

# National Solutions Centre

Meeting increased demand for high quality, tailored solutions across the UK





Our innovative solutions have been created with ease of installation and optimising end user experience in mind, from vinyl condenser wraps to strip and rebuild of VRV systems. Daikin UK is committed to working with you to tailor the systems and solutions we offer to your exact requirements.

### Introduction

At our brand new National Solutions Centre in Thornbury, Bristol, Daikin UK is pleased to offer tailored and bespoke solutions across Split and Sky Air, VRV and Altherma product ranges, as well as customised accessories and controllers to enhance and improve system performance. The experts that work in our National Solutions Centre offer a wealth of experience in unit modification and made-to-order solutions for customers across the whole of the UK, which is why we have seen an increase in demand for bespoke solutions.

Our innovative solutions have been created with ease of installation and optimising end user experience in mind, from vinyl condenser wraps to strip and rebuild of VRV systems. Daikin UK is committed to working with you to tailor the systems and solutions we offer to your exact requirements.

These modification maintain the units CE marking.

To discuss your requirements for tailored solutions from our National Solutions Centre, please contact your Daikin Sales Engineer.

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# Core offer

#### Wrapping

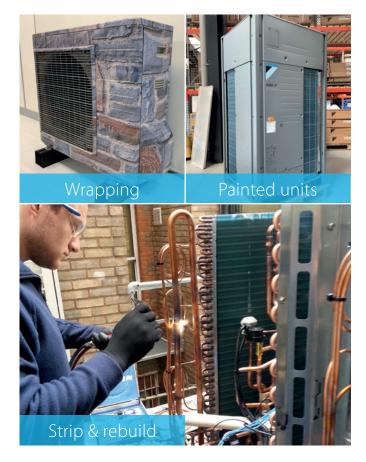
#### Daikin condenser wrapping service

Daikin UK's condenser wrapping service is a unique offering, in which bespoke patterned vinyl wraps are applied to outdoor condenser units. Vinyl wraps are a popular choice for disguising the look of an outdoor unit or to make it a feature.

Care is always taken during the wrapping process to ensure unit performance and access is maintained. Quality of workmanship in removing panels, wrapping, then replacing means that wrapping integrity will be maintained through the warranty period. Based on customer photographs, a high quality printed vinyl wrap with laminate cover will be carefully applied to the unit. This will then be delivered to the customer site from the National Solutions Centre. The lead time for wrapping is 2-3 weeks from receipt of photo.

#### **Painted units**

Customers sometimes require visible units to be less obtrusive, whether for aesthetic or planning reasons. Daikin UK offers a customisation service, during which we can repaint our units to any specified RAL or BS finish or from an agreed sample. Our repainting service is managed from the National Solutions Centre and includes removing base paint to give a uniform, long lasting and professional finish. We have repainted fan coils, decoration panels, BS boxes and all types of condensers for a number of clients. The lead time for bespoke painted units can be between 2-3 weeks.



#### Strip & rebuild

Our strip and rebuild service helps to make transportation and lifting of VRV Condenser units more manageable by breaking them down into smaller components.

The integrity of the technology is of utmost importance, so great care is taken when Daikin engineers strip down the unit at the National Solutions Centre. Components are packaged securely and delivered kerb side onsite. The varying components are lifted and moved into placed and Daikin engineers then attend site to rebuild, pressure test, vacuum and finally charge the unit with refrigerant ready for commissioning. Benefits of the strip and rebuild service include:

- > Removes the need for crane lifts
- Decreases the space required to transport the condenser through a building
- > Lowers the cost of installation

The service is available for all VRV systems and there is a 3 week lead time for this service.

#### **Blygold treatment**

#### Additional heat exchanger corrosion resistance

Daikin UK offers Blygold Treatment on all outdoor heat exchangers where the unit will be exposed to the following outdoor conditions:

- Coastal areas, due to high salt and humidity levels (normally up to 5km inland in the UK)
- > Near agricultural spaces where fertiliser spray is used
- > In areas with high traffic pollution or near industrial buildings that burn fossil fuels

Blygold coats the coils to add an additional level of protection to offer further peace of mind to your customer by prolonging the life of the heat exchanger by up to three times and ultimately maintaining the efficiency of the unit throughout its life.

Systems treated with Blygold pass both the VDA Wechelstest and Kesternich Test to give up to six times more resistance to corrosion compared with a standard outdoor unit. The treatment ensures that Daikin condensing unit coils are sealed off from the environment in a manner that will not reduce the heat transfer or cause pressure drop issues.

Units are treated at Blygold UK's premises prior to equipment being shipped to site. The coating is UV resistant, flexible, heat conductive, and chemical resistant to most harsh environments. Blygold treatments are available for all condenser types:

- > Direct Expansion products starting with RE RY RX RQ RZQ \*MX
- > Heating products starting with ER ED EB EV
- > Applied Air cooled Chiller products starting with EW



## Indoor unit additions

#### **Casette collars**

For use with Roundflow cassettes VRV/SkyAir

Daikin UK now offers bespoke design ceiling cassette collars for use where there is insufficient ceiling void depth to install a traditional cassette.

The latest range of cassette collars have been designed to be robust, durable and easy to install. The steel construction ensures a rigid, self-supporting frame which will not warp, Epoxy coating ensures durability and resistance to chipping during the installation process and installation is easy with no additional fixings required.

The new bespoke cassette collars are compatible with both VRV and Sky Air Compact Roundflow Cassettes, High COP Roundflow Cassettes and are available in three depths: 50mm, 100mm and 150mm.

#### Weatherproof enclosure – VAMs VAM-FC/J Weather proof enclosures for VAM Total Heat Exchange

Weather proof enclosures for VAM Total Heat Exchangers

VAM units are a convenient way to deliver local fresh air requirements into a space with minimum fuss. Daikin UK offers weatherproofing for VAM units, allowing external installation and greater flexibility to keep indoor air quality at a high level. There are some occasions when VAM units will not fit in a ceiling void and so the weatherproofing options allow VAM units to be installed on a roof and then ducted into the space requiring fresh air, so more properties can benefit from improved indoor air quality. These enclosures are fitted to the VAM units by our National Solutions Centre so they arrive on site ready for you to connect to the ductwork.

The enclosures are rated to IP44 to prevent ingress of the British weather from interfering with the operation of the unit. Please note that pre-heaters cannot be used with the enclosures. Lead time for weatherproofing VAM units is up to six weeks. Weatherproofing is available for all J and FC series units, but not the VKM range.



#### Multi box with valves

### New modifications available for VRV Multi BS box with isolation valves

Further increasing the flexibility of the Multi BS boxes, we are now able to offer the full range of multi BS boxes with valves pre-fitted. Having valves pre-installed on the boxes can save considerable time and effort on site.

Pre-installed valves allow indoor units to be added without altering system pipework, New indoor units can be added without having to remove refrigerant from the rest of the system, avoiding the need to pump down/vac out/recharge the whole system.

By having the valves pre-fitted, you can offer your customers reduced time and costs when making alterations to the system layout. If the client needs an extra fan coil fitted, or if the size of a fan coil changes because of a change of use in a space, then it is possible to keep the rest of the system running whilst the changes are made.

Multi box valve modifications are available from the National Solutions Centre and can be provided within 3-5 weeks from date of order. Pricing and part numbers can be found in the latest price list.

#### Precision Piping Method (PPM) Precision Piping Method for VRV systems

Daikin PPM is a new method of piping manufacture for VRV installations, in which pipework preparation, bending, brazing and testing is completed in factory controlled conditions, before the pipework sections are delivered to site.

PPM ensures consistency and quality, while saving time and allowing skilled labour to be used on other projects. The preformed pipe-work can be used for multiple ref-net connections or larger pipe-work connections e.g. for connection to condensers. Engineers can measure multiple pipe bends and connections on-site and send them to the PPM workshop for them to be pre-formed, pressure tested and labelled, then delivered to site when required.

**Modular PPM:** this is when modular systems of PPM are manufactured, thus standardising the approved methodology for how installations should be carried out. This maximises space benefits and ease of maintenance.

**Special projects PPM:** this is for bespoke projects which require PPM for a number of reasons e.g. complex piping, health & safety (no hotworks allowed) or simply the desire for quality. Please contact Daikin to discuss your requirements and pricing.

# Controls





#### kWhr meters

Daikin kWhr meter panels offer a convenient means of monitoring the electrical power consumption of VRV systems. They consist of a 3 phase kilowatt hour meter mounted through the facia of an enclosure, while inside to the panel are electrical connections to allow correction termination of the incoming and outgoing power supply cables. Supplied loose with the panel are three split type Current Transformers (CTs) that can be mounted within or separate from the panel. KWhr meter panels are available in a range of capacities based on the maximum permissible rated current of the supplied CTs. There is a three week lead time for install of kWhr meter panels.



#### **Refrigerant leak detectors**

Refrigerant leak detection systems can be required for the Safety of Building Occupants , as defined in the BS-EN378 standard. Daikin has a solution that can help meet requirements for leak detection within enclosed spaces.

BS-EN378 requires that systems containing R410A refrigerant gas, such as VRV, meet the requirements for maximum system refrigerant volumes that could leak within hotel bedroom or other similar Category Class A spaces. If these limitations are exceeded, there must be an alarm system installed within each room. The alarm system must alert the occupier through both audible and visual indication, and must also alert building staff such as supervisors, night porters etc. Individual leak sensors or complete systems can be provided by Daikin.

Please contact your Sales engineer to enable assessment of your requirements and quotation.



#### Madoka remote controller shroud

To date, replacing an existing BRC1D or BRC1E remote controller with a new Madoka remote controller has required redecoration of the surrounding wall, due to the smaller size of the Madoka remote controller. Not anymore. With the release of the Madoka shroud, the requirement to redecorate the surrounding wall can be minimised or, in most cases, completely eliminated.

The Madoka shroud is available in two finishes, white and black, although special finishes are available on request. Designed to provide a slight overlap on the exposed wall area, the shroud is 130mm square, compared to the 120mm square of the BRC1D & BRC1E remote controllers. This ensures that aligning of the shroud to the exposed wall area is not too critical.

The shrouds are available to order now, ex stock. The Madoka shrouds are sold at listed price. No discount will be applied.



### Madoka wired touch screen remote controller (metal finish)

The Madoka remote controller is now available with a metal clad option, with a choice of finishes:

- Brushed chrome
- Polished chrome
- > Polished brass

The metal clad option is designed to be flush with the wall, with the fascia plate being secured to the supplied backbox with matching finish screws.

The metal clad option retains all the functionality of the original Madoka remote controller, including connection via Bluetooth for the Madoka Assistant App ensuring access to all advanced functionality and speed of commissioning and servicing.

The metal clad Madoka controllers are compatible with all Sky Air, VRV and Heat recovery ventilation (VAM) indoor units and available on a three to four week lead time.





#### Change over panel Automatic changeover panels for use with Split and SkyAir

In comms rooms, it is normal to have a standby air conditioning unit, which automatically operates in the event of a fault with one of the duty units or upon high temperature being detected in the conditioned space. It is also normal to rotate the operation of the duty and standby units to ensure equal use of all units. Automatic Changeover panels offer a fully automatic means of controlling the air conditioning within a comms room and alerting in the event of a fault occurring.

The panels are available to order via your local sales branch, on a three week lead time.

# Plenums

Daikin UK now offers plenums to allow connection of 200mm flexible ductwork to FXSQ-A, FBA-A, FXDQ, FDXM and FXMQ series units.

**Supply air plenums** have been created for connecting flexible ductwork to the ducted units. The plenum attaches to the supply air outlet flange on the unit.

**Return air plenums** have been created for connecting flexible ductwork to the return air outlet of the ducted units. The RC fits over the return air flange and includes a slot for the filter to be fitted. This has a spring-clip fastening to the lid, allowing filter to be removed for maintenance.

Plenums are applicable to all Sky Air and VRV systems and are available from stock at the National Solutions Centre.





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