

climaVAIR air conditioning commercial range



cassette range
floor/ceiling range

Air conditioning

climaVAIR

commercial range



When it comes to creating the ideal living environment, Vaillant has it all under control. For more than 130 years, we have been setting the standards in the heating market, developing products that have revolutionised the industry. Today we are still Europe's No. 1 boiler manufacturer with an enviable reputation for performance, efficiency, quality and reliability. But staying on top requires constant innovation. So we continually invest in developing new energy efficient technologies for even better solutions - all designed to create the perfect climate at home and at work.

Take air conditioning for example. In an enclosed environment, air conditioning can improve the ambient by controlling the temperature and humidity. As well as cooling the air, our heat pump systems can efficiently heat the room during colder periods. This means you can enjoy a climate controlled environment all year round. Advanced filter solutions also bring good news for allergy sufferers with the air conditioning system cleaning the air as it circulates in the room. And, due to its high efficiency in heating mode, it's more environmentally friendly than a conventional heating system.



For over 10 years, Vaillant air conditioning systems have been the preferred choice for discerning domestic and commercial customers across mainland Europe. Now available in the UK, they have been tried, tested and proven in a huge variety of applications - and because all Vaillant systems incorporate heat pump technology to heat as well as cool, our systems offer genuine year round climate control. Furthermore, each unit has plenty of built-in convenience features representing unbeatable value.

All climaVAIR air conditioning units have high efficiency ratings and utilize zero ozone depleting potential (ODP) refrigerants.

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climaVAIR cassette

mono split system



Outdoor unit



Remote control



Indoor unit

Cassette split systems

Where wall space is at a premium and a ceiling void is available, cassette units provide a neat and attractive solution.

Vaillant climaVAIR

Fitted with motorised air deflectors as well as fresh air and branch duct connections to certain models the best possible air distribution is available.

All cassette systems use heat pump technology providing heating, cooling and dehumidification modes and utilise energy efficient, non-ozone depleting R410a refrigerant.

Every unit has an integral condensate pump, hot start function and self-diagnostic fault display for those rare occasions when a fault develops

Controls

Multi-function infra red remote control is standard across the range. An optional hard-wired controller is available which can control up to 16 indoor units and integrate with BEMS building controls.

As well as the usual temperature and fan speed operation, standard control functions include automatic restart after power interruption, as well as the usual remote control timer functions all climaVAIR cassettes offer remote stop/start interface with BEMS or other customer interface, all designed to offer the user the convenience and freedom to set the unit exactly as required.

climaVAIR cassette split system models

Mono inverter units:

A range of two models of 5kW and 6.5kW

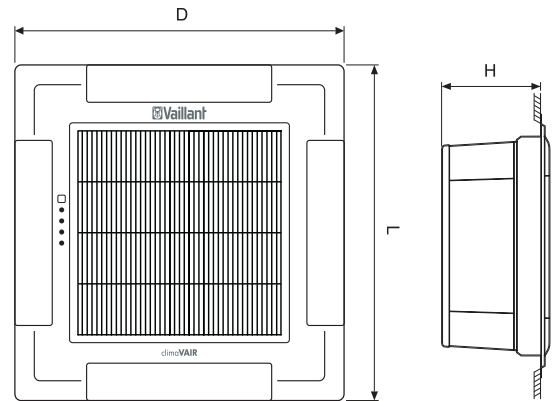
Mono on/off units:

A range of three models from 8kW to 14Kw

Dimensions and features

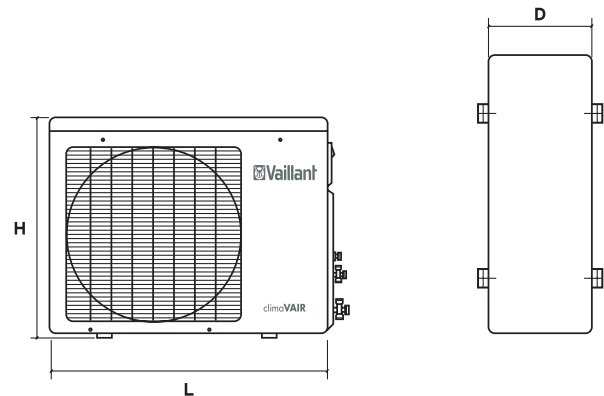
Indoor unit dimensions

Model (inverter)	L	D	H	Kg
V6 - 050NK	700	700	260	19
V6 - 065NK	950	950	240	27
Model (on-off)				
V6 - 085K	950	950	240	33
V6 - 105K	950	950	290	45
V6 - 130K	1340	950	280	46



















Outdoor unit dimensions


Model (inverter)	H	L	D	Kg
V6 - 050NK	680	810	288	58
V6 - 065NK	732	865	335	57
Model (on-off)				
V6 - 085K	840	948	340	74
V6 - 105K	1250	948	340	91
V6 - 130K	1250	948	340	106





All climaVAIR cassette models have the following features:

 <p>4 Modes Cooling, heating, fan and dry mode.</p>	 <p>Auto restart function After power cut this function ensures the system restarts with the same settings (as those in force prior to power supply interruption).</p>	 <p>Branch Duct connection Branch duct connection - allows additional ductwork connection (not supplied) to allow conditioned air to be transferred to another room/area (not available to all models).</p>
 <p>Auto operation Automatic activation in the appropriate mode (COOL - HEAT - DRY), by adjusting its operation to the ambient temperature. The user can also select the desired airflow.</p>	 <p>Sleep function Function which adapts the ambient temperature during sleep.</p>	 <p>Vertical air swing Enables the air direction to be adjusted vertically for improved distribution.</p>
 <p>R407c Chlorine-free refrigerant, ecological and environmentally friendly.</p>	 <p>24hr programmer Programs the units so that they start or stop at user defined times.</p>	
 <p>Infra-red remote control All functions controlled by infra-red remote control.</p>	 <p>Silent operation Lowers the internal fan speed to provide reduced noise levels.</p>	
 <p>Dust filter Filter the air as it circulates through the system.</p>	 <p>Defrost Prevents the outdoor unit from freezing in the winter months.</p>	
 <p>Hot start function Only starts the internal fan when the heating coil is hot to prevent cool air discharge.</p>	 <p>Anti-rust outdoor Outdoor unit made of galvanised steel and anti-rust materials. Even resistant in environments with high saline content.</p>	
 <p>Room card function Allows the unit to be switched on and off remotely by room card, time clock or BEMS.</p>	 <p>Fresh air connection Fresh air introduction feature. Transfers the fresh air from the outside to the inside.</p>	

In addition the climaVAIR cassette inverter models also feature:

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DC inverter technology
Technology which provides energy saving to conventional on/off systems.
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R410a
Energy efficient zero ozone depleting potential (ODP) refrigerant.
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Twin rotary
Twin rotating cylinders provide improved efficiency and reduced vibration in comparison with single types.

climaVAIR floor/ceiling mono split system



Indoor unit



Remote control



Outdoor unit

Floor/ceiling split systems

Every so often the air conditioning installer is faced with a project where the popular options of high wall and cassette units for one reason or another are not suitable for the application. This is where the climaVAIR floor/ceiling units come into their own. These adaptable units can be fitted to a wall at low level ideal for heating applications or suspended under a suitable ceiling where mounting a high wall or cassette unit is not possible.

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All floor/ceiling systems are heat pump units providing heating, cooling and dehumidification modes and utilise energy efficient, non-ozone depleting R410a refrigerant.

Every unit has hot start function and self-diagnostic fault display for those rare occasions when a fault develops.

Controls

Infra red remote control is standard across the range. An optional wired controller is available which can control up to 16 indoor units and integrate with BEMS building controls.

As well as the usual temperature and fan speed operation, standard control functions include automatic restart after power interruption, as well as the usual remote control timer functions all climaVAIR floor/ceiling units offer remote stop/start interface with BEMS or other customer interface, all designed to offer the user the convenience and freedom to set the unit exactly as required.

climaVAIR floor/ceiling split system models

Mono inverter units:

A range of two models of 5kW and 6.5kW

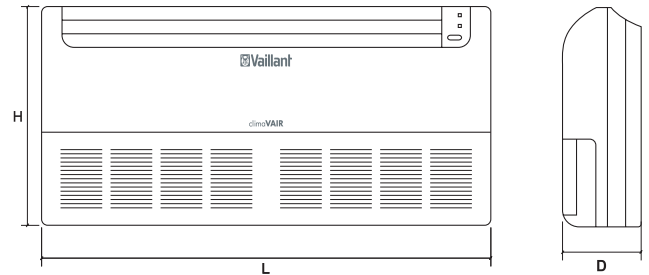
Mono on/off units:

A range of two models of 8kW and 11.5kW

Dimensions and features

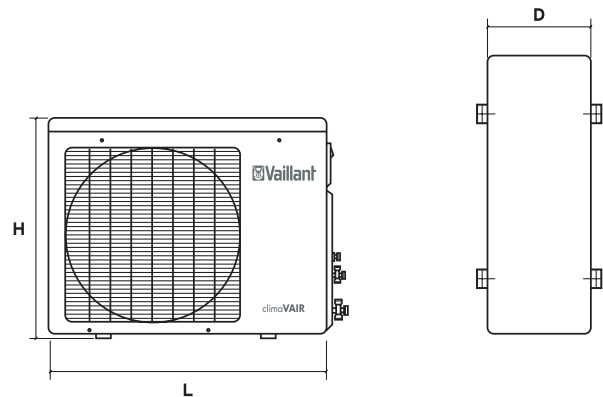
Indoor unit dimensions

Model (inverter)	H	L	D	Kg
V6 - 050 NF	655	1090	199	30
V6 - 065 NF	655	1090	199	30
Model (on-off)				
V6 - 085 F	700	1580	240	50
V6 - 105 F	700	1580	240	54




















Outdoor unit dimensions

Model (inverter)	H	L	D	Kg
V6 - 050 NF	680	810	288	58
V6 - 065 NF	732	865	335	57
Model (on-off)				
V6 - 085 F	840	948	340	74
V6 - 105 F	1250	948	340	91



All Vaillant floor/ceiling systems have the following features:

 <p>4 Modes Cooling, heating, fan and dry mode.</p>	 <p>Silent operation Lowers the internal fan speed to provide reduced noise levels.</p>	 <p>Outdoor valve protector Protects the valves on the outdoor unit from exposure to the elements.</p>
 <p>Auto operation Automatic activation in the appropriate mode (COOL - HEAT - DRY), by adjusting its operation to the ambient temperature. The user can also select the desired airflow.</p>	 <p>Horizontal air swing Enables the air direction to be adjusted horizontally for improved distribution.</p>	 <p>Defrost Prevents the outdoor unit from freezing in the winter months.</p>
 <p>Infra-red remote control All functions controlled by infra-red remote control.</p>	 <p>Vertical air swing Enables the air direction to be adjusted vertically for improved distribution.</p>	 <p>Anti-rust outdoor Outdoor unit made of galvanised steel and anti-rust materials. Even resistant in environments with high saline content.</p>
<p>Hot Start</p> <p>Hot start function Only starts the internal fan when the heating coil is hot to prevent cool air discharge.</p>	 <p>Turbo Increases the air conditioning speed when faster room cooling/heating is required.</p>	 <p>DC inverter technology Technology which provides energy saving compared to conventional on/off systems.</p>
 <p>Room card function Allows the unit to be switched on and off remotely by room card, time clock or BEMS.</p>	 <p>Sleep function Function which adapts the ambient temperature during sleep.</p>	 <p>R410a Energy efficient zero ozone depleting potential (ODP) refrigerant.</p>
 <p>Auto restart function After power cut this function ensures the system restarts with the same settings (as those in force prior to power supply interruption).</p>	 <p>24hr programmer Programs the units so that they start or stop at user defined times.</p>	 <p>Twin rotary Twin rotating cylinders provide improved efficiency and reduced vibration in comparison with single types.</p>

Technical specification - floor/ceiling

System reference		climaVAIR floor/ceiling inverter heat pump		climaVAIR floor/ceiling inverter heat pump	
		V6 - 051 NF	V6 - 066 NF	V6 - 085 F	V6 - 105 F
Cooling capacity	kW	5.28	6.64	8.05	11.50
(Min-max)	kW	1.80/5.80	2.00/8.00	-	-
Heating capacity	kW	6.54	7.33	8.80	12.32
(Min-max)	kW	2.00/7.10	2.50/8.50	-	-
Power input cooling/heating	kW	1.73/1.81	2.21/2.66	2.85/2.74	3.58/3.60
Operating current cooling/heating	A	11.50/10.2	14.00/14.60	12.8/12.4	16.2/16.3
EER/COP		3.05/3.61	3.01/2.76	2.82/3.21	3.21/3.43
Energy level class		B/A	B/E	C/C	A/B
Annual power consumption ¹	kWh	867	1,103	1,426	1,789
Indoor unit		V6 - 051 NHFI	V6 - 066 NHFI	V6 - 085 HFI	V6 - 105 HFI
Air flow volume high/med/low	m ³ /h	750/650/550	750/650/550	1550/1300/1000	1800/1600/1400
Remote control		infra-red*	infra-red*	Infra-red*	infra-red*
Sound pressure level min/max ²	dB(A)	44/48	44/48	46/50	46/50
Dimensions HxLxD	mm	655x1090x199	655x1090x199	700x1580x240	700x1580x240
Weight	Kg	30	30	50	54
Outdoor unit		V6 - 051 NHFKO	V6 - 066 NHFKO	V6 - 085 HFKO	V6 - 105 HFKO
Air flow volume	m ³ /h	2,500	3,000	4,000	7,000
Sound pressure level ³	dB(A)	51	53	54	55
Refrigerant		R410a	R410a	R410a	R410a
Refrigerant charge heat pump	gr.	1,850	2,300	2,450	3,300
Compressor type		Inverter DC twin rotary	Inverter DC twin rotary	Rotary non-inverter	Rotary non-inverter
Dimensions HxLxD	mm	680x810x288	732x865x335	840x948x340	1250x948x340
Weight	Kg	58	57	74	91
Installation					
Power supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
Max. operating current	A	12.00	15.00	15.50	17.40
Recommended fuse size (Type D)	A	16	20	20	20
Interconnecting cores		3 core and earth	3 core and earth	3 core and earth	3 core and earth
Mains supply to:		Outdoor	Outdoor	Outdoor	Outdoor
Pipe connection liquid/gas	in	1/4-1/2	3/8-5/8	3/8-5/8	3/8-5/8
Max. piping length	m	30	50	30	50
Max. height differential between parts	m	10	20	15	20
Chargeless length	m	5	5	5	5
Additional charge per metre	gr	30	50	65	65

*Optional wired control.

¹ Based on 500 hours operation at full load.

² Sound pressure level indoor unit: directivity 3 dB(A) distance 2.2m.

³ Sound pressure level external unit: directivity 3 dB(A) distance 1.8m.

Nominal cooling capacities based on indoor temperatures of 27°CDB/19°CWB -- outdoor temperatures 35°CDB/24°CWB.

Technical specification - cassettes

System reference		climaVAIR cassette inverter heat pump		climaVAIR cassette on-off heat pumps		
		V6-050 NK	V6-065 NK	V6-085 K	V6-105 K	V6-130 K
Cooling capacity	kW	5.23	6.92	8.05	10.12	14.01
(min-max)	kW	1.8 - 5.8	2.0 - 8.0	-	-	-
Heating capacity	kW	5.29	7.25	8.14	10.78	16.51
(min-max)	kW	2.0 - 6.2	2.5 - 8.5	-	-	-
Power input cooling/heating	kW	1.74/1.73	2.31/2.24	2.86/2.76	3.48/3.63	4.75/5.16
Operating current cooling/heating	A	10.2/10.5	14.01/12.10	12.9/12.5	15.7/16.4	21.5/23.4
EER/COP		3.01/3.05	3.00/3.23	2.81/2.76	2.91/2.97	2.95/3.20
Energy level class		B/D	B/C	C/D	C/D	C/D
Annual consumption ¹	kWh	868	1,153	1,431	1,740	2,376
Indoor unit		V6-050 NHKI	V6-065 NHKI	V6-085 HKI	V6-105 HKI	V6-130 HKI
Air flow volume low/med/high	m3/h	700/600/550	1300/1100/870	1600/1100/870	1600/1100/870	1980/1.600/1.300
Remote control		Infra-red*	Infra-red*	Infra-red*	Infra-red*	Infra-red*
Sound pressure level (min/max) ²	dB(A)	32/45	39/48	39/48	42/50	43/51
Dimensions HxLxD	mm	260x570x570	240x840x840	240x840x840	290x840x840	280x1230x840
Grille dimensions HxLxD	mm	60x700x700	80x950x950	80x950x950	80x950x950	80x1340x950
Weight	Kg	19	27	33	45	46
Outdoor unit		V6-050 NHFKO	V6-065 NHFKO	V6-085 HFKO	V6-105 HFKO	V6-130 HFKO
Air flow volume	m3/h	2,500	3,000	4,000	7,000	7,000
Sound pressure level ³	dB(A)	45	47	54	55	57
Refrigerant		R410A	R410A	R410A	R410A	R410A
Refrigerant charge heat pump	gr	1,850	2,300	2,300	3,300	3,700
Compressor type		Inverter DC twin rotary	Inverter DC twin rotary	Rotary non-inverter	Rotary non-inverter	Rotary non-inverter
Dimensions HxLxD	mm	680x810x288	732x865x335	840x948x340	1250x948x340	1250x948x340
Weight	Kg	58	57	74	91	106
Installation						
Power supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	400/3/50
Max operating current	A	12.00	15.00	15.50	17.60	10.20
Recommended fuse size (Type D)	A	16	20	20	20	16
Interconnecting cores		3 core + earth	3 core + earth	3 core + earth	3 core + earth	3 core + earth
Supply to		Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Pipe connection liquid/gas	inches	1/4-1/2	3/8-5/8	3/8-5/8	3/8-5/8	3/8-5/8
Max. Piping length	m	30	50	30	50	50
Max. height differential between parts	m	10	20	15	20	20
Chargeless length	m	5	5	5	5	5
Additional charge per metre	gr	30g	50g	65g	65g	65g

*Optional wired control.

¹ Based on 500 hours operation at full load.

² Sound pressure level indoor unit: directivity 3 dB(A) distance 2.2m.

³ Sound pressure level external unit: directivity 3 dB(A) distance 1.8m.

Nominal cooling capacities based on indoor temperatures of 27°CDB/19°CWB -- outdoor temperatures 35°CDB/24°CWB.

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