DAIKIN

COMMERCIAL MULTI SYSTEM

SHOPS
RESTAURANTS
SMALL OFFICES

MULTI SYSTEM

2009

R-410A

www.daikin.co.uk

ABOUT DAIKIN

Daikin UK is a leading supplier of heating, cooling and refrigeration solutions for commercial, residential and industrial applications. Our product portfolio comprises a wide range of highly energy efficient climate control systems which provides the public and private sectors with the right product for any application and requirement.

- state of the art direct expansion air conditioning
- heat pump residential and light commercial heating, domestic hot water and cooling
- applied central cooling and heating
- medium to low temperature refrigeration.

RESPECT FOR THE ENVIRONMENT

Daikin has an enviable record in concern for environmental issues and applies it to all areas of the business, implementing and in many cases pre-empting, international and local environmental protective legislation.

This commitment is reflected in three areas:

1. Reducing waste in manufacturing and operations,
2. Recycling materials and equipment,
3. Designing and producing energy-efficient climate control equipment.

Please visit our website for more information **www.daikin.co.uk**

RECYCLING END OF LIFE AIR CONDITIONING UNITS

Daikin UK's unique recycling service takes this commitment to the environment one step further. Despite the WEEE directive 2002/96/EC not currently including fixed air conditioning, when installing Daikin equipment you can arrange for up to 95% of the redundant equipment to be reprocessed by an authorised WEEE recycler.

Once collected from site, the end of life air conditioning equipment will be transported to a recycling facility, where it is dismantled in such a way that any hazardous substances are destroyed or reprocessed. This service is available to all installers of Daikin equipment, regardless of the manufacturer of the redundant units.

COMMERCIAL MULTI SYSTEM

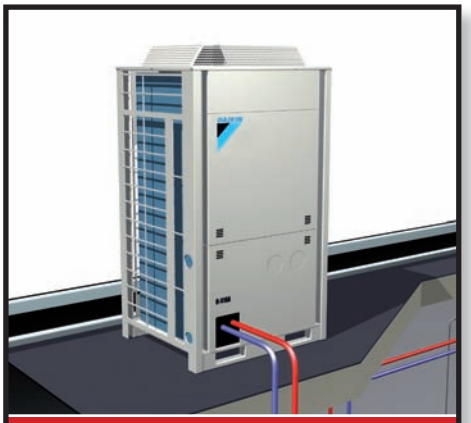
Daikin has extended its Sky Air inverter range with the new CMSQ series. This inverter controlled heat pump system is especially designed for light commercial applications with multiple areas requiring great flexibility and control. The CMSQ is ideal for shops, restaurants, small offices and even 2-storey areas.

This R-410A system is available in 8 and 10HP, three phase versions and reaches a COP as high as 4.1. Inverter control ensures constant room temperatures and maximum efficiency, especially in partial load situations.

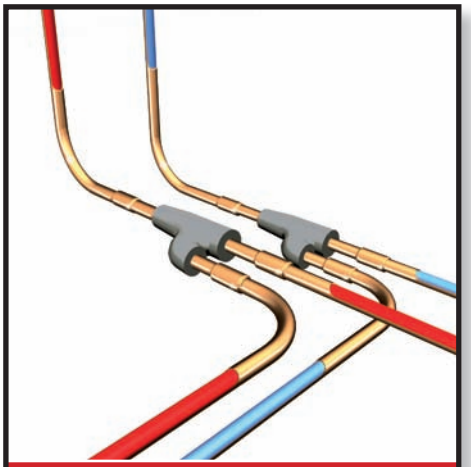
CMSQ is ideal for applications which require flexible control, but do not have a need for simultaneous heating and cooling. The outdoor units are very flexible in installation thanks to the increased piping length of 165m and the possibility to install the unit on the roof, placed against an outside wall or even indoors.

The CMSQ outdoor units are supported by Daikin's Roundflow cassette (FMCQ) and the well-known concealed ceiling unit (FMDQ). Up to four indoor units can be installed in any combination of capacity and type, with each unit individually controllable via its own infrared or hard-wired remote control. CMSQ also optionally supports Daikin's Intelligent Touch Controller and Intelligent Manager control systems.

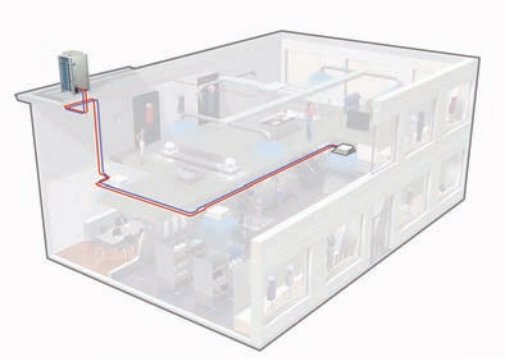
IDEAL SOLUTION
FOR LIGHT COMMERCIAL SPACES



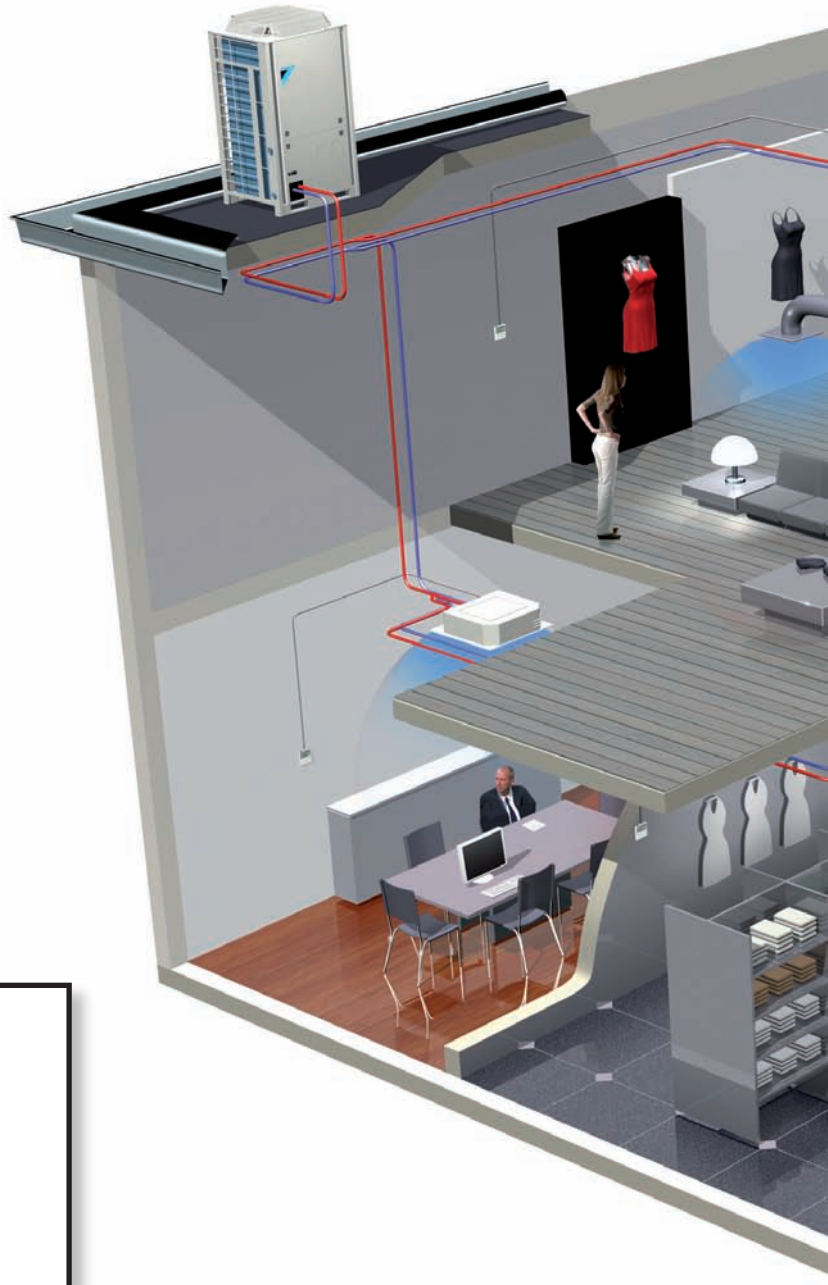
OUTDOOR UNIT: can be mounted easily on a roof, placed against an outside wall or even located indoors



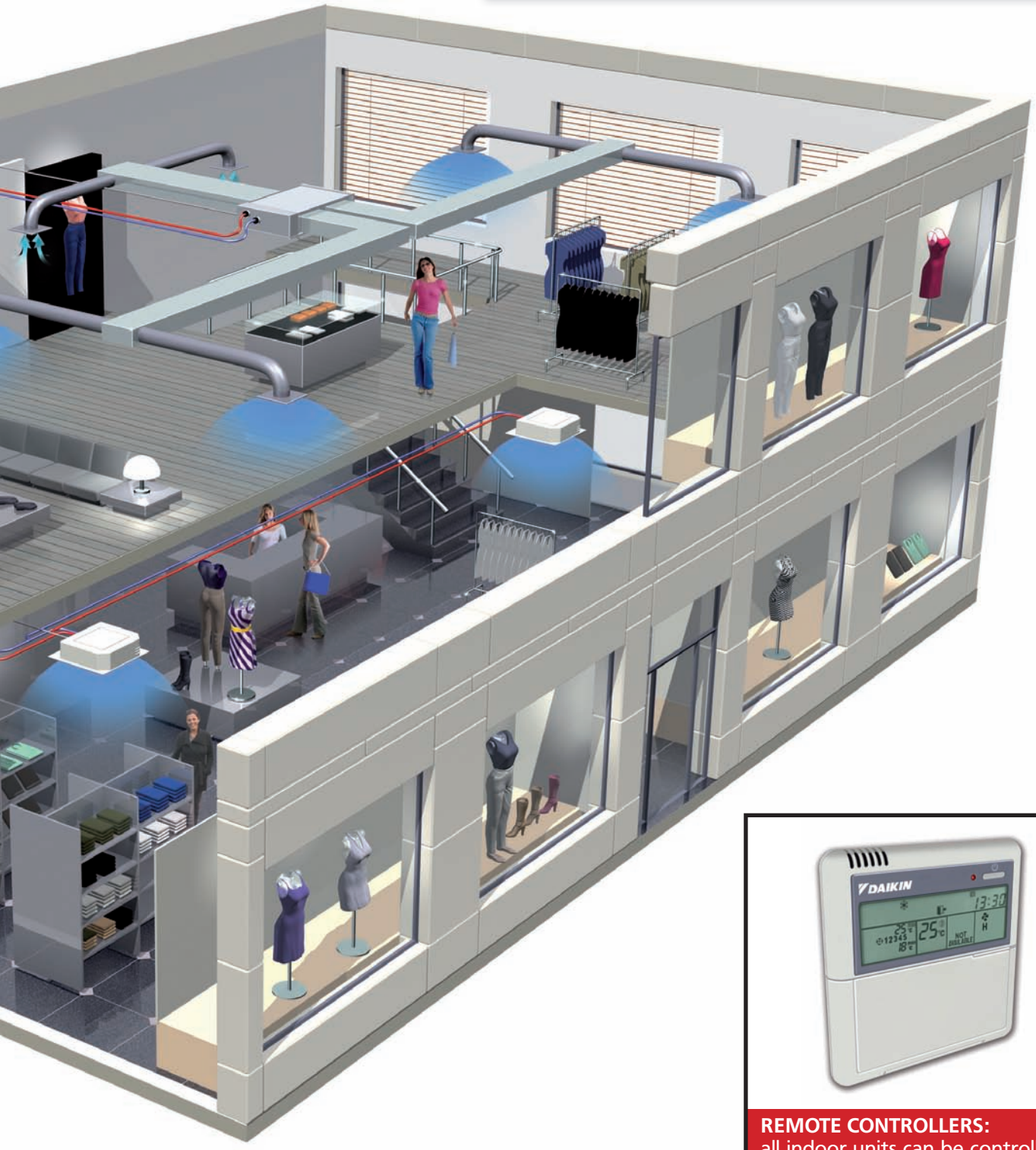
REFNET: designed for simple installation



PIPING LENGTH INDOOR – OUTDOOR
Maximum piping length outdoor-all indoors: up to 165m. Maximum installation height difference outdoor-indoor: up to 30m



ASYMMETRIC COMBINATION:
different size and types of indoor units are possible



REMOTE CONTROLLERS:
all indoor units can be controlled individually via wired or infrared remote control

CMSQ

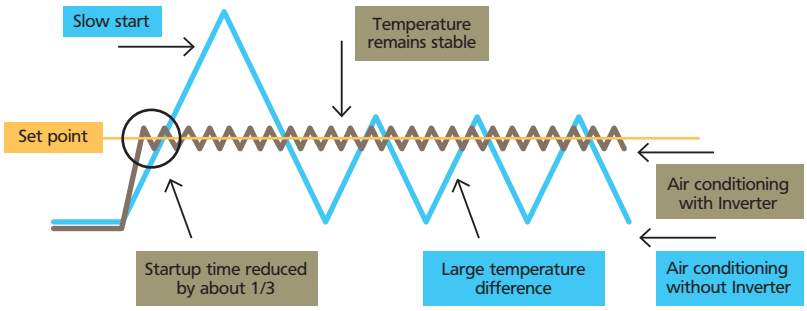
CREATING THE HIGHEST COMFORT LEVELS

Inverter technology used in the Commercial Multi System (CMS) ensures the highest comfort levels. The automatic control of room temperature means that the actual sensed temperature in the room is at the pre set level, ensuring it is never too cool or too hot.

This is a major improvement over standard fixed speed models, which utilise continuous on/off switching of the compressor, creating greater fluctuations in room temperatures.

Inverter technology offers improved levels of comfort:

- Less frequent start/stop cycles
- Capacity is automatically throttled back when set point is approached
- Start-up time is reduced by 1/3



SAVING ENERGY

Based around Daikin's well proven reluctance DC compressor motor technology, the CMSQ units deliver high energy efficiency particularly in the mid to low settings, minimising annual electricity consumption and overall running costs. The system also offers improved COP up to 4.10.

The application of inverter control saves energy for two basic reasons:

- It enables compressor speed to vary according to the cooling/heating load and therefore consumes only the power necessary to match that load.
- In partial load conditions energy efficiency is higher.

ENERGY SAVING TECHNOLOGY

RELUCTANCE DC COMPRESSOR

CMSQ outdoor units are equipped with a scroll compressor. The motor in the compressor is transferred from the low pressure side to the high pressure side. In this way superheat can be better controlled, resulting in better performance.

The scroll compressor is driven by the newly developed motor enabling better performance, higher energy efficiency resulting in high energy cost savings:

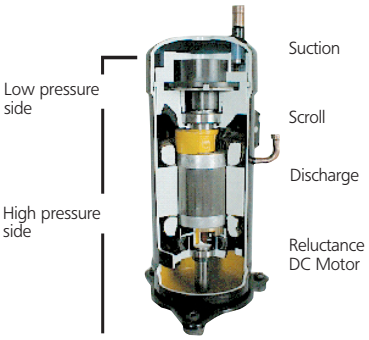
› Using 4 neodymium magnets. These magnets are more powerful than the widely used ferrite types.

Ferrite magnet

Neodymium magnet

Powerful magnets :
Secret to raising energy-efficiency!

scroll compressor

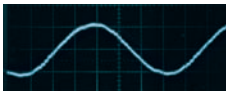


SINE WAVE DC INVERTER

Generates smooth inverter waveforms to increase efficiency.

Rectangular wave

Sine wave PWM*



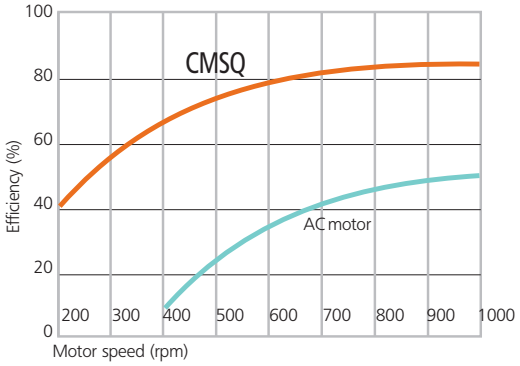
*Pulse Width Modulation

FAN MOTOR

The DC fan motor offers substantial improvements in operating efficiency compared to conventional AC motors, especially during low speed operation. Whole energy efficiency levels have been significantly improved.

DC fan motor structure

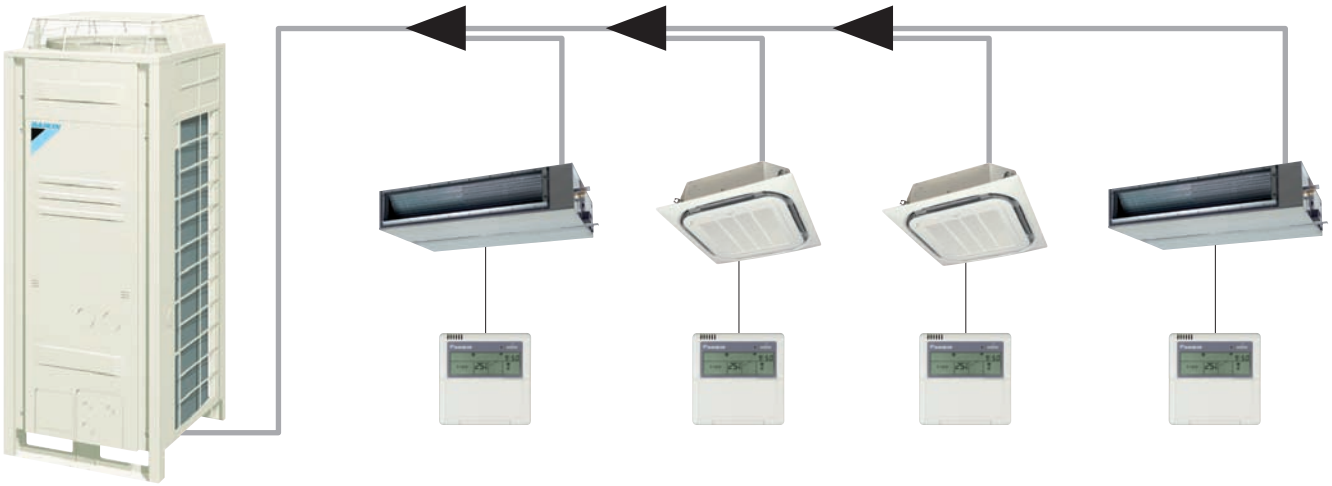
DC motor efficiency
(comparison with a conventional AC motor)



INDIVIDUAL CONTROL

The CMSQ is ideal for applications which require flexible control, but without the need for simultaneous heating and cooling.

Up to 4 indoor units can be controlled individually in order to provide an even higher comfort level for your customers. In this way all different areas in shop (storage room and shop floor), restaurants (bar, kitchen or dining area) and offices (meeting room or desks) can be set at a different temperature.



WIRED REMOTE CONTROL

BRC1D52

- Real time clock: indicates real time and day
- Limit operation (min/max): room temperature is controlled within adjustable upper and lower limits. Limit operation can be activated manually or by schedule timer
- Schedule timer: Provides a 7-day schedule timer, enabling daily or weekly programming. Up to 5 actions per day possible
- Home leave (frost protection): during absence, the indoor temperature can be maintained at a certain level. This function can also switch the unit ON or OFF
- Different levels of disabled buttons can be selected as follows:
  Level 1: all buttons are accessible
  Level 2: all buttons are disabled except for: ON/OFF, set temperature up/down, fan speed, cooling/heating mode, enable/disable schedule timer, air flow direction adjustment button
  Level 3: all buttons are disabled except for: ON/OFF, set temperature up/down, fan speed

INFRARED REMOTE CONTROL

ON / OFF

- Timer mode start/stop
- Timer mode on/off
- Programme time
- Temperature setting
- Air flow direction
- Operating mode
- Fan speed control
- Filter sign reset
- Inspection / test indication

INDOOR UNITS	INFRARED REMOTE CONTROL
FMCQ-A	BRC7F532F
FMDQ-A	BRC4C64

OTHER CONTROL POSSIBILITIES

intelligent touch Controller

Connectable to provide

- Individual control: set point, start/stop, fan speed
- Schedule control
- Flexible grouping in zones
- Yearly schedule
- Fire emergency stop control
- Interlocking control
- Automatic cooling/heating changeover
- Heating optimization
- Temperature limit
- Password security: 3 levels (general, administration & service)
- Quick selection and full control
- Simple navigation
- Easy installation and labour saving
- Compact design: limited installation space
- Overall energy saving

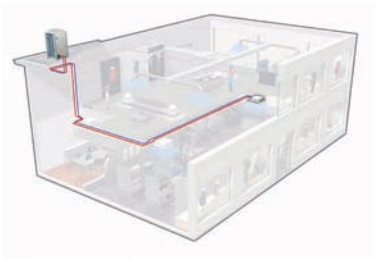
intelligent Manager

Connectable to provide

- Individual control: set point, start/stop, fan speed
- Group control
- Schedule control
- Fire emergency stop control
- Interlocking control
- Set point limitation
- Automatic cooling/heating changeover
- Power failure/release control
- Temperature limit (automatic start)
- Timer extension
- Easy installation and labour saving
- Compact design: limited installation space
- Overall energy saving

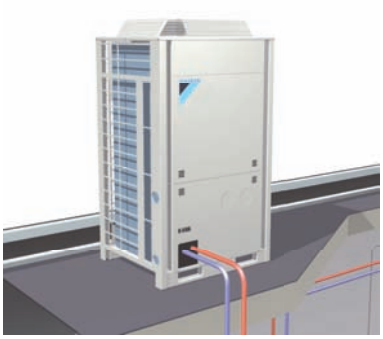
FLEXIBLE INSTALLATION & MAINTENANCE

EXTENDED PIPING LENGTH



CMSQ units offer an extended piping length of 165m (190m equivalent) with a total system piping length (from the outdoor unit to all indoor units) of 200m.
This makes installation more flexible for any required layout.
Level difference between outdoor and indoor is up to 30m.
Between the indoor units the difference in height can be up to 4m, this means 2-storey applications are possible.

FLEXIBLE INSTALLATION OF THE OUTDOOR UNIT



The CMSQ units are flexible in installation. With the extended piping length the outdoor unit can be installed where it suits you.
These outdoor units can be mounted easily on a roof, placed against an outside wall or even located indoors.

UNIFIED REFNET PIPING

The unified Daikin REFNET piping system is especially designed for simple installation.

The use of REFNET piping in combination with electronic expansion valves, results in a dramatic reduction in imbalance in refrigerant flowing between indoor units, despite the small diameter of the piping.

REFNET joints and headers (both accessories) can cut down on installation work and increase system reliability.

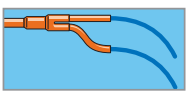
Compared to regular T-joints, where refrigerant distribution is far from optimal, the Daikin REFNET joints have specifically been designed to optimise refrigerant flow.

REFNET joint

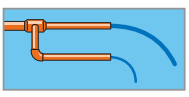
Attached insulators for REFNET joint

REFNET header

Attached insulators for REFNET header



REFNET joint



T-joint

ANTI CORROSION TREATMENT

Special anti corrosion treatment of the heat exchanger provides 5 to 6 times more resistance against acid rain and salt corrosion. The provision of rust proof steel sheet on the underside of the unit gives additional protection providing the quality standard adapted by Daikin.

IMPROVEMENT IN CORROSION RESISTANCE

	Corrosion resistance rating	
	Non-treated	Anti-corrosion treated
Salt corrosion	1	5 to 6
Acid rain	1	5 to 6

LOW NOISE LEVEL

DAIKIN OUTDOOR UNITS

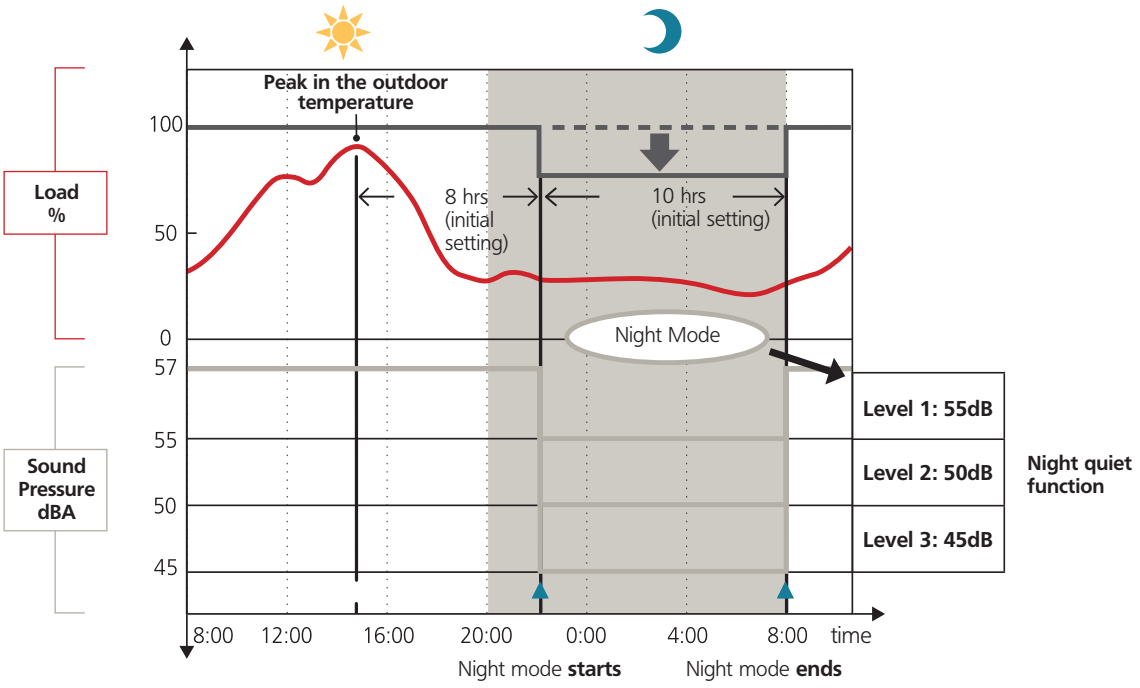
The sound pressure levels for CMSQ outdoor units are as low as 57 dB(A).

DAIKIN INDOOR UNITS

› **Daikin FMCQ and FMDQ units operate at sound levels between 20 and 40 dBA: FMCQ goes down to 28 dBA, whereas FMDQ goes down to 30 dBA.**

dB(A)	Perceived loudness	Sound
0	Threshold of hearing	-
20	Extremely soft	Rustling leaves
28	**FMCQ-A**	
30	**FMDQ-A**	
40	Very soft	Quiet room
60	Moderately loud	Normal conversation
80	Very loud	City traffic noise
100	Extremely loud	Symphonic orchestra
120	Threshold of feeling	Jet taking off

NIGHT QUIET FUNCTION



Notes:
This function is available for on site setting. The relationship between outdoor temperature (load) and time shown in the graph is merely an example.

During the night the sound level of the outdoor unit can be reduced for a certain period: starting time and ending time can be input.

2 modes[*1] with low sound level at night:

› **Mode 1 Automatic mode**
Set on the outdoor PCB. Time of maximum temperature is memorised. The low operating mode will become active 8 hours[*2] after the peak temperature in the daytime and operation will return to normal after 10 hours[*3].

› **Mode 2 Customized mode**
Starting and ending times can be input. (External control adapter for outdoor unit, DTA104A61 or DTA104A62 and a separately ordered timer are necessary.)

Notes:
*1. Determine which mode to select depending on the climatic characteristics of each country.
*2. Initial setting. Can be selected from 6, 8 and 10 hours.
*3. Initial setting. Can be selected from 8, 9 and 10 hours.

INDOOR – OUTDOOR COMBINATIONS

The CMSQ outdoor units can be connected to following indoor units:

- FMCQ-A, Roundflow cassette
- FMDQ-B, Concealed ceiling unit with DC Inverter driven fan

Asymmetric combination of all indoor units can be connected to the outdoor unit.

The indoor units may be of different types (e.g. combination of Round flow cassette and concealed ceiling unit) and even in different capacities (e.g. 71 and 125 class). All indoor units can be installed in the same room or in different rooms and are always **controlled individually** from their own wired or infrared remote control, providing your customers a higher comfort level.

OUTDOOR TYPE	NUMBER OF CONNECTABLE INDOORS	INDOOR TYPE	CAPACITY INDEX 1	CAPACITY INDEX 2	CAPACITY INDEX 3	CAPACITY INDEX 4	TOTAL CAPACITY INDEX	REFNET
CMSQ200A	2	FMCQ/FMDQ	50	50			100	KHRQ22M20TA
			50	60			110	KHRQ22M20TA
			50	71			121	KHRQ22M20TA
			50	100			150	KHRQ22M20TA
			50	125			175	KHRQ22M20TA
			60	60			120	KHRQ22M20TA
			60	71			131	KHRQ22M20TA
			60	100			160	KHRQ22M20TA
			60	125			185	KHRQ22M20TA
			71	71			142	KHRQ22M20TA
			71	100			171	KHRQ22M20TA
			71	125			196	KHRQ22M20TA
			100	100			200	KHRQ22M20TA
CMSQ200A	3	FMCQ/FMDQ	50	50	50		150	2 x KHRQ22M20TA
			50	50	60		160	2 x KHRQ22M20TA
			50	50	71		171	2 x KHRQ22M20TA
			50	50	100		200	2 x KHRQ22M20TA
			50	60	60		170	2 x KHRQ22M20TA
			50	60	71		181	2 x KHRQ22M20TA
			50	71	71		192	2 x KHRQ22M20TA
			60	60	60		180	2 x KHRQ22M20TA
			60	60	71		191	2 x KHRQ22M20TA
CMSQ200A	4	FMCQ/FMDQ	50	50	50	50	200	3 x KHRQ22M20TA

OUTDOOR TYPE	NUMBER OF CONNECTABLE INDOORS	INDOOR TYPE	CAPACITY INDEX 1	CAPACITY INDEX 2	CAPACITY INDEX 3	CAPACITY INDEX 4	TOTAL CAPACITY INDEX	REFNET
CMSQ250A	2	FMCQ/FMDQ	50	100			150	KHRQ22M29T9
			50	125			175	KHRQ22M29T9
			60	71			131	KHRQ22M29T9
			60	100			160	KHRQ22M29T9
			60	125			185	KHRQ22M29T9
			71	71			142	KHRQ22M29T9
			71	100			171	KHRQ22M29T9
			71	125			196	KHRQ22M29T9
			100	100			200	KHRQ22M29T9
			100	125			225	KHRQ22M29T9
			125	125			250	KHRQ22M29T9
CMSQ250A	3	FMCQ/FMDQ	50	50	50		150	KHRQ22M29T9 + KHRQ22M20TA
			50	50	60		160	KHRQ22M29T9 + KHRQ22M20TA
			50	50	71		171	KHRQ22M29T9 + KHRQ22M20TA
			50	50	100		200	KHRQ22M29T9 + KHRQ22M20TA
			50	50	125		225	KHRQ22M29T9 + KHRQ22M20TA
			50	60	60		170	KHRQ22M29T9 + KHRQ22M20TA
			50	60	71		181	KHRQ22M29T9 + KHRQ22M20TA
			50	60	100		210	KHRQ22M29T9 + KHRQ22M20TA
			50	60	125		235	KHRQ22M29T9 + KHRQ22M20TA
			50	71	71		192	KHRQ22M29T9 + KHRQ22M20TA
			50	71	100		221	KHRQ22M29T9 + KHRQ22M20TA
			50	71	125		246	KHRQ22M29T9 + KHRQ22M20TA
			60	60	60		180	KHRQ22M29T9 + KHRQ22M20TA
			60	60	71		191	KHRQ22M29T9 + KHRQ22M20TA
			60	60	100		220	KHRQ22M29T9 + KHRQ22M20TA
			60	60	125		245	KHRQ22M29T9 + KHRQ22M20TA
			71	71	71		213	KHRQ22M29T9 + KHRQ22M20TA
			71	71	100		242	KHRQ22M29T9 + KHRQ22M20TA
CMSQ250A	4	FMCQ/FMDQ	50	50	50	50	200	KHRQ22M29T9 + 2 x KHRQ22M20TA
			50	50	50	60	210	KHRQ22M29T9 + 2 x KHRQ22M20TA
			50	50	50	71	221	KHRQ22M29T9 + 2 x KHRQ22M20TA
			50	50	50	100	250	KHRQ22M29T9 + 2 x KHRQ22M20TA (1) 2 x KHRQ22M29T9 + KHRQ22M20TA (2)
			50	50	60	60	220	KHRQ22M29T9 + 2 x KHRQ22M20TA
			50	50	60	71	231	KHRQ22M29T9 + 2 x KHRQ22M20TA
			50	60	60	60	230	KHRQ22M29T9 + 2 x KHRQ22M20TA
			50	60	60	71	241	KHRQ22M29T9 + 2 x KHRQ22M20TA
			60	60	60	60	240	KHRQ22M29T9 + 2 x KHRQ22M20TA
			60	60	60	71	251	KHRQ22M29T9 + 2 x KHRQ22M20TA

Notes: (1) when indoor 100 is the first - (2) when indoor 50 is the first

Remark: in case 2 different refnets are being used, KHRQ22M29T9 needs to be installed first in line

CMSQ-A

Especially developed for light commercial multi applications such as shops, restaurants and small offices.

- **Two classes available:** 20kW and 25kW
- **Energy efficient:** EER up to 3.71 and COP up to 4.1
- **Two types of connectable indoor units:** unique Roundflow cassette (FMCQ) and concealed ceiling unit (FMDQ), both in a range of capacities from 5.0 to 12.5 kW
- **Individual control:** up to 4 indoors can be connected and controlled individually
- **Asymmetric combination:** different capacities between indoor units is allowed
- **Flexible installation:** can be mounted on a roof, placed against an outside wall, or installed indoors
- Total system piping length of 200m
- Level difference between outdoor and indoor unit up to 30m
- Height difference between the indoor units up to 4m (two-storey shop application possible)
- REFNET piping system for optimum refrigerant flow
- Extremely quiet in operation, with sound levels as low as 57 dBA (normal operation) and 45 dBA (night mode).
- Connectable to the Intelligent Touch Controller and Intelligent Manager control systems

Outdoor unit

CMSQ-A

CMSQ-A

HEAT PUMP				CMSQ200A7W1B	CMSQ250A7W1B
Nominal capacity		cooling	kW	20.0	25.0
		heating	kW	22.4	28.0
Nominal input		cooling	kW	6.60	6.74
		heating	kW	5.80	6.83
EER				3.03	3.71
COP				3.86	4.10
Power supply			PHVHz	3N~, 400V, 50Hz	
Dimensions		HxWxD	mm	1,680x635x765	1,680x930x765
Weight			kg	159	187
Colour				Daikin White	
External static pressure			Pa	78 Pa in high static pressure	
Sound pressure level		cooling	dB(A)	57	59
Sound pressure, night quiet mode (level 1-2-3)		cooling	dB(A)	55-50-45	
Sound power level (nom)		cooling	dB(A)	78	81
Compressor			type	Hermitically sealed scroll compressor	
Refrigerant type				R-410A	
Refrigerant charge			kg	6.2	7.7
Refrigerant oil				Synthetic (ether) oil	
Refrigerant oil charged volume			l	1.7	2.1
Total system piping length (outdoor to all indoor units)			m	200	
Maximum piping length (outdoor - indoor units)			m	165	
Maximum installation height difference (outdoor-indoor units)			m	30	
Maximum interunit level difference (indoor-indoor)			m	4	
Maximum connectable indoor units				4	
Piping connections		liquid (O.D.)	mm	9.52	
		gas (O.D.)	mm	15.9	19.1
Operation range	cooling	from ~ to	°CDB	- 5.0 ~ 43.0	
	heating	from ~ to	°CWB	- 20.0 ~ 15.0	

OPTIONAL ACCESSORIES

NAME OF OPTION	CMSQ200A7W1B	CMSQ250A7W1B
Refnet header	KHRQ22M29H	
Refnet joint	KHRQ22M20T	
	-	KHRQ22M29T9
Central drain pan kit	KWC26B160	KWC26B280

FMCQ-A

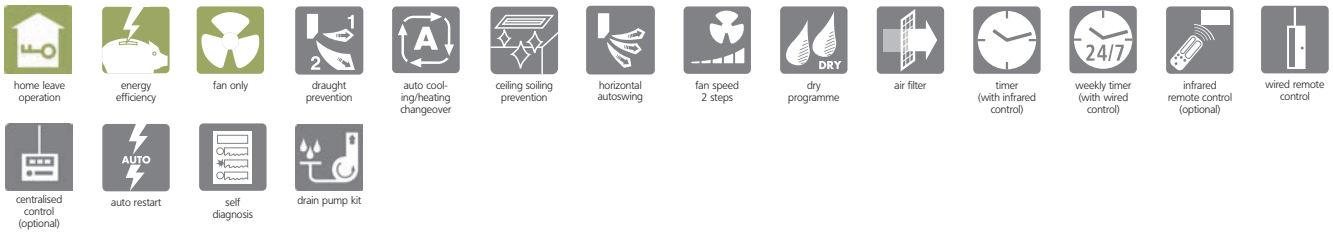
Roundflow Cassette

White with white louvres

White with grey louvres

ROUND FLOW

- The thin body of the unit is the solution for customers requiring a compact unit for use with false ceilings: the required installation height is only 214mm for class 50-60
- **Modern style decoration panel, available in 2 different variations:**
  - white with grey louvres
  - full white including white louvres especially designed for modern commercial interiors
- **Horizontal air discharge:** ensures draught free operation and prevents ceiling soiling.
- **Air flow flexibility:** a wide selection of 23 different airflow patterns enables unit installation in corners or small rooms.
- Air discharge from the corners avoids dead zones that may be subject to temperature differences
- **Fresh air intake:** up to 20%
- Standard high-lift drain pump kit (850mm)
- **Air purification filter:** removes airborne dust particles to ensure a steady supply of clean air
- **Quiet operation:** down to 29 dBA sound pressure level
- **Wired remote controller with weekly timer:** provides a 7-day schedule timer, enabling daily or weekly programming.
  Up to 5 actions per day possible
- **Fan speed:** 2 fan speeds can be selected



FMCQ-A

			FMCQ50A7VEB	FMCQ60A7VEB	FMCQ71A7VEB	FMCQ100A7VEB	FMCQ125A7VEB
Nominal capacity	cooling	kW	5.0	6.0	7.1	10.0	12.5
	heating	kW	5.6	6.7	8.0	11.2	14.0
Dimensions (HxWxD)	unit	mm	204x840x840		246x840x840		288x840x840
Weight	unit	kg	21		24		26
Casing			Galvanised steel plate				
Air flow rate (H/L)	cooling	m^3/min	15.5/10.0	16.5/11.0	23.5/14.5	26.5/17.0	33.0/20.0
	heating	m^3/min	15.0/9.5	17.5/12.0	23.5/14.5	28.0/17.5	33.0/20.0
Sound pressure level (H/L)	cooling	dB(A)	33/28	34/29	38/32	41/33	44/34
	heating	dB(A)	33/28	36/30	38/32	42/34	44/34
Sound power level	cooling	dB(A)	51	52	55	58	61
Power supply		PHVHz	1~,220-240/220,50/60				
Refrigerant type			R-410A				
Piping connections	liquid (O.D.)	mm	6.35	9.52			
	gas (O.D.)	mm	12.7	15.9			
	drain	mm	VP25 (O.D. 32, I.D. 25)				
Infrared remote control			BRC7F532F				
Wired remote control			BRC1D528				
Decoration panel	model		BYCQ140CW1 / BYCQ140CW1W				
	colour		White (RAL9010) with grey louvres / White with white louvres (RAL 9010)				
	dimensions (HxWxD)	mm	50x950x950				
	weight	kg	5.5				

OPTIONS

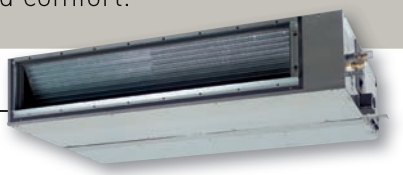
		FMCQ50A7VEB	FMCQ60A7VEB	FMCQ71A7VEB	FMCQ100A7VEB	FMCQ125A7VEB
Decoration panel		BYCQ140CW1 / BYCQ140CW1W				
Long life replacement filter	non woven type	KAFP551K160				
Fresh air intake kit (20% fresh air intake)	chamber type	KDDQ55C140				
Sealing member of air discharge outlet		KDBHQ55C140				

FMDQ-B

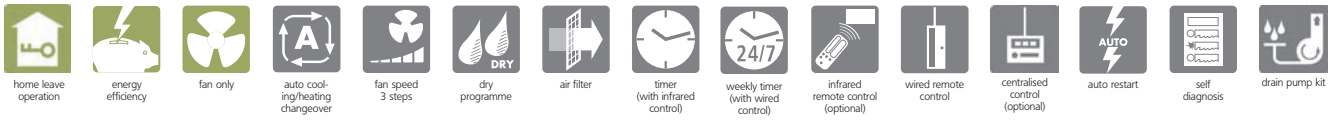
The new ducted unit with DC inverter driven fan offers lower energy input and higher performance and comfort.

Concealed ceiling unit Inverter fan

FMDQ-B



- Ideal for areas requiring maximum floor space for furniture, decorations and fittings. Only air suction and discharge grilles are visible
- **DC inverter fans:** large reduction in power consumption
- **3-step airflow control:** Comfort improved
- Maximum External Static Pressure (ESP) up to 120Pa. Flexible ducts of varying lengths can be easily used
- Possibility to change ESP through wired remote control allows optimisation of the supply air volume
- Automatic air flow adjustment towards nominal air flow rate to ease installation
- **Standard high-lift drain pump kit (625mm):** increases reliability of the drain system
- **Standard air filter:** removes airborne dust particles to ensure a steady supply of clean air
- **Low noise:** down to 29 dBA sound pressure level
- Wired remote controller with weekly timer: provides a 7-day schedule timer, enabling daily or weekly programming. Up to 5 actions per day possible
- **Fan speed:** 3 fan speeds can be selected



FMDQ-B

			FMDQ50B	FMDQ60B	FMDQ71B	FMDQ100B	FMDQ125B
Nominal capacity	cooling	kW	5.0	6.0	7.1	10.0	12.5
	heating	kW	5.6	6.7	8.0	11.2	14.0
Nominal input	cooling	kW	0.192	0.142	0.163	0.247	0.303
	heating	kW	0.192	0.142	0.163	0.247	0.303
Dimensions (HxWxD)	unit	mm	300x700x700	300x1,000x700		300x1,400x700	
Weight	unit	kg	26	35		46	
Casing			Galvanised steel / non painted				
Air flow rate (H/L)	cooling	m^3/min	16/11	19.5/16	25/20	32/23	39/28
	heating	m^3/min	16/11	19.5/16	25/20	32/23	39/28
ESP (H/M)	max	Pa	100/30		100/40	120/40	120/50
Sound pressure level (H/L)	cooling	dB(A)	37/29	37/30	38/32	32	33
	heating	dB(A)	37/29	37/30	38/32	32	33
Sound power level	cooling	dB(A)	63	59	63	61	66
Refrigerant type			R-410A				
Piping connections	liquid (O.D.)	mm	6.4	9.5			
	gas (O.D.)	mm	12.7	15.9			
	drain	mm	VP25 (O.D.32/I.D25)				
Air filter			Resin net with mold resistance				
Drain-up height		mm	625				
Power supply		PhVHz	1~, 220-240/220, 50/60				
Infrared remote control			BRC4C65				
Wired remote control			BRC1D528				
Decoration panel	model		BYBS45DJW1	BYBS71DJW1		BYBS125DJW1	
	dimensions (HxWxD)	mm	55x800x500	55x1,100x500		55x1,500x500	
	weight	kg	3.5	4.5		6.5	

OPTIONS

	FMDQ50A7V3B	FMDQ60A73B	FMDQ71A7V3B	FMDQ100A7V3B	FMDQ125A7V3B
Decoration panel	BYBS45DJW1	BYBS71DJW1		BYBS125DJW1	
Service access panel	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W		
High efficiency filter 65% (1)	KAFJ252L56	KAFJ252L80	KAFJ252L160		
High efficiency filter 90%	KAFJ253L56	KAFJ253L80	KAFJ253L160		
Filter chamber for bottom suction	KAJ25L56D	KAJ25L80D	KAJ25L160D		
Filter chamber for rear suction	KAJ25L56B	KAJ25L80B	KAJ25L160B		
Air suction canvas	KSA-25K56	KSA-25KA80	KSA-25K160		
Screening door / blind board	KBBJ25K56	KBBJ25K80	KBBJ25K160		
Air discharge adapter for round duct	KDAJ25KA56	KDAJ25KA140			

(1) If installing a high efficiency filter in the unit, an assembly chamber for either bottom or rear suction is required

NEW

POWER SUPPLY

V1 = 1~, 230V, 50Hz
V3 = 1~, 230V, 50Hz
VE = 1~, 220-240V, 50Hz/60Hz
W1 = 3N~, 400V, 50Hz

MEASURING CONDITIONS

HEATING & COOLING

1) nominal cooling capacities are based on:	
indoor temperature	27°CDB/19°CWB
outdoor temperature	35°CDB
refrigerant piping length	7.5m
level difference	0m
2) nominal heating capacities are based on:	
indoor temperature	20°CDB
outdoor temperature	7°CDB/6°CWB
refrigerant piping length	7.5m
level difference	0m

The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value, depending on the distance and acoustic environment (for measuring conditions: please refer to the technical databooks).
The sound power level is an absolute value indicating the "power" which a sound source generates.
For more detailed information please consult our technical databooks.

Daikin air conditioners offer a comprehensive range of features to enhance your comfort. In this catalogue, main features are represented by following pictogrammes:

'We Care' Icons

A number of 'We Care' icons are highlighted in green throughout the catalogue to indicate product features that have an impact on reducing energy consumption:

Home leave operation
During absence, the indoor temperature can be maintained at a certain level.

Energy efficiency
Daikin air conditioners are energy efficient and economical.

Fan only
The air conditioner can be used as fan, blowing air without cooling or heating.

COMFORT

Draught prevention
When starting to warm up or when the thermostat is off, the air discharge direction is set horizontally and the fan to low speed, to prevent draught. After warming up, air discharge and fan speed are set as desired.

Auto cooling-heating changeover
Automatically selects cooling or heating mode to achieve the set temperature (heat pump types only).

AIR FLOW

Ceiling soiling prevention
A special function prevents air blowing out too long in horizontal position, to prevent ceiling stains.

Horizontal auto swing
Possibility to select automatic horizontal moving of the air discharge louvre, for uniform air flow and temperature distribution.

Fan speed steps
Allows to select up to the given number of fan speed.

HUMIDITY CONTROL

Dry programme
Allows humidity levels to be reduced without variations in room temperature.

AIR TREATMENT

Air filter
Removes airborne dust particles to ensure a steady supply of clean air.

REMOTE CONTROL & TIMER

Timer
Allows to preset the air conditioner to start/stop at a specified time.

Weekly timer
A 7-day schedule timer, enabling daily or weekly programming.

Infrared remote control
Infrared remote control with LCD to start, stop and regulate the air conditioner from a distance.

Wired remote control
Wired remote control to start, stop and regulate the air conditioner from a distance.

Centralised control
Centralised control to start, stop and regulate several air conditioners from one central point.

OTHER FUNCTIONS

Auto-restart
The unit restarts automatically at the original settings after power failure.

Self-diagnosis
Simplifies maintenance by indicating system faults or operating anomalies.

Drain pump kit
Facilitates condensation draining from the indoor unit.

Head Office

Daikin Airconditioning UK Limited
The Heights, Brooklands, Weybridge, Surrey KT13 0NY
Tel 0845 6419000 Fax 0845 6419009

www.daikin.co.uk

Daikin UK is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.

Daikin units comply with the European regulations that guarantee the safety of the product.

ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.

Daikin Europe N.V. participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory. Multi units are Eurovent certified for combinations up to 2 indoor units. VRV products, Rooftops, FWB-J and FWD-units are not within the scope of the Eurovent Certification Programme.

DAIKIN UK RECYCLING
END OF LIFE AIR CON UNITS

FSC

Daikin products are distributed by:

UKEPCEN08-121 / 10.08 / Swim / La Movida. Copyright 2008 Daikin.
Printed in the UK on paper that is 50% recycled and 50% from sustainable sources.