



TECHNOLOGY BROCHURE

The next generation of heat pumps **VITOCAL**





Modern heat pumps are by far one of the most efficient heating systems, which also makes them one of the most economical. With its new generation of heat pumps, Viessmann is setting new benchmarks with even more reliability, energy efficiency and sustainability. Our mission statement "We create living spaces for generations to come" means we take responsibility for conserving energy resources. We do so by means of innovative technologies which make efficient use of environmental energy for heating and cooling – with particular emphasis on protecting the climate through the use of "green" refrigerants.

An important aspect of this is precise matching of the system to the specific application. To this end, we have developed heat pumps which, thanks to their high flow temperatures and innovative hydraulics, are especially suitable for use in existing buildings. This makes it possible to continue using radiator heating systems.













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AIR SOURCE HEAT PUMPS FOR MODERNISATION AND NEW BUILD PROJECTS



A heat pump works like a refrigerator, just in reverse. While a refrigerator directs heat to the outside, heat pumps take energy from the air or the ground and transfer it into the living space via the heating system. The transfer medium carrying the heat drawn from the environment is compressed in order to reach the flow temperatures necessary for different heating systems.

Reliable, compact and more environmentally responsible than ever – the new, innovative heat pump technology from Viessmann makes particularly efficient use of environmental energy for heating and cooling.

Vitocal 250-A series Heat pumps for modernisation projects

Existing buildings often do not have underfloor heating installed. If you wish to keep the existing radiators when modernising these types of building, you need a heat generator with higher flow temperatures of up to 70 °C. Viessmann has developed the Vitocal 250-A and Vitocal 252-A monoblock air source heat pumps for precisely this purpose.

Climate Protect with "green" refrigerant

With its extremely low GWP100 (global warming potential) value of 0.02, the "green" refrigerant R290 (propane) that these appliances use is especially environmentally responsible. The appliances are hermetically sealed and are delivered fully charged.

Wall mounted and floorstanding solutions

The heat pumps in the Vitocal 250-A series are available as wall mounted or floorstanding compact units with integral DHW cylinders.

Vitocal 200-S series Heat pumps for new build projects

The new Vitocal 200-S split heat pump series achieves high flow temperatures of up to 60 °C and is especially recommended for energy efficient new build.

Environmentally responsible refrigerant

Type R32 as used here has a GWP (global warming potential) value which is two thirds lower than that of the still widely used refrigerant R410A.

Wall mounted and floorstanding solutions

Vitocal 200-S series heat pumps are available as wall mounted or floorstanding compact units with integral DHW cylinders.

Viessmann One Base – all components optimally networked

Viessmann One Base with a 7 inch colour touchscreen allows for easy and intuitive operation directly at the appliance or via the convenient ViCare app.



Outdoor unit with designer wall mounting bracket

Viessmann One Base makes the home more comfortable, efficient and futureproof.



Wellbeing at your fingertips: Easy and convenient control of the energy system from anywhere



VIESSMANN

Viessmann One Base networks digital services with complete energy systems, including heat pumps, ventilation systems, power storage units and photovoltaic systems.

All Viessmann systems and smart home solutions on one platform

With Viessmann One Base, the entire energy system is operated via just one app – simply, reliably and quickly. The new platform links all devices and electronic applications in the home into one single climate and energy solution. With beneficial consequences: lower energy consumption, a smaller carbon footprint and an overview of running costs that is always up to date. Viessmann One Base makes your home fit for a climate friendly future!

One system for everything: Viessmann One Base

The platform integrates any smart home solutions already in use, seamlessly and wirelessly. It can be easily expanded, for example with a Wallbox for charging an electric car. As members of the ViShare Energy Community, users can easily track their sustainable use of electricity and heat via Viessmann One Base.

Viessmann One Base is compatible with all additional digital services. The integrated services and devices can be easily controlled with voice assistants such as Amazon Alexa and Google Assistant. The platform is the basis for an expandable and futureproof energy system in every home.

Always in the best of hands

All that is needed to communicate with Viessmann One Base is the free ViCare app; the integrated Viessmann Energy Management System does the rest. Viessmann One Base is quick and straightforward to use via app. The contractor can also keep a remote eye on the system and correct possible irregularities immediately by electronic means. This eliminates unnecessary travel and appointments with the trade partner.



ViCare thermostatic radiator valves enable straightforward control of individual rooms via app or voice command, e.g. using Amazon Alexa.



With the energy cockpit in the ViCare app, users can keep track of the energy flows in their home.



The energy balance visualises current and past energy flows. It documents the output of the whole system.

VIESSMANN ONE BASE - MANY BENEFITS AT A GLANCE

- + **Convenience**: Control of the energy system via app. Can be linked if required with other devices and services such as Amazon Alexa, Apple HomeKit, Google Assistant and more.
- + **Efficiency**: The platform links up and optimises energy flows for especially efficient and therefore cost effective operation.
- + **Reassurance**: The contractor is automatically notified of any irregularities and can take corrective action online.
- + **Sustainability:** Long-term integration of all required digital services, upgrades and product expansions, such as photovoltaics with a power storage unit and a Wallbox for e-mobility.

* Energy Market Solutions GmbH (EMS), a stakeholder in the Viessmann Group, is the operator and contractual partner in the ViShare Energy Community.





The new generation of Viessmann heat pumps delivers impressive energy efficiency and performance in new build and modernisation projects.

The iF Design Award jury recognised the wall mounted and compact appliances in the Vitocal 250-A and Vitocal 200-S series with the iF Gold Design Award 2021.

CLIMATE PROTECT
OPTIPERFORM
SERVICE LINK
SUPER SILENT
ECO SELECT

Climate Protect⁺⁺⁺ protects the environment and the climate

The new heat pumps in the Vitocal 200-S series use the environmentally responsible refrigerant R32 with a low GWP100 (global warming potential) of 771.





OptiPerform – reliable operation with maximum efficiency

The advanced heat pumps from Viessmann work with a patented hydraulic system. With Hydro AutoControl[®], the heat pump is operated reliably and with maximum efficiency throughout its entire service life. The unique design not only enables the contractor to set up the heat pump much faster and therefore more cost effectively with OptiPerform, it also takes up a lot less space, being up to 60 percent smaller than other, similar systems.



OPTIPERFORM

Service link – for faster response time if a service is required

Thanks to mobile technology, the heat pumps in the Vitocal 200-S series are always connected to Viessmann Service. Completely free of charge. The heat pump transmits any faults directly and without a time delay. The contractor can undertake the appropriate measures immediately. This cuts out unnecessary journeys– saving time and money.



Super silent – whisper-quiet in full and partial load operation

Viessmann heat pumps are among the quietest of their kind thanks to advanced acoustic design⁺, and include a sound-optimised fan. Combined with intelligent speed control, it significantly reduces airborne noise in both full and partial load operation. As a result, the outdoor unit can be installed even in densely built-up areas such as terraced housing or close to the property boundary.



Eco Select – switch between the most cost effective or the most sustainable operating mode

Hybrid units from Viessmann use Hybrid Pro Control. This integrated energy manager controls the heating system according to external conditions such as the outside temperature or flow temperature, and to suit individual user settings. These can be energy prices, the amount of self-generated power, CO₂ emissions or the heat demand. Users can select, for example, whether the appliance automatically uses the cheapest energy source currently available in economy mode. Or whether it runs in ecological mode with the lowest CO₂ emissions per kilowatt hour of heating energy generated.





12 / 13 MONOBLOCK AIR SOURCE HEAT PUMPS FOR MODERNISATION PROJECTS



The new generation of the Vitocal 250-A heat pump series is ideally suited to modernisation.

VITOCAL 250-A VITOCAL 252-A

The new monoblock air source heat pumps make modernising a heating system as easy as replacing a gas condensing boiler.

The Vitocal 250-A series achieves high flow temperatures of 70 °C – at an outside temperature of down to minus 10 °C. This allows flexible heating/cooling solutions, particularly in modernisation projects.

Climate Protect with "green" refrigerant

With its extremely low GWP100 (global warming potential) value of 0.02, the "green" refrigerant R290 (propane) that these appliances use is especially environmentally responsible. The appliances are hermetically sealed and are delivered fully charged.

Wall mounted and floorstanding solutions

The heat pumps in the Vitocal 250-A series are available as wall mounted or floorstanding compact units with integral DHW cylinders. Viessmann One Base with a 7 inch colour touchscreen allows for easy and intuitive operation directly at the appliance or via the convenient ViCare app.





VITOCAL 250-A

Air source heat pumps as monoblock versions

2.6 to 13.4 kW Up to 70 °C flow temperature

VITOCAL 252-A

Air source heat pumps as monoblock versions

2.6 to 13.4 kW Up to 70 °C flow temperature Enamelled DHW cylinder, 190 litre capacity

TAKE ADVANTAGE OF THESE BENEFITS

- + Protects the environment and the climate (Climate Protect⁺⁺⁺)
- + Reliable operation with maximum efficiency (OptiPerform)
- + Guaranteed faster service response time (service link)
- + Whisper-quiet operation for placement anywhere on the property (super silent)
- + Low running costs due to high efficiency
- + Integrated Energy Management System ensures transparent energy consumption and costs
- + Active cooling function for use in the summer
- + Easy operation via ViCare app
- + Attractive, high quality design





Vitocal 250-A outdoor unit

- Coated evaporator with corrugated fins for higher efficiency
 Power saving, variable speed DC fan
 Variable speed twin rotary compressor
 Inverter
- 5 Condenser

VITOCAL 250-A 2.6 to 13.4 kW

Vitocal 250-A indoor units

- Heating water buffer cylinder (16 litre capacity)
- Diaphragm expansion vessel
 (18 litre capacity)
- 3 Instantaneous heating water heater
- 4 Secondary pump (high efficiency circulation pump)
- Heat pump control unit with7 inch colour touchscreen
- 6 Safety valve
- 4/3-way valve for heating/
 DHW heating/bypass
- 8 Two integral heating/cooling circuits





VITOCAL 250-A With one integral heating/cooling circuit



VITOCAL 250-A With two integral heating/cooling circuits



Vitocal 250-A outdoor unit with designer floor bracket



Vitocal 250-A outdoor unit with floor bracket

BENEFITS AT A GLANCE:

- Ideally suited to modernisation projects, with 70 °C flow temperature (at an outside temperature down to -10 °C)
- Protects the environment and the climate (Climate Protect⁺⁺⁺) environmentally responsible, natural refrigerant R290 (propane) with an extremely low GWP100 of 0.02 (GWP = global warming potential)
- + Reliable operation with maximum efficiency (OptiPerform)
- + Guaranteed faster service response time (service link)
- + Whisper-quiet operation for placement anywhere on the property (super silent)
- + Low running costs thanks to high efficiency, COP (coefficient of performance) to EN 14511: up to 5.3 (at A7/W35)
- + 60 % less space required than comparable models
- + Integrated Energy Management System ensures transparent energy consumption and costs
- + Active cooling function for use in the summer
- + Easy operation via ViCare app





Vitocal 252-A outdoor unit

- 1 Coated evaporator with corrugated fins for higher efficiency
- 2 Power saving, variable speed DC fan
- 3 Variable speed twin rotary compressor
- 4 Inverter
- 5 Condenser

VITOCAL 252-A 2.6 to 13.4 kW Cylinder capacity: 190 l

Vitocal 252-A indoor units

- Heating water buffer cylinder (16 litre capacity)
- Diaphragm expansion vessel
 (18 litre capacity)
- 3 Instantaneous heating water heater
- 4 Secondary pump (high efficiency circulation pump)
- Heat pump control unit with7 inch colour touchscreen
- 6 Safety valve
- 4/3-way valve for heating/
 DHW heating/bypass
- 8 DHW cylinder (190 litre capacity)
- 9 Second heating/cooling circuit







VITOCAL 252-A With one heating/cooling circuit

VITOCAL 252-A With two heating/cooling circuits



Vitocal 252-A outdoor unit with designer floor bracket



Vitocal 252-A outdoor unit with floor bracket

BENEFITS AT A GLANCE:

- + Ideal for modernisation projects due to 70 °C flow temperature
- Protects the environment and the climate (Climate Protect⁺⁺⁺) environmentally responsible, natural refrigerant R290 (propane) with an extremely low GWP100 of 0.02 (GWP = global warming potential)
- + Reliable operation with maximum efficiency (OptiPerform)
- + Guaranteed faster service response time (service link)
- + Whisper-quiet operation for placement anywhere on the property (super silent)
- + Low running costs thanks to high efficiency, COP (coefficient of performance) to EN 14511: up to 5.3 (at A7/W35)
- + 60 % less space required than comparable models
- + Integrated Energy Management System ensures transparent energy consumption and costs
- + Easy operation via ViCare app
- + Can be split for better manoeuvrability in confined spaces
- + Active cooling function for use in the summer



VITOCAL 250-A

Vitocal 250-A AWO-M-E-AC(-AF)	Туре	251.A10 251.A10 2C		
Voltage	V	230		
Vitocal 250-A AWO-E-AC(-AF)	Туре		251.A10 251.A10 2C	251.A13 251.A13 2C
Voltage	V		400	400
Heating performance data to EN 14511 Rated heating output				
Operating point A7/W35	kW	7.3	7.3	8.1
Operating point A-//W35	kW	9.7	9.7	11.1
Performance data – heating to EN 14511 (A7/W35, 5 K spread) Rated heating output				
Coefficient of performance \mathfrak{E} (COP) in heating mode		5.3	5.3	5.2
Output control	kW	2.6 to 12.0	2.6 to 12.0	3.0 to 13.4
Sound power level	dB(A)	54	54	54
Performance data – cooling to EN 14511 (A35/W18, 5 K spread)				
Cooling capacity	kW	6.3	6.5	8.2
Energy efficiency ratio EER	1.1.0./	5.3	5.3	4.9
	K V V	12.9	13.0	15.1
Refrigerant circuit		Deee	5000	5000
Charge in delivered condition	ka	R290	R290	R290
 Global warming potential (GWP100 as per IPCC AB6). 	ку	0.02	0.02	0.02
- CO ₂ equivalent	t	0.00004	0.00004	0.00004
Dimensions Length x width x height				
Indoor unit (1 heating/cooling circuit)	mm	360 × 450 × 920	360 x 450 x 920	360 x 450 x 920
Indoor unit (2 heating/cooling circuits)	mm	360 × 600 × 920	360 × 600 × 920	360 x 600 x 920
Dimensions, outdoor unit				
Length x width x height	mm	600 x 1144 x 1382	600 x 1144 x 1382	600 x 1144 x 1382
Weight of indoor unit (2C weighs 54 kg)	kg	47	47	47
	<u></u>	215	221	221
Energy efficiency η _s at W35	%	197	197	195
Energy efficiency η _s at W55	%	152	152	154

Total sound power level measurement with reference to EN ISO 12102/EN ISO 9614-2, accuracy class 3 in night mode Energy efficiency η_s : heating performance data in line with Commission Regulation (EU) No 813/2013 under average climatic conditions for low (W35) and medium (W55) temperature applications

PRODUCT FEATURES

- Monoblock air source heat pumps
- _ For room heating/cooling and DHW heating
- _ Maximum flow temperature: 70 °C (at an outside temperature of down to −10 °C)
- _ Monoblock indoor unit with heat pump control unit, high efficiency circulation pump for the secondary circuit, 4/3-way valve, safety assembly
- Integral instantaneous heating water heater
- _ Built-in heating water buffer cylinder and overflow valve

VITOCAL 252-A



Vitocal 252-A AWOT-M-E-AC(-AF)	Туре	251.A10 251.A10 2C		
Voltage	V	230		
Vitocal 252-A AWOT-E-AC(-AF)	Туре		251.A10 251.A10 2C	251.A13 251.A13 2C
Voltage	V		400	400
Heating performance data to EN 14511 Rated heating output Operating point A7/W35	kW	7.3	7.3	8.1
Operating point A–7/W35	kW	9.7	9.7	11.1
Performance data – heating to EN 14511 (Α7/W35, 5 K spread) Rated heating output Coefficient of performance ε (COP) in heating mode		5.3	5.3	5.2
Output control	kW	2.6 to 12.0	2.6 to 12.0	3.0 to 13.4
Sound power level	dB(A)	54	54	55
Performance data – cooling to EN 14511 (A35/W18, 5 K spread)				
Cooling capacity	kW	6.3	6.5	8.2
Energy efficiency ratio EER	k\//	5.3 12 9	5.3 13.0	4.9
		12.0		
Refrigerant circuit		B290	B290	B290
 Charge in delivered condition 	kg	2	2	2
 Global warming potential (GWP100 as per IPCC AR6) 		0.02	0.02	0.02
- CO ₂ equivalent	t	0.00004	0.00004	0.00004
Dimensions, indoor unit Length x width x height	mm	597 x 600 x 1900	597 x 600 x 1900	597 x 600 x 1900
Dimensions, outdoor unit Length x width x height	mm	600 x 1144 x 1382	600 x 1144 x 1382	600 x 1144 x 1382
Weight of indoor unit (2C weighs 172 kg)	kg	170	170	170
Weight of outdoor unit	kg	215	221	221
Energy efficiency η_{s} at W35	%	197	197	195
Energy efficiency η_{s} at W55	%	152	152	154

Total sound power level measurement with reference to EN ISO 12102/EN ISO 9614-2, accuracy class 3 in night mode Energy efficiency η_s : heating performance data in line with Commission Regulation (EU) No 813/2013 under average climatic conditions for low (W35) and medium (W55) temperature applications

PRODUCT FEATURES

- _ Compact air source heat pump in monoblock design
- _ Integral DHW cylinder (190 | capacity)
- _ For room heating/cooling and DHW heating
- _ Maximum flow temperature: 70 °C (at an outside temperature of down to −10 °C)
- _ Monoblock indoor unit with heat pump control unit, high efficiency circulation pump for the secondary circuit, 4/3-way valve, safety assembly _ Integral instantaneous heating water heater
- _ Built-in heating water buffer cylinder and overflow valve

20 / 21 SPLIT AIR SOURCE HEAT PUMPS FOR NEW BUILD PROJECTS



The new generation of the Vitocal 200-S heat pump series for energy efficient new build

VITOCAL 200-S VITOCAL 222-S

The benefits of the Viessmann split air source heat pumps Vitocal 200-S and Vitocal 222-S (with integral 190 litre DHW cylinder) are particularly apparent in energy efficient new buildings. With a flow temperature up to 60 °C, they guarantee a cost effective and environmentally responsible heat supply.

Designed for ongoing cost efficiency

These modulating split heat pumps guarantee high energy efficiency at all times. For example, they conserve energy in partial load operation too and generate only the amount of heat that is currently needed.

One of the quietest outdoor units of its kind

When developing and designing the outdoor units, particular emphasis was placed on extremely quiet operation. The advanced acoustic design (AAD) makes a compelling case with high quality, sound-optimised fans, intelligent speed control and double, flexible anti-vibration mounts for the refrigerant circuit components. This makes the outdoor units among the quietest of their kind by far. Ideal in densely built-up areas, for example terraced housing.





VITOCAL 200-S

Air source heat pumps as split version

2.6 to 10.4 kW Up to 60 °C flow temperature

VITOCAL 222-S

Air source heat pumps as split version

2.6 to 10.4 kW Up to 60 °C flow temperature Enamelled DHW cylinder, 190 litre capacity

TAKE ADVANTAGE OF THESE BENEFITS

- + Protects the environment and the climate (Climate Protect⁺⁺)
- + Reliable operation with maximum efficiency (OptiPerform)
- + Guaranteed faster service response time (service link)
- + Whisper-quiet operation for placement anywhere on the property (super silent)
- + Low running costs due to high efficiency
- + Integrated Energy Management System ensures transparent energy consumption and costs
- + Active cooling function for use in the summer
- + Easy operation via ViCare app
- + Attractive, high quality design





Vitocal 200-S outdoor unit

- 1 Coated evaporator with corrugated fins for higher efficiency
- 2 Power saving, variable speed DC fan
- 3 Variable speed compressor
- 4 Electronic expansion valve

VITOCAL 200-S 2.6 to 10.4 kW

Vitocal 200-S indoor units





VITOCAL 200-S With one integral heating/cooling circuit



VITOCAL 200-S With two integral heating/cooling circuits



Vitocal 200-S outdoor unit with designer floor bracket



Vitocal 200-S outdoor unit with designer wall mounting bracket

BENEFITS AT A GLANCE:

- + With 60 °C flow temperature, ideally suited to energy efficient new build
- Protects the environment and the climate (Climate Protect⁺⁺) environmentally responsible refrigerant R32 with a low GWP100 of 771 (GWP = global warming potential)
- + Reliable operation with high efficiency (OptiPerform)
- + Guaranteed faster service response time (service link)
- + Whisper-quiet operation for placement anywhere on the property (super silent)
- + Low running costs thanks to high efficiency, COP (coefficient of performance) to EN 14511: up to 5.0 (at A7/W35)
- + Ideal for combination with photovoltaic system and power storage unit
- + 60 % less space required than comparable models
- + Integrated Energy Management System ensures transparent energy consumption and costs
- + Attractive, high quality design indoors and outdoors
- + Active cooling function for use in the summer
- + Easy operation via ViCare app





Vitocal 222-S outdoor unit

- 1 Coated evaporator with corrugated fins for higher efficiency
- 2 Power saving, variable speed DC fan
- 3 Variable speed compressor
- 4 Electronic expansion valve

VITOCAL 222-S 2.6 to 10.4 kW Cylinder capacity: 190 l

Vitocal 222-S indoor units



- 9 Second heating/cooling circuit







VITOCAL 222-5 With one heating/cooling circuit

VITOCAL 222-5 With two heating/cooling circuits



Vitocal 222-S outdoor unit with designer floor bracket



Vitocal 222-S outdoor unit with designer wall mounting bracket

BENEFITS AT A GLANCE:

- + With 60 °C flow temperature, ideally suited to energy efficient new build
- Protects the environment and the climate (Climate Protect⁺⁺) environmentally responsible refrigerant R32 with a low GWP100 of 771 (GWP = global warming potential)
- + Reliable operation with high efficiency (OptiPerform)
- + Guaranteed faster service response time (service link)
- + Whisper-quiet operation for placement anywhere on the property (super silent)
- + Low running costs thanks to high efficiency, COP (coefficient of performance) to EN 14511: up to 5.0 (at A7/W35)
- + Ideal for combination with photovoltaic system and power storage unit
- + 60 % less space required than comparable models
- + Indoor unit can be split for better manoeuvrability
- + Integrated Energy Management System ensures transparent energy consumption and costs
- + Attractive, high quality design indoors and outdoors
- + Active cooling function for use in the summer
- + Easy operation via ViCare app



VITOCAL 200-S

Vitocal 200-S AWB-M-E-AC(-AF)	Types	201.E06 NEV 201.E06 2C	201.E08 NEV 201.E08 2C	201.E10 NEV 201.F10 20
Voltage	V	230	230	230
Heating performance data to EN 14511 Rated heating output				
Operating point A 7/W35	kVV	5.3	6.8	8.3
Operating point A=7/W35	KVV	5.5	0.3	7.8
Performance data – heating to EN 14511 (A7/W35, 5 K spread)				
Rated heating output	kW	5.3	6.8	8.3
Output control	L\\/	5.U 2.6 to 7.5	5.U 2.6 to 9.0	4.9 2.6 to 10.4
	KVV	2.0 10 7.5	2.0 10 9.0	2.0 10 10.4
Sound power level	dB(A)	50	50	50
Performance data – cooling to EN 14511 (A35/W18, 5 K spread)				
Cooling capacity	kW	5.4	6.7	8.8
Energy efficiency ratio EER	1.1.4/	5.9	5.1	4.9
Max. cooling capacity	kVV	8.5	9.5	10.6
Refrigerant circuit				
Refrigerant		R32	R32	R32
Charge in delivered condition Clabel warming notantial (C)//P100 on par IPCC APC)	kg	1.50	1.50	1.50
	+	116	1 16	1 16
			1.10	1.10
Dimensions Length x width x height				
Indoor unit (1 heating/cooling circuit)	mm	360 x 450 x 920	360 x 450 x 920	360 x 450 x 920
Indoor unit (2 heating/cooling circuits)	mm	360 × 600 × 920	360 × 600 × 920	360 x 600 x 920
Dimensions, outdoor unit Lenath x width x height	mm	500 x 1080 x 850	500 x 1080 x 850	500 x 1080 x 850
Weight of indoor unit (1 heating circuit/2 heating circuits)	kg	65/75	65/75	65/75
vveignt of outdoor Unit	кд	95	95	95
Energy efficiency class	III.	A+++ / A++	A+++ / A++	A+++ / A++

Versions – NEV: without expansion vessel; 2C: with integral 2nd heating circuit Total sound power level measurement with reference to EN ISO 12102/EN ISO 9614-2, accuracy class 3 in night mode (level 2) Energy efficiency class in line with Commission Regulation (EU) No 813/2013 regarding heating under average climatic conditions –

low (W35)/medium (W55) temperature applications

PRODUCT FEATURES

- _ Air source heat pumps as split versions
- _ For room heating/cooling and DHW heating
- _ Maximum flow temperature: 60 °C
- _ Split indoor unit with heat pump control unit, high efficiency circulation pump for the secondary circuit, 4/3-way valve and bypass
- _ Integral instantaneous heating water heater
- _ Built-in heating water buffer cylinder (16 I) and expansion vessel (18 I in version with 2 heating circuits)



VITOCAL 222-5

Vitocal 222-S AWBT-M-E-AC(-AF)	Types	221.E06 221.E06.2C	221.E08 221 E08 20	221.E10 221 E10 2C
Voltage	V	230	230	230
Heating performance data to EN 14511 Rated heating output				
Operating point A7/W35	kW	5.3	6.8	8.3
Operating point A-7/W35	kW	5.5	6.3	7.8
Performance data – heating to EN 14511 (A7/W35, 5 K spread)				
Rated heating output	kW	5.3	6.8	8.3
Coefficient of performance \mathcal{E} (COP) in heating mode		5.0	5.0	4.9
Output control	kW	2.6 to 7.5	2.6 to 9.0	2.6 to 10.4
Sound power level	dB(A)	50	50	50
Performance data – cooling to EN 14511 (A35/W18, 5 K spread)				
Cooling capacity	kW	5.4	6.7	8.8
Energy efficiency ratio EER		5.9	5.1	4.9
Max. cooling capacity	kW	8.5	9.5	10.6
Refrigerant circuit				
Refrigerant		R32	R32	R32
- Charge in delivered condition	kg	1.50	1.50	1.50
- Global warming potential (GWP100 as per IPCC AR6)		//1	//1	//1
- CO ₂ equivalent	t	1.16	1.16	1.16
Dimensions, indoor unit		507 000 4000	507 000 4000	507 000 4000
Length x width x height	mm	597 x 600 x 1900	597 x 600 x 1900	597 X 600 X 1900
Dimensions, outdoor unit				
Length x width x height	mm	500 x 1080 x 850	500 x 1080 x 850	500 x 1080 x 850
Weight of indoor unit (1 heating circuit/2 heating	ka	188/190	188/190	188/190
circuits)	ka	95	95	95
Weight of outdoor unit				
Energy efficiency class		A+++ / A++	A*** / A**	A+++ / A++
Draw-off profile Efficiency class	6	L A+	L A+	L A ⁺

Versions – NEV: without expansion vessel; 2C: with integral 2nd heating circuit Total sound power level measurement with reference to EN ISO 12102/EN ISO 9614-2, accuracy class 3 in night mode (level 2) Energy efficiency class in line with Commission Regulation (EU) No 813/2013 regarding heating under average climatic conditions – low (W35)/medium (W55) temperature applications

PRODUCT FEATURES

- _ Air source heat pumps as split versions
- _ For room heating/cooling and DHW heating
- _ Integral DHW cylinder (190 | capacity)
- _ Maximum flow temperature: 60 °C
- _ Split indoor unit with heat pump control unit, high efficiency circulation pump for the secondary circuit, 4/3-way valve and bypass
- _ Integral instantaneous heating water heater
- _ Built-in heating water buffer cylinder (16 I) and expansion vessel (18 I)



VITOCAL 250-AH VITOCAL 250-SH

Anyone wanting greater independence from power supply utilities today should not be dependent on a single energy source. Instead, the ideal solution is a heating system offering optimum flexibility and using multiple energy sources, i.e. a hybrid appliance from Viessmann.

Works well in combination with existing heating systems

The Vitocal 250-AH and Vitocal 250-SH versions are especially good additions to any oil or gas heating system. The heat pump provides the base load in that case. The boiler is only switched on at especially low temperatures.



COMBINATION WITH EXISTING HEATING SYSTEM

TAKE ADVANTAGE OF THESE BENEFITS

- + Futureproof heat supply thanks to two heat generators in a single appliance
- + Automatic calculation of the most efficient operating mode
- + Ready for smart grids and photovoltaic self-consumption
- + Also for retrofitting

Eco Select – cost effective or sustainable heating

Hybrid Pro Control is an integrated energy manager that controls the heating system depending on the outdoor or flow temperature as well as individual settings. Factors such as energy prices, the amount of self-generated electricity, CO₂ emissions or heat demand can play a role in this.

Users can determine whether their energy system should automatically use the cheapest energy source currently available or run with the lowest CO₂ emissions per kilowatt hour of generated thermal energy when in eco mode.



With economy always in mind

Hybrid appliances from Viessmann amalgamate the benefits of a heat pump with those of a highly efficient condensing boiler. Consequently, in operation they always draw on an optimum mix of renewable and conventional energy sources.

The intelligent control unit can be individually set so that the most efficient heat generator is selected at any one time, i.e. the one that is most cost efficient for the user. Constantly fluctuating energy prices will never be an issue again.



Vitocal 250-AH: Viessmann also offers systems suitable for retrofitting to existing heating systems for free environmental energy.





Vitocal 250-AH outdoor unit

- 1 Coated evaporator with corrugated fins for higher efficiency
- 2 Power saving, variable speed DC fan
- 3 Variable speed twin rotary compressor
- 4 Inverter
- 5 Condenser

VITOCAL 250-AH 2.6 to 13.4 kW

Vitocal 250-AH indoor unit

- Heating water buffer cylinder (16 litre capacity)
- Diaphragm expansion vessel (18 litre capacity)
- 3 3-way mixing valve for hybrid functions
- 4 4/3-way valve for heating/ DHW heating/bypass
- 5 Secondary pump (high efficiency circulation pump)
- 6 Safety valve
- Heat pump control unit with7 inch colour touchscreen







Vitocal 250-AH outdoor unit with designer floor bracket



Vitocal 250-AH outdoor unit with floor bracket

BENEFITS AT A GLANCE:

- Ideally suited to modernisation projects, with 70 °C flow temperature (at an outside temperature down to -10 °C)
- + Climate Protect⁺⁺⁺: Protects the environment and the climate environmentally responsible, natural refrigerant R290 (propane) with an extremely low GWP100 of 0.02 (GWP = global warming potential)
- + OptiPerform: reliable operation with high efficiency
- + Service link: guaranteed faster response time if a service is required
- + Super silent: whisper-quiet operation allows placement anywhere on the property
- + Low running costs thanks to high efficiency, COP (coefficient of performance) to EN 14511: up to 5.3 (at A7/W35)
- + 60 % less space required than comparable models
- + Integrated Energy Management System ensures transparent energy consumption and costs
- + Easy operation via ViCare app
- + Simple integration into the existing heating system including the current heat generator





Vitocal 250-SH outdoor unit

- 1 Coated evaporator with corrugated fins for higher efficiency
- 2 Power saving, variable speed DC fan
- 3 Variable speed compressor
- 4 Electronic expansion valve

VITOCAL 250-SH 2.6 to 10.4 kW

Vitocal 250-SH indoor unit

 Heating water buffer cylinder (16 litre capacity)
 Diaphragm expansion vessel (18 litre capacity)
 3-way mixing valve for hybrid functions
 4/3-way valve for heating/ DHW heating/bypass
 Secondary pump (high efficiency circulation pump)
 Safety valve
 Heat pump control unit with 7 inch colour touchscreen
 Flow sensor







Vitocal 250-SH outdoor unit with designer floor bracket



Vitocal 250-SH outdoor unit with designer wall mounting bracket

BENEFITS AT A GLANCE:

- Climate Protect⁺⁺: Protects the environment and the climate environmentally responsible refrigerant R32 with a low GWP100 of 771 (GWP = global warming potential)
- + Reliable operation with high efficiency (OptiPerform)
- + Guaranteed faster service response time (service link)
- + Whisper-quiet operation for placement anywhere on the property (super silent)
- + Low running costs thanks to high efficiency, COP (coefficient of performance) to EN 14511: up to 5.0 (at A7/W35)
- + Ideal for combination with photovoltaic system and power storage unit
- + 60 % less space required than comparable models
- + Integrated Energy Management System ensures transparent energy consumption and costs
- + Attractive, high quality design indoors and outdoors
- + Active cooling function for use in the summer
- + Easy operation via ViCare app



VITOCAL 250-AH

Vitocal 250-AH HAWO-M-AC(-AF) Voltage	Type V	252.A10 230		
Vitocal 250-AH HAWO-AC(-AF) Voltage	Type V		252.A10 400	252.A13 400
Heating performance data to EN 14511 Rated heating output Operating point A7/W35 Operating point A-7/W35	kW kW	7.3 9.7	7.3 9.7	8.1 11.1
Performance data – heating to EN 14511 (A7/W35, 5 K spread) Rated heating output Coefficient of performance ε (COP) in heating mode Output control	kW	5.3 2.6 to 12.0	5.3 2.6 to 12.0	5.2 3.0 to 13.4
Sound power level	dB(A)	54	54	54
Performance data – cooling to EN 14511 (A35/W18, 5 K spread) Cooling capacity Energy efficiency ratio EER Max. cooling capacity	kW kW	6.3 5.3 12.9	6.5 5.3 13.0	8.2 4.9 15.1
Refrigerant circuit Refrigerant - Charge in delivered condition - Global warming potential (GWP100 as per IPCC AR6) - CO ₂ equivalent	kg t	R290 2 0.02 0.00004	R290 2 0.02 0.00004	R290 2 0.02 0.00004
Dimensions, indoor unit Length x width x height		360 × 600 × 920	360 x 600 x 920	360 x 600 x 920
Dimensions, outdoor unit Length x width x height		600 x 1144 x 1382	600 x 1144 x 1382	600 x 1144 x 1382
Weight if indoor unit Weight of outdoor unit	kg kg	57 215	57 221	57 221
Energy efficiency η_{s} at W35	%	197	197	195
Energy efficiency n_ at W55	%	152	152	154

Total sound power level measurement with reference to EN ISO 12102/EN ISO 9614-2, accuracy class 3 in night mode

Energy efficiency η_s : heating performance data in line with Commission Regulation (EU) No 813/2013 under average climatic conditions for low (W35) and medium (W55) temperature applications

PRODUCT FEATURES

- Monoblock air source heat pumps, prepared for hybrid operation with external heat generator up to 30 kW
- _ For room heating/cooling and DHW heating
- Maximum flow temperature up to 70 °C at an outside temperature of –10 °C
- Monoblock indoor unit with heat pump control unit, high efficiency circulation pump for the secondary circuit, 4/3-way valve, safety assembly
- _ Integral hybrid hydraulics and interfaces for controlling the external heat generator
- _ Built-in heating water buffer cylinder and overflow valve



VITOCAL 250-SH

Vitocal 250-SH HAWB-M-AC(-AF)	Туре	252.B06	252.B08	252.B10
Voltage	V	230	230	230
Heating performance data to EN 14511 Rated heating output	k)\\/	5.2	6 9	0.2
Operating point A-7/W35 Operating point A-7/W35	kW	5.5	6.3	7.8
Performance data – heating to EN 14511 (A7/W35, 5 K spread)				
Rated heating output	kW	5.3	6.8	8.3
Coefficient of performance $\boldsymbol{\epsilon}$ (COP) in heating mode		5.0	5.0	4.9
Output control	kW	2.6 to 7.5	2.6 to 9.0	2.6 to 10.4
Sound power level	dB(A)	50	50	50
Performance data - cooling to EN 14511 (A35/W18, 5 K spread)				
Cooling capacity	kW	5.4	6.7	8.8
Energy efficiency ratio EER		5.9	5.1	4.9
Max. cooling capacity	kW	8.5	9.5	10.6
Refrigerant circuit				
Refrigerant		R32	R32	R32
- Charge in delivered condition	kg	1.50	1.50	1.50
 Global warming potential (GWP100 as per IPCC AR6) 		771	771	771
– CO ₂ equivalent	t	1.16	1.16	1.16
Dimensions, indoor unit				
Length x width x height	mm	360 x 600 x 920	360 x 600 x 920	360 × 600 × 920
Dimensions, outdoor unit				
Length x width x height	mm	500 x 1080 x 850	500 x 1080 x 850	500 x 1080 x 850
Weight if indoor unit	kg	54	55	55
Weight of outdoor unit	kg	95	95	95
Energy efficiency class		A+++ / A++	A+++ / A++	A+++ / A++

Total sound power level measurement with reference to EN ISO 12102/EN ISO 9614-2, accuracy class 3 in night mode (level 2) Energy efficiency class in line with Commission Regulation (EU) No 813/2013 regarding heating under average climatic conditions – low (W35)/medium (W55) temperature applications

PRODUCT FEATURES

- _ Air source heat pumps as split versions
- _ For room heating/cooling and DHW heating
- _ Maximum flow temperature: 60 °C
- Split indoor unit with heat pump control unit, high efficiency circulation pump for the secondary circuit, 4/3-way valve and bypass
- _ Built-in heating water buffer cylinder (16 I) and expansion vessel (18 I)

System technology ensures reliable and economical operation. The convenient controls and <u>perfectly</u> matching Viessmann system components offer maximum reliability, flexibility and efficiency.



"The whole is greater than the sum of its parts." In accordance with this philosophy, Viessmann does not simply supply individual heating equipment components that meet the high Viessmann standards for quality, reliability and effectiveness – in addition, all products are part of a matching overall concept, where all components complement one another. After all, only perfect interaction between all system parts can draw out the maximum potential of our innovative leading technology.

Viessmann system technology incorporates everything you need for a reliable and economical heating system: Viessmann One Base with wireless remote control and online management using the ViCare app, powerful Vitocell DHW cylinders for the highest DHW convenience, and high grade photovoltaic systems.

1 Vitocal 252-A



The new heat pumps are ideally suited to modernisation projects. Reliable, compact and climate friendly, environmental energy can be used very efficiently for heating and cooling.

2 Vitocharge VX3



The modular power storage unit with a capacity of 5 to 15 kilowatt hours can be seamlessly integrated into the Viessmann energy system for heat, power and mobility.





Futureproof, reliable and intelligent: the charging station can be easily integrated into the energy system. This allows very convenient charging of a vehicle at home.

4 Vitovolt 300



Photovoltaic systems make an active contribution to climate protection while also helping to save energy costs and reduce dependence on power supply utilities.

5 Vitoair FS



Compact, powerful and quiet. Vitoair FS ensures healthy indoor air and low energy costs through high heat recovery.

Generate your own power and make the best use of it. With a photovoltaic system and the Vitocharge VX3 modular power storage system.



Thanks to their quiet operation, the Vitocal 200-S split air source heat pump and the Vitocharge VX3 power storage system are also suitable for installation close to the living space.

There are currently two ways in which the solar power generated by a rooftop photovoltaic system can be used: it can either all be exported to the grid, or can be partially or fully consumed on site. A heat pump, for example, enables heat to be generated efficiently using self-generated power. With a heat pump, one kilowatt-hour of electricity can provide up to four kilowatt-hours of heat by using free environmental energy.

As a result, if the energy demand for DHW and central heating is met with the help of a heat pump, not only can the level of photovoltaic self-consumption be significantly increased, but the more cost effective solar power also enables a low cost heat supply.

If you intend to combine a photovoltaic system with a heat pump, select an appliance that optimises self-consumption and can be adapted to match the power-generating characteristics of the photovoltaic system. For this purpose Viessmann has developed a suitably matching system comprising photovoltaic modules and a heat pump.

Optimised system concept with Viessmann heat pumps

Via an energy meter, the heat pump control unit detects whether the PV system is supplying sufficient amounts of power – which is then used by the heat pump to heat DHW and heating water. The heat gained during the day via photovoltaic technology is stored in a well-insulated cylinder and can be used for domestic hot water and heating as and when required.

With Viessmann One Base, self-consumption of solar power is automatically increased. Combining the Viessmann heat pump with a photovoltaic system also offers the option of integrating additional components that increase self-consumption of the solar power generated (such as ventilation equipment, for example). Before the heat pump is activated, priority is given to meeting the power demand for electrical household appliances using self-generated solar power. After the demand from household appliances has been satisfied, an energy meter records the amount of solar power remaining and communicates this to the heat pump. Using the heat pump, the solar surplus can then be stored in the form of thermal energy and made available when it is required. This raises the level of self-consumption and makes use of the solar energy while it is available.

The economic viability of the photovoltaic system is substantially increased thanks to the deliberate increase in the level of selfconsumption. Using low cost solar power also makes the heat pump more economically attractive.

VITOCHARGE VX3

Vitocharge VX3 for almost complete independence from the public grid

The Vitocharge VX3 modular power storage system rounds off the energy solution. It enables power to be supplied exactly when it is needed. This makes efficient, decentralised power supply with high levels of self-consumption and self-sufficiency a reality.

Viessmann is the only manufacturer to supply all products from a single source, so that users can make effective and economical use of the power they generate. With this solution, users are almost completely independent of the public electricity grid.

Self-generated power for the heat pump with the modular storage system

A particularly effective way to save energy is by enabling interaction between a heat pump, photovoltaic system and power storage unit. This involves the electrical components in the heat pump being operated with self-generated power.

The Vitocharge VX3 compact photovoltaic power storage system with hybrid inverter was designed for connecting photovoltaic modules and/or batteries. An inverter can accommodate up to three 5 kWh battery units, thereby providing a maximum usable storage capacity of 15 kWh.

Uncomplicated and fully integrated into Viessmann's range of solutions

Due to its flexible storage capacity, the system is easy to configure. Installation is also particularly straightforward thanks to the modular design, and can be carried out by one person. ViGuide allows rapid, error-free commissioning thanks to full integration in the Viessmann digital services and platforms. The trade partner can also monitor the system at all times to ensure fault-free functioning and respond to any irregularities quickly if needed.

ViShare



Тір

The perfect component for Viessmann energy systems: ViShare from EMS*. Find out more about this at vishare.viessmann.de

* Energy Market Solutions GmbH (EMS), a stakeholder in the Viessmann Group, is the operator and contractual partner in the ViShare Energy Community.



Vitocharge VX3 photovoltaic power storage system – the ideal solution for new build and modernisation projects: store self-generated power and use it later.

TAKE ADVANTAGE OF THESE BENEFITS

- + Straightforward installation thanks to manageable weight
- Quick and simple commissioning
 Full integration in the digital services, e.g. ViGuide
- One product for all applications in new build or modernisation projects in detached or two-family houses
- + High quality guarantees durability of the entire system
- + Futureproof compatibility through EEBUS for variable integration into different energy systems

At Viessmann, proximity to trade partners is the basis of the company's success. Everyone can benefit from their expertise by choosing a Viessmann heat pump. You're in good hands.



Property developers and system users can receive advice and support regarding sales, installation and customer service exclusively via Viessmann heating contractors, who complete regular training at the Viessmann Academy, and have an in-depth knowledge of the company's products. Every system user benefits from the comprehensive service that all installation contractors offer as standard.

Technology from Viessmann – subsidies from the government

You don't just save on running costs. Energy savings and environmentally responsible heating technology is also financially supported by local, regional and national bodies through various subsidies, as well as by power supply utilities.

Our advice

Viessmann FörderProfi – subsidies made easy. More information available at www.foerder-profi.de



EXAMPLES OF THE SERVICE WE PROVIDE

- _ Free, no-obligation and individual consultation, even on site
- Clear calculation of heating cost savings after modernisation of the heating system – including systems combined with solar collectors, of course
- Calculation of the payback period, after which the new heating system will have paid for itself through energy savings
- Calculation of the actual heat and DHW demand for the household or property
- Information on the most viable combination of a new heating system with a solar thermal system for central heating backup and DHW heating
- Up to date information about public subsidy programmes that could help to finance a new heat pump and solar thermal system
- _ Support in applying for subsidies



Professional and reliable: your heating contractor can offer you individual advice and calculate the energy costs you can save with a new heat pump.

Simply rent rather than buy a heating system

Need a new heating system but don't want to pay the full price for it? Take the easy option: with the Viessmann Wärme rental service, you get a modern and efficient Viessmann heating system – without having to buy it. Simply pay a low monthly rate and we take care of the rest.

A truly all-inclusive support package:

- _ €0 purchasing costs
- Up to 15 years all-inclusive service and full guarantee
- _ Reduce heating costs by up to 30 %

WÄRME

For more information, see: https://angebote.viessmann.de/ heizung-mieten-statt-kaufen?

Contribute to the energy transition with Viessmann Strom

Independent, straightforward, secure. Viessmann Strom lets end users make an energy transition of their own. With this "green electricity", users also make their personal contribution to the energy transition. Over a term which can be selected ranging from 10 to 20 years, they have a secure power supply with monthly costs that can be planned ahead.

The package comprises:

- Vitovolt photovoltaic modules
- _ Installation and commissioning
- Registration with the grid operator and the Bundesnetzagentur (German Federal Network Agency)
- Maintenance and repair
- Guarantee and insurance
- Removal or takeover after contract period

Strom

For questions on Viessmann Strom, please email strom@viessmann.com or phone +49 6452 701955



Viessmann One Base networks digital services with complete energy systems, including heat pumps, ventilation systems, power storage units and photovoltaic systems.

VIESSMANN



Seamless integration of products and systems with digital services and value added services for system users and trade partners

* Energy Market Solutions GmbH (EMS), a stakeholder in the Viessmann Group, is the operator and contractual partner in the ViShare Energy Community.

We are Viessmann, a family business. Founded in 1917 as a heating technology manufacturer, today we are the world's leading provider of sustainable climate (heating, cooling and air quality) and renewable energy solutions.

Our integrated range of solutions seamlessly connects products and systems via digital platforms and services, creating an individualised feel-good climate for our users. All our activities are driven by the company mission statement "We create living spaces for generations to come". This is the responsibility that we, the 13,000 members of the Viessmann family, take on every day together with our (trade) partners.



We create living spaces for generations to come.



Number 1 Trade Partner – for the 16th consecutive time

Practical partnership

As part of its comprehensive range, Viessmann also offers a wide selection of value added services. These include an extensive training and further development programme for trade partners at the well equipped training facilities of the Viessmann Academy. With its new digital services, Viessmann offers innovative solutions such as the operation and monitoring of heating systems by smartphone. Users benefit from greater reassurance and convenience, whilst contractors can keep a constant eye on the systems for which they are responsible.



As a family company in its fourth generation, we take a long term view: we create living spaces for generations to come. This mission statement guides the actions of all employees in the large Viessmann family.

VIESSMANN GROUP IN FIGURES

- ___ Viessmann was founded
- ____ employees
- ___ Group turnover in billions of euros
- ____ export share in percent
- manufacturing sites in
 12 countries
- sales companies in
 43 countries
 - _ sales offices worldwide



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