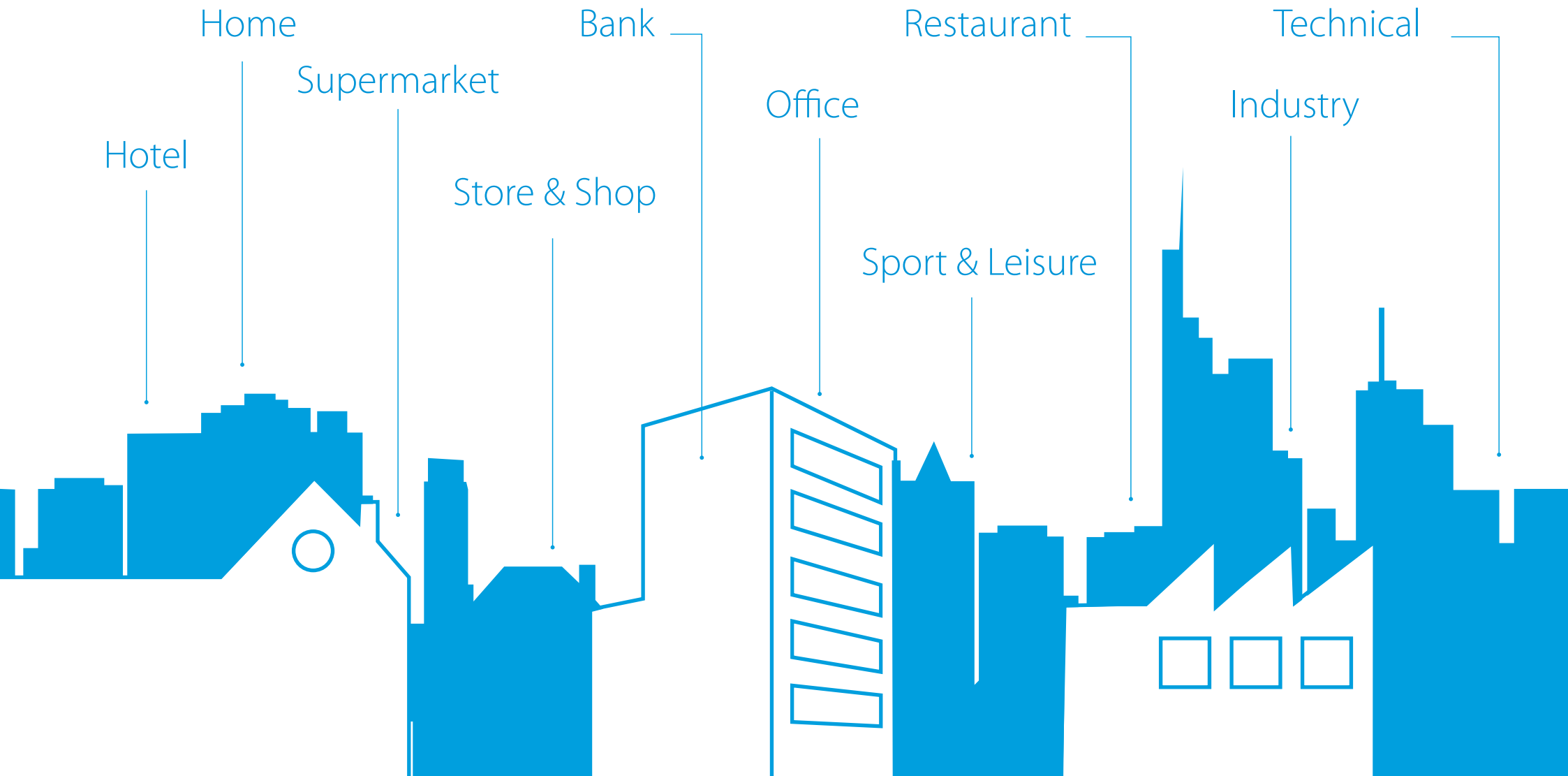
DAIKIN

Commercial solutions for small to large applications

365-days climate comfort for every business

Daikin world

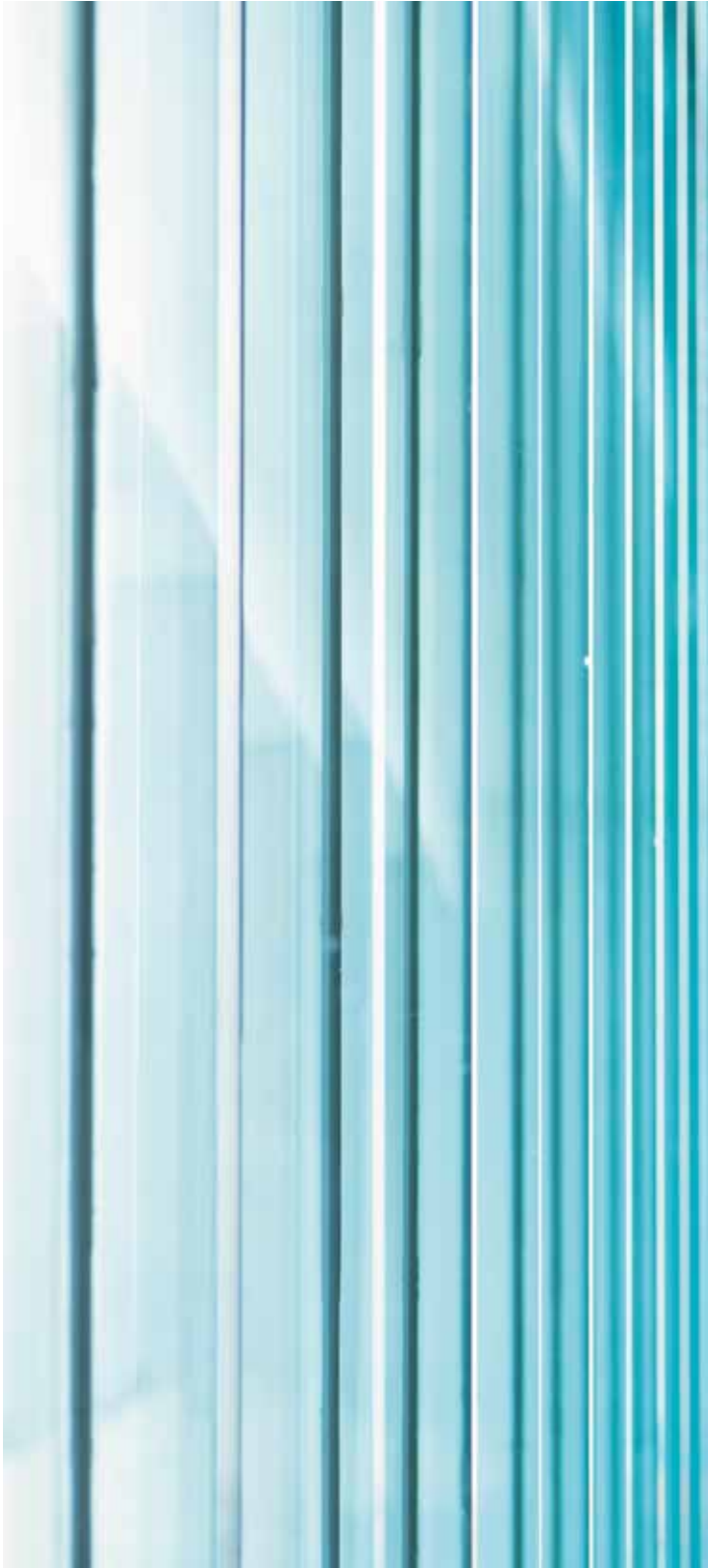


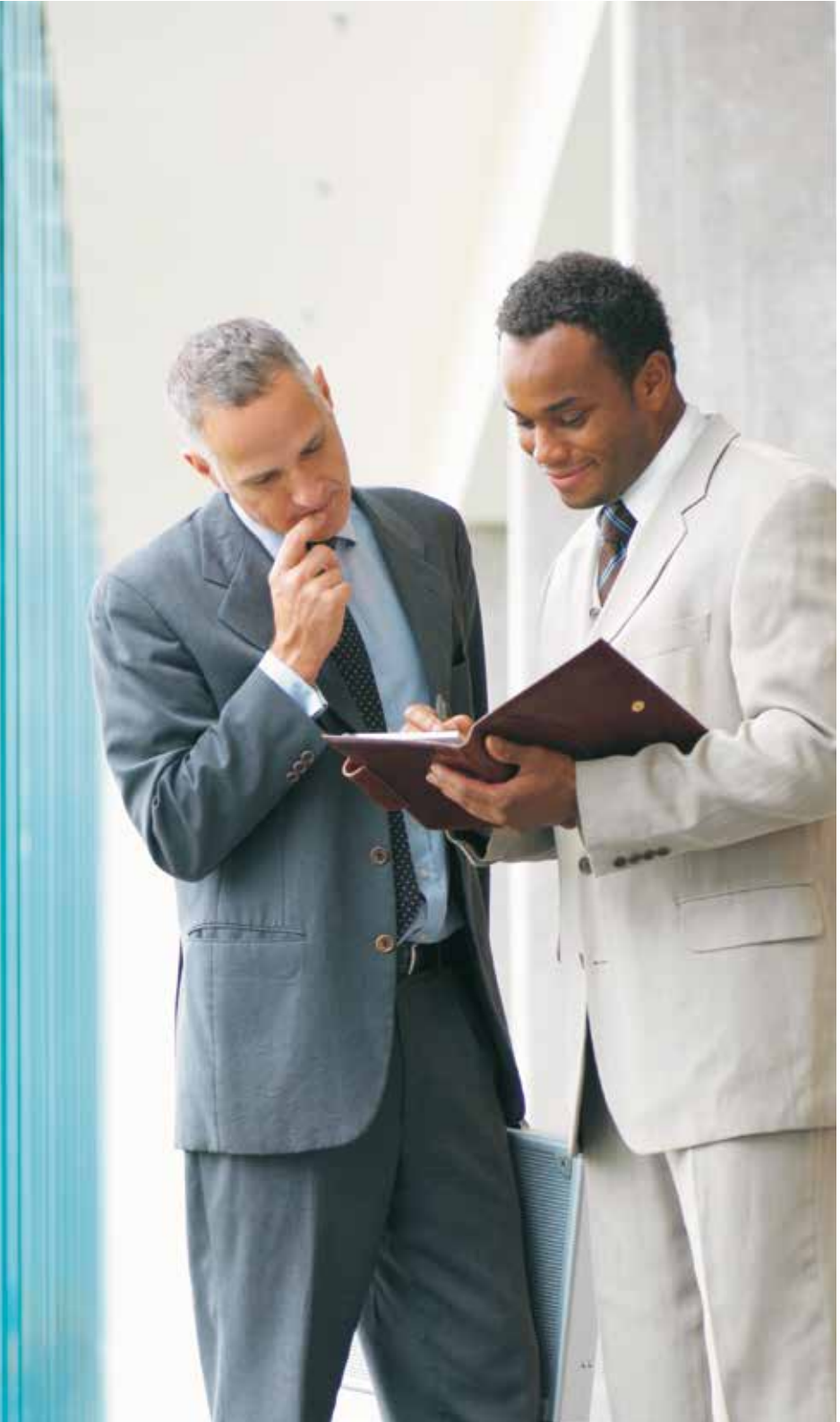
The perfect working environment is essential for all businesses. From supermarkets to offices, from public buildings to hotels, from restaurants to shops it is essential that the quality of the air is optimised at all times – but no space is used in exactly the same way and that calls for flexible, tailored and economic solutions. Daikin, the innovation leader for more than 90 years, understands this and its 'total solution' concept is built around customised solutions for individual clients. Whether cooling, heating, ventilation, air curtains or refrigeration with intelligent control systems.

Daikin has the units, the experience and the solution for you. Learn all about our solutions for your business and read more about customer experiences.

Working partnerships

Delivering 'Total Solutions' in long-term relationships





On
6

Daikin leads the way

Your partner of choice, Daikin equals quality

On
8

The perfect working environment for every business

Our wide range of high-quality products provide an answer to every need and can be integrated in to a full solution

On
12

Discover our commercial case studies

Many others have already discovered our unique Daikin products and service

Supporting you
every step along the way

The comfort of reliability

Nobody is really looking for complexity in business. Because complexity often leads to mistakes, delays or losses. Unfortunately, the world we are all doing business in, is sometimes quite complex. When looking for further business development, we all expand our national and international operations. And that doesn't make things easy.

As a multinational company, you deserve the **best partners**. Partners that can take away the headaches and make you feel comfortable again. With Daikin, you have found such a partner. Because Daikin would like things to be easy … for you.

And we can help you with that. That's why we have developed our **Partnership Programme,** a programme that will include all the items to make your life easier, personalised to your situation and needs.

We also have a dedicated group of people, our **key account team,** for national and international needs who are experts in their business and real organisers. They can rely on a worldwide **network** of colleagues and partners in all segments and aspects of our business, always available to help you out.

1 point of contact

- Your (international) simplifier/organiser/coordinator
- Unique technical know-how & expertise
- Ensuring fast, simple and smart communication
- Creating your competitive advantage

Efficiency

Short and simple communication routes throughout the project cycle from design to installation, valid in all (international) markets

Guidance on the latest local regulations and government schemes

- Helping you to secure **more project completions,** saving time and money
- Assisting you in meeting your **legal compliance**

Flexibility

Rely on our (international) network of Daikin certified installers OR use your own trusted partners

Best value purchase plans including volume recognition

- Enjoy freedom in our partnership
- Best value for money

Uniformity

Pre-agreed purchase flows for your (international) markets

Rely on the most extensive support and after-sales network for all your (international) needs

Rely on an (International) warranty package with uniform procedures

- Ensuring your delivery times are met to deliver your challenging deadlines
- Ensuring your customers' comfort at all times
- Guaranteeing business continuity

Transparency

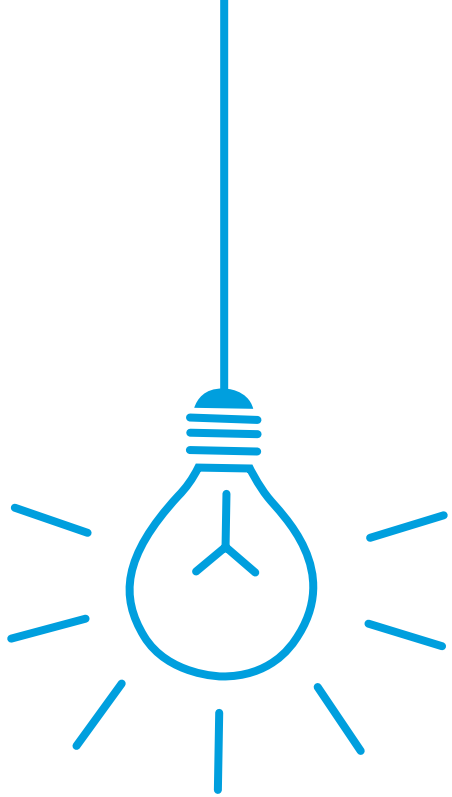
Cost of equipment and services throughout your (international) purchases

Supporting you to optimise the life cycle cost of your HVAC installation

- Easy budgeting/Procurement benefits
- Increase your profitability and/or complete more projects with the same capital expenditure

Innovation

that surpasses the Ecodesign targets



Climate revolution in commercial buildings

In 1982, Daikin became the first company to use **heat pump technology** powered by renewable energy to provide **all-year round comfort** in larger buildings. This radically **new technology** was soon imitated by others.

Daikin, always a step ahead

Daikin, a pioneer and leading manufacturer in air conditioning, has not stopped since then in setting new standards for its proven VRV system. There was the first effective utilisation of **heat recovery** in the year 1991: waste heat generated during the cooling processes ends up saving money for heating, in other parts of a commercial building. And 1998 sees an important step taken in the battle against the hole in the ozone layer. Daikin is the first manufacturer to use an FCKW-free (fluorochlorinated hydrocarbon) refrigerant in its air conditioning units. With the fourth VRV generation, we are now writing the next chapter in the success story of the direct vaporisation principle. A great deal may have changed since 1982; who was responsible for this, however, remains unchanged. Daikin continues to develop state-of-the-art technology today, with which it defends its market leadership in, Europe and the world.

Focus on total yearly consumption

Our units have always been optimised for overall efficiency throughout the year. It goes without saying that our units fulfil the **EU Ecodesign** Directive that came into effect in 2013. It focuses attention on seasonal efficiency and evaluates the performance of air conditioning systems, based on their efficiency and cost-effectiveness throughout every day of the year. Without doubt we dare to say that Daikin has the best performing units in its range and we're the **first in the market** to implement the legislation long before it became law.

European action plan 20/20/20

-20%
CO_2 emissions vs. 1990

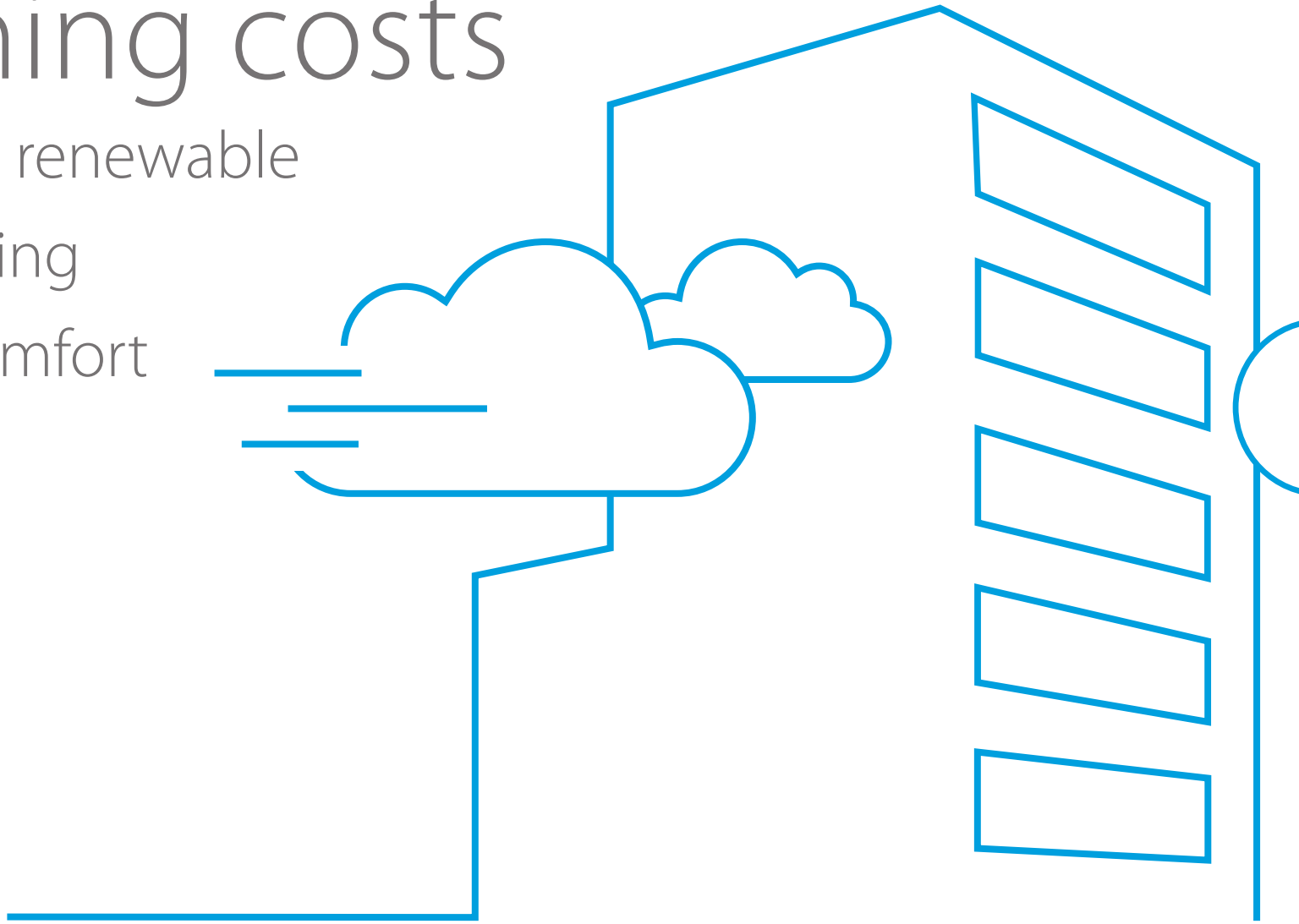
20%
Share of renewable energy

-20%
Primary energy use vs. Business as usual

By the year 2020

Low running costs

from reliability and renewable energy to maximising your customers' comfort



Energy from the air

What could be simpler? The air is the ultimate **in renewable energy**. Taking heat from the air **reduces the running costs** of the system, is **ecologically friendly**, and totally reliable. What better way to maximise your customers' comfort. By using our advanced air-to-air heat pump technology to extract heat from the surrounding air, the cost of running the system is reduced by up to 75%. It's a truly **innovative solution**.

100%
energy =

75%
ambient air

+

25%
electricity

Heat pump technology

Air-to-air heat pumps obtain **75%** of their output energy from a renewable source: the ambient air, in summer and winter, even when it is freezing outside; air which is both renewable and inexhaustible.

Of course, heat pumps also require **electricity** to run the system **(25%)**, but increasingly this electricity can also be generated from renewable energy sources (solar energy, wind energy, hydropower, biomass). A heat pump's efficiency is measured in SCOP (Seasonal Coefficient Of Performance) for heating and SEER (Seasonal Energy Efficiency Ratio) for cooling.

Inverter technology

Daikin systems (e.g. Daikin Altherma) can heat your home up to five times more efficiently than a traditional heating system based on fossil fuels or electricity. By making use of the heat in the outside air, **the system uses much less energy, while you enjoy a stable and pleasant level of comfort**.
Also, maintenance requirements are minimal, keeping running costs low. Thanks to advanced compressor technology, the energy savings are even greater.

Daikin's inverter technology is a true innovation in the field of climate control. The principle is simple: inverters **adjust the power used to suit the actual requirement** – no more, no less! This technology provides you with real benefits!

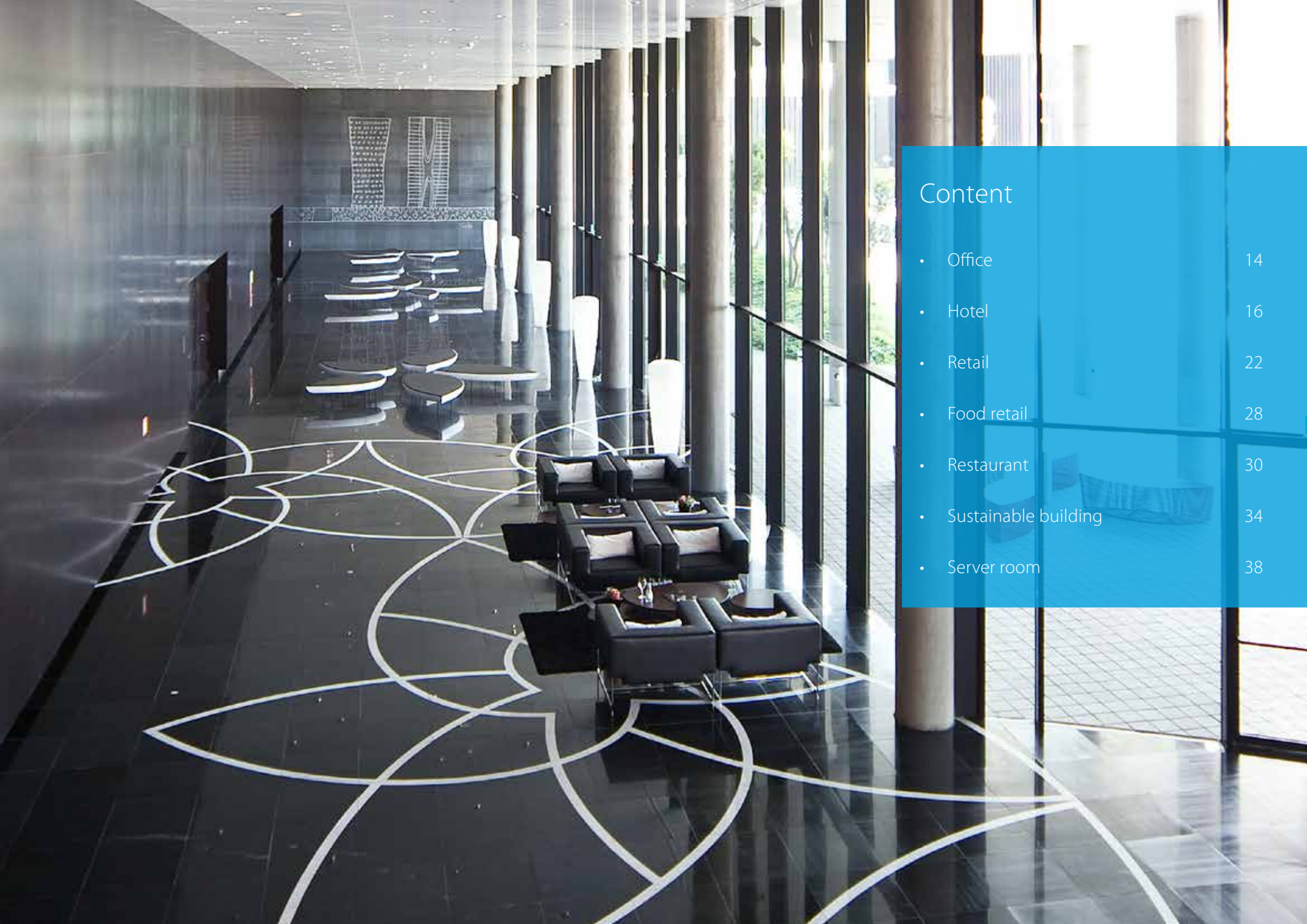
Total solution

Conceptually the Daikin Total Solution offers a single point of contact for all the design and maintenance requirements for your integrated climate control system. Our equipment has proven reliability built in and so by ensuring that you have the right mix of units we know that you will be able to achieve optimal comfort with low maintenance costs. But what is more, our units deliver maximum energy efficiency and the minimum of operating costs.

Discover our commercial case studies

Looking at real-life examples makes it much easier to understand our Total Solution.

We have selected seven projects across seven different sectors. Each are part of our Total Solution programme and in each case we were involved from the start of the design phase, though project delivery and into future maintenance.



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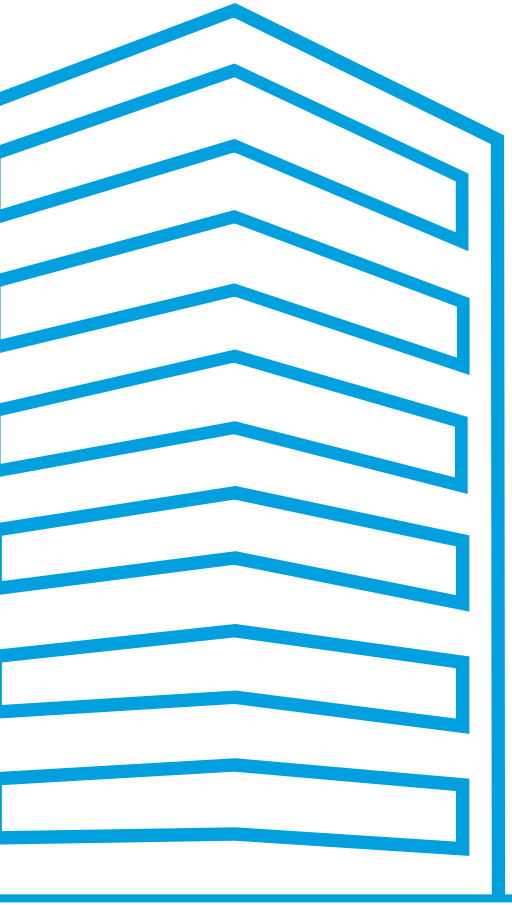
Office

Efficiency in the workplace

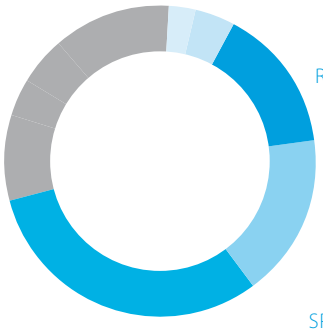


Efficient building and facilities management is key to minimising operational costs. Daikin's customised office solutions give you full control over energy consumption – creating the ideal working conditions and minimising environmental impact.

HUGE ENERGY SAVINGS

Daikin's office air conditioning can be integrated into a whole climate control solution. Heat recovery between components, free cooling ventilation and free hot water production all result in lower running costs and minimum carbon emissions.

COVER UP TO 48% OF YOUR NEEDS WITH A TOTAL SOLUTION:



Check on YouTube

Animation of an office solution:
https://www.youtube.com/DaikinEurope

REPLACEMENT TECHNOLOGY

Daikin office solutions with replacement technology offer rapid return on investment and a cost-effective upgrade; major energy savings with minimal downtime.

YEAR-ROUND COMFORT

Continuous heating during cold weather (down to -25°C) delivers high heating capacity; variable refrigeration temperatures deliver continuous comfort to avoid cold draughts.

REDUCED INSTALLATION COSTS

Daikin's fully flat cassette integrates flush with standard ceiling tiles for quick installation and neat integration in the ceiling, while Daikin's Intelligent Touch Manager offers a cost-effective mini BMS, which integrates all Daikin and third-party equipment.

FULLY FLAT CASSETTE

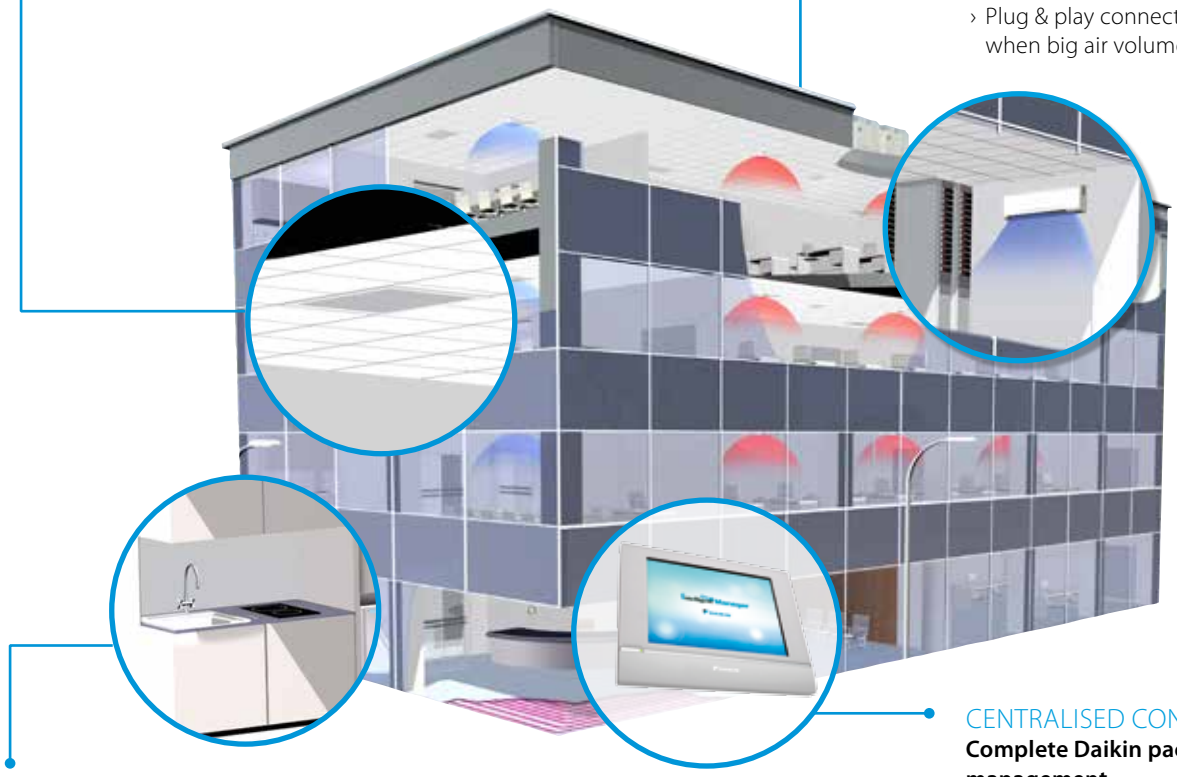
Design & genius in one

› Unique design in the market: fits flush in architectural ceiling tiles and fully flat with the ceiling
› Iconic design & engineering excellence
› Intelligent sensors for maximum comfort and efficiency

FRESH AIR

A healthier office atmosphere

› Minimise energy waste by recovering heat from exhausted air
› Combining ventilation and air conditioning in one system
› Ideal for medium to large buildings
› Air filtration ensures a steady supply of clean air
› Plug & play connection to air handling units for when big air volumes are required



HOT WATER

Cutting the cost of hot water

› Use heat pump technology to produce hot water
› Free production of hot water made possible by transferring heat from areas requiring cooling.
› Possibility to connect solar panels
› Possible applications: sinks, under-floor heating, showers and radiators

CENTRALISED CONTROL

Complete Daikin package for office building management

› Intuitive user interface
› Smart energy management
› Flexible in size and integration via WAGO
› Online access and control of multiple buildings
› Easy management of electrical consumption of multiple tenants

Crystal tower

BREEAM Excellent label

Daikin Romania

"The Crystal Tower demonstrates that energy efficiency can be achieved, even for a difficult urban site and compact built surfaces.
Quality of design, incorporating the use of the newest technologies, shows it is possible to transform a mono-volume building into a strong and interesting presence for the city."

PROJECT

Water loop for VRV water-cooled modules + boilers & cooling towers
Surface covered by the installation: 16,900 m^2 (15 floors in total)

SYSTEM

- 3 x VRV III outdoor units
- 67 x water-cooled VRV outdoor units
- 265 x concealed ceiling units
- 24 x 4-way blow cassette units
- 5 x Sky Air outdoor units
- 5 x 4-way blow cassette units
- 1 x air-cooled multi-scroll chiller
- 1 x air-cooled screw chiller
- 11 x BACnet interface

www.crystaltower.ro

Other references

Daikin UK

VELOCITY (UK)

Sustainability is at the forefront of Velocity's design. Each element of the design has been carefully considered to ensure an EPC rating of 'B' and an 'Excellent' BREEAM rating.

WHY DAIKIN?

Daikin was chosen as the personal preference of the building engineer. Having worked extensively with our products on other projects, he selected Daikin for their flexibility and reliability.

SYSTEM

› 28 x VRV III outdoor units (heat recovery)
› 2 x VRV III outdoor units (heat pump)
› 256 x concealed ceiling units
› 10 x Intelligent Touch Controllers

www.velocitybrooklands.com

Daikin Germany

KAFFEE PARTNER (DE)

A chiller was planned in the original concept; but then it was decided to install 7 VRV systems (total cooling capacity approx. 272 kW) leading to a lower investment, a reduction in energy and less required space. In total, 70 offices and meeting rooms on four floors are air conditioned.

WHY DAIKIN?

The client's need to reduce energy costs through the use of highly energy efficient systems made Daikin the obvious choice when compared to other systems.

SYSTEM

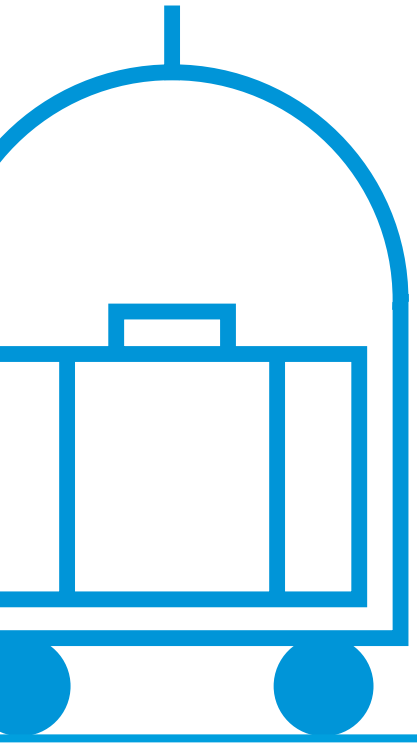
› 7 x VRV III outdoor units (heat pump)
› 3 x condensing unit for air handling application
› 15 x concealed ceiling units
› 69 x 4-way blow cassette units

www.kaffee-partner.de

Hotel

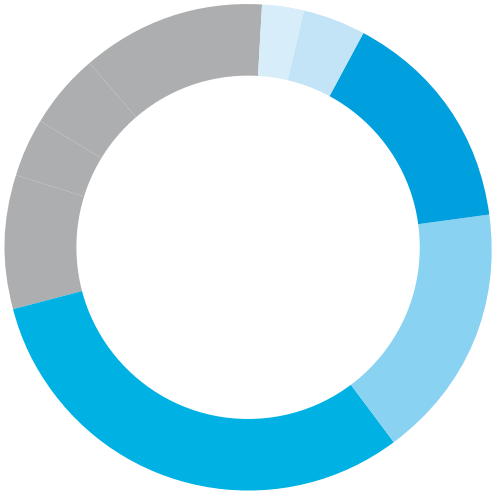
hospitality, economy, reliability

A hotel's reputation depends on how welcome and comfortable guests feel during their stay. Yet at the same time, hotel owners must maintain complete control of their operation costs and energy consumption. A specially developed portfolio meets the needs of the hotel market.



COVER UP TO 70% OF THE CUSTOMERS NEEDS, OFFERING THEM A TOTAL SOLUTION:

- OTHER
- REFRIGERATION 3%
- VENTILATION 4%
- SPACE COOLING 15%
- HOT WATER 17%
- SPACE HEATING 31%



Check on YouTube

Animation on hotel application
https://www.youtube.com/DaikinEurope

GUEST ROOMS

The perfect personal environment for guests by simultaneously heating spaces while cooling others and ensuring a good night's rest.

- ⊕ Intuitive remote control with built-in connection to key card or window contact to save energy
- ⊕ A wide choice of indoor units can be used

KITCHEN

Comprehensive control and monitoring of air conditioning, heating, hot water and refrigeration.

- ⊕ Heat is recovered from refrigerated display cases and cold chambers to boost heating in other areas
- ⊕ Dedicated inverter refrigeration solutions

LOW-COST HEATING

Low-cost heating and hot water by recovering heat from areas requiring cooling.

HOTEL ENTRANCE

Provide your customer with a sense of maximum comfort from the moment they enter.

- ⊕ Air curtains allow doors to be opened without energy loss, while maintaining a high comfort level
- ⊕ Underfloor heating for even temperature distribution in high ceilinged areas
- ⊕ CO_2 sensors prevent energy loss through over-ventilation, while at peak moments enough fresh air is supplied

CENTRAL CONTROL

The key to keeping control over your energy costs and ensuring customer comfort.

- ⊕ Integration with hotel booking software, starting air conditioning when guest checks in
- ⊕ Smart energy management tools continuously optimise your building's efficiency
- ⊕ Monitor all Daikin and third-party equipment from one central location, and even remotely

Porta Fira

Awarded skyskraper

Daikin Spain

This project reinforces Daikin's position as a leader in air conditioning for large-scale structures, able to provide solutions that stand out not only for their accuracy and reliability, but also for their energy efficiency.

The Hotel Santos Porta Fira is considered the best skyscraper in the world and has been awarded the prestigious, "EMPORIS AWARD 2010", architectural award. It is situated in Barcelona in L'Hospitalet, opposite the Fira Gran Vía.

PROJECT

Daikin was chosen to meet the high standards of comfort for this unique hotel of 24 floors and 113m high, with the installation of 74 VRV outdoor units and 664 VRV indoor units and two R-134a air cooled chillers with single screw compressor.

WHY DAIKIN?

The customer is a strong supporter of Daikin's quality and has been installing Daikin equipment since 1996.

SYSTEM

- 74 outdoor units (60 x VRV heat recovery outdoor units) controlled via intelligent manager
- 664 indoor units
- 2 x air-cooled chillers (EWAD 600 BJYNN/Q)

www.hotelbarcelonaportafira.com

Other references

Daikin France

LE PIGONNET (FR)

Hotel Le Pigonnet is a luxurious hotel / restaurant in Aix-En-Provence. Daikin replaced the existing R-22 installation with an energy-efficient VRV solution.

WHY DAIKIN?

Thanks to replacement technology solution, Daikin was able to minimise the interruption to business and the interior decorations were preserved by keeping the refrigerant piping.

SYSTEM

› 8 VRVIII-Q RQYQ140P + 36 FXLQ25 + 3FVX50+1FTXS
› 3MXS52+ 2 FVXS25
› RXS50 + 1 FTXS50
› RXS50 + 1 FVXS50
› 3 MXS68 + 2 FVXS 25 + 1 FVXS50
› RXS25 + FVXS25

www.hotelpigonnet.com

HOTEL HOLIDAY INN (FR)

Purchased by the IHG group to be turned into a 4-star Holiday Inn, this former Ministry of Education building was entirely renovated. The hotel has 108 guest rooms on eight floors, and in the basement there is a meeting room, the kitchen, staff rooms, a 'breakfast' room and the utility rooms.

WHY DAIKIN?

The strong restriction on sound levels (installation in residential area) and the limited space in the technical room were the main specific features of this project.

SYSTEM

› 10 x VRV III outdoor units (heat recovery)
› 120 x concealed ceiling units
› 28 x ceiling mounted cassette units
› 1 x wall mounted unit
› Intelligent Touch Manager

www.ihg.com/holidayinn/hotels/us/en/paris/parsg/hoteldetail

Store & Shop

Reducing retail costs

In the current commercial environment, retailers are under pressure to reduce both store development and running costs. Legislation adds further financial pressure with different energy-efficient schemes. Therefore affordable, energy-efficient solutions are vital to minimise lifetime costs, while ensuring compliance with the latest regulations.

With their fiercest competitors often located nearby, retail shops need to provide their customers with the ultimate shopping experience: and that begins with a comfortable environment. With Daikin air conditioning solutions, store owners can optimise the shopping environment and improve customer and employee comfort levels while reducing costs. Moreover, our wide range of indoor units complement any store's interior design and deliver comfort that keeps customers shopping for longer.

We ensure that all our units offer flexible installations, total solutions whatever the customer's requirements, and the highest rates of energy efficiency on the market. For the light commercial sector we recommend our SkyAir range for its reliability, its smart use of energy and its ability to be tailored to specific needs. In this way, we offer your customer total control over comfort levels through easily controlled heating and cooling, ventilation and doorway climate separation.

Whatever the site and requirements we can design a system that is economical, has low environmental impact and uses the very latest in advanced VRV technology. Our heat pumps extract heat from the outside air even in cold weather to warm the retail space and can be installed either on roof tops or against walls - the ultimate in installation flexibility. And our air curtains solve that problem of comfort loss resulting from exterior doors.

ENTRANCE

Highly efficient solutions to combat the issue of climate separation across your doorway

› Most efficient open-door solution giving substantial energy savings of up to 72% and a payback period of only 1.5 years compared to electric air curtains
› Year-round comfort ensured by rectifier technology and optimised air flow velocity

360° COMFORT

50% energy saving compared to standard cassettes

› The auto cleaning function ensures daily filter cleaning, leading to 50% energy saving
› Lower maintenance cost (filter cleaning can be done with a vacuum cleaner)
› Intelligent sensors switch off the unit when there is nobody in the room, saving up to 27%
› Perfect comfort: 360° air discharge and presence detection directing the airflow away from persons

USER-FRIENDLY CONTROL

Create a comfortable environment for customers

› Simple-to-use menu making it easier than ever to control your system
› Energy saving functions, reducing your running costs
› Contemporary design
› Weekly schedules increase comfort and efficiency
› Supports multiple languages
› Lock-key function to avoid improper use

The range

Retail

Daikin UK

The Range is recognised for its products including; DIY, homewares, furniture, lighting, arts & crafts and garden..
The Ranges' ethos is to present mid-price home, leisure and garden products, drawing together everything that could be needed for a stylish home, all at affordable prices.
The Range continues to evolve, with stores stretching across the UK.

PROJECT

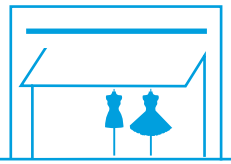
Total HVAC solution. Both VRVIII Heat Recovery and VRV IV heat pumps provide continuous heating, ensuring comfort at all times. Both systems allow the integration of hot water, ventilation and an air curtain for a fully integrated approach. Total surface: 7,800 m^2

WHY DAIKIN?

They required a solution to provide the right levels of climate control, balanced with energy efficiency.

SYSTEM

› 74 x VRV outdoor units (60 x Heat Recovery + 14 x Heat Pumps)
› 664 x VRV indoor units
› 2 x air cooled screw chillers
› Intelligent Manager (control system)



www.therange.co.uk

"We were very happy to work with Daikin UK to incorporate one of the latest fully integrated renewable systems that would provide heating, hot water, and air conditioning, allowing The Range at Warrington to have a fully controllable system with operation flexibility according to requirements."

Brad Hurter, CDS Group

CDS group

Service Station & Supermarket

Integrated freezing, chilling, space cooling & heating

"The impact of heat recovery on the efficiency of my system is just astonishing … "

Climate control for a typically service station includes a combination of freezing, chilling and space heating or cooling. The same can be said about a convenience store in a high street location.

THE RIGHT TEMPERATURE IN THE RIGHT PLACE

With the need for multiple showcases at different temperatures ranging from -18ºC up to +7ºC a highly flexible solution was needed. Daikin's ZEAS system is the perfect choice for its versatility, its advanced VRV technology and its proven reliability. With optional boosters, it is possible to have medium and low temperature cooling on the system at the same time.

COOL IN SUMMER, WARM IN WINTER

With lots of refrigeration units in a relatively small space, the build up of heat is likely to cause sub-optimal temperatures in the retail space. By combining the system with a Conveni-Pack system, the excess heat generated is removed from the space and used to deliver domestic hot water and or space heating in winter.

LOW NOISE IMPACT IN THE ENVIRONMENT

As the service stations and convenience stores are open for very long hours, sometimes all night, it is important to have low noise nighttime settings - something that comes standard with the Conveni-Pack

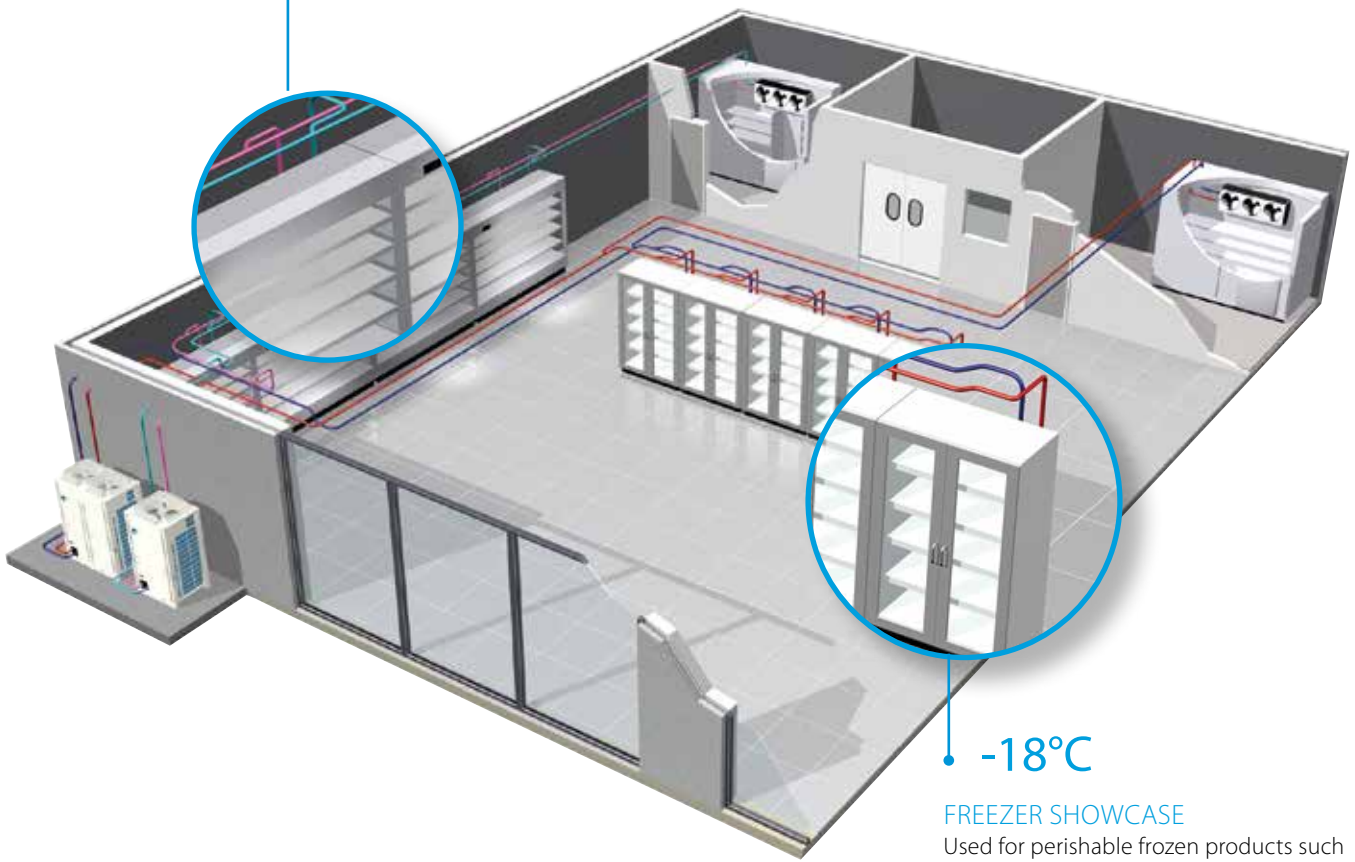
Check on YouTube

Animation on Service Station application
https://youtu.be/AePd_ZwJ6MA
Animation on Supermarket application
https://youtu.be/xHng7iMXmPM

+7°C

SHOWCASE

Used extensively to stock drinks and sandwiches, these units are connected to the medium temperature refrigeration system.



-18°C

FREEZER SHOWCASE

Used for perishable frozen products such as fish or meat, these freezer showcases have doors and are connected to a low temperature refrigeration system.

E. Leclerc Drive

Multi-channel food retailer

Daikin France

PROJECT

This drive-in supermarket, located in an old printing house, required refrigeration.
As the installer was already familiar with Daikin's VRV system, ZEAS proved to be the perfect solution, offering both medium and low-temperature refrigeration, even though temperatures can vary greatly between summer and winter.

SYSTEM

› 3 x Refrigeration condensing units for low-temperature refrigeration
› 2 x Refrigeration condensing units for medium-temperature refrigeration

Other references

Daikin Germany

EDEKA BUSCHKÜHLE (DE)

The 2 Conveni-Pack systems supply 32 metres of service counters, 12.5 metres of convenience fridges, one cooling storage room for fruit, an air curtain and five indoor units; the ZEAS system supplies two deep freezers with a total capacity of 5 kW.

SYSTEM

› 2 x Refrigeration condensing units for medium temperature refrigeration (Conveni-Pack)
› 1 x Refrigeration condensing unit for low-temperature refrigeration (ZEAS)

www.einkaufen-erleben.de

Restaurant

Create the perfect ambiance

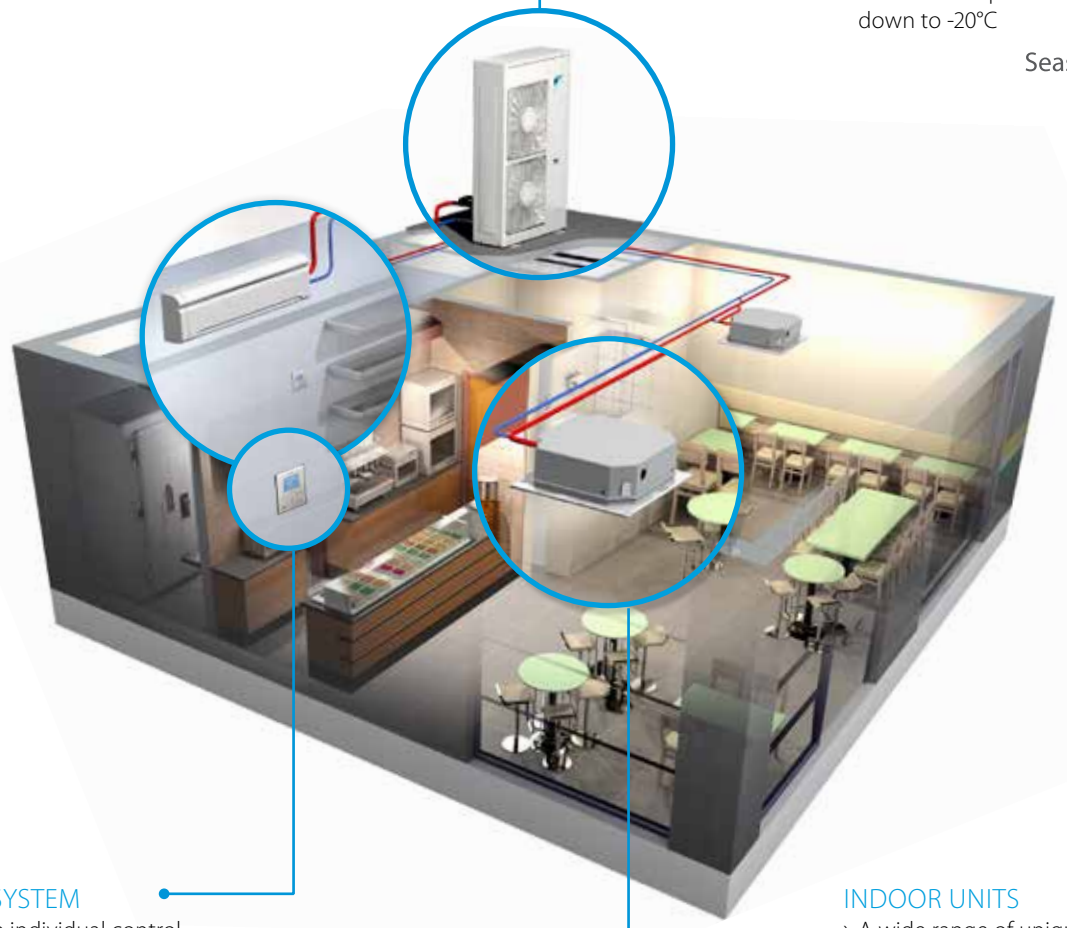
Restaurants require heating, cooling, ventilation, hot-water production and even refrigeration systems. But, none of these requirements should distract diners from enjoying the perfect ambience.

Daikin offers total control of temperature and air quality – avoiding cold draughts and noise – so that your customer's restaurant is always fresh, comfortable and welcoming for the guests and employees. Even if the restaurant is not fully booked the system always delivers, using only the output that is required. The Daikin inverter system perfectly matches the demands, saving energy almost 80% of the time.

With our heat pumps recovering heat from the kitchen to provide low-cost heating and sanitised hot water, our products offer a CO_2-friendly alternative to gas or oil-fired boilers and outperforms fossil fuel installations by a large margin.

This helps in overall energy consumption and reduces operating costs. While our centralised control systems will ensure extra energy savings.

The dedicated Total Solutions team keeps a close watch on all your projects to make sure the system is tailor-made, the installation is in accordance with Daikin's high quality standards, and everything really meets the customer's needs. We deliver peace of mind, for you, for your customers and the perfect comfort levels for their guests. Enjoy your meal!



OUTDOOR UNIT

- Keeps your running costs as low as possible thanks to industry-leading technology
- Wide range of connectable indoor units
- Guarantees operation in heating mode down to -20°C

Seasonal Smart

CONTROL SYSTEM

- From simple individual control to complete Daikin BMS package
- Communication interfaces for integration with third-party BMS systems
- User-friendly in operation
- Several functions and features help you to save on energy

INDOOR UNITS

- A wide range of unique units, designed to suit every shape of room
- Extremely quiet in operation so as not to disturb the comfortable area where your customers enjoy their meal
- Unique features to increase the comfort of your customers and to improve energy efficiency

Icebar by icehotel

Experience the Extreme

Daikin UK

Step into ICEBAR LONDON, a cold sensory experience where the walls, bar, tables and even your own drinking glass are made from crystal clear Torne River ice, which is harvested from the pristine winter wonderland of Jukkasjärvi in Northern Sweden.

PROJECT

The refrigeration system was required to work in conjunction with a total climate control solution that would provide air conditioning, heating and ventilation to the bar, restaurant, kitchen and washroom areas.

WHY DAIKIN?

The project was carried out by Design & Build and Daikin were introduced to the client by our contractor, AC Direct Ltd.

SYSTEM

- 2 x Refrigeration condensing units (ZEAS)
- 1 x VRV III outdoor unit (heat recovery) with hot water production
- Biddle air curtain
- 1 x VAM unit (ventilation)

www.belowzerolondon.com

"We had been meaning to upgrade our heating, ventilating, air conditioning and refrigeration systems in our restaurant and Icebar for a while. Ascertaining the correct comfort levels for our customers in the restaurant was of prime importance and had to be balanced against energy loss from the large open entrance doors.

This challenge, combined with the constant heat gains in the carefully maintained -5ºC atmosphere of Icebar, led us to work very closely with Daikin UK to design a controlled installation for the whole venue, which will lead to heat recovery savings of over 50% by using new technology."

Alex de Pommes, Icebar's Director

Other references

Daikin Netherlands

ZIGGO DÔME

The Netherlands' newest and most energy - efficient music hall, Ziggo Dome in Amsterdam, has been equipped by Daikin.
The refrigeration units installed meet the requirements to cool and freeze drinks and food in 218 locations.

WHY DAIKIN?

The project was carried out by Design & Build and Daikin were introduced to the client by our contractor, AC Direct Ltd.

SYSTEM

› 6 x Refrigeration (ZEAS) 6 x LRMEQ20AY1, 2 x LRLEQ5AY1)
› Control via ModBus interface

www.ziggodome.nl

Your partner

for green and sustainable buildings

Daikin offers the optimal solution for your green building project: expertise with our own Interational Accredited Professionals, responsibly sourced materials, and highly efficient and comfortable products.

BOOST YOUR BREEAM© SCORE WITH DAIKIN

- **We have a team of BREEAM® Accredited Professionals at your service!**
  Daikin have BREEAM® Accredited Professionals (AP) across Europe, helping you all the way to achieving your BREEAM® certificate
- **We source responsibly**
  Daikin achieved BES6001 certificates for several product ranges
- **Daikin supports you in getting maximum BREEAM® credits & lead points:**
  Daikin Total HVAC-R Solutions High Seasonal Efficiency Technologies
- **You get a BREEAM innovation credit with the 'VRV cloud'**
  BREEAM® awards innovative products & technologies which boosts your end score. The VRV Cloud is an intelligent energy-management assistance tool that gives you valuable knowledge, while also reducing the effort required to manage energy usage.

BREEAM is the world's foremost environmental assessment and rating system for buildings. It sets the standard for best practice in sustainable building design, construction and operation and is proof of green and sustainable credentials.

References of Daikin 's participation:

Daikin has successfully participated in many green and sustainable projects. Helping builders to achieve BREEAM Excellent, LEED Gold, NZEB and similar certificates has become one of our specialties – and our case studies prove it!

Park Phi (Enschede NL): BREEAM Excellent
Quattro Park C (Krakow, PL): BREEAM Very Good
Japan House (Moscow, RU): BREEAM Good
Crystal Tower (Bucharest, RO): BREEAM Excellent
Velocity (UK): BREEAM Excellent.
For more references, please refer to our website: www.daikineurope.com/references

THE NET-ZERO-ENERGY NZEB BUILDING

As of 2019, all new buildings in the EU must be net-zero-and energy buildings – this also includes commercially utilised constructions. How can such a zero value still be achieved today, when proven heat pump technology and, for instance, photovoltaics have been cost-effectively integrated in a net-zero-energy building?

BREEAM® Accredited Professionals (AP)

Park Phi

Daikin Netherlands

BREEAM Excellent label

The Park Phi offices are green and sustainable, requiring a Total Solution from Daikin that provided a heat recovery cooling system and underfloor heating with domestic hot water. In addition the project included the temperature control of a data centre. The entire heating and cooling had to be controlled from a central control system.

PROJECT

The system installed utilises a water-cooled VRV system on each floor to recover heat, combined with a Daikin Altherma High Temperature air-to-water heat pump system with additional Rotex boilers to provide hot water and underfloor heating. Cooling the data centre uses a dry cooler and air-cooled chillers with heat recovery technology, backed up two separate Daikin packaged systems. The entire combined system uses an advanced Daikin integrated controller.

WHY DAIKIN?

The project owners had an excellent Total Solutions relationship with Daikin and had been very impressed with our innovative approach and exceptional quality.

SYSTEM

› VRV-WIII geothermal system
› Daikin Altherma HT
› Sky Air
› Aircooled chiller with heat recovery
› iManager, iTouch Manager, ACNSSModHilicius,

Green building

For Gerard Schröder the choice for this system was an easy one:

"As far as I'm concerned, with the VRV Heat Recovery system, Daikin has the Rolls Royce in heat pump technology. If you want to build a sustainable office building, there really is no other alternative."

Other references

Daikin Italy

NZEB

The client was faced with the need for improved summer comfort levels, greater energy efficiency and reduced power consumption to deliver cost savings. We delivered a highly energy efficient system that combined our advanced VRV technology optimised by ZEFFLE IR.

WHY DAIKIN?

Daikin's experience in delivering enhanced comfort in the working environment combined with keeping solar heat away from the interior made Daikin an obvious choice.

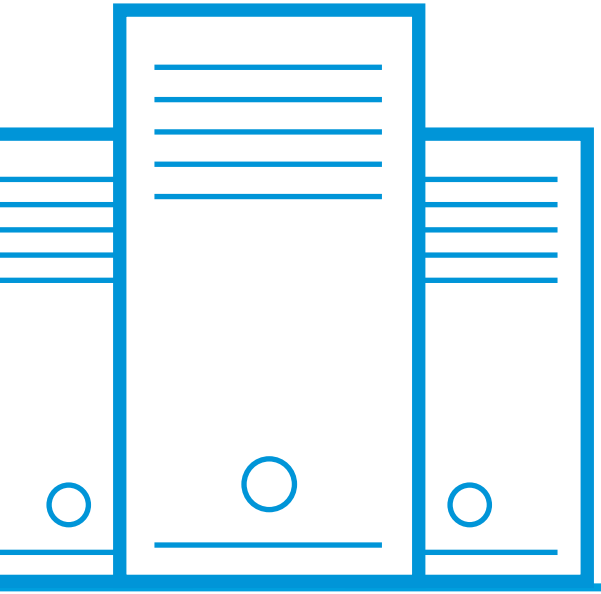
SYSTEM

› VRV
› ZEFFLE IR

Server room

Technical cooling

Reliable system and guaranteed continuous operation, highly sensible, technical cooling applications. Server rooms are critical spaces emitting a fair amount of heat but at the same time are extremely sensitive to temperature and humidity. These rooms need to be cooled 24/7, 365 days a year. Daikin's Seasonal Smart Sky Air range is the best solution on the market today. In this case, perfectly combinable with a numerous range of indoor units: wall mounted, floor standing, ceiling suspended and concealed ceiling units.



Check on YouTube

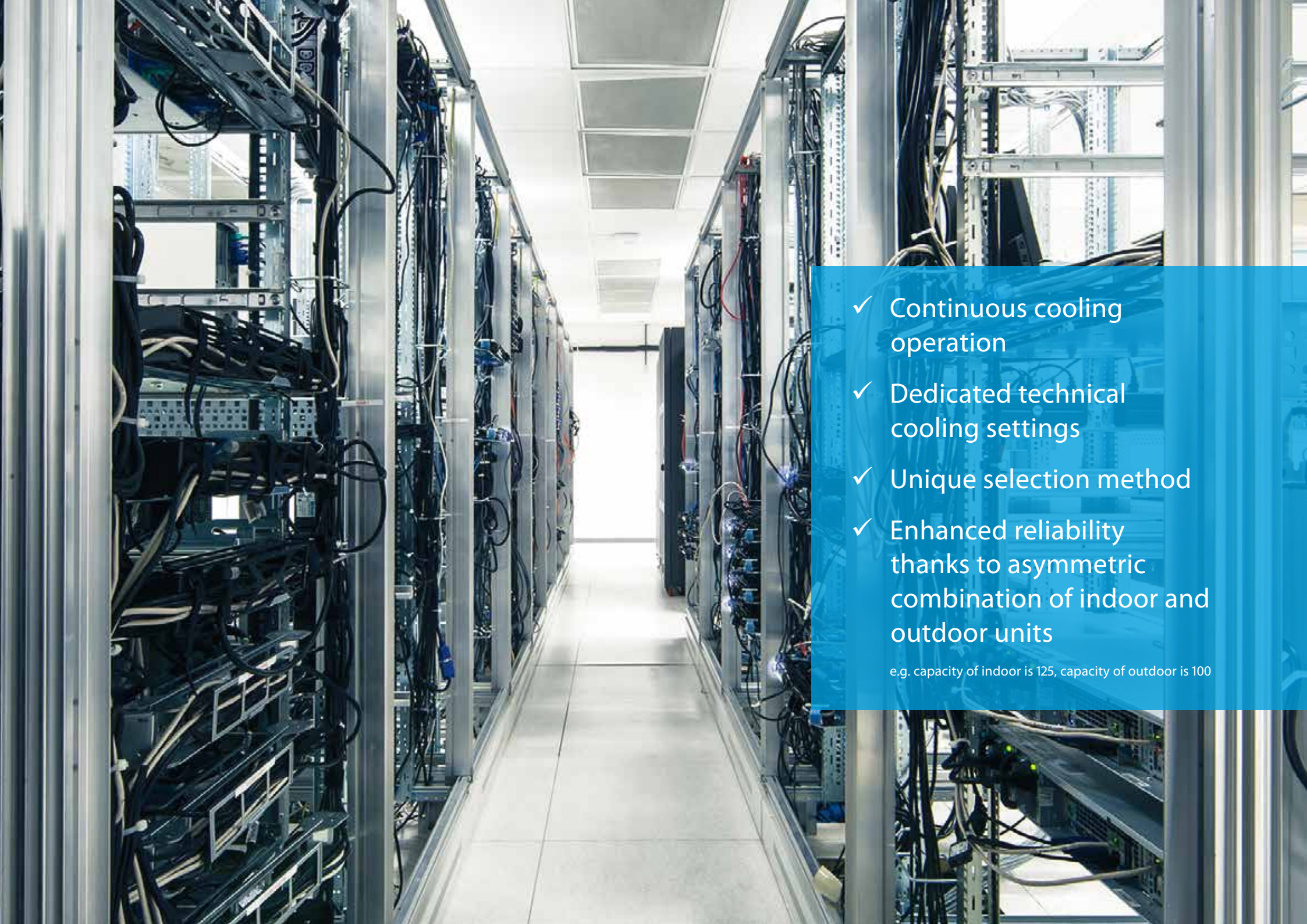
Animation on office application
https://www.youtube.com/DaikinEurope

SKY AIR FOR TECHNICAL COOLING

› Quality and reliable products
› Continuous cooling operation 24/7/365
- Automatic rotation between active indoor units
- Back-up outdoor unit ensures continuous operation
- Possibility of blocking certain settings

Servers, especially racks of servers, generate a great deal of heat and this needs to be removed through **continuous cooling** control.
This is achieved through **automatic switching between units** after a certain period of use to ensure that at any time, one unit is working while the other is available for maintenance.
Each server room is fitted with several indoor units, each connected to a single outdoor unit to ensure that if one outdoor unit fails, the other is there as an automatic back-up.

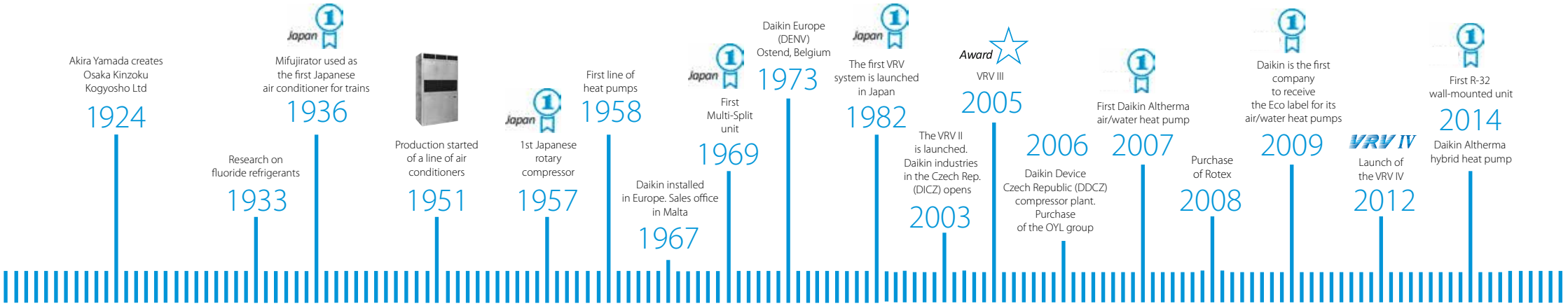
Given the critical importance of continuous cooling for server rooms, the system can be managed via an RTD-NET controller that can monitor and control up to 16 indoor units, either directly or via the building management system, and has a '**control of duty**' unit that locks the server room settings so that they cannot be changed by people in the server room.



- ✓ Continuous cooling operation
- ✓ Dedicated technical cooling settings
- ✓ Unique selection method
- ✓ Enhanced reliability thanks to asymmetric combination of indoor and outdoor units

e.g. capacity of indoor is 125, capacity of outdoor is 100

Daikin leads the way



A partner of choice

The perfect working environment is essential for all businesses. But no space is used in exactly the same way and that calls for flexible, tailored and economic solutions.

Daikin, Europe's leading manufacturer and global No 1 in HVAC-R equipment, understands this and our 'total solution' concept is built around customised solutions for individual clients.

Whether air conditioning, heating, ventilation, air curtains, hot water, refrigiration or controls, Daikin has the units, the experience and the solutions for you.

Daikin quality

Daikin's much envied quality quite simply stems from the close attention paid to design, production and testing, as well as aftersales support. To this end, every component is carefully selected and rigorously tested to verify its contribution to product quality and reliability.

Staff who understands you

Daikin and its staff of devoted analysts are ready to assist you on a daily basis in setting up nationwide or international agreements, providing advice on equipment selection and monitoring regulations. Our goal is to help you carry out your plans with confidence, using custom-designed systems that meet your needs (for comfort, performance levels, etc.).

Daikin's territory:

Daikin is also active in residential (social housing, new build / refurbishment, house/apartment) and industrial territories (process cooling, wineries, pharmaceutical).

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