# AIR CONDITIONING & REFRIGERANT

With extensive ACR stocks, SBS are well placed to service your air conditioning project requirements with a wide variety of ancillaries to complement the product range. The business has specialist product managers in this field to help answer any technical questions, along with efficiency turning your enquiry into a formal quote. The range is supported by air conditioning and refrigeration ancillaries from pumps to refrigerant gas.

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- DAIKIN
- MIDEA
- ANCILLARIES
- REFRIGERANT



### DAIKIN

Regarded by many as a leader in the air conditioning field, Daikin's extensive portfolio of products can suit all HVAC applications. The manufacturer's air conditioning products are known for their reliability, efficiency and excellent design. They can provide users with integrated climate control solutions for domestic, commercial and industrial applications.

With dedicated Daikin experts for our air conditioning sales, along with vast stock levels, SBS can offer excellent service with high levels of product knowledge. Our in-house personnel can provide technical support to assist with design and system layout, including the Daikin software VRV Xpress which can produce a report giving schematics and technical information.

### **SPLITS & SKY AIR**

Daikin's Split and Sky Air range offers the most complete comfort and energy efficient solution for all kinds of domestic and small commercial spaces. It gives the user full control of heating, cooling, ventilation and air curtains. The range starts at 2kW and increases up to 25kW. There is a large range of indoor types including wall mounts, floor standing, ducted, cassettes and under ceiling units.

A Split is typically one outdoor to one indoor unit, but the range also covers multi-splits meaning one outdoor can serve multiple indoor units. There is also the larger twin, triple and double twin systems that use one outdoor to serve up to four indoors from a single remote controller. All of these systems use inverter technology which is used to regulate the indoor temperature continuously. Compared with a traditional system, it gives optimum comfort as well as reducing energy costs by around 30%. The Sky Air product range is optimised for top seasonal efficiency, for heating, cooling, ventilation and air curtains in shops, restaurants, banks and small offices. SBS hold a large stock of the Split and Sky Air range.

#### **FEATURES (SPLITS)**

- Available in R410a and R32
- Capacity from 2-7kW
- Versatile range of indoor units wall, floor, ducted, cassettes
- Multi split range available allowing up to 5 indoors piped to a single outdoor
- Reduced energy savings with the intelligent eye sensor
- Remote access control via the Wifi adapter
- Pipe runs up to 30m
- Cooling available down to -10°C ambient and heating down to -15°C (outside temperatures)
- Possible tax relief via ECA scheme

#### **FEATURES (SKYAIR)**

- Available in R410a and R32
- Capacity from 7-25kW
- Available with single and 3 phase power supplies
- Also available as twin, triple and double twin applications
- Versatile range of indoor units ducted, cassettes, wall, floor
- Option for Self Cleaning cassettes giving reduced running and maintenance costs
- Unique underceiling cassette with the FUA-A indoor
- Auto changeover feature as standard
- Systems suitable for replacement technology



- 3 types of outdoor options depending on application requirements
- Pipe runs up to 85m
- Cooling available down to -15°C ambient and heating down to -20°C (outside temperatures)
- Server room cooling possible using EDP setting on Seasonal Smart or Alpha outdoor.



### DAIKIN

# VRV 5

The Daikin VRV 5 Heat Recovery system ensures maximum comfort and efficiency while significantly reducing a building's environmental footprint. What's more its smart, compact and responsive design makes for flexible and easy installation in any commercial building.

### **FEATURES**

- Reduced CO2 equivalent thanks to the use of lower GWP R-32 refrigerant and lower refrigerant charge
- Single component refrigerant, easy to re-use and recycle
- Greatest sustainability over the entire lifecycle, thanks to market leading real-life seasonal efficiency
- "Free" heating through efficient 3-pipe heat recovery, transferring heat from areas requiring cooling to areas requiring heating
- Tackle small room applications without any additional measures, thanks to Shîrudo Technology
- Specially designed indoor units for R-32, ensuring low sound and maximum efficiency
- Simultaneous cooling and heating for the perfect personal comfort of guests/tenants
- Like for like R-410A installation flexibility with piping lengths up to 165 metres and a total length of 1,000 metres



- Sound pressure down to 40 dB(A) thanks to 5 low sound steps
- ESP up to 78 Pa to allow ducting
- Wide operation range of up to +46°C in cooling and down to -20°C in heating

### CHILLERS

Daikin's range of air-cooled and water-cooled chillers are designed to suit every application, large or small, offering the ultimate in flexibility and control. The unique combination of advanced technology, experience and reliability make Daikin chillers the ideal choice. Daikin chillers have nominal cooling capacities of 5kW to 2,148kW (air-cooled) or 13kW to 2,500kW (water-cooled). There are many chiller options including models using inverter compressors and chillers that can provide free cooling. Most options are available with different efficiency and sound options to suit a particular site to meet noise or space restrictions.

The latest Daikin technology can achieve industry-leading efficiency along with optimum energy-saving for outstanding cost saving performance. Using the Daikin chiller software can produce a bespoke report for every application showing the out put of the chiller at given conditions. It will also give full technical info including the specification and dimensional drawings of the chiller.

Also as part of the Applied product range Daikin can offer Fan Coil Units and Air Handling Units (AHUs).

#### **FEATURES**

- Capacity range from 5 2,500kW
- Aircooled, watercooled and condenserless chillers available
- Various refrigerant types available
- Chillers options with Inverter compressors
- Free cooling chillers available
- Scroll, Screw and Swing compressors
- Multiple selection options dependent on efficiency and sound requirements
- Cooling and Heat Pump chillers available
- R410a, R32, R134a and R1234ze range



### DAIKIN

### VENTILATION

Daikin offers a range of options that enables control of fresh air into commercial and residential spaces. The VAM / VKM range of heat recovery ventilation products can efficiently deliver controlled fresh air to meet your design priorities.

#### **FEATURES**

- VAM air flow from 150-2000m<sup>3</sup>/hr
- CO<sub>2</sub> sensor to minimise running costs by only delivering actual requirements of fresh air
- Heater batteries available to pre-heat the ambient air for all year round

### CONTROLS

Whether you need complete control over your building management system, or want to integrate your Daikin units into third party management system, Daikin offers a complete portfolio of user-friendly solutions.

#### **FEATURES**

- Interfaces available for Bacnet, Modbus, LON and KNX
- Smart energy monitoring with the DNSS system
- Mini building management system using the I-Touch Manager
- Central control of up to 512 indoors
- Web access as standard on the I-Touch Manager
- Recessed local controllers available with various finishes
- Tablet control possible using the Daikin Cloud

### **SPARES**

Genuine Daikin spares are available on quick turnaround with the only information needed being the make and model of the unit which requires the part, the rest can be done by Smith Brothers. Spares are available for VRV, chillers, split systems, multi, CVP, compressor spares, fan motors indoor and outdoor, fan guards, fan blades, thermistors, inverter boards, main power boards, four way valves, condensing unit coil's, PCB's, Daikin accessories, Altherma spares, wireless thermostats and controllers to only name a few.



& **REFRIGERANT** 

**AIR CONDITIONING** 

Midea

Midea offer intelligent indoor climate control for most commercial applications. On the leading edge of digitalisation, they offer optimal systems of space heating, cooling, hot water and air purification.

Manufactured in China, Midea is becoming one of the world's fastest-growing companies, offering a wide range of products to serve the needs of day-to-day living fully. The company is known for being one of the top manufacturers of HVAC products, boasting an annual global sales output of over 52 million systems.

### **SPLITS**

Midea Split System has a wide range of residential and light commercial split systems which combine innovative technology with elegant design.

### **AG ECO (WALL MOUNTS)**

Midea's AG Eco wall mounted range is highly efficient (SEER A++) and ideal for heating and cooling spaces in homes or offices. Available from 2kW-8kW, the range has a unique design and the latest inverter technology for an easy and economical set-up and operation at an affordable price.

- Sleek and elegant design
- Self-cleaning outdoor unit
- 3d air flow with vertical & horizontal swing
- Optional multi-function control

- Turbo function
- 'Follow me' sensitive cooling
- board • Wi-fi control

### i-CUBE BREEZELESS E (WALL MOUNT)

Midea's I-Cube Breezless E has an effective rapid cooling and heating function as it heats or cools a room in just 10 minutes. The units are equipped with a UVC sterilisation module which uses ultraviolet light to kill bacteria and prevent mould growth.

- Rapid Cooling and Heating Modes
- Optional Multi-Function Board

• i-Health – UV Lamp • i-Eco Dashboard

Built in Wi-Fi

### **BREEZELESS+ (WALL MOUNTS)**

Midea's innovative BreezeleSS+ wall mounted range uses the world's first TwinFlap™ technology with 7,928 mini-hole matrix. The matrix softens the airflow so you can barely feel it, leaving you comfortably cool without any unpleasant blasts of cold air. Benefiting from an energy efficiency rating of A+++, the units have a 'boost mode' to cool your space in just 40 seconds.

- BreezeleSS+ Effect
- Side Outlet

- Rapid Cooling
  - Economic Mode
- Self-Cleaning Outdoor Unit
- Filters and Self Cleaning

### **VERTU PLUS (WALL MOUNT)**

Available from 2.6kW to 4.0kW the Midea Vertu Plus wall mounted series achieves market leading energy efficiency with a SEER of 8.6 (A+++) and SCOP of 4.6 (A++). The stylish units, with attractive mirror finish change colour depending on the mode setting; trendy mode indicators light up blue when used for cooling and orange when used for heating.

- Leading Energy Efficiency
- Unique V-Shaped Design
- Smart & Intelligent Control
- Midea Proactive Pure

• Wide Angle Air Flow

'Follow Me' Sensitive Cooling

- Easy to Clean
- Wi-fi control



### Midea

#### **CONSOLE UNITS**

Simple, stylish, and compact Midea console units fit into any interior. The units are designed to be installed on the floor or lower wall depending on your requirements. The units have an easy-to-remove front panel which provides easy access to filters, refrigerant pipes and electrical connections.

- Flexible Installation
- Turbo Mode
- Anti-cold Air Function

### DUCTED

With its compact design, the Midea A6 Ducted range can be easily mounted in a ceiling void in a commercial office or retail space and offers flexible control and easy maintenance

• Flexible air intake position

Built in drain pump

- Multi channel air flow distribution
- Fresh air inlet

### **COMPACT ROUND FLOW CASSETTE**

The Midea Compact RoundFlow Cassette is the perfect solution for commercial, office or retail spaces. It features a 360° air outlet which provides even airflow circulation to cool or heat every corner of a room and keep a constant temperature.

360° Airflow Outlet

• Fresh Air •

Built-in Drain Pump

### Remote Signal

### **BREEZELESS+ ROUNDFLOW CASSETTE**

The super slim Midea BreezeleSS+ cassettes have low heights starting from just 205mm, allowing for easy installation in shallow ceilings. The new cassette allows optimum comfort to be achieved, tailored to each unique user's preference via various modes; Air Blast, Gentle Flow and Power Breezeless mode.

- BreezeleSS+ Effect
- 360° Airflow Outlet
- 'Follow Me' Sensitive Cooling
- Fresh Air Inlet & Drain Pump
- Super slim design
- **CEILING AND FLOOR**

This stylish range of Midea units can be installed either horizontally on the ceiling or vertically against the wall. Perfect for spaces which do not have suspended ceilings the units feature '3D air flow', which supplies an even and comfortable airflow.

- Easy installation
- Auto swing and wide angle air flow
- Optimal Comfort

### **MULTI SPLIT**

The Multi Split series is the ideal solution for efficient 2, 3, 4 or 5 zone air conditioning with a single outdoor unit.

- Flexible installation
- Dedicated indoor units

- Service & Value since 1897











 Low Ambient Cooling Auto Restart Function Louvre Position Memory

• LED chassis mounted display • Flexible control and easy maintenance

LED Fascia Display

 LED Fascia Display • Independent vane control • Twin Combinations Remote Signal













### Midea

## **VRF**

Midea offers high performance VRF outdoor units with heat pump and heat recovery technology. The variety of models bring high efficiency, high reliability cooling and heating to projects large and small. With 11 types and more than 100 models, Midea VRF indoor units can meet a variety of customer requirements in a wide range of locations including shopping centres, hospitals, office buildings, hotels and airports.

### **MINI VRF**

Available in capacity ranges from 7.2kW to 45kW Midea's Mini VRF range is slim and compact, resulting in significant savings on installation space. Perfect for commercial and residential applications such as small offices, apartments, and shops, up to 20 indoors can be connected to a single outdoor unit saving time, space, and money.

#### WIDE APPLICATION RANGE

- Wide range of indoor units
- Wide Operation Range: minus 15°C to 48°C.
- Long Pipe Length

Easy installation • Space saving design Auto Addressing

•

EASY INSTALLATION AND SERVICE

#### **V6R HEAT RECOVERY**

Midea's V6R range is the industry's first 3 pipe Heat Recovery VRF with zonal leak detection to guarantee the system's safe and reliable operation. Available from 8HP to 54HP the exclusive range is extremely versatile and can meet the needs of small, medium, or large sized applications.

Zonal Leak Detection

**V6 HEAT PUMPS** 

- Wide Capacity Range
- Flexible and easy to install
- Fresh Air Supply
- Multiple Port MS Boxes



Domestic Hot Water and Underfloor Heating

Midea's V6 Heat Pump range is available from 8HP up to 32HP, which is the world's largest single VRF unit capacity. The highly efficient range has a space saving design and its EVI compressor significantly increases heating and cooling capacity under extreme conditions.

### **Touch screen controllers & BMS interface**

Midea has an extensive range of controllers, including touch screen modules, to suit all user requirements.



### Midea

### **HEAT PUMPS**

M Thermal provides an energy efficient solution that delivers space heating and cooling and domestic hot water. It is a complete allyear-round, integrated heating system which can replace, or work in synergy with traditional gas or oil boilers.

### **M THERMAL R32 MONOBLOC AIR TO WATER HEAT PUMP**

- Full range from 4kW to 16kW
- High seasonal efficiency A+++ ErP Energy Rating
- Maximum sound power ≤60dB(A), rated sound power ≤58dB(A)
- Silent Chamber only 35 Db(a) sound pressure level at 3 metres
- Maximum outlet water temperature 65°C
- Continuous water supply temperature, 60°C even as low as -20°C
- Efficient heating capacity even when at -7°C air temperature •
- Energy consumption data for running cost analysis ٠
- DC inverter compressor, fan motor and pump to allow precise control
- Program upgrade via USB port on system PCB
- WiFi/App control as standard
- Advanced intuitive controls •

### VENTILATION

Midea heat recovery ventilation ensures effective fresh air in any application. The exceptionally quiet units can greatly reduce energy losses and room temperature fluctuations caused by the ventilation process.

 Enhanced efficiency Low noise

Flexible controls

- Flexible control
- Multiple modes

### **DX INTERFACE KITS**

The DX Interface is a control box which allows Midea VRF outdoor units to connect to third party equipment with a heating or cooling coil. The cooling/heating requirement can then be provided via the Midea outdoor units.

- High flexibility with capacity adjustment
- Flexible installation

- Service & Value since 1897





Led mounted display





To complement the air conditioning range, SBS stock air conditioning and refrigeration ancillaries to support our customers and offer a complete package. Teaming up with market leading and high quality brands such as Aspen, Lawton, Armaflex, DiversiTech along with our service levels, gives Smith Brothers a real competitive advantage in the market place.

The main range consists of copper, lagging, steel, mounting support, pumps and clips but stocks of trunking, refrigerant gas and electrical cable are also available to fulfil project needs.

#### COPPER

Copper pipe for refrigeration and air conditioning, all meet PED and EN 12735 standards with our suppliers conforming to quality management system ISO 9001. The tube is designed specifically for refrigeration and air conditioning use and is accordingly cleaned, nitrogen-purged and capped. Please note that straight length copper above 21/8" is available in various gauges and lengths upon request on a 3 week lead time. Refrigeration fittings are degreased copper endfeed/endbrazed, manufactured to the latest ASME standards, and are specifically designed for copper refrigeration and air conditioning systems.

COIL:	<sup>3</sup> ⁄16" to <sup>7</sup> ⁄8" 15m & 30m
FROM:	19 to 22 gauge
STRAIGHT:	$^{3}\!\!/_{8}"$ to $4^{1}\!\!/_{8}"$ 3m & 6m
FROM:	11 to 21 gauge



#### RLS

RLS & MaxiPro press fittings offer a simple, effective and economical method to create reliable copper tube connections, with the fittings designed and engineered to join copper tube in high-pressure HVAC and refrigeration systems. RLS press fittings are fully registered and listed to UL207 for pressures up to 700 PSI.

These fittings connect quickly and easily using an RLS-approved press tool and jaws, replacing the time-consuming practice of manually brazing joints. The pressing procedure is similar to the one used with water press fittings. RLS press fittings, however, were developed to withstand the high pressures found in HVAC/R systems. MaxiPro fittings can also be sourced and supplied.



#### **INSULATION**

A full range of insulation is offered to suit all sizes of copper which can reduce energy losses along with preventing condensation, mould and bacteria. Lengths, bags and boxes are all offered with various thickness to suit all pipe size requirements.



### ANCILLARIES



#### PUMPS

SBS offer a wide selection of pumps which continue to make the installer's life easier whilst offering the most reliable condensate removal pumps available.

As the range continues to expand finding a product to space, power and noise requirements is easier than ever with simply plug and play options available. There are many benefits to using a condensate removal pump over gravity, with four different types:

- Piston
- Peristaltic
- Centrifugal
- Diaphragm

To compare the pumps available refer to pump comparison tables in vital statistics section for more information.



#### **PIPE CLAMPS, FIXINGS & STEEL**

A full range of clips such as BBJ's and cushion clamps are stocked in bag quantities across the full range of size dimensions. The vast steel range and fixings covers such items as; cantilever arms, cable tray, slotted channel, studding rod, G clamps, wedge anchors, nuts/bolts, zebs, washers etc.

#### **CHEMICALS**

A wide range of cleaners and maintenance products are available in various forms from powder to concentrates, through to aerosols and odour control jelly's. The company also stock NSF approved products which may be required in certain situations or conditions. Smith Brothers branches all have access to a product selection chart to help ensure the product is fit for purpose whether it be professional heavy duty use or regular maintenance.











#### MOUNTING

Mounting blocks for various loads and anti-vibration pads with normal or lightweight options. The support system is also available with strut which can be custom built to support any unit or load requirement. With the increasing need to mount equipment safety, especially when on a roof top, this system option offers a flexible solution for spreading load.



### **PROTECTION & BRACKETS**

Cages to protect and house outside units are available for both floor or wall mounted units. A range of brackets (some with built-in spirit level) with condensation trays for all size and weight options to support wall hung units are stocked.



#### TRUNKING

Available in both 75mm, 105mm and 140mm sizes in ivory, white and black colour options. All fittings and components are manufactured to a high standard to give a professional finish. Also UV resistant, fire proof and offering protection against damage.







Often run through trunking a range of electrical accessories such as rotary isolators and switch fuses (both metal and plastic) are available for indoor or outdoor use. The cable has different thickness, length, colour and number of cores.

### CABLE

THICKNESS:	0.75 to 4mm
NUMBER:	2 to 5 core
COLOUR:	Black, Clear, Grey or White
COIL LENGTH:	25 to 100 metres

#### **CONSUMABLES**

The usual stock of sundries is kept such as:

- Cable ties
- Mapp gas
- Silicone sealants
- Tape
- PortablesFan motors

• Flushing kits

Braided hose



### GAS

All SBS gas cylinders are now rental FREE for a 12 month period. Providing the customer has an FGAS registration number we stock and can deliver various size bottles from stock. The monitoring of bottles is audited by the branches, with some offering a loan free period meaning their is no upfront deposit. Refilling of gas is not done on site but the empty bottles get sent off for refilling, we provide a full bottle so there is no delay.



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