V016-EN-03

RESIDENTIAL AIR CONDITIONING 2016

sinclair
AIR CONDITIONING

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.

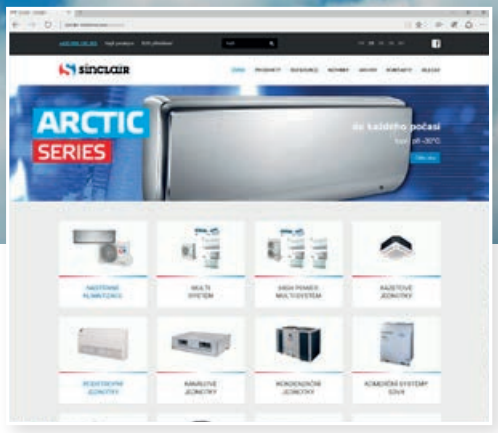
Thanks to the attention paid to research, development, manufacturing and product testing as well as to the after sales support, SINclaIR has reached a high level of quality and reliability.

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.

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 Vocs 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 PLASMATEC.

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 consuption 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-xxAIx).

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 sulphyde 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. TiO^2 contained has strong photocatalyst effect but is enviromental 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

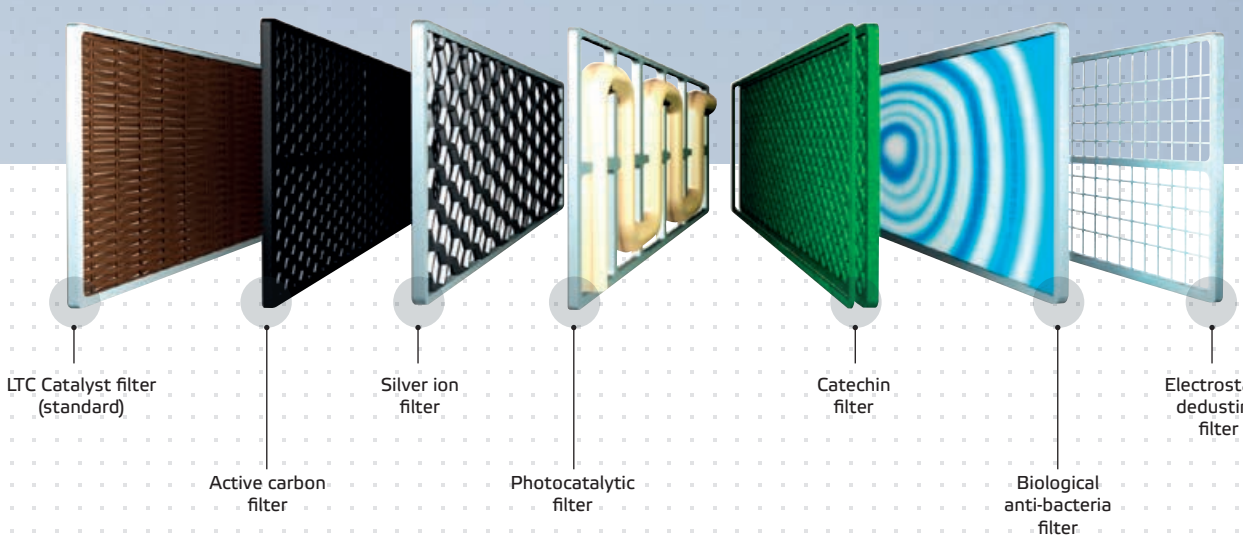
Silver ion filter is a new kind of high-efficient sterilizing products. Silver ion is a colorless and tasteless ion that brings no side effect, irritation, pollution, drug-tolerance or volatilization. Since the ion recycles itself after sterilizing, it is durable and can effectively stop bacteria from 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 bacterias 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).

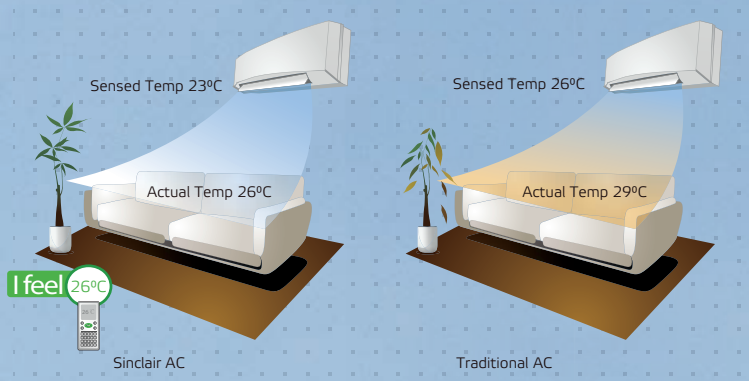


For availability, consult the manufacturer.

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

-18ºC COOLING

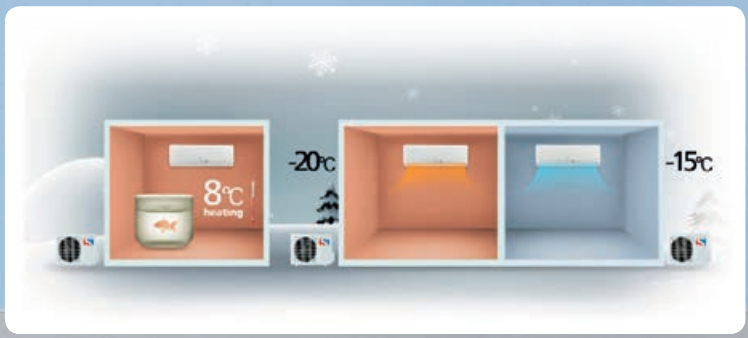
Cooling at -18ºC while keep a reliable operation. As the outdoor temperature changes, the frequency of compressor and the speed of fan adjusts accordingly.

-30ºC HEATING

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

8ºC HEATING

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

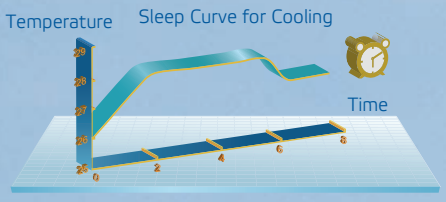


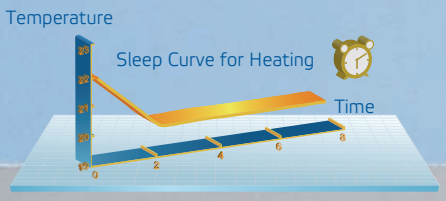
COLD AIR PREVENTION

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.





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.

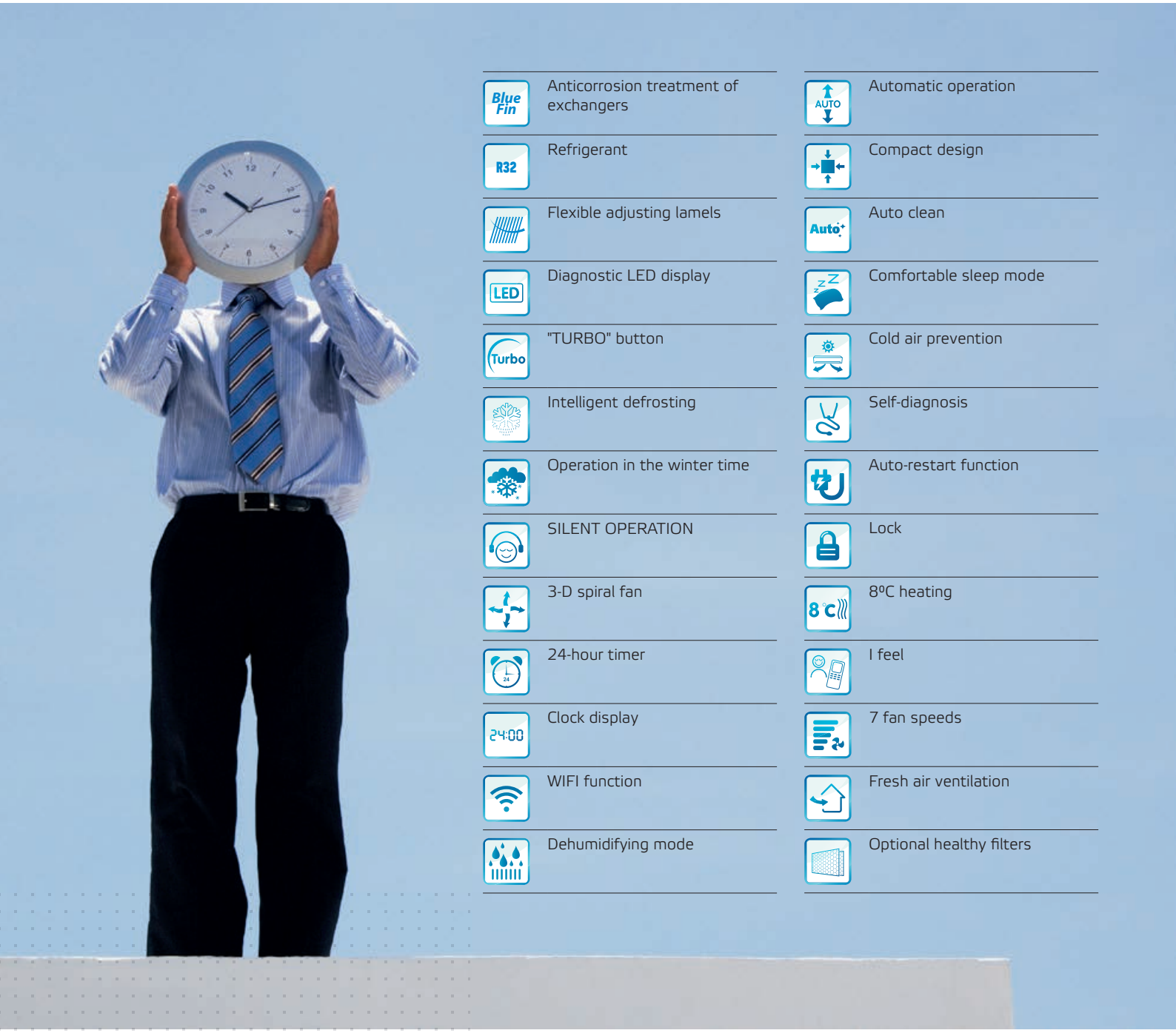
FUNCTION DRYING

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

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

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

R410A

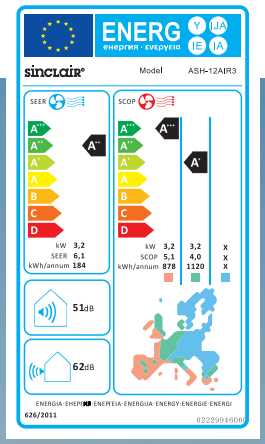
DC INVERTER

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 (0,6-3,6) / 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 / 1040		
Rated power input cooling / heating	W		1400	1500		
Power current cooling / heating	A		3,6 / 3,5	4,5 / 4,6		
Rated current cooling / heating	A		7,2	7,2		
SEER / SCOP	-		5,8 / 4,0	6,1 / 4,0		
Energy class	-		A+ / A+	A++ / A+		
Air flow	ID	m^3/h	500 / 400 / 300 / 250	500 / 400 / 300 / 250		
	OD	m^3/h	1600	2200		
Sound pressure level	ID	dB(A)	38/ 34/ 31/ 28	39/ 34/ 31/ 28		
	OD	dB(A)	50	52		
Dehumidifying volume	l/h		0,8	1,4		
Refrigerant type / charge	Type / kg / t eq.CO_2		R410A / 0,70 / 1,46	R410A / 0,9 / 1,88		
Pipe diameter	Liquid side	inch / mm	¼ / 6,4	¼ / 6,4		
	Gas side	inch / mm	⅜ / 9,5	⅜ / 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	8,5 / 10,0	8,5 / 10,0		
	OD	kg	27,0 / 29,0	29,0 / 32,0		
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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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.

ELEMENT SERIES

Affordable solution for your home

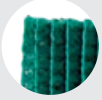
ASH-09AIE2
ASH-12AIE2
ASH-18AIE2
ASH-24AIE2

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

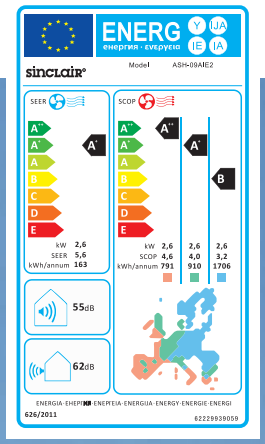
OPTIONAL ACCESSORIES

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)	6,5 (2,5-6,6) / 7,0 (2,5-7,6)
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	2180 / 2220
Rated power input cooling / heating	W		1550	1650	2650	2800
Power current cooling / heating	A		3,8 / 4,0	5,1 / 4,9	7,4 / 7,8	9,7 / 10,5
Rated power current cooling / heating	A		6,9	7,3	11,8	12,5
SEER / SCOP	-		5,6 / 4,0	5,6 / 4,0	5,6 / 4,0	5,6 / 4,0
Energy class	-		A+ / A+	A+ / A+	A+ / A+	A+ / A+
Air flow	ID	m^3/h	600/ 520/ 370/ 280	680/ 560/ 410/ 300	800/ 680/ 560/ 460	1000/ 800/ 700/ 550
	OD	m^3/h	1600	1600	3200	4000
Sound pressure level	ID	dB(A)	41/ 38/ 30/ 24	42/ 39/ 31/ 25	49 / 44 /40 /35	51/ 47/ 42/ 39
	OD	dB(A)	51	53	55	58
Dehumidifying volume	l/h		0,8	1,4	1,8	2,1
Refrigerant type / charge	Type / kg / t eq.CO_2		R410A / 0,70 / 1,46	R410A / 0,85 / 1,77	R410A / 1,30 / 2,71	R410A / 1,80 / 3,76
Pipe diameter	Liquid side	inch / mm	¼ / 6,4	¼ / 6,4	¼ / 6,4	¼ / 6,4
	Gas side	inch / mm	⅜ / 9,5	⅜ / 9,5	½ / 12,7	⅝ / 15,9
Standard pipe length	m		5	5	5	5
Max. pipe length	m		15	20	25	25
Max. elevation / Drop height	m		10	10	10	10
Additional refrigerant	g/m		20	20	20	50
Dimension (w x h x d)	ID	mm	770x283x201	770x283x201	865x305x215	1007x315x219
	OD	mm	776x540x320	776x540x320	963x700x396	1000x790x427
Package dimension (w x h x d)	ID	mm	847x345x276	847x345x276	948x383x310	1076x398x328
	OD	mm	851x595x363	851x595x363	1029x750x458	1083x855x488
Net/gross weight	ID	kg	8,0 / 9,5	9,0 / 10,5	12,0 / 15,0	14,0 / 17,0
	OD	kg	28,0 / 31,0	29,0 / 32,0	46,0 / 50,5	55,5 / 60,5
Set temperature range	°C		16~30	16~30	16~30	16~30
Operating temperature range	Cooling	°C	-15~43	-15~43	-15~43	-15~43
	Heating	°C	-20~24	-20~24	-20~24	-20~24

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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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.

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
8ºC heating
"I FEEL" function
Standard inbuilt wifi module
Cold plasma generator
Hidden display and IR receiver

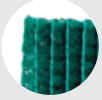
WIFI

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

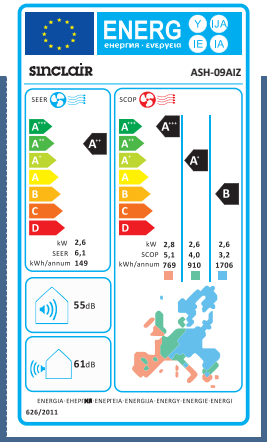
HEALTHY FILTERS



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)	6,7 (2,0-8,2) / 7,3 (2,0-8,5)
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		805 / 755	1084 / 989	1580 / 1410	1875 / 1945
Rated power input cooling / heating	W		1550	1650	2600	3800
Power current cooling / heating	A		3,7 / 3,4	5,2 / 5,0	7,0 / 6,3	8,3 / 8,6
Rated power current cooling / heating	A		6,9	7,3	11,5	16,9
SEER / SCOP	-		6,1 / 4,0	6,1 / 4,0	6,1 / 4,0	6,3 / 4,0
Energy class	-		A++ / A+	A++ / A+	A++ / A+	A++ / A+
Air flow	ID	m^3/h	560/ 490/ 430/ 330	660/ 540/ 460/ 330	800/ 720/ 610/ 520	1150/ 1050/ 950/ 850
	OD	m^3/h	1600	1600	3200	3200
Sound pressure level	ID	dB(A)	26/ 32/ 36/ 39	26/ 22/ 39/ 42	36/ 39/ 42/ 46	39/ 42/ 45/ 48
	OD	dB(A)	52	53	56	60
Dehumidifying volume	l/h		0,8	1,4	1,8	2,4
Refrigerant type / charge	Type / kg / t eq.CO_2		R410A / 0,70 / 1,46	R410A / 0,85 / 1,77	R410A / 1,30 / 2,71	R410A / 1,90 / 3,97
Pipe diameter	Liquid side	inch / mm	¼ / 6,4	¼ / 6,4	¼ / 6,4	¼ / 6,4
	Gas side	inch / mm	⅜ / 9,5	⅜ / 9,5	½ / 12,7	⅝ / 15,9
Standard pipe length	m		5	5	5	5
Max. pipe length	m		19	20	25	25
Max. elevation / Drop height	m		10	10	10	10
Additional refrigerant	g/m		20	20	20	50
Dimension (w x h x d)	ID	mm	790x275x200	845x289x209	970x300x224	1078x325x246
	OD	mm	776x540x320	776x540x320	955x700x396	955x700x396
Package dimension (w x h x d)	ID	mm	866x367x271	921x281x379	1041x383x320	1148×413×350
	OD	mm	851x595x363	851x595x363	1029x750x458	1029x750x458
Net/gross weight	ID	kg	9,0 / 11,0	10,0 / 12,0	13,5 / 16,5	17,0 / 20,5
	OD	kg	28,0 / 31,0	29,0 / 32,0	45,0 / 49,5	53,0 / 57,5
Set temperature range	°C		16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30
Operating temperature range	Cooling	°C	-15 ~ 43	-15 ~ 43	-15 ~ 43	-15 ~ 43
	Heating	°C	-22 ~ 24	-22 ~ 24	-22 ~ 24	-22 ~ 24

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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

WIFI

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

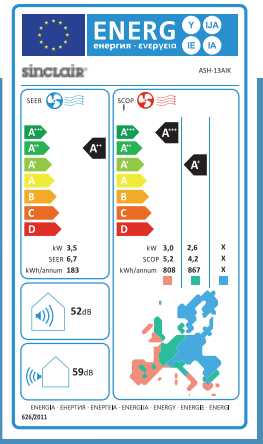
KJR-12B

SWM-01

SPB-01, SPB-02

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	m^3/h	472/ 360/ 254	563/ 497/ 224	870/ 730/ 500	1176/ 921/ 446
	OD	m^3/h	1900	2000	2100	2700
Sound pressure level	ID	dB(A)	20/ 28/ 35/ 40	24/ 33/ 40/ 41	27/ 34/ 43/ 45	28/ 35/ 45/ 47
	OD	dB(A)	55	56	58	61
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	¼ / 6,4	¼ / 6,4	¼ / 6,4	⅜ / 9,5
	Gas side	inch / mm	⅜ / 9,5	⅜ / 9,5	½ / 12,7	⅝ / 15,9
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	1106x342x232
	OD	mm	770x555x300	800x554x333	800x554x333	845x702x363
Package dimension (w x h x d)	ID	mm	785x375x285	875x375x285	1045x405x305	1195x420x315
	OD	mm	900x585x345	920x615x390	920x615x390	965x755x395
Net/gross weight	ID	kg	7,0 / 9,3	7,7 / 10,2	10,1 / 13,6	13,2 / 17,0
	OD	kg	26,6 / 29,0	29,1 / 31,9	37,8 / 40,5	48,4 / 51,6
Set temperature range	°C		17 ~ 32	17 ~ 32	17 ~ 32	17 ~ 32
Operating temperature range	Cooling	°C	-15 ~ 50	-15 ~ 50	-15 ~ 50	-15 ~ 50
	Heating	°C	-15 ~ 30	-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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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.

ARCTIC SERIES

As unique as a snowflake

HEATING TILL -30ºC

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 -18ºC to 54ºC outdoor temperature
Heating from -30ºC to 24ºC outdoor temperature
Radio controlled (RC) remote controller

PLASMA TEC DC INVERTER

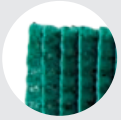
SMART

WIFI SMART APP

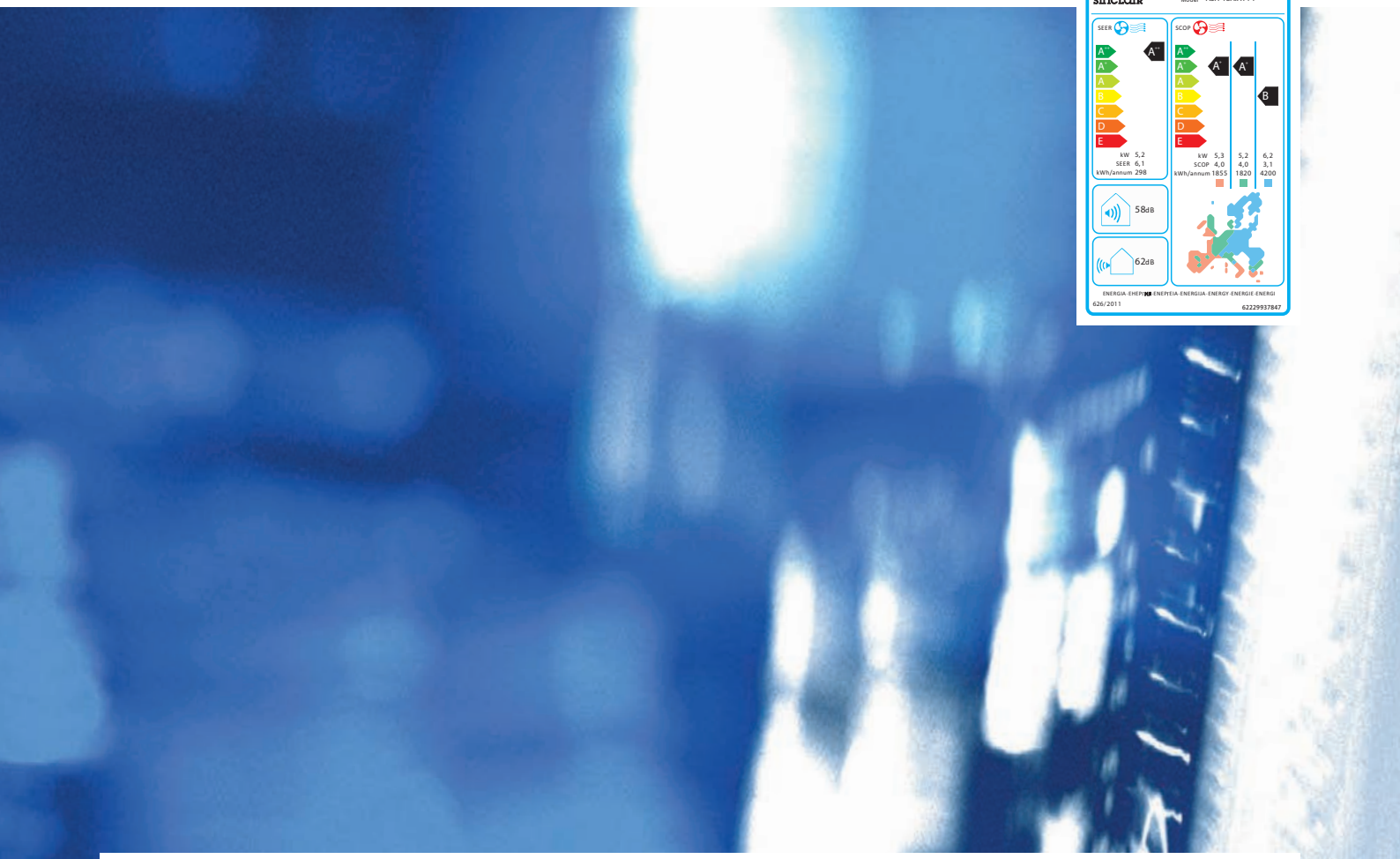
THE INDOOR UNIT HAS INBUILT WIFI MODULE, WITH WHICH THE AIR CONDITIONER CAN BE CONTROLLED BY IOS OR ANDROID PHONE / TABLET.

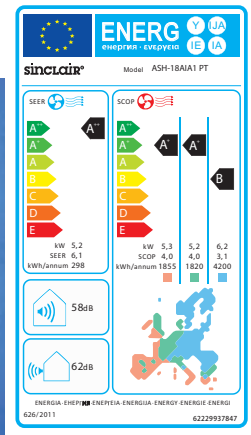
OPTIONAL ACCESSORIES

HEALTHY FILTERS



TECHNICAL PARAMETERS

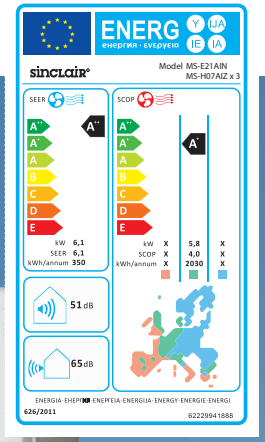




MODEL			ASH-13AIA1 PT	ASH-18AIA1 PT		
Capacity cooling / heating	kW		3,5 (0,4-4,5) / 3,6 (0,6-5,4)	5,3 (0,9-5,7) / 5,3 (0,8-7,2)		
Power supply	Hz / V		1~ / 50 / 220-240	1~ / 50 / 220-240		
	Unit		Outdoor	Outdoor		
Power input cooling / heating	W		920 / 970	1600 / 1420		
Rated power input cooling / heating	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	m^3/h	720/ 550/ 490/ 420/ 370/ 320/ 290	850/ 750/ 650/ 600/ 500/ 400/ 340		
	OD	m^3/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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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.

MULTI SYSTEM SERIES



MS-E42AI

MC-CXXAI

MC-DXXAI

MS-HXXAISW PT

MS-HXXAIZ

WIFI

MC-FXXAI

MS-PXXAI

NEW

MC-C12AI
MC-C18AI
MC-C24AI

MC-F09AI
MC-F12AI
MC-F18AI
MC-F24AI

MC-D09AI
MC-D12AI
MC-D18AI
MC-D24AI

MS-H07AIZ
MS-H09AIZ
MS-H12AIZ
MS-H18AIZ

MS-H09AISW PT
MS-H12AISW PT

MS-P09AI
MS-P12AI
MS-P18AI

MS-E14AIN
MS-E18AIN
MS-E21AIN
MS-E24AIN
MS-E28AIN

MS-E36AI
MS-E42AI

3-year warranty
Flexible installation
Free combination up to 5 indoor units
Autorestart function
Set temperature range 16-30ºC
Standard wifi control (MS-H09AIZ to MS-H18AIZ)
Standard water pump (cassette units)

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

LED · Auto+ · 24:00 · Turbo · Blue Fin · R410A

DC INVERTER

OPTIONAL ACCESSORIES

G2S

SCC-16
+SCC-16K

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	m^3/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	6,4x3
	Gas side	mm x qty	9,5 x2	9,5 x2	9,5 x3
Max. length of connection pipe	m		20 / 10	20 / 10	60 / 20
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	ºC	-15 ~ 43	-15 ~ 43	-15 ~ 43
	Heating	ºC	-20 ~ 24	-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	m^3/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 / 20	70 / 20	
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	ºC	-15 ~ 43	-15 ~ 43	
	Heating	ºC	-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	m^3/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 / 20	80 / 25	
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	ºC	-15 ~ 48	-15 ~ 48	
	Heating	ºC	-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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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

MS-E14AIN		MS-E21AIN		MS-E24AIN			MS-E28AIN
1 UNIT	2 UNITS	2 UNITS	3 UNITS	2 UNITS	3 UNITS		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		
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
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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+7+9+9+12	9+9+9+9+18	7+9+9+12+18
7+7+7+9	7+9+9+9	9+9+9+18	7+12+12+24	7+7+7+7+9	7+7+9+9+18	9+9+9+12+12	7+9+9+12+24*
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+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 curstomer 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.

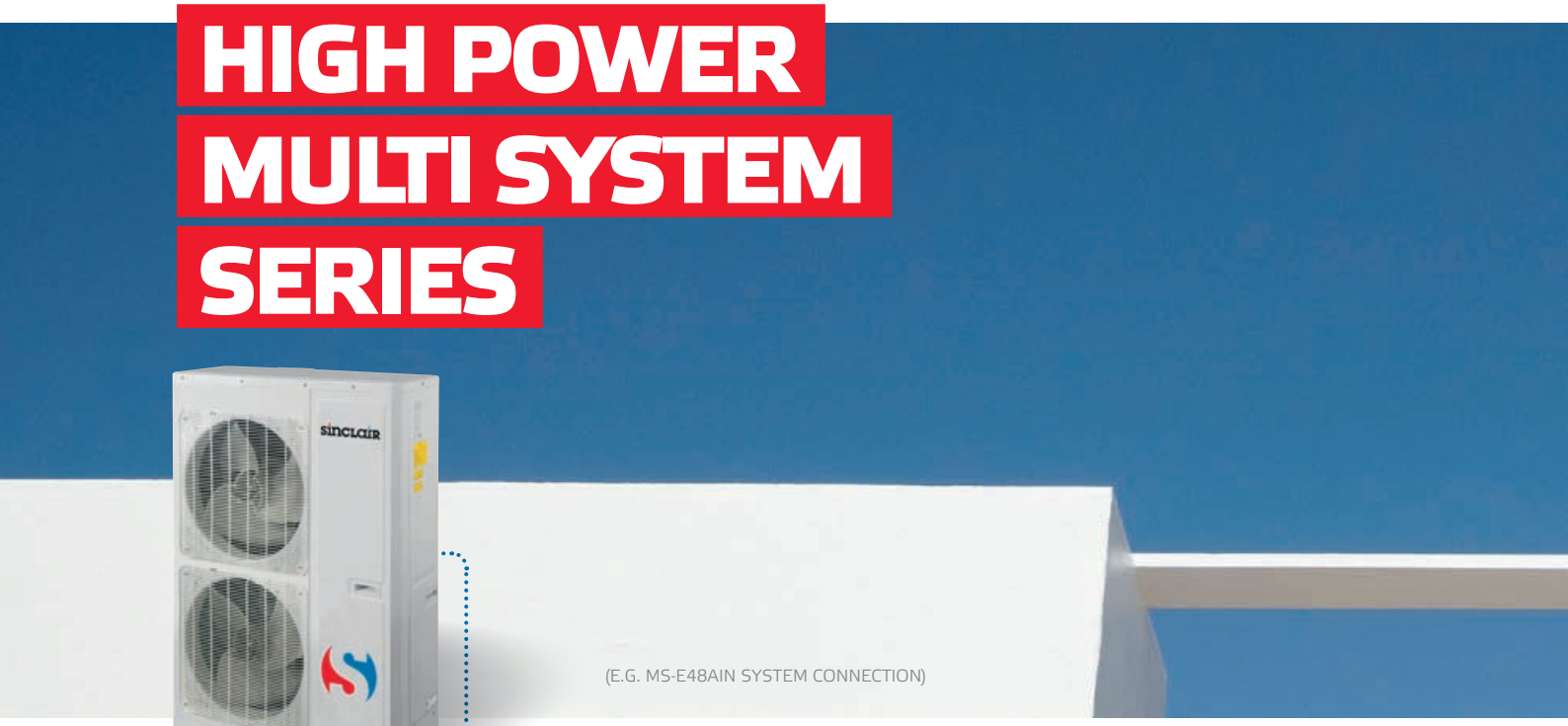
Model			MS-E14AIN	MS-E18AIN	MS-E21AIN	MS-E24AIN	MS-E28AIN	MS-E36AI	MS-E42AI
Max. connection pipe length		m	20	20	60	60	70	70	80
Max. connection pipe length (One indoor unit)		m	10	10	20	20	20	20	25
Max. installation altitude	Outdoor unit is installed under the lower side of indoor unit	m	5	5	10	10	10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

TECHNICAL PARAMETERS
INDOOR UNITS

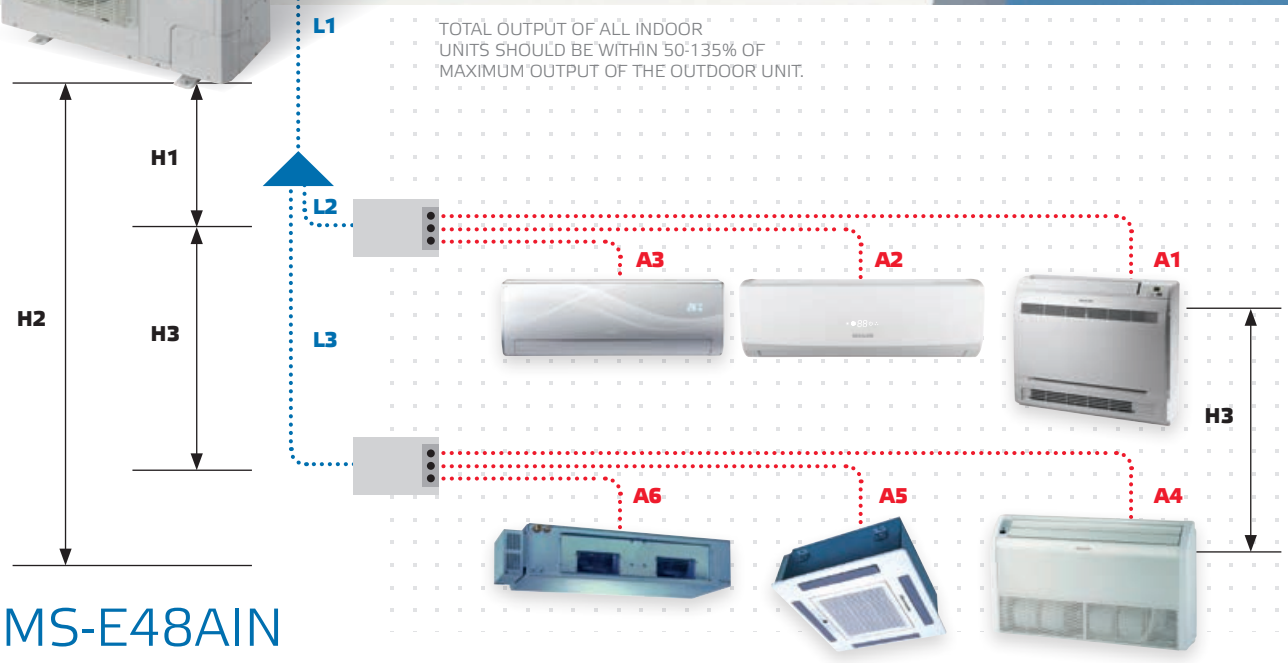
WALL MOUNTED			MS-H09AISW PT	MS-H12AISW PT		
Capacity cooling / heating	kW		2,6 / 2,8	3,5 / 3,8		
Power supply	Hz / V		1~ / 50 / 220-240	1~ / 50 / 220-240		
Air flow	m³/h		450-260	560-280		
Sound pressure level	dB(A)		38/ 35/ 32/ 30/ 28/ 26/ 25	39/ 36/ 34/ 31/ 28/ 27/ 26		
Dehumidifying volume	l/h		0,8	1,4		
Pipe diameter	Liquid side	inch / mm	¼ / 6,4	¼ / 6,4		
	Gas side	inch / mm	⅜ / 9,5	⅜ / 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	inch / mm	¼ / 6,4	¼ / 6,4	¼ / 6,4	¼ / 6,4
	Gas side	inch / mm	⅜ / 9,5	⅜ / 9,5	⅜ / 9,5	½ / 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	inch / mm	¼ / 6,4	¼ / 6,4	¼ / 6,4	⅜ / 9,5
	Gas side	inch / mm	⅜ / 9,5	⅜ / 9,5	½ / 12,7	⅝ / 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	inch / mm	¼ / 6,4	¼ / 6,4	⅜ / 9,5	
	Gas side	inch / mm	⅜ / 9,5	½ / 12,7	⅝ / 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	inch / mm	¼ / 6,4	¼ / 6,4	¼ / 6,4	⅜ / 9,5
	Gas side	inch / mm	⅜ / 9,5	⅜ / 9,5	½ / 12,7	⅝ / 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	inch / mm	¼ / 6,4	¼ / 6,4	¼ / 6,4	
	Gas side	inch / mm	⅜ / 9,5	⅜ / 9,5	½ / 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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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



(E.G. MS-E48AIN SYSTEM CONNECTION)



TOTAL OUTPUT OF ALL INDOOR UNITS SHOULD BE WITHIN 50-135% OF MAXIMUM OUTPUT OF THE OUTDOOR UNIT.

MS-E48AIN
MS-E56AIN

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

R410A

DC INVERTER

OPTIONAL ACCESSORIES

BRANCH JOINTS
MS-01BI

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

MODEL		MS-E48AIN	MS-E56AIN
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	4600 / 4250	5200 / 4700
Rated power input / current	W/A	6000 / 12	6500 / 12
EER / COP	-	2,70 / 3,20	2,65 / 3,50
Air Flow Volume	m^3/h	6600	6600
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 (ΣL+ΣA)	m	135	145
Max. total pipe length between OD and Dbox (ΣL)	m	55	55
Max. total pipe length between Dbox and ID (ΣA)	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	993x1500x453	993x1500x453
Net/ gross weight	kg	121,0 / 132,0	121,0 / 132,0
Operation range cooling/ heating	°C (DB)	10~48/ -15~27	10~48/ -15~27

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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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-E48AIN						
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+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+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+12+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+7+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+9	7+7+7+7+7+12+12	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+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+7+9	7+7+7+7+7+7+7+12	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+9+9+9+9

(unit: x1000Btu/h)
When connecting other than recommended combinations, the system will not work properly.

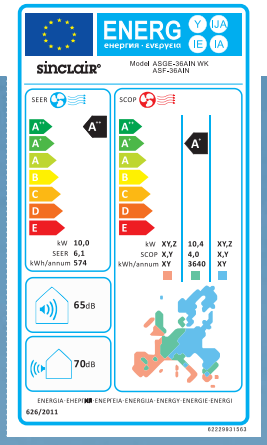
Big choice of indoor units for combination: the model MS-E48AIN offers 195 possible combinations, model MS-E56AIN has 286 possible combinations.

COMBINATION TABLE

MS-E56AIN						
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	7+9+9+12+12+18	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+12	7+9+12+12+12+12	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+18	7+9+12+12+12+18	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+24	7+12+12+12+12+12	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+12+12	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+12+18	9+9+9+9+9+12	9+9+12+12+12+12
7+7+7+7+9+12	7+7+7+9+9+24	7+7+9+9+9+9	7+7+9+12+12+18	7+9+9+9+12+24	9+9+9+9+9+18	9+9+12+12+12+18
7+7+7+7+9+18	7+7+7+9+12+12	7+7+9+9+9+12	7+7+9+12+12+24	7+9+9+9+18+18	9+9+9+9+9+24	9+12+12+12+12+12
7+7+7+7+9+24	7+7+7+9+12+18	7+7+9+9+9+18	7+7+9+12+18+18	7+9+9+12+12+12	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
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	7+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+12+12	7+7+7+9+9+9+24	7+7+9+9+9+9+12	7+9+9+9+9+9+12	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+12+18	7+7+7+9+9+12+12	7+7+9+9+9+9+18	7+9+9+9+9+9+18	9+9+9+9+9+12+12
7+7+7+7+7+9+9	7+7+7+7+7+18+18	7+7+7+7+12+12+12	7+7+7+9+9+12+18	7+7+9+9+9+12+12	7+9+9+9+9+12+12	9+9+9+9+12+12+12
7+7+7+7+7+9+12	7+7+7+7+9+9+9	7+7+7+7+12+12+18	7+7+7+9+12+12+12	7+7+9+9+9+12+18		
8 UNITS						
7+7+7+7+7+7+7+7	7+7+7+7+7+7+9+9	7+7+7+7+7+7+12+18	7+7+7+7+7+9+12+12	7+7+7+7+7+9+9+9+12	7+7+7+9+9+9+9+12	7+7+9+9+9+9+9+12
7+7+7+7+7+7+7+9	7+7+7+7+7+7+9+12	7+7+7+7+7+9+9+9	7+7+7+7+7+12+12+12	7+7+7+7+9+9+12+12	7+7+7+9+9+9+12+12	7+9+9+9+9+9+9+9
7+7+7+7+7+7+7+12	7+7+7+7+7+7+9+18	7+7+7+7+7+9+9+12	7+7+7+7+9+9+9+9	7+7+7+9+9+9+9+9	7+7+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+12+12	7+7+7+7+7+9+9+18				
9 UNITS						
7+7+7+7+7+7+7+7+7	7+7+7+7+7+7+7+7+12	7+7+7+7+7+7+7+9+9	7+7+7+7+7+7+7+9+12	7+7+7+7+7+7+9+9+9	7+7+7+7+7+7+9+9+12	7+7+7+7+7+9+9+9+9
7+7+7+7+7+7+7+7+9						

(unit: x1000Btu/h)

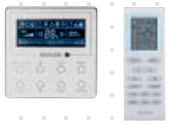
NEW UNI DC INVERTER SERIES



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.

Blue Fin R410A DC INVERTER

OPTIONAL ACCESSORIES

SCMI-01 FMD-01 SCC-16 SDM-01 G2S

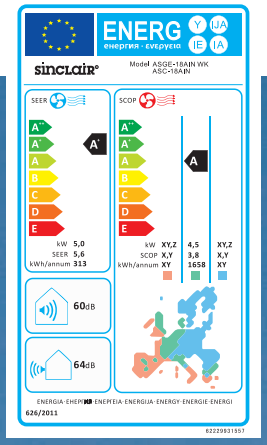
TECHNICAL PARAMETERS

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	m^3/h	600 / 550 / 450	700 / 600 / 500	1000 / 900 / 800	1200 / 1000 / 900	1900 / 1630 / 1520
	OD	m^3/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	⅜ / 9,5	⅜ / 9,5
	Gas side	inch / mm	⅜ / 9,5	⅜ / 9,5	½ / 12,7	⅝ / 15,9	⅝ / 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	1105x1100x440
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	ºC	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48
	Heating	ºC	-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	m^3/h	1900 / 1630 / 1520	1900 / 1630 / 1520	2300 / 2100 / 1900	2500 / 2100 / 1900	
	OD	m^3/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	⅜ / 9,5	⅜ / 9,5	⅜ / 9,5	⅜ / 9,5	
	Gas side	inch / mm	⅝ / 15,9	⅝ / 15,9	⅝ / 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	ºC	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	
	Heating	ºC	-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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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.

NEW UNI DC INVERTER SERIES



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

ASC-XXAIN

ASGE-XXAIN WK

- Anticorrosion treatment of exchangers
- 3-year warranty
- Autorestart function
- 3-D spiral fan
- Standard water pump
- Fresh air supply

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

Blue Fin · R410A · DC INVERTER

OPTIONAL ACCESSORIES

SCMI-01 FMD-01 SCC-16 SDM-01 G2S

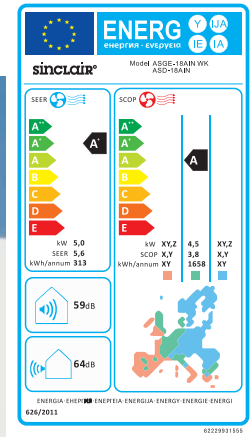
TECHNICAL PARAMETERS

MODEL-ID MODEL-OD			ASC-12AIN ASGE-12AIN WK	ASC-18AIN ASGE-18AIN WK	ASC-24AIN ASGE-24AIN WK	ASC-36AIN ASGE-36AIN WK
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)	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
	OD	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Power input cooling / heating	W		1090 / 1050	1550 / 1640	2180 / 2210	3200 / 3500
Current cooling / heating	A		5,0 / 4,9	7,2 / 7,6	10,1 / 10,2	15,0 / 16,2
SEER / SCOP	-		5,6 / 4,0	5,6 / 3,8	6,1 / 4,0	6,1 / 4,0
Energy class	-		A+ / A+	A+ / A	A++ / A+	A++ / A+
Air flow	ID	m^3/h	700	760	1300	1860
	OD	m^3/h	1800	3200	4000	5100
Sound pressure level	ID	dB(A)	46 / 45 / 43 / 37	47 / 46 / 44 / 37	47 / 46 / 42 / 38	51 / 49 / 46 / 43
	OD	dB(A)	52	56	57	63
Dehumidifying volume	l/h		1,2	1,8	2,4	3,4
Refrigerant	Type / kg / t eq.CO_2		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	⅜ / 9,5	⅜ / 9,5
	Gas side	inch / mm	⅜ / 9,5	½ / 12,7	⅝ / 15,9	⅝ / 15,9
Max. pipe length	m		20	20	30	30
Max. elevation / Drop height	m		15	15	15	15
Standard pipe length	m		7	7	7	7
Additional refrigerant	g/m		30	30	60	60
Dimension (w x h x d)	ID	mm	595x595x240	595x595x240	840x840x240	840x840x320
	OD	mm	850x540x320	955x700x395	980x790x425	1105x1100x440
	Panel	mm	650x50x650	650x50x650	950x60x950	950x60x950
Package dimension (w x h x d)	ID	mm	773x300x733	773x300x733	963x325x963	963x409x963
	OD	mm	881x595x363	1029x750x458	1083x855x488	1158x1236x493
	Panel	mm	763x105x763	763x105x763	1028x130x1043	1028x130x1043
Net/ gross weight	ID	kg	20 ,0 / 24,0	20,0 / 24,0	26,0 / 32,0	31,0 / 38,0
	OD	kg	34,0 / 37,0	47,0 / 50,0	67,0 / 72,0	92,0 / 100,0
	Panel	kg	3,5 / 5,0	3,5 / 5,0	7,0 / 11,0	7,0 / 11,0
Operating temperature range	Cooling	°C	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48
	Heating	°C	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24

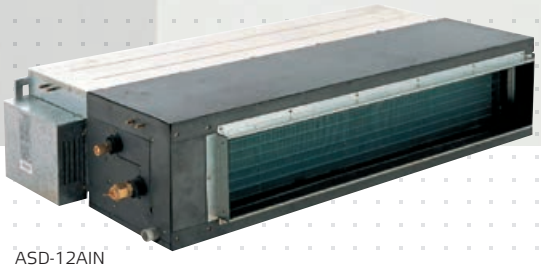
MODEL-ID MODEL-OD			ASC-36AIN ASGE-36AIN-3 WK	ASC-42AIN ASGE-42AIN-3 WK	ASC-48AIN ASGE-48AIN-3 WK	ASC-60AIN ASGE-60AIN-3 WK
Capacity cooling / heating	kW		10,0 (3,2-11,5) / 12,0 (2,9-14,5)	11,0 (3,3-12,0) / 12,5 (3,6-15,0)	14,0 (6,0-14,8) / 16,0 (5,2-18,0)	16,0 (7,4-16,5) / 16,5 (6,2-18,5)
Power supply	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 / 3500	3900 / 3800	4600 / 4500	5700 / 4600
Current cooling / heating	A		5,4 / 5,8	6,7 / 6,6	8,9 / 7,8	9,8 / 8,2
SEER / SCOP	-		6,1 / 4,0	6,1 / 4,0	5,6 / 3,8	6,1 / 4,0
Energy class	-		A++ / A+	A++ / A+	A+ / A	A++ / A+
Air flow	ID	m^3/h	1860	1860	2300	2400
	OD	m^3/h	5100	6600	6600	8800
Sound pressure level	ID	dB(A)	51 / 49 / 46 / 43	51 / 49 / 46 / 43	53 / 52 / 47 / 41	54 / 53 / 47 / 41
	OD	dB(A)	63	64	64	68
Dehumidifying volume	l/h		3,4	3,7	4,5	5
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	⅜ / 9,5	⅜ / 9,5	⅜ / 9,5	⅜ / 9,5
	Gas side	inch / mm	⅝ / 15,9	⅝ / 15,9	⅝ / 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	840x840x320	840x840x320	910x910x290	910x910x290
	OD	mm	1105x1100x440	960x1350x410	960x1350x410	1085x1365x425
	Panel	mm	950x60x950	950x60x950	1040x65x1040	1040x65x1040
Package dimension (w x h x d)	ID	mm	963x409x963	963x409x963	1023x375x993	1023x375x993
	OD	mm	1158x1236x493	1043x1500x453	1043x1500x453	1143x1505x478
	Panel	mm	1028x130x1043	1028x130x1043	1137x140x1137	1137x140x1137
Net/ gross weight	ID	kg	31,0 / 38,0	31,0 / 38,0	43,0 / 50,0	43,0 / 50,0
	OD	kg	98,0 / 106,0	108,0 / 118,0	114,0 / 124,0	126,0 / 138,0
	Panel	kg	7,0 / 11,0	7,0 / 11,0	8,0/ 12,0	8,0/ 12,0
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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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.

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 G2S SND-01

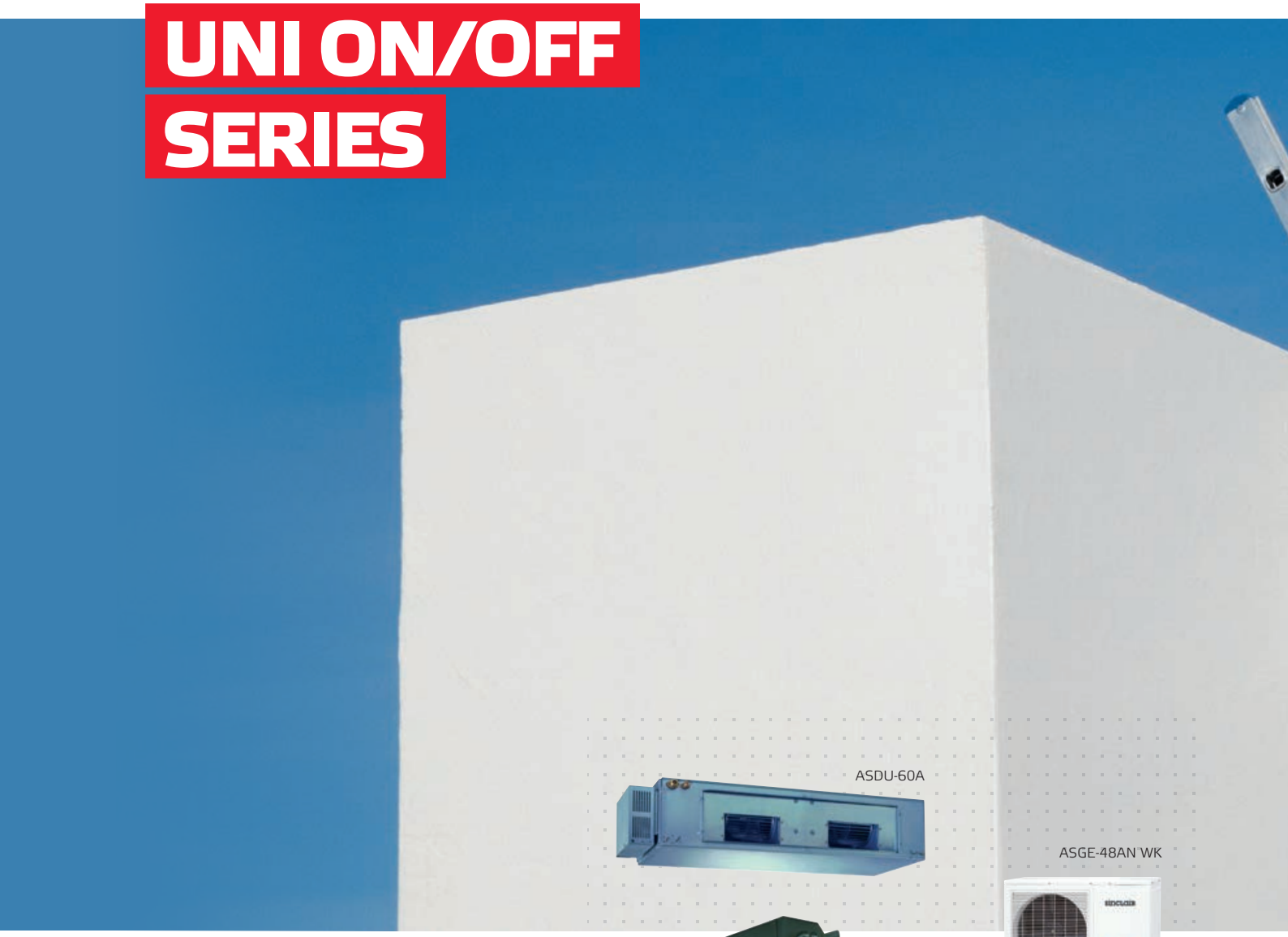
TECHNICAL PARAMETERS

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	220-240 / 50 / 1
	OD	Hz / V	220-240 / 50 / 1	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	m^3/h	650	750	1000	1400	2100
	OD	m^3/h	1800	1800	3200	4000	5100
Sound pressure level	ID	dB(A)	36 / 35 / 33 / 28	37 / 36 / 34 / 28	40 / 39 / 36 / 28	47 / 46 / 44 / 40	53 / 52 / 48 / 44
	OD	dB(A)	52	52	56	57	63
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	¼ / 6,4	¼ / 6,4	¼ / 6,4	⅜ / 9,5	⅜ / 9,5
	Gas side	inch / mm	⅜ / 9,5	⅜ / 9,5	½ / 12,7	⅝ / 15,9	⅝ / 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	1225x290x775
	OD	mm	850x540x320	850x540x320	955x700x395	980x790x425	1105x1100x440
Package dimension (w x h x d)	ID	mm	1023x320x748	1123x323x798	1123x323x798	1348x283x597	1338x305x877
	OD	mm	881x595x363	881x595x363	1029x750x458	1083x855x488	1158x1236x493
Net/ gross weight	ID	kg	26,0 / 32,0	33,0 / 38,0	33,0 / 38,0	34,0 / 39,0	46,0 / 53,0
	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 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	m^3/h	2100	2100	2400	3000	
	OD	m^3/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	⅜ / 9,5	⅜ / 9,5	⅜ / 9,5	⅜ / 9,5	
	Gas side	inch / mm	⅝ / 15,9	⅝ / 15,9	⅝ / 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	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	57,0 / 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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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.

UNI ON/OFF SERIES



ASDU-60A

ASGE-48AN WK

ASCU-48AN

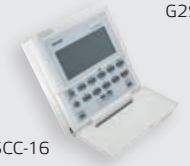
ASFU-48AN

STANDARD

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)

OPTIONAL ACCESSORIES



SCC-16

G2S

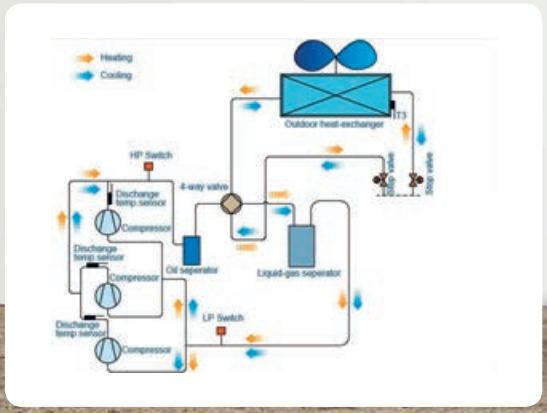
TECHNICAL PARAMETERS

MODEL-ID MODEL-OD			ASFU-48AN ASGE-48AN WK	ASCU-48AN ASGE-48AN WK	ASDU-48AN ASGE-48AN WK	ASDU-60A 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	m^3/h	2100/ 1900/ 1800	1660/ 1570/ 1500	2300 / 2110 / 1850	2500 / 2070 / 1730
	OD	m^3/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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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.

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 CURCUIT FOR THE RIGHT AND RELIABLE FUNCTION OF THE UNIT.

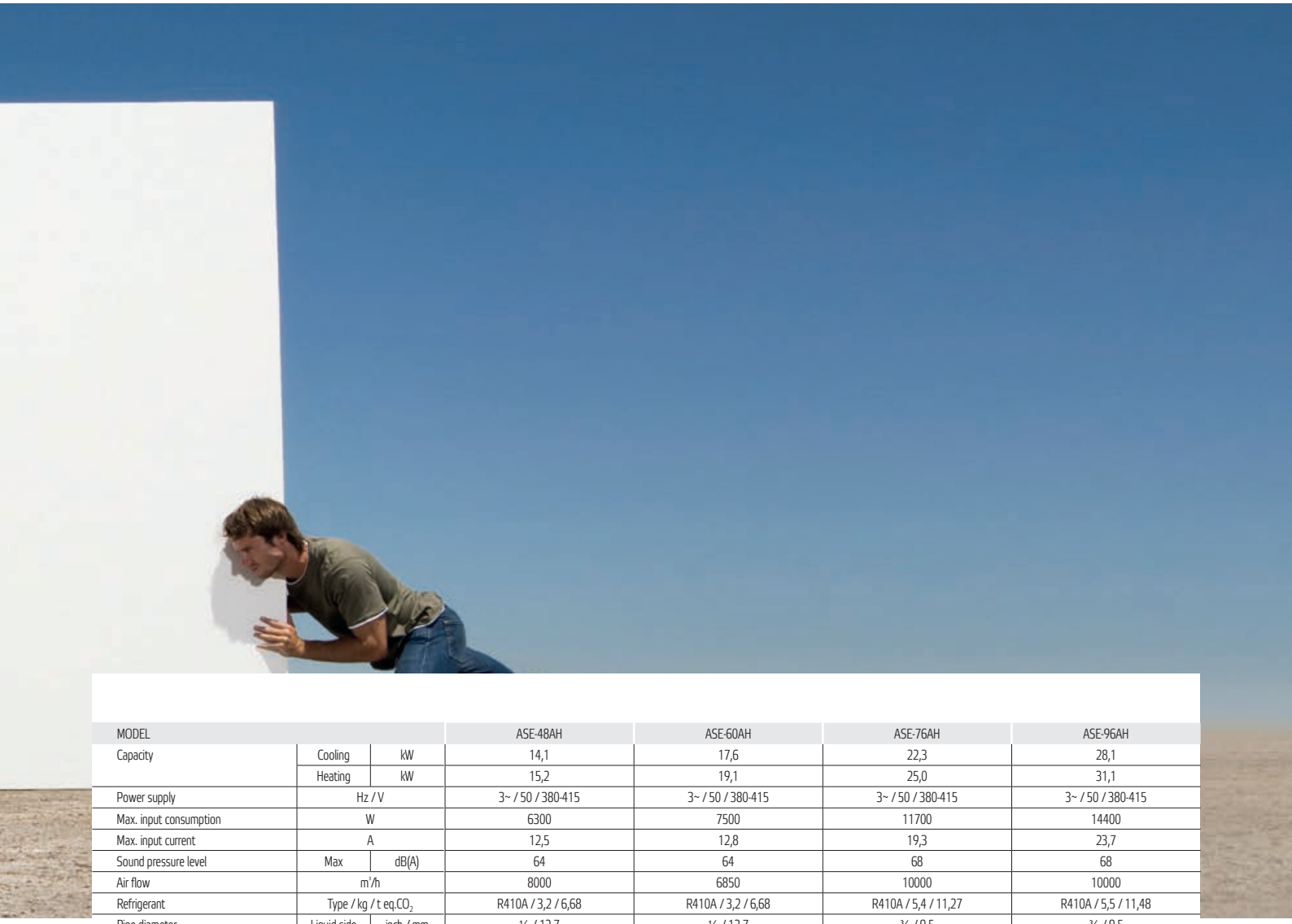
Blue Fin R410A

ASE-48AH / ASE-60AH

ASE-192AH

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
Sound pressure level	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	⅜ / 9,5	⅜ / 9,5
	Gas side	inch / mm	¾ / 19,1	¾ / 19,1	⅞ / 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	ºC	18 ~ 43	18 ~ 43	17 ~ 46	17 ~ 46
	Heating	ºC	-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	
Sound pressure level	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	⅝ / 16,0	⅝ / 16,0	
	Gas side	inch / mm	1⅛ / 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	ºC	17 ~ 46	17 ~ 46	17 ~ 46	
	Heating	ºC	-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 27ºC DB/19ºC WB, outdoor temperature 35ºC DB/24ºC WB. Heating condition: indoor temperature 20ºC DB/15ºC WB, outdoor temperature 7ºC DB/6ºC 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.

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

MANUAL CONTROL PANEL

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

DC INVERTER

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	l/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

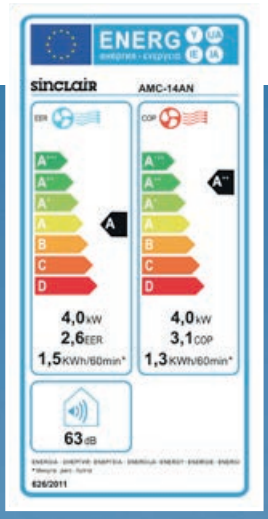
OPTIONAL ACCESSORIES

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	4,0
	Heating	kW	3,0	4,0
Optimal room size	m^2		15-25	25-35
Frekvence/Napětí	Hz / V		1~ / 50 / 220-240	1~ / 50 / 220-240
Rated current	A		5,8	7,7
Power input	Cooling/Heating	W	1200 / 1000	1500 / 1300
EER / COP	W/W		2,6 / 3,1	2,6 / 3,1
Energy class	Cooling/Heating		A / A++	A / A++
Sound pressure level	Max.	dB(A)	62	63
Air fow	m^3/h		400	450
Dehumidifying volume	l/h		50	70
Reftigerant type/ charge	Type / kg / t eq.CO_2		R410A / 0,55 / 1,15	R410A / 0,61 / 1,27
Global Warming Potencial	GWP value		2088	2088
Dimension (w x h x d)	mm		300x778x505	300x778x505
Package dimension (w x h x d)	mm		330x815x550	330x815x550
Net weight	kg		28,5 / 30,7	30,6 / 32,8
Operating temperature	Cooling	°C	17 ~ 32	17 ~ 32
	Heating	°C	7 ~ 25	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.

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)

CFO-16E

CFO-45E

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	330	830
Rated current	A	1,3	1,7	3,8
Sound pressure level	dB	45 / 43	45 / 43 / 41	46 / 44
Air fow	m³/h	100 / 80	150 / 130 / 115	300 / 200
Water tank volume	l	3,0	4,9	4,0
Optimal room size	m^2	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	ºC	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

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
Frequence	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 fow 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

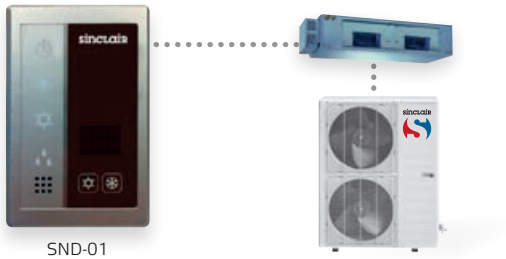
SCMI-01 SINCLAIR COMMUNICATION MODULE

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.

SDM-01

FMD-01



SND-01

SDC-01

SIC-01

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

SPB-01

SWM-01

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, SPB-02 PORT BOARD

It is possible to connect this optional accessories with contacts to a display of indoor unit from KITE series. This module contains contacts for distant control of the unit (on/off contact), for error signaling and for wire controllers KJR-120G (with SPB-01), KJR-12B (with SPB-02) and for central controller CCM (with SPB-02).

SWM-01 WIFI MODULE

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

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The noise levels mentioned in this catalogue are values measured under ideal conditions, in an anechoic chamber. These values can be influenced by local conditions (acoustical bouncing area, the equipment of the room, etc.).
The pictures of units and accessories are illustrative only.
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AIR CONDITIONING

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