

Air conditioners,

# **Commercial and Technical Data**







Daikin Europe N.V.

#### **About Daikin**



Daikin has a worldwide reputation based on almost 85 years' experience in the successful manufacture of high quality air conditioning equipment for industrial, commercial and residential use.

#### **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.

#### Biddle, the Company



Biddle is an internationally renowned company with more than 50 years' experience in the manufacturing and marketing of innovative outdoor/indoor climate separation equipment. Throughout its long history the company has made its name in engineering advanced custom made solutions for retail, industrial and public sector buildings.

#### Daikin and Biddle

The remarkable synergy between Daikin and Biddle, both leaders in their respective fields, has lead to a combined heat pump and air curtain system that represents the ideal solution for retail outlets and office buildings. Co-operation of this order guarantees customers high energy efficiencies, rapid payback on investment and hard to beat in store comfort.

# **Environmental Awareness**

#### Air Conditioning and the Environment

Air conditioning systems provide a significant level of indoor comfort, making **optimum working and living conditions** possible in the most extreme climates.

In recent years, motivated by a global awareness of the need to reduce the burdens on the environment, Daikin has invested enormous efforts in limiting the negative effects associated with the production and the operation of air conditioners.

Hence, models with **energy saving** features and improved **eco-production** techniques have seen the light of day, making a significant contribution to limiting the impact on the environment.

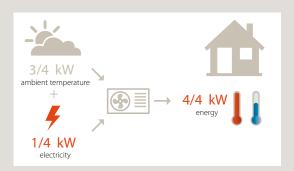


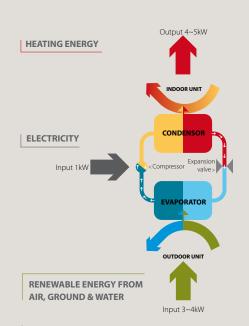
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# Did you know that hi-VRV®...

- > Means variable refrigerant volume
- Is the industry leader with several unique products
- Is a rapid response system in which
   up to 64 indoor units can operate
   on the same refrigerant circuit
- Integrates air conditioning,
   ventilation and control





# Benefits of Daikin heat pumps

# The Solution for those with an Eye to the Future

Heat pumps are used to extract calories (heat) contained in the outside air, even in cold weather. Using a compressor, they are capable of very effectively heating offices, commercial spaces, hotels and any other application. The only input that heat pumps require to make the system work is electricity: the heat they produce is entirely drawn from the outside air. Electricity use is thus minimum and far lower than that of an electric space-heater or air curtain for example. It is a simple equation: using Daikin heat pumps, 75% of the energy consumed to heat your building is found in the outside air: it is thus free of charge and... renewable!

Quiet and discrete, heat pumps are currently the most advanced technology used to equip buildings with low energy consumption.

#### A Renewable Resource

Up to 3/4th of the heat produced by a heat pump is free of charge since it is drawn from the outside air. It is thus a no-cost and non-depletable resource!

#### How does it work?

As its name makes clear, a heat pump is a system designed to extract and transport heat, thus allowing one to maintain a constant indoor temperature all year long.

#### A perpetual cycle

A heat transfer fluid, harmless to the ozone layer, circulates in a closed circuit inside the system in order to transfer heat to and from the air outside and inside your home.

- > The evaporator enables the fluid to extract heat from the outside air by changing from a liquid state to a gas.
- > The electric compressor then compresses the gas, which raises its temperature.
- The condensor then allows the gas to transfer its heat to the heating system as it returns to a liquid state.
- > The expansion valve lowers the pressure of the fluid, which triggers its vaporisation to begin a new cycle.

# Benefits of Biddle Air Curtains connected to Daikin Heat Pumps

Biddle air curtains provide highly efficient solutions to combat the issue of climate separation across your outlet or office doorway.

#### 'Open Door' Trading

Although the customer friendly aspects of open door trading are widely appreciated by retail and commercial outlet managers, open doors can also give rise to massive losses in warm air and hence, energy. Biddle air curtains however, not only preserve indoor warmth and generate significant economies, they also represent an **invitation for customers** to enter a pleasant trading and working environment.



The stable store environment ensuing from efficient outdoor/indoor climate separation limits heat loss through the door opening and enhances the efficiency of the air conditioning system. By combining Biddle air curtains with highly efficient Daikin VRV® and ERQ heat pumps, users benefit from substantial energy savings of up to 72% compared to electric air curtains.

#### Short pay back period

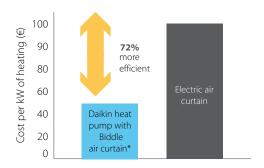
Energy savings accruing from the installation of this advanced equipment give rise to the remarkable payback period of less then **1.5 years** with massive potential extra savings likely to stem from reductions in future energy bills.

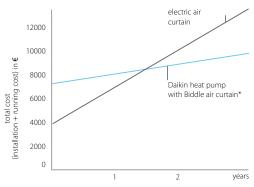
#### Comfort through patented technology

Customers and staff alike can enjoy maximum indoor comfort all year round, irrespective of external weather conditions resulting from the combined advanced rectifier technology and constant air velocity inherent in Biddle air curtains.

#### Easy installation

Easy and fast installation of these systems not only reduces costs but makes expensive water systems, boilers and gas connection redundant. Furthermore, integrating a Biddle air curtain with a Daikin VRV® also eliminates the need to install multiple outdoor units, thereby reducing installation time and costs still further. This unrivalled combination in fact, enables Daikin to offer its customers the ultimate, environmentally conscious, 'total solution' package, comprising cooling, heating, outdoor-indoor climate separation and fresh air ventilation.





\* Payback period and gains calculated based upon the following: Air curtain is 9hrs/day – 156 days/year (1,404 hrs/year) in use.

Annual energy consumption for an electric air curtain: 3,137EUR (COP = 0.95).

Typical installation cost: 1,000EUR;

Typical equipment cost: 2,793EUR.

Annual energy consumption for CYQS200DK100FBN and ERQ100AV: 748EUR (COP 4.00).

Typical installation cost: 2,000EUR;

Typical equipment cost: 5,150EUR.

Calculation based upon electricity cost: 0,1705EUR /kWh.

# Which system offers me the best solution?

I need an air curtain and heating, and/or cooling, and/or ventilation

Integrate the Biddle air curtain in a total solution for your shop, office building or other commercial space

#### VRV® heat recovery

- > VRV® is among the first heat recovery systems suitable for connection to air curtains
- The most advanced and environmentally conscious method of separating outdoor and indoor climates on the market, offering a payback period of less than 1.5 years
- > Provides virtually free air curtain heating via recovered heat from indoor units in cooling mode
- Easy and quick to install at reduced costs since no additional water systems, boilers and gas connections are required
- > Connectable to the Biddle comfort air curtain



\* VRV\* heat recovery in combination with Biddle comfort air curtain

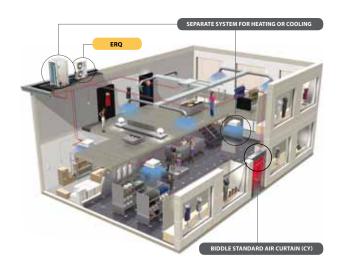
#### VRV® heat pump

- > VRV® is among the first heat pump systems suitable for connection to air curtains
- An efficient and economical method of separating outdoor and indoor climates, offering the well proven cost saving advantages inherent in VRV® heat pump technology and a payback period of less than 1.5 years
- > Easy and quick to install at reduced costs since no additional water systems, boilers and gas connections are require
- > Connectable to the Biddle comfort air curtain

# I only need an air curtain

A solution for your commercial doorway, connectable to ERQ (pair application)
ERQ heat pump

- A reliable and effective method of separating outdoor and indoor climates, offering a payback period of less than 1.5 years
- > Easy and quick to install at reduced costs since no additional water systems, boilers and gas connections are required
- > Connectable to the Biddle standard air curtain



- \* ERQ in combination with Biddle standard air curtain
- \* heating or cooling can be provided by the Daikin commercial multi system

# Which air curtain offers me the best solution?

Biddle air curtains come in comfort and standard versions, all of them in varying door widths from 1 up to 2.5 meters. Below you can find an overview of the different versions and available door heights.

# Biddle comfort air curtain (CA)







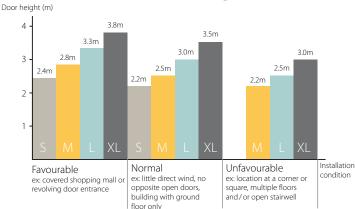
Free Hanging (F)

Cassette (C)

Recessed (C)

- All year round comfort ensured by the constant discharge velocity and adjustable jet air flow width (European patent)
- Maximum energy efficiency stemming from almost zero down flow turbulence, optimised air flow and the application of advanced discharge rectifier technology
- Around 85% air separation efficiency, greatly reducing both heat loss and required indoor unit heating capacity

#### Biddle comfort air curtain range



#### Biddle standard air curtain (CY)







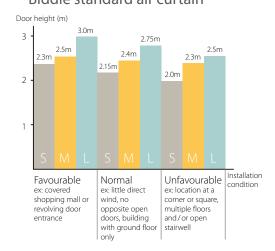
Free Hanging (F)

Cassette (C)

Recessed (C)

- Maximum energy efficiency stemming from almost zero down flow turbulence, optimised air flow and the application of advanced discharge rectifier technology
- Around 85% air separation efficiency, greatly reducing both heat loss and required indoor unit heating capacity

#### Biddle standard air curtain



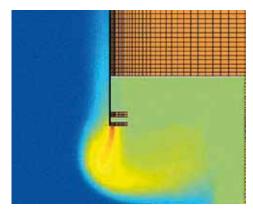
# Advanced biddle air curtain technlologies

#### Rectifier technology

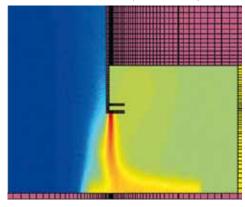
By reducing the air turbulence at the discharge of the Biddle air curtain, the induction of the surrounding air is also reduced, providing a deeply penetrating airstream. In addition the design of the rectifier provides a laminar air flow right down to floor level, reducing energy consumption and increasing comfort levels all year round.



- > Laminar air flow stream Minimizes air turbulence
- > Top energy efficiency
- > Improved penetration
- > 80-85% separation efficiency



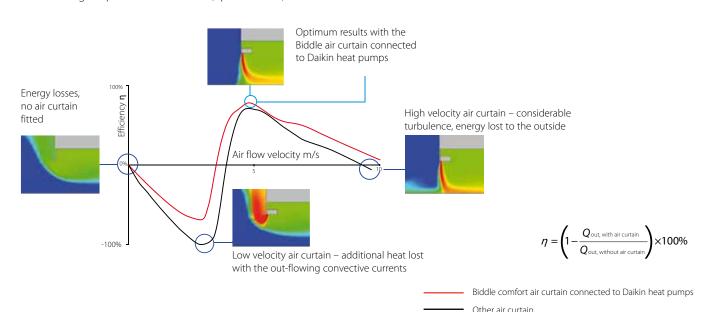
Air curtain, with turbulent air stream and loss of airflow – low separation efficiency



Biddle air curtain connected to Daikin heat pump with patented rectifier grille – separation efficiency up to 80-85%

#### Optimised air flow velocity

The correct air flow velocity greatly improves the Biddle air curtain efficiency and when combined with the rectifier technology, results in high separation efficiencies (up to 80-85%).

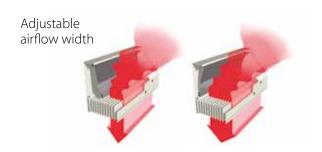


# Constant Air Velocity technology (european patent)\*

On more demanding days it is usual to increase the operational speed of the air curtain. Similarly on milder days the speed would be reduced. With air curtains featuring a fixed area discharge grille this leads to an increase or decrease in air velocity which, in turn leads to less comfort and lower energy efficiency.

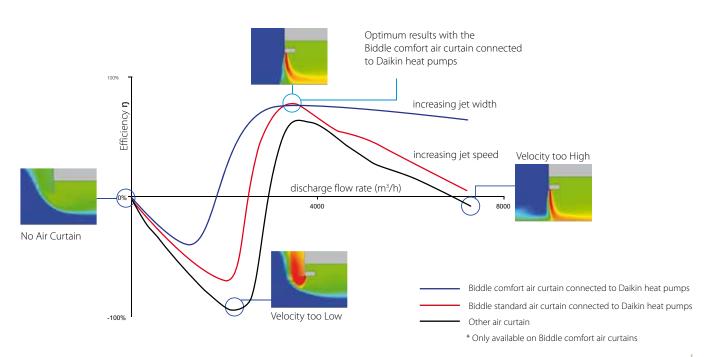
One of the important differences between the Biddle comfort air curtain and other air curtains is the inclusion of a patented damper mechanism. This assembly helps maintain a constant velocity across all fan speeds, so the optimum air velocity for efficiency and thermal comfort is maintained regardless of the conditions outside.

- > All year round comfort
- > 80-85% separation efficiency



# Increased outlet width VS Increased air velocity \*

The application of comfort air curtain technology generates a high separation efficiency compared to that of other air curtains, as the Biddle comfort air curtain increases the airstream outlet width, rather than increasing the velocity.





# Selection of a Biddle Air Curtain

An air curtain is selected properly if it has sufficient capacity to heat up entering cold outside air to a comfortable temperature. Additionally, the unit must be able to properly screen off the entire width and height of the door opening. The air curtain type to be selected depends on:

- 1. The door height (= mounting height, measured from floor to bottom of unit)
- 2. The door width
- 3. The volume and temperature of the outside air entering through the open door

#### 1. Door height and 2. Door width

It is important for the distance between the air curtain and the door to be as short as possible. In addition, the air curtain must be at least as wide as the door opening, as too narrow an air curtain will lead to air leakages on the sides.



Correct door height and width installation

 To prevent air leakages on the sides, the air curtain must be at least as wide as the door opening.

#### 3. Entering cold air through natural ventilation

In practice, the volume and temperature of entering outside air are difficult to determine, as conditions near a door vary continuously. Other aspects, such as floors with open connections, multiple open doors in a single room, or the orientation of the building, may also have a large influence on the capacity need. To make selection easy, the following guidelines may be used:

- Favorable conditions: covered shopping mall or revolving-door entrance.
- Normal conditions: little direct wind, no opposite open doors, building with ground floor only.
- Unfavorable conditions: location at a corner or square, multiple floors and/or open stairwell.

<sup>\*</sup> Contact your local dealer for more information

#### Strength of the air curtain not only determined by air displacement

It is commonly believed that a properly working air curtain should displace much air, but that is a misconception. The screening effect of an air curtain, which we call the air curtain strength, is determined by a proper mix of air velocity, air outlet temperature, and air stream width. The required air velocity is partly determined by the turbulence of the air stream. If the rectifier technology is used, the air stream will be practically laminar, and far less air will have to be displaced than with conventional air curtains. This does not only result in higher comfort but it also means that less capacity will be needed, and that the electrical power consumption will be lower as well. If an air curtain is too strong, however, the efficiency will fall because a part of the heat will escape, over the floor, to outside.

#### Two installation levels

To accurately gear the capacity to the prevailing conditions. Biddle comfort air curtains have the possibility to set two different installation levels:

1. Installation level A: comfort setting

The capacity is slightly limited for all strengths. The lower discharge velocity and the lower noise level result in even higher comfort. Model CA S does not offer installation level A.

2. Installation level B: standard setting

This level is the standard setting, and is suitable for all conditions. At all strengths, more capacity is supplied than with installation level A.

# Integrating your Biddle Air Curtain into a Daikin Heat Pump System

### For connection to ERQ

Your ERQ units capacity should be larger or equal to the capacity of the Biddle air curtain. Ex.: CYQM100DK80FBN  $\rightarrow$  ERQ100A7V1B

### For connection to VRV®

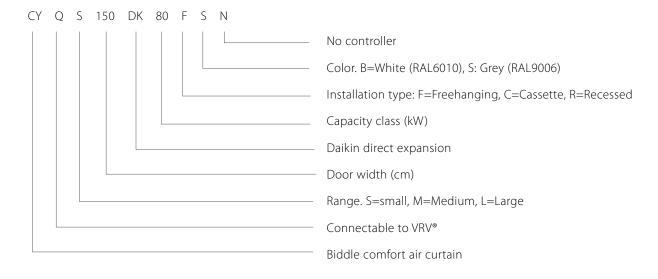
For selection of the VRV® outdoor unit handle the Biddle air curtain as a Daikin indoor unit and add the capacity to the total capacity of the other indoor units.

Then follow the VRV® outdoor unit selection.

#### Biddle comfort air curtian nomenclature



#### Biddle standard air curtian nomenclature



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#### **Biddle Comfort Air Curtain**

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	Cassette 2
	Recessed

#### 1-1 CAVS

1-1-1 Technical S	pecifications			CAVS100DK80*BC/*SC	CAVS150DK80*BC/*SC	CAVS200DK100*BC/*SC	CAVS250DK140*BC/*SC			
Heating capacity	Installation level B	speed 1	kW	3.8	4.9	6.3	8.7			
		speed 2	kW	3.8	4.9	6.3	8.7			
		speed 3	kW	4.8	6.1	7.9	10.9			
		speed 4	kW	6.0	7.5	9.7	13.3			
		speed 5	kW	7.7	9.3	12.1	16.8			
		speed 6	kW	7.7	9.3	12.1	16.8			
Delta T	inlet = room	speed 1	K	23	20	20	21			
	temperature on	speed 2	K	23	20	20	21			
	installation level B	speed 3	K	22	19	18	20			
		speed 4	K	20	17	16	18			
		speed 5	K	18	15	14	16			
		speed 6	K	18	15	14	16			
Power Input (50Hz)	Fan only		kW	0.20	0.30	0.40	0.50			
	Heating		kW	0.20	0.30	0.40	0.50			
Maximum door width			m	1.0	1.5	2.0	2.5			
Maximum door height	Favorable conditions	<u> </u>	m	2.4	2.4	2.4	2.4			
	Normal conditions		m	2.2	2.2	2.2	2.2			
Dimensions	Height	Unit F	mm		2	70	•			
		Unit C	mm		2	70				
		Unit R	mm		2	70				
	Width	Unit F	mm	1,123	1,623	2,123	2,623			
		Unit C	mm	1,000	1,500	2,000	2,500			
		Unit R	mm	1,048	1,548	2,048	2,548			
	Depth	Unit F	mm	590						
		Unit C	mm		82	21				
		Unit R	mm		50	61				
	Packed unit	Height F/C/R	mm		7(	60				
		Width F/C/R	mm	1,630	1,630	2,130	2,630			
		Depth F/C/R	mm	630	630	680	680			
Weight	Unit F kg			61	73	89	101			
	Unit C		kg	59	83	102	129			
	Unit R		kg	61	88	108	137			
	Packed unit F		kg	78	89	122	154			
	Packed unit C		kg	74	103	139	182			
	Packed unit R		kg	76	108	145	190			
Casing	Colour			BC:RAL9010 SC:RAL 9006	BC:RAL9010 SC:RAL 9006	BC:RAL9010 SC:RAL 9006	BC:RAL9010 SC:RAL 9006			
	Material				Electrogalvani	sed sheet steel				
Required Ceiling Void	•		mm		42	20				
Fan - Air flow rate -	Installation level B	speed 1	m³/h	490	740	990	1,240			
Heating		speed 2	m³/h	490	740	990	1,240			
		speed 3	m³/h	670	1,000	1,340	1,670			
		speed 4	m³/h	880	1,310	1,750	2,190			
		speed 5	m³/h	1,230	1,850	2,470	3,080			
		speed 6	m³/h	1,230	1,850	2,470	3,080			
Refrigerant	Туре				R-4	10A				
	Control					pansion valve	-			
Sound pressure -	1	speed 1	dBA	30	32	33	34			
	l		dBA	30	32	33	34			
Heating	Installation level B	speed 2								
Heating	Installation level B	speed 3	dBA	36	38	39	40			
Heating	Installation level B	speed 3 speed 4	dBA dBA	36 42	44	45	46			
Heating	Installation level B	speed 3 speed 4 speed 5	dBA dBA dBA	36 42 50	44 52	45 53	46 54			
·		speed 3 speed 4 speed 5 speed 6	dBA dBA	36 42 50 50	44 52 52	45 53 53	46 54 54			
Piping connections	Liquid (OD)	speed 3 speed 4 speed 5 speed 6 Diameter (OD)	dBA dBA dBA	36 42 50 50 9.52	44 52 52 52 9.52	45 53 53 9.52	46 54 54 9.52			
Piping connections		speed 3 speed 4 speed 5 speed 6	dBA dBA dBA dBA	36 42 50 50	44 52 52 52 9.52 16.0	45 53 53 9.52 16.0	46 54 54			
·	Liquid (OD)	speed 3 speed 4 speed 5 speed 6 Diameter (OD)	dBA dBA dBA dBA mm	36 42 50 50 9.52 16.0	44 52 52 9.52 16.0 Vacuum clea	45 53 53 9.52	46 54 54 9.52 19.0			

#### 1 - 1 CAVS

1-1-1 Technical Specifications	CAVS100D	K80*BC/*SC	CAVS150DI	K80*BC/*SC	CAVS200DH	(100*BC/*SC	CAVS250DH	(140*BC/*SC	
Standard accessories				Biddle rem	ote control				
	BC: Side	SC: Side	BC: Side	SC: Side	BC: Side	SC: Side	BC: Side	SC: Side	
	caps in	caps in white	caps in	caps in white	caps in	caps in white	caps in	caps in white	
	pure white	aluminium	pure white	aluminium	pure white	aluminium	pure white	aluminium	
	(RAL9010),	(RAL9006),	(RAL9010),	(RAL9006),	(RAL9010),	(RAL9006),	(RAL9010),	(RAL9006),	
	size S/M	size S/M	size S/M	size S/M	size S/M	size S/M	size S/M	size S/M	
	low voltage cable 1x25m + 2x5m								
				temperature	sensor (NTC)	)			
Notes	Favorable c	onditions: cov	ered shoppir	ng mall or rev	olving-door e	ntrance. Norn	nal conditions	: little direct	
	wind, no o	opposite oper	doors, buildi	ng with grour	nd floor only.	Unfavorable (	conditions: lo	cation at a	
		(	corner or squa	are, multiple f	loors and/or	open stairway	<b>'</b> .		
	Sound pressure level (at 3m)								
	Pipe work and electrical connections are on top of the unit								
			CA has in	stallation leve	el B as standa	ard setting			

1-1-2Electrical	Specifications		CAVS100DK80*BC/*SC	CAVS150DK80*BC/*SC	CAVS200DK100*BC/*SC	CAVS250DK140*BC/*SC				
Power Supply	Frequency	Hz	50							
	Voltage	V	230							
Voltage range	Min.	V	224							
	Max.	V	240							
Current (50Hz) Maximum fuse amps (MFA) A 16										
	Full load amps (FLA)	А	0.90	1.35	1.80	2.25				

#### 1 - 2 CAVM

Healing taggeolys  And selection   Pageol   Selection   Select	1-2-1 Technical S	pecifications			CAVM100DK80*BC/*SC	CAVM150DK80*BC/*SC	CAVM200DK100*BC/*SC	CAVM250DK140*BC/*SC				
Part	Heating capacity	Installation level B	speed 1	kW	5.3	6.7	8.6	11.8				
Power liput (50Hz)			speed 2	kW	5.3	6.7	8.6	11.8				
Public			speed 3	kW	6.1	7.5	9.7	13.4				
Delta T			speed 4	kW	7.7	9.4	12.1	16.8				
Pela T			speed 5	kW	8.9	10.6	13.7	19.3				
Power Input (901tz)   Power Input (901tz)			speed 6	kW	8.9	10.6	13.7	19.3				
Maximum dorn width   Maximu	Delta T	inlet = room	speed 1	K	21	18	17	19				
Power Input (50Hz)   Power		'	speed 2	K	21	18	17	19				
Power lingut (50Hz)		installation level B	speed 3	K	20	17	16	18				
Power Input (50Hz)   Fan only			speed 4	K	18	15	14	16				
Power injust (SPHz)			speed 5	K	17	14	13	15				
Heating			speed 6	K	17	14	13	15				
Maximum door width   Maximum door width   Maximum door height   Feveral end conditions   m   2.8	Power Input (50Hz)	Fan only		kW	0.28	0.42	0.56	0.70				
Maximum door height   Mormal conditions		Heating		kW	0.28	0.42	0.56	0.70				
Normal conditions	Maximum door width			m	1.0	1.5	2.0	2.5				
Uniformable conditions	Maximum door height	Favorable conditions	;	m	2.8	2.8	2.8	2.8				
Dimensions		Normal conditions		m	2.5	2.5	2.5	2.5				
Variable		Unfavorable conditio	ns	m	2.2	2.2	2.2	2.2				
Wright   Unit R   mm	Dimensions	Height	Unit F	mm		2	70					
Wright   Unit F			Unit C	mm		2	70					
Unit C			Unit R	mm		2	70					
Depth		Width	Unit F	mm	1,123	1,623	2,123	2,623				
Depth			Unit C	mm	1,000	1,500	2,000	2,500				
Variety   Var			Unit R	mm	1,048	2,548						
Packed unit   Height F/C/R   mm		Depth	Unit F	mm								
Packed unit			Unit C	mm		8:	21					
Weight   Whith F/C/R   mm   1,630   1,630   2,130   2,630   680   680   680			Unit R	mm		5	61					
Depth F/C/IR   mm   630   630   680   680		Packed unit	Height F/C/R	mm								
Weight   Unit F			Width F/C/R	mm	1,630	1,630	2,130	2,630				
Unit C			Depth F/C/R	mm	630	630	680	680				
Unit R	Weight	Unit F		kg			97					
Packed unit F				kg	68		111					
Packed unit C				kg	66		117	144				
Packed unit R   Regular   Regular		Packed unit F		kg	82	96	130	157				
Casing   Colour   Material   BC:RAL9010   SC:RAL9006   SC:RAL9006   SC:RAL9006   SC:RAL9006   SC:RAL9006   SC:RAL9006   SC:RAL9006   SC:RAL9006   SC:RAL9006   SCRAL9010   SC:RAL9006   SCRAL9010   SC:RAL9006   SCRAL9010   SCRAL9006   SCRAL9010   SCRAL9010   SCRAL9006   SCRAL9010   SCRAL9006   SCRAL9010   SCRAL90		Packed unit C		kg		108	148	189				
Required Ceiling Void				kg								
Required Ceiling Void	Casing				BC:RAL9010 SC:RAL 9006			BC:RAL9010 SC:RAL 9006				
Fan - Air flow rate - Heating		Material						T				
Heating   Speed 2   m³/h   530   800   1,070   1,330		T										
Speed 3   m³/h   750   1,120   1,490   1,870		Installation level A										
Speed 4   m³/h   890   1,330   1,770   2,220	Heating											
Speed 5   m³/h   1,230   1,840   2,450   3,060     Installation level B   Speed 1   m³/h   750   1,120   1,490   1,870     Speed 2   m³/h   750   1,120   1,490   1,870     Speed 3   m³/h   890   1,330   1,770   2,215     Speed 4   m³/h   1,230   1,840   2,450   3,060     Speed 5   m³/h   1,530   2,290   3,050   3,810     Refrigerant   Type   R-410A												
Speed 6   m³/h   1,230   1,840   2,450   3,060     Installation level B   Speed 1   m³/h   750   1,120   1,490   1,870     Speed 2   m³/h   750   1,120   1,490   1,870     Speed 3   m³/h   890   1,330   1,770   2,215     Speed 4   m³/h   1,230   1,840   2,450   3,060     Speed 5   m³/h   1,530   2,290   3,050   3,810     Refrigerant   Type   R-410A												
Installation level B   speed 1   m³/h   750   1,120   1,490   1,870												
speed 2         m³/h         750         1,120         1,490         1,870           speed 3         m³/h         890         1,330         1,770         2,215           speed 4         m³/h         1,230         1,840         2,450         3,060           speed 5         m³/h         1,530         2,290         3,050         3,810           Refrigerant    Type  Type			-									
speed 3         m³/h         890         1,330         1,770         2,215           speed 4         m³/h         1,230         1,840         2,450         3,060           speed 5         m³/h         1,530         2,290         3,050         3,810           speed 6         m³/h         1,530         2,290         3,050         3,810           Refrigerant   Type  Type		Installation level B										
speed 4         m³/h         1,230         1,840         2,450         3,060           speed 5         m³/h         1,530         2,290         3,050         3,810           speed 6         m³/h         1,530         2,290         3,050         3,810           Refrigerant         Type         R-410A												
speed 5         m³/h         1,530         2,290         3,050         3,810           speed 6         m³/h         1,530         2,290         3,050         3,810           Refrigerant         Type         R-410A												
speed 6         m³/h         1,530         2,290         3,050         3,810           Refrigerant         Type         R-410A												
Refrigerant Type R-410A												
			speed 6	m³/h	1,530			3,810				
Control Electronic expansion valve	Refrigerant											
		Control				Electronic ex	pansion valve					

### 1 - 2 CAVM

1-2-1 Technical	Specifications			CAVM100D	K80*BC/*SC	CAVM150D	K80*BC/*SC	0K80*BC/*SC CAVM200DK100*BC/*SC CAVM250DK140*BC			
Sound pressure -	Installation level A	speed 1	dBA	2	25	2	.7	2	28	2	29
Heating		speed 2	dBA	2	?5	2	<del>!</del> 7	2	28	2	29
		speed 3	dBA	3	32	3	34	3	35	3	36
		speed 4	dBA	3	37	3	9	4	10	4	11
		speed 5	dBA	4	5	4	-7	4	18	4	19
		speed 6	dBA	4	5	4	-7	4	18	4	19
	Installation level B	speed 1	dBA	3	33	3	5	3	36	3	37
		speed 2	dBA	3	33	3	5	3	36	3	37
		speed 3	dBA	3	37	3	19	4	10	4	11
		speed 4	dBA	4	5	4	.7	4	18	4	19
		speed 5	dBA	5	51	5	3	5	54	5	55
		speed 6	dBA	5	51	5	3	5	54	55	
Piping connections	Liquid (OD)	Diameter (OD)	mm	9.52		9.	9.52		9.52		.52
	Gas	Diameter (OD)	mm	16	6.0	16	3.0	16	6.0	19	9.0
Air Filter							Vacuum clea	nable filter G	1		
Required accessories	i				[	Daikin wired r	emote contro	I (BRC1E51A	or BRC1D5	2)	
Standard accessories	i			Biddle remote control							
				BC: Side	SC: Side	BC: Side	SC: Side	BC: Side	SC: Side	BC: Side	SC: Side
				caps in	caps in white	caps in	caps in white	caps in	caps in white	caps in	caps in white
				pure white (RAL9010).	aluminium	pure white	aluminium	pure white	aluminium	pure white	aluminium (RAL9006),
				size S/M	(RAL9006), size S/M	(RAL9010), size S/M	(RAL9006), size S/M	(RAL9010), size S/M	(RAL9006), size S/M	(RAL9010), size S/M	size S/M
				0.20 0/111	0.20 0,			e 1x25m + 2x		0.20 0/111	0.20 0,
								sensor (NTC)			
Notes				Favorable o	onditions: co			, ,	<u> </u>	nal conditions	s: little direct
										conditions: lo	
		corner or square, multiple floors and/or open stairway.									
						5	Sound pressu	re level (at 3r	n)		
					Pi	pe work and e	electrical con	nections are o	on top of the	unit	
l						CA has in	stallation lev	el B as standa	ard setting		

1-2-2 Electrica	l Specifications		CAVM100DK80*BC/*SC	CAVM150DK80*BC/*SC	CAVM200DK100*BC/*SC	CAVM250DK140*BC/*SC					
Power Supply	Frequency	Hz		50							
	Voltage	V	230								
Voltage range	Min.	V	224								
	Max.	V	240								
Current (50Hz)	Maximum fuse amps (MFA)	Α	16								
	Full load amps (FLA)	Α	1.24	1.86	2.48	3.10					

#### 1 - 3 CAVL

1-3-1 Technical S	pecifications			CAVL100DK125*BC/*SC	CAVL150DK200*BC/*SC	CAVL200DK250*BC/*SC	CAVL250DK250*BC/*SC				
Heating capacity	Installation level B	speed 1	kW	8.7	13.1	16.9	18.6				
		speed 2	kW	8.7	13.1	16.9	18.6				
		speed 3	kW	10.6	15.9	20.3	22.1				
		speed 4	kW	12.5	18.8	24.0	25.8				
		speed 5	kW	15.3	22.8	28.8	30.5				
		speed 6	kW	15.3	22.8	28.8	30.5				
Delta T	Inlet = room	speed 1	K	20	20	19	17				
	temperature on	speed 2	K	20	20	19	17				
	installation level B	speed 3	K	18	18	18	15				
		speed 4	K	17	17	16	14				
		speed 5	K	15	15	14	12				
		speed 6	K	15	15	14	12				
Power Input (50Hz)	Fan only		kW	0.75	1.13	1.50	1.88				
	Heating		kW	0.75	1.13	1.50	1.88				
Maximum door width			m	1.0	1.5	2.0	2.5				
Maximum door height	Favorable conditions		m	3.3	3.3	3.3	3.3				
	Normal conditions		m	3.0	3.0	3.0	3.0				
	Unfavorable condition		m	2.5	2.5	2.5	2.5				
Dimensions	Height	Unit F	mm		3:	70					
		Unit C				70					
		Unit R	mm		3	70					
	Width	Unit F	mm	1,123	1,623	2,123	2,623				
		Unit C	mm	1,000	1,500	2,000 2,048	2,500				
		Unit R	mm	1,048	1,548	2,548					
	Depth	Unit F	mm		7	74					
		Unit C	mm			105					
F		Unit R	mm	745							
	Packed unit	Height C	mm	1,140							
		Height F/R	mm		1	90	1				
		Width F/C/R	mm	1,630	1,630	2,130	2,630				
		Depth F/C/R	mm	630	630	680	680				
Weight	Unit F		kg	83	108	137	166				
	Unit C		kg	81	118	151	190				
	Unit R		kg	83	141	155	196				
	Packed unit F		kg	100	124	169	204				
	Packed unit C		kg	100	143	195	252				
	Packed unit R		kg	99	162	193	250				
Casing	Colour			BC:RAL9010   SC:RAL 9006			BC:RAL9010   SC:RAL 9006				
D : 10 " 1/:1	Material					sed sheet steel					
Required Ceiling Void	Installation 1 - 1.4		mm	4.000		20	0.540				
Fan - Air flow rate - Heating	Installation level A	speed 1	m³/h	1,020	1,530	2,030	2,540				
i realing		speed 2	m³/h	1,020	1,530	2,030	2,540				
		speed 3	m³/h	1,330	2,000	2,670	3,330				
		speed 4	m³/h	1,730	2,600	3,470	4,340				
		speed 5	m³/h	2,210	3,320	4,430	5,530				
	Installation In at D	speed 6	m³/h	2,210	3,320	4,430	5,530				
	Installation level B	speed 1	m³/h	1,330	2,000	2,670	3,330				
		speed 2	m³/h	1,330	2,000	2,670	3,330				
		speed 3	m³/h	1,730	2,600	3,470	4,340				
		speed 4	m³/h	2,210	3,320	4,430	5,530				
		speed 5	m³/h	2,990	4,490	5,980	7,480				
Defrigerent	Tuno	speed 6	m³/h	2,990	4,490	5,980	7,480				
Refrigerant	Type					10A					
	Control				Electronic ex	pansion valve					

#### 1 - 3 CAVL

1-3-1 Technical	Specifications			CAVL100DK	(125*BC/*SC	CAVL150DF	(200*BC/*SC	CAVL200DH	(250*BC/*SC	CAVL250DH	(250*BC/*SC
Sound pressure -	Installation level A	speed 1	dBA	3	7	3	38	4	10	4	1
Heating		speed 2	dBA	3	7	3	38	4	10	4	1
		speed 3	dBA	4	.0	4	12	4	13	4	4
		speed 4	dBA	4	5	4	17	4	18	4	19
		speed 5	dBA	5	0	5	52	5	53	5	54
	speed 6 dBA		dBA	5	0	5	52	5	53	5	54
	Installation level B	speed 1	dBA	4	2	4	14	4	<b>l</b> 5	4	ŀ6
		speed 2	dBA	4	2	4	14	4	<b>l</b> 5	4	ŀ6
		speed 3	dBA	4	.6	4	18	4	19	5	50
		speed 4	dBA	5	i1	5	53	5	54	5	55
		speed 5	dBA	5	7	5	59	6	60	6	61
	speed 6 dBA 57		5	59	60		61				
Piping connections	Liquid (OD)	Diameter (OD)	mm	9.	52	9.	52	9.	52	9.	52
	Gas	Diameter (OD)	mm	16	6.0	19	9.0	22	2.0	22	2.0
Air Filter						,	Vacuum clea	nable filter G	1		
Required accessories					[	Daikin wired r	emote contro	I (BRC1E51A	or BRC1D5	2)	
Standard accessories				Biddle remote control							
				BC: Side	SC: Side	BC: Side	SC: Side	BC: Side	SC: Side	BC: Side	SC: Side
				caps in	caps in white	caps in	caps in white	caps in	caps in white	caps in	caps in white
				pure white (RAL9010).	aluminium (RAL9006),	pure white	aluminium (RAL9006),	pure white (RAL9010),	aluminium (RAL9006),	pure white (RAL9010),	aluminium (RAL9006),
				size L/XL	size L/XL	(RAL9010), size L/XL	size L/XL	size L/XL	size L/XL	size L/XL	size L/XL
				0.20 2				e 1x25m + 2x			
								sensor (NTC)			
Notes				Favorable c	onditions: co			, ,	<u>'                                    </u>	nal conditions	: little direct
				wind, no opposite open doors, building with ground floor only. Unfavorable conditions: location at a corner or square, multiple floors and/or open stairway.							
					Pi	pe work and e	electrical con	nections are o	on top of the	unit	
						S	Sound pressu	re level (at 3r	n)		
						CA has in	stallation lev	el B as standa	ard setting		

1-3-2 Electrica	l Specifications		CAVL100DK125*BC/*SC	CAVL150DK200*BC/*SC	CAVL200DK250*BC/*SC	CAVL250DK250*BC/*SC				
Power Supply	Frequency	Hz	50							
	Voltage	٧	230							
Voltage range	Min.	٧	224							
	Max.	٧	240							
Current (50Hz)	Maximum fuse amps (MFA)	Α	16							
	Full load amps (FLA)	Α	3.30	4.95	6.60	8.25				

#### 1-4 CAVXL

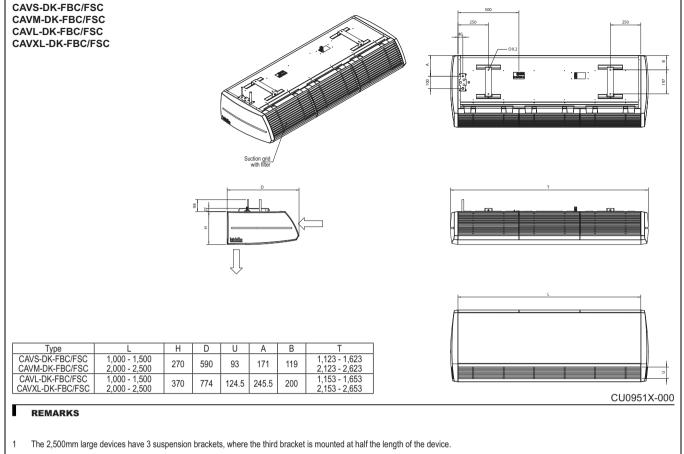
1-4-1 Technical S	pecifications			CAVXL100DK125*BC/*SC	CAVXL150DK200*BC/*SC	CAVXL200DK250*BC/*SC	CAVXL250DK250*BC/*SC				
Heating capacity	Installation level B	speed 1	kW	10.0	15.1	19.3	21.1				
		speed 2	kW	10.0	15.1	19.3	21.1				
		speed 3	kW	12.3	18.6	23.6	25.4				
		speed 4	kW	14.7	22.0	27.8	29.6				
		speed 5	kW	17.2	25.7	32.2	33.8				
		speed 6	kW	17.2	25.7	32.2	33.8				
Delta T	inlet = room	speed 1	K	19	19	18	16				
	temperature on	speed 2	K	19	19	18	16				
	installation level B	speed 3	K	17	17	16	14				
		speed 4	K	15	15	15	12				
		speed 5	K	14	14	13	11				
		speed 6	K	14	14	13	11				
Power Input (50Hz)	Fan only		kW	1.40	2.10	2.80	3.50				
	Heating		kW	1.40	2.10	2.80	3.50				
Maximum door width			m	1.0	1.5	2.0	2.5				
Maximum door height	Favorable conditions		m		3	.8					
	Normal conditions		m		3	.5					
	Unfavorable condition		m			.0					
Dimensions	Height	Unit F	mm			70					
		Unit C	mm			70					
		Unit R	mm		3.						
	Width	Unit F	mm	1,123	1,623	2,123	2,623				
		Unit C	mm	1,000	1,500	2,000	2,500				
		Unit R	mm	1,048	1,548	2,048	2,548				
	Depth	Unit F	mm	774							
		Unit C	mm	1,105 745							
F		Unit R	mm								
	Packed unit F/C/R	Height C	mm	1,410							
	 	Height F/R mm 990									
		Width F/C/R	mm	1,630	1,630	2,130	2,630				
		Depth F/C/R	mm	630	630	680	680				
Weight	Unit F		kg	69	102	130	162				
	Unit C		kg	84	123	160	198				
	Unit R		kg	86	146	164	204				
	Packed unit F		kg	85	123	168	216				
	Packed unit C		kg	103	148	204	260				
0 :	Packed unit R		kg	102	167	202	258				
Casing	Colour			BC:RAL9010 SC:RAL 9006			BC:RAL9010 SC:RAL 9006				
Deguired Cailing Vaid	Material		T			sed sheet steel 20					
Required Ceiling Void Fan - Air flow rate -	Installation level A	speed 1	mm m³/h	1,300	1,950	2,600	3,250				
Heating	IIIStaliation level A	speed 1	m³/h	1,300	1,950	2,600	3,250				
		speed 2 speed 3	m³/h	1,610	2,420	3,230	4,030				
		speed 3	m³/h	2,160	3,250	4,330	5,410				
		speed 4	m³/h	2,800	4,190	5,590	6,990				
		speed 5	m³/h	2,800	4,190	5,590	6,990				
	Installation level B	speed 0	m³/h	1,610	2,420	3,230	4,030				
	mistaliation level D	speed 1	m³/h	1,610	2,420	3,230	4,030				
		speed 2 speed 3	m³/h	2,160	3,250	4,330	5,410				
		speed 3	m³/h	2,800	4,190	5,590	6,990				
		speed 4	m³/h	3,650	5,480	7,310	9,130				
		speed 5	m³/h	3,650	5,480	7,310	9,130				
Refrigerant	Туре	50000 U	1111/11	0,000	,	10A	0,100				
	Control										
	1 - 3 • .			Electronic expansion valve							

#### 1-4 CAVXL

1-4-1 Technical Specifications			CAVXL100D	K125*BC/*SC	CAVXL150D	K200*BC/*SC	CAVXL200D	K250*BC/*SC	CAVXL250D	K250*BC/*SC	
Sound pressure -	Installation level A	speed 1	dBA	4	2	4	4	4	5	4	16
Heating		speed 2	dBA	4	2	4	4	4	5	4	16
		speed 3	dBA	4	ŀ6	4	-8	4	9	5	50
		speed 4	dBA	5	51	5	i3	5	54	5	55
		speed 5	dBA	5	56	5	8	5	i9	6	60
		speed 6	dBA	5	56	5	8	5	i9	6	60
	Installation level B	speed 1	dBA	4	7	4	.9	5	50	5	51
		speed 2	dBA	4	7	4	.9	5	50	5	51
		speed 3	dBA	5	52	5	3	5	55	5	56
		speed 4	dBA	5	56	5	8	5	i9	6	60
		speed 5	dBA	6	51	6	3	6	54	6	<b>3</b> 5
		speed 6	dBA	6	51	6	3	6	64	6	<b>3</b> 5
Piping connections	Liquid (OD)	Diameter (OD)	mm	9.	52	9.	52	9.52		9.	52
	Gas	Diameter (OD)	mm	16	6.0	19	9.0	22	2.0	22	2.0
Air Filter							Vacuum clea	nable filter G	1		
Required accessories	i					Daikin wired r	emote contro	I (BRC1E51A	or BRC1D52	2)	
Standard accessories	;						Biddle rem	ote control			
				BC: Side	SC: Side	BC: Side	SC: Side	BC: Side	SC: Side	BC: Side	SC: Side
				caps in	caps in white	caps in	caps in white	caps in	caps in white	caps in	caps in white
				pure white (RAL9010).	aluminium (RAL9006),	pure white (RAL9010),	aluminium (RAL9006),	pure white (RAL9010),	aluminium (RAL9006),	pure white (RAL9010).	aluminium (RAL9006),
				size L/XL	size L/XL	size L/XL	size L/XL	size L/XL	size L/XL	size L/XL	size L/XL
						low	voltage cabl	e 1x25m + 2x			1
							temperature	sensor (NTC)	)		
Notes				Favorable conditions: covered shopping mall or revolving-door entrance. Normal conditions: little direct							
				wind, no o			ing with grour				cation at a
				corner or square, multiple floors and/or open stairway.							
					Pi		electrical con		<u>'</u>	unit	
							ound pressu				
						CA has in	stallation leve	el B as standa	ard setting		

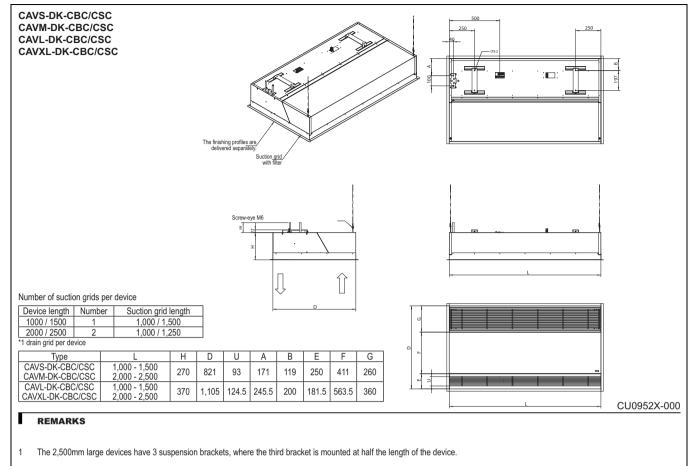
1-4-2 Electrical Specifications			CAVXL100DK125*BC/*SC	CAVXL150DK200*BC/*SC	CAVXL200DK250*BC/*SC	CAVXL250DK250*BC/*SC	
Power Supply Frequency Hz 50					0		
	Voltage V 230						
Voltage range Min. V 224					24		
	Max.	V	240				
Current (50Hz)	Maximum fuse amps (MFA)	Α		6			
	Full load amps (FLA)	Α	6.10	9.15	12.20	15.30	

#### 2 - 1 Free hanging



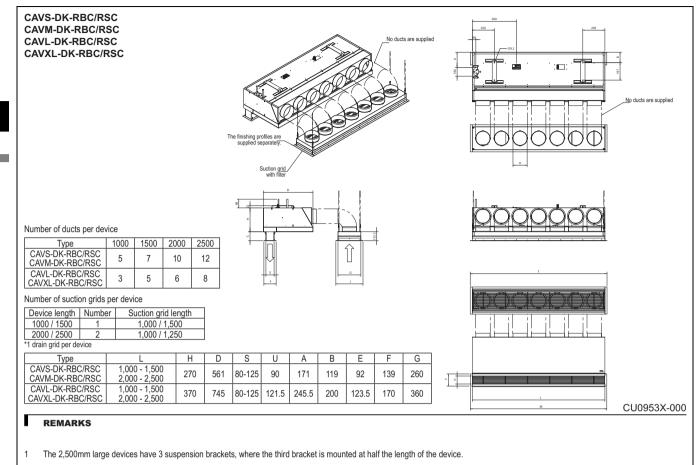
2 The mounting holes for finishing profiles in a lowered ceiling (L+8) x (D+8) mm

#### 2 - 2 Cassette



? The mounting holes for finishing profiles in a lowered ceiling (L+8) x (D+8) mm

#### 2-3 Recessed



The mounting holes for finishing profiles in a lowered ceiling (L+8) x (D+8) mm

#### **TABLE OF CONTENTS**

#### **Biddle Standard Air Curtain**

1	Specifications
•	CYQS
	CYQM
	CYQL
2	Dimensional drawing & centre of gravity
	Free hanging
	Cassette
	Renessed

#### 1-1 CYQS

1-1-1 Technical Specifications				CYQS150DK80*BN/*SN	CYQS250DK140*BN/*SN					
Heating capacity	Installation level B	speed 2	kW	7.1	9.2	12.7				
		speed 3	kW	9.0	11.6	16.2				
Delta T	inlet = room	speed 2	K	17	17	18				
	temperature	speed 3	K	15	15	16				
Power Input (50Hz)	Fan only	•	kW	0.35	0.46	0.58				
	Heating		kW	0.35	0.46	0.58				
Maximum door width			m	1.5	2.0	2.5				
Maximum door height	Favorable conditions	i	m		2.3					
	Normal conditions		m		2.15					
	Unfavorable conditio	ns	m 2.0							
Dimensions	Height	Unit F	mm		270					
		Unit C	mm	270						
		Unit R	mm							
	Width	Unit F	mm	1,500	2,000	2,500				
		Unit C	mm	1,500	2,000	2,500				
		Unit R	mm	1,548	2,048	2,548				
	Depth	Unit F	mm		590					
		Unit C	mm		821	•				
		Unit R	mm		561	•				
	Packed unit	Height	mm	760						
		Width	mm	1,630	2,130	2,630				
		Depth	mm	630	680	680				
Weight	Unit F	Unit F		66	83	107				
			kg kg	83	102	129				
	1		kg	88	108	137				
	Packed unit F		kg	83	115	145				
	Packed unit C		kg	103	139	182				
	Packed unit R		kg	108	145	190				
Casing	Colour					BN:RAL9010 SN:RAL 9006				
Ü	Material				Electrogalvanised sheet steel	·				
Required Ceiling Void	1		mm		420					
Fan - Air flow rate -	Installation level B	speed 2	m³/h	1,235	1,646	2,058				
Heating		speed 3	m³/h	1,746						
Refrigerant	Туре			,	420 1,646 2,058 2,328 2,910 R-410A					
· ·	Control				Electronic expansion valve					
Sound pressure level -	Installation level B	speed 2	dBA	39	40	41				
Heating		speed 3	dBA	49	50	51				
Piping connections	Liquid (OD)	Diameter (OD)	mm		9.52					
	Gas	Diameter (OD)	mm	16.0	16.0	19.0				
Air Filter	1	1 - (- /	1		Vacuum cleanable filter G1	<u> </u>				
Required accessories				Daikin wir	red remote control (BRC1E51A or E	BRC1D52)				
Notes				Favorable conditions: covered sho wind, no opposite open doors, b corner or	opping mall or revolving-door entrar building with ground floor only. Unfa square, multiple floors and/or open	nce. Normal conditions: little direct avorable conditions: location at a stairway.				
				Pipe work and electrical connections are on top of the unit						
				Sound pressure level (at 3m)						
					ing, refer to the databook or installa only one installation level available					

1-1-2 Electrical Specifications			CYQS150DK80*BN/*SN CYQS200DK100*BN/*SN CYQS250DK14					
Power Supply	Frequency	Frequency Hz		50				
	Voltage	V	230					
Voltage range	Min.	V	224					
	Max.	V	240					
Current (50Hz)	Maximum fuse amps (MFA)	Α	16					
	Full load amps (FLA)	Α	1.26	1.68	2.10			

#### 1 - 2 CYQM

1-2-1 Technical S	Specifications			CYQM100DK80*BN/*SN	CYQM150DK80*BN/*SN	SN CYQM200DK100*BN/*SN CYQM250DK140*E			
Heating capacity	Installation level B	speed 2	kW	7.7	9.3	12.1	16.8		
		speed 3	kW	9.2	11.0	13.4	19.9		
Delta T	inlet = room	speed 2	K	19	15	14	16		
	temperature	speed 3	K	17	14	13	15		
Power Input (50Hz)	Fan only		kW	0.37	0.56	0.75	0.94		
	Heating		kW	0.37	0.56	0.75	0.94		
Maximum door width			m	1.0	1.5	2.0	2.5		
Maximum door height	Favorable conditions	3	m		2	.5			
	Normal conditions		m		2	.4			
	Unfavorable condition	ons	m		2	.3			
Dimensions	Height	Unit F	mm		2	70			
		Unit C	mm		2	70			
		Unit R	mm		2	70			
	Width	Unit F	mm	1,000	1,500	2,000	2,500		
		Unit C	mm	1,000	1,500	2,000	2,500		
		Unit R	mm	1,048	1,548	2,048	2,548		
	Depth	Unit F	mm		5	90	1		
		Unit C	mm	821					
		Unit R	mm		5	61			
	Packed unit F/C/R	Height C	mm		7	60			
		Height F/R	mm		7	60			
		Width F/C/R	mm	1,630	1,630	2,130	2,630		
		Depth F/C/R	mm	630	630	680	680		
Weight	Unit F kg		kg	57	73	94	108		
	Unit C kg		kg	68	88	111	136		
	Unit R kg		kg	66	93	117	144		
	Packed unit F kg		kg	73	90	126	161		
			kg	84	108	148	189		
			kg	81	113	154	197		
Casing	Colour			BN:RAL9010 SN:RAL 9006	BN:RAL9010 SN:RAL 9006	BN:RAL9010 SN:RAL 9006	BN:RAL9010 SN:RAL 9006		
	Material				Electrogalvani	sed sheet steel			
Required Ceiling Void			mm		4:	20			
Fan - Air flow rate -	Installation level B	speed 2	m³/h	1,223	1,835	2,446	3,058		
Heating		speed 3	m³/h	1,605	2,408	3,210	4,013		
Refrigerant	Туре	•			R-4	10A			
	Control				Electronic ex	pansion valve			
Sound pressure level -	Installation level B	speed 2	dBA	44	46	47	48		
Heating		speed 3	dBA	50	51	53	54		
Piping connections	Liquid (OD)	Diameter (OD)	mm		9.	52			
	Gas	Diameter (OD)	mm	16.0	16.0	16.0	19.0		
Air Filter					Vacuum clea	nable filter G1			
Required accessories				[	Daikin wired remote contro	I (BRC1E51A or BRC1D52	2)		
Notes				wind, no opposite oper	n doors, building with ground corner or square, multiple	olving-door entrance. Norr nd floor only. Unfavorable floors and/or open stairway	conditions: location at a		
				Pip		nections are on top of the	unit		
				Sound pressure level (at 3m)					
				Installation level B: stan		atabook or installation mar ion level available)	nual for more information		

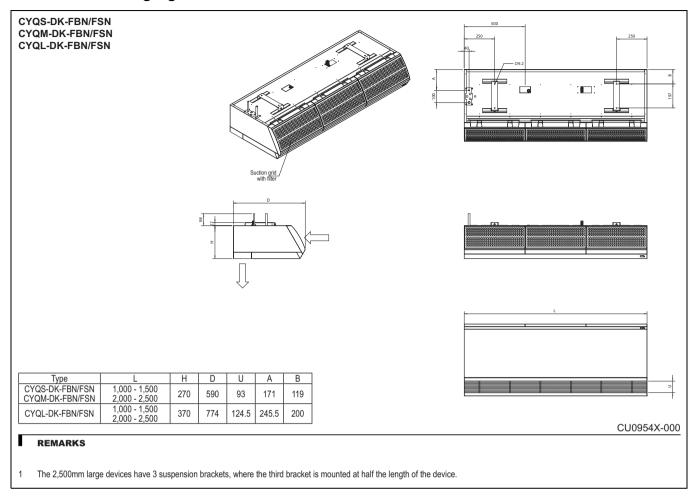
1-2-2 Electrical Specifications			CYQM100DK80*BN/*SN	CYQM150DK80*BN/*SN	CYQM200DK100*BN/*SN	CYQM250DK140*BN/*SN	
Power Supply	Frequency	Hz	50				
	Voltage	V	230				
Voltage range	Min.	V	224				
	Max.	V	240				
Current (50Hz) Maximum fuse amps (MFA) A 16							
	Full load amps (FLA)	Α	1.64	2.46	3.28	4.10	

#### 1-3 CYQL

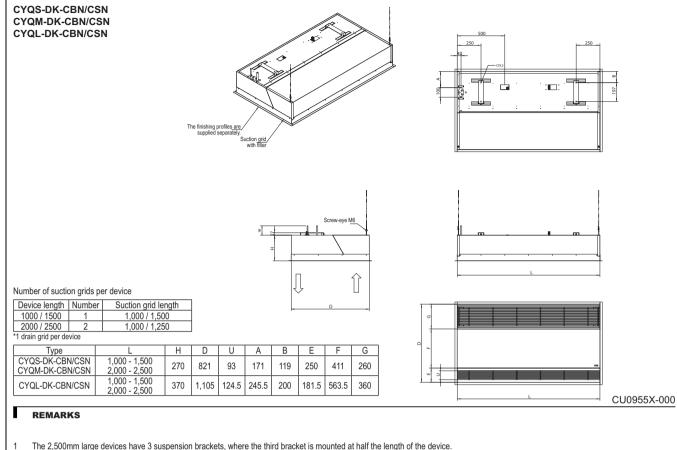
1-3-1 Technical S	1-3-1 Technical Specifications			CYQL100DK125*BN/*SN CYQL150DK200*BN/*SN CYQL200DK250*BN/*SN CYQL250DK250*BN/					
Heating capacity	Installation level B	speed 2	kW	11.9	17.9	22.8	24.6		
		speed 3	kW	15.6	23.3	29.4	31.1		
Delta T	inlet = room	speed 2	K	17	17	17	14		
	temperature	speed 3	K	15	15	14	12		
Power Input (50Hz)	Fan only		kW	0.75	1.13	1.50	1.88		
	Heating		kW	0.75	1.13	1.50	1.88		
Maximum door width			m	1.0	1.5	2.0	2.5		
Maximum door height	Favorable conditions	3	m		3	.0			
	Normal conditions		m		2.	75			
	Unfavorable condition	ns	m		2	2.5			
Dimensions	Height	Unit F	mm		3	70			
		Unit C	mm		3	70			
		Unit R	mm		3	70			
	Width	Unit F	mm	1,000	1,500	2,000	2,500		
		Unit C	mm	1,000	1,500	2,000	2,500		
		Unit R	mm	1,048	1,548	2,048	2,548		
	Depth	Unit F	mm		7	74			
		Unit C	mm		1,	105			
		Unit R	mm		745				
	Packed unit	Height C	mm		1,4	110			
		Height F/R	mm		9	90			
		Width F/C/R	mm	1,630	1,630	2,130	2,630		
		Depth F/C/R	mm	630	630	680	680		
Weight	Unit F		kg	76	100	126	157		
			kg	81	118	151	190		
	Unit R		kg	83	141	155	196		
			kg	92	116	159	195		
			kg	100	143	195	252		
	Packed unit R		kg	99	162	193	250		
Casing	Colour			BN:RAL9010 SN:RAL 9006	BN:RAL9010 SN:RAL 9006	BN:RAL9010 SN:RAL 9006	BN:RAL9010 SN:RAL 9006		
	Material				Electrogalvani	sed sheet steel			
Required Ceiling Void			mm			20			
Fan - Air flow rate -	Installation level B	speed 2	m³/h	2,056	3,084	4,112	5,140		
Heating		speed 3	m³/h	3,100	4,650	6,200	7,750		
Refrigerant	Туре					10A			
	Control				Electronic ex	pansion valve			
Sound pressure level -	Installation level B	speed 2	dBA	43	45	46	47		
Heating		speed 3	dBA	53	54	56	57		
Piping connections	Liquid (OD)	Diameter (OD)	mm	9.52	9.52	9.52	9.52		
	Gas	Diameter (OD)	mm	16.0	19.0	22.0	22.0		
Air Filter						nable filter G1			
Required accessories						I (BRC1E51A or BRC1D52	•		
Notes				wind, no opposite oper	n doors, building with ground corner or square, multiple	olving-door entrance. Norn nd floor only. Unfavorable floors and/or open stairway	conditions: location at a /.		
				Pipe work and electrical connections are on top of the unit					
					Sound pressu	re level (at 3m)			
				Installation level B: stan		atabook or installation mar ion level available)	iual for more information		

1-3-2 Electrical Specifications			CYQL100DK125*BN/*SN	CYQL150DK200*BN/*SN	CYQL200DK250*BN/*SN	CYQL250DK250*BN/*SN	
Power Supply	Frequency	Frequency Hz		50			
	Voltage	V	230				
Voltage range	Min.	V	224				
	Max.	V	240				
Current (50Hz)	Maximum fuse amps (MFA)	Α	A 16				
	Full load amps (FLA)	А	3.30	4.95	6.60	8.25	

#### 2 - 1 Free hanging

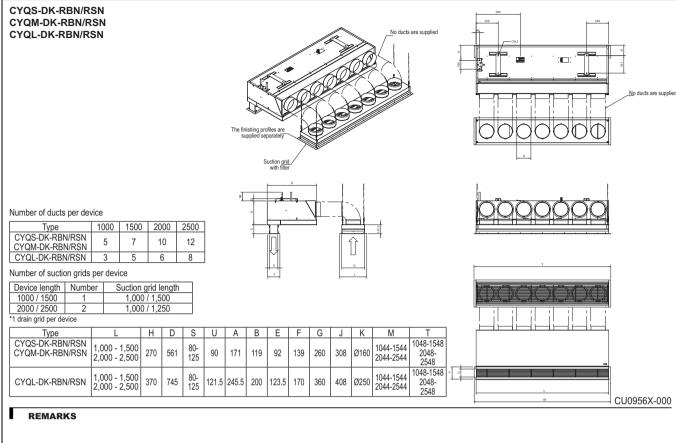


#### 2 - 2 Cassette



- The 2,500mm large devices have 3 suspension brackets, where the third bracket is mounted at half the length of the device.
- The mounting holes for finishing profiles in a lowered ceiling (L+8) x (D+8) mm

#### 2 - 3 Recessed



- The 2,500mm large devices have 3 suspension brackets, where the third bracket is mounted at half the length of the device.
- 2 Holes (for finishing profiles) drain (L+8) x (E+8) mm suction (L+8) x (G+8) mm.



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.







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