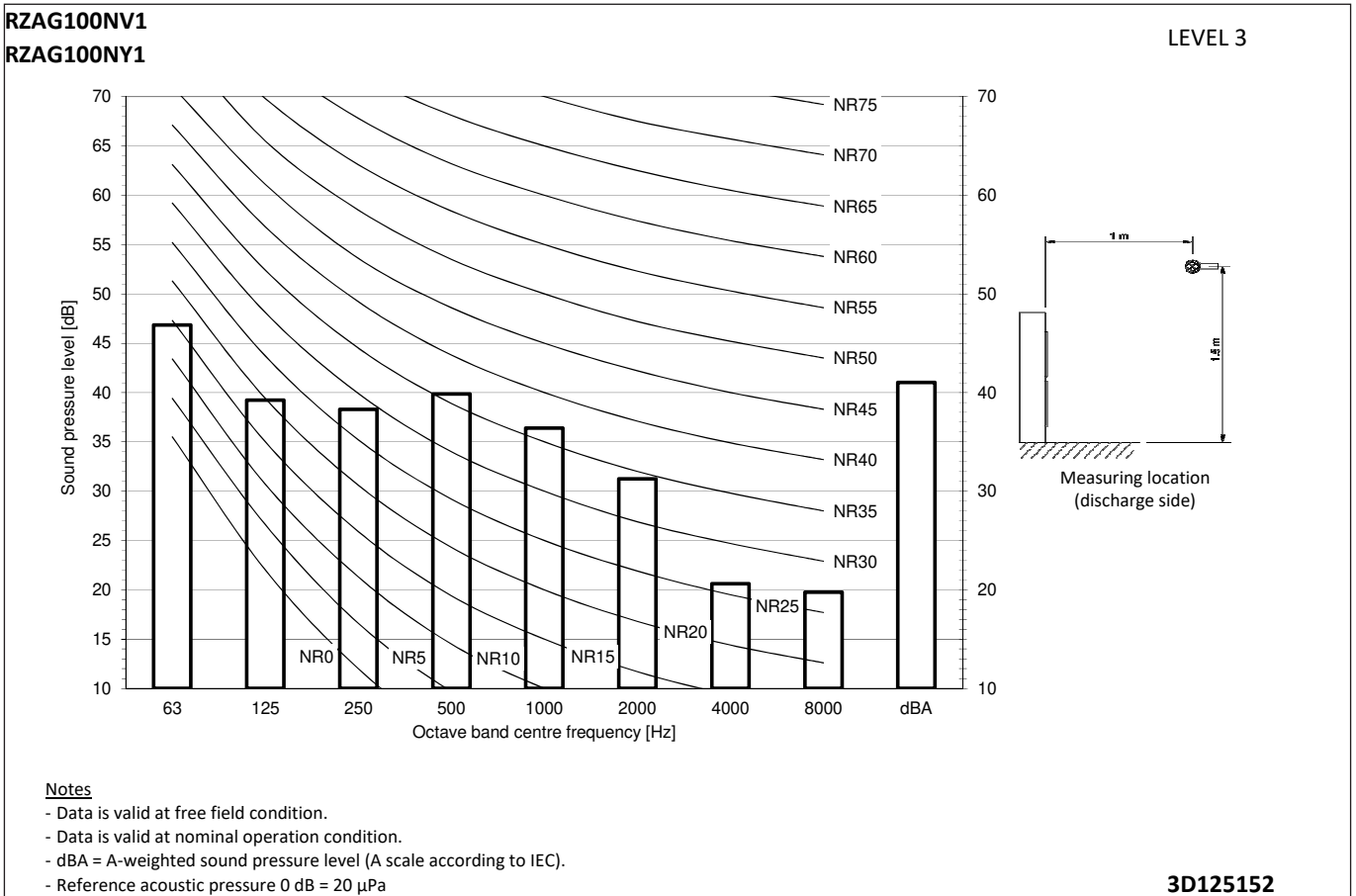
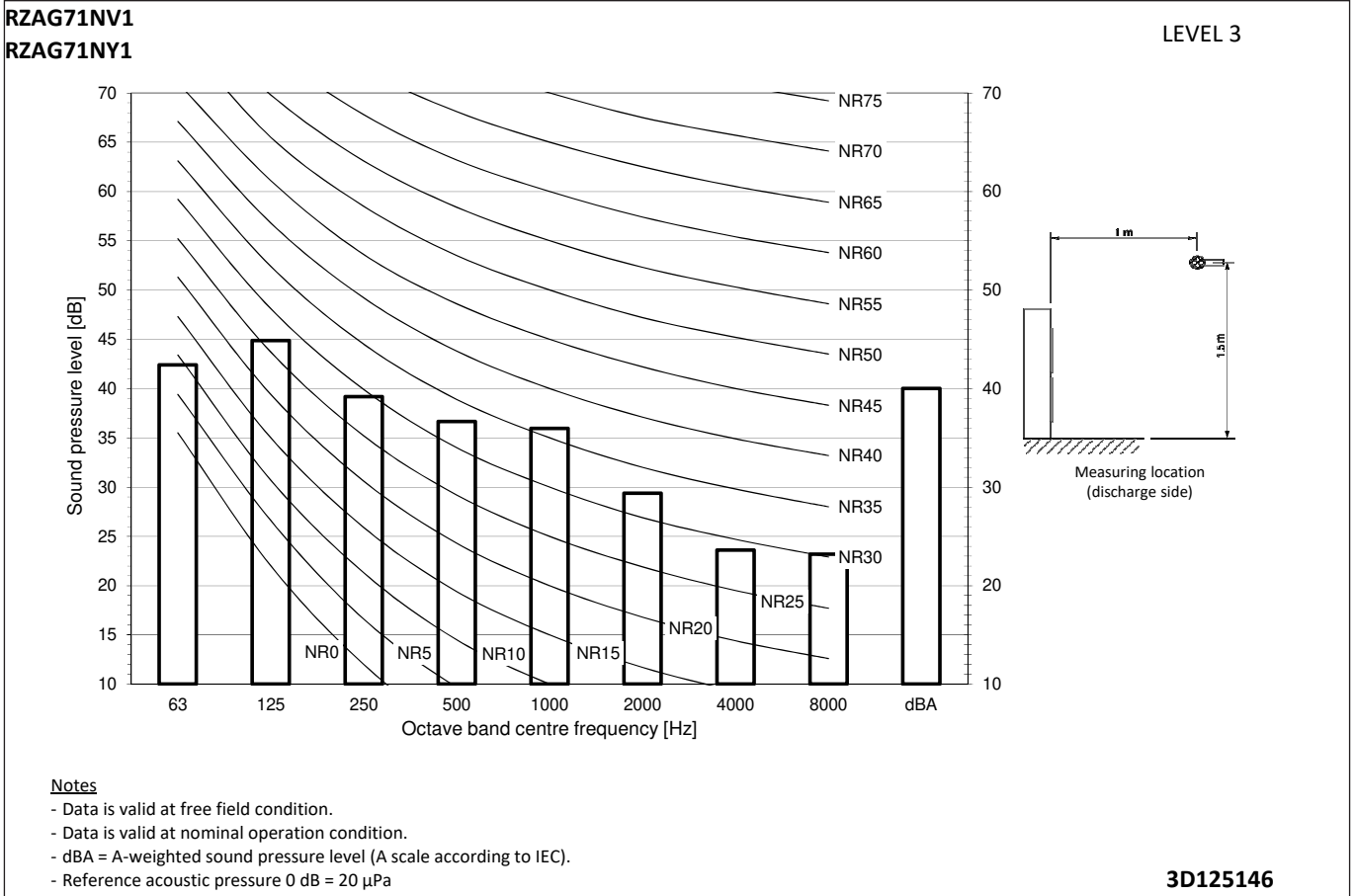
11 - 5 Sound Pressure Spectrum Quiet Mode Level 2



11 Sound data

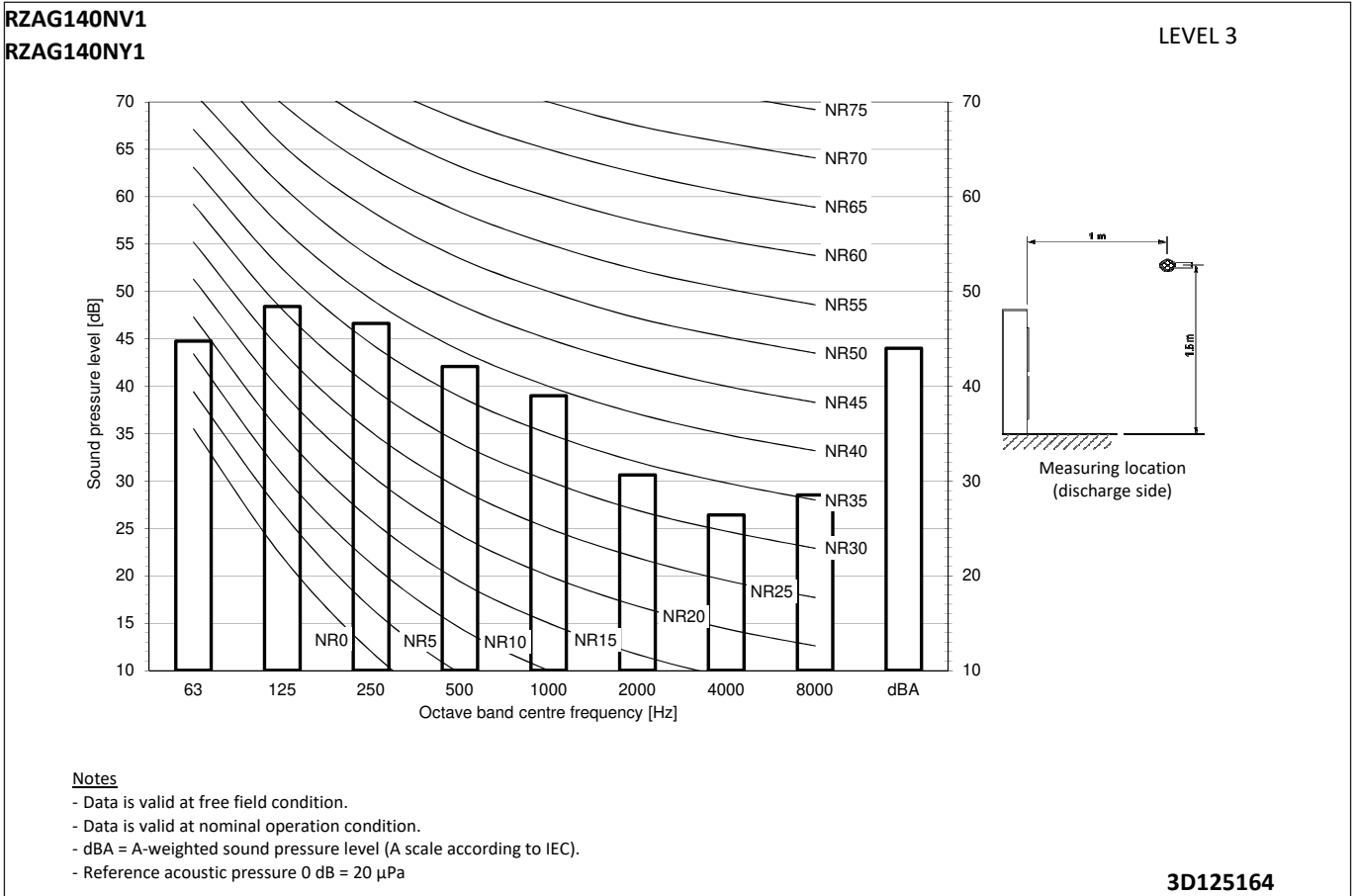
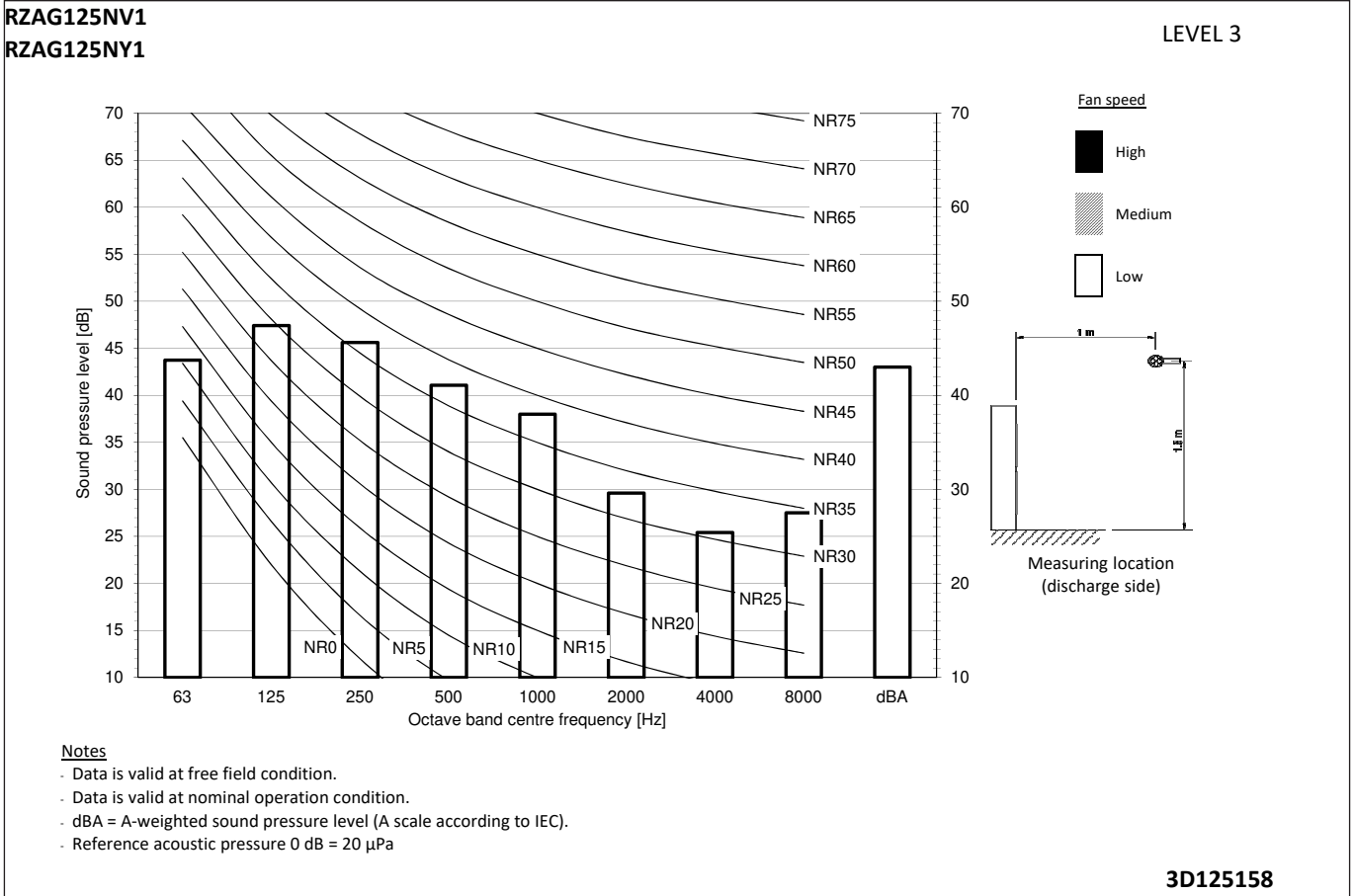
11 - 6 Sound Pressure Spectrum Quiet Mode Level 3

11



11 Sound data

11 - 6 Sound Pressure Spectrum Quiet Mode Level 3



12 Installation

12 - 1 Installation Method

12

RZAG-NV1
RZAG-NY1

Single unit (■) | Single row of units (■ ■ ■)

Suction side

In the illustration below, the service space at the suction side is based on 35°C DB and cooling operation. Foresee more space in the following cases:

- When the suction side temperature regularly exceeds this temperature.
- When the heat load of the outdoor units is expected to regularly exceed the maximum operating capacity.

Discharge side

Take refrigerant piping work into account when positioning the units. If your lay out does not match with any of the layouts below, contact your dealer.

Single unit (■) | Single row of units (■ ■ ■)

	A-E	Hb Hd Hu	(mm)								
			a	b	c	d	e	e _B	e _D		
	B	-		≥ 100							
	A,B,C	-	≥ 100(1)	≥ 100	≥ 100						
	B,E	-		≥ 100			≥ 1000		≤ 500		
	A,B,C,E	-	≥ 150(1)	≥ 150	≥ 150		≥ 1000		≤ 500		
	D	-					≥ 500				
	D,E	-					≥ 500	≥ 1000	≤ 500		
	B,D	Hd > Hu		≥ 100		≥ 500					
			Hd ≤ Hu	≥ 100		≥ 500					
	B,D,E	Hd > Hu	Hb ≤ ½Hu	≥ 250		≥ 750	≥ 1000	≤ 500			1
			½Hu < Hb ≤ Hu	≥ 250		≥ 1000	≥ 1000	≤ 500			
Hb > Hu			⊘								
Hd ≤ Hu		Hd ≤ ½Hu	≥ 100		≥ 1000	≥ 1000	≤ 500				
		½Hu < Hd ≤ Hu	≥ 200		≥ 1000	≥ 1000	≤ 500				
	Hd > Hu	⊘									
	A,B,C	-	≥ 200(1)	≥ 300	≥ 1000						
	A,B,C,E	-	≥ 200(1)	≥ 300	≥ 1000		≥ 1000		≤ 500		
	D	-				≥ 1000					
	D,E	-				≥ 1000	≥ 1000	≤ 500			
	B,D	Hd > Hu		≥ 300		≥ 1000					1+2
			Hd ≤ Hu								
			Hd ≤ ½Hu	≥ 250		≥ 1500					
	B,D,E	Hd > Hu	Hb ≤ ½Hu	≥ 300		≥ 1000	≥ 1000	≤ 500			
			½Hu < Hb ≤ Hu	≥ 300		≥ 1250	≥ 1000	≤ 500			
			Hb > Hu	⊘							
Hd ≤ Hu		Hd ≤ ½Hu	≥ 250		≥ 1500	≥ 1000	≤ 500				
		½Hu < Hd ≤ Hu	≥ 300		≥ 1500	≥ 1000	≤ 500				
	Hd > Hu	⊘									

(1) For better serviceability, use a distance ≥ 250 mm

A,B,C,D Obstacles (walls/baffle plates)

E Obstacle (roof)

a,b,c,d,e Minimum service space between the unit and obstacles A, B, C, D and E

e_B Maximum distance between the unit and the edge of obstacle E, in the direction of obstacle B

e_D Maximum distance between the unit and the edge of obstacle E, in the direction of obstacle D

Hu Height of the unit

Hb,Hd Height of obstacles B and D

1 Seal the bottom of the installation frame to prevent discharged air from flowing back to the suction side through the bottom of the unit.

2 Maximum two units can be installed.

⊘ Not allowed


1D128513

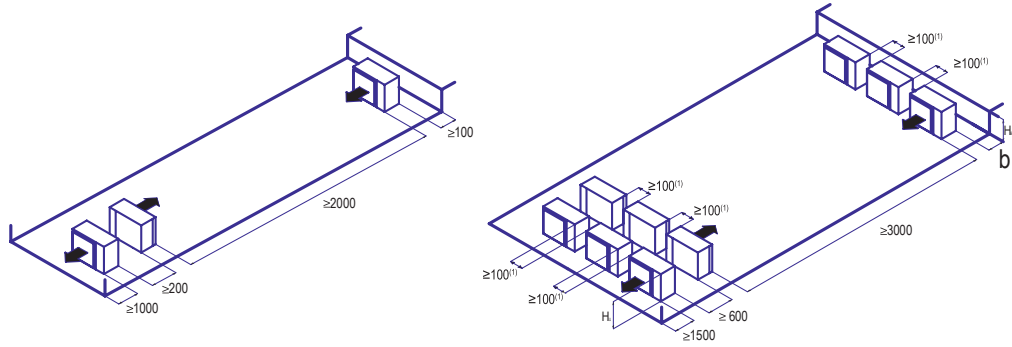
12 Installation

12 - 1 Installation Method

RZAG-NV1
RZAG-NY1

Multiple rows of units ()

Multiple rows of units ()



Hb Hu	b (mm)
$Hb \leq \frac{1}{2}Hu$	$b \geq 250$
$\frac{1}{2}Hu < Hb \leq Hu$	$b \geq 300$
$Hb > Hu$	⊘

- (1) For better serviceability, use a distance ≥ 250 mm
- ⊘ Not allowed

1D128513


12 Installation

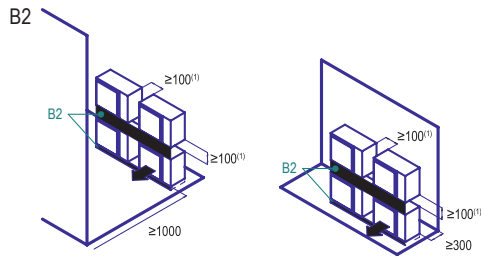
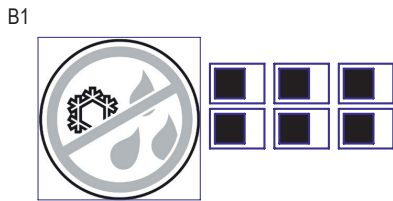
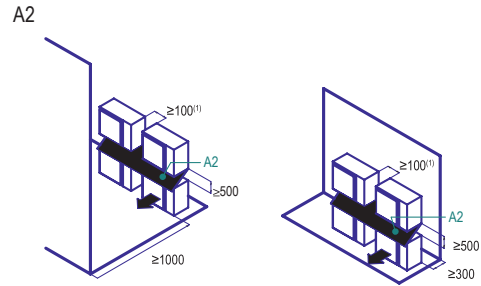
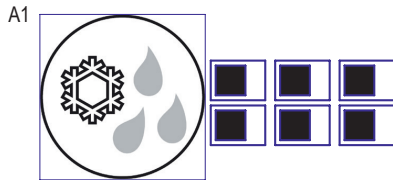
12 - 1 Installation Method

12

RZAG-NV1
RZAG-NY1

Stacked units (max.2 levels) 

Stacked units (max.2 levels) 



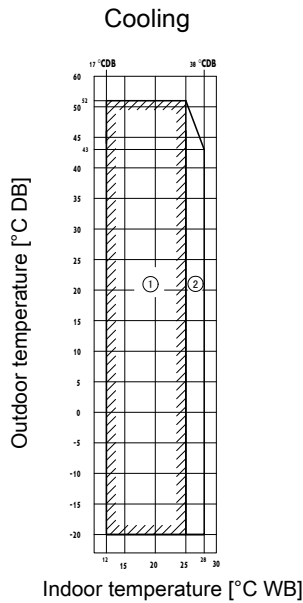
- (1) For better serviceability, use a distance ≥ 250 mm
- A1=>A2 (A1) If there is danger of drainage dripping and freezing between the upper and lower units...
(A2) Then install a roof between the upper and lower units. Install the upper unit high enough above the lower unit to prevent ice buildup at the upper unit's bottom plate.
- B1=>B2 (B1) If there is no danger of drainage dripping and freezing between the upper and lower units...
(B2) Then it is not required to install a roof, but seal the gap between the upper and lower units to prevent discharged air from flowing back to the suction side through the bottom of the unit.

1D128513

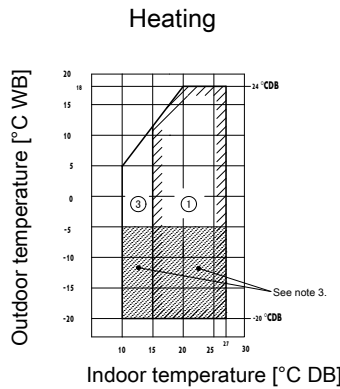
13 Operation range

13 - 1 Operation Range

RZAG-NV1 RZAG-NY1



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

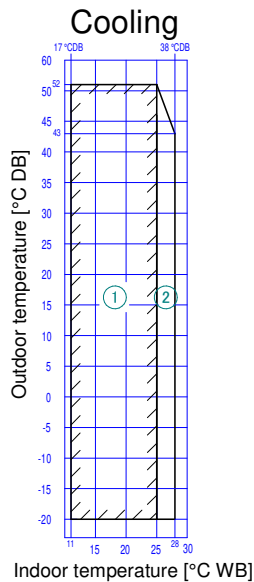


Notes

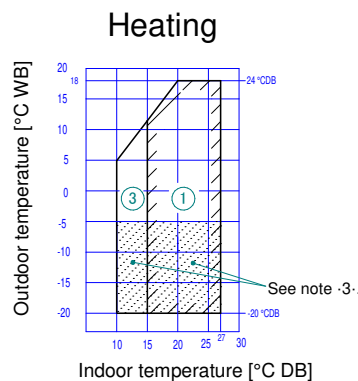
1. Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
2. To reduce the freeze-up operation (indoor de-icing) frequency, it is recommended to install the outdoor unit in a location not exposed to wind.
3. If the unit is selected to operate at ambient temperature < -5°C for 5 days or more, with relative humidity of 100%, it is required to install the optional bottom plate heater.

3D110020A

RZAG-NV1 RZAG-NY1



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



Notes

1. Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
2. To reduce the freeze-up operation (indoor de-icing) frequency, it is recommended to install the outdoor unit in a location not exposed to wind.
3. If the unit is selected to operate at ambient temperature < -5°C for -5- days or more, with relative humidity of 100%, it is required to install the optional bottom plate heater.

3D110022

14 Appropriate Indoors

14 - 1 Appropriate Indoors

14

RZAG-NV1

RZAG-NY1

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	
RZAG125N2V1B	RZAG125N2Y1B			P		4										4																P
RZAG140N2V1B	RZAG140N2Y1B				P	4						P				4							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
RZAG125N2V1B	RZAG125N2Y1B			P												P
RZAG140N2V1B	RZAG140N2Y1B				P											P

4D140340

RZAG-NV1

RZAG-NY1

ENER Lot 21

Appropriate indoor units

Connectable to **·RZAG125N2V1B/RZAG125N2Y1B·** 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 **·RZAG140N2V1B/RZAG140N2Y1B·** 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	-

4D140340

14 Appropriate Indoors

14 - 1 Appropriate Indoors

RZAG125-140NV1

RZAG125-140NY1

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	FMA35	FMA50	FMA60	FUA71	FUA100	FUA125	FAA71	FAA100	FDA125	
RZAG125N7V1B	RZAG125N7Y1B			P		4										4																P
RZAG140N7V1B	RZAG140N7Y1B				P	4										4																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
RZAG125N7V1B	RZAG125N7Y1B			P												P
RZAG140N7V1B	RZAG140N7Y1B				P											P

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

3D120939

RZAG-NV1

RZAG-NY1

ENER Lot 21
Appropriate indoor units

Connectable to :RZAG125N7V1B / RZAG125N7Y1B 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 :RZAG140N7V1B / RZAG140N7Y1B 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	-

ENER Lot 10
Appropriate indoor units

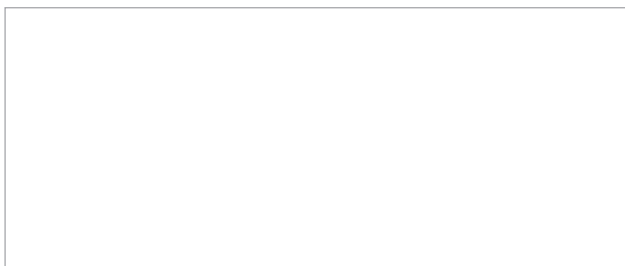
Connectable to :RZAG71N7V1B / RZAG71N7Y1B and covered by :ENER Lot 10:

FCAHG71	FCAG35	FFA35	FBA35	FNA35	FUA71	FAA71	-	FVA71	FDXM35	FHA35	-
-	FCAG71	-	FBA71	-	-	-	-	-	-	FHA71	-

Connectable to :RZAG100N7V1B / RZAG100N7Y1B 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	-

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