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Summary of	Buderus Logatherm WSW196i.2/186 -6 and -8	Reg. No.	011-1W0434
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 WSW196i.2/186 -6 and -8		
Heat Pump Type	Brine/Water		
Refrigerant	R410a		
Mass Of Refrigerant	1.35 kg		
Certification Date	08.12.2020		
Testing basis	HP KEYMARK certification scheme rules rev. 7		



# Model: WSW196i.2-6 T180 (+W) / 186-6 T180

General Data		
Power supply	3x400V 50Hz	
Off-peak product	No	

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.85 kW	5.23 kW
El input	1.34 kW	1.90 kW
СОР	4.36	2.76
Indoor water flow rate	1.02 m³/h	0.57 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

# **Average Climate**



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	211 %	147 %
Prated	6.00 kW	5.00 kW
SCOP	5.47	3.87
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.17 kW	4.63 kW
COP Tj = -7°C	4.70	3.01
Pdh Tj = +2°C	3.15 kW	2.82 kW
COP Tj = +2°C	5.56	3.91
Pdh Tj = +7°C	2.02 kW	1.81 kW
COP Tj = +7°C	6.20	4.59
Pdh Tj = 12°C	2.12 kW	1.97 kW
COP Tj = 12°C	6.09	4.63
Pdh Tj = Tbiv	5.85 kW	5.23 kW
COP Tj = Tbiv	4.36	2.76





Pdh Tj = TOL	5.85 kW	5.23 kW
COP Tj = TOL	4.36	2.76
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2166 kWh	2749 kWh

# Colder Climate

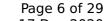
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	222 %	154 %
Prated	6.00 kW	5.00 kW
SCOP	5.76	4.04





THIS IIIIOTHIALION WAS	generated by the HP	KEYMARK database on 17 Dec 2020
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.60 kW	3.17 kW
COP Tj = -7°C	5.57	3.75
Pdh Tj = +2°C	2.15 kW	1.93 kW
COP Tj = +2°C	6.25	4.44
Pdh Tj = +7°C	2.13 kW	1.98 kW
$COPTj = +7^{\circ}C$	6.29	4.77
Pdh Tj = 12°C	2.11 kW	2.00 kW
COP Tj = 12°C	5.95	5.04
Pdh Tj = Tbiv	5.85 kW	5.23 kW
COP Tj = Tbiv	4.36	2.76
Pdh Tj = TOL	5.85 kW	5.23 kW
COP Tj = TOL	4.36	2.76
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW





Annual energy consumption Qhe	2477 kWh	3165 kWh	
		l	

# Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	206 %	143 %
Prated	6.00 kW	5.00 kW
SCOP	5.35	3.77
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.85 kW	5.23 kW
COP Tj = +2°C	4.36	2.76
Pdh Tj = +7°C	3.76 kW	3.36 kW
COP Tj = +7°C	5.24	3.54
Pdh Tj = 12°C	2.12 kW	1.97 kW
COP Tj = 12°C	6.14	4.49
Pdh Tj = Tbiv	5.85 kW	5.23 kW





COP Tj = Tbiv	4.36	2.76
Pdh Tj = TOL	5.85 kW	5.23 kW
COP Tj = TOL	4.36	2.76
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1402 kWh	1793 kWh

Domestic Hot Water (DHW)

Average Climate



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	135 %	
СОР	3.27	
Heating up time	01:34 h:min	
Standby power input	30.9 W	
Reference hot water temperature	47.6 °C	
Mixed water at 40°C	211	

# Colder Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	135 %	
СОР	3.27	
Heating up time	01:34 h:min	
Standby power input	30.9 W	
Reference hot water temperature	47.6 °C	
Mixed water at 40°C	211	

# Warmer Climate



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	135 %	
СОР	3.27	
Heating up time	01:34 h:min	
Standby power input	30.9 W	
Reference hot water temperature	47.6 °C	
Mixed water at 40°C	211	



# Model: WSW196i.2-6 (+W) / 186-6

General Data		
Power supply	3x400V 50Hz	

# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	5.85 kW	5.23 kW	
El input	1.34 kW	1.90 kW	
СОР	4.36	2.76	
Indoor water flow rate	1.02 m³/h	0.57 m³/h	

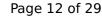
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

# Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	211 %	147 %
Prated	6.00 kW	5.00 kW
SCOP	5.47	3.87
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.17 kW	4.63 kW
COP Tj = -7°C	4.70	3.01
Pdh Tj = +2°C	3.15 kW	2.82 kW
COP Tj = +2°C	5.56	3.91
Pdh Tj = +7°C	2.02 kW	1.81 kW
COP Tj = +7°C	6.20	4.59
Pdh Tj = 12°C	2.12 kW	1.97 kW
COP Tj = 12°C	6.09	4.63
Pdh Tj = Tbiv	5.85 kW	5.23 kW
COP Tj = Tbiv	4.36	2.76





Pdh Tj = TOL	5.85 kW	5.23 kW
COP Tj = TOL	4.36	2.76
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2166 kWh	2749 kWh

### Colder Climate

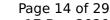
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	222 %	154 %
Prated	6.00 kW	5.00 kW
SCOP	5.76	4.04





This information was generated by the HP KEYMARK database on 17 Dec 2020				
Tbiv	-22 °C	-22 °C		
TOL	-22 °C	-22 °C		
Pdh Tj = -7°C	3.60 kW	3.17 kW		
COP Tj = -7°C	5.57	3.75		
Pdh Tj = +2°C	2.15 kW	1.93 kW		
COP Tj = +2°C	6.25	4.44		
Pdh Tj = $+7^{\circ}$ C	2.13 kW	1.98 kW		
$COPTj = +7^{\circ}C$	6.29	4.77		
Pdh Tj = 12°C	2.11 kW	2.00 kW		
COP Tj = 12°C	5.95	5.04		
Pdh Tj = Tbiv	5.85 kW	5.23 kW		
COP Tj = Tbiv	4.36	2.76		
Pdh Tj = TOL	5.85 kW	5.23 kW		
COP Tj = TOL	4.36	2.76		
WTOL	67 °C	67 °C		
Poff	11 W	11 W		
РТО	11 W	11 W		
PSB	11 W	11 W		
PCK	o w	o w		
Supplementary Heater: Type of energy input	Electric	Electric		
Supplementary Heater: PSUP	0 kW	0 kW		
	I	,		





Annual energy consumption Qhe	2477 kWh	3165 kWh

### Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)

Low temperature 206 %	Medium temperature
206 %	143 %
	1.3 /0
6.00 kW	5.00 kW
5.35	3.77
2 °C	2 °C
2 °C	2 °C
5.85 kW	5.23 kW
4.36	2.76
3.76 kW	3.36 kW
5.24	3.54
2.12 kW	1.97 kW
6.14	4.49
5.85 kW	5.23 kW
	5.35 2 °C 2 °C 5.85 kW 4.36 3.76 kW 5.24 2.12 kW 6.14



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COP Tj = Tbiv	4.36	2.76
Pdh Tj = TOL	5.85 kW	5.23 kW
COP Tj = TOL	4.36	2.76
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1402 kWh	1793 kWh

# Model: WSW196i.2-8 T180 (+W) / 186-8 T180

General Data		
Power supply	3x400V 50Hz	
Off-peak product	No	

# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	7.61 kW	6.73 kW	
El input	1.85 kW	2.56 kW	
СОР	4.11	2.63	
Indoor water flow rate	1.31 m³/h	0.74 m³/h	

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

# **Average Climate**



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	207 %	152 %
Prated	7.61 kW	6.73 kW
SCOP	5.38	3.99
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.04 kW	5.86 kW
COP Tj = -7°C	4.33	2.95
Pdh Tj = +2°C	4.22 kW	3.75 kW
COP Tj = +2°C	5.46	4.04
Pdh Tj = +7°C	2.66 kW	2.52 kW
COP Tj = +7°C	6.15	4.77
Pdh Tj = 12°C	2.10 kW	1.99 kW
COP Tj = 12°C	6.26	4.95
Pdh Tj = Tbiv	7.61 kW	6.73 kW
COP Tj = Tbiv	4.11	2.63





Pdh Tj = TOL	7.61 kW	6.73 kW
COP Tj = TOL	4.11	2.63
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2923 kWh	3482 kWh

# Colder Climate

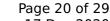
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	220 %	158 %
Prated	7.61 kW	6.73 kW
SCOP	5.70	4.16





THIS IIIIOITIIation was	generated by the nr Ki	EYMARK database on 17 Dec 2020
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.58 kW	4.21 kW
COP Tj = -7°C	5.43	3.79
Pdh Tj = +2°C	3.01 kW	2.50 kW
COP Tj = +2°C	6.16	4.63
Pdh Tj = $+7^{\circ}$ C	2.13 kW	2.01 kW
$COPTj = +7^{\circ}C$	6.51	5.08
Pdh Tj = 12°C	2.10 kW	2.01 kW
COP Tj = 12°C	6.17	5.13
Pdh Tj = Tbiv	7.61 kW	6.73 kW
COP Tj = Tbiv	4.11	2.63
Pdh Tj = TOL	7.61 kW	6.73 kW
COP Tj = TOL	4.11	2.63
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW





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# Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	206 %	153 %
Prated	7.61 kW	6.73 kW
SCOP	5.35	4.02
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.61 kW	6.73 kW
COP Tj = +2°C	4.11	2.63
Pdh Tj = +7°C	5.23 kW	4.14 kW
COP Tj = +7°C	5.10	3.59
Pdh Tj = 12°C	2.66 kW	2.00 kW
COP Tj = 12°C	6.20	4.98
Pdh Tj = Tbiv	7.61 kW	6.73 kW





COP Tj = Tbiv	4.11	2.63
Pdh Tj = TOL	7.61 kW	6.73 kW
COP Tj = TOL	4.11	2.63
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric

0 kW

1899 kWh

0 kW

2237 kWh

Domestic Hot Water (DHW)

Average Climate

Supplementary Heater: PSUP

Annual energy consumption Qhe



EN 16147	
Declared load profile	XL
Efficiency ηDHW	124 %
СОР	3.01
Heating up time	01:31 h:min
Standby power input	34.9 W
Reference hot water temperature	47.6 °C
Mixed water at 40°C	211

# Colder Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	3.01	
Heating up time	01:31 h:min	
Standby power input	34.9 W	
Reference hot water temperature	47.6 °C	
Mixed water at 40°C	211	

# Warmer Climate





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	3.01	
Heating up time	01:31 h:min	
Standby power input	34.9 W	
Reference hot water temperature	47.6 °C	
Mixed water at 40°C	211	



# Model: WSW196i.2-8 (+W) / 186-8

General Data	
Power supply	3x400V 50Hz

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	7.61 kW	6.73 kW
El input	1.85 kW	2.56 kW
СОР	4.11	2.63
Indoor water flow rate	1.31 m³/h	0.74 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

# Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	207 %	152 %
Prated	7.61 kW	6.73 kW
SCOP	5.38	3.99
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.04 kW	5.86 kW
COP Tj = -7°C	4.33	2.95
Pdh Tj = +2°C	4.22 kW	3.75 kW
COP Tj = +2°C	5.46	4.04
Pdh Tj = +7°C	2.66 kW	2.52 kW
COP Tj = +7°C	6.15	4.77
Pdh Tj = 12°C	2.10 kW	1.99 kW
COP Tj = 12°C	6.26	4.95
Pdh Tj = Tbiv	7.61 kW	6.73 kW
COP Tj = Tbiv	4.11	2.63





Pdh Tj = TOL	7.61 kW	6.73 kW
COP Tj = TOL	4.11	2.63
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2923 kWh	3482 kWh

### Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	220 %	158 %
Prated	7.61 kW	6.73 kW
SCOP	5.70	4.16





THIS IIIIOTHIALION WAS	generated by the HF Ki	ETMARK database on 17 Dec 2020
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.58 kW	4.21 kW
COP Tj = -7°C	5.43	3.79
Pdh Tj = +2°C	3.01 kW	2.50 kW
COP Tj = +2°C	6.16	4.63
Pdh Tj = +7°C	2.13 kW	2.01 kW
$COPTj = +7^{\circ}C$	6.51	5.08
Pdh Tj = 12°C	2.10 kW	2.01 kW
COP Tj = 12°C	6.17	5.13
Pdh Tj = Tbiv	7.61 kW	6.73 kW
COP Tj = Tbiv	4.11	2.63
Pdh Tj = TOL	7.61 kW	6.73 kW
COP Tj = TOL	4.11	2.63
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW





Annual energy consumption Qhe	3289 kWh	3988 kWh	

### Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	206 %	153 %
Prated	7.61 kW	6.73 kW
SCOP	5.35	4.02
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.61 kW	6.73 kW
COP Tj = +2°C	4.11	2.63
Pdh Tj = +7°C	5.23 kW	4.14 kW
COP Tj = +7°C	5.10	3.59
Pdh Tj = 12°C	2.66 kW	2.00 kW
COP Tj = 12°C	6.20	4.98
Pdh Tj = Tbiv	7.61 kW	6.73 kW



# $$\operatorname{\textit{Page}}\xspace$ 29 of 29 This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = Tbiv	4.11	2.63
Pdh Tj = TOL	7.61 kW	6.73 kW
COP Tj = TOL	4.11	2.63
WTOL	67 °C	67 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1899 kWh	2237 kWh