



Number

95379/01

Replaces

Issued

PIN

13-04-2017

Scope

No. 813/2013 (2-8-2013) and/or

92/42/EEC (21-05-1992)

Report number

150900970/1

0063CQ3970

Contract number

E 6600

# **EC TYPE EXAMINATION CERTIFICATE (BED/R813)**

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

Rendamax

R601 EVO, R602 EVO, R603 EVO, R604 EVO, R605 EVO, R606 EVO, R607 EVO;

manufactured by

Elco BV Kerkrade, The Netherlands

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 in the appendices

Kiwa Nederland B.V.

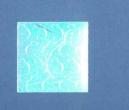
Wilmersdorf 50 P.O. Box 137 7300 AC APELDOORN The Netherlands





Luc Leroy Kiwa







Number

95376/01

Replaces

Issued

13-04-2017

Scope

2009/142/EC (30-11-2009)

Report number

150900970/1

Contract number

E 6600

PIN

0063CQ3970

## EC TYPE EXAMINATION CERTIFICATE (GAD)

Kiwa hereby declares that the Condensing Boilers and Water Heaters\*, types

Rendamax R601 EVO, R602 EVO, R603 EVO, R604 EVO, R605 EVO, R606 EVO, R607 EVO; Rendamax R601 EVO IP, R602 EVO IP, R603 EVO IP, R604 EVO IP, R605 EVO IP, R606 EVO IP, R607 EVO IP;

manufactured by

Elco BV

## Kerkrade, The Netherlands

meet the essential requirements as described in the

Directive 2009/142/EC relating to appliances burning gaseous fuels.

\*) models indicated with IP are Water Heaters

Appliance types

: B23(P), C13, C33, C43, C53, C63, C83

Appliance categories

:  $I_{2H}$ ,  $I_{2L}$ ,  $I_{2E}$ ,  $I_{2E(R)}$ ,  $I_{2Esi}$ ,  $I_{2EK}$ ,  $I_{2ELL}$ ,  $I_{3P}$ ,  $I_{3B/P}$ 

Countries:

Albania Armenia Australia Austria Azerbaijan Belarus Belgium

Bosnia-Herzegovina

Bulgaria

China

Croatia

Cyprus

Denmark Estonia Finland France Georgia Germany Greece Hungary **Iceland** Ireland Italy

Latvia

Liechtenstein Lithuania Luxembourg Macedonia Malta Moldavia Montenegro Netherlands, the New Zealand Norway Poland

Portugal

Romania Russian Federation Serbia Slovakia Slovenia Spain Sweden Switzerland Turkey

Ukraine

United Kingdom Uzbekistan

Czech Republic

Kiwa Nederland B.V.

Wilmersdorf 50 P.O. Box 137 7300 AC APELDOORN The Netherlands

www.1kiwa.com

GASTEC



Luc Leroy Kiwa







### Page 1 of 5

Annex to Certificate: 95376/01

Appendix no:1

Dated: March 2017

Examination report(s):

150900970/1

dated April 2017

### Elco BV

This appendix supersedes appendix no. (n.a.)

Scope

Directive 92/42/EEC

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

Specifications

Model(s):

Rendamax R601 EVO

Condensing boiler:

yes

Low-temperature (\*\*) boiler:

no

no

B1 boiler: Combination heater:

no

	Symb.	Value Unit
Useful heat output At rated heat output and high-temperature regime (*) At 30 % of rated heat output and low-temperature regime (**)	P <sub>4</sub> P <sub>1</sub>	142.3 kW 47.5 kW
Useful efficiencies At rated heat output and high-temperature regime (*) At 30 % of rated heat output and low-temperature regime (**)	$\eta_4$ $\eta_1$	88.4 % (gcv) 98.3 % (gcv)
Auxiliary electricity consumption At full load At part load In standby mode	elmax elmin P <sub>SB</sub>	- kW - kW - kW
Other items Standby heat loss Emissions of Nitrogen Oxides (nominal) Sound Power level	Pstby NOx Lwa	0.286 kW 25 mg/kWh - dB(A)

- 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, G20)



### Page 2 of 5

Annex to Certificate: 95376/01

Appendix no:1

Dated: March 2017

Examination report(s):

70

Lwa

dB(A)

150900970/1

dated April 2017

#### Elco BV

This appendix supersedes appendix no. (n.a.)

Scope

Directive 92/42/EEC

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

Specifications

Model(s): Rendamax R602 EVO

Condensing boiler:

yes

Low-temperature (\*\*) boiler:

B1 boiler:

no

Combination heater:

Sound Power level

no no

He fellows when	Symb.	Value	Unit
Useful heat output At rated heat output and high-temperature regime (*) At 30 % of rated heat output and low-temperature regime (**)	P <sub>4</sub>	190.4	kW
	P <sub>1</sub>	63.5	kW
Useful efficiencies At rated heat output and high-temperature regime (*) At 30 % of rated heat output and low-temperature regime (**)	η <sub>4</sub>	88.4	% (gcv)
	η <sub>1</sub>	98.3	% (gcv)
Auxiliary electricity consumption At full load At part load In standby mode	elmax	0.267	kW
	elmin	0.056	kW
	P <sub>SB</sub>	0.007	kW
Other items Standby heat loss Emissions of Nitrogen Oxides (nominal)	Pstby NOx	0.286 25	kW mg/kWh

- 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, G20)



#### Page 3 of 5

Annex to Certificate: 95376/01

Appendix no:1

Dated: March 2017 Examination report(s):

150900970/1

dated April 2017

#### Elco BV

This appendix supersedes appendix no. (n.a.)

Scope

Directive 92/42/EEC

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

Specifications

Model(s): Rendamax R603 EVO

Condensing boiler: yes

Low-temperature (\*\*) boiler: no

B1 boiler: no Combination heater: no

Symb. Value Unit

Useful heat output
At rated heat output and high-temperature regime (\*)
At 30 % of rated heat output and low-temperature regime (\*\*)
P<sub>4</sub>
237.6 kW

At 30 % of rated heat output and low-temperature regime (\*\*) P<sub>1</sub> 79.2

Useful efficiencies At rated heat output and high-temperature regime (\*)  $\eta_4$  88.5 % (gcv)

At 30 % of rated heat output and low-temperature regime (\*\*)  $\eta_1$  98.3 % (gcv)

Auxiliary electricity consumption

At full load elmin - kW

kW

In standby mode P<sub>SB</sub> \_\_\_\_ kW

Standby heat loss
Emissions of Nitrogen Oxides (nominal)
Sound Power level
Pstby
NOx
24
mg/kWh
dB(A)

(\*) 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, G20)



### Page 4 of 5

Annex to Certificate: 95376/01

Appendix no:1

Dated: March 2017

Examination report(s):

150900970/1

Pstby

NOx

Lwa

0.310

24

kW

mg/kWh

dB(A)

dated April 2017

#### Elco BV

This appendix supersedes appendix no. (n.a.)

Scope

Directive 92/42/EEC

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

Specifications

Rendamax R604 EVO Model(s):

Condensing boiler:

yes

Low-temperature (\*\*) boiler:

no

B1 boiler: Combination heater:

Standby heat loss

Sound Power level

Emissions of Nitrogen Oxides (nominal)

no no

	Symb.	Value	Unit
Useful heat output At rated heat output and high-temperature regime (*) At 30 % of rated heat output and low-temperature regime (**)	P <sub>4</sub> P <sub>1</sub>	285.7 95.2	kW kW
Useful efficiencies At rated heat output and high-temperature regime (*) At 30 % of rated heat output and low-temperature regime (**)	$\eta_4$ $\eta_1$	88.5 98.3	% (gcv) % (gcv)
Auxiliary electricity consumption At full load At part load In standby mode	elmax elmin P <sub>SB</sub>	-	kW kW kW
Other items			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). Calculated values are based on gross calorific value (reference conditions:15°C, 1013,25 mbar, G20)



### Page 5 of 5

Annex to Certificate: 95376/01

Appendix no:1

Dated: March 2017 Examination report(s):

150900970/1

dated April 2017

Occurs la Maleca

#### Elco BV

This appendix supersedes appendix no. (n.a.)

Scope

Directive 92/42/EEC

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

Specifications

Model(s): Rendamax R605 EVO

Condensing boiler: yes
Low-temperature (\*\*) boiler: no
B1 boiler: no
Combination heater: no

Harfollows assessed	Symb.	Value	Unit
Useful heat output At rated heat output and high-temperature regime (*) At 30 % of rated heat output and low-temperature regime (**)	P <sub>4</sub>	381.3	kW
	P <sub>1</sub>	127.1	kW
Useful efficiencies At rated heat output and high-temperature regime (*) At 30 % of rated heat output and low-temperature regime (**)	η <sub>4</sub> η <sub>1</sub>	88.5 98.3	% (gcv) % (gcv)
Auxiliary electricity consumption At full load At part load In standby mode	elmax	0.486	kW
	elmin	0.069	kW
	P <sub>SB</sub>	0.007	kW
Other items Standby heat loss Emissions of Nitrogen Oxides (nominal) Sound Power level	Pstby	0.310	kW
	NOx	24	mg/kWh
	Lwa	77	dB(A)

- (\*) 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, G20)