

# CERTIFICATE

<b>Certificate holder</b>	<b>Bosch Thermotechnik GmbH Sophienstr. 30-32 35576 Wetzlar GERMANY</b>
<b>Production facility</b>	Aveiro, Changwon, Tranas
<b>Product</b>	Air/Water Heat pumps
<b>Type, Model</b>	Buderus Logatherm WPLS11.2, Buderus Logatherm WPLS13.2 Buderus Logatherm WPLS15.2
<b>Testing basis</b>	DIN EN 14511-1; DIN EN 14511-2; DIN EN 14511-3; DIN EN 14511-4:2013-12 DIN EN 14825:2013-12 DIN EN 12102:2013-10 DIN EN 16147:2011-04 European KEYMARK Scheme Heat Pumps Rev. 2 (2017-03)
<b>Mark of conformity</b>	
<b>Registration No.</b>	011-1W0143
<b>Valid until</b>	2027-07-31
<b>Right of use</b>	This certificate entitles the holder to use the mark of conformity shown above in conjunction with the specified registration number.

See annex for further information.

2017-09-26

Dipl.-Wi.-Ing. (FH) Sören Scholz  
Head of Certification Body

S. S.



# ANNEX

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<b>Certificate</b>	011-1W0143 dated 2017-09-26
<b>Technical Data</b>	See technical data sheet to the above mentioned registration number at <a href="http://www.dincertco.tuv.com">www.dincertco.tuv.com</a>
<b>Testing laboratory/ Inspection body</b>	RISE Research Institutes of Sweden AB PO Box 857 501 15 Boras SWEDEN
<b>Test report(s)</b>	4P07069-03 dated 2015-05-05



This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Summary of	Buderus Logatherm WPLS.11/13/15.2	Reg. No.	011-1W0143
Certificate Holder			
Name	Bosch Thermotechnik GmbH (Buderus)		
Address	Sophienstraße 30-32	Zip	35576
City	Wetzlar	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	RISE Research Institutes of Sweden AB		
Subtype title	Buderus Logatherm WPLS.11/13/15.2		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	HFC-410a		
Mass Of Refrigerant	2.3 kg		
Certification Date	26.09.2017		
Testing basis	n/a		

## Model: Buderus Logatherm WPLS15.2 RE

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.65 kW	8.36 kW
El input	2.19 kW	3.06 kW
COP	4.41	2.73
Indoor water flow rate	1.64 m <sup>3</sup> /h	0.92 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	123 %
Prated	13.00 kW	11.00 kW
SCOP	3.90	3.15
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	11.10 kW	9.30 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.70 kW	6.00 kW
COP Tj = +2 °C	3.71	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

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Pdh Tj = Tbiv	12.50 kW	10.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	12.50 kW	10.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6612 kWh	6942 kWh

## Model: Buderus Logatherm WPLS13.2 RTS

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.21 kW	8.02 kW
El input	2.09 kW	2.96 kW
COP	4.40	2.70
Indoor water flow rate	1.57 m <sup>3</sup> /h	0.88 m <sup>3</sup> /h

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Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
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Prated	11.00 kW	10.00 kW
SCOP	3.90	3.10
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	9.90 kW	8.40 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.00 kW	6.00 kW
COP Tj = +2 °C	3.72	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
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Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01



Pdh Tj = Tbiv	11.20 kW	9.50 kW
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Pdh Tj = TOL	11.20 kW	9.50 kW
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WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5949 kWh	6356 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	71 %
COP	1.68
Heating up time	3:20 h:min
Standby power input	60.0 W
Reference hot water temperature	56.4 °C
Mixed water at 40°C	304 l

## Model: Buderus Logatherm WPLS13.2 RT

### General Data

Power supply	3x400V 50Hz
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Supplementary Heater: PSUP	0.00 kW	0.00 kW
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Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5949 kWh	6356 kWh

## Model: Buderus Logatherm WPLS11.2 RTS

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.60 kW	7.50 kW
El input	1.95 kW	2.78 kW
COP	4.40	2.70
Indoor water flow rate	1.47 m <sup>3</sup> /h	0.83 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
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<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	152 %	119 %
Prated	10.00 kW	9.00 kW
SCOP	3.88	3.05
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	8.80 kW	7.50 kW
COP Tj = -7 °C	2.71	2.10
Pdh Tj = +2 °C	5.90 kW	6.00 kW
COP Tj = +2 °C	3.81	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
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PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5324 kWh	5770 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	71 %
COP	1.68
Heating up time	3:20 h:min
Standby power input	60.0 W
Reference hot water temperature	56.4 °C
Mixed water at 40°C	304 l



## Model: Buderus Logatherm WPLS11.2 RT

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.60 kW	7.50 kW
El input	1.95 kW	2.78 kW
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Defrost test	passed

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<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	152 %	119 %
Prated	10.00 kW	9.00 kW
SCOP	3.88	3.05
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	8.80 kW	7.50 kW
COP Tj = -7 °C	2.71	2.10
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Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
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Indoor water flow rate	1.64 m <sup>3</sup> /h	0.92 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	123 %
Prated	13.00 kW	11.00 kW
SCOP	3.90	3.15
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	11.10 kW	9.30 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.70 kW	6.00 kW
COP Tj = +2 °C	3.71	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	12.50 kW	10.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	12.50 kW	10.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6612 kWh	6942 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	71 %
COP	1.68
Heating up time	3:20 h:min
Standby power input	60.0 W
Reference hot water temperature	56.4 °C
Mixed water at 40°C	304 l

## Model: Buderus Logatherm WPLS15.2 RB

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	9.65 kW	8.36 kW
El input	2.19 kW	3.06 kW
COP	4.41	2.73
Indoor water flow rate	1.64 m <sup>3</sup> /h	0.92 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate



<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	153 %	123 %
Prated	13.00 kW	11.00 kW
SCOP	3.90	3.15
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	11.10 kW	9.30 kW
COP Tj = -7 °C	2.71	2.11
Pdh Tj = +2 °C	6.70 kW	6.00 kW
COP Tj = +2 °C	3.71	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.31
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	12.50 kW	10.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	12.50 kW	10.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6612 kWh	6942 kWh

## Model: Buderus Logatherm WPLS11.2 RE

### General Data

Power supply	3x400V 50Hz
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### Heating

#### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.60 kW	7.50 kW
El input	1.95 kW	2.78 kW
COP	4.40	2.70
Indoor water flow rate	1.47 m <sup>3</sup> /h	0.83 m <sup>3</sup> /h

#### EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

### Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	152 %	119 %
Prated	10.00 kW	9.00 kW
SCOP	3.88	3.05
Tbiv	-10 °C	-10 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7 °C	8.80 kW	7.50 kW
COP Tj = -7 °C	2.71	2.10
Pdh Tj = +2 °C	5.90 kW	6.00 kW
COP Tj = +2 °C	3.81	3.11
Pdh Tj = +7 °C	6.50 kW	6.00 kW
COP Tj = +7 °C	5.71	4.30
Pdh Tj = 12 °C	6.50 kW	6.00 kW
COP Tj = 12 °C	5.71	5.01

This information was downloaded from the HP KEYMARK database on 16 Mar 2020

Pdh Tj = Tbiv	10.00 kW	8.50 kW
COP Tj = Tbiv	2.61	1.81
Pdh Tj = TOL	10.00 kW	8.50 kW
COP Tj = TOL	2.61	1.81
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	11 W	11 W
PTO	51 W	51 W
PSB	11 W	11 W
PCK	100 W	100 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5324 kWh	5770 kWh