



# ENERG

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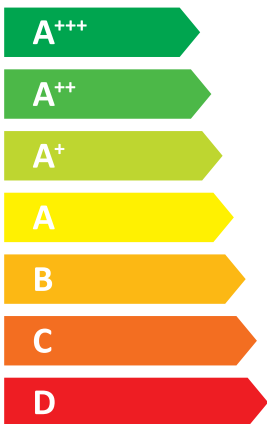
## Bösch

## GEOBLOCK20S-RU50



55 °C

35 °C



- dB



**41** dB

■ 20  
■ **20**  
■ 20  
kW

■ 20  
■ **20**  
■ 20  
kW



# Produktdatenblatt

Delegierte Verordnung (EU) Nr. 811/2013

Name oder Warenzeichen des Lieferanten	<b>Bösch</b>
Modellkennung	<b>GEOBLOCK20S-RU50</b>
Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz (durchschnittliche Klimaverhältnisse – Niedertemperaturbereich)	<b>A+++</b>
Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz (durchschnittliche Klimaverhältnisse – Mitteltemperaturbereich)	<b>A+++</b>
Wärmenennleistung (durchschnittliche Klimaverhältnisse – Niedertemperaturbereich)	<b>20 kW</b>
Wärmenennleistung (durchschnittliche Klimaverhältnisse – Mitteltemperaturbereich)	<b>20 kW</b>
Jahreszeitbedingte Raumheizungs-Energieeffizienz (durchschnittliche Klimaverhältnisse – Niedertemperaturbereich)	<b>213 %</b>
Jahreszeitbedingte Raumheizungs-Energieeffizienz (durchschnittliche Klimaverhältnisse – Mitteltemperaturbereich)	<b>158 %</b>
Jährlicher Energieverbrauch – Endenergie (durchschnittliche Klimaverhältnisse – Niedertemperaturbereich)	<b>7 540 kWh</b>
Jährlicher Energieverbrauch – Brennwert (durchschnittliche Klimaverhältnisse – Niedertemperaturbereich)	<b>- GJ</b>
Jährlicher Energieverbrauch – Endenergie (durchschnittliche Klimaverhältnisse – Mitteltemperaturbereich)	<b>9 965 kWh</b>
Jährlicher Energieverbrauch – Brennwert (durchschnittliche Klimaverhältnisse – Mitteltemperaturbereich)	<b>- GJ</b>
Schallleistungspegel (in Innenräumen)	<b>- dB</b>
Besondere Vorkehrungen	<b>-</b>
<b>Weitere Angaben</b>	
Wärmenennleistung (kältere Klimaverhältnisse – Niedertemperaturbereich)	<b>20 kW</b>
Wärmenennleistung (wärmere Klimaverhältnisse – Niedertemperaturbereich)	<b>20 kW</b>
Wärmenennleistung (kältere Klimaverhältnisse – Mitteltemperaturbereich)	<b>20 kW</b>
Wärmenennleistung (wärmere Klimaverhältnisse – Mitteltemperaturbereich)	<b>20 kW</b>
Jahreszeitbedingte Raumheizungs-Energieeffizienz (kältere Klimaverhältnisse – Niedertemperaturbereich)	<b>206 %</b>
Jahreszeitbedingte Raumheizungs-Energieeffizienz (wärmere Klimaverhältnisse – Niedertemperaturbereich)	<b>204 %</b>
Jahreszeitbedingte Raumheizungs-Energieeffizienz (kältere Klimaverhältnisse – Mitteltemperaturbereich)	<b>159 %</b>

Jahreszeitbedingte Raumheizungs-Energieeffizienz (wärmere Klimaverhältnisse – Mitteltemperaturbereich)	<b>155 %</b>
Jährlicher Energieverbrauch – Endenergie (kältere Klimaverhältnisse – Niedertemperaturbereich)	<b>9 231 kWh</b>
Jährlicher Energieverbrauch – Brennwert (kältere Klimaverhältnisse – Niedertemperaturbereich)	<b>- GJ</b>
Jährlicher Energieverbrauch – Endenergie (wärmere Klimaverhältnisse – Niedertemperaturbereich)	<b>5 032 kWh</b>
Jährlicher Energieverbrauch – Brennwert (wärmere Klimaverhältnisse – Niedertemperaturbereich)	<b>- GJ</b>
Jährlicher Energieverbrauch – Endenergie (kältere Klimaverhältnisse – Mitteltemperaturbereich)	<b>11 809 kWh</b>
Jährlicher Energieverbrauch – Brennwert (kältere Klimaverhältnisse – Mitteltemperaturbereich)	<b>- GJ</b>
Jährlicher Energieverbrauch – Endenergie (wärmere Klimaverhältnisse – Mitteltemperaturbereich)	<b>6 573 kWh</b>
Jährlicher Energieverbrauch – Brennwert (wärmere Klimaverhältnisse – Mitteltemperaturbereich)	<b>- GJ</b>
Schalleistungspegel (im Freien)	<b>41 dB</b>

Das Modell wurde auf dem Unionsmarkt in Verkehr gebracht , und zwar ab dem 01/01/2026.



**EPREL-Eintragungsnummer** 2522242

<https://eprel.ec.europa.eu/qr/2522242>

**Lieferant:** Walter Bösch GmbH & Co KG (Importeur)

**Website:** [www.boesch.at](http://www.boesch.at)

**Kundenbetreuung:**

**Name:** Walter Bösch GmbH & Co KG

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**Anschrift:**

Rasis Bündt 12  
6890 Lustenau  
Österreich

Manufacturer:	Max Weishaupt SE
Model:	GEOBLOCK20S-RU50
	Brine - to-water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	
Application:	low
Climate:	average

Item	Symbol	Value	Unit
<b>Rated heat output (*)</b>	Prated	20	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	P <sub>dh</sub>	18,4	kW
T <sub>j</sub> = +2°C	P <sub>dh</sub>	10,7	kW
T <sub>j</sub> = +7°C	P <sub>dh</sub>	19,7	kW
T <sub>j</sub> = +12°C	P <sub>dh</sub>	12,5	kW
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6,0	kW
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	19,7	kW
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	P <sub>dh</sub>		kW
Bivalent temperature	T <sub>biv</sub>	-10	°C

Item	Symbol	Value	Unit
<b>Seasonal space heating energy efficiency</b>	η <sub>s</sub>	213	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	COP <sub>d</sub>	4,65	
T <sub>j</sub> = +2°C	COP <sub>d</sub>	5,57	
T <sub>j</sub> = +7°C	COP <sub>d</sub>	6,05	
T <sub>j</sub> = +12°C	COP <sub>d</sub>	6,17	
T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	4,49	
T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	4,49	
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COP <sub>d</sub>		
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Heating water operating limit temperature	WTOL	70	°C

Item	Symbol	Value
<b>Degradation co-efficient (**)</b>	C <sub>dh</sub>	
T <sub>j</sub> = -7°C	C <sub>dh</sub>	1,00
T <sub>j</sub> = +2°C	C <sub>dh</sub>	1,00
T <sub>j</sub> = +7°C	C <sub>dh</sub>	1,00
T <sub>j</sub> = +12°C	C <sub>dh</sub>	0,98
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	C <sub>dh</sub>	

Power consumption in modes other than active mode

Off mode	P <sub>OFF</sub>	0,020	kW
Thermostat-off mode	P <sub>TO</sub>	0,005	kW
Standby mode	P <sub>SB</sub>	0,020	kW
Crankcase heater mode	P <sub>CK</sub>	0,010	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	0 / 0	dB
Annual energy consumption	Q <sub>HE</sub>	7.540	kWh

For heat combination heater:

<b>Declared load profile</b>		
Daily electricity consumption	Q <sub>elec</sub>	kWh

Supplementary heater

Rated heat output (*)	P <sub>sup</sub>	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--		m <sup>3</sup> /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--	1,00	m <sup>3</sup> /h

<b>Water heating energy efficiency</b>	η <sub>wh</sub>		%
Annual electricity consumption	AEC		kWh

Contact details Max Weishaupt SE, Max-Weishaupt-Straße 14, 88475 Schwendi, Tel. 07353/83-0

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0,9.

Manufacturer:	Max Weishaupt SE
Model:	GEOBLOCK20S-RU50
	Brine - to-water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	
Application:	medium
Climate:	average

Item	Symbol	Value	Unit
<b>Rated heat output (*)</b>	Prated	20	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	Pdh	17,5	kW
T <sub>j</sub> = +2°C	Pdh	10,6	kW
T <sub>j</sub> = +7°C	Pdh	7,1	kW
T <sub>j</sub> = +12°C	Pdh	4,1	kW
T <sub>j</sub> = bivalent temperature	Pdh	20,5	kW
T <sub>j</sub> = operation limit temperature	Pdh	20,5	kW
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	Pdh		kW
Bivalent temperature	T <sub>biv</sub>	-10	°C

Item	Symbol	Value	Unit
<b>Seasonal space heating energy efficiency</b>	η <sub>s</sub>	158	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	COPd	3,24	
T <sub>j</sub> = +2°C	COPd	4,09	
T <sub>j</sub> = +7°C	COPd	4,84	
T <sub>j</sub> = +12°C	COPd	5,40	
T <sub>j</sub> = bivalent temperature	COPd	3,04	
T <sub>j</sub> = operation limit temperature	COPd	3,04	
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COPd		
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Heating water operating limit temperature	WTOL	70	°C

Item	Symbol	Value
<b>Degradation co-efficient (**)</b>	Cdh	
T <sub>j</sub> = -7°C	Cdh	1,00
T <sub>j</sub> = +2°C	Cdh	1,00
T <sub>j</sub> = +7°C	Cdh	1,00
T <sub>j</sub> = +12°C	Cdh	0,98
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	Cdh	

Power consumption in modes other than active mode

Off mode	P <sub>OFF</sub>	0,020	kW
Thermostat-off mode	P <sub>TO</sub>	0,005	kW
Standby mode	P <sub>SB</sub>	0,020	kW
Crankcase heater mode	P <sub>CK</sub>	0,010	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	0 / 0	dB
Annual energy consumption	Q <sub>HE</sub>	9.965	kWh

For heat combination heater:

<b>Declared load profile</b>			
Daily electricity consumption	Q <sub>elec</sub>		kWh

Supplementary heater

Rated heat output (*)	P <sub>sup</sub>	0,00	kW
Type of energy input		electricity	

For air-to-water heat pumps: Rated air flow rate, outdoors	--		m <sup>3</sup> /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--	0,90	m <sup>3</sup> /h

<b>Water heating energy efficiency</b>	η <sub>wh</sub>		%
Annual electricity consumption	AEC		kWh

Contact details Max Weishaupt SE, Max-Weishaupt-Straße 14, 88475 Schwendi, Tel. 07353/83-0

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Manufacturer:	Max Weishaupt SE
Model:	GEOBLOCK20S-RU50
	Brine - to-water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	
Application:	low
Climate:	colder

Item	Symbol	Value	Unit
<b>Rated heat output (*)</b>	Prated	20	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	P <sub>dh</sub>	12,2	kW
T <sub>j</sub> = +2°C	P <sub>dh</sub>	7,4	kW
T <sub>j</sub> = +7°C	P <sub>dh</sub>	7,0	kW
T <sub>j</sub> = +12°C	P <sub>dh</sub>	4,0	kW
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	19,7	kW
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	19,7	kW
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	P <sub>dh</sub>	19,7	kW
Bivalent temperature	T <sub>biv</sub>	-22	°C

Item	Symbol	Value	Unit
<b>Seasonal space heating energy efficiency</b>	η <sub>s</sub>	206	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	COP <sub>d</sub>	5,20	
T <sub>j</sub> = +2°C	COP <sub>d</sub>	5,60	
T <sub>j</sub> = +7°C	COP <sub>d</sub>	5,80	
T <sub>j</sub> = +12°C	COP <sub>d</sub>	5,90	
T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	4,39	
T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	4,39	
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COP <sub>d</sub>		
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Heating water operating limit temperature	WTOL	70	°C

Item	Symbol	Value
<b>Degradation co-efficient (**)</b>	C <sub>dh</sub>	
T <sub>j</sub> = -7°C	C <sub>dh</sub>	1,00
T <sub>j</sub> = +2°C	C <sub>dh</sub>	1,00
T <sub>j</sub> = +7°C	C <sub>dh</sub>	1,00
T <sub>j</sub> = +12°C	C <sub>dh</sub>	0,90
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	C <sub>dh</sub>	

Power consumption in modes other than active mode

Off mode	P <sub>OFF</sub>	0,020	kW
Thermostat-off mode	P <sub>TO</sub>	0,005	kW
Standby mode	P <sub>SB</sub>	0,020	kW
Crankcase heater mode	P <sub>CK</sub>	0,010	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	0 / 0	dB
Annual energy consumption	Q <sub>HE</sub>	9.231	kWh

For heat combination heater:

<b>Declared load profile</b>			
Daily electricity consumption	Q <sub>elec</sub>		kWh

Supplementary heater

Rated heat output (*)	P <sub>sup</sub>	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--		m <sup>3</sup> /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--	1,00	m <sup>3</sup> /h

<b>Water heating energy efficiency</b>	η <sub>wh</sub>		%
Annual electricity consumption	AEC		kWh

Contact details Max Weishaupt SE, Max-Weishaupt-Straße 14, 88475 Schwendi, Tel. 07353/83-0

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0,9.

Manufacturer:	Max Weishaupt SE
Model:	GEOBLOCK20S-RU50
	Brine - to-water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	
Application:	medium
Climate:	colder

Item	Symbol	Value	Unit
<b>Rated heat output (*)</b>	Prated	20	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	P <sub>dh</sub>	12,3	kW
T <sub>j</sub> = +2°C	P <sub>dh</sub>	7,2	kW
T <sub>j</sub> = +7°C	P <sub>dh</sub>	4,8	kW
T <sub>j</sub> = +12°C	P <sub>dh</sub>	4,1	kW
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	20,0	kW
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	20,0	kW
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	P <sub>dh</sub>		kW
Bivalent temperature	T <sub>biv</sub>	-22	°C

Item	Symbol	Value	Unit
<b>Seasonal space heating energy efficiency</b>	η <sub>s</sub>	159	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	COP <sub>d</sub>	3,70	
T <sub>j</sub> = +2°C	COP <sub>d</sub>	4,60	
T <sub>j</sub> = +7°C	COP <sub>d</sub>	5,20	
T <sub>j</sub> = +12°C	COP <sub>d</sub>	5,40	
T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3,04	
T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	3,04	
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COP <sub>d</sub>		
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Heating water operating limit temperature	WTOL	70	°C

Item	Symbol	Value
<b>Degradation co-efficient (**)</b>	C <sub>dh</sub>	
T <sub>j</sub> = -7°C	C <sub>dh</sub>	1,00
T <sub>j</sub> = +2°C	C <sub>dh</sub>	1,00
T <sub>j</sub> = +7°C	C <sub>dh</sub>	1,00
T <sub>j</sub> = +12°C	C <sub>dh</sub>	0,90
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	C <sub>dh</sub>	

Power consumption in modes other than active mode

Off mode	P <sub>OFF</sub>	0,020	kW
Thermostat-off mode	P <sub>TO</sub>	0,005	kW
Standby mode	P <sub>SB</sub>	0,020	kW
Crankcase heater mode	P <sub>CK</sub>	0,010	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	0 / 0	dB
Annual energy consumption	Q <sub>HE</sub>	11.809	kWh

For heat combination heater:

<b>Declared load profile</b>		
Daily electricity consumption	Q <sub>elec</sub>	kWh

Supplementary heater

Rated heat output (*)	P <sub>sup</sub>	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--		m <sup>3</sup> /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--	0,90	m <sup>3</sup> /h

<b>Water heating energy efficiency</b>	η <sub>wh</sub>		%
Annual electricity consumption	AEC		kWh

Contact details Max Weishaupt SE, Max-Weishaupt-Straße 14, 88475 Schwendi, Tel. 07353/83-0

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0,9.

Manufacturer:	Max Weishaupt SE
Model:	GEOBLOCK20S-RU50
	Brine - to-water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	
Application:	low
Climate:	warmer

Item	Symbol	Value	Unit
<b>Rated heat output (*)</b>	Prated	20	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh		kW
Tj = +2°C	Pdh	20,0	kW
Tj = +7°C	Pdh	4,9	kW
Tj = +12°C	Pdh	4,0	kW
Tj = bivalent temperature	Pdh	19,7	kW
Tj = operation limit temperature	Pdh	19,7	kW
For air-to-water heat pumps: Tj = -15°C (if TOL <-20°C)	Pdh		kW
Bivalent temperature	Tbiv	2	°C

Item	Symbol	Value	Unit
<b>Seasonal space heating energy efficiency</b>	ηs	204	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	COPd		
Tj = +2°C	COPd	4,49	
Tj = +7°C	COPd	5,00	
Tj = +12°C	COPd	6,05	
Tj = bivalent temperature	COPd	4,49	
Tj = operation limit temperature	COPd	4,49	
For air-to-water heat pumps: Tj = -15°C (if TOL <-20°C)	COPd		
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Heating water operating limit temperature	WTOL	70	°C

Item	Symbol	Value
<b>Degradation co-efficient (**)</b>	Cdh	
Tj = -7°C	Cdh	
Tj = +2°C	Cdh	1,00
Tj = +7°C	Cdh	1,00
Tj = +12°C	Cdh	1,00
For air-to-water heat pumps: Tj = -15°C (if TOL <-20°C)	Cdh	

Power consumption in modes other than active mode

Off mode	P <sub>OFF</sub>	0,020	kW
Thermostat-off mode	P <sub>TO</sub>	0,005	kW
Standby mode	P <sub>SB</sub>	0,020	kW
Crankcase heater mode	P <sub>CK</sub>	0,010	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	0 / 0	dB
Annual energy consumption	Q <sub>HE</sub>	5.032	kWh

For heat combination heater:

<b>Declared load profile</b>			
Daily electricity consumption	Q <sub>elec</sub>		kWh

Supplementary heater

Rated heat output (*)	P <sub>sup</sub>	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--		m <sup>3</sup> /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--	1,00	m <sup>3</sup> /h

<b>Water heating energy efficiency</b>	η <sub>wh</sub>		%
Annual electricity consumption	AEC		kWh

Contact details Max Weishaupt SE, Max-Weishaupt-Straße 14, 88475 Schwendi, Tel. 07353/83-0

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Manufacturer:	Max Weishaupt SE
Model:	GEOBLOCK20S-RU50
	Brine - to-water heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	
Application:	medium
Climate:	warmer

Item	Symbol	Value	Unit
<b>Rated heat output (*)</b>	Prated	20	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	Pdh		kW
T <sub>j</sub> = +2°C	Pdh	20,0	kW
T <sub>j</sub> = +7°C	Pdh	13,0	kW
T <sub>j</sub> = +12°C	Pdh	6,0	kW
T <sub>j</sub> = bivalent temperature	Pdh	20,0	kW
T <sub>j</sub> = operation limit temperature	Pdh	20,0	kW
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	Pdh		kW
Bivalent temperature	T <sub>biv</sub>	2	°C

Item	Symbol	Value	Unit
<b>Seasonal space heating energy efficiency</b>	η <sub>s</sub>	155	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	COPd		
T <sub>j</sub> = +2°C	COPd	3,04	
T <sub>j</sub> = +7°C	COPd	3,70	
T <sub>j</sub> = +12°C	COPd	4,80	
T <sub>j</sub> = bivalent temperature	COPd	3,04	
T <sub>j</sub> = operation limit temperature	COPd	3,04	
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COPd		
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Heating water operating limit temperature	WTOL	70	°C

Item	Symbol	Value
<b>Degradation co-efficient (**)</b>	Cdh	
T <sub>j</sub> = -7°C	Cdh	
T <sub>j</sub> = +2°C	Cdh	1,00
T <sub>j</sub> = +7°C	Cdh	1,00
T <sub>j</sub> = +12°C	Cdh	0,90
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	Cdh	

Power consumption in modes other than active mode

Off mode	P <sub>OFF</sub>	0,020	kW
Thermostat-off mode	P <sub>TO</sub>	0,005	kW
Standby mode	P <sub>SB</sub>	0,020	kW
Crankcase heater mode	P <sub>CK</sub>	0,010	kW

Other items

Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	0 / 0	dB
Annual energy consumption	Q <sub>HE</sub>	6.573	kWh

For heat combination heater:

<b>Declared load profile</b>		
Daily electricity consumption	Q <sub>elec</sub>	kWh

Supplementary heater

Rated heat output (*)	P <sub>sup</sub>	0,00	kW
Type of energy input	electricity		

For air-to-water heat pumps: Rated air flow rate, outdoors	--		m <sup>3</sup> /h
For water-/brine-to water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	--	0,90	m <sup>3</sup> /h

<b>Water heating energy efficiency</b>	η <sub>wh</sub>		%
Annual electricity consumption	AEC		kWh

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(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.