



## **Duct S2**

Start a new era of comfort

Samsung Ducted Air Conditioning Systems

Working to keep you comfortable all year round

## More than a trusted Air Conditioning solution

Home, is a place full of special moments and wonderful memories where we live and grow in our own unique ways. At Samsung, we imagine all sorts of innovative ways to improve how your home functions and help it run smoothly – to help give you more quality time to enjoy life.

We are proud to say our Samsung brand is part of an intuitive and humanistic product design company, and one of the world's top electronics producers. Samsung Air Conditioners have been designed with the same passion for innovation and quality that has helped make Samsung one of the Interbrand 2018 Best Global Brands.\*

samsung Air Conditioning systems are held in high esteem around the world and have been selected for a multitude of developments including apartments, housing, shopping centres, airports, stadiums and hotels. Samsung continues to invest heavily in R&D, performance testing and quality control to deliver quality Air Conditioning systems to market.

## 2018 Best Global Brands\*

- 1 Apple
- 2 Google
- 3 Amazon
- 4 Microsoft
- 5 Coca-Cola
- 6 Samsung
- 7 Toyota
- 8 Mercedes-Benz
- 9 Facebook

\*Source: Interbrand Best Global Brands 2018 Rankings

## Working to keep you and your family comfortable all year round

A Samsung inverter reverse cycle Ducted Air Conditioner is designed to enable each room in your home to be cooled or heated by one system. Ducted Systems are also relatively unobtrusive as the conditioned air is distributed through ducts hidden in your roof space to outlets in the ceiling of each room.

The primary components of your Samsung Ducted System consist of the indoor unit, outdoor unit and controller.



## SAMSUNG



## Controller

A stylish and intuitive controller makes it easy to select desired temperature and fan speeds. Some controller models also include a number of features such as LCD backlighting and time scheduling.



## **Outdoor Unit**

The outdoor unit contains the Samsung Smart Inverter compressor which circulates refrigerant to the indoor unit and back again. The unit also contains a heat exchanging coil and a fan which blows air across the coil.



#### **Indoor Unit**

The indoor unit, hidden from view, also contains a heat exchanging coil that cools the air in your house in cooling mode and warms it in heating mode. A fan then blows the conditioned air through the ducts installed in your roof space to the outlets in the ceiling of each room.



## New Era for Refrigerant R32

Refrigerants are an essential part of air conditioning, it is important to choose refrigerant that has a low environmental impact. Samsung has added a new type of refrigerant to its air conditioning range to help protect the ozone layer and to help reduce global warming.



## Hello R32 Refrigerant!

Samsung is presenting a new era of air conditioners with R32 refrigerant. R32 has a lower Global Warning Potential (GWP) of 675 compared to R410A GWP of 2,088. R32 is also a zero Ozone Depletion Potential (ODP) refrigerant, minimizing the effects on the ozone layer.





\* Please note that the product image in the picture may be different from the actual one, product size varies depending on model

## High Performance by Twin BLDC Compressor

## **Twin BLDC Compressor**

A key contributor to Samsung Ducted systems efficiency is its advanced compressor technology Adopting Twin Brushless Direct Current (BLDC) rotary compressor with premium moving parts, Samsung ducted system delivers efficient and reliable performance.



<sup>\*</sup> BLDC Rotary compressor applies to all models except AC200. Please note that the product image in the picture may be different from the actual one.

## 5.2kW to 14kW models

### **Powerful Airflow**

Samsung Ducted indoor units contain 2 fans (5.2kW model) and 3 fans (7.1 to 14kW), and are designed to handle ducting resistance with static pressures of up to 147Pa (5.2, 7.1, and 9kW models) and 196Pa (10, 12, and 14kW models), to help provide good airflow at each ducted airflow outlets.

## **Quiet Operation**

Duct S2 is designed to operate very quietly helping to maintain a peaceful environment.

#### Low-Profile

Duct S2 indoor units are low in unit height: 250mm unit height for 5.2, 7.1, and 8.5kW models, and 300mm unit height for 10, 12, and 14kW models. This helps enable Duct S2 to be installed in narrow roof spaces.

## **Light-Weight Design**

Duct S2 is designed to help make installation easy, with its lightweight and compact indoor unit; a 14kW indoor model weighing at 43.5kg.

## **3-Way Service Access**

Duct S2 indoor units feature removable panels on three sides for ease of maintenance.





3-Way Service Access

## 16kW to 20kW models

Larger capacity models: 16, 18, and 20kW indoor unit can easily be separated for easy handling and maneuver into tight installation spaces.

## Separable for easy handling



## Cutout for roof truss for easy installation



## -20°C to 50°C

#### Comfortable and Reliable

Samsung Ducted Air Conditioners are designed to keep on working, even on those extremely hot or cold days. With an operating range of -15°C to 50°C outside air temperature for cooling, and -20°C to 24°C for heating, you can be assured that your unit can work when you need it\*. Its smart inverter system delivers your set temperature quickly, and keeps performing finetune adjustments to ensure a constant, comfortable environment.

\* Whilst the unit will keep running up to 50°C for cooling, as the outside temperature rises above 35°C, the cooling capacity will reduce. Similarly for heating, the capacity begins to reduce below 7°C.



<sup>\*</sup> Please note that the product image in the picture may be different from the actual one, product size varies depending on model.



## Demand Response Enabled Device (D.R.E.D)

D.R.E.D allows certain energy providers to limit your power consumption during peak demand times to help reduce power strain on the electricity network. Participation may entitle you to rebates from your energy provider, contact your energy provider to find out if it recognises D.R.E.D and for details. All Samsung Duct S systems enable D.R.E.D, with the option of DRM1, DRM2, and DRM3 levels.



## **DUCT S2** 1-phase, 220-240V, 50Hz











Model Name System	Indoor Unit		AC052TNHDKG/SA	AC071TNHDKG/SA
	Outdoor Unit		AC052TXAPKG/SA	AC071TXAPKG/SA
Capacity	Refrigerant		R32	R32
	Cooling (Min/Std/Max)	kW	1.30 / 5.20 / 6.50	2.00 / 7.10 / 8.00
	Heating (Min/Std/Max)	kW	1.20 / 6.00 / 8.00	1.70 / 8.00 / 9.00
Efficiency	Energy Grade (Cooling)	EER	3.70	3.21
	Energy Grade (Heating)	COP	4.00	4.00
	Energy Grade (Cooling)	AEER	3.68	3.21
	Energy Grade (Heating)	ACOP	3.99	3.99
Electrical	MCA	А	18.8	18.8
	MFA	А	20.7	20.7
Indoor Unit	Power Supply	Ф, #, V, Hz	1-phase, 220-240V, 50Hz	1-phase, 220-240V, 50Hz
	Air Flow Rate (H, M, L)	l/s	300 / 233 / 183	400 / 333 / 283
	ESP (L,M,H)	Pa	0 / 39 / 147	0 / 39 / 147
	Sound Pressure @ 1.5m (H/L)	dB(A)	35 / 27	36 / 28
	Supply Air Opening (WxH)	mm	818 x 220	1168 x 220
	Return Air Opening (WxH)	mm	818 x 220	1168 x 220
	Net Weight	kg	26.5	34
	Unit Dimensions (WxHxD)	mm	850 x 250 x 700	1200 x 250 x 700
	Drain connection size	mm	OD 32 / ID 25	OD 32 / ID 25
Outdoor Unit	Power Supply	Ф, #, V, Hz	1-phase, 220-240V, 50Hz	1-phase, 220-240V, 50Hz
	Туре		Twin BLDC Rotary	Twin BLDC Rotary
	Sound Pressure @ 1m (Cool/Heat)	dB(A)	49 / 49	50 / 52
	Sound Power (Cooling - High)	dB(A)	63	66
	Net Weight	kg	51	51
	Shipping weight	kg	55	55
	Net Dimensions (WxHxD)	mm	880 x 798 x 310	880 x 798 x 310
	Shipping Dimensions (WxHxD)	mm	1,023 x 896 x 413	1,023 x 896 x 413
Installation	Liquid Pipe		6.35, 1/4"	6.35, 1/4"
	Gas Pipe		15.8, 5/8"	15.8, 5/8"
	Max. Allowable Piping Length	m	50	50
	Max. Allowable Piping Height (outdoor above indoor)	m	30	30
	Pre-charged Length	m	20	20
Operating Range	Cooling	ōC	-15 to 50	-15 to 50
	Heating	ōС	-20 to 24	-20 to 24

<sup>1.</sup> Specification may be subject to change without prior notice

<sup>2.</sup> Performances are based on the following test conditions:
Cooling: Indoor temperature 27°C DB, 19°C WB, Outdoor temperature 35°C DB, 24°C WB
Heating: Indoor temperature 20°C DB, 15°C WB, Outdoor temperature 7°C DB, 6°C WB Equivalent refrigerant pipe length 5m, 7.5m (20kW), Level differences 0m

<sup>3.</sup> Select wire size based on the value of MCA and in accordance of local electrical regulation standards.

 $<sup>{\</sup>it 4. Sound pressure level is obtained in an anechoic room.}$ 

Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation condition.

dBA = A-weighted sound pressure level. Reference acoustic pressure 0 dB = 20uPa
5. Sound power level is an absolute value that a sound source generates.

dBA = A-weighted sound power level. Reference power: 1pW. Measured according to ISO 3741.



<sup>•</sup> Please note that product images may be different from the actual one, product size varies depending on model

## **DUCT S2** 3-phase, 380-415V, 50Hz







	Indoor Unit		AC100TNHDKG/SA	AC120TNHDKG/SA
Model Name System	Outdoor Unit		AC100TXAPNG/SA	AC120TXAPNG/SA
Capacity	Refrigerant		R32	R32
	Cooling (Min/Std/Max)	kW	4.3 / 10.0 / 12.0	4.5 / 12.0 / 14.0
	Heating (Min/Std/Max)	kW	3.6 / 11.2 / 16.0	3.8 / 14.0 / 19.0
	Energy Grade (Cooling)	EER	3.70	3.40
Efficiency	Energy Grade (Heating)	СОР	4.10	3.80
	Energy Grade (Cooling)	AEER	3.69	3.44
	Energy Grade (Heating)	ACOP	4.09	3.79
Electrical	MCA	А	18.8	19
Electrical	MFA	А	18.8	19
	Power Supply	Ф, #, V, Hz	1-phase, 220-240V, 50Hz	1-phase, 220-240V, 50Hz
	Air Flow Rate (H, M, L)	l/s	650 / 550 / 450	720 / 620 / 500
	ESP (L,M,H)	Pa	29 / 49 / 196	29 / 61 / 196
	Sound Pressure @ 1.5m (H/L)	dB(A)	42 / 37 / 32	43 / 38 / 33
Indoor Unit	Supply Air Opening (WxH)	mm	1268 x 270	1268 x 270
	Return Air Opening (WxH)	mm	1268 x 270	1268 x 270
	Net Weight	kg	43.5	43.5
	Unit Dimensions (WxHxD)	mm	1300 x 300 x 700	1300 x 300 x 700
	Drain connection size	mm	OD 32 / ID 25	OD 32 / ID 25
	Power Supply	Ф, #, V, Hz	3 -phase, 380-415V, 50Hz	3 -phase, 380-415V, 50Hz
	Туре		Twin BLDC Rotary	Twin BLDC Rotary
	Sound Pressure @ 1m (Cool/Heat)	dB(A)	51 / 53	53 / 55
Outdoor Unit	Sound Power (Cooling - High)	dB(A)	68	69
Outdoor Unit	Net Weight	kg	97.5	99.5
	Shipping weight	kg	106.5	108.5
	Net Dimensions (WxHxD)	mm	940 x 1420 x 330	940 x 1420 x 330
	Shipping Dimensions (WxHxD)	mm	995 x 1598 x 426	995 x 1598 x 426
Installation	Liquid Pipe		9.52, 3/8"	9.52, 3/8"
	Gas Pipe		15.8, 5/8"	15.8, 5/8"
	Max. Allowable Piping Length	m	85	85
	Max. Allowable Piping Height (outdoor above indoor)	m	30	30
	Pre-charged Length	m	30	30
Operating Range	Cooling	ōС	-15~50	-15 to 50
	Heating	ōС	-20~24	-20 to 24

<sup>1.</sup> Specification may be subject to change without prior notice  $\,$ 

<sup>2.</sup> Performances are based on the following test conditions:
Cooling: Indoor temperature 27°C DB, 19°C WB, Outdoor temperature 35°C DB, 24°C WB
Heating: Indoor temperature 20°C DB, 15°C WB, Outdoor temperature 7°C DB, 6°C WB Equivalent refrigerant pipe length 5m, 7.5m (20kW), Level differences 0m

<sup>3.</sup> Select wire size based on the value of MCA and in accordance of local electrical regulation standards.

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Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation condition.

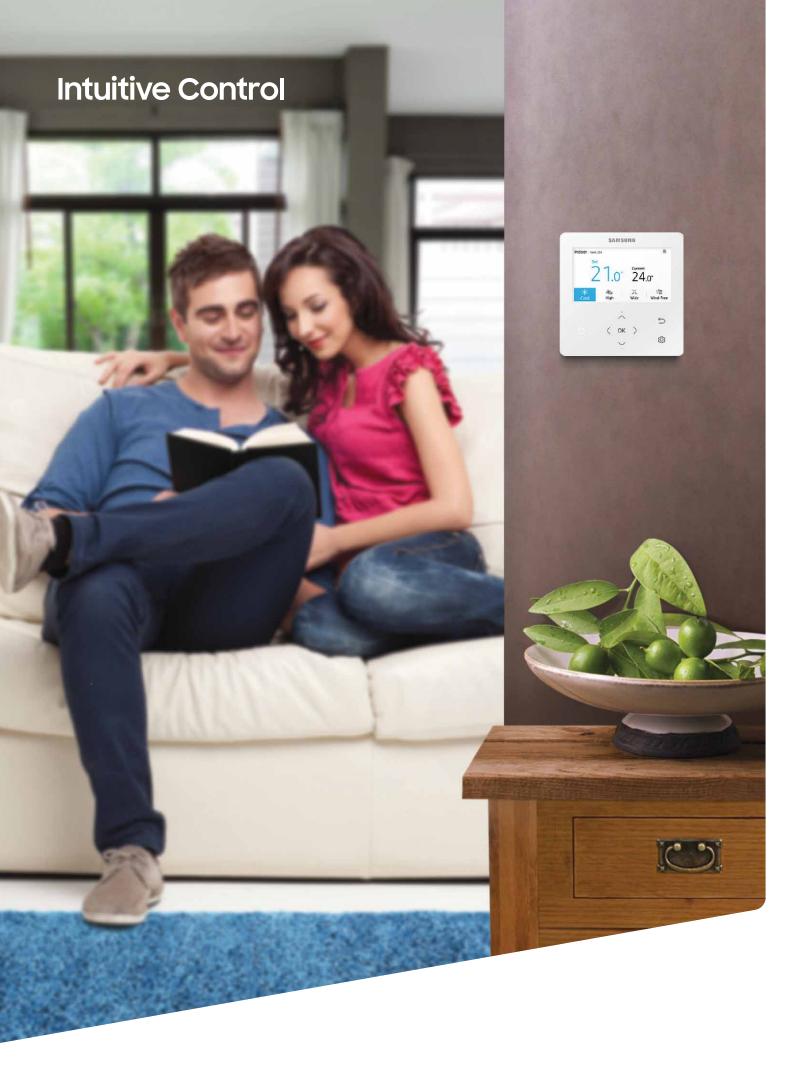
dBA = A-weighted sound pressure level. Reference acoustic pressure 0 dB = 20uPa
5. Sound power level is an absolute value that a sound source generates.

dBA = A-weighted sound power level. Reference power: 1pW. Measured according to ISO 3741.



<sup>•</sup> Please note that product images may be different from the actual one, product size varies depending on model

<sup>• 18</sup>kW and 20kW model uses R410A refrigerant



## Controls to meet your needs

(All controllers shown are sold separately)

#### **MWR-SH11N**

#### **LED Touch Screen Wired Controller**

- Touch screen display with backlight
- Simple functionality control
- Outing function; maintains room at preset conditions
- Lock functionality options
- On/off count down timer
- Built-in wireless receiver, can use in conjunction with AR-EH03E wireless controller
- Built-in room temperature sensor



#### **MWR-WG00JN**

#### **UX Wired Controller**

- Colour LCD Display with backlight
- Intuitive user interface
- Simple navigational control panel
- Current Date and time setting
- Programmable yearly scheduling and holiday scheduling
- Energy Usage monitoring
- Built-in wireless receiver, can use in conjunction with AR-EH03E wireless controller
- Built-in room temperature sensor



#### **MWR-WE13N**

## **Standard Wired Controller**

- Touch button controller, display with backlight
- Lock functionality options
- Current Date and time setting
- Weekly scheduler and exception day setting
- Filter cleaning alert indicator
- Built-in room temperature sensor



#### AR-EH03E

#### Wireless Controller

- Simple functionality control
- On/off count down timer
- Filter cleaning alert indicator
- Use in conjunction with MRK-A10N wireless controller receiver



AR-EH03E

MRK-A10N

## **MIM-B14**

#### **External Contact Interface Module**

- Indoor unit on/off control by external contact to key card, push button timer, sensor, etc.
- Output contact to relay for outside air fan connection





## MIM-H03N WiFi Kit

Samsung ducted systems featured in this brochure can be controlled by a compatible smart device\* when connected to MIM-H03N WiFi kit, sold separately.



Products are sold separately.

## WiFi Kit App

Features that control your comfort from virtually anywhere.\*



Compatible Smart device sold separately.

SAMSUNG (1) Table Style SAMSUNG (1) Table Style SAMSUNG (1) Table Style Style

Turn your Air Conditioning unit On/Off



Check and adjust the temperature of the room



Advanced On/Off Timer settings

Program what time you want your unit to turn on or off

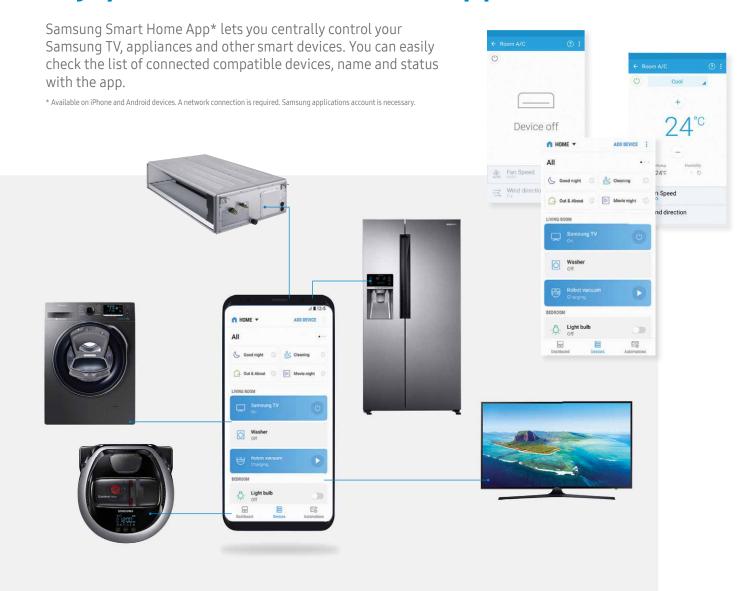
Set day(s) of the week you would like this



Multiple Air Conditioning units can be run from one App on a compatible device

- Controlling of zones via WiFi is not available
- Existing WiFi infrastructure required
- Samsung WiFi Kit App needs to be installed on your compatible smartphone
- \* WiFi enabled control requires a wireless router. WiFi enabled control is compatible with selected Android™ and iOS Smartphones and requires the Smart Air Conditioner app, downloaded from Google Play or iTunes. To use 'Out Of House' control, users must register the product at http://global.samsungsmartphliance.com. Internet connection required. Data charges may apply. Android is a trademark of Google Inc. iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under licence. iTunes is a trademark of Apple Inc., registered in the U.S. and other countries.

## Enjoy Smart Home with an App







# Samsung Air Conditioning are committed to After Sales and Warranty Support providing you peace of mind



## 5 Year Warranty on Parts and Labour

Peace of mind knowing we have you covered with Samsung's 5 years parts and labour warranty for residential application for products featured in this brochure. Refer to the warranty card included with your product for full details.

\* This is in addition to the rights of consumers under consumer guarantees pursuant to the Australian Consumer Law



## **National Samsung Service Network**

Our extensive national repairer network and dedicated Service Centres are on hand to support your product. And with extensive spare parts in Australia to ensure we get your air conditioning back up and running fast.



## **MEPS Compliant**

All Samsung Air Conditioners sold in Australia meet Minimum Energy Performance Standards (MEPS) as set by the Australian Government.



## **Product Support Line**

If you have any concerns about your product simply call 1300 362 603 and our friendly staff will assist with your enquiry and book a service call if required.

To learn more about Samsung AIR CONDITIONERS Go to https://www.samsung.com/au/business/air-conditioners/duct-s2/

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