



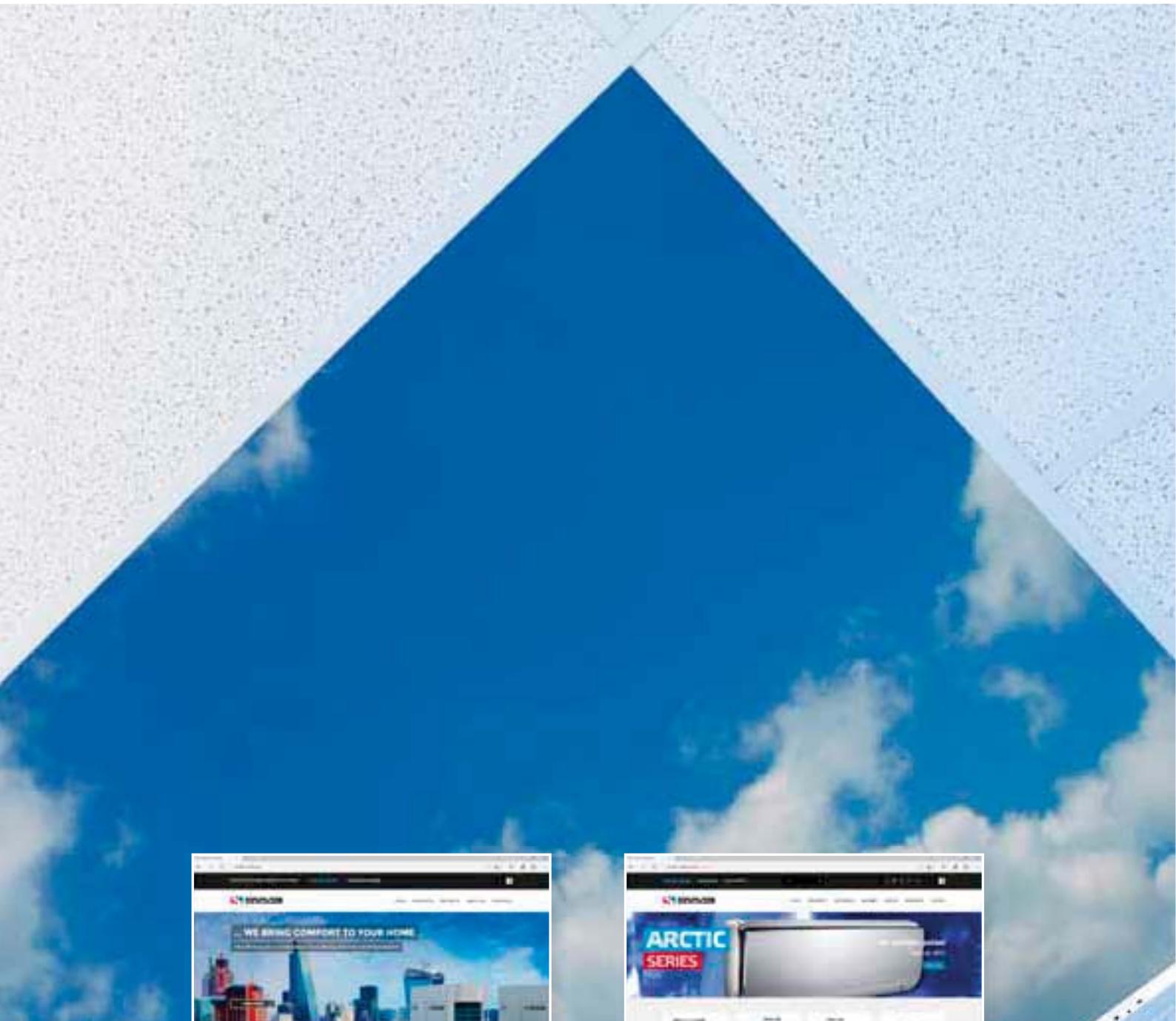
LET'S INSPIRE.

**RESIDENTIAL
AIR CONDITIONING 2016**



With SINCLAIR air-conditioners, you can easily enjoy homely comfort and pleasant atmosphere in all types of residential living. SINCLAIR offers wide range of capacities, types and designs. Even for complex projects, we can find easy and comfortable solutions - e.g. MULTI SYSTEM SERIES with energy-saving technology DC INVERTER.

- From the very beginning SINCLAIR has set its main target to bring quality and comfort to the life of people of the Blue Planet. Thanks to the attention paid to research, development, manufacturing and product testing as well as to the after sales support, SINCLAIR has reached a high level of quality and reliability.
- Production processes of SINCLAIR air-conditioners comply with ISO 9001.
- SINCLAIR products are in conformity with European standards, which guarantee safe operation.



GLOBAL WEB PAGE

WWW.SINCLAIR-WORLD.COM

ON THE GLOBAL WEBSITES, YOU WILL FIND BASIC INFORMATION ABOUT OUR ASSORTMENT.



PRODUCT WEB PAGE

WWW.SINCLAIR-SOLUTIONS.COM

THESE WEBSITES ARE AIMED AT PARTNER COMPANIES WHO CAN DOWNLOAD THERE ALL THE DOCUMENTS (USER MANUALS, DECLARATIONS OF CONFORMITY ETC.) AND AFTER SIGNING INTO THE PARTNER (B2B) SECTION, YOU CAN UPLOAD THE TECHNICAL DOCUMENTATION AS WELL.

AIR CONDITIONING FEATURES

PLASMA+TEC

Switch on the great new feature of your SINCLAIR air conditioner – PLASMA technology and feel the air becoming cleaner and fresher.

SINCLAIR air conditioner will not only cool or heat your room, but it will also make your environment safer. Plasma technology will make the air cleaner, fresher, free of harmful bacteria. Protect your family with this new feature. lower your chances of becoming sick with flu or any other illness caused by air-borne bacteria. You can lower the allergens in the air, improving life of allergic persons.

Plasma air technology produces a natural bio-climate rich in active oxygen molecules, known as ions. The Plasma air system creates a measurable and controllable quantity of positive and negative oxygen ions. The negative ions contain an extra electron while the positive ions are missing an electron resulting in an unstable condition.

These unstable ions provide the following benefits:

PARTICLE REDUCTION

air-borne particles are charged by the ions through ionic bonding. These charged particles stick together, becoming heavier and then fall to the floor. These larger particles are also returned through the air conditioning system where they are captured by the filter.

ODOR NEUTRALIZATION

odorous gases and aerosols oxidize on contact with active oxygen molecules. odors, especially of an organic origin, are quickly eliminated.

VOC CONTROL

Volatile organic compounds (Vocs) are emitted as gases where there is carpeting, building materials, furniture, office equipment, cleaning agents, paints, glues, solvents or pesticides. The ions trade electrons with these Voc's breaking down their molecular structures into less harmful ones.

HEALTH BENEFITS

Human and animal lungs absorb oxygen more efficiently from clean ionized air, enhancing general health and well-being. alertness and concentration is improved.

Note: Models which have in their model name shortcut PT are equipped with the PLASMA+TEC.



DC INVERTER

Standard air conditioners have a fixed speed compressor and therefore have no ability to reduce the power consumption as they are not able to vary the load. With a D.c. Inverter Drive, the unit can work on a partial load thereby reduces the power consumption not only on start up but also on running costs.

With the Dc Inverter technology the temperature does not fluctuate and therefore provides more comfort. energy consupption can be reduced by as much as 44% compared to fixed speed compressors.

OPTIONAL HEALTHY FILTERS

This optional healthy filters can be used only with wall mounted split units (ASH-xxA1x).

LTC CATALYST FILTER

A mechanical filter intercepts aerosols and particles, purifies indoor air under room temperature and condition, catalyzes and decomposes up to 80% ammonia, hydrogen sulphide and aldehyde. This filter is constant, which can be used for long time without regeneration. It is water washable and the effect is the same after wash. Accessories for all wall mounted types of air condition.

CATECHIN FILTER

Catechin is an additive with excellent antioxidation and powerful sterilization that abstracts from natural green tea. After functions of a series of enzyme, benzene ring is generated to absorb and eliminate odor and injurant in ring. Catechin filter is good at long-time sterilizing and filtering dust. Its bacteriostasis to Escherichia Coli and Staphylococcus aureus is above 95%.

ACTIVE CARBON FILTER

Active carbon is an excellent absorber with dual characteristics of physical and chemical absorbing and it is available to absorb things in air and liquid selectively. With the advantages of active carbon, this filter is good at absorbing and is able to absorb injurious gas like benzene, formaldehyde and ammonia in a short time.

PHOTOCATALYTIC FILTER

Photocatalyst filter is functioned by deodorant, bacterial-killing, recycling effect under the light. It can effectively purify the air and keep it fresh. TiO² contained has strong photocatalyst effect but is environmental friendly. It is able to get rid of more than 90% acetic acid, formaldehyde and ammonia and more than 70% regenerate injurant.

SILVER ION FILTER

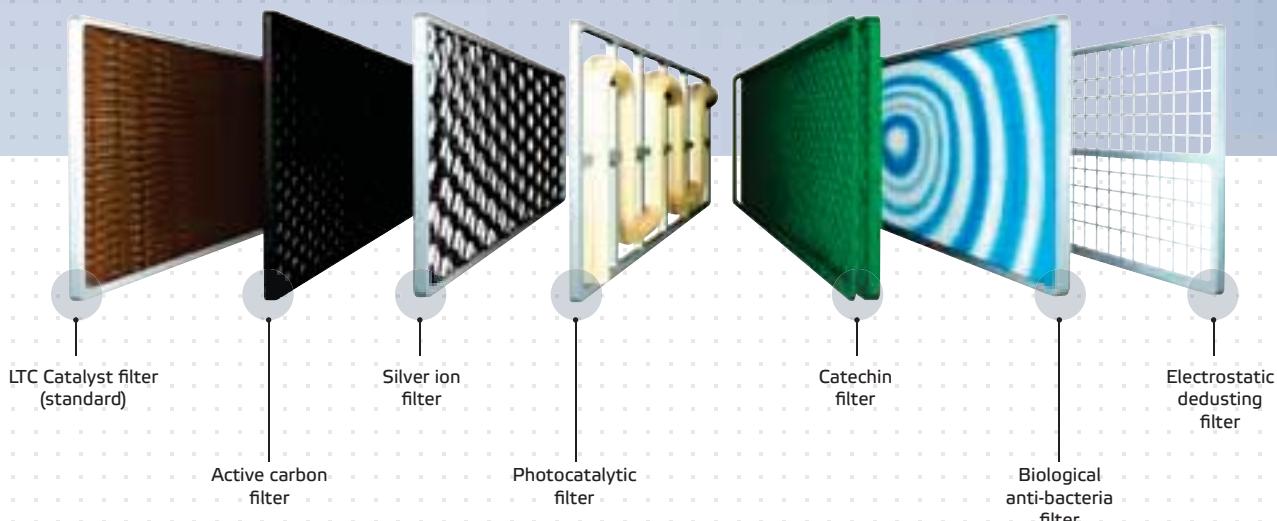
Silver ion filter is a new kind of high-efficient sterilizing products. Silver ion is a colorless and tasteless ion that brings no side effect, irritation, pollution, drug-tolerance or volatilization. Since the ion recycles itself after sterilizing, it is durable and can effectively stop bacteria from growing. Besides long time sterilizing, silver ion filter is environmental-friendly, safe, but contains strong activity (able to kill more than 99% bacteria). Silver ion strongly attracts bacteria and microorganisms, goes through its cell membrane and makes the proteinase of bacteria loss activity. It can also disturb the composing of DNA of bacteria and microorganism, so that they would die for losing the capacity of division and breed.

BIOLOGICAL ANTI-BACTERIA FILTER

This filter is a purifying material with excellent sterilizing and dust-collecting ability. When air passing the filter, dust and bacteria are adhered on the surface of filter where there is bio-bactericide. When microbe adheres on the filter, the bio-bactericide interferes its metabolism and limits its growth. Its bacteriostasis to Escherichia Coli and Staphylococcus aureus is above 95%.

ELECTROSTATIC DEDUSTING FILTER

Applying high-voltage electrostatic technology, dust passing by is charged as charged particle. Thanks to the wind power created by air conditioner, charged particle moves fast and is trapped and filtered by electret fibre. Electrostatic deduster can collect 85% dust including different kinds of powder, smog and even very tiny material (not smaller than 0.1μm).



OTHER ADVANTAGES OF SINCLAIR AIR CONDITIONERS

I FEEL

The mini sensor in the remote controller can sense its surrounding temperature, and transmit the signal back to the indoor unit. So the unit can adjust the air flow volume and temperature accordingly, to provide maximum comfort and save energy simultaneously.



LOW AMBIENT FUNCTION

-18°C COOLING

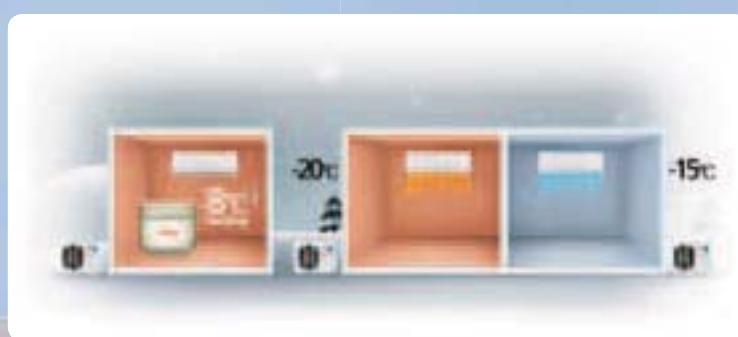
Cooling at -18°C while keep a reliable operation. As the outdoor temperature changes, the frequency of compressor and the speed of fan adjusts accordingly.

-30°C HEATING

Operate finely when heating at -30°C. It is supported by SINCLAIR electrical heating chassis, preheating technology and frequency-adjusting compressor.

8°C HEATING

Maintain the room temperature steadily at 8°C and prevent the room from freezing by heating operation when nobody is at home for long time.



HIGH-QUALITY MOTOR

Adopting high-quality motor design enhances rust resistance and low noise operation thereby increases the life span of the motor.

HIGH CAPACITY OF DEHUMIDIFYING FUNCTION

High quality dehumidifying keeps air dry and comfortable.

SILENT OPERATION

When in silent mode the noise level is significantly decreased.

ENVIRONMENTALLY FRIENDLY

No usage of CFC-based refrigerant and no harm to environment.

COLD AIR PREVENTION

The copper pipe will be heated in advance, so the air will not be flowed out before it reaches the set temperature.

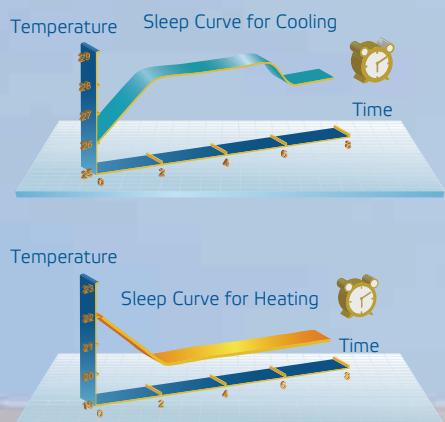


COMFORTABLE SLEEP MODE

MODE 1: Indoor temperature automatically rises (when cooling) or drops (when heating).

MODE 2: Featuring unique refreshment function, the temperature is automatically adjusted to be a little lower before you wake up.

MODE 3: You may design your own sleep curve under DIY mode.



FUNCTION DRYING

Dehumidifier enhances drying and protects clothes and furniture against getting damp and mildew during rainy periods.

ENERGY SAVING OPERATION

Low power consumption.

SYMBOLS USED IN THE CATALOGUE



	Anticorrosion treatment of exchangers		Automatic operation
	Refrigerant		Compact design
	Flexible adjusting lamels		Auto clean
	Diagnostic LED display		Comfortable sleep mode
	"TURBO" button		Cold air prevention
	Intelligent defrosting		Self-diagnosis
	Operation in the winter time		Auto-restart function
	SILENT OPERATION		Lock
	3-D spiral fan		8°C heating
	24-hour timer		I feel
	Clock display		7 fan speeds
	WIFI function		Fresh air ventilation
	Dehumidifying mode		Optional healthy filters

Note: Check the function of a particular model of air conditioner.



WALL MOUNTED SPLIT AIR CONDITIONERS

ROCKY SERIES

Solid as a rock



ASH-09AIR3
ASH-12AIR3

Energy class A+ / A+
3-year warranty
Easy clean panel
Standard filters-catechin and active carbon filter
Dual side water outlet



DC INVERTER

OPTIONAL ACCESSORIES

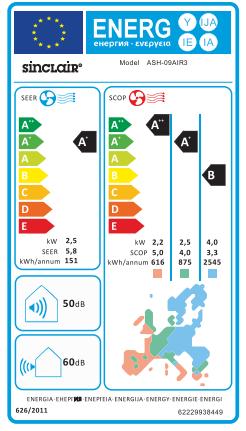
HEALTHY
FILTERS



GSM MODULE
G2S



TECHNICAL PARAMETERS



MODEL		ASH-09AIR3	ASH-12AIR3	
Capacity cooling / heating	kW	2,5 (0,6-2,8) / 2,8 (0,6-3,0)	3,2 (0,6-3,5) / 3,4 (0,6-3,8)	
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	
	Unit	Outdoor	Outdoor	
Power input cooling / heating	W	800 / 780	1020 / 995	
Rated power input cooling / heating	W	1400	1500	
Power current cooling / heating	A	3,6 / 3,5	4,5 / 4,4	
Rated current cooling / heating	A	7,2	7,7	
SEER / SCOP	-	5,8 / 4,0	6,1 / 4,0	
Energy class	-	A+ / A+	A++ / A+	
Air flow	ID	m³/h	500 / 400 / 300 / 250	
	OD	m³/h	1600	1600
Sound pressure level	ID	dB(A)	38/34/31/28	39/34/31/28
	OD	dB(A)	50	51
Dehumidifying volume	l/h	0,8	1,4	
Refrigerant type / charge	Type / kg / t eq.CO ₂	R410A / 0,70 / 1,46	R410A / 0,85 / 1,88	
Pipe diameter	Liquid side	inch / mm	1/4 / 6,4	1/4 / 6,4
	Gas side	inch / mm	3/8 / 9,5	3/8 / 9,5
Standard pipe length	m	5	5	
Max. pipe length	m	15	20	
Max. elevation / Drop height	m	10	10	
Additional refrigerant	g/m	20	20	
Dimension (w x h x d)	ID	mm	790x265x174	790x265x174
	OD	mm	776x540x320	842x596x320
Package dimension (w x h x d)	ID	mm	870x248x355	870x248x355
	OD	mm	820x580x335	878x630x360
Net/gross weight	ID	kg	9,0 / 10,5	9,0 / 10,5
	OD	kg	27,0 / 29,5	31,0 / 34,0
Set temperature range	°C	16~30	16~30	
Operating temperature range	Cooling	°C	-15~48	-15~48
	Heating	°C	-15~24	-15~24

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions:

Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB.

SEER/SCOP was calculated according to European standards contained in EN14825 for average season, based on part load classifying and testing conditions given by norm EN14511. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual operation due to environmental change. Power input is tested under standard condition.

WALL MOUNTED SPLIT AIR CONDITIONERS

ELEMENT SERIES

*Affordable solution
for your home*



ASH-09AIE2
ASH-12AIE2
ASH-18AIE2
ASH-24AIE2

Energy class A+/A+
3-year warranty
Dual side water outlet
Comfortable sleep mode
Standard filters-catechin and Biological
anti-bacteria filter
High speed digital signal processor



PLASMA+TEC DC INVERTER

OPTIONAL ACCESSORIES

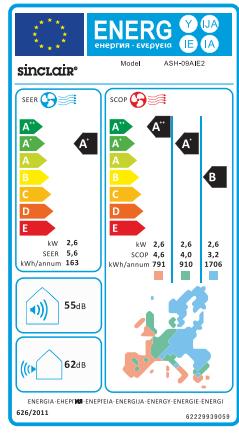
HEALTHY
FILTERS



GSM MODULE
G2S



TECHNICAL PARAMETERS



MODEL		ASH-09AIE2		ASH-12AIE2		ASH-18AIE2		ASH-24AIE2	
Capacity cooling / heating		kW		2,6 (0,5-3,2) / 2,8 (0,5-4,1)		3,5 (0,6-4,0) / 3,8 (0,6-5,1)		5,3 (1,2-6,2) / 5,6 (1,1-6,0)	
Power supply	Hz / V	1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240	
	Unit	Outdoor		Outdoor		Outdoor		Outdoor	
Power input cooling / heating		W		870 / 900		1150 / 1100		1675 / 1750	
Rated power input cooling / heating		W		1550		1650		2650	
Power current cooling / heating		A		3,8 / 4,0		5,1 / 4,9		7,4 / 7,8	
Rated power current cooling / heating		A		6,9		7,3		11,8	
SEER / SCOP		-		5,6 / 4,0		5,6 / 4,0		5,6 / 4,0	
Energy class		-		A+ / A+		A+ / A+		A+ / A+	
Air flow	ID	m³/h		600 / 520 / 370 / 280		680 / 560 / 410 / 300		800 / 680 / 560 / 460	
	OD	m³/h		1600		1600		3200	
Sound pressure level	ID	dB(A)		41 / 38 / 30 / 24		42 / 39 / 31 / 25		49 / 44 / 40 / 35	
	OD	dB(A)		51		53		55	
Dehumidifying volume		l/h		0,8		1,4		1,8	
Refrigerant type / charge		Type / kg / t eq.CO ₂		R410A / 0,70 / 1,46		R410A / 0,85 / 1,77		R410A / 1,30 / 2,71	
Pipe diameter	Liquid side	inch / mm		¼ / 6,4		¼ / 6,4		¼ / 6,4	
	Gas side	inch / mm		¾ / 9,5		¾ / 9,5		½ / 12,7	
Standard pipe length		m		5		5		5	
Max. pipe length		m		15		20		25	
Max. elevation / Drop height		m		10		10		10	
Additional refrigerant		g/m		20		20		20	
Dimension (w x h x d)	ID	mm		770x283x201		770x283x201		865x305x215	
	OD	mm		776x540x320		776x540x320		963x700x396	
Package dimension (w x h x d)	ID	mm		847x345x276		847x345x276		948x383x310	
	OD	mm		851x595x363		851x595x363		1029x750x458	
Net/gross weight	ID	kg		8,0 / 9,5		9,0 / 10,5		12,0 / 15,0	
	OD	kg		28,0 / 31,0		29,0 / 32,0		46,0 / 50,5	
Set temperature range		°C		16~30		16~30		16~30	
Operating temperature range	Cooling	°C		-15~43		-15~43		-15~43	
	Heating	°C		-20~24		-20~24		-20~24	

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WALL MOUNTED SPLIT AIR CONDITIONERS

ZOOM SERIES

*Powerful solution
with stylish design*

NEW

ASH-09AIZ
ASH-13AIZ
ASH-18AIZ
ASH-24AIZ

Energy class A++ / A+

3-year warranty

Standard filters-catechin and active carbon filter

8°C heating

"I FEEL" function

Standard inbuilt wifi module

Cold plasma generator

Hidden display and IR receiver

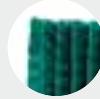


WIFI SMART APP

THE INDOOR UNIT HAS INBUILT WIFI MODULE, WITH WHICH THE AIR CONDITIONER CAN BE CONTROLLED BY IOS OR ANDROID PHONE / TABLET.

OPTIONAL ACCESSORIES

HEALTHY FILTERS

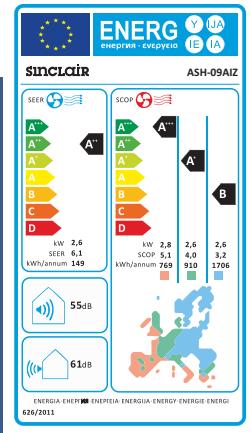


GSM MODULE
G2S



PLASMA+TEC DC INVERTER

TECHNICAL PARAMETERS



MODEL	ASH-09AIZ		ASH-13AIZ		ASH-18AIZ		ASH-24AIZ	
Capacity cooling / heating	kW		2,6 (0,5-3,2) / 2,8 (0,5-4,1)		3,5 (0,6-4,0) / 3,7 (0,6-5,1)		5,1 (1,3-6,6) / 5,3 (1,1-6,8)	
Power supply	Hz / V		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240	
Power input cooling / heating	Unit		Outdoor		Outdoor		Outdoor	
Power input cooling / heating	W		805 / 755		1084 / 989		1580 / 1410	
Rated power input cooling / heating	W		1550		1650		2600	
Power current cooling / heating	A		3,7 / 3,4		5,2 / 5,0		7,0 / 6,3	
Rated power current cooling / heating	A		6,9		7,3		11,5	
SEER / SCOP	-		6,1 / 4,0		6,1 / 4,0		6,1 / 4,0	
Energy class	-		A++ / A+		A++ / A+		A++ / A+	
Air flow	ID	m³/h	560/490/430/330		660/540/460/330		800/720/610/520	
	OD	m³/h	1600		1600		3200	
Sound pressure level	ID	dB(A)	26/32/36/39		26/22/39/42		36/39/42/46	
	OD	dB(A)	52		53		56	
Dehumidifying volume	l/h		0,8		1,4		1,8	
Refrigerant type / charge	Type / kg / t eq.CO ₂		R410A / 0,70 / 1,46		R410A / 0,85 / 1,77		R410A / 1,30 / 2,71	
Pipe diameter	Liquid side	inch / mm	¼ / 6,4		¼ / 6,4		¼ / 6,4	
	Gas side	inch / mm	¾ / 9,5		¾ / 9,5		½ / 12,7	
Standard pipe length	m		5		5		5	
Max. pipe length	m		19		20		25	
Max. elevation / Drop height	m		10		10		10	
Additional refrigerant	g/m		20		20		20	
Dimension (w x h x d)	ID	mm	790x275x200		845x289x209		970x300x224	
	OD	mm	776x540x320		776x540x320		955x700x396	
Package dimension (w x h x d)	ID	mm	866x367x271		921x281x379		1041x383x320	
	OD	mm	851x595x363		851x595x363		1029x750x458	
Net/gross weight	ID	kg	9,0 / 11,0		10,0 / 12,0		13,5 / 16,5	
	OD	kg	28,0 / 31,0		29,0 / 32,0		45,0 / 49,5	
Set temperature range	°C		16 ~ 30		16 ~ 30		16 ~ 30	
Operating temperature range	Cooling	°C	-15 ~ 43		-15 ~ 43		-15 ~ 43	
	Heating	°C	-22 ~ 24		-22 ~ 24		-22 ~ 24	

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WALL MOUNTED SPLIT AIR CONDITIONERS

KITE SERIES

*From the top
of the world*

NEW

**ASH-09AIK
ASH-13AIK
ASH-18AIK
ASH-24AIK**

Energy class A++ / A+

3-year warranty

R410a environmentally friendly

Standard dust filter

Hidden display and IR receiver

Optional WiFi, wired controller

Optional alarm port, on/off port

Easy installation and maintenance
with all compact front panel



NETHOME PLUS APP

WIFI MODULE CAN BE INBUILD TO THE INDOOR
UNIT, WITH WHICH THE AIR CONDITIONER CAN BE
CONTROLLED BY IOS OR ANDROID PHONE / TABLET.

OPTIONAL ACCESSORIES

KJR-120G

KJR-12B

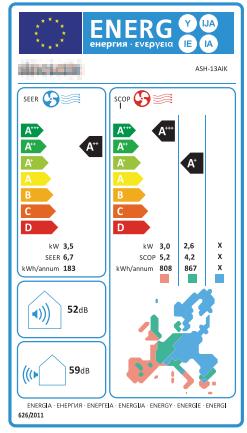
SWM-01

SPB-01



DC INVERTER

TECHNICAL PARAMETERS



MODEL	ASH-09AIK		ASH-13AIK	ASH-18AIK	ASH-24AIK
Capacity cooling / heating	kW	2,6 (1,2-3,3) / 2,9 (0,8-3,7)	3,5 (1,3-4,5) / 3,8 (1,1-4,9)	5,3 (1,9-6,1) / 5,6 (1,4-6,7)	7,0 (2,7-7,9) / 7,6 (2,1-9,1)
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
	Unit	Outdoor	Outdoor	Outdoor	Outdoor
Power input cooling / heating	W	816 / 811	1153 / 1055	1633 / 1500	2306 / 2302
Rated power input cooling / heating	W	2075	2200	2550	3700
Power current cooling / heating	A	3,5 / 3,5	5,0 / 4,6	7,1 / 6,5	10,0 / 10,0
Rated power current cooling / heating	A	9,5	10,0	11,5	17,0
SEER / SCOP	-	6,8 / 4,1	6,7 / 4,2	6,8 / 4,2	6,4 / 4,0
Energy class	-	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Air flow	ID	m³/h	472 / 360 / 254	563 / 497 / 224	870 / 730 / 500
	OD	m³/h	1900	2000	2100
Sound pressure level	ID	dB(A)	20 / 28 / 35 / 40	24 / 33 / 40 / 41	27 / 34 / 43 / 45
	OD	dB(A)	55	56	58
Dehumidifying volume	l/h	1,0	1,2	1,7	2,3
Refrigerant type / charge	Type / kg / t eq.CO ₂	R410A / 0,80 / 1,67	R410A / 0,95 / 1,98	R410A / 1,48 / 3,09	R410A / 2,00 / 4,18
Pipe diameter	Liquid side	inch / mm	1/4 / 6,4	1/4 / 6,4	1/4 / 6,4
	Gas side	inch / mm	3/8 / 9,5	3/8 / 9,5	1/2 / 12,7
Standard pipe length	m	5	5	5	5
Max. pipe length	m	25	25	30	50
Max. elevation / Drop height	m	10	10	20	25
Additional refrigerant	g/m	15	15	15	30
Dimension (w x h x d)	ID	mm	716x300x193	804x300x193	964x325x222
	OD	mm	770x555x300	800x554x333	845x702x363
Package dimension (w x h x d)	ID	mm	785x375x285	875x375x285	1045x405x305
	OD	mm	900x585x345	920x615x390	965x755x395
Net/gross weight	ID	kg	7,0 / 9,3	7,7 / 10,2	10,1 / 13,6
	OD	kg	26,6 / 29,0	29,1 / 31,9	37,8 / 40,5
Set temperature range	°C	17 ~ 32	17 ~ 32	17 ~ 32	17 ~ 32
Operating temperature range	Cooling	°C	-15 ~ 50	-15 ~ 50	-15 ~ 50
	Heating	°C	-15 ~ 30	-15 ~ 30	-15 ~ 30

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions:

Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB.

SEER/SCOP was calculated according to European standards contained in EN14825 for average season, based on part load classifying and testing conditions given by norm EN14511. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual operation due to environmental change. Power input is tested under standard condition.

WALL MOUNTED SPLIT AIR CONDITIONERS

ARCTIC SERIES

*As unique
as a snowflake*

HEATING
TILL -30°C

ASH-13AIA1 PT
ASH-18AIA1 PT

Energy class A++ / A++

3-year warranty

R410a environmentally friendly

Silver design panel

Standard filters-catechin and active carbon filter

New construction of compressor

Silent operation

Adjustable position of guide louver/ left-right swing

Cooling from -18°C to 54°C outdoor temperature

Heating from -30°C to 24°C outdoor temperature

Radio controlled (RC) remote controller



WIFI SMART APP

THE INDOOR UNIT HAS INBUILT WIFI MODULE, WITH WHICH THE AIR CONDITIONER CAN BE CONTROLLED BY IOS OR ANDROID PHONE / TABLET.



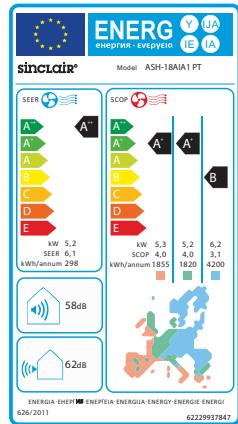
OPTIONAL ACCESSORIES

HEALTHY
FILTERS



PLASMA+TEC DC INVERTER

TECHNICAL PARAMETERS



MODEL		ASH-13AIA1 PT	ASH-18AIA1 PT	
Capacity cooling / heating	kW	3,5 (0,4-4,5) / 3,6 (0,6-5,4)	5,3 (0,9-5,7) / 5,3 (0,8-7,2)	
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	
	Unit	Outdoor	Outdoor	
Power input cooling / heating	W	920 / 970	1600 / 1420	
Rated power input cooling / heating	W	1680	2400	
Power current cooling / heating	A	4,1 / 4,2	7,1 / 6,2	
Rated power current cooling / heating	A	7,1	10,6	
SEER / SCOP	-	7,0 / 4,6	6,1 / 4,0	
Energy class	-	A++ / A++	A++ / A+	
Air flow	ID	m³/h 720/550/490/420/370/320/290	850/750/650/600/500/400/340	
	OD	m³/h 2400	3200	
Sound pressure level	ID	dB(A) 43/38/36/34/31/23/20	46/42/40/36/33/25/22	
	OD	dB(A) 52	56	
Dehumidifying volume	l/h	1,40	1,80	
Refrigerant type / charge	Type / kg / t eq.CO ₂	R410A / 1,30 / 2,71	R410A / 1,65 / 3,44	
Pipe diameter	Liquid side	inch / mm ¼ / 6,4	¼ / 6,4	
	Gas side	inch / mm ½ / 12,7	½ / 12,7	
Standard pipe length	m	5	5	
Max. pipe length	m	20	25	
Max. elevation / Drop height	m	10	10	
Additional refrigerant	g/m	20	20	
Dimension (w x h x d)	ID	mm 860x305x170	960x320x205	
	OD	mm 899x596x378	965x700x396	
Package dimension (w x h x d)	ID	mm 935x388x295	1043x403x333	
	OD	mm 948x645x420	1029x750x458	
Net/gross weight	ID	kg 11,5 / 14,0	14,0 / 17,0	
	OD	kg 44,5 / 47,5	51,0 / 55,5	
Set temperature range	°C	16 ~ 30	16 ~ 30	
Operating temperature range	Cooling	°C -18 ~ 54	-18 ~ 54	
	Heating	°C -30 ~ 24	-30 ~ 24	

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions:

Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB.

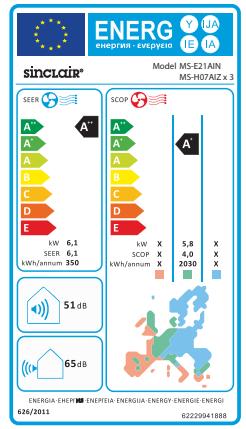
SEER/SCOP was calculated according to European standards contained in EN14825 for average season, based on part load classifying and testing conditions given by norm EN14511. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual operation due to environmental change. Power input is tested under standard condition.

FLEXIBLE INVERTER AIR CONDITIONERS

MULTI SYSTEM SERIES



MS-E42AI



MC-CXXAI



MC-DXXAI



MS-HXXAISW PT

MS-HXXAIZ



MC-FXXAI



MS-PXXAI



MC-C12AI	MS-H09AISW PT
MC-C18AI	MS-H12AISW PT
MC-C24AI	MS-P09AI
MC-F09AI	MS-P12AI
MC-F12AI	MS-P18AI
MC-F18AI	MS-E14AIN
MC-F24AI	MS-E18AIN
MC-D09AI	MS-E21AIN
MC-D12AI	MS-E24AIN
MC-D18AI	MS-E28AIN
MC-D24AI	MS-E36AI
MS-H07AIZ	MS-E42AI
MS-H09AIZ	
MS-H12AIZ	
MS-H18AIZ	

3-year warranty

Flexible installation

Free combination up to 5 indoor units

Autorestart function

Set temperature range 16-30°C

Standard wifi control (MS-H09AIZ to MS-H18AIZ)

Standard water pump (cassette units)

ALL AVAILABLE COMBINATIONS OF INDOOR UNITS
ARE MENTIONED IN COMBINATION TABLE.



DC INVERTER

OPTIONAL ACCESSORIES



SCC-16

G2S

TECHNICAL PARAMETERS OUTDOOR UNITS

MODEL		MS-E14AIN	MS-E18AIN	MS-E21AIN
Qty of connectable indoor units	-	1-2	1-2	2-3
Capacity cooling / heating	kW	4,1 (2,1-4,4) / 4,4 (2,5-5,4)	5,2 (2,1-5,8) / 5,4 (2,6-5,9)	6,1 (2,2-7,3) / 6,5 (3,6-8,5)
Power input cooling / heating	W	1200 / 1180	1450 / 1550	1910 / 1730
Rated power input	W	1780	1780	2870
Power current cooling / heating	A	5,32 / 5,24	6,43 / 6,88	8,47 / 7,68
Rated power current	A	7,90	7,90	12,73
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
SEER / SCOP	-	6,1 / 4,0	6,3 / 4,0	6,1 / 4,0
Energy class	-	A++ / A+	A++ / A+	A++ / A+
Air flow	m³/h	2600	3200	3200
Sound pressure level	dB(A)	55	56	56
Refrigerant type / charge	Type / kg / t eq.CO ₂	R410A / 1,40 / 2,92	R410A / 1,60 / 3,34	R410A / 2,20 / 4,59
Pipe diameter	Liquid side	mm x qty	6,4x2	6,4x2
	Gas side	mm x qty	9,5 x2	9,5 x2
Max. length of connection pipe	m	20	20	60
Max. elevation/Drop height	m	5	5	10
Dimension (w x h x d)	mm	899x596x378	963x700x396	963x700x396
Package dimension (w x h x d)	mm	948x645x420	1029x750x458	1029x750x458
Net/gross weight	kg	43,0 / 46,0	51,0 / 55,5	62,0 / 66,5
Operating temperature range	Cooling	°C	-15 ~ 43	-15 ~ 43
	Heating	°C	-20 ~ 24	-20 ~ 24
MODEL		MS-E24AIN	MS-E28AIN	
Qty of connectable indoor units	-	2-3	2-4	
Capacity cooling / heating	kW	7,1 (2,3-8,5) / 8,5 (3,7-8,8)	8,0 (2,3-10,3) / 9,3 (3,7-10,3)	
Power input cooling / heating	W	2180 / 2280	2540 / 2490	
Rated power input	W	2870	3580	
Power current cooling / heating	A	9,67 / 10,12	15,71 / 11,05	
Rated power current	A	12,73	15,88	
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	
SEER / SCOP	-	6,1 / 4,0	6,1 / 4,0	
Energy class	-	A++ / A+	A++ / A+	
Air flow	m³/h	4000	4000	
Sound pressure level	dB(A)	58	58	
Refrigerant type / charge	Type / kg / t eq.CO ₂	R410A / 2,20 / 4,59	R410A / 2,60 / 5,43	
Pipe diameter	Liquid side	mm x qty	6,4x3	6,4x4
	Gas side	mm x qty	9,5 x3	9,5 x4
Max. length of connection pipe	m	60	70	
Max. elevation/Drop height	m	10	10	
Dimension (w x h x d)	mm	1001x790x427	1001x790x427	
Package dimension (w x h x d)	mm	1083x855x488	1083x855x488	
Net/gross weight	kg	68,0 / 73,0	69,0 / 74,0	
Operating temperature range	Cooling	°C	-15 ~ 43	-15 ~ 43
	Heating	°C	-20 ~ 24	-20 ~ 24
MODEL		MS-E36AI	MS-E42AI	
Qty of connectable indoor units	-	2-4	2-5	
Capacity cooling / heating	kW	10,5 (2,1-11,0) / 12,0 (2,6-13,0)	12,1 (2,1-13,6) / 13,0 (2,6-14,0)	
Power input cooling / heating	W	3500 / 3750	3590 / 3550	
Rated power input	W	4880	5300	
Power current cooling / heating	A	15,42 / 15,20	16,43 / 16,22	
Rated power current	A	21,65	23,50	
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	
SEER / SCOP (EER / COP)	-	5,5 / 3,8	3,2 / 3,8	
Energy class	-	A / A	A / A	
Air flow	m³/h	5200	5500	
Sound pressure level	dB(A)	57	54	
Refrigerant type / charge	Type / kg / t eq.CO ₂	R410A / 4,30 / 8,98	R410A / 4,80 / 10,02	
Pipe diameter	Liquid side	mm x qty	6,4x3 + 9,5x1	6,4x4 + 9,5x1
	Gas side	mm x qty	9,5x2 + 12,7x1 + 15,9x1	9,5x2 + 12,7x2 + 15,9x1
Max. length of connection pipe	m	70	80	
Max. elevation/Drop height	m	15	15	
Dimension (w x h x d)	mm	1015x1103x440	1015x1103x440	
Package dimension (w x h x d)	mm	1158x1235x493	1115x1155x480	
Net/gross weight	kg	94,0 / 104,0	95,0 / 105,0	
Operating temperature range	Cooling	°C	-15 ~ 48	-15 ~ 48
	Heating	°C	-15 ~ 27	-15 ~ 27

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions:

Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB.

SEER/SCOP was calculated according to European standards contained in EN14825 for average season, based on part load classifying and testing conditions given by norm EN14511. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual operation due to environmental change. Power input is tested under standard condition.

COMBINATION TABLE

(unit: x1000Btu/h)

MS-E14AIN		MS-E21AIN		MS-E24AIN			MS-E28AIN
1 UNIT	2 UNITS	2 UNITS	3 UNITS	2 UNITS	7+7+7	7+7+18	2 UNITS
7	7+7	7+7	7+7+7	7+7	7+7+7	7+7+18	7+7
9	7+12	7+12	7+7+12	7+12	9+9+12	7+9+18	7+12
12	7+9	9+9	7+7+9	9+9	7+7+9	12+12+12	9+9
	9+9	7+9	7+9+9	9+18	7+9+9	7+12+12	9+18
	9+12	7+18	9+9+9	12+18	7+7+12	9+9+18	12+18
MS-E18AIN		9+12	7+9+12	7+9	7+9+12	9+12+12	7+9
1 UNITS	2 UNITS	9+18	7+12+12	7+18	9+9+9		7+18
7	7+7	12+12	9+9+12	9+12			9+12
9	7+12	12+18	12+12+12*	12+12			12+12
12	9+12			18+18			18+18
	7+9						
	9+9						

MS-E28AIN			MS-E36AI				
3 UNITS		4 UNITS	2 UNITS		3 UNITS		
7+7+7	9+9+12	7+7+7+7	7+7	9+24	7+7+7	7+12+18	9+12+18
7+7+18	7+7+12	7+7+7+9	7+9	12+12	7+7+9	7+12+24	9+12+24
7+9+18	7+9+12	7+7+9+9	7+12	12+18	7+7+12	7+18+18	9+18+18
9+9+9	9+9+18	9+9+9+9	7+18	12+24	7+7+18	7+18+24*	9+18+24*
9+12+12	12+12+12	7+7+7+12	7+24	18+18	7+7+24	9+9+9	12+12+12
7+7+9	12+12+18	7+7+9+12	9+9	18+24	7+9+9	9+9+12	12+12+18
7+9+9	9+12+18	7+9+9+9	9+12	24+24*	7+9+12	9+9+18	12+12+24
7+12+12	7+12+18	7+7+7+18	9+18		7+9+18	9+9+24	12+18+18
		7+7+9+18			7+9+24	9+12+12	18+18+18*
		7+9+9+12			7+12+12		
		9+9+12+12					
		7+7+12+12					
		9+9+9+12					

MS-E36AI			MS-E42AI				
4 UNITS		2 UNITS	3 UNITS			3 UNITS	
7+7+7+7	7+7+18+18*	9+9+9+9	7+7	9+24	7+7+7	7+12+24	9+18+18
7+7+7+9	7+9+9+9	9+9+9+12	7+9	12+12	7+7+9	7+18+18	9+18+24
7+7+7+12	7+9+9+12	9+9+9+18	7+12	12+18	7+7+12	7+18+24	9+24+24
7+7+7+18	7+9+9+18	9+9+12+12	7+18	12+24	7+7+18	7+24+24	12+12+12
7+7+7+24	7+9+9+24*	9+12+12+12	7+24	18+18	7+7+24	9+9+9	12+12+18
7+7+9+9	7+9+12+12	9+9+9+24*	9+9	18+24	7+9+9	9+9+12	12+12+24
7+7+9+12	7+9+12+18	9+9+12+18	9+12	24+24	7+9+12	9+9+18	12+18+18
7+7+9+18	7+9+18+18*	9+9+18+18*	9+18		7+9+18	9+9+24	12+18+24
7+7+9+24	7+12+12+12	9+12+12+18*			7+9+24	9+12+12	18+18+18
7+7+12+12	7+12+12+18	12+12+12+12			7+12+12	9+12+18	12+24+24*
7+7+12+18					7+12+18	9+12+24	18+18+24

MS-E42AI							
4 UNITS			5 UNITS				
7+7+7+7	7+7+18+18	9+9+9+12	7+9+18+24	7+7+7+7	7+7+9+9+12	9+9+9+9+18	7+9+9+12+24*
7+7+7+9	7+9+9+9	9+9+9+18	7+12+12+24	7+7+7+9	7+7+9+9+18	9+9+9+12+12	7+9+9+18+18
7+7+7+12	7+9+9+12	9+9+9+24	7+12+18+18	7+7+7+7+12	7+7+9+12+12	9+9+12+12+12	7+9+9+18+18
7+7+7+18	7+9+9+18	9+9+12+12	7+12+18+24	7+7+7+7+18	7+7+9+12+18	9+9+12+12+18*	7+9+12+12+18
7+7+7+24	7+9+9+24	9+9+12+18	7+18+18+18	7+7+7+7+24	7+7+12+12+12	7+7+7+7+12+24	7+12+12+12+12
7+7+9+9	7+9+12+12	9+9+12+24	9+9+18+24	7+7+7+9+9	7+9+9+9+9	7+7+7+18+18	7+12+12+12+18
7+7+9+12	7+9+12+18	9+9+18+18	9+12+12+24	7+7+7+9+12	7+9+9+9+12	7+7+9+9+24	9+9+9+9+24
7+7+9+18	7+9+12+24*	9+12+12+12*	9+12+18+18	7+7+7+9+18	7+9+9+9+18	7+7+9+12+24	9+9+9+12+18
7+7+9+24	7+9+18+18	9+12+12+18	9+18+18+18	7+7+7+9+24	7+9+9+12+12	7+7+9+18+18	9+9+9+18+18*
7+7+12+12	7+12+12+12	12+12+12+12	12+12+18+18	7+7+7+12+12	7+9+12+12+12	7+7+12+12+18	9+12+12+12+12
7+7+12+18	7+12+12+18	12+12+12+18	12+12+12+24	7+7+7+12+18	9+9+9+9+9	7+7+12+18+18	9+12+12+12+18*
7+7+12+24	9+9+9+9	7+7+18+24		7+7+9+9+9	9+9+9+9+12	7+9+9+9+24	12+12+12+12+12

*This combinations of indoor units capacities exceed 130% of maximum capacity of the outdoor unit.

When indoor rated total capacity exceeds the outdoor rated capacity, cannot ensure that each indoor unit actual running capacity could reach its value required by rated capacity. For MS-E24AIN, MS-E28AI, MS-E36AI, MS-E42AI it is not allowed to install one indoor unit only. If the specification of outdoor unit gas valve is 3/8, but customer needs to install 18 indoor unit so that it is need to use a "pipe joint subassembly" (2pcs as standard accessory) to make a conversion joint with outdoor unit gas valve and connection pipe.

Model	MS-E14AIN	MS-E18AIN	MS-E21AIN	MS-E24AIN	MS-E28AIN	MS-E36AI	MS-E42AI
Max. connection pipe length	m	20	20	60	60	70	80
Max. connection pipe length (One indoor unit)	m	10	10	20	20	20	25
Max. installation altitude	Outdoor unit is installed under the lower side of indoor unit	m	5	5	10	10	15
	Outdoor unit is installed on the upper side of indoor unit	m	5	5	10	10	15
Max. connection pipe length (Under the condition of no need to charge the refrigerant, liquid pipe total length)	m	10	10	30	30	40	50
Refrigerant charge volume	g/m			20			22

TECHNICAL PARAMETERS INDOOR UNITS

WALL MOUNTED		MS-H09AISW PT	MS-H12AISW PT		
Capacity cooling / heating	kW	2,6 / 2,8	3,5 / 3,8		
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240		
Air flow	m³/h	450-260	560-280		
Sound pressure level	dB(A)	38/35/32/30/28/26/25	39/36/34/31/28/27/26		
Dehumidifying volume	l/h	0,8	1,4		
Pipe diameter	Liquid side	1/4 / 6,4	1/4 / 6,4		
	Gas side	3/8 / 9,5	3/8 / 9,5		
Dimension (w x h x d)	mm	860x299x153	896x320x159		
Package dimension (w x h x d)	mm	944x386x247	973x403x255		
Net/gross weight	kg	9,5 / 12,5	11,5 / 14,5		
Controller	type	remote	remote		
WALL MOUNTED		MS-H07AIZ	MS-H09AIZ	MS-H12AIZ	MS-H18AIZ
Capacity cooling / heating	kW	2,10 / 2,60	2,6 / 2,8	3,5 / 3,7	5,1 / 5,3
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Air flow	m³/h	550/490/420/330	560/490/430/330	660/540/460/330	800/720/610/520
Sound pressure level	dB(A)	38/36/32/26	39/36/32/26	42/39/33/26	46/42/39/36
Dehumidifying volume	l/h	0,6	0,8	1,4	1,8
Pipe diameter	Liquid side	1/4 / 6,4	1/4 / 6,4	1/4 / 6,4	1/4 / 6,4
	Gas side	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5	1/2 / 12,7
Dimension (w x h x d)	mm	790x275x200	790x275x200	845x289x209	970x300x224
Package dimension (w x h x d)	mm	866x271x367	866x271x367	921x281x379	1041x383x320
Net/gross weight	kg	9,0 / 11,0	9,0 / 11,0	10,0 / 12,0	13,5 / 16,5
Controller	type	remote	remote	remote	remote
FLOOR CEILING		MC-F09AI	MC-F12AI	MC-F18AI	MC-F24AI
Capacity cooling / heating	kW	2,5 / 2,8	3,5 / 3,9	5,0 / 5,5	7,1 / 8,0
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Air flow	m³/h	650	650	950	1250
Sound pressure level	dB(A)	40 / 36	40 / 36	45 / 40	48 / 40
Pipe diameter	Liquid side	1/4 / 6,4	1/4 / 6,4	1/4 / 6,4	3/8 / 9,5
	Gas side	3/8 / 9,5	3/8 / 9,5	1/2 / 12,7	3/8 / 15,9
Dimension (w x h x d)	mm	1220x700x225	1220x700x225	1220x700x225	1220x700x225
Package dimension (w x h x d)	mm	1343x823x315	1343x823x315	1343x823x315	1343x823x315
Net/gross weight	kg	40,0 / 50,0	40,0 / 50,0	45,0 / 54,0	45,0 / 54,0
Controller	type	remote & wired	remote & wired	remote & wired	remote & wired
CASSETTE		MC-C12AI	MC-C18AI	MC-C24AI	
Capacity cooling / heating	kW	3,5 / 4,0	4,5 / 5,0	7,1 / 8,0	
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Air flow	m³/h	600	600	1180	
Sound pressure level	dB(A)	46 / 44 / 42	46 / 44 / 42	39 / 37 / 35	
Pipe diameter	Liquid side	1/4 / 6,4	1/4 / 6,4	3/8 / 9,5	
	Gas side	3/8 / 9,5	1/2 / 12,7	3/8 / 15,9	
Dimension (w x h x d)	mm	570x230x570	570x230x570	840x240x840	
Package dimension (w x h x d)	mm	851x325x731	851x325x731	963x310x963	
Dimension-panel (w x h x d)	mm	650x50x650	650x50x650	950x60x950	
Package dimension - panel (w x h x d)	mm	733x117x673	733x117x673	1043x130x1028	
Net/gross weight - body (panel)	kg	18,0 / 23,0 (2,5 / 3,5)	18,0 / 23,0 (2,5 / 3,5)	30,0 / 38,0 (6,5 / 10,0)	
Controller	type	remote & wired	remote & wired	remote & wired	
DUCT		MC-D09AI	MC-D12AI	MC-D18AI	MC-D24AI
Capacity cooling / heating	kW	2,5 / 2,8	3,5 / 3,9	5,0 / 5,5	7,1 / 8,0
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Air flow	m³/h	450	550	700	1000
Sound pressure level	dB(A)	37 / 31	39 / 32	41 / 33	42 / 34
Pipe diameter	Liquid side	1/4 / 6,4	1/4 / 6,4	1/4 / 6,4	3/8 / 9,5
	Gas side	3/8 / 9,5	3/8 / 9,5	1/2 / 12,7	3/8 / 15,9
ESP	Pa	0-15	0-15	0-15	0-15
Dimension (w x h x d)	mm	700x200x615	700x200x615	900x200x615	1100x200x615
Package dimension (w x h x d)	mm	893x305x743	893x305x743	1123x305x743	1323x305x743
Net/gross weight	kg	22,0 / 27,0	23,0 / 29,0	27,0 / 36,0	31,0 / 41,0
Controller	type	wired	wired	wired	wired
CONSOLE		MS-P09AI	MS-P12AI	MS-P18AI	
Capacity cooling / heating	kW	2,6 / 2,8	3,5 / 3,8	5,3 / 5,8	
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Air flow	m³/h	480-650	550-750	650-840	
Sound pressure level	dB(A)	40/38/33/26	42/40/37/32	48/46/41/35	
Dehumidifying volume	l/h	0,8	1,4	1,8	
Pipe diameter	Liquid side	1/4 / 6,4	1/4 / 6,4	1/4 / 6,4	
	Gas side	3/8 / 9,5	3/8 / 9,5	1/2 / 12,7	
Dimension (w x h x d)	mm	700x600x215	700x600x215	700x600x215	
Package dimension (w x h x d)	mm	791x710x286	791x710x286	791x710x286	
Net/gross weight	kg	15,0 / 18,0	15,0 / 18,0	15,0 / 18,0	
Controller	type	remote	remote	remote	

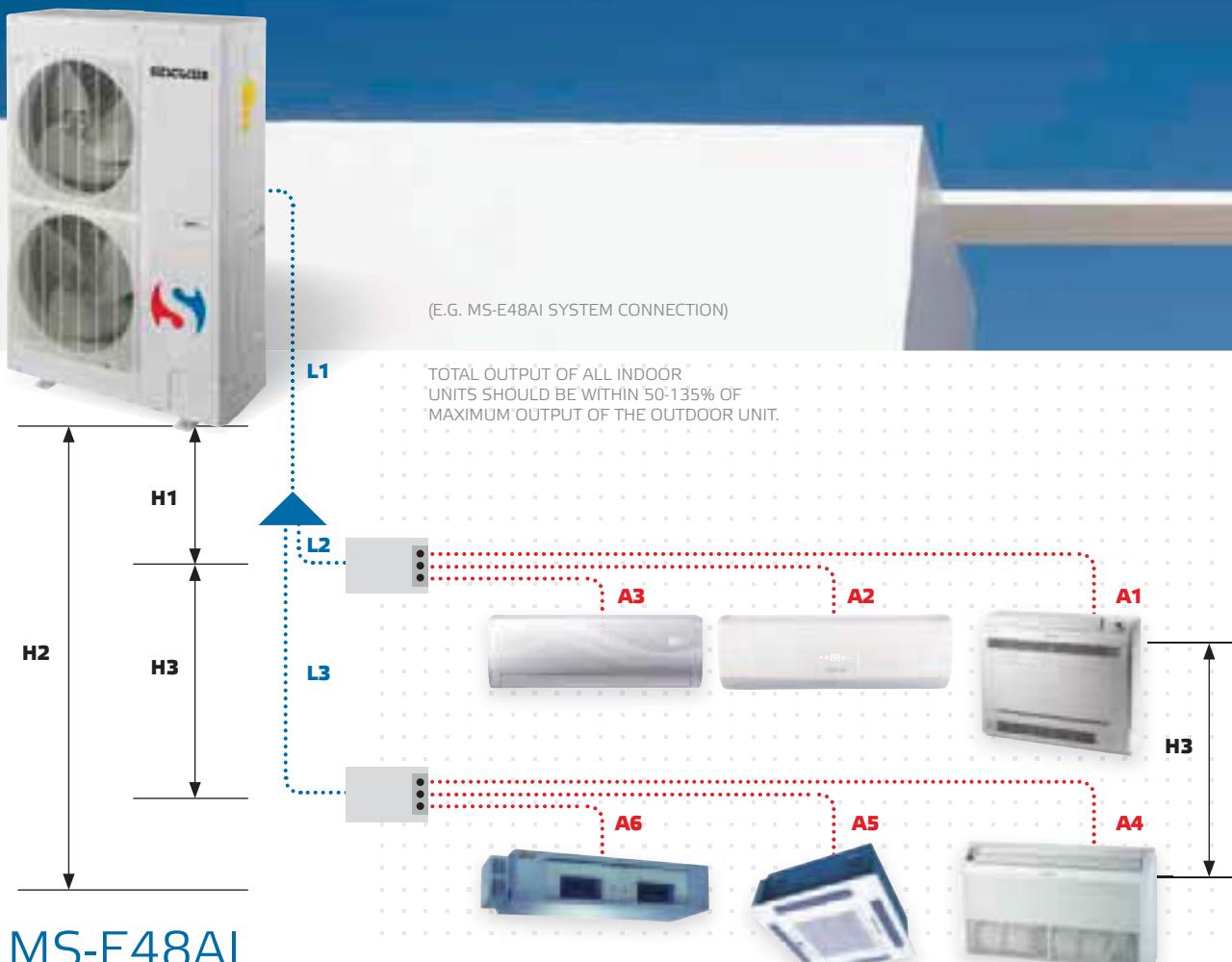
The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions:

Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125). GWP of refrigerant used: 2088.

Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual operation due to environmental change. Power input is tested under standard condition.

HIGH POWER MULTI SYSTEM SERIES



MS-E48AI MS-E56AI

Connectivity starts at 2 and reaches up to 9 indoor units from multi system / multi combi series

Total pipe length 135/145m, total max. elevation 45m

Refrigerant pipes divided by branch joints and distributors

Central controller SCC-16 for indoor units

Automatic scanning of connected indoor units

Automatic addressing of indoor units

Service parameter setting / indication of the running mode/ error report notification

4-way outlet of refrigeration pipes

Pipe adapter (standard for Dbox)

3-year warranty



DC INVERTER

OPTIONAL ACCESSORIES

BRANCH JOINTS
MS-01BI



BRANCH JOINTS ARE USED FOR EQUAL DISTRIBUTION OF REFRIGERANT FROM OUTDOOR UNIT TO DISTRIBUTION BOXES.

TECHNICAL PARAMETERS



MODEL		MS-E48AI	MS-E56AI
Qty of connectable indoor units	-	2 - 8	2 - 9
Total capacity index of to be connected indoor units	%	50-135	50-135
Cooling / Heating capacity	kW	14,0 (1,0-16,0) / 16,0 (1,2-17,4)	16,0 (1,0-18,0) / 18,0 (1,2-19,0)
Power supply	Hz / V	3~ / 50 / 380-415	3~ / 50 / 380-415
Nominal power input cooling / heating	W	4400 / 4250	5000 / 4700
Rated power input / current	W/A	6000 / 12	6500 / 12
EER / COP	-	2,96 / 3,20	2,80 / 3,50
Air Flow Volume	m³/h	7000	7000
Sound pressure level	dB(A)	58	58
Refrigerant type / charge	Type / kg / t eq.CO ₂	R410A / 4,95 / 10,33	R410A / 4,95 / 10,33
Piping connections liquid / gas	mm	9,5 / 15,9	9,5 / 19,1
Max. total pipe length (ØL+ØA)	m	135	145
Max. total pipe length between OD and Dbox (ØL)	m	55	55
Max. total pipe length between Dbox and ID (ØA)	m	80	90
Pipe length between Dbox and ID (A1,2,...)	m	15	15
Max. height between OD and Dbox (H1) and ID (H2)	m	30	30
Max. height between DBoxes or IDs (H3)	m	15	15
Prefilled length of refrigerant pipe/ additional refrigerant	m	30 / depends on calculation	30 / depends on calculation
Dimensions (w x h x d)	mm	900x1345x340	900x1345x340
Package dimensions (w x h x d)	mm	983x1398x443	983x1398x443
Net/ gross weight	kg	116,0 / 125,0	116,0 / 125,0
Operation range cooling/heating	°C (DB)	18~48/-10~24	18~48/-10~24

DISTRIBUTION BOXES DB2-19SB, DB3-19SB, DB5-16AF



MODEL		DB2-19SB	DB3-19SB	DB5-16AF
Maximum number of connectable indoor units	-	2	3	5
Power Supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Connection port to outdoor unit liquid / gas	mm	9,7 / 19,3	9,7 / 19,3	9,7 / 16,3
Connection port to indoor unit liquid / gas	mm	2x 6,4 / 16,3	3x 6,4 / 16,3	5x 6,4 / 9,5
Connection Method	-	Braze	Braze	Flare
Sound pressure level	dB(A)	28	28	30
Unit dimensions / Package dimensions	mm	600x313x182 / 683x392x270	600x313x182 / 683x392x270	617x410x193 / 676x473x275
Net/ gross weight	kg	5,5 / 7,5	6,0 / 8,0	9,0 / 11,0

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions: Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual Operation due to environmental change. Power input is tested under standard condition.

HIGH POWER MULTI SYSTEM SERIES

MS-E48AI						
2 UNITS						
7+18	9+18	12+12	12+24	18+18	18+24	24+24
7+24	9+24	12+18				
3 UNITS						
7+7+12	7+9+18	7+18+18	9+9+18	9+12+24	12+12+12	12+18+24
7+7+18	7+9+24	7+18+24	9+9+24	9+18+18	12+12+18	12+24+24
7+7+24	7+12+12	7+24+24	9+12+12	9+18+24	12+12+24	18+18+18
7+9+9	7+12+18	9+9+9	9+12+18	9+24+24	12+18+18	18+18+24
7+9+12	7+12+24	9+9+12				
4 UNITS						
7+7+7+7	7+7+9+24	7+9+9+9	7+9+18+18	7+12+18+24	9+9+12+18	9+12+18+18
7+7+7+9	7+7+12+12	7+9+9+12	7+9+18+24	7+18+18+18	9+9+12+24	9+12+18+24
7+7+7+12	7+7+12+18	7+9+9+18	7+9+24+24	9+9+9+9	9+9+18+18	9+18+18+18
7+7+7+18	7+7+12+24	7+9+9+24	7+12+12+12	9+9+9+12	9+9+18+24	12+12+12+12
7+7+7+24	7+7+18+18	7+9+12+12	7+12+12+18	9+9+9+18	9+12+12+12	12+12+12+18
7+7+9+9	7+7+18+24	7+9+12+18	7+12+12+24	9+9+9+24	9+12+12+18	12+12+12+24
7+7+9+12	7+7+24+24	7+9+12+24	7+12+18+18	9+9+12+12	9+12+12+24	12+12+18+18
7+7+9+18						
5 UNITS						
7+7+7+7+7	7+7+7+9+24	7+7+9+18	7+7+12+12+24	7+9+9+12+24	9+9+9+9+9	9+9+9+18+18
7+7+7+7+9	7+7+7+12+12	7+7+9+24	7+7+12+18+18	7+9+9+18+18	9+9+9+9+12	9+9+12+12+12
7+7+7+7+12	7+7+7+12+18	7+7+9+12+12	7+9+9+9+9	7+9+12+12+12	9+9+9+9+18	
7+7+7+7+18	7+7+7+12+24	7+7+9+12+18	7+9+9+9+12	7+9+12+12+18	9+9+9+9+24	9+9+12+12+18
7+7+7+7+24	7+7+7+18+18	7+7+9+12+24	7+9+9+9+18	7+9+12+12+24	9+9+9+12+12	9+12+12+12+12
7+7+7+9+9	7+7+7+18+24	7+7+9+18+18	7+9+9+9+24	7+12+12+12+12	9+9+9+12+18	9+12+12+12+18
7+7+7+9+12	7+7+9+9+9	7+7+12+12+12	7+9+9+12+12	7+12+12+12+18	9+9+9+12+24	12+12+12+12+12
7+7+7+9+18	7+7+9+9+12	7+7+12+12+18	7+9+9+12+18			
6 UNITS						
7+7+7+7+7+7	7+7+7+7+9+12	7+7+7+7+18+18	7+7+7+9+12+18	7+7+9+9+12+12	7+9+9+9+9+18	9+9+9+9+9+9
7+7+7+7+7+9	7+7+7+7+9+18	7+7+7+9+9+9	7+7+7+12+12+12	7+7+9+9+12+18	7+9+9+9+12+12	9+9+9+9+9+12
7+7+7+7+7+12	7+7+7+7+9+24	7+7+7+9+9+12	7+7+7+12+12+18	7+7+9+12+12+12	7+9+9+9+12+18	9+9+9+9+9+18
7+7+7+7+7+18	7+7+7+7+12+12	7+7+7+9+9+18	7+7+9+9+9+9	7+7+12+12+12+12	7+9+9+12+12+12	9+9+9+9+12+12
7+7+7+7+7+24	7+7+7+7+12+18	7+7+7+9+9+24	7+7+9+9+9+12	7+9+9+9+9+9	7+9+12+12+12+12	9+9+9+9+12+12
7+7+7+7+9+9	7+7+7+7+12+24	7+7+7+9+12+12	7+7+9+9+9+18	7+9+9+9+9+12		
7 UNITS						
7+7+7+7+7+7+7	7+7+7+7+7+9+18	7+7+7+7+7+9+18	7+7+7+7+9+9+12	7+7+7+7+12+12+12	7+7+7+9+9+12+12	7+9+9+9+9+9+9
7+7+7+7+7+7+9	7+7+7+7+7+9+19	7+7+7+7+7+9+19	7+7+7+7+9+9+18	7+7+7+9+9+9+9	7+7+9+9+9+9+9	7+9+9+9+9+9+12
7+7+7+7+7+7+12	7+7+7+7+7+9+12	7+7+7+7+9+9+9	7+7+7+7+9+9+12+12	7+7+7+9+9+9+12	7+7+9+9+9+9+12	9+9+9+9+9+9+9
8 UNITS						
7+7+7+7+7+7+7+7	7+7+7+7+7+7+9+9	7+7+7+7+7+7+9+12	7+7+7+7+7+9+9+9	7+7+7+7+7+9+9+12	7+7+7+7+7+9+9+9	7+7+7+7+7+9+9+9

(unit: x1000Btu/h)

Big choice of indoor units for combination:
the model MS-E48AI offers 195 possible
combinations, model MS-E56AI has 286
possible combinations.



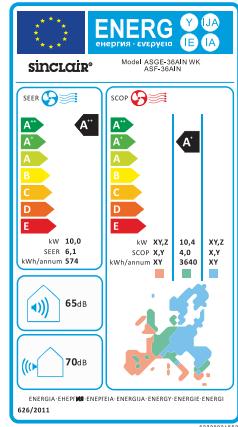
COMBINATION TABLE

MS-E56AI						
2 UNITS						
7+18	9+18	12+18	12+24	18+18	18+24	24+24
7+24	9+24					
3 UNITS						
7+7+18	7+12+12	7+24+24	9+12+12	9+18+24	12+12+24	18+18+18
7+7+24	7+12+18	9+9+12	9+12+18	9+24+24	12+18+18	18+18+24
7+9+12	7+12+24	9+9+18	9+12+24	12+12+12	12+18+24	18+24+24
7+9+18	7+18+18	9+9+24	9+18+18	12+12+18	12+24+24	24+24+24
7+9+24	7+18+24					
4 UNITS						
7+7+7+7	7+7+12+12	7+9+9+24	7+12+12+24	9+9+9+24	9+12+12+18	12+12+12+18
7+7+7+9	7+7+12+18	7+9+12+12	7+12+18+18	9+9+12+12	9+12+12+24	12+12+12+24
7+7+7+12	7+7+12+24	7+9+12+18	7+12+18+24	9+9+12+18	9+12+18+18	12+12+18+18
7+7+7+18	7+7+18+18	7+9+12+24	7+18+18+18	9+9+12+24	9+12+18+24	12+12+18+24
7+7+7+24	7+7+18+24	7+9+18+18	7+18+18+24	9+9+18+18	9+12+24+24	12+12+24+24
7+7+9+9	7+7+24+24	7+9+18+24	7+18+24+24	9+9+18+24	9+18+18+18	12+18+18+18
7+7+9+12	7+9+9+9	7+9+24+24	9+9+9+9	9+9+24+24	9+18+18+24	12+18+18+24
7+7+9+18	7+9+9+12	7+12+12+12	9+9+9+12	9+12+12+12	12+12+12+12	18+18+18+18
7+7+9+24	7+9+9+18	7+12+12+18	9+9+9+18			
5 UNITS						
7+7+7+7+7	7+7+7+12+24	7+7+9+18+18	7+9+9+9+18	7+9+12+18+18	9+9+9+9+24	9+9+12+18+24
7+7+7+7+9	7+7+7+18+18	7+7+9+18+24	7+9+9+9+24	7+9+12+18+24	9+9+9+12+12	9+9+18+18+18
7+7+7+7+12	7+7+7+18+24	7+7+9+24+24	7+9+9+12+12	7+9+18+18+18	9+9+9+12+18	9+12+12+12+12
7+7+7+7+18	7+7+7+24+24	7+7+12+12+12	7+9+9+12+18	7+12+12+12+12	9+9+9+12+24	9+12+12+12+18
7+7+7+7+24	7+7+9+9+9	7+7+12+12+18	7+9+9+12+24	7+12+12+12+18	9+9+9+18+18	9+12+12+12+24
7+7+7+9+9	7+7+9+9+12	7+7+12+12+24	7+9+9+18+18	7+12+12+12+24	9+9+9+18+24	9+12+12+18+18
7+7+7+9+12	7+7+9+9+18	7+7+12+18+18	7+9+9+18+24	7+12+12+18+18	9+9+12+12+12	12+12+12+12+12
7+7+7+9+18	7+7+9+9+24	7+7+12+18+24	7+9+12+12+12	9+9+9+9+9	9+9+12+12+18	12+12+12+12+18
7+7+7+9+24	7+7+9+12+12	7+7+18+18+18	7+9+12+12+18	9+9+9+9+12	9+9+12+12+24	12+12+12+12+24
7+7+7+12+12	7+7+9+12+18	7+9+9+9+9	7+9+12+12+24	9+9+9+9+18	9+9+12+18+18	12+12+12+18+18
7+7+7+12+18	7+7+9+12+24	7+9+9+9+12				
6 UNITS						
7+7+7+7+7+7	7+7+7+7+12+18	7+7+7+9+18+18	7+7+9+9+9+24	7+9+9+9+9+9+9	7+9+9+12+12+18	9+9+9+9+9+12+18
7+7+7+7+7+9	7+7+7+7+12+24	7+7+7+9+18+24	7+7+9+9+12+12	7+9+9+9+9+9+12	7+9+12+12+12+12	9+9+9+9+9+12+24
7+7+7+7+7+12	7+7+7+7+18+18	7+7+7+12+12+12	7+7+9+9+12+18	7+9+9+9+9+9+18	7+9+12+12+12+18	9+9+9+9+9+18+18
7+7+7+7+7+18	7+7+7+9+9+9	7+7+7+12+12+18	7+7+9+9+12+24	7+9+9+9+9+9+24	7+12+12+12+12+12	9+9+9+9+12+12+12
7+7+7+7+7+24	7+7+7+9+9+12	7+7+7+12+12+24	7+7+9+9+18+18	7+9+9+9+9+12+12	9+9+9+9+9+9+9	9+9+9+9+12+12+18
7+7+7+7+9+9	7+7+7+9+9+18	7+7+7+12+18+18	7+7+9+12+12+12	7+9+9+9+9+9+12	9+9+9+9+9+9+12	9+9+9+9+12+12+12
7+7+7+7+9+12	7+7+7+9+9+24	7+7+7+9+9+9	7+7+9+12+12+18	7+9+9+9+9+9+18	9+9+9+9+9+9+18	9+9+9+9+12+12+18
7+7+7+7+9+18	7+7+7+9+9+12+12	7+7+7+9+9+12	7+7+9+12+12+24	7+9+9+9+9+9+24	9+9+9+9+9+9+24	9+12+12+12+12+12
7+7+7+7+9+24	7+7+7+9+9+18+18	7+7+7+9+9+18	7+7+9+12+12+18	7+9+9+9+9+12+12	9+9+9+9+9+12+12	12+12+12+12+12+12
7+7+7+7+12+12	7+7+7+9+12+24					
7 UNITS						
7+7+7+7+7+7+7	7+7+7+7+7+9+18	7+7+7+7+9+9+12	7+7+7+9+9+9+9	7+7+7+9+12+12+18	7+7+9+9+12+12+12	7+9+9+9+12+12+12
7+7+7+7+7+7+9	7+7+7+7+7+9+24	7+7+7+7+9+9+18	7+7+7+9+9+9+12	7+7+7+12+12+12+12	7+7+9+12+12+12+12	9+9+9+9+9+9+9+9
7+7+7+7+7+7+12	7+7+7+7+7+12+12	7+7+7+7+9+9+24	7+7+7+9+9+9+18	7+7+9+9+9+9+9+9	7+9+9+9+9+9+9+9	9+9+9+9+9+9+9+12
7+7+7+7+7+7+18	7+7+7+7+7+12+18	7+7+7+7+9+9+12	7+7+7+9+9+9+24	7+7+9+9+9+9+9+12	7+9+9+9+9+9+9+12	9+9+9+9+9+9+9+18
7+7+7+7+7+7+24	7+7+7+7+7+12+24	7+7+7+7+9+9+12	7+7+7+9+9+9+18	7+7+9+9+9+9+9+18	7+9+9+9+9+9+9+18	9+9+9+9+9+9+9+18
7+7+7+7+7+9+9	7+7+7+7+7+12+18	7+7+7+7+9+9+12	7+7+7+9+9+9+18	7+7+9+9+9+9+12+12	7+9+9+9+9+9+9+12+12	9+9+9+9+9+9+9+12+12
7+7+7+7+7+9+12	7+7+7+7+7+9+9+9	7+7+7+7+12+12+12	7+7+9+9+9+12+12	7+7+9+9+9+9+9+18	7+9+9+9+9+9+9+18	9+9+9+9+9+9+9+18
8 UNITS						
7+7+7+7+7+7+7+7	7+7+7+7+7+7+9+9	7+7+7+7+7+9+9+12	7+7+7+7+9+9+9+12	7+7+7+7+9+9+9+12+12	7+7+7+9+9+9+9+12+12	7+7+9+9+9+9+9+12+12
7+7+7+7+7+7+7+9	7+7+7+7+7+7+9+12	7+7+7+7+7+9+9+12	7+7+7+7+9+9+9+12	7+7+7+7+9+9+9+12+12	7+7+7+9+9+9+9+12+12	7+9+9+9+9+9+9+9+9+9
7+7+7+7+7+7+7+12	7+7+7+7+7+7+9+9+18	7+7+7+7+7+9+9+9+12	7+7+7+7+9+9+9+18	7+7+7+7+9+9+9+9+9+9	7+7+9+9+9+9+9+9+9+9	9+9+9+9+9+9+9+9+9+9
7+7+7+7+7+7+7+18	7+7+7+7+7+7+9+12+12	7+7+7+7+7+9+9+9+18				
9 UNITS						
7+7+7+7+7+7+7+7+7	7+7+7+7+7+7+7+9+9+12	7+7+7+7+7+7+9+9+9+12	7+7+7+7+7+9+9+9+12+12	7+7+7+7+7+9+9+9+9+12+12	7+7+7+7+7+9+9+9+9+12+12	7+7+7+7+7+9+9+9+9+9+12+12
7+7+7+7+7+7+7+7+9	7+7+7+7+7+7+7+9+9+12+12	7+7+7+7+7+7+9+9+9+12+12	7+7+7+7+7+9+9+9+9+12+12	7+7+7+7+7+9+9+9+9+12+12	7+7+7+7+7+9+9+9+9+12+12	7+9+9+9+9+9+9+9+9+9+9
7+7+7+7+7+7+7+7+12	7+7+7+7+7+7+7+9+9+12+18	7+7+7+7+7+7+9+9+9+12+18	7+7+7+7+7+9+9+9+9+12+18	7+7+7+7+7+9+9+9+9+9+12+18	7+7+7+7+7+9+9+9+9+9+12+18	9+9+9+9+9+9+9+9+9+9+9
7+7+7+7+7+7+7+7+18	7+7+7+7+7+7+7+9+9+12+12+12	7+7+7+7+7+7+9+9+9+12+12+12				

(unit: x1000Btu/h)

FLOOR CEILING UNITS

NEW UNI DC INVERTER SERIES



ASF-XXAIN

ASF-09AIN ASF-36AIN
ASF-12AIN ASF-42AIN
ASF-18AIN ASF-48AIN
ASF-24AIN ASF-60AIN

Anticorrosion treatment of exchangers
3-year warranty
Autorestart function
Silent operation



ASGE-XXAIN WK

YOU SHOULD COMBINE INDOOR UNITS ASF-XXAIN
WITH SAME CAPACITY OUTDOOR UNIT ASGE-XXAIN WK
OR ASGE-XXAIN-3 WK.



DC INVERTER

OPTIONAL ACCESSORIES

SCMI-01

FMD-01

SCC-16

SDM-01

G2S



TECHNICAL PARAMETERS

MODEL-ID		ASF-09AIN		ASF-12AIN		ASF-18AIN		ASF-24AIN		ASF-36AIN	
MODEL-OD		ASGE-09AIN WK		ASGE-12AIN WK		ASGE-18AIN WK		ASGE-24AIN WK		ASGE-36AIN WK	
Capacity cooling / heating	kW	2,7 (0,8-3,5) / 2,9 (0,8-3,8)		3,5 (0,9-3,9) / 3,8 (0,9-4,1)		5,0 (1,6-5,8) / 5,6 (1,4-6,8)		7,0 (2,4-8,2) / 8,0 (2,4-9,0)		10,0 (3,2-11,5) / 12,0 (2,9-14,5)	
Power supply	ID	Hz / V	1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240
	OD	Hz / V	1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240
Power input cooling / heating	W	840 / 800		1090 / 1050		1550 / 1550		2180 / 2210		3200 / 3400	
Current cooling / heating	A	3,9 / 3,7		5,0 / 4,9		7,2 / 7,2		10,10 / 10,20		15,00 / 15,80	
SEER / SCOP	-	6,1 / 3,8		6,1 / 4,0		6,1 / 4,0		5,6 / 4,0		6,1 / 4,0	
Energy class	-	A++ / A		A++ / A+		A++ / A+		A+ / A+		A++ / A+	
Air flow	ID	m³/h	600 / 550 / 450		700 / 600 / 500		1000 / 900 / 800		1200 / 1000 / 900		1900 / 1630 / 1520
	OD	m³/h	1800		1800		3200		4000		5100
Sound pressure level	ID	dB(A)	37 / 35 / 32 / 28		40 / 38 / 35 / 31		44 / 42 / 38 / 32		49 / 48 / 46 / 40		54 / 53 / 51 / 46
	OD	dB(A)	52		52		56		57		63
Dehumidifying volume	l/h	0,9		1,2		1,6		2,1		3,2	
Refrigerant	Type / kg / t eq.CO ₂	R410A / 1,2 / 2,51		R410A / 1,2 / 2,51		R410A / 1,4 / 2,92		R410A / 2,2 / 4,59		R410A / 3,5 / 7,31	
Pipe diameter	Liquid side	inch / mm	¼ / 6,4		¼ / 6,4		¼ / 6,4		¾ / 9,5		¾ / 9,5
	Gas side	inch / mm	% / 9,5		% / 9,5		½ / 12,7		% / 15,9		% / 15,9
Max. pipe length	m	20		20		20		30		30	
Max. elevation / Drop height	m	15		15		15		15		15	
Standard pipe length	m	7		7		7		7		7	
Additional refrigerant	g/m	30		30		30		60		60	
Dimension (w x h x d)	ID	mm	1220x700x225		1220x700x225		1220x700x225		1220x700x225		1420x700x245
	OD	mm	850x540x320		850x540x320		955x700x395		980x790x425		1105x100x440
Package dimension (w x h x d)	ID	mm	1343x823x315		1343x823x315		1343x823x315		1343x823x315		1548x828x345
	OD	mm	881x595x363		881x595x363		1029x750x458		1083x855x488		1158x1236x493
Net/ gross weight	ID	kg	38,0 / 47,0		39,0 / 48,0		39,0 / 48,0		40,0 / 50,0		48,0 / 56,0
	OD	kg	34,0 / 37,0		34,0 / 37,0		47,0 / 50,0		67,0 / 72,0		92,0 / 100,0
Operating temperature range	Cooling	°C	-15 ~ 48		-15 ~ 48		-15 ~ 48		-15 ~ 48		-15 ~ 48
	Heating	°C	-15 ~ 24		-15 ~ 24		-15 ~ 24		-15 ~ 24		-15 ~ 24
MODEL-ID		ASF-36AIN		ASF-42AIN		ASF-48AIN		ASF-60AIN			
MODEL-OD		ASGE-36AIN-3 WK		ASGE-42AIN-3 WK		ASGE-48AIN-3 WK		ASGE-60AIN-3 WK			
Capacity cooling / heating	kW	10,0 (3,2-11,5) / 12,0 (2,9-14,5)		11,5 (3,6-12,5) / 13,5 (3,9-15,5)		14,0 (6,0-14,8) / 16,0 (5,2-18,0)		16,0 (7,4-16,5) / 17,0 (6,2-18,5)			
Power supply	ID	Hz / V	1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240		
	OD	Hz / V	3~ / 50 / 380-415		3~ / 50 / 380-415		3~ / 50 / 380-415		3~ / 50 / 380-415		
Power input cooling / heating	W	3200 / 3400		3900 / 3700		4800 / 4300		5700 / 4600			
Current cooling / heating	A	4,9 / 4,6		5,2 / 5,1		6,2 / 6,5		7,4 / 7,2			
SEER / SCOP	-	6,1 / 4,0		5,6 / 4,0		5,6 / 4,0		5,1 / 4,0			
Energy class	-	A++ / A+		A+ / A+		A+ / A+		A / A+			
Air flow	ID	m³/h	1900 / 1630 / 1520		1900 / 1630 / 1520		2300 / 2100 / 1900		2500 / 2100 / 1900		
	OD	m³/h	5100		6600		6600		8800		
Sound pressure level	ID	dB(A)	54 / 53 / 51 / 46		55 / 54 / 52 / 47		57 / 55 / 50 / 46		58 / 56 / 51 / 46		
	OD	dB(A)	63		64		64		68		
Dehumidifying volume	l/h	3,2		3,4		4,2		4,8			
Refrigerant	Type / kg / t eq.CO ₂	R410A / 3,5 / 7,31		R410A / 3,7 / 7,72		R410A / 4,0 / 8,35		R410A / 5,0 / 10,44			
Pipe diameter	Liquid side	inch / mm	% / 9,5		% / 9,5		% / 9,5		% / 9,5		
	Gas side	inch / mm	% / 15,9		% / 15,9		% / 15,9		¾ / 19,1		
Max. pipe length	m	30		30		50		50			
Max. elevation / Drop height	m	15		15		30		30			
Standard pipe length	m	7		7		7		7			
Additional refrigerant	g/m	60		60		60		60			
Dimension (w x h x d)	ID	mm	1420x700x245		1420x700x245		1700x700x245		1700x700x245		
	OD	mm	1105x1100x440		960x1350x410		960x1350x410		1085x1365x425		
Package dimension (w x h x d)	ID	mm	1548x828x345		1548x828x345		1828x828x345		1828x828x345		
	OD	mm	1158x1236x493		1043x1500x453		1043x1500x453		1143x1505x478		
Net/ gross weight	ID	kg	48,0 / 56,0		50,0 / 58,0		59,0 / 68,0		59,0 / 68,0		
	OD	kg	98,0 / 106,0		108,0 / 118,0		114,0 / 124,0		126,0 / 138,0		
Operating temperature range	Cooling	°C	-15 ~ 48		-15 ~ 48		-15 ~ 48		-15 ~ 48		
	Heating	°C	-15 ~ 24		-15 ~ 24		-15 ~ 24		-15 ~ 24		

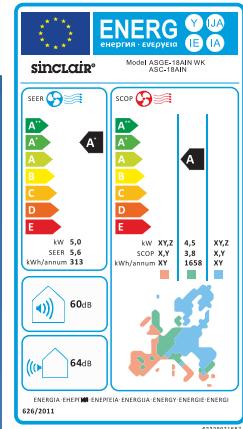
The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions:

Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB.

SEER/SCOP was calculated according to European standards contained in EN14825 for average season, based on part load classifying and testing conditions given by norm EN15111. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual operation due to environmental change. Power input is tested under standard condition.

CASSETTE UNITS

NEW UNI DC INVERTER SERIES



ASC-12AIN ASC-42AIN
ASC-18AIN ASC-48AIN
ASC-24AIN ASC-60AIN
ASC-36AIN

Anticorrosion treatment of exchangers

3-year warranty

Autorestart function

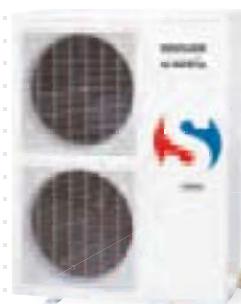
3-D spiral fan

Standard water pump

Fresh air supply



ASC-XXAIN



ASGE-XXAIN WK

YOU SHOULD COMBINE INDOOR UNITS ASC-XXAIN WITH SAME CAPACITY OUTDOOR UNIT ASGE-XXAIN WK OR ASGE-XXAIN-3 WK.



DC INVERTER

OPTIONAL ACCESSORIES

SCMI-01

FMD-01

SCC-16

SDM-01

G2S



TECHNICAL PARAMETERS

MODEL-ID		ASC-12AIN ASGE-12AIN WK		ASC-18AIN ASGE-18AIN WK		ASC-24AIN ASGE-24AIN WK		ASC-36AIN ASGE-36AIN WK	
MODEL-OD									
Capacity cooling / heating		kW		3,5 (0,9-3,9) / 3,8 (0,9-4,1)		5,0 (1,6-5,8) / 5,5 (1,4-6,5)		7,0 (2,4-8,5) / 8,0 (2,4-9,5)	
Power supply	ID	Hz / V		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240	
	OD	Hz / V		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240	
Power input cooling / heating		W		1090 / 1050		1550 / 1640		2180 / 2210	
Current cooling / heating		A		5,0 / 4,9		7,2 / 7,6		10,1 / 10,2	
SEER / SCOP		-		5,6 / 4,0		5,6 / 3,8		6,1 / 4,0	
Energy class		-		A+ / A+		A+ / A		A++ / A+	
Air flow	ID	m³/h		700		760		1300	
	OD	m³/h		1800		3200		4000	
Sound pressure level	ID	dB(A)		46 / 45 / 43 / 37		47 / 46 / 44 / 37		47 / 46 / 42 / 38	
	OD	dB(A)		52		56		57	
Dehumidifying volume		l/h		1,2		1,8		2,4	
Refrigerant		Type / kg / t eq.CO ₂		R410A / 1,2 / 2,51		R410A / 1,4 / 2,92		R410A / 2,2 / 4,59	
Pipe diameter	Liquid side	inch / mm		1/4 / 6,4		1/4 / 6,4		1/4 / 9,5	
	Gas side	inch / mm		3/8 / 9,5		1/2 / 12,7		1/2 / 15,9	
Max. pipe length		m		20		20		30	
Max. elevation / Drop height		m		15		15		15	
Standard pipe length		m		7		7		7	
Additional refrigerant		g/m		30		30		60	
Dimension (w x h x d)	ID	mm		595x595x240		595x595x240		840x840x240	
	OD	mm		850x540x320		955x700x395		980x790x425	
	Panel	mm		650x50x650		650x50x650		950x60x950	
Package dimension (w x h x d)	ID	mm		773x300x733		773x300x733		963x325x963	
	OD	mm		881x595x363		1029x750x458		1083x855x488	
	Panel	mm		763x105x763		763x105x763		1028x130x1043	
Net/ gross weight	ID	kg		20,0 / 24,0		20,0 / 24,0		26,0 / 32,0	
	OD	kg		34,0 / 37,0		47,0 / 50,0		67,0 / 72,0	
	Panel	mm		3,5 / 5,0		3,5 / 5,0		7,0 / 11,0	
Operating temperature range	Cooling	°C		-15 ~ 48		-15 ~ 48		-15 ~ 48	
	Heating	°C		-15 ~ 24		-15 ~ 24		-15 ~ 24	

MODEL-ID		ASC-36AIN ASGE-36AIN-3 WK		ASC-42AIN ASGE-42AIN-3 WK		ASC-48AIN ASGE-48AIN-3 WK		ASC-60AIN ASGE-60AIN-3 WK	
MODEL-OD									
Capacity cooling / heating		kW		10,0 (3,2-11,5) / 12,0 (2,9-14,5)		11,0 (3,3-12,0) / 12,5 (3,6-15,0)		14,0 (6,0-14,8) / 16,0 (5,2-18,0)	
Power supply	ID	Hz / V		1~ / 50 / 220-240		1~ / 50 / 220-240		1~ / 50 / 220-240	
	OD	Hz / V		3~ / 50 / 380-415		3~ / 50 / 380-415		3~ / 50 / 380-415	
Power input cooling / heating		W		3200 / 3500		3900 / 3800		4600 / 4500	
Current cooling / heating		A		5,4 / 5,8		6,7 / 6,6		8,9 / 7,8	
SEER / SCOP		-		6,1 / 4,0		6,1 / 4,0		5,6 / 3,8	
Energy class		-		A++ / A+		A++ / A+		A+ / A	
Air flow	ID	m³/h		1860		1860		2300	
	OD	m³/h		5100		6600		6600	
Sound pressure level	ID	dB(A)		51 / 49 / 46 / 43		51 / 49 / 46 / 43		53 / 52 / 47 / 41	
	OD	dB(A)		63		64		64	
Dehumidifying volume		l/h		3,4		3,7		4,5	
Refrigerant		Type / kg / t eq.CO ₂		R410A / 3,5 / 7,31		R410A / 3,7 / 7,72		R410A / 4,0 / 8,35	
Pipe diameter	Liquid side	inch / mm		3/8 / 9,5		1/2 / 9,5		1/2 / 9,5	
	Gas side	inch / mm		% / 15,9		% / 15,9		1/2 / 19,1	
Max. pipe length		m		30		30		50	
Max. elevation / Drop height		m		15		15		30	
Standard pipe length		m		7		7		7	
Additional refrigerant		g/m		60		60		60	
Dimension (w x h x d)	ID	mm		840x840x320		840x840x320		910x910x290	
	OD	mm		1105x1100x440		960x1350x410		960x1350x410	
	Panel	mm		950x60x950		950x60x950		1040x65x1040	
Package dimension (w x h x d)	ID	mm		963x409x963		963x409x963		1023x375x993	
	OD	mm		1158x1236x493		1043x1500x453		1043x1500x453	
	Panel	mm		1028x130x1043		1028x130x1043		1137x140x1137	
Net/ gross weight	ID	kg		31,0 / 38,0		31,0 / 38,0		43,0 / 50,0	
	OD	kg		98,0 / 106,0		108,0 / 118,0		114,0 / 124,0	
	Panel	mm		7,0 / 11,0		7,0 / 11,0		8,0 / 12,0	
Operating temperature range	Cooling	°C		-15 ~ 48		-15 ~ 48		-15 ~ 48	
	Heating	°C		-15 ~ 24		-15 ~ 24		-15 ~ 24	

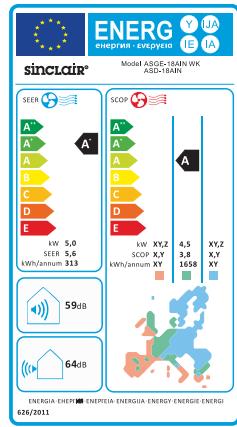
The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions:

Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB.

SEER/SCOP was calculated according to European standards contained in EN14825 for average season, based on part load classifying and testing conditions given by norm EN1511. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual Operation due to environmental change. Power input is tested under standard condition.

DUCT UNITS

NEW UNI DC INVERTER SERIES



ASD-60AIN



ASD-12AIN

ASD-09AIN ASD-36AIN
ASD-12AIN ASD-42AIN
ASD-18AIN ASD-48AIN
ASD-24AIN ASD-60AIN

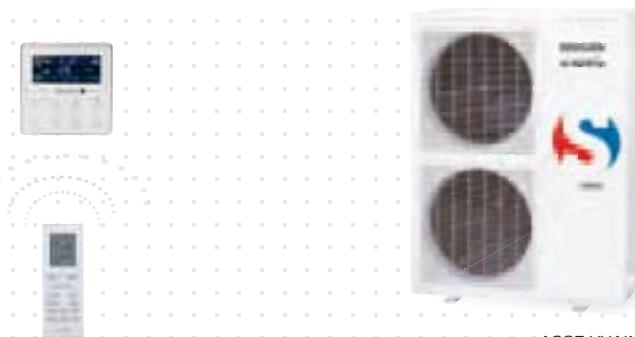
Anticorrosion treatment of exchangers

3-year warranty

Autorestart function

Standard water pump

Optional display board SND-01



ASGE-XXAIN WK

YOU SHOULD COMBINE INDOOR UNITS ASD-XXAIN WITH SAME CAPACITY OUTDOOR UNIT ASGE-XXAIN WK OR ASGE-XXAIN-3 WK.



DC INVERTER

OPTIONAL ACCESSORIES

SCMI-01 FMD-01 SCC-16 SDM-01 G25 SND-01



TECHNICAL PARAMETERS

MODEL-ID MODEL-OD		ASD-09AIN ASGE-09AIN WK	ASD-12AIN ASGE-12AIN WK	ASD-18AIN ASGE-18AIN WK	ASD-24AIN ASGE-24AIN WK	ASD-36AIN ASGE-36AIN WK
Capacity cooling / heating	kW	2,7 (0,8-3,4) / 2,9 (0,8-3,7)	3,5 (0,9-3,7) / 3,8 (0,9-4,1)	5,0 (1,6-5,5) / 5,6 (1,4-6,8)	7,0 (2,2-8,5) / 8,0 (2,4-9,5)	10,0 (3,2-11,5) / 12,0 (2,9-14,5)
Power supply	ID	Hz / V	220-240 / 50 / 1	220-240 / 50 / 1	220-240 / 50 / 1	220-240 / 50 / 1
	OD	Hz / V	220-240 / 50 / 1	220-240 / 50 / 1	220-240 / 50 / 1	220-240 / 50 / 1
Power input cooling / heating - OD	W	840 / 800	1170 / 1050	1600 / 1580	2180 / 2210	3200 / 3400
Current cooling / heating - OD	A	3,9 / 3,7	5,0 / 4,9	7,2 / 7,2	10,1 / 10,2	15,0 / 15,8
SEER / SCOP	-	5,6 / 3,8	5,6 / 4,0	5,6 / 3,8	6,1 / 4,0	5,6 / 4,0
Energy class	-	A+ / A	A+ / A+	A+ / A	A++ / A+	A+ / A+
Air flow	ID	m³/h	650	750	1000	1400
	OD	m³/h	1800	1800	3200	4000
Sound pressure level	ID	dB(A)	36 / 35 / 33 / 28	37 / 36 / 34 / 28	40 / 39 / 36 / 28	47 / 46 / 44 / 40
	OD	dB(A)	52	52	56	57
Dehumidifying volume	l/h	0,7	0,9	1,4	1,9	2,7
External static pressure - rated / range	Pa	25 / 0-30	25 / 0-30	25 / 0-30	25 / 0-100	37 / 0-150
Refrigerant	Type / kg / t eq.CO ₂	R410A / 1,2 / 2,51	R410A / 1,2 / 2,51	R410A / 1,4 / 2,92	R410A / 2,2 / 4,59	R410A / 3,5 / 7,31
Pipe diameter	Liquid side	inch / mm	1/4 / 6,4	1/4 / 6,4	1/4 / 6,4	3/8 / 9,5
	Gas side	inch / mm	3/8 / 9,5	3/8 / 9,5	1/2 / 12,7	3/8 / 15,9
Max. pipe length	m	20	20	20	30	30
Max. elevation / Drop height	m	15	15	15	15	15
Standard pipe length	m	7	7	7	7	7
Additional refrigerant	g/m	30	30	30	60	60
Dimension (w x h x d)	ID	mm	925x250x665	1035x265x720	1035x265x720	1280x270x560
	OD	mm	850x540x320	850x540x320	955x700x395	980x790x425
Package dimension (w x h x d)	ID	mm	1023x320x748	1123x323x798	1123x323x798	1348x283x597
	OD	mm	881x595x363	881x595x363	1029x750x458	1083x855x488
Net/ gross weight	ID	kg	26,0 / 32,0	33,0 / 38,0	33,0 / 38,0	34,0 / 39,0
	OD	kg	34,0 / 37,0	34,0 / 37,0	47,0 / 50,0	67,0 / 72,0
Operating temperature range	Cooling	°C	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48
	Heating	°C	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24
MODEL-ID MODEL-OD		ASD-36AIN ASGE-36AIN-3 WK	ASD-42AIN ASGE-42AIN-3 WK	ASD-48AIN ASGE-48AIN-3 WK	ASD-60AIN ASGE-60AIN-3 WK	
Capacity cooling / heating	kW	10,0 (3,2-11,5) / 12,0 (2,9-14,5)	11,5 (3,6-12,5) / 13,5 (3,9-15,5)	14,0 (6,0-14,5) / 15,5 (5,2-17,0)	16,0 (7,4-16,5) / 16,5 (6,2-18,5)	
Power supply	ID	Hz / V	220-240 / 50 / 1	220-240 / 50 / 1	220-240 / 50 / 1	220-240 / 50 / 1
	OD	Hz / V	380-415 / 50 / 3	380-415 / 50 / 3	380-415 / 50 / 3	380-415 / 50 / 3
Power input cooling / heating - OD	W	3200 / 3400	4000 / 3900	4700 / 4400	5700 / 4600	
Current cooling / heating - OD	A	4,8 / 4,7	5,5 / 4,9	6,4 / 6,7	7,8 / 7,4	
SEER / SCOP	-	5,1 / 4,0	5,6 / 4,0	5,6 / 3,8	5,6 / 3,8	
Energy class	-	A / A+	A+ / A+	A+ / A	A+ / A	
Air flow	ID	m³/h	2100	2100	2400	3000
	OD	m³/h	5100	6600	6600	8800
Sound pressure level	ID	dB(A)	53 / 52 / 48 / 44	53 / 52 / 48 / 44	55 / 53 / 49 / 45	56 / 55 / 51 / 46
	OD	dB(A)	63	64	64	68
Dehumidifying volume	l/h	2,7	3,0	3,8	4,6	
External static pressure - rated / range	Pa	37 / 0-150	37 / 0-150	50 / 0-150	50 / 0-150	
Refrigerant	Type / kg / t eq.CO ₂	R410A / 3,5 / 7,31	R410A / 3,7 / 7,72	R410A / 4,0 / 8,35	R410A / 5,0 / 10,44	
Pipe diameter	Liquid side	inch / mm	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5
	Gas side	inch / mm	3/8 / 15,9	3/8 / 15,9	3/8 / 15,9	3/8 / 19,1
Max. pipe length	m	30	30	50	50	
Max. elevation / Drop height	m	15	15	30	30	
Standard pipe length	m	7	7	7	7	
Additional refrigerant	g/m	60	60	60	60	
Dimension (w x h x d)	ID	mm	1225x290x775	1225x290x775	1340x350x750	1340x350x750
	OD	mm	1105x1100x440	960x1350x410	960x1350x410	1085x1365x425
Package dimension (w x h x d)	ID	mm	1338x305x877	1338x305x877	1423x455x837	1423x455x837
	OD	mm	1158x1236x493	1043x1500x453	1043x1500x453	1143x1505x478
Net/ gross weight	ID	kg	46,0 / 53,0	46,0 / 53,0	56,0 / 65,0	56,0 / 65,0
	OD	kg	98,0 / 106,0	108,0 / 118,0	114,0 / 124,0	126,0 / 138,0
Operating temperature range	Cooling	°C	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48
	Heating	°C	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions:

Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB.

SEER/SCOP was calculated according to European standards contained in EN14825 for average season, based on part load classifying and testing conditions given by norm EN15111. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual operation due to environmental change. Power input is tested under standard condition.

UNI ON/OFF SERIES

ASFU-48AN
ASCU-48AN
ASDU-48AN
ASGE-48AN WK
ASDU-60A
ASGE-60A WK

Anticorrosion treatment of exchangers
3-year warranty
Autorestart function
Fresh air supply (cassette units)
Standard water pump (cassette units)



ASDU-60A



ASCU-48AN



ASGE-48AN WK



ASFU-48AN

STANDARD



OPTIONAL ACCESSORIES

SCC-16



G2S



TECHNICAL PARAMETERS



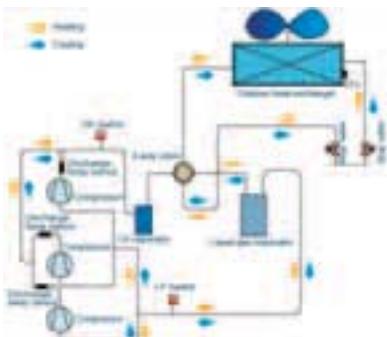
MODEL-ID			ASFU-48AN	ASCU-48AN	ASDU-48AN	ASDU-60A
MODEL-OD			ASGE-48AN WK	ASGE-48AN WK	ASGE-48AN WK	ASGE-60A WK
Capacity	Cooling	kW	13,2	13,2	13,2	16,0
	Heating	kW	14,5	14,5	14,5	18,5
Power supply	ID	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
	OD	Hz / V	3~ / 50 / 380-415	3~ / 50 / 380-415	3~ / 50 / 380-415	3~ / 50 / 380-415
Power input cooling / heating	W		5000 / 4800	4800 / 5200	5100 / 4600	6500 / 5500
Current cooling / heating	A		11,0 / 10,5	10,5 / 11,3	10,5 / 9,8	11,8 / 10,0
Air flow	ID	m³/h	2100 / 1900 / 1800	1660 / 1570 / 1500	2300 / 2110 / 1850	2500 / 2070 / 1730
	OD	m³/h	6000	6000	6000	6200
Sound pressure level	ID	dB(A)	58/55/52	53/51/48	53/50/46	53/50/48
	OD	dB(A)	63	63	63	64
External static pressure - rated / range	Pa		-	-	50 (0-150)	50 (0-150)
Refrigerant	Type / kg / t eq.CO ₂		R410A / 3,8 / 7,93	R410A / 3,8 / 7,93	R410A / 3,8 / 7,93	R410A / 5,0 / 10,44
Pipe diameter	Liquid side	inch / mm	½ / 12,7	½ / 12,7	½ / 12,7	½ / 12,7
	Gas side	inch / mm	¾ / 19,1	¾ / 19,1	¾ / 19,1	¾ / 19,1
Max. pipe length	m		50	50	50	50
Max. elevation / Drop height	m		30	30	30	30
Standard pipe length	m		7	7	7	7
Additional refrigerant	g/m		120	120	120	120
Dimension (w x h x d)	ID	mm	1590x695x238	840x320x840	1226x290x775	1126x330x815
	OD	mm	1032x1250x412	1032x1250x412	1032x1250x412	1032x1250x412
	Panel	mm	-	950x60x950	-	-
Package dimension (w x h x d)	ID	mm	1717x833x345	963x409x963	1338x837x305	1338x885x345
	OD	mm	1113x1400x453	1113x453x1400	1113x1400x453	1113x1400x453
	Panel	mm	-	1028x130x1043	-	-
Net/ gross weight	ID	kg	48,0 / 58,0	32,0 / 43,0	57,0 / 67,0	66,0 / 76,0
	OD	kg	112,0 / 123,0	112,0 / 123,0	112,0 / 123,0	123,0 / 134,0
	Panel	kg	-	6,5 / 10,5	-	-
Operating temperature range	Cooling	°C	-15 ~ 43	-15 ~ 43	-15 ~ 43	-15 ~ 43
	Heating	°C	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions: Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual Operation due to environmental change. Power input is tested under standard condition.

OUTDOOR UNITS

CONDENSING UNITS

REFRIGERANT PIPE DIAGRAM OF UNIT ASE-192AH



NEW

ASE-48AH
ASE-60AH
ASE-76AH
ASE-96AH
ASE-120AH

ASE-150AH
ASE-192AH

Anticorrosion treatment of exchangers
Silent operation
Compact design
Throttle type-capillary*
3-year warranty

* (ASE-48AH AND ASE-60AH)

IT IS NECESSARY TO DESIGN CORRESPONDING SIZE OF EVAPORATOR FOR THE BIG CONDENSING UNITS (ASE-76AH TO ASE-192AH). ALSO IT IS NEEDED TO ADD NECESSARY COMPONENTS OF COOLING CIRCUIT FOR THE RIGHT AND RELIABLE FUNCTION OF THE UNIT.



ASE-120AH



TECHNICAL PARAMETERS



MODEL			ASE-48AH	ASE-60AH	ASE-76AH	ASE-96AH
Capacity	Cooling	kW	14,1	17,6	22,3	28,1
	Heating	kW	15,2	19,1	25,0	31,1
Power supply	Hz / V		3~ / 50 / 380-415	3~ / 50 / 380-415	3~ / 50 / 380-415	3~ / 50 / 380-415
Max. input consumption	W		6300	7500	11700	14400
Max. input current	A		12,5	12,8	19,3	23,7
Noise-outdoor unit	Max	dB(A)	64	64	68	68
Air flow	m ³ /h		8000	6850	10000	10000
Refrigerant	Type / kg / t eq.CO ₂		R410A / 3,2 / 6,68	R410A / 3,2 / 6,68	R410A / 5,4 / 11,27	R410A / 5,5 / 11,48
Pipe diameter	Liquid side	inch / mm	½ / 12,7	½ / 12,7	¾ / 9,5	¾ / 9,5
	Gas side	inch / mm	¾ / 19,1	¾ / 19,1	¾ / 22,2	1 / 25,4
Length of connection pipe	Max	m	50	50	50	50
Elevation (OD down/ up)	Max	m	25 / 25	25 / 25	30 / 25	30 / 25
Dimension (w x h x d)	mm		990x965x345	900x1170x350	1255x908x700	1255x908x700
Package dimension (w x h x d)	mm		1120x1100x435	1032x1307x443	1320x1060x730	1320x1060x730
Net/ gross weight	kg		93,2 / 105,0	97,0 / 108,0	174,0 / 193,0	187,0 / 204,0
Operating temperature range	Cooling	°C	18 ~ 43	18 ~ 43	17 ~ 46	17 ~ 46
	Heating	°C	-7 ~ 24	-7 ~ 24	-7 ~ 24	-7 ~ 24

MODEL			ASE-120AH	ASE-150AH	ASE-192AH
Capacity	Cooling	kW	35,0	44,0	56,3
	Heating	kW	38,0	47,0	58,6
Power supply	Hz / V		3~ / 50 / 380-415	3~ / 50 / 380-415	3~ / 50 / 380-415
Max. input consumption	W		17300	26900	32200
Max. input current	A		28,6	47,9	53,8
Noise-outdoor unit	Max	dB(A)	69	70	73
Air flow	m ³ /h		12000	15000	18000
Refrigerant	Type / kg / t eq.CO ₂		R410A / 7,5 / 15,66	R410A / 10,0 / 20,88	R410A / 11,8 / 24,63
Pipe diameter	Liquid side	inch / mm	½ / 12,7	¾ / 16,0	¾ / 16,0
	Gas side	inch / mm	1½ / 28,6	1¼ / 32,0	1¼ / 32,0
Length of connection pipe	Max	m	50	50	50
Elevation (OD down/ up)	Max	m	30 / 25	30 / 25	30 / 25
Dimension (w x h x d)	mm		1255x908x700	1250x1615x765	1390x1615x765
Package dimension (w x h x d)	mm		1320x1060x730	1305x1790x820	1455x1790x830
Net/ gross weight	kg		201,0 / 217,0	288,0 / 308,0	320,0 / 336,0
Operating temperature range	Cooling	°C	17 ~ 46	17 ~ 46	17 ~ 46
	Heating	°C	-7 ~ 24	-7 ~ 24	-7 ~ 24

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Data are based on following conditions: Length of connection pipe: 5m. Cooling: indoor temperature 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB. Heating condition: indoor temperature 20°C DB/15°C WB, outdoor temperature 7°C DB/6°C WB. Contains fluorinated greenhouse gases covered by Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual Operation due to environmental change. Power input is tested under standard condition.

WINDOW SERIES

*Traditional
and compact
solution for specific
applications*

NEW

ASW-09BI
ASW-12BI

Energy class A
3-year warranty
Low GWP refrigerant R32 (GWP 675)
Cooling mode only
Dirty filter Alarm
Low Voltage Startup
Auto restart function



DC INVERTER

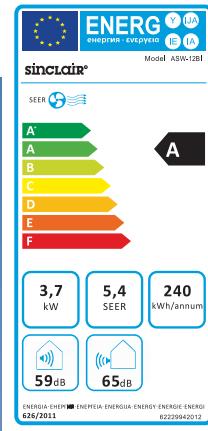


MANUAL CONTROL PANEL



YOU CAN CONTROL UNIT WITH BUBBLE BUTTONS RIGHT FROM FRONT PANEL OF THE AIR CONDITIONER.

TECHNICAL PARAMETERS



MODEL		ASW-09BI	ASW-12BI		
Cooling capacity	kW	2,7	3,7		
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240		
Application area	m ²	12-18	16-24		
Power input cooling	W	782	1030		
Rated power input	W	1100	1300		
Power current cooling	A	3,5	4,6		
Rated power current	A	5,5	6,5		
SEER	-	3,45	3,54		
Energy class	-	A	A		
Air flow	Interier	m ³ /h	400/360/320	480/430/380	
	Exterier	m ³ /h	800	1200	
Sound pressure level	Interier	dB(A)	50/48/46	50/48/46	
	Exterier	dB(A)	56/54/52	58/56/54	
Sound power level	Interier	dB(A)	59/57/55	59/57/55	
	Exterier	dB(A)	65/63/61	65/63/61	
Dehumidifying volume	/h		1,0	1,6	
Refrigerant type / charge	Type / kg / t eq.CO ₂	R32 / 0,51 / 0,34	R32 / 0,63 / 0,43		
Dimension (w x h x d)	mm	mm	560x375x710	660x428x700	
Package dimension (w x h x d)	mm	mm	623x425x806	739x505x793	
Net/gross weight	kg	kg	43,0 / 47,0	50,0 / 54,0	
Set temperature range	°C		16 ~ 30	16 ~ 30	
Operating temperature range	Cooling	°C	16 ~ 43	16 ~ 43	

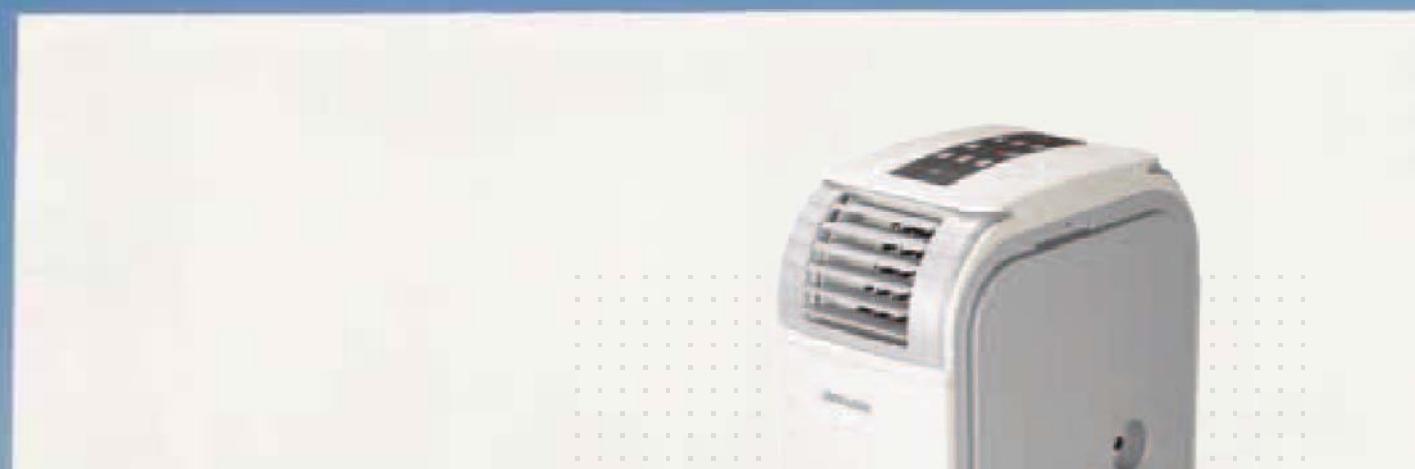
The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice.

Refer to rating label. SEER/SCOP was calculated according to European standards contained in EN14825 for average season, based on part load classifying and testing conditions given by norm EN14511.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual Operation due to environmental change. Power input is tested under standard condition.

LOCAL AIR CONDITIONERS



AMC-11AN AMC-14AN

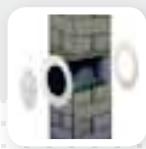
Auto-protection function
Independent dehumidifying function
Microprocessor control
Rotary compressor
Exchangeable filter
24-hour timer
Environmentally friendly
2-year warranty

OPTIONAL ACCESSORIES

AMC-WINK
WINDOW KIT



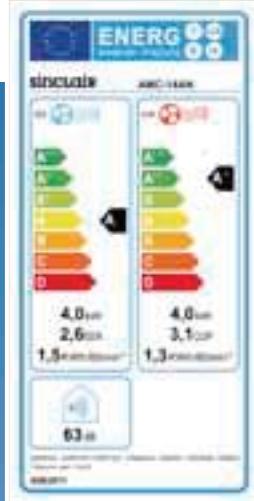
AMC-WK
WALL KIT



AK-15A
WALL CONTROLLER SET



TECHNICAL PARAMETERS



MODEL	AMC-11AN		AMC-14AN
Capacity	Cooling	kW	3,0
	Heating	kW	3,0
Optimal room size	m²		15-25
Frekvence/Napětí	Hz / V		1~ / 50 / 220-240
Rated current	Cooling/Heating	A	5,8
Power input	Cooling/Heating	W	1200 / 1000
EER / COP	W/W		2,6 / 3,1
Energy class	Cooling/Heating		A / A++
Noise - indoor unit	Min/Max	dB(A)	62
Air flow	m³/h		400
Dehumidifying volume	l/h		50
Refrigerant type/ charge	Type / kg / t eq.CO ₂		R410A / 0,55 / 1,15
Global Warming Potential	GWP value		2088
Dimension (w x h x d)	mm		300x778x505
Package dimension (w x h x d)	mm		330x815x550
Net weight	kg		28,5 / 30,7
Operating temperature	Cooling	°C	17 ~ 32
	Heating	°C	7 ~ 25

R410A (50% HFC-32, 50% HFC-125), GWP 2088

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Hermetically sealed system.

This model can be used inside the room, but with use of module AK-15A can be also installed outside to keep the noise out of room.



PORATABLE SERIES

MOBILE DEHUMIDIFIERS

CFO-16E
CFO-20N
CFO-45E

Powerful Dehumidifying Function
Silent operation and Mode Indicators
Microprocessor control
Drying
low Power consumption
Autorestart*
Indication of opened water tank*
External drain water outlet*
Protection of overflowing*
2-year Warranty

* (CFO-16E, CFO-20N)



TECHNICAL PARAMETERS



MODEL		CFO-16E	CFO-20N	CFO-45E
Dehumidifying volume	l/day	16,0	20,0	45,0
Power supply	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Power input / Max. power input	W	280 / 390	330 / 480	740 / 830
Rated current	A	1,3	1,7	3,8
Sound pressure level	dB	45 / 43	45 / 43 / 41	46 / 44
Air flow	m³/h	100 / 80	150 / 130 / 115	300 / 200
Water tank volume	l	3,0	4,9	4,0
Optimal room size	m²	20	28	40
Refrigerant* / charge	Type / kg / t eq.CO ₂	R134A / 0,12 / 0,16	R134A / 0,20 / 0,26	R410A / 0,30 / 0,63
Dimension (w x h x d)	mm	353x496x225	343x523x270	515x510x238
Package dimension (w x h x d)	mm	393x510x271	393x312x540	575x565x290
Net/gross weight	kg	12,0 / 13,0	14,5 / 16,0	18,5 / 20,5
Operating temperature	°C	5 ~ 35	5 ~ 35	5 ~ 35

R410A (50% HFC-32, 50% HFC-125), GWP 2088

R134A (100% HFC-134a), GWP 1300

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

The values stated in the sheet are complying with norm EN810

Dehumidifying volume is measured according to EN60335-2-40, test conditions: DB 30%, RH 80%

Hermetically sealed system.

TAKING ADVANTAGE OF REFRIGERATION PRINCIPLE, THE DE-HUMIDIFIER POWERFULLY REMOVES PARTIAL MOISTURE FROM AIR TO DROP THE HUMIDITY OF THE ROOM AND KEEP INDOOR AIR DRY AND COMFORTABLE. ALSO, YOU CAN TAKE ADVANTAGE OF ITS DEHUMIDIFYING ABILITY TO HELP TO DRY THE LAUNDRY QUICKER.

WITH THE USE OF THIS DEVICE YOU ARE ALSO HELPING TO PROTECT YOUR FURNITURE AND HOME EQUIPMENT, DURING THE TIMES OF HIGH AIR HUMIDITY.

AIR PURIFIER

SP-300A



SP-240A



NEW

SP-240A SP-300A

Plasma Ion and Anion generator (SP-240A)
Plasma Anion generator (SP-300A)
Odor control
Electrostatic de-dusting mode
Auto detecting of air quality
Odor&dust sensor
Humidification function (SP-240A)
Timer
Filter change monitor
Remote controller
2-year Warranty

OPTIONAL ACCESSORIES

SPF-300 REPLACEMENT DUST FILTERS
SPDF-240 REPLACEMENT DUST FILTERS
SPWF-240 REPLACEMENT HUMIDIFYING FILTERS



TECHNICAL PARAMETERS



MODEL		SP-240A	SP-300A
Recommended cleaning area	m ²	15 - 22	20 - 30
Frequency	Hz	50	50
Voltage	V	220-240	220-240
Rated current	A	0,25	0,28
Power input (max.)	W	58	95 (Turbo) / 85 / 75 / 60
Sound pressure level	dB(A)	48 / 42 / 35 / 27 (Quiet operation)	53 (Turbo) / 48 / 38 / 28
Air flow volume	m ³ /hr	240 / 200 / 160 / 80 (Quiet operation)	300 (Turbo) / 230 / 150 / 75
Cleaning volume	m ³ /hr	160	180
Humidification	ml/hr	380	-
Ion and Anion generator	-	+	(only anions)
Air filtration system	type	Plastic antiseptic filter with silver ion, Cotton LTC Catalyst filter, HIMOP/HEPA filter, Active carbon filter, Electrostatic filter (only SP-240A)	
Timer	hr	0,5 - 24	1,2 or 4
Sets of filters (replacement)	type	SPDF-240 (DUST), SPWF-240 (WATER)	SPF-300
Dimension (w x h x d)	mm	385x608x278	396x576x245
Package dimension (w x h x d)	mm	433x679x318	446x615x300
Net/ gross weight	kg	11,0 / 13,0	10,0 / 12,0

PROTECT YOUR FAMILY WITH THIS NEW FEATURE

LOWER YOUR CHANCES OF BECOMING SICK WITH FLU OR ANY OTHER ILLNESS CAUSED BY AIR-BORNE BACTERIA. YOU CAN LOWER THE ALLERGENS IN THE AIR, IMPROVING LIFE OF ALLERGIC PERSONS.

OPTIONAL ACCESSORIES



SCMI-01 SINCLAIR COMMUNICATION MODULE

The module is designed for applications requiring source of coldness or heat, such as cooling for air-conditioning systems or heating with connected hydro box. The SCMI-01 control module is designed for controlling ASGE-xxAIN WK and ASGE-xxAIN-3 WK outdoor inverter units. This module can operate in 3 modes: the slave unit (control by 0-10V), the autonomous pressure (evaporation temperature) control mode and the autonomous temperature control mode for cooling or heating.

Power indicator and optional and three yellow LEDs indicate switching of the module relays.



FMD-01 FAN MOTOR CONTROL MODULE

This fan module FMD-01 can control fan motor of NEW UNI DC SERIES indoor units (ASF-xxAIN, ASC-xxAIN, ASD-xxAIN).

SDM-01 DOOR MODULE

Door module is used to control NEW UNI DC INVERTER outdoor units ASGE-XXAIN WK and ASGE-XXAIN-3 WK.

SND-01 DISPLAY BOARD

Using wall-mounted display, you can control duct units ASD-xxAIN. It indicates set operation mode and set temperature. It enables switching the unit into automatic cooling or heating mode and displaying error code (report). It works as DO signal receiver, too.

SDC-01, SIC-01 CONVERTER

Communication converter is used for detection of communication protocol and for communication with PC for diagnosis of the units series NEW UNI DC INVERTER and S-THERM heat pumps.



SCC-16 CENTRALIZED CONTROL AND WEEKLY TIMER

The centralized controller allows you to centralize up to 16 units at the same time and provide weekly start stop times.

Via a telephone network and p.c. you can also monitor the installed system.

The central controller can be used for the units which are equipped with the wire controller.



G2S MODUL GSM

It is used for controlling SINCLAIR air-conditioners by means of your mobile phone. It applies IR transfer for communication with the air-conditioner, therefore there is no need to connect it to the air-conditioner whatsoever. In this view, it operates as another remote controller.

The module is equipped with two transmitting IR diodes, signalizing diodes, slot for inserting SIM card and with connectors for connecting power supply cable and for connecting to the USB port of a computer.

SPB-01 PORT BOARD

This port board can be connected to display board of indoor units of KITE series. It includes on/off port, alarm port, wired and central controller terminal board.

SWM-01 WIFI MODULE

This USB wifi module can be connected to indoor unit to achieve long distance control with smart phone or tablet.

SUMMARY

- 4 FEATURES
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