



Air Conditioning

Technical Data

Outdoor units



EEDEN15-132

AZQS-B(8)V1

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AZQS-B(8)V1

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1 Features

Ideal solution for basic cooling and heating

- Daikin outdoor units are neat, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall
- With gas cooled PCB reliable cooling is guaranteed as it is not influenced by ambient temperature (1~)
- Outdoor units are fitted with either a swing or scroll compressor, renowned for low noise and high energy efficiency
- Outdoor units for pair application
- Units optimized for seasonal efficiency give an indication on how efficient an air conditioner operates over an entire heating or cooling season.



Inverter



Auto cooling-
heating
changeover

2 Specifications

2-1 Capacity and Power input				ADEQ71A/AZQS71B2V1	ADEQ100A/AZQS100B8V1	ADEQ125A/AZQS125B8V1
Cooling capacity	Nom.		kW	6.8	9.5	12.1
Heating capacity	Nom.		kW	7.50	10.8	13.50
Power input	Cooling	Nom.	kW	2.12	2.96	4.02
	Heating	Nom.	kW	2.08	2.99	3.91
Seasonal efficiency (according to EN14825)	Cooling	Energy label		B		-
		Pdesign	kW	6.80	9.50	-
		SEER		4.81		-
		Annual energy consumption	kWh	494.77	692	-
	Heating (Average climate)	Energy label		A		-
		Pdesign	kW	6.00	7.60	-
		SCOP		3.81		-
		Annual energy consumption	kWh	2,205.68	2,793	-
Nominal efficiency	EER			3.21		3.01
	COP			3.61		3.45
	Annual energy consumption		kWh	1,060	1,480	2,010
	Energy label	Cooling		A		-
		Heating		A		-

Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

2-2 Capacity and Power input				AHQ71C/AZQS71B2V1	AHQ100C/AZQS100B8V1	AHQ125C/AZQS125B8V1	AHQ140C/AZQS140B8V1
Cooling capacity	Nom.		kW	6.8	9.5	12.1	13.0
Heating capacity	Nom.		kW	7.5	10.8	13.5	15.5
Power input	Cooling	Nom.	kW	2.24	3.62	4.60	4.32
	Heating	Nom.	kW	2.46	3.17	3.74	4.55
Seasonal efficiency (according to EN14825)	Cooling	Energy label		B		-	
		Pdesign	kW	6.80	9.50	-	
		SEER		4.65		-	
		Annual energy consumption	kWh	511.85	723	-	
	Heating (Average climate)	Energy label		A		-	
		Pdesign	kW	6.33	7.60	-	
		SCOP		3.80		-	
		Annual energy consumption	kWh	2,332.26	2,800	-	
Nominal efficiency	EER			3.03	2.62	2.63	3.01
	COP			3.05	3.41	3.61	3.41
	Annual energy consumption		kWh	1,120	1,810	2,300	2,159
	Energy label	Cooling		B	D	-	
		Heating		D	B	-	

Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

2-3 Capacity and Power input				ABQ71C/AZQS71B2V1	ABQ100C/AZQS100B8V1	ABQ125C/AZQS125B8V1	ABQ140C/AZQS140B8V1
Cooling capacity	Nom.		kW	6.8	9.5	12.1	13.0
Heating capacity	Nom.		kW	7.5	10.8	13.5	15.5
Power input	Cooling	Nom.	kW	2.33	3.63	4.31	4.32
	Heating	Nom.	kW	2.13	3.16	3.96	4.55

2 Specifications

2-3 Capacity and Power input				ABQ71C/AZQS71B2V1	ABQ100C/AZQS100B8V1	ABQ125C/AZQS125B8V1	ABQ140C/AZQS140B8V1
Seasonal efficiency (according to EN14825)	Cooling	Energy label		B		-	
		Pdesign	kW	6.80	9.50	-	
		SEER		4.65		-	
		Annual energy consumption	kWh	512	716	-	
	Heating (Average climate)	Energy label		A		-	
		Pdesign	kW	5.65	6.78	-	
		SCOP		3.80		-	
		Annual energy consumption	kWh	2,082	2,498	-	
Nominal efficiency	EER			2.91	2.62	2.81	3.01
	COP			3.51	3.42	3.41	
	Annual energy consumption		kWh	1,165	1,813	2,153	2,159
	Energy label	Cooling		C	D	-	
		Heating		B		-	

Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

Annual energy consumption is according to Energy labeling directive 2002/31/EC

SEER and SCOP are according to EN 14825

2-4 Capacity and Power input				ACQ71C/AZQS71B2V1	ACQ100C/AZQS100B8V1	ACQ125C/AZQS125B8V1
Cooling capacity	Nom.		kW	6.8	9.5	12.1
Heating capacity	Nom.		kW	7.50	10.80	13.5
Power input	Cooling	Nom.	kW	2.05	2.96	4.02
	Heating	Nom.	kW	2.08	2.99	3.96
Seasonal efficiency (according to EN14825)	Cooling	Energy label		B		-
		Pdesign	kW	6.80	9.50	-
		SEER		4.65		-
		Annual energy consumption	kWh	512	716	-
	Heating (Average climate)	Energy label		A		-
		Pdesign	kW	6.33	7.60	-
		SCOP		3.80		-
		Annual energy consumption	kWh	2,332	2,800	-
Nominal efficiency	EER			3.31	3.21	3.01
	COP			3.61		3.41
	Annual energy consumption		kWh	1,025	1,480	2,010
	Energy label	Cooling		B	A	-
		Heating		A		-

Notes

EER/COP according to Eurovent 2012, for use outside EU only

Nominal efficiency: cooling at 35°/27° nominal load, heating at 7°/20° nominal load

2-5 Technical Specifications				AZQS71B2V1	AZQS100B8V1	AZQS125B8V1	AZQS140B8V1
Capacity control	Method			Inverter controlled			
Casing	Colour			Ivory white			
	Material			Painted galvanized steel plate			
Dimensions	Unit	Height	mm	770	990		1,430
		Width	mm	900	940		
		Depth	mm	320			
	Packed unit	Height	mm	900	1,170		1,610
		Width	mm	980	1,015		
		Depth	mm	420	422		

2 Specifications

2-5 Technical Specifications					AZQS71B2V1		AZQS100B8V1		AZQS125B8V1		AZQS140B8V1		
Weight	Unit			kg	67		81				102		
	Packed unit			kg	71		91		92		115		
Heat exchanger	Length			mm	857				-				
	Rows		Quantity		2				-				
	Fin pitch			mm	1.4				-				
	Passes		Quantity		8				-				
	Face area			m²	0.641				-				
	Stages		Quantity		34				-				
	Empty tubeplate hole		Quantity		0				-				
	Tube type				Hi-XSS				-				
	Fin		Type				WF fin						
			Treatment						Anti-corrosion treatment (PE)				
Compressor	Quantity						1						
	Model				2YC63DXD				-				
	Type								Hermetically sealed swing compressor				
	Output			W	1,700.0				-				
	Starting method				Inverter driven				-				
Fan	Type								Propeller fan				
	Discharge direction								Horizontal				
	Quantity						1				2		
	Air flow rate	Cooling	Nom.	m³/min	52.0		76		77		83		
			Super low	m³/min					-				
			cfm							-			
	Heating	Nom.	m³/min	48.0				83				62	
		Super low	m³/min							-			
		cfm							-				
Fan motor	Quantity						1				2		
	Model				KFD-325-70-8A				Brushless DC motor				
	Output			W	70				200		94		
	Drive								Direct drive				
	Speed	Steps			8				-				
		Cooling	Nom.	rpm	800				-		-		
			Super low	rpm					-				
	Heating	Nom.	rpm	745				-					
		Super low	rpm					-					
	Sound power level	Cooling			dBA	65		70		71		70	
Heating			dBA					-					
Sound pressure level	Cooling	Nom.		dBA	48		53		54		53		
		Silent operation		dBA	43				-				
	Heating	Nom.		dBA	50		57		58		54		
	Night quiet mode	Level 1		dBA	-				49				
Operation range	Cooling	Ambient	Min.	°CDB					-5				
			Max.	°CDB			46						
	Heating	Ambient	Min.	°CWB					-15				
			Max.	°CWB			15.5						
Refrigerant	Type								R-410A				
	Charge			kg	2.75				2.9		4.0		
	Control								Expansion valve (electronic type)				
	GWP								1,975				
	Circuits	Quantity							1				
Refrigerant oil	Type								FVC50K				
	Charged volume			l	0.75				0.9		1.35		

2 Specifications

2-5 Technical Specifications					AZQS71B2V1	AZQS100B8V1	AZQS125B8V1	AZQS140B8V1
Piping connections	Liquid	Quantity			1			
		Type			Flare connection			
		OD	mm		9.52			
	Gas	Quantity			1			
		Type			Flare connection			
		OD	mm		15.9			
	Drain	Quantity			3	5		
		Type			Hole			
		ID	mm		-			
		OD	mm		26			
	Piping length	OU - IU	Min.	m	5			
			Max.	m	30	50		
		System	Equival ent	m	40	70		
			Chargel ess	m	30			
	Additional refrigerant charge			kg/m	See installation manual			
Level difference	IU - OU	Max.	m	15.0	30.0			
	IU - IU	Max.	m	-	0.5			
Heat insulation				Both liquid and gas pipes				
Defrost method				Pressure equalising	Reversed cycle			
Defrost control				Sensor for outdoor heat exchanger temperature				
Safety devices	Item	01			High pressure switch			
		02			Fan motor thermal protection	Low pressure switch		
		03			Fuse	Fan driver overload protector		
		04			-	Fuse		

2-6 Electrical Specifications				AZQS71B2V1	AZQS100B8V1	AZQS125B8V1	AZQS140B8V1
Power supply	Name			V1			
	Phase			1~			
	Frequency		Hz	50			
	Voltage		V	220-240			
	Voltage range	Min.	%	-10			
		Max.	%	10			
Current	Nominal running current (RLA)	Cooling	A	16.20	-		
	Zmax	List		Complies to EN6100-3-3	Complies to EN61000-3-11		
	Recommended fuses		A	20	32		40
Current - 50Hz	Maximum fuse amps (MFA)		A	20	-		
Current - 60Hz	Maximum fuse amps (MFA)		A	-			
Wiring connections	For power supply	Remark		-	See installation manual outdoor unit		
	For connection with indoor	Remark		-	See installation manual outdoor unit		
Power supply intake				Outdoor unit only			

Notes

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.

Short-circuit power

RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB

MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

PED: assembly = category I : excluded from scope of PED due to article 1, item 3.6 of 97/23/EC

Minimum Ssc (=Short-circuit power) value: Equipment complying with EN/IEC 61000-3-12: European/International Technical Standard setting the limits for harmonic currents produced by equipment connected to public low-voltage systems with input current >16A and ≤ 75A per phase

See separate drawing for electrical data

3 Electrical data

3 - 1 Electrical Data

AZQS-B(8)V1

AZQS-BY1

							Comp		OFM		IFM	
Indoor	Outdoor	Hz-- Power supply	Voltage	MCA	TOCA	MFA	MSC	RLA	kW	FLA	kW	FLA
ACQ71CV1	AZQS71B2V1	50Hz ~220-240V	Min. 198V Max. 264V	18, 8	—	20	—	16, 2	0, 07	0, 3	0, 067	0, 52
ABQ71CV1				19, 5	—	20	—	16, 2	0, 07	0, 3	0, 128	1, 05
ADEQ71A7VEB				19, 5	—	20	—	16, 2	0, 07	0, 3	0, 350	1, 1
AHQ71CV1	19, 2			—	20	—	16, 2	0, 07	0, 3	0, 106	0, 8	
ACQ100CV1	AZQS100B8V1			28, 5	—	32	—	24, 4	0, 2	0, 6	0, 094	0, 77
ABQ100CV1				28, 6	—	32	—	24, 4	0, 2	0, 6	0, 109	0, 9
ADEQ100A7VEB				29, 5	—	32	—	24, 4	0, 2	0, 6	0, 350	1, 6
AHQ100CV1	AZQS125B8V1			28, 9	—	32	—	24, 4	0, 2	0, 6	0, 149	1, 12
ACQ125CV1				28, 9	—	32	—	24, 4	0, 2	0, 6	0, 137	1, 12
ABQ125CV1				31, 5	—	32	—	24, 4	0, 2	0, 6	0, 413	3, 16
ADEQ125A7VEB	AZQS140B8V1			30, 1	—	32	—	24, 4	0, 2	0, 6	0, 350	2, 1
AHQ125CV1				28, 9	—	32	—	24, 4	0, 2	0, 6	0, 240	1, 1
ABQ140CV1				32, 8	—	40	—	24, 2	0, 094+0, 094	0, 4+0, 4	0, 546	4, 23
AHQ140CV1				30, 7	—	32	—	24, 2	0, 094+0, 094	0, 4+0, 4	0, 316	2, 52
ACQ100CV1	AZQS100BY1	3N~50Hz 380-415V	Min. 324V Max. 456V	14, 2	—	16	—	11, 4	0, 2	0, 6	0, 094	0, 77
ABQ100CV1				14, 3	—	16	—	11, 4	0, 2	0, 6	0, 109	0, 9
ADEQ100A7VEB				15, 2	—	16	—	11, 4	0, 2	0, 6	0, 350	1, 6
AHQ100CV1	14, 6			—	16	—	11, 4	0, 2	0, 6	0, 149	1, 12	
ACQ125CV1	AZQS125BY1			14, 6	—	16	—	11, 4	0, 2	0, 6	0, 137	1, 12
ABQ125CV1				17, 2	—	20	—	11, 4	0, 2	0, 6	0, 413	3, 16
ADEQ125A7VEB				15, 8	—	16	—	11, 4	0, 2	0, 6	0, 350	2, 1
AHQ125CV1	AZQS140BY1			14, 6	—	16	—	11, 4	0, 2	0, 6	0, 240	1, 1
ABQ140CV1				21, 8	—	25	—	14, 2	0, 094+0, 094	0, 4+0, 4	0, 546	4, 23
AHQ140CV1				19, 7	—	20	—	14, 2	0, 094+0, 094	0, 4+0, 4	0, 316	2, 52

SYMBOLS

MCA	: Min. Circuit Amps. (A)
TOCA	: Total Over-Current Amps. (A)
MFA	: Max. Fuse Amps. (A)
MSC	: Max. current during the starting compressor. (A)
RLA	: Rated Load Amps. (A)
OFM	: Outdoor Fan Motor. (A)
IFM	: Indoor Fan Motor.
FLA	: Full Load Amps.
kW	: Fan Motor Rated Output. (kW)

NOTES

- 1 RLA is based on the following conditions:
Cooling
Indoor temperature 27.0°CDB/19.0°CWB
Outdoor temperature 35.0°CDB
Heating
Indoor temperature 20.0°CDB
Outdoor temperature 7.0°CDB / 6.0°CWB
- 2 TOCA means the total value of each OC set.
- 3 Voltage range
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
- 4 Maximum allowable voltage variation between phases is 2%.
- 5 MCA is the maximum input current.
Teh capacity of the MFA must be greater than that of the MCA.
Select the MFA according to the table.
The next lower standard fuse rating is minimum 15 ampere.
- 6 Select wire size based on the larger value of MCA.
- 7 MFA is used to select the circuit breaker and the ground fault circuit interrupter.
Earth leakage breaker

3D090681

3 Electrical data

3 - 1 Electrical Data

3

AZQS71-125B(8)V1

Ssc value [kVA]

	ADEQ71A	ADEQ100A	ADEQ125A
AZQS71B2V1	P (89.7)		
AZQS100B8V1		P (89.7)	
AZQS125B8V1			P (89.7)

P = Pair

NOTES

In accordance with EN/IEC 61000-3-12⁽¹⁾, it may be necessary to consult the distribution network operator to ensure that the equipment is connected only to a supply with $S_{sc}^{(2)} \geq$ minimum Ssc value.

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

(2): Short-circuit power

4D081768

4 Options

4 - 1 Options

AZQS-B(8)V1

Option	Option kit	
	AZQS71B2V1B	AZQS100B8V1B
		AZQS125B8V1B
		AZQS140B8V1B
Demand adaptor kit	KRP58M51MK	

4D090357

5 Combination table

5 - 1 Combination Table

5

AZQS-B(8)V1

Sky Air		Cassette			Duct				SC30 duct			Ceiling-suspended			
Model		ACQ71CV1	ACQ100CV1	ACQ125CV1	ABQ71CV1	ABQ100CV1	ABQ125CV1	ABQ140CV1	ADE071A7VEB	ADE0100A7VEB	ADE0125A7VEB	AHQ71CV1	AHQ100CV1	AHQ125CV1	AHQ140CV1
AZQS71B2V1B		P			P				P			P			
AZQS100B8V1B	AZQS100B7Y1B		P			P				P			P		
AZQS125B8V1B	AZQS125B7Y1B			P			P				P			P	
AZQS140B8V1B	AZQS140B7Y1B							P							P

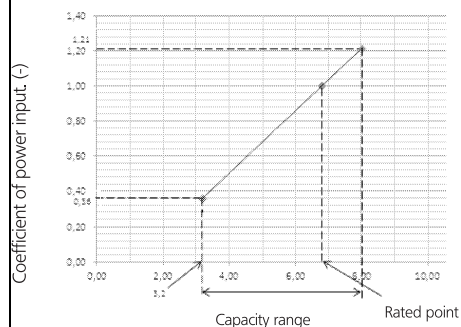
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6 Capacity tables

6 - 1 Cooling Capacity Tables

AZQS71BV1

Cooling



Cooling capacity (kW)

Cooling

Indoor		Outdoor temp. (°CDB)											
°CWB	°CDB	25			30			35			40		
(°C)	(°C)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)	TC (kW)	SHC (kW)	CPI (-)
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

3D081310C

NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark  show the max. at standard conditions.
On the figure the mark  show rated capacity and rated coefficient of power input.
However the max. capacity is not guaranteed, except at standard condition.
- SHC is based on indoor EWB and EDB.
SHC for other dry bulb temp. = SHC + SHC*.
SHC* = SHC correction for other dry bulb.
SHC* = 0.02 x AFR (m³/min.) x (1-BF) x (DB*-EDB)
- Coefficient of power input is the percentage when the rated value is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating performance include the drop of frost formation.
- Air flow rate and (BF) are tabulated below.

(Pair)

	ACQ71C	ABQ71C	ADEQ71	AHQ71C
AFR	24.4	18.3	18.0	23.8
(BF)	(0.157)	(0.233)	(0.08)	(0.212)

- Rated power input of each model is tabulated below.

(Pair)

	ACQ71C	ABQ71C	ADEQ71	AHQ71C
Cooling	2.05	2.33	2.12	2.22

SYMBOLS

AFR:	Air flow rate	(m ³ /min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°CWB)
EDB:	Entering dry bulb temp.	(°CDB)
TC:	Maximum Total cooling (heating) capacity	(kW)
SHC:	Sensible heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor and outdoor fan motor)	
CPI:	Coefficient of power input.	(-)

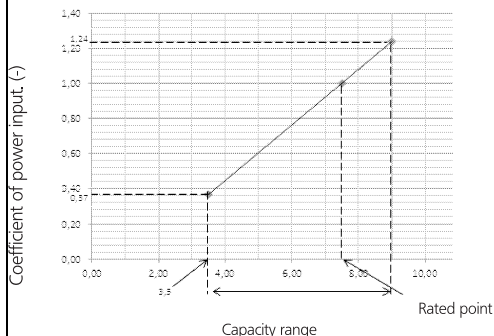
Caution:
TC and SHC are shown by kW.

6 Capacity tables

6 - 2 Heating Capacity Tables

AZQS71BV1

Heating



Heating capacity (kW)

Heating

Indoor °CDB	-15.0		-10.0		-5.0		0.0		6.0		10.0	
(°C)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)	TC (kW)	CPI (-)
16	5.14	0.89	5.68	0.94	6.22	0.98	6.75	1.03	9.02	1.08	9.72	1.13
18	5.14	0.92	5.67	0.97	6.21	1.02	6.74	1.07	9.01	1.12	9.70	1.18
20	5.13	0.96	5.67	1.01	6.20	1.06	6.73	1.11	9.00	1.17	9.69	1.23
21	5.13	0.98	5.66	1.03	6.20	1.08	6.73	1.13	9.00	1.19	9.69	1.25
22	5.12	0.99	5.66	1.04	6.19	1.10	6.73	1.15	8.99	1.22	9.68	1.28
24	5.12	1.03	5.65	1.09	6.19	1.14	6.72	1.20	8.98	1.26	9.66	1.32

3D081310C

NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- On the figure the mark ○ show the max. at standard conditions.
On the figure the mark □ show rated capacity and rated coefficient of power input.
However the max. capacity is not guaranteed, except at standard condition.
- SHC is based on indoor EVWB and EDB.
SHC for other dry bulb temp. = SHC + SHC*.
 $SHC^* = 0.02 \times AFR (m^3/min.) \times (1 - BF) \times (DB^* - EDB)$
- Capacities are based on following conditions:
Outdoor air: 85% RH. However, the condition rated capacity in heating is 7° CDB / 6° CWB.
Corresponding refrigerant piping length : 5.0 m
Level difference : 0 m
- Coefficient of power input is the percentage when the rated value is defined as 1.00.
- The value contains less than 5% error according to indoor unit type.
- Heating capacity include the drop of frost formation.
- Air flow rate and (BF) are tabulated below.

(Pair)

	ACQ71C	ABQ71C	ADEQ71	AHQ71C
AFR	24.4	18.3	18.0	23.8
(BF)	(0.157)	(0.233)	(0.08)	(0.212)

- Rated power input of each model is tabulated below.

(Pair)

	ACQ71C	ABQ71C	ADEQ71	AHQ71C
Heating	2.08	2.13	2.08	2.46

SYMBOLS

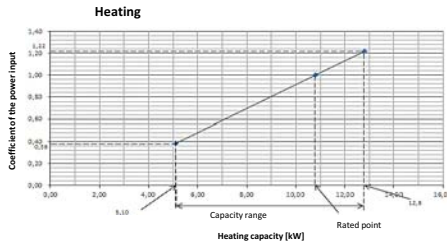
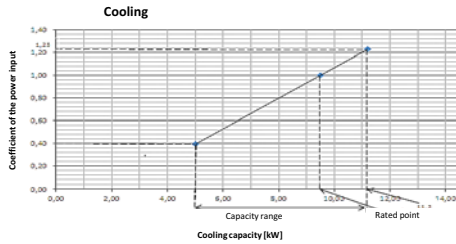
AFR:	Air flow rate	(m ³ /min)
BF:	Bypass factor	
EVWB:	Entering wet bulb temp.	(°CWB)
EDB:	Entering dry bulb temp.	(°CDB)
TC:	Maximum Total cooling (heating) capacity	(kW)
SHC:	Sensible heating capacity	(kW)
PI:	Power input	(kW)
	(comp.+indoor and outdoor fan motor)	
CPI:	Coefficient of power input.	(-)

Caution:
TC and SHC are shown by kW.

6 Capacity tables

6 - 3 Cooling/Heating Capacity Tables

AZQS100B8V1



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		
°CWB	°CDB	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
16.0	22	11.2	7.61	1.01	10.8	7.44	1.11	10.5	7.29	1.22	10.1	7.09	1.32
18.0	25	11.8	7.89	1.01	11.4	7.49	1.12	11.0	7.27	1.23	10.5	7.09	1.33
19.0	27	12.0	7.57	1.02	11.6	7.44	1.12	11.2	7.26	1.23	10.8	7.04	1.33
19.5	27	12.1	7.59	1.02	11.7	7.37	1.13	11.4	7.34	1.23	10.9	7.04	1.34
22.0	30	12.8	7.52	1.02	12.4	7.36	1.13	11.9	7.16	1.24	11.5	7.03	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		5.0		10.0	
°CDB	°CWB	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
16	8.68	0.93	0.94	0.99	1.01	1.02	1.04	1.05	1.08	1.12	1.18	1.23	1.28
18	8.57	0.97	0.94	1.02	1.00	1.07	1.03	1.10	1.08	1.17	1.18	1.23	1.28
20	8.56	1.01	0.93	1.07	1.00	1.11	1.03	1.14	1.08	1.22	1.18	1.28	1.28
21	8.56	1.03	0.92	1.09	1.00	1.13	1.03	1.16	1.08	1.24	1.18	1.28	1.28
22	8.55	1.04	0.92	1.10	1.00	1.14	1.03	1.18	1.08	1.26	1.18	1.28	1.28
24	8.54	1.09	0.91	1.15	1.00	1.19	1.03	1.23	1.08	1.31	1.18	1.28	1.28

- Notes**
- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
 - = Maximum at standard conditions
= Rated capacity and rated coefficient of the power input
The maximum capacity is not guaranteed except at standard conditions.
 - SHC is based on indoor units EWB & EDB.
SHC for other dry-bulb temperatures = SHC + SHC*
SHC* = SHC correction for other dry-bulb temperatures
= 0.02 × AFR (m³/min) × (1-BF) × (DB* - EDB)
 - The capacities are based on the following conditions:
Outdoor air: 85% RH
However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.
Corresponding refrigerant piping length: 5.0 m
Level difference: 0m
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.

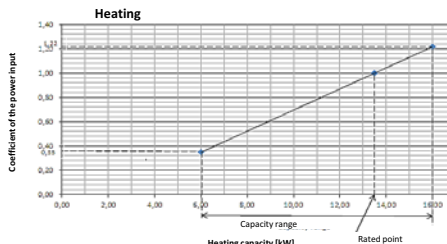
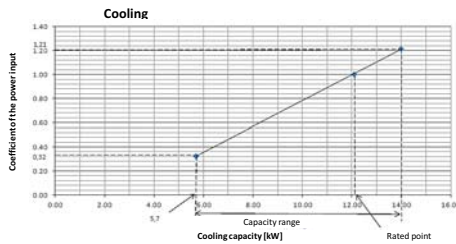
9. The rated power input for each model is mentioned in the table below.

	ACQ100CV1	ADEQ100	AHQ100CV1	ABQ100CV1
AFR (BF)	29.2 (0.253)	32.0 (0.13)	31.1 (0.174)	22.7 (0.175)

	ACQ100CV1	ADEQ100	AHQ100CV1	ABQ100CV1
Cooling	2.96	2.96	3.62	3.63
Heating	2.99	2.99	3.17	3.16

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AZQS125B8V1



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		
°CWB	°CDB	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI	TC	SHC	CPI
16.0	22	14.1	9.54	0.99	13.6	9.30	1.09	13.1	9.12	1.19	12.6	8.78	1.29
18.0	25	14.7	9.50	0.99	14.2	9.32	1.09	13.7	9.09	1.20	13.2	8.83	1.31
19.0	27	15.0	9.52	1.00	14.5	9.34	1.10	14.0	9.06	1.20	13.5	8.87	1.31
19.5	27	15.2	9.52	1.00	14.7	9.26	1.11	14.2	9.08	1.20	13.6	8.81	1.31
22.0	30	16.0	9.39	1.00	15.5	9.14	1.11	14.9	8.95	1.21	14.4	8.74	1.32
24.0	32	16.7	9.31	1.01	16.1	9.09	1.12	15.5	8.83	1.23	15.0	8.63	1.33

Heating

Indoor		Outdoor temperature (°C WB)											
		-15.0		-10.0		-5.0		0.0		5.0		10.0	
°CDB	°CWB	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI	TC	CPI
16	10.7	0.93	1.18	0.99	1.26	1.02	1.30	1.06	1.60	1.12	1.73	1.18	1.23
18	10.7	0.97	1.18	1.02	1.25	1.07	1.29	1.10	1.60	1.17	1.73	1.23	1.23
20	10.7	1.01	1.18	1.07	1.25	1.11	1.29	1.14	1.60	1.22	1.73	1.28	1.28
21	10.7	1.03	1.18	1.09	1.25	1.13	1.29	1.16	1.60	1.24	1.73	1.31	1.31
22	10.7	1.04	1.18	1.10	1.25	1.14	1.29	1.18	1.60	1.27	1.73	1.33	1.33
24	10.7	1.09	1.18	1.15	1.25	1.19	1.29	1.23	1.60	1.31	1.73	1.38	1.38

- Notes**
- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
 - = Maximum at standard conditions
= Rated capacity and rated coefficient of the power input
The maximum capacity is not guaranteed except at standard conditions.
 - SHC is based on indoor units EWB & EDB.
SHC for other dry-bulb temperatures = SHC + SHC*
SHC* = SHC correction for other dry-bulb temperatures
= 0.02 × AFR (m³/min) × (1-BF) × (DB* - EDB)
 - The capacities are based on the following conditions:
Outdoor air: 85% RH
However, the outdoor ambient condition of the rated capacity during heating operation is 7°C DB / 6°C WB.
Corresponding refrigerant piping length: 5.0 m
Level difference: 0m
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.

	ACQ125CV1	ABQ125CV1	ADEQ125	AHQ125CV1
AFR (BF)	34.0 (0.10)	40.5 (0.157)	39.0 (0.16)	34.4 (0.123)

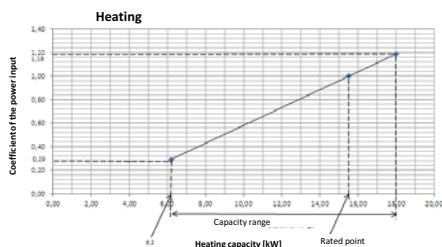
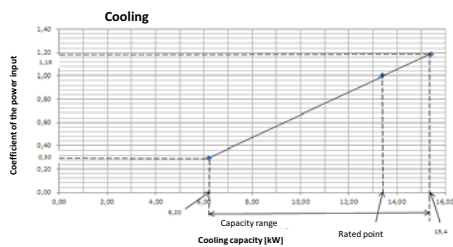
	ACQ125CV1	ABQ125CV1	ADEQ125	AHQ125CV1
Cooling	4.02	4.30	4.02	4.60
Heating	3.96	3.96	3.91	3.74

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6 Capacity tables

6 - 3 Cooling/Heating Capacity Tables

AZQS140B8V1



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
TCWB	TCDB	kW	kW	—	kW	kW	—	kW	kW	—	kW	kW	—
16.0	22	15.5	10.47	0.98	14.9	10.25	1.00	14.4	10.03	1.18	13.9	9.69	1.28
18.0	25	16.2	10.85	0.98	15.6	10.21	1.00	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	9.90	1.19	14.8	9.70	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	9.63	1.21	15.8	9.60	1.31
24.0	32	18.4	10.00	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		
		TC	CPI	—	TC	CPI	—	TC	CPI	—	TC	CPI	—
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	11.6	1.00	12.7	1.06	13.5	1.11	13.9	1.13	18.0	1.21	19.4	1.28	—
22	11.6	1.02	12.7	1.08	13.5	1.12	13.9	1.16	18.0	1.24	19.4	1.30	—
24	11.6	1.07	12.6	1.12	13.5	1.17	13.9	1.20	18.0	1.29	19.4	1.35	—

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

	ABQ140CV1	AHQ140CV1
AFR (BF)	48.7 (0.15)	43.9 (0.157)

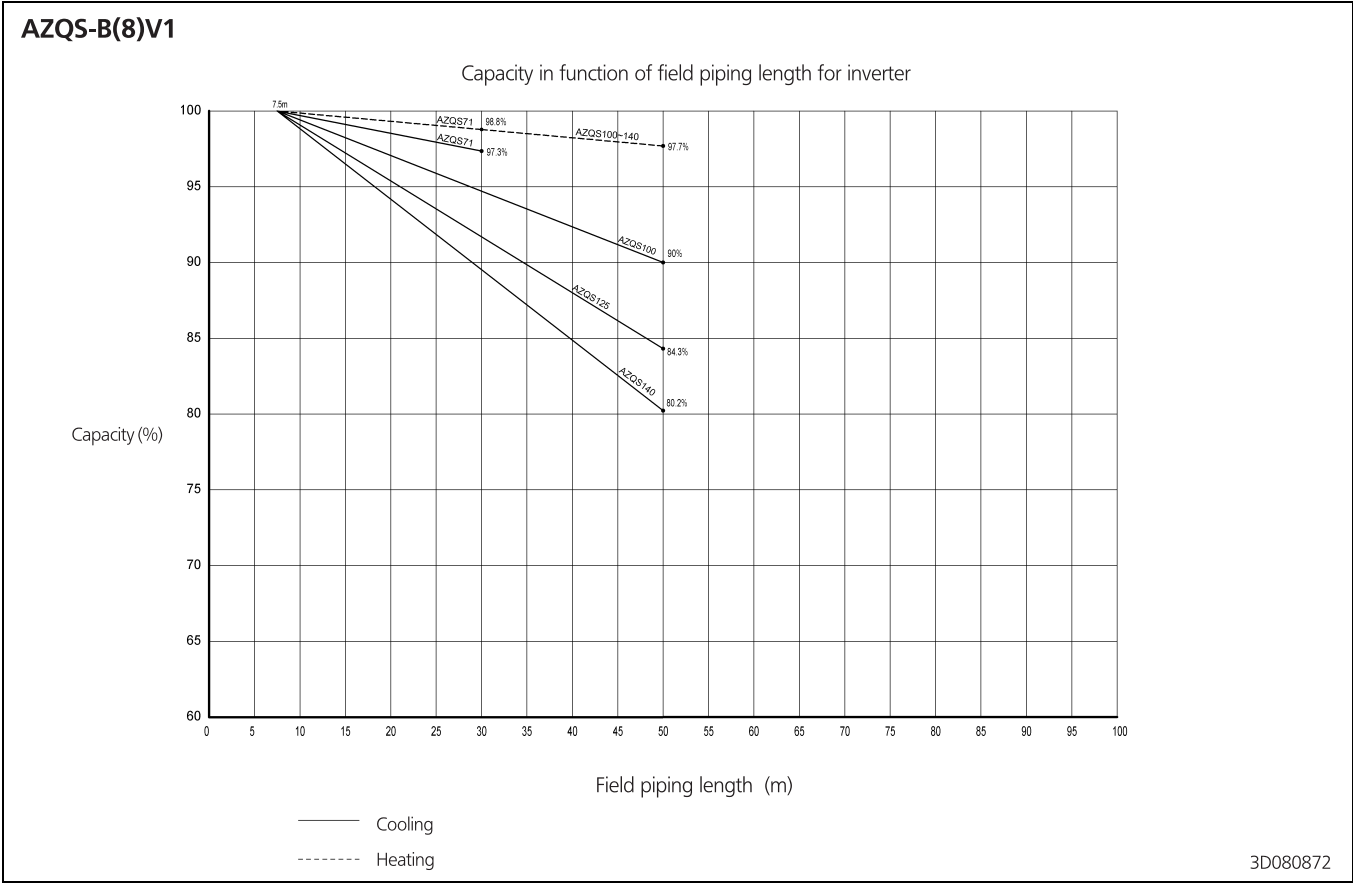
- The rated power input for each model is mentioned in the table below.
Pair

	ABQ140CV1	AHQ140CV1
Cooling	4.32	4.32
Heating	4.55	4.55

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6 Capacity tables

6 - 4 Capacity Correction Factor

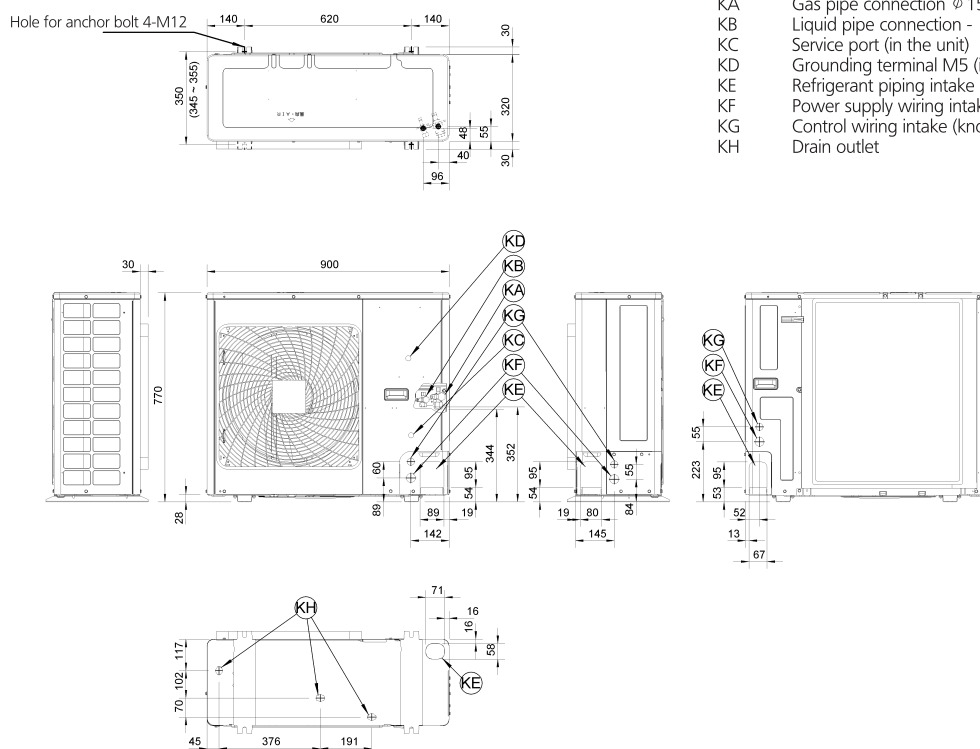


7 Dimensional drawings

7 - 1 Dimensional Drawings

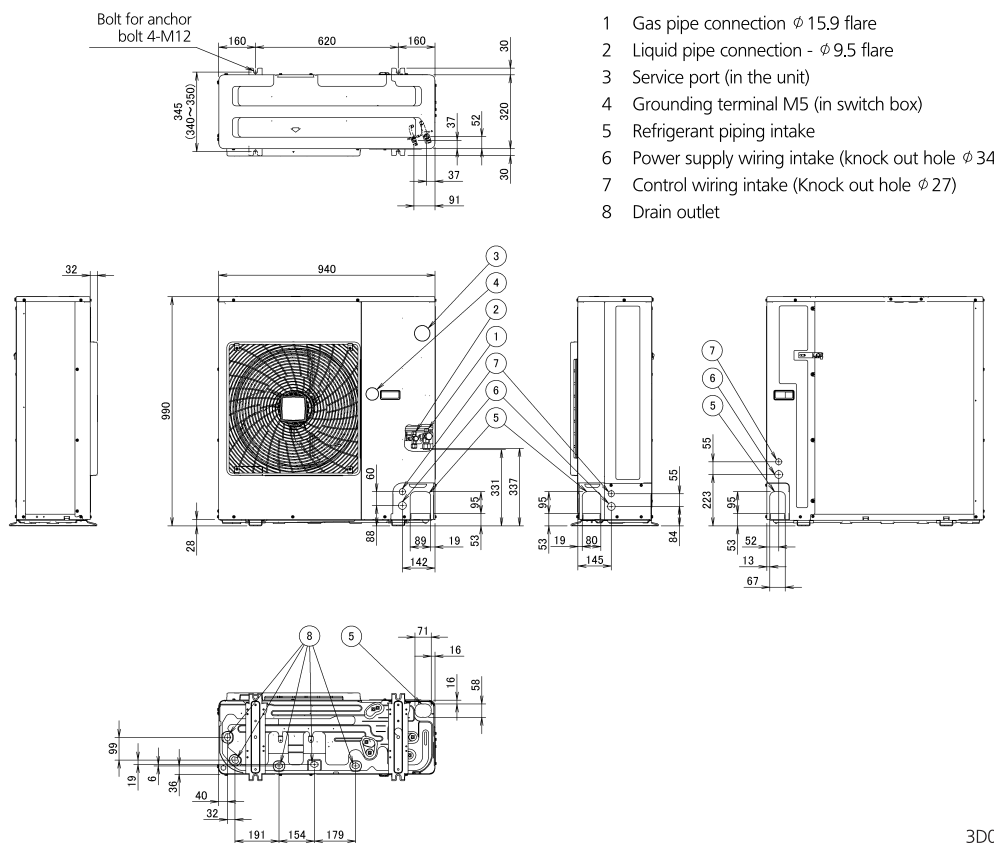
AZQS71B2V1

unit (mm)



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AZQS100-125B8V1

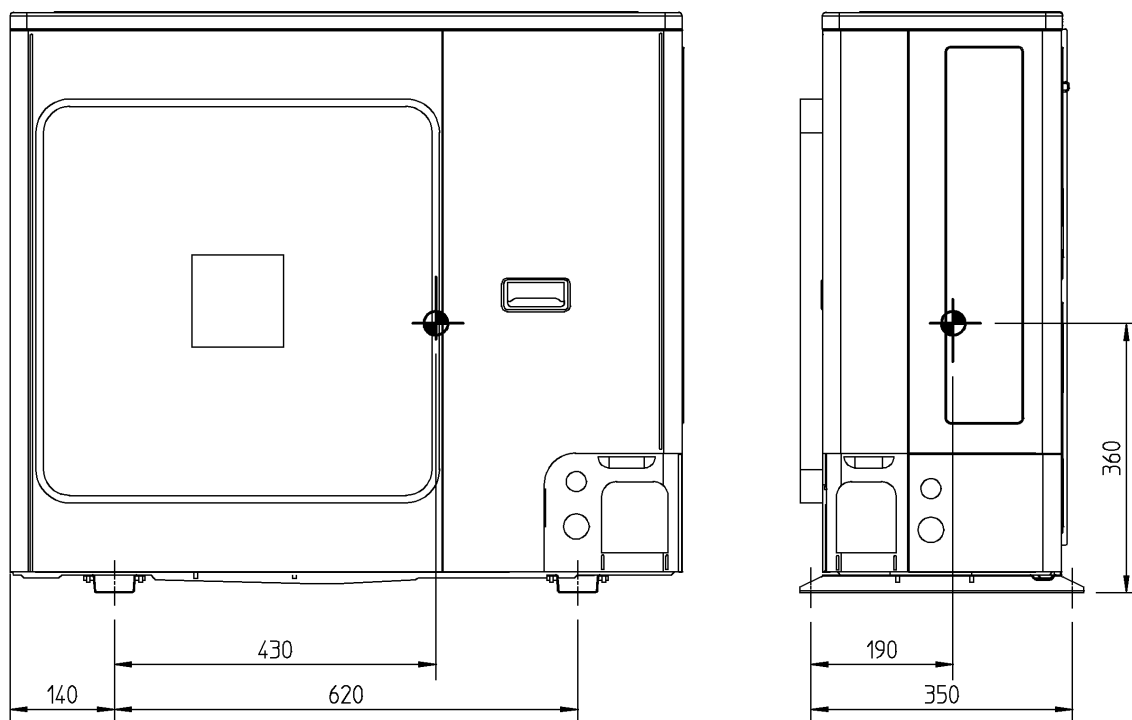


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8 Centre of gravity

8 - 1 Centre of Gravity

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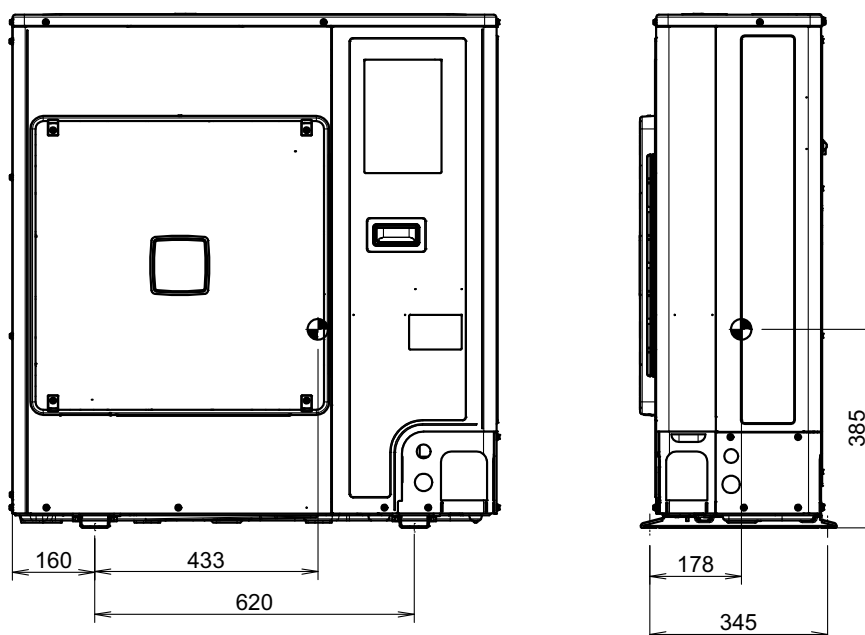


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8 Centre of gravity

8 - 1 Centre of Gravity

AZQS100B8V1



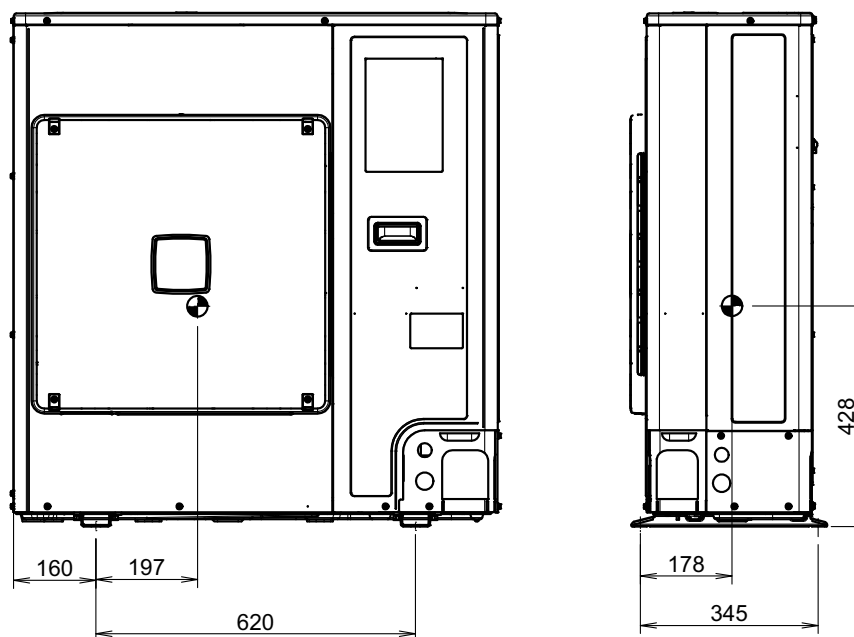
4D090895

8 Centre of gravity

8 - 1 Centre of Gravity

8

AZQS125B8V1

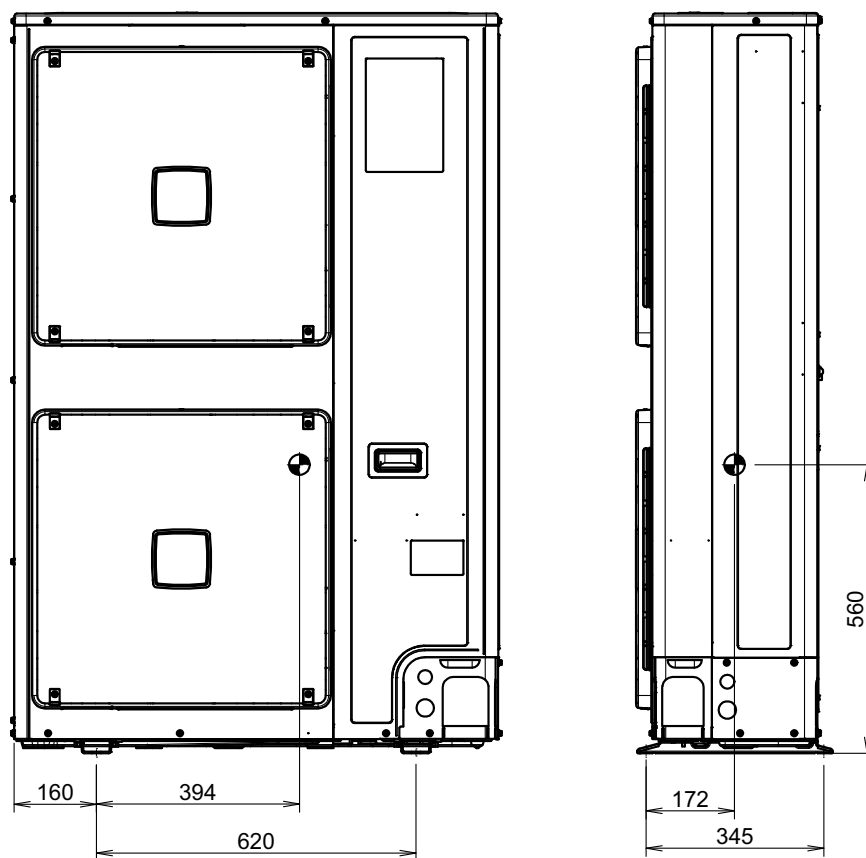


4D090896

8 Centre of gravity

8 - 1 Centre of Gravity

AZQS140B8V1



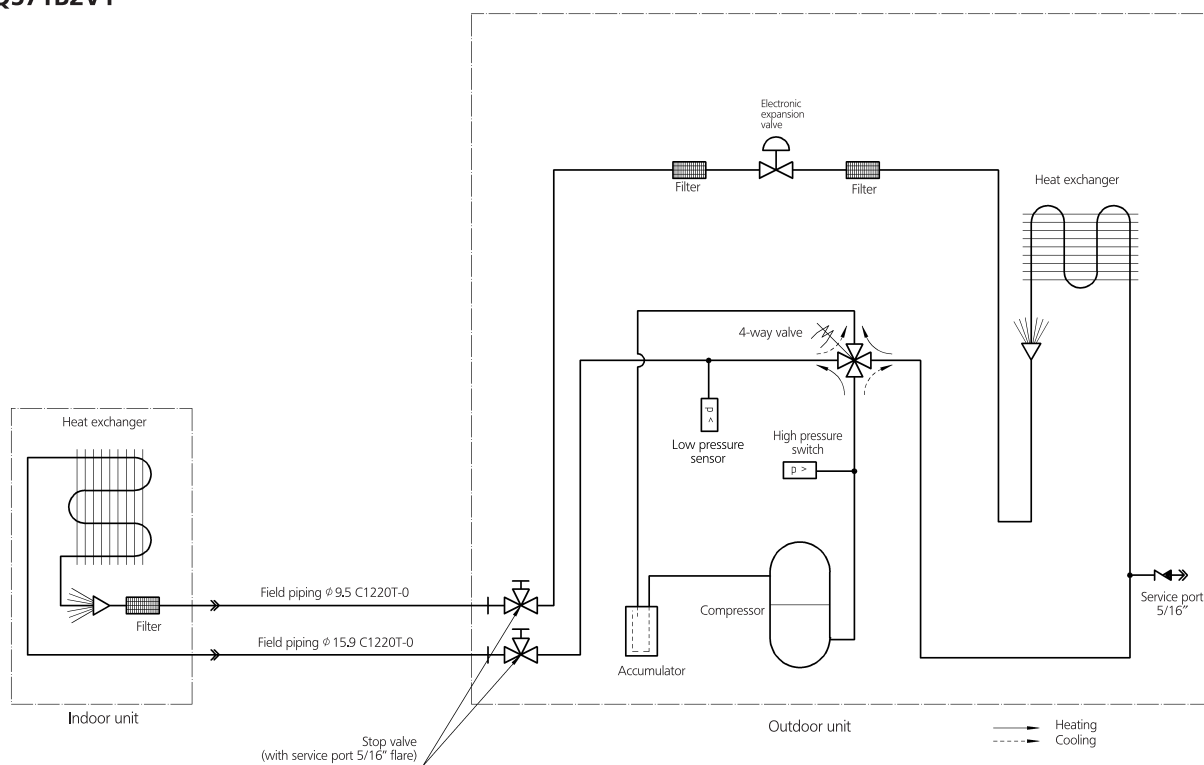
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9 Piping diagrams

9 - 1 Piping Diagrams

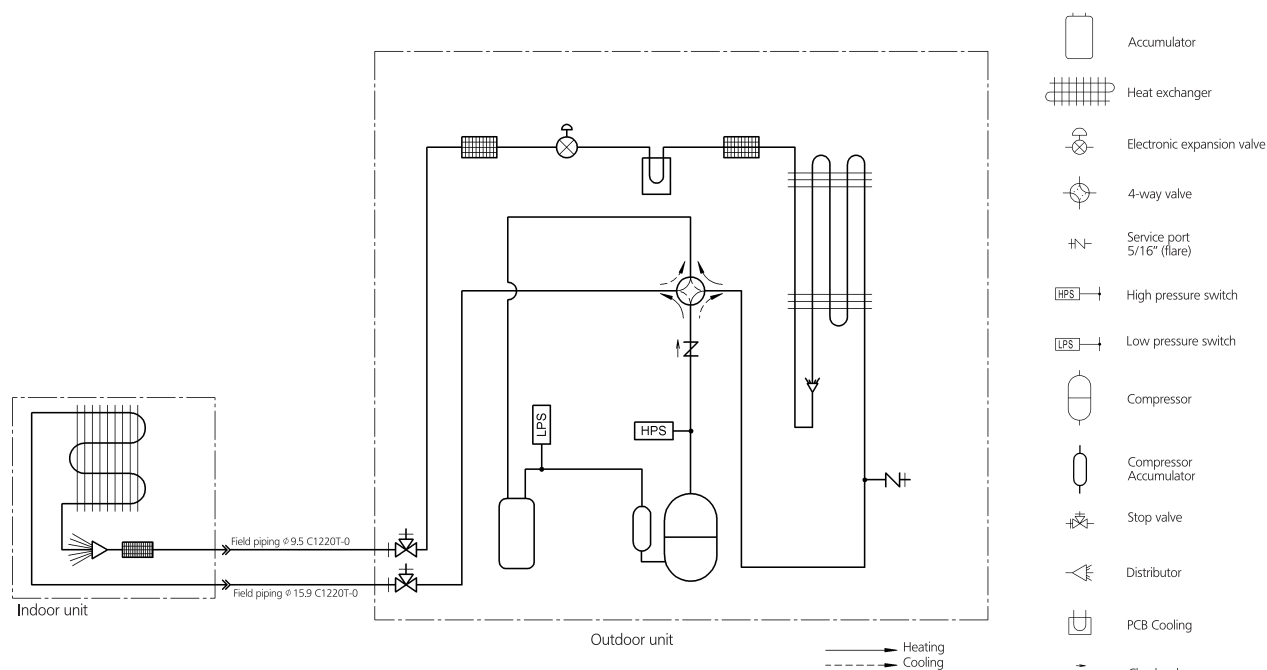
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AZQS71B2V1



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AZQS100-140B8V1



Notes:

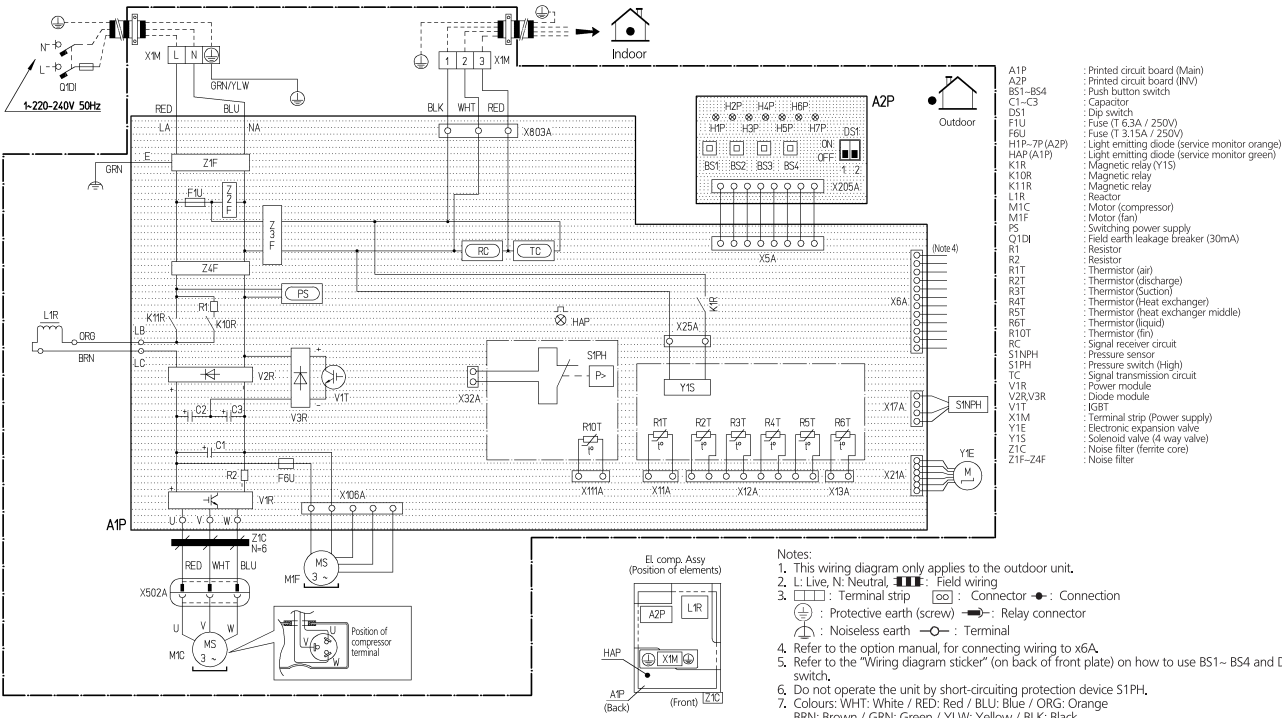
- 1 The pipes between the branch and the indoor units should have the same size as the indoor connections.
- 2 The check valve is only present in following models: AZQS100 and AZQS125.

3D090344

10 Wiring diagrams

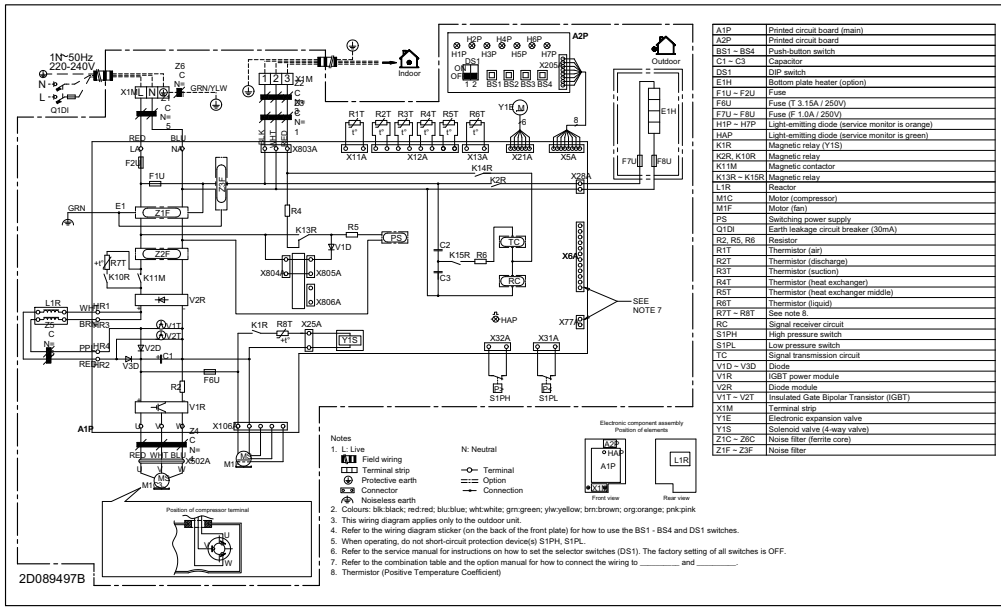
10 - 1 Wiring Diagrams - Single Phase

AZQS71B2V1



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AZQS100B8V1

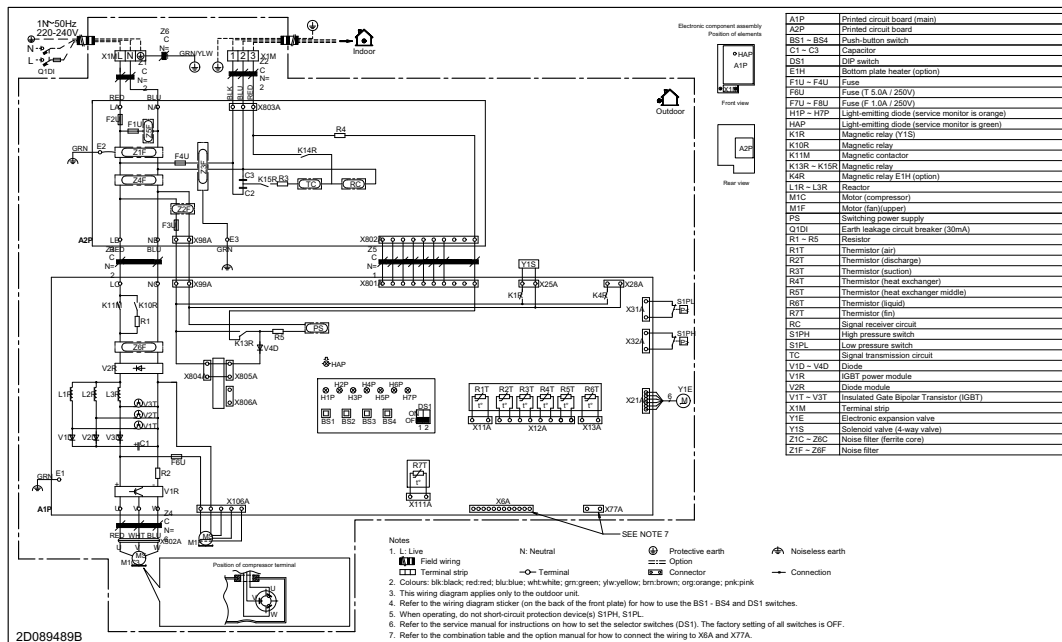


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10 Wiring diagrams

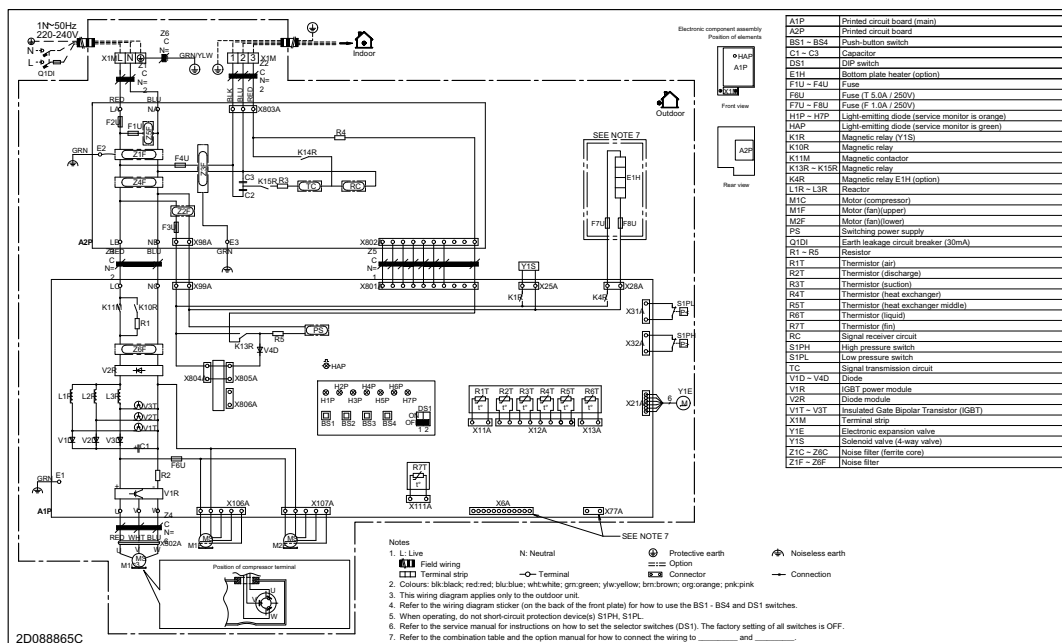
10 - 1 Wiring Diagrams - Single Phase

AZQS125B8V1



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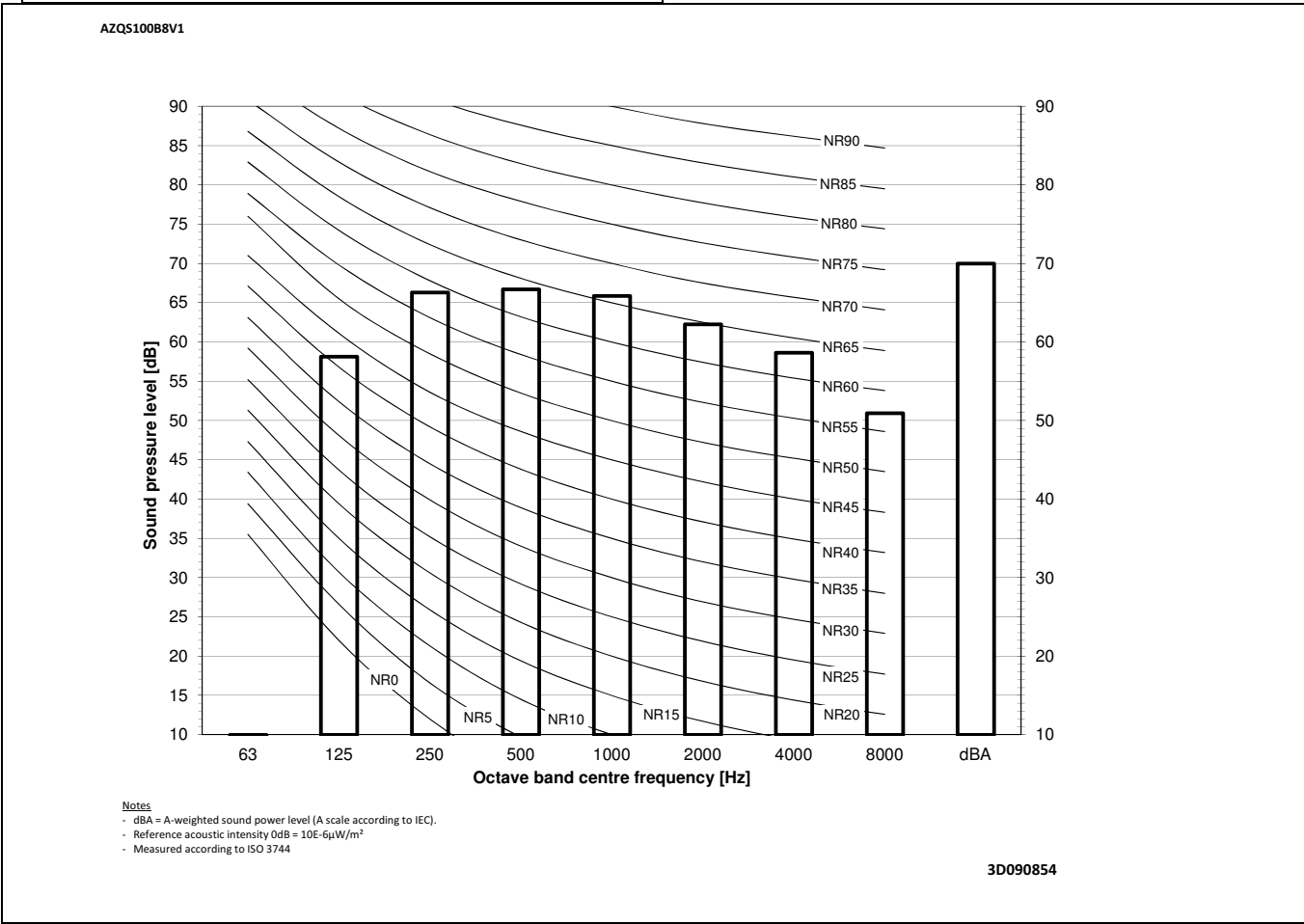
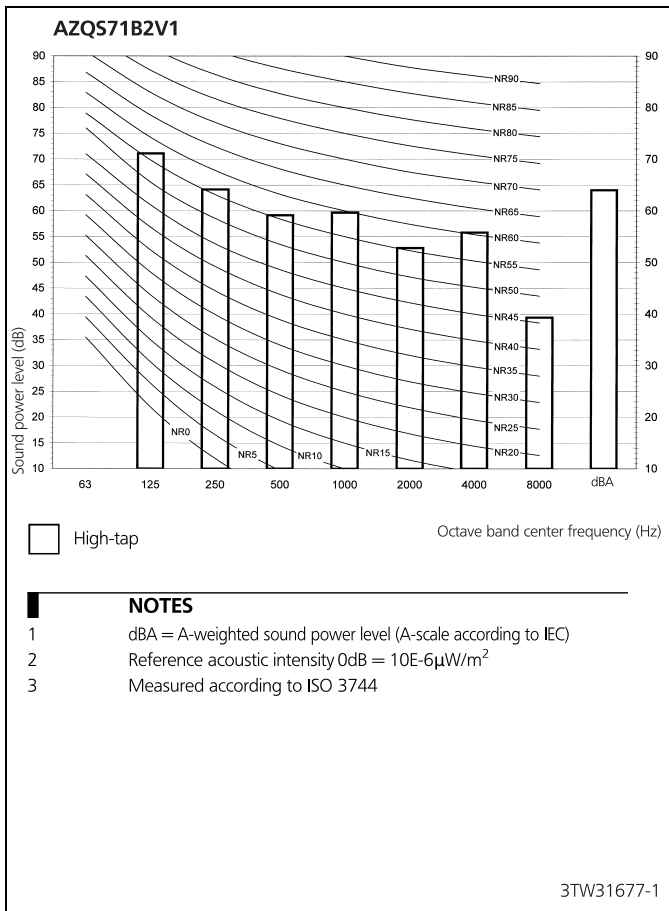
AZQS140B8V1



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11 Sound data

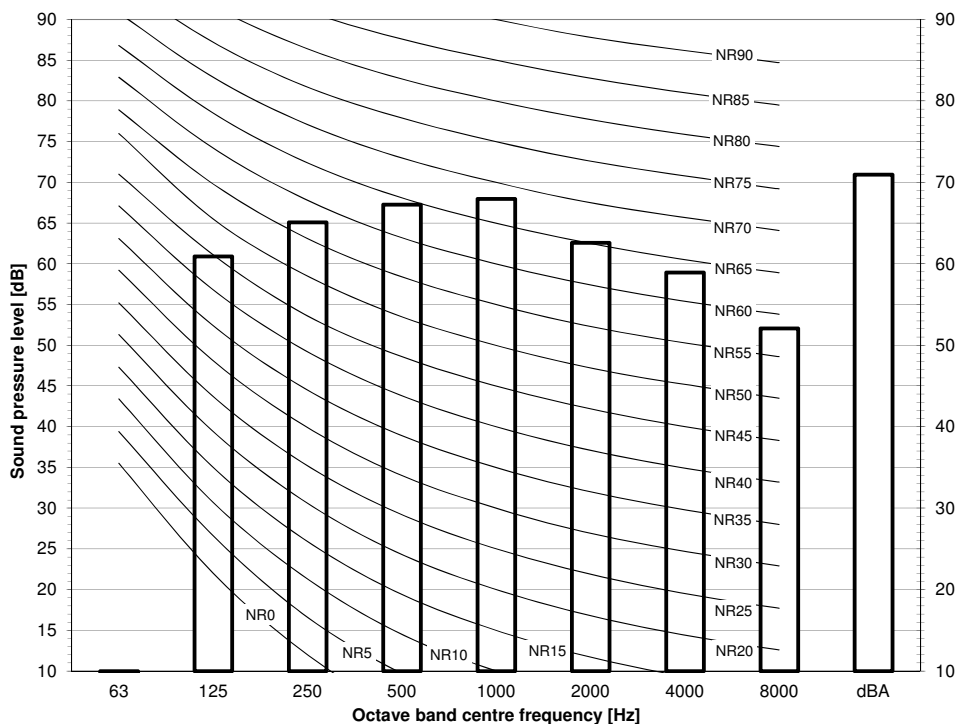
11 - 1 Sound Power Spectrum



11 Sound data

11 - 1 Sound Power Spectrum

AZQS125B8V1

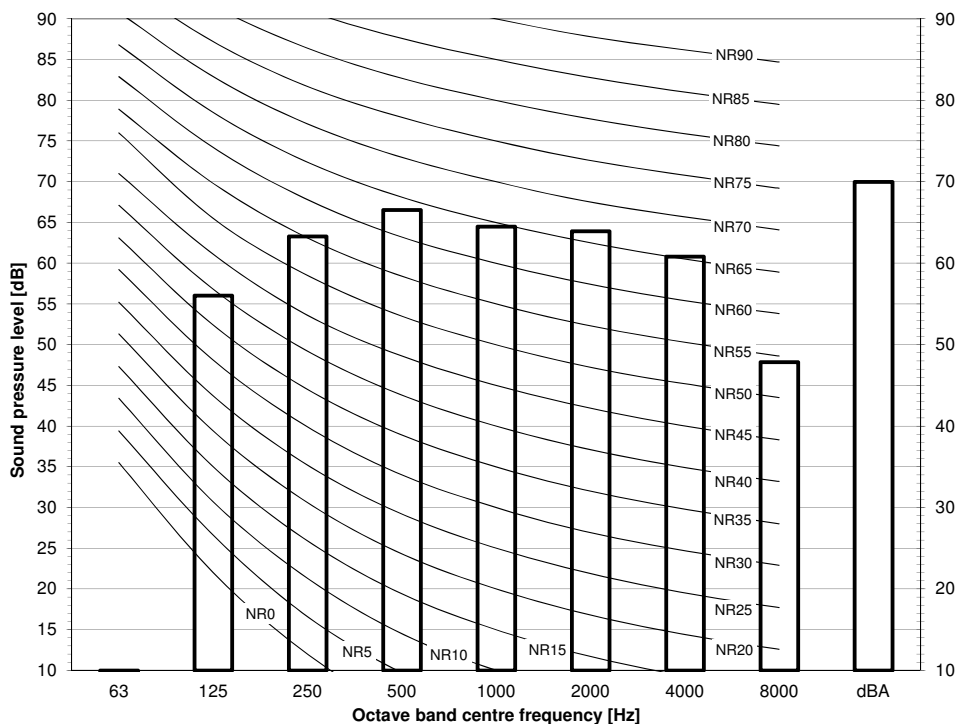


Notes

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

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AZQS140B8V1



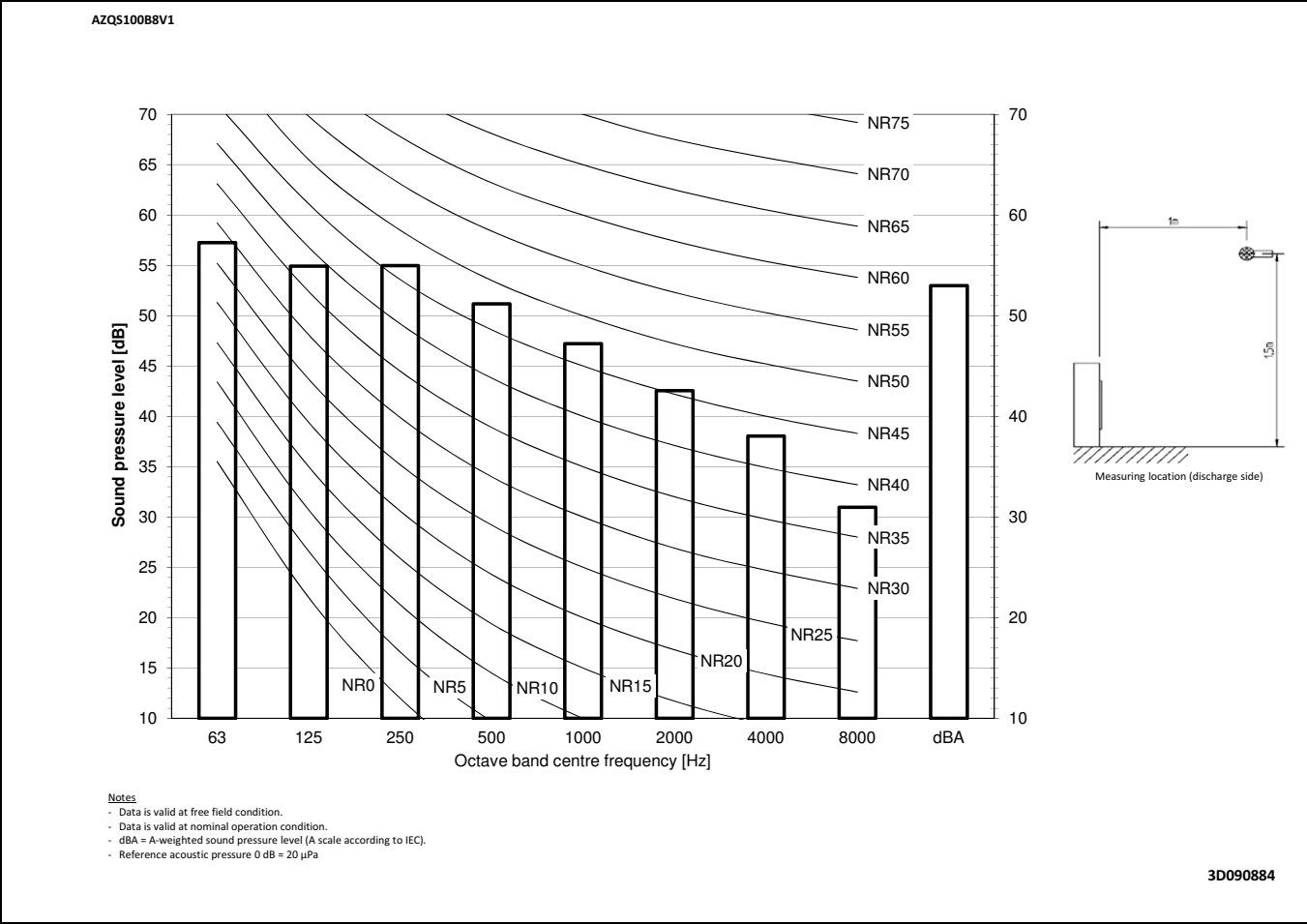
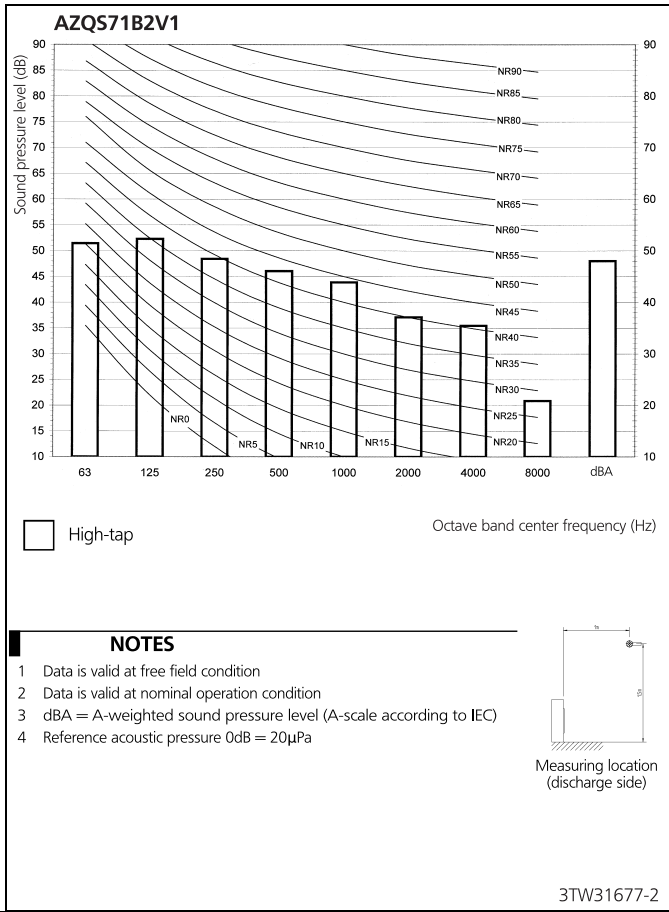
Notes

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

3D090856

11 Sound data

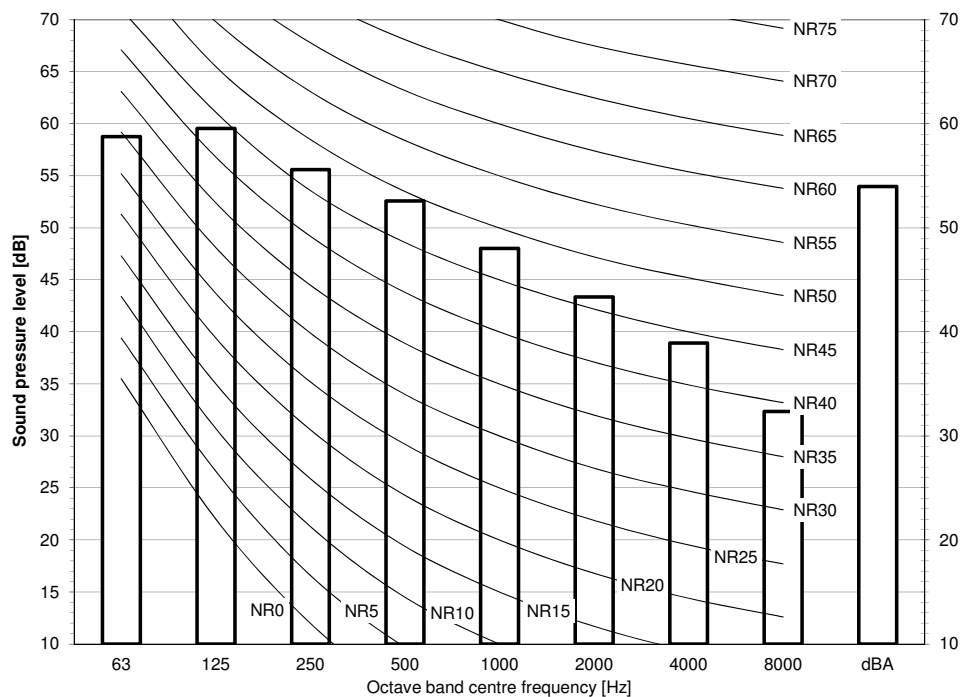
11 - 2 Sound Pressure Spectrum - Cooling



11 Sound data

11 - 2 Sound Pressure Spectrum - Cooling

AZQS125B8V1

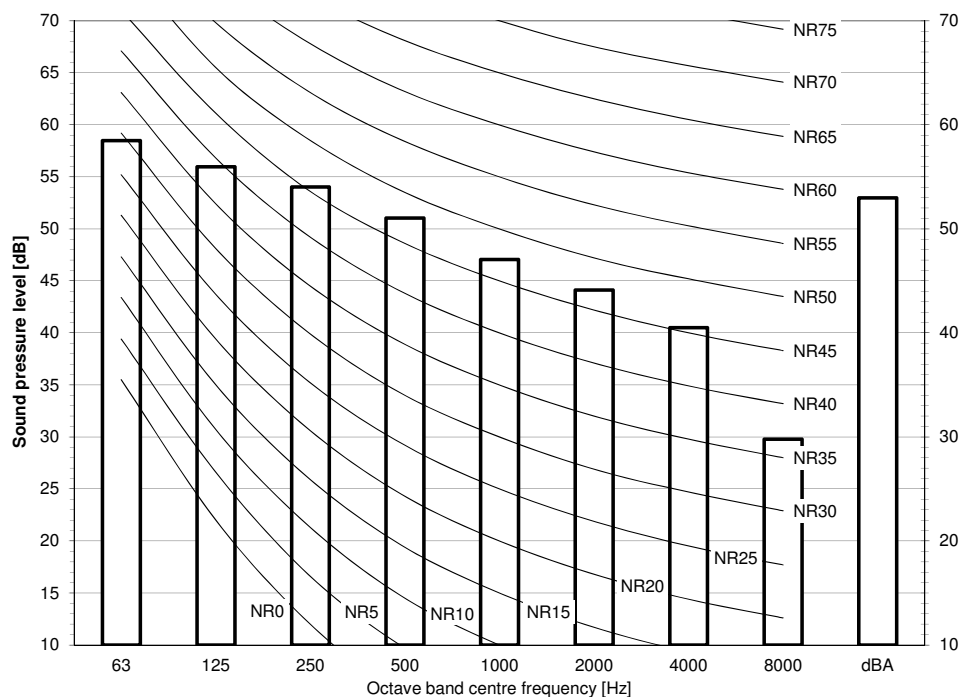


Notes

- 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

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AZQS140B8V1



Notes

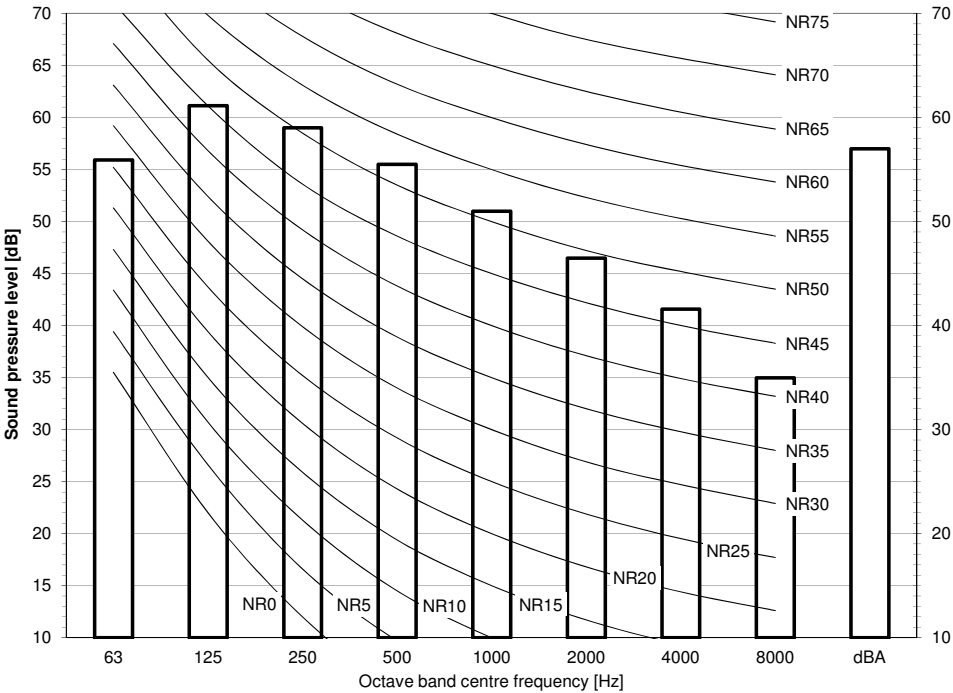
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 μ Pa

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11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

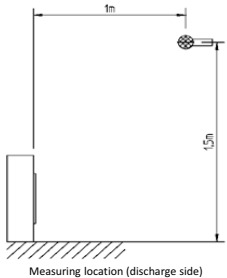
AZQS100B8V1



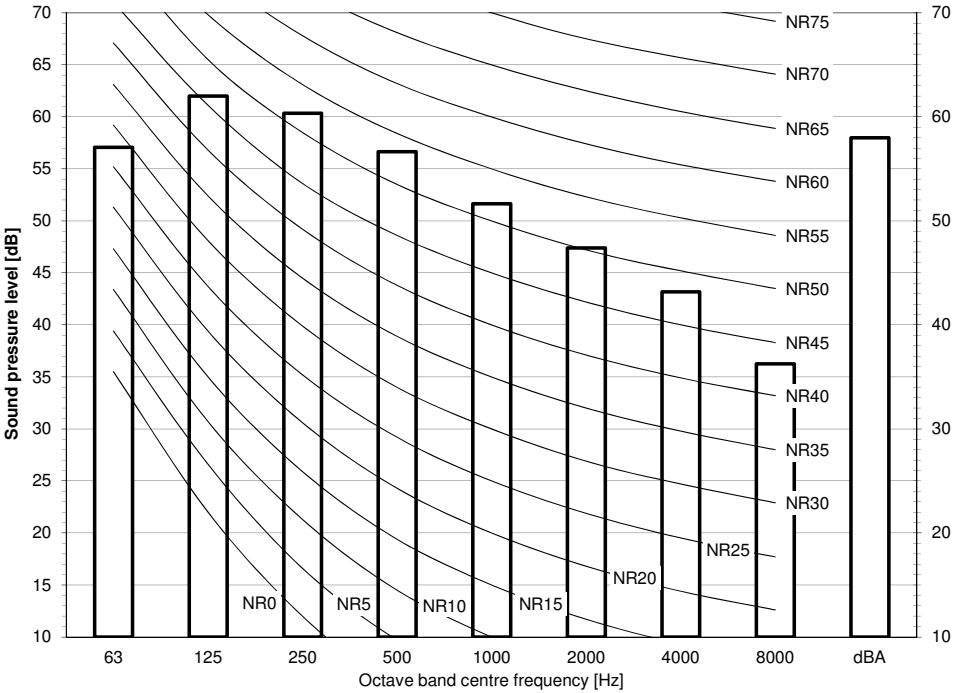
Notes

- 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

3D090874



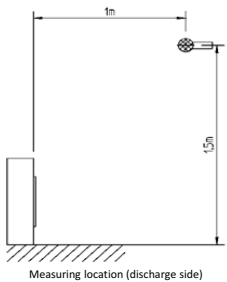
AZQS125B8V1



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

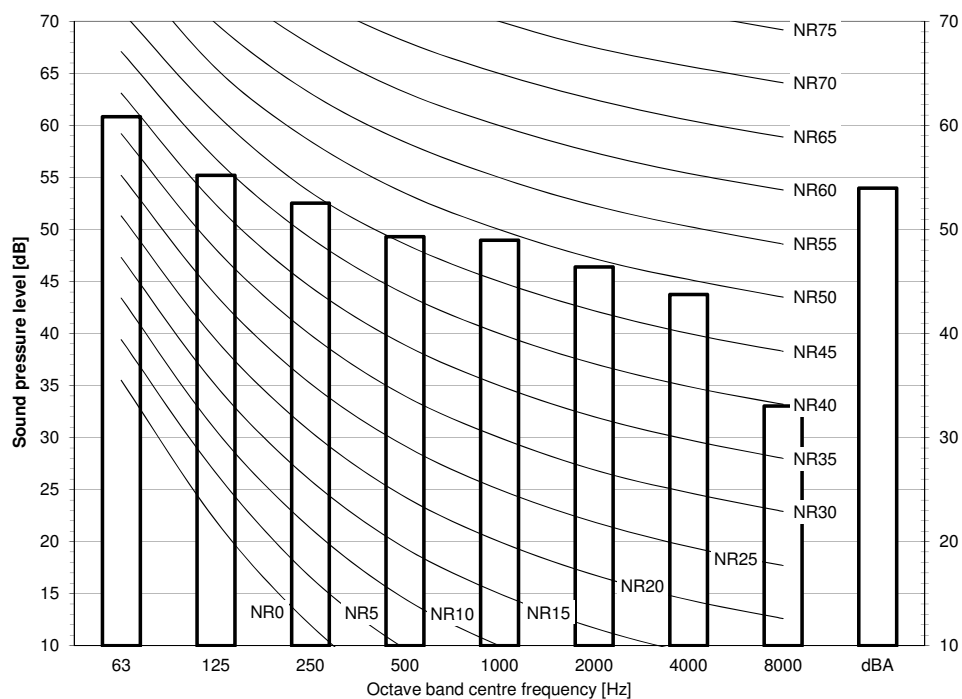
3D090875



11 Sound data

11 - 3 Sound Pressure Spectrum - Heating

AZQS140B8V1



Notes

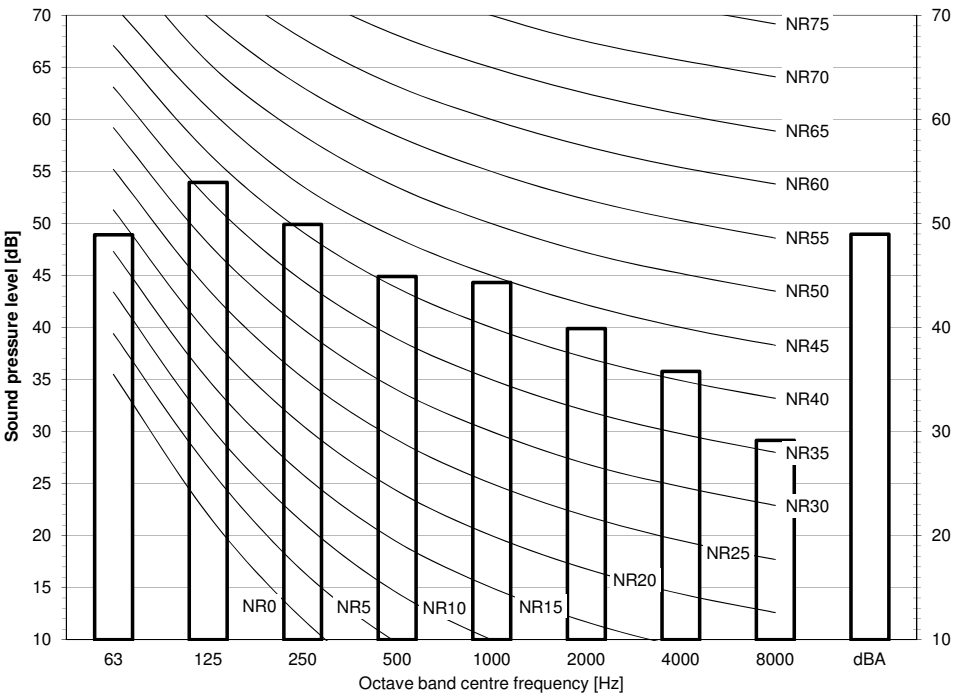
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

3D090876

11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode

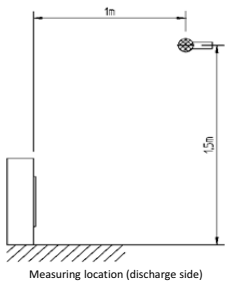
AZQS100B8V1



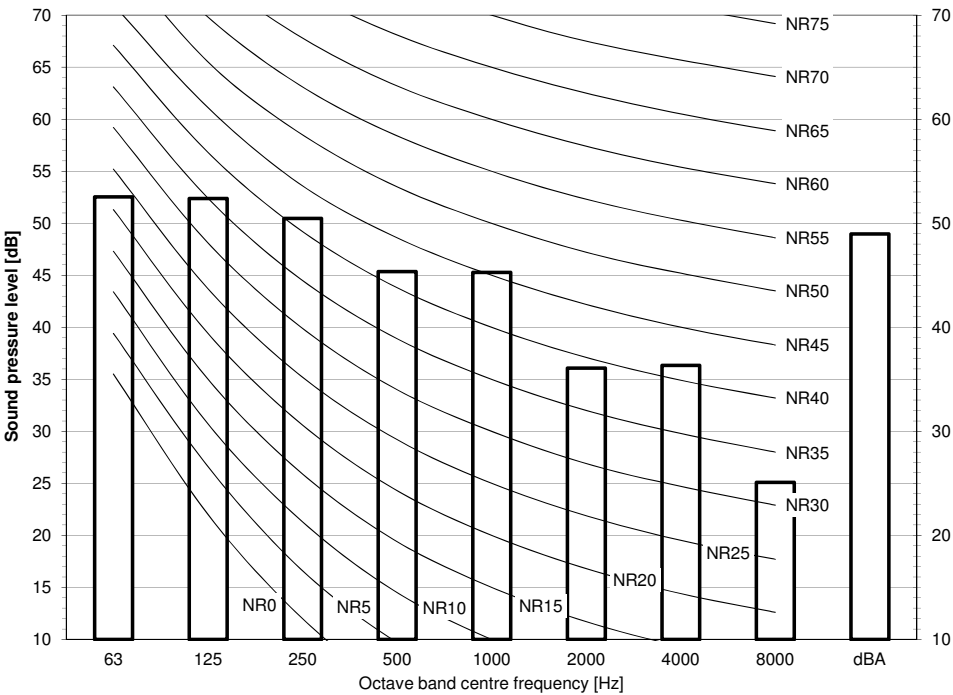
Notes

- 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

3D090864



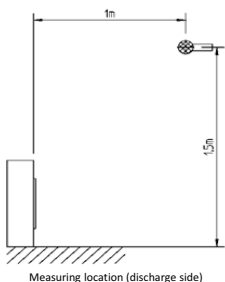
AZQS125B8V1



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

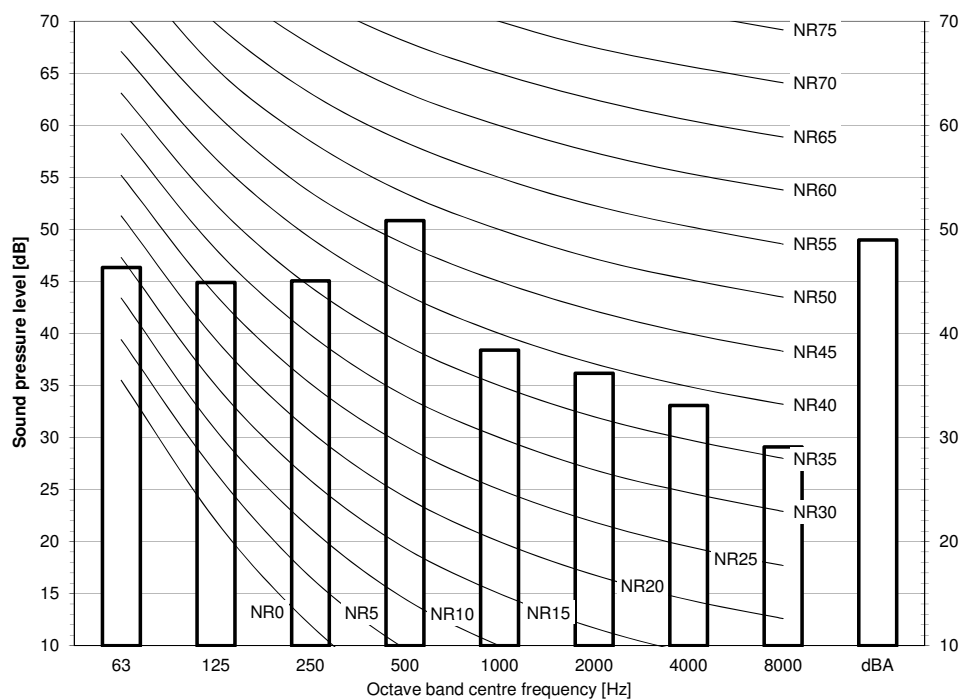
3D090865



11 Sound data

11 - 4 Sound Pressure Spectrum Quiet Mode

AZQS140B8V1



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

3D090866

12 Installation

12 - 1 Installation Method

AZQS-B(8)V1

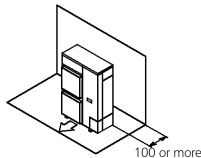
Installation service space

The measure of these values is "mm".

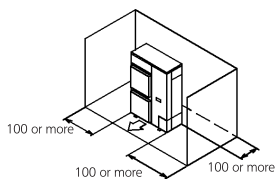
(A) When there are obstacles on suction sides.

• No obstacle above

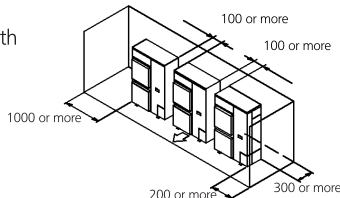
- ① Stand-alone installation
 - Obstacle on the suction side only



- Obstacle on both sides and suction side, too

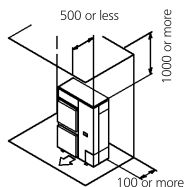


- ② Series installation (2 or more) (Note 1)
 - Obstacle on the suction side and both sides

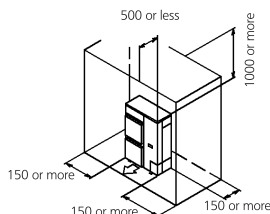


• Obstacle above, too.

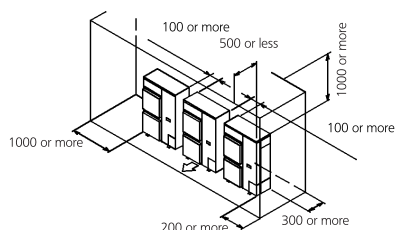
- ① Stand-alone installation
 - Obstacle on the suction side, too



- Obstacle on both sides and suction side, too



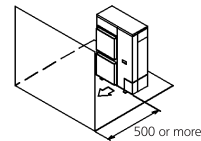
- ② Series installation (2 or more) (Note 1)
 - Obstacle on the suction side and both sides



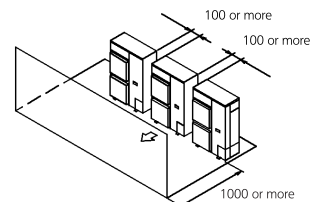
(B) When there are obstacles on discharge sides.

• No obstacle above

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

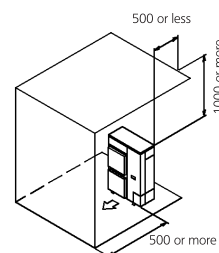


- ② Series installation (2 or more) (Note 1)
 - Obstacle on the discharge side only

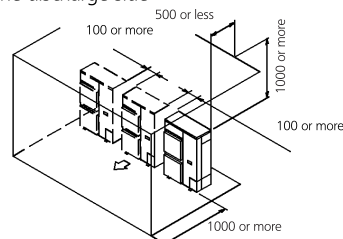


• Obstacle above, too

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



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



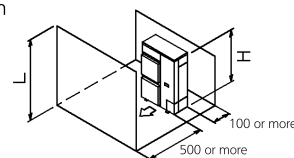
(C) When there are obstacles on both suction and discharge sides.:

Pattern 1

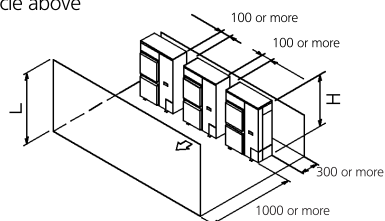
When the obstacles on the discharge side is higher than the unit. ($L > H$)
(There is no limit for the height of obstructions on the suction side.)

• 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

AZQS-B(8)V1

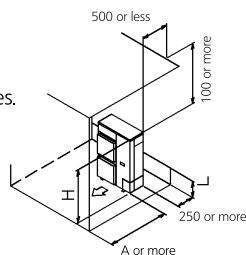
● Obstacle above, too

① Stand-alone installation (Note 2)

- When there are obstacles on suction, discharge and top sides.

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

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



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

- When there are obstacles on suction, discharge and top sides.

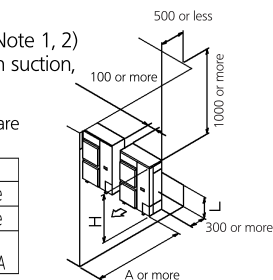
The relations between H, A and L are as follows.

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

Limit of series installation is 2 units.

Pattern 2

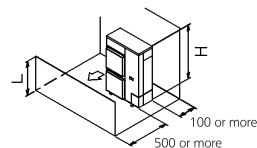
When the obstacle on the discharge side is lower than the unit ($L \leq H$)
(There is no limit for the height of obstructions on the suction side.)



● No obstacle above

① Stand-alone installation

- No obstacle above

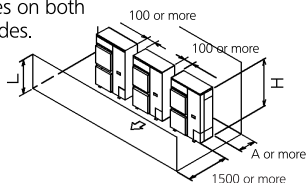


② Series installation (2 or more) (Note 1, 2)

- When there are obstacles on both suction and discharge sides.

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

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



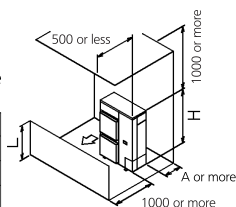
● obstacle above

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



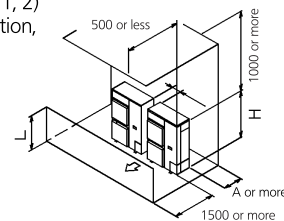
② Series installation (2 or more) (Note 1, 2)

- When there are obstacles on suction, discharge and top sides.

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

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

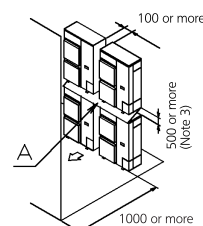
Limit of series installation is 2 units.



(D) Double-decker installation

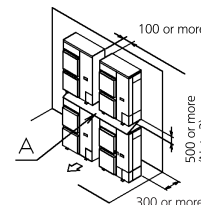
① Obstacle on the discharge side. (1)

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



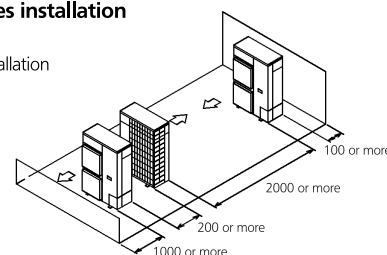
② Obstacle on the suction side. (1)

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



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

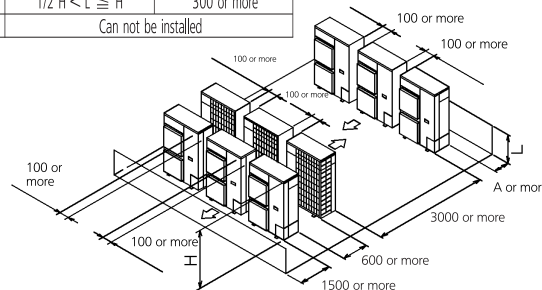
① One row of stand-alone installation



② Rows of series installation (2 or more)

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

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



NOTES

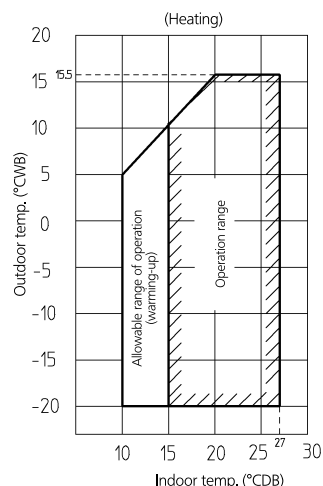
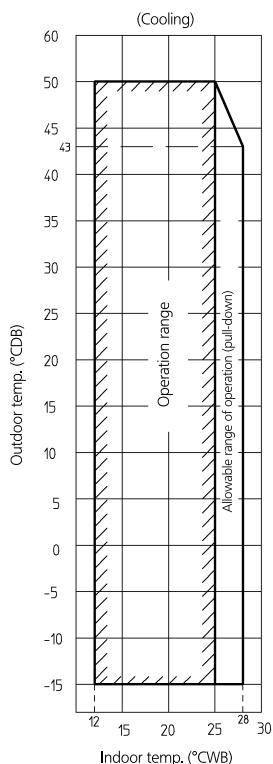
- In case of the sideways piping, make a 100mm gap between the unit above.
- Close the bottom of the installation frame to prevent the discharged air from being bypassed.
- It is not necessary to install a roof cover if there is no danger of drainage dripping and freezing. In this case, the space between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

3D069554

13 Operation range

13 - 1 Operation Range

AZQS71B2V1

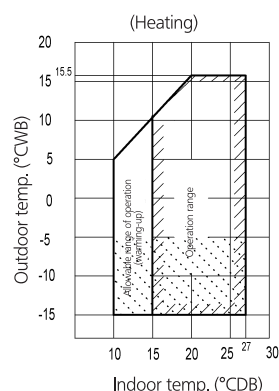
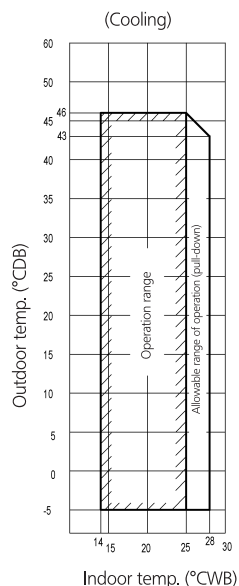


Notes:

- Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
- 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.

3TW26733-1B

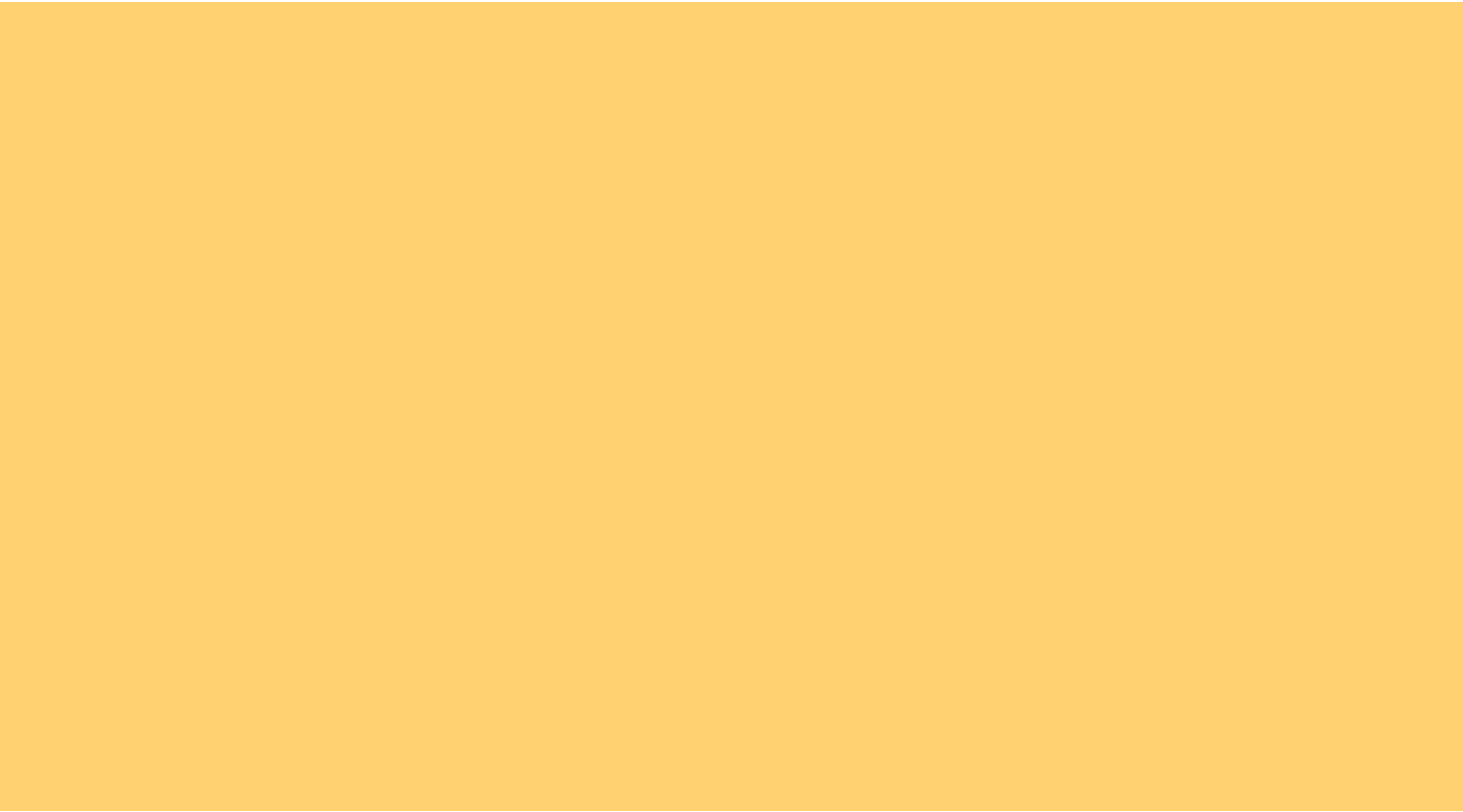
AZQS100-140B8V1



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%) in this operation area, an RZQG model should be used instead of an RZQSG model. This to avoid freeze-up of the outdoor unit.

3D076504



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