

# Replacement technology

Upgrade your air conditioning system now!



Drastically improve your efficiency, comfort and reliability



# Replace now!

- ✓ To prevent unexpected breakdown
- ✓ To lower running costs
- ✓ To protect the environment
- ✓ To improve comfort

## What is Daikin replacement technology?

Quick & Quality replacement for R-22 and R-407C systems



No disturbance of  
your daily operations

- › Re-use your system infrastructure ensuring a quality replacement quickly
- › Replacement done over the weekend won't interrupt your business



Replace systems of  
other manufacturers

- › Does your building also use equipment from a manufacturer other than Daikin? Don't worry, those can be replaced as well, offering highly-efficient and flexible Daikin technology



Peace of mind

- › Avoid higher maintenance costs and possible failures of older R-22 or R-704C systems
- › Focus on your core business and let the new Daikin system take care of the rest



Lower costs  
compared with total  
refurbishment

- › Cut running costs and improve comfort by using the newest technologies
- › No interruption of your business activity and no costs for moving or redecorating



## Fact: R-22 has been banned in Europe\*

If your equipment is more than 15 years old, it probably still uses R-22 refrigerant. Today R-22 systems are prohibited, possibly resulting in unexpected downtime.

**Keep your business running at all times with Daikin replacement technology.**

\* EU directive: Regulation (EC) No. 2037/2000

Daikin replacement technology is available for the entire portfolio



### Residential

**Split replacement** of outdoor and indoor while keeping refrigerant piping

### Commercial

- › **VRV replacement** of outdoor and indoor while keeping refrigerant piping
- › **Chiller modernisation:** upgrade components to secure refrigerant compliance and extend lifetime
- › **Sky Air replacement** of outdoor and indoor while keeping refrigerant piping

### Industrial

**Chiller modernisation:** upgrade components to secure refrigerant compliance and extend lifetime



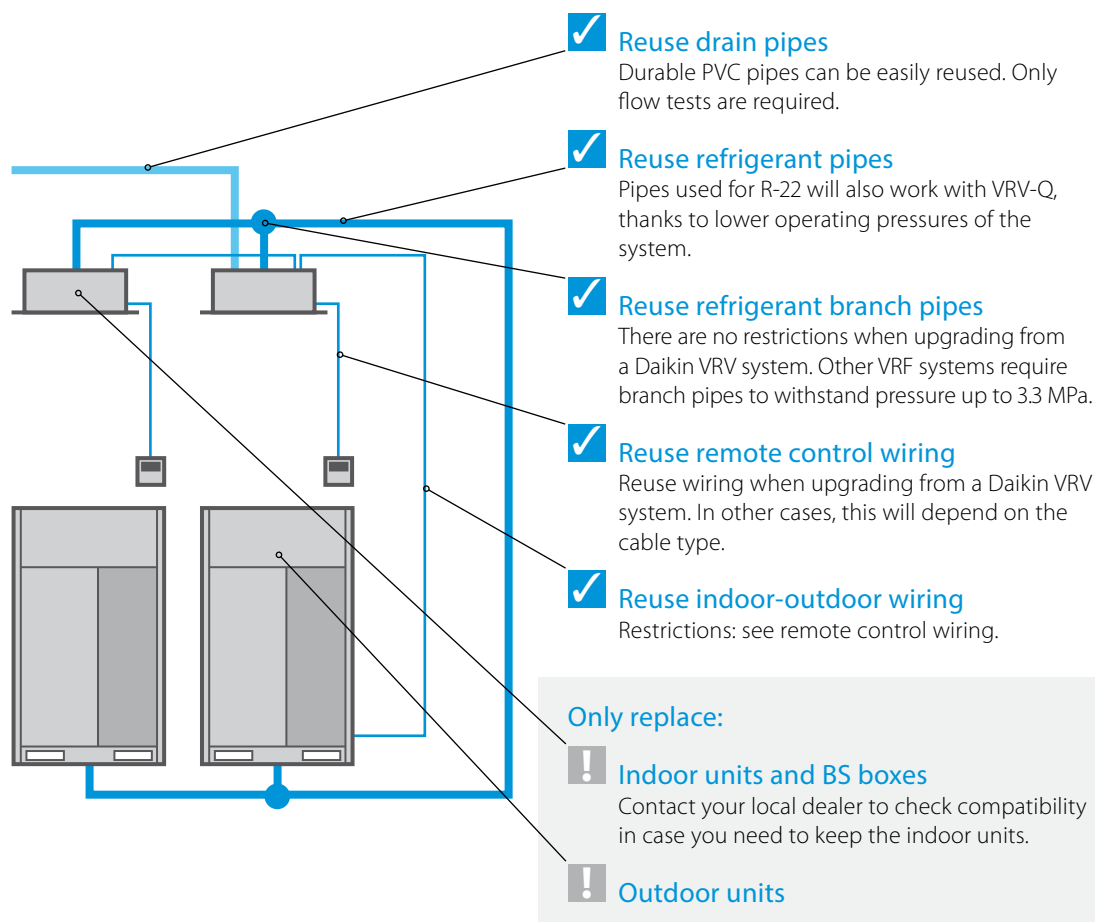
**Planning your replacement in future?**

**Monitor your system now!**

Your building use might have changed over the years. Monitoring and Daikin expert advice prepare you for an optimum replacement to maximize efficiency and comfort, while minimizing the investment cost of your new system.

# VRV replacement

## Daikin's quick & quality upgrade solution



## Your benefits with Daikin's replacement solution

### Always operational

No interruptions to daily business while replacing the system thanks to phased-in, fast installation.

### Smaller footprint, more performance

- › Save space
- › Connect more indoor units to the new outdoor unit, to increase capacity.

### Unique automatic refrigerant charge

- › Eliminates the need to calculate refrigerant volume
- › Ensures that the system will operate at optimum conditions even if you do not know the exact piping lengths
- › Ensures a quality replacement

### A reliable, high-quality solution

- › Top quality
- › Enhanced comfort
- › Unique range of indoor units, e. g. Daikin's innovative roundflow cassette:



- › 360° air discharge
- › Optional presence sensor and floor sensor
- › Optional auto-cleaning filter

## Replace non-Daikin systems

Cost effectively replace systems from other manufacturers with high efficient VRV technology.

NON DAIKIN DAIKIN



## A cost saving decision

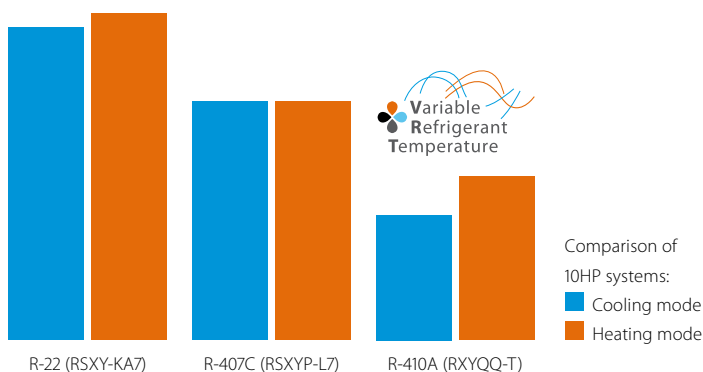
### Less investment

- › System upgrades cost less, because only the outdoor and indoor units need to be replaced
- › The easiest and fastest way to comply with EPDB regulations for buildings.

### Improved efficiency

EU Directives prohibit system repairs with R-22 after January 1, 2015. Delaying the required R-22 replacement until an unplanned system breakdown is a losing game. Replacement day will come. Installing a technically advanced system lowers energy consumption and maintenance costs from day one.

## Up to 48% less consumption



EER / COP	8HP	10HP
RXYQQ-T (R-410A)	4.30 / 4.54	3.84 / 4.45
RSXYP-L7 (R-407C)	3.10 / 3.14	3.10 / 3.10
RSXY-KA7 (R-22)	2.37 / 2.95	2.37 / 3.00

### Environment protection

Improved efficiency saves energy and lowers CO<sub>2</sub> emissions.

## Success stories



35% savings

### Palace of Westminster, United Kingdom

#### Why VRV-Q?

"VRV-Q offers a replacement option with the unique ability to reduce operating pressures of R-410A down to R-22 levels, keeping the R-410A performance."

**Mick Langford (All Seasons Climate Control, Daikin D1 dealer)**

- › More than 35% energy savings
- › Over 6 tonnes less CO<sub>2</sub> per year
- › Year of installation: 2012
- › Installed units: 3 VRV-Q outdoor units, 13 indoor units
- › Replacement of competitor system



25% savings

### Torre Serenissima office tower, Italy

#### Why VRV-Q?

"The complete replacement of the 17-year-old R-22 system resulted in only a half-day of missed work for employees. The user's improved control of the air flow significantly enhanced comfort, while reducing energy consumption by 25%."

**Maurizio Casarola (Property Manager)**

- › 25% energy savings
- › Year of installation: 2013
- › Installed units: 39 VRV-Q outdoor units, 250 indoor units, 35 VAM 500, 4 intelligent Touch Controllers
- › Full installation done during weekends

# Chiller modernisation

## Be smart – replace components, not systems

### Our concept

Even if the R-22 chiller has been maintained well and is still in good condition, R-22 is no longer allowed to be used. That's why Daikin offers chiller modernisation packages. Not only is the chiller made compliant with the latest legislation, the technology upgrade also revives your system, increasing reliability and efficiency.

#### Main benefits

- › Convert R-22 to be compliant with legislation
- › Limit capital
- › Save money for future equipment thanks to the chiller's longer lifetime, increased reliability, and improved maintenance efficiency
- › Enhance energy efficiency up to +20% ESEER by manufacturer pre-engineered upgrade

#### Benefits for budget and risk management

- › No chiller removal
- › No water pipe work
- › No electrical modifications
- › Low logistic expenses (transport, crantage, permissions ...)
- › Quick delivery
- › Government-sponsored subsidies may be available



Control





softstarter or inverter

Compressor



## Success story

ROI:  
2  
years



### Hotel, Dubai, United Arab Emirates

**Customer type:**  
Chilled water plant serving two premium hotel resorts

**Products:**  
32 chillers, 4 reciprocating compressors each

**Daikin solution:**  
20 modernised chillers are delivering the same cooling capacity. **Modernisation investment was returned in 2 years.**



# Replacement of Split and Sky Air

## Upgrade your home or light commercial systems

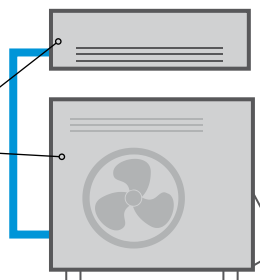
All common split and Sky Air outdoor and indoor units can be used to replace R-22 and R-407C systems.

- › No indoor work needs to be done
- › Lower running cost
- › Upgrade indoor units to newer, more stylish models

## How does it work?

**!** **Replace indoor and outdoor units**  
Replace Daikin and other manufacturer systems

**✓** **Reuse existing piping and wiring**



## Your copper pipes will last for multiple generations

- › copper pipes used in air conditioning systems tested by Daikin will last over 60 years after installation.
- › Japan/China have replaced with VRV Q-series already 10 years ago!

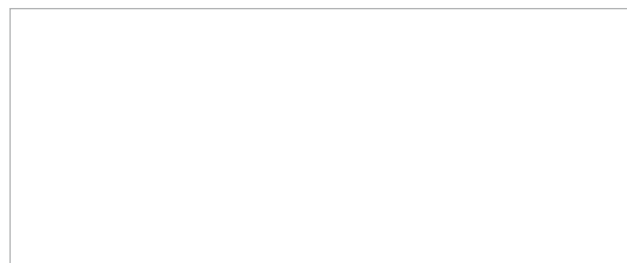
## Umeda Center Building, Japan

- › original A/C system: 20 years in use
- › replacement with VRV Q-series: 2006 - 2009
- › capacity up from 1620HP to 2322HP
- › SHASE renewal award:



Learn more about Daikin replacement solutions at [www.daikineurope.com/minisite/r22/](http://www.daikineurope.com/minisite/r22/)

**Daikin Europe N.V.** Naamloze Vennootschap · Zandvoordestraat 300 · 8400 Oostende · Belgium · [www.daikin.eu](http://www.daikin.eu) · BE 0412 120 336 · RPR Oostende (Responsible Editor)



ECPEN16-215 xxx-02/16



The present publication is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Daikin Europe N.V. has compiled the content of this publication to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this publication. All content is copyrighted by Daikin Europe N.V.

Printed on non-chlorinated paper. Prepared by Platzer Kommunikation, Germany.