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Summary of	Buderus Logatherm WSW196i.2/186 -16	Reg. No.	011-1W0436
Certificate Holder		<u> </u>	
Name	Bosch Thermotechnik GmbH (Buderus)		
Address	Sophienstraße 30-32	Zip	35576
City	Wetzlar	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Buderus Logatherm WSW196i.2/186 -16		
Heat Pump Type	Brine/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.3 kg		
Certification Date	08.12.2020		
Testing basis	HP KEYMARK certification scheme rules rev. 7		



Model: WSW196i.2-16 T180 (+W) / 186-16 T180

Configure model		
Model name WSW196i.2-16 T180 (+W) / 186-16 T180		
Application Heating + DHW + low temp		
Units Indoor		
Climate Zone Colder Climate + Warmer Climate		
Reversibility No		
Cooling mode application (optional) n/a		

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

Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	15.53 kW	14.19 kW		
El input	4.12 kW	5.66 kW		
СОР	3.77	2.51		

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

Warmer Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	41 dB(A)	41 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	207 %	157 %
Prated	15.53 kW	14.19 kW
SCOP	5.38	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.53 kW	14.19 kW
COP Tj = +2°C	3.77	2.51
Pdh Tj = $+7^{\circ}$ C	9.98 kW	9.31 kW
$COP Tj = +7^{\circ}C$	5.10	3.65
Pdh Tj = 12°C	4.89 kW	4.71 kW
COP Tj = 12°C	6.10	5.04
Pdh Tj = Tbiv	15.53 kW	14.19 kW
COP Tj = Tbiv	3.77	2.51
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.53 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.51





WTOL	71 °C	71 °C
Poff	10 W	10 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	3856 kWh	4609 kWh

Colder Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	41 dB(A)	41 dB(A)	

EN 14825		
	Low tempera	ture Medium temperature
η_{s}	214 %	163 %
Prated	15.53 kW	14.19 kW
SCOP	5.55	4.28
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
	,	





Pdh Tj = -7°C 10.06 kW 8.96 kW COP Tj = -7°C 5.22 3.88 Pdh Tj = +2°C 6.20 kW 5.41 kW COP Tj = +2°C 6.08 4.80 Pdh Tj = +7°C 4.91 kW 4.75 kW COP Tj = +7°C 6.16 5.15 Pdh Tj = 12°C 4.88 kW 4.74 kW COP Tj = 12°C 5.96 5.25 Pdh Tj = Tbiv 15.53 kW 14.19 kW COP Tj = Tbiv 3.77 2.51 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 15.53 kW 14.19 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 3.77 2.51 WTOL 71 °C 71 °C Poff 10 W 10 W PTO 10 W 10 W PSB 10 W 10 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0 kW 0 kW Annual energy consumption Ohe 6898 kWh 8176 kWh		I	
Pdh Tj = +2°C 6.20 kW 5.41 kW COP Tj = +2°C 6.08 4.80 Pdh Tj = +7°C 4.91 kW 4.75 kW COP Tj = +7°C 6.16 5.15 Pdh Tj = 12°C 4.88 kW 4.74 kW COP Tj = 12°C 5.96 5.25 Pdh Tj = Tbiv 15.53 kW 14.19 kW COP Tj = Tbiv 3.77 2.51 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = -7°C	10.06 kW	8.96 kW
COP Tj = +2°C 6.08 4.80 Pdh Tj = +7°C 4.91 kW 4.75 kW COP Tj = +7°C 6.16 5.15 Pdh Tj = 12°C 4.88 kW 4.74 kW COP Tj = Tbiv 15.53 kW 14.19 kW COP Tj = ToL or Pdh Tj = Tdesignh if TOL < Tdesignh 3.77 2.51 WTOL Poff 10 W 10 W PSB 10 W Supplementary Heater: Type of energy input Electricity Supplementary Heater: PSUP 6.08 4.80 4.80 4.80 4.75 kW 4.76 kW 4.76 kW 4.76 kW 4.76 kW 4.76 kW 4.77 kW 4.77 kW 4.78 kW 4.74 kW 4.76 kW 4.76 kW 4.76 kW 4.76 kW 4.77 kW 4.77 kW 4.78 kW 4.74 kW 4.76 kW 4.76 kW 4.76 kW 4.77 kW 4.77 kW 4.77 kW 4.78 kW 4.76 kW 4.77 kW 4.78 kW 4.77 kW 4.78 kW 4.76 kW 4.77 kW 4.78 kW 4.76 kW 4.76 kW 4.76 kW 4.76 kW 4.76 kW 4.77 kW 4.77 kW 4.78 kW 4.74 kW 4.75 kW 4.76 kW 4.77 kW 4.80 kW	COP Tj = -7°C	5.22	3.88
Pdh Tj = +7°C 4.91 kW 4.75 kW COP Tj = +7°C 6.16 5.15 Pdh Tj = 12°C 4.88 kW 4.74 kW COP Tj = 12°C 5.96 5.25 Pdh Tj = Tbiv 15.53 kW 14.19 kW COP Tj = Tbiv 3.77 2.51 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = +2°C	6.20 kW	5.41 kW
COP Tj = +7°C 6.16 5.15 Pdh Tj = 12°C 4.88 kW 4.74 kW COP Tj = 12°C 5.96 5.25 Pdh Tj = Tbiv 15.53 kW 14.19 kW COP Tj = Tbiv 3.77 2.51 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 15.53 kW 14.19 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 3.77 2.51 WTOL 71 °C 71 °C Poff 10 W 10 W PTO 10 W 10 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP	COP Tj = +2°C	6.08	4.80
Pdh Tj = 12°C 4.88 kW 4.74 kW COP Tj = 12°C 5.96 5.25 Pdh Tj = Tbiv 15.53 kW 14.19 kW COP Tj = Tbiv 3.77 2.51 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = +7°C	4.91 kW	4.75 kW
COP Tj = 12°C	$COP Tj = +7^{\circ}C$	6.16	5.15
Pdh Tj = Tbiv 15.53 kW 14.19 kW COP Tj = Tbiv 3.77 2.51 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = 12°C	4.88 kW	4.74 kW
COP Tj = Tbiv 3.77 2.51 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	COP Tj = 12°C	5.96	5.25
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = Tbiv	15.53 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	COP Tj = Tbiv	3.77	2.51
WTOL 71 °C 71 °C Poff 10 W 10 W PTO 10 W 10 W PSB 10 W 10 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0 kW 0 kW	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.53 kW	14.19 kW
Poff 10 W 10 W PTO 10 W 10 W PSB 10 W 10 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0 kW 0 kW	COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.51
PTO 10 W 10 W PSB 10 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0 kW 0 kW	WTOL	71 °C	71 °C
PSB 10 W 10 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0 kW 0 kW	Poff	10 W	10 W
PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0 kW 0 kW	РТО	10 W	10 W
Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0 kW 0 kW	PSB	10 W	10 W
Supplementary Heater: PSUP 0 kW 0 kW	PCK	o w	o w
	Supplementary Heater: Type of energy input	Electricity	Electricity
Annual energy consumption Qhe 6898 kWh 8176 kWh	Supplementary Heater: PSUP	0 kW	0 kW
	Annual energy consumption Qhe	6898 kWh	8176 kWh

Average Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	41 dB(A)	41 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	205 %	156 %
Prated	15.53 kW	14.19 kW
SCOP	5.33	4.10
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.90 kW	12.81 kW
COP Tj = -7°C	4.08	2.82
Pdh Tj = +2°C	8.92 kW	7.91 kW
COP Tj = +2°C	5.43	4.23
Pdh Tj = +7°C	5.71 kW	5.39 kW
$COP Tj = +7^{\circ}C$	6.09	4.79
Pdh Tj = 12°C	4.88 kW	4.69 kW
COP Tj = 12°C	6.07	5.07
Pdh Tj = Tbiv	15.53 kW	14.19 kW
COP Tj = Tbiv	3.77	2.51





Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.53 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.51
WTOL	71 °C	71 °C
Poff	10 W	10 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	6018 kWh	7154 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	127 %	
СОР	3.05	
Heating up time	01:09 h:min	
Standby power input	43.0 W	
Reference hot water temperature	46.9 °C	
Mixed water at 40°C	206 I	



Colder Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	127 %	
СОР	3.05	
Heating up time	01:09 h:min	
Standby power input	43.0 W	
Reference hot water temperature	46.9 °C	
Mixed water at 40°C	206	

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	127 %	
СОР	3.05	
Heating up time	01:09 h:min	
Standby power input	43.0 W	
Reference hot water temperature	46.9 °C	
Mixed water at 40°C	206 I	



Model: WSW196i.2-16 (+W) / 186-16

Configure model		
Model name	WSW196i.2-16 (+W) / 186-16	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

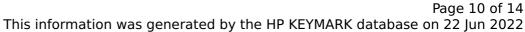
General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	15.53 kW	14.19 kW	
El input	4.12 kW	5.66 kW	
СОР	3.77	2.51	

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

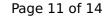
Warmer Climate





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Pdh Tj = $+2$ °C	15.53 kW	14.19 kW	
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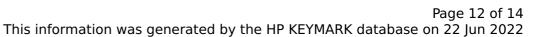


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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	3856 kWh	4609 kWh

Colder Climate

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COP Tj = Tbiv	3.77	2.51
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.51
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	6898 kWh	8176 kWh

Average Climate





EN 12102-1		
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TOL	-10 °C	-10 °C
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.53 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.51
WTOL	71 °C	71 °C
Poff	10 W	10 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	6018 kWh	7154 kWh