

Number	97343/03	Replaces	97343/02
Issued	17-04-2018	Scope	No. 813/2013 (2-8-2013) and/or 92/42/EEC (21-05-1992)
Report number	170201428/2		
PIN	0063CS3428	Contract number	E 8090

EC TYPE EXAMINATION CERTIFICATE (BED/R813)

Kiwa, notified body for council Directive 92/42/EC, hereby declares that the **Central Heating Boilers**, types:

VC 656/5 - 5 (H-INT I) ecoTEC plus	VC 486/5 - 5 (H-INT I) ecoTEC plus
VU 656/5 - 5 (H-CZ) ecoTEC plus	VU 486/5 - 5 (H-CZ) ecoTEC plus
VU 656/5 - 5 (H-FR) ecoTEC plus	VU 486/5 - 5 (H-FR) ecoTEC plus
VU 606/5 - 5 (H-GB) ecoTEC plus	VU 446/5 - 5 (H-GB) ecoTEC plus
VM 656/5 - 5 (H-II/ES) ecoTEC plus	VM 486/5 - 5 (H-II/ES) ecoTEC plus
VU 656/5 - 5 (H-INT II) ecoTEC plus	VU 486/5 - 5 (H-INT II) ecoTEC plus
VU 656/5 - 5 (H-INT IV) ecoTEC plus	VU 486/5 - 5 (H-INT IV) ecoTEC plus
VU 656/5 - 5 (H-INT III) ecoTEC plus	VU 486/5 - 5 (H-INT III) ecoTEC plus
VU 656/5 - 5 (H-TR) ecoTEC plus	VU 486/5 - 5 (H-TR) ecoTEC plus
VC 656/5 - 5 (E-BE) ecoTEC plus	VC 486/5 - 5 (E-BE) ecoTEC plus
VC 636/5 - 5 (E-DE) ecoTEC plus	VC 406/5 - 5 (E-DE) ecoTEC plus
VC 636/5 - 5 (LL-DE) ecoTEC plus	VC 406/5 - 5 (LL-DE) ecoTEC plus
VU 596/5 - 5 (H-PL) ecoTEC plus	VC 476/5 - 5 (E-DE) ecoTEC plus
VHR 45/5-5 (EK-NL) ecoTEC plus	VC 476/5 - 5 (LL-DE) ecoTEC plus
VHR 65/5-5 (EK-NL) ecoTEC plus	VU 486/5 - 5 (H-PL) ecoTEC plus
VC 506/5 - 5 (H-CH) ecoTEC plus	

manufactured by

Vaillant GmbH
Remscheid, Germany

meet the requirements regarding useful efficiencies according to article 4 of commission regulation (EU) No. 813/2013 and/or as described in the Directive 92/42/EEC on efficiency requirements.

This is based upon the measured values as given in the table on the appendix.

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GASTEC





Luc Leroy
Kiwa



Certificate

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Specifications:

Model(s):

VU 446/5 - 5 (H-GB) ecoTEC plus,	VC 486/5 - 5 (H-INT I) ecoTEC plus
VC 486/5 - 5 (E-BE) ecoTEC plus,	VU 486/5 - 5 (H-CZ) ecoTEC plus
VU 486/5 - 5 (H-FR) ecoTEC plus,	VM 486/5 - 5 (H-IT/ES) ecoTEC plus
VU 486/5 - 5 (H-INT II) ecoTEC plus,	VU 486/5 - 5 (H-INT III) ecoTEC plus
VU 486/5 - 5 (H-TR) ecoTEC plus,	VC 476/5 - 5 (E-DE) ecoTEC plus
VC 476/5 - 5 (LL-DE) ecoTEC plus,	VU 486/5 - 5 (H-PL) ecoTEC plus

Condensing boiler:	yes
Range rated:	yes
Low-temperature (**) boiler:	yes
B1 boiler:	no
Combination heater:	no
Gas type :	G20

	Symbol	Value	Unit
Useful heat output			
At rated heat output and high-temperature regime (*)	P ₄	44,1	kW
At 30 % of rated heat output and low-temperature regime (**)	P ₁	14,8	kW

Useful efficiencies

At rated heat output and high-temperature regime (*)	η_4	88,4
At 30 % of rated heat output and low-temperature regime (**)	η_1	98,3

Specifications:

Model(s):

- (*) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.
- (**) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

Calculated values are based on gross calorific value (reference conditions: 15 °C, 1013,25 mbar)



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VU 446/5 - 5 (H-GB) ecoTEC plus,	VC 486/5 - 5 (H-INT I) ecoTEC plus
VC 486/5 - 5 (E-BE) ecoTEC plus,	VU 486/5 - 5 (H-CZ) ecoTEC plus
VU 486/5 - 5 (H-FR) ecoTEC plus,	VM 486/5 - 5 (H-IT/ES) ecoTEC plus
VU 486/5 - 5 (H-INT II) ecoTEC plus,	VU 486/5 - 5 (H-INT III) ecoTEC plus
VU 486/5 - 5 (H-TR) ecoTEC plus,	VC 476/5 - 5 (E-DE) ecoTEC plus
VC 476/5 - 5 (LL-DE) ecoTEC plus,	VU 486/5 - 5 (H-PL) ecoTEC plus

Condensing boiler:	yes
Range rated:	yes
Low-temperature (**) boiler:	yes
B1 boiler:	no
Combination heater:	no
Gas type :	G31

	Symbol	Value	Unit
Useful heat output			
At rated heat output and high-temperature regime (*)	P ₄	44,0	kW
At 30 % of rated heat output and low-temperature regime (**)	P ₁	14,3	kW
Useful efficiencies			
At rated heat output and high-temperature regime (*)	η ₄	89,8	
At 30 % of rated heat output and low-temperature regime (**)	η ₁	98,5	

(*) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.

(**) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

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Article 4 of commission regulation (EU) No. 813/2013

Specifications:

Model(s):

VU 606/5 - 5 (H-GB) ecoTEC plus,	VC 656/5 - 5 (H-INT I) ecoTEC plus
VC 656/5 - 5 (E-BE) ecoTEC plus,	VU 656/5 - 5 (H-CZ) ecoTEC plus
VU 656/5 - 5 (H-FR) ecoTEC plus,	VM 656/5 - 5 (H-IT/ES) ecoTEC plus
VU 656/5 - 5 (H-INT II) ecoTEC plus,	VU 656/5 - 5 (H-INT III) ecoTEC plus
VU 656/5 - 5 (H-TR) ecoTEC plus,	VC 636/5 - 5 (E-DE) ecoTEC plus
VC 636/5 - 5 (LL-DE) ecoTEC plus,	VHR 65/5-5 (EK-NL) ecoTEC plus

Condensing boiler:	yes
Range rated:	yes
Low-temperature (**) boiler:	yes
B1 boiler:	no
Combination heater:	no
Gas type :	G20

	Symbol	Value	Unit
Useful heat output			
At rated heat output and high-temperature regime (*)	P ₄	58,7	kW
At 30 % of rated heat output and low-temperature regime (**)	P ₁	19,7	kW

Useful efficiencies

At rated heat output and high-temperature regime (*)	η_4	88,4
At 30 % of rated heat output and low-temperature regime (**)	η_1	98,5

Specifications:

Model(s):

- (*) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.
- (**) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

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VU 606/5 - 5 (H-GB) ecoTEC plus,	VC 656/5 - 5 (H-INT I) ecoTEC plus
VC 656/5 - 5 (E-BE) ecoTEC plus,	VU 656/5 - 5 (H-CZ) ecoTEC plus
VU 656/5 - 5 (H-FR) ecoTEC plus,	VM 656/5 - 5 (H-IT/ES) ecoTEC plus
VU 656/5 - 5 (H-INT II) ecoTEC plus,	VU 656/5 - 5 (H-INT III) ecoTEC plus
VU 656/5 - 5 (H-TR) ecoTEC plus,	VC 636/5 - 5 (E-DE) ecoTEC plus
VC 636/5 - 5 (LL-DE) ecoTEC plus,	VHR 65/5-5 (EK-NL) ecoTEC plus

Condensing boiler:	yes
Range rated:	yes
Low-temperature (**) boiler:	yes
B1 boiler:	no
Combination heater:	no
Gas type :	G31

	Symbol	Value	Unit
Useful heat output			
At rated heat output and high-temperature regime (*)	P ₄	58,4	kW
At 30 % of rated heat output and low-temperature regime (**)	P ₁	19,2	kW
Useful efficiencies			
At rated heat output and high-temperature regime (*)	η ₄	89,8	
At 30 % of rated heat output and low-temperature regime (**)	η ₁	98,1	

(*) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.

(**) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

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Specifications:

Model(s):

VC 406/5 - 5 (E-DE) ecoTEC plus

VC 406/5 - 5 (LL-DE) ecoTEC plus

Condensing boiler: yes
 Range rated: yes
 Low-temperature (**) boiler: yes
 B1 boiler: no
 Combination heater: no
 Gas type : G20

	Symbol	Value	Unit
Useful heat output			
At rated heat output and high-temperature regime (*)	P ₄	37,3	kW
At 30 % of rated heat output and low-temperature regime (**)	P ₁	11,2	kW
Useful efficiencies			
At rated heat output and high-temperature regime (*)	η ₄	88,4	
At 30 % of rated heat output and low-temperature regime (**)	η ₁	98,3	

(*) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.

(**) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

Calculated values are based on gross calorific value (reference conditions: 15 °C, 1013,25 mbar)



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Specifications:

Model(s):

VU 596/5 - 5 (H-PL) ecoTEC plus

Condensing boiler: yes
 Range rated: yes
 Low-temperature (**) boiler: yes
 B1 boiler: no
 Combination heater: no
 Gas type : G20

Useful heat output

At rated heat output and high-temperature regime (*)

At 30 % of rated heat output and low-temperature regime (**)

Symbol	Value	Unit
P ₄	53,8	kW
P ₁	18,0	kW

Useful efficiencies

At rated heat output and high-temperature regime (*)

At 30 % of rated heat output and low-temperature regime (**)

η ₄	88,1
η ₁	98,2

Specifications:

- (*) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.
- (**) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

Calculated values are based on gross calorific value (reference conditions: 15 °C, 1013,25 mbar)



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Model(s):

VHR 45/5-5 (EK-NL) ecoTEC plus

Condensing boiler: yes
 Range rated: yes
 Low-temperature (**) boiler: yes
 B1 boiler: no
 Combination heater: no
 Gas type : G20

Useful heat output

At rated heat output and high-temperature regime (*)

At 30 % of rated heat output and low-temperature regime (**)

Symbol	Value	Unit
P ₄	41,0	kW
P ₁	13,7	kW

Useful efficiencies

At rated heat output and high-temperature regime (*)

At 30 % of rated heat output and low-temperature regime (**)

η ₄	88,1
η ₁	97,0

Specifications:

Model(s):

VC 506/5 - 5 (H-CH) ecoTEC plus

(*) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.

(**) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

Calculated values are based on gross calorific value (reference conditions: 15 °C, 1013,25 mbar)



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Condensing boiler: yes
 Range rated: yes
 Low-temperature (**) boiler: yes
 B1 boiler: no
 Combination heater: no
 Gas type : G20

	Symbol	Value	Unit
Useful heat output			
At rated heat output and high-temperature regime (*)	P ₄	45,9	kW
At 30 % of rated heat output and low-temperature regime (**)	P ₁	15,4	kW
Useful efficiencies			
At rated heat output and high-temperature regime (*)	η ₄	88,8	
At 30 % of rated heat output and low-temperature regime (**)	η ₁	97,8	

(*) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.

(**) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

Calculated values are based on gross calorific value (reference conditions: 15 °C, 1013,25 mbar)

