



TECHNICAL DATA

GEOHERMAL HEAT PUMPS IGLU® Aleut



NAUSEQUINAL	SARAFUNAL	COF
110 _{wh}	4.95 _{wh}	4.51

TABLE OF CONTENTS

Technical data of IGLU® Aleut fixed capacity heat pumps	3
Technical data of IGLU® Aleut WT fixed capacity heat pump with water heater	4
Annex to the technical characteristics according to European Commission Regulation No 813/20139	
Technical data of IGLU® Aleut 5 fixed capacity heat pump.....	9
Technical data of IGLU® Aleut 7 fixed capacity heat pump.....	10
Technical data of IGLU® Aleut 9 fixed capacity heat pump.....	11
Technical data of IGLU® Aleut 11 fixed capacity heat pump	12
Technical data of IGLU® Aleut 13 fixed capacity heat pump	13
Technical data of IGLU® Aleut 16 fixed capacity heat pump	14
Technical data of IGLU® Aleut 5 WT fixed capacity heat pump with boiler	15
Technical data of IGLU® Aleut 7 WT fixed capacity heat pump with boiler	16
Technical data of IGLU® Aleut 9 WT fixed capacity heat pump with boiler	17
Technical data of IGLU® Aleut 11 WT fixed capacity heat pump with boiler	18
Technical data of IGLU® Aleut 13 WT fixed capacity heat pump with boiler	19
Technical data of IGLU® Aleut 16 WT fixed capacity heat pump with boiler	20
Technical data of IGLU® Aleut 7 WTI variable capacity heat pump with integrated boiler	21
Technical data of IGLU® Aleut 12 WTI variable capacity heat pump with integrated boiler	22
Technical data of IGLU® Aleut 18 WTI variable capacity heat pump with integrated boiler	23
Technical data of IGLU® Aleut 7 I variable capacity heat pump.....	24
Technical data of IGLU® Aleut 12 I variable capacity heat pump.....	25
Technical data of IGLU® Aleut 18 I variable capacity heat pump.....	26

Technical data of IGLU® Aleut fixed capacity heat pumps

	Units	5 kW	7 kW	9 kW	11 kW	13 kW	16 kW
Brine/water used							
Thermal power (B0/W35) ¹⁾	kW	5,24	7,25	9,22	10,95	13,07	15,45
Thermal power (B0/W45) ¹⁾	kW	4,89	6,85	8,67	9,98	12,30	14,75
Thermal power (B0/W55) ¹⁾	kW	4,67	6,46	8,22	9,76	11,65	13,77
COP (B0/W35) ¹⁾	-	4,37	4,42	4,45	4,52	4,54	4,46
COP (B0/W45) ¹⁾	-	3,37	3,42	3,47	3,41	3,47	3,52
COP (B0/W55) ¹⁾	-	2,66	2,69	2,70	2,75	2,76	2,71
SCOP (B0/W35)	-	5,55	5,66	5,72	5,86	5,77	5,77
SCOP (B0/W45)	-	4,14	4,22	4,26	4,37	4,3	4,3
SCOP (B0/W55)	-	3,99	4,07	4,11	4,22	4,15	4,15
Brine circuit							
Rated flow (DT = 3K) ²⁾	m³/h	1,50	2,0	2,50	3,00	3,50	4,0
Permissible external pressure drop ²⁾	kPa	73	80	89	70	55	52
Maximum pressure	bar	4					
Volume (internal)	l	5					6
Operating temperature	°C	from -10 to +20					
Connection (Cu)	mm	28					
Compressor							
Type		Spiral "Scroll"					
Mass of refrigerant R 407C ³⁾	kg	1,20	1,30	1,35	1,40	1,50	1,50
Maximum pressure	bar	30					
Heating system							
Rated flow (DT = 7K)	m³/h	1,00	1,50	2,00	2,00	2,20	2,20
Min, flow temperature	°C	15					
Max, flow temperature	°C	65					
Max, permissible operating pressure	bar	4,0					
Connection (Cu)	mm	28					
Power network connection values							
Electrical connections		3/N/PE 400V/ 50Hz					
Inertial fuse; with electric heater 3kW/ 6kW/ 9kW	A	10/16/20	16/16/20	16/20/25	16/25/25	20/25/32	20/25/32
Compressor rated power (B0/W35)	kW	1,19	1,64	2,06	2,56	3,06	3,46
Max, current with inrush current limiter	A	4,10	5,20	6,80	8,23	10,10	11,8
Type of protection	IP	IP20					
General information							
Permissible ambient temperatures	°C	from +10 to +35					
Sound power level ⁴⁾	dBA	42					45
Dimensions (width x depth x height)	mm	600 x 600 x 1100					
Weight (without packaging)	kg	102	110	115	130	135	145

Recommended maximum heating coil area for hot water boiler:

Thermal power, kW	Coil area, m²
5 – 7	< 2,5
9 – 11	< 3
13	< 3,5
16 – 18	< 4
24	< 6

Note: for higher power heat pumps hot water capacity should be „fresh water“ type

1) With internal pump according to EN 14511

2) With ethylene glycol

3) Greenhouse potential, GWP100 = 1774

4) According to EN 3743-1

Technical data of IGLU® Aleut WT fixed capacity heat pump with water heater

	Units	5 kW	7 kW	9 kW	11 kW	13 kW	16 kW
Brine/water used							
Thermal power (B0/W35) ¹⁾	kW	5,24	7,25	9,22	10,95	13,07	15,45
Thermal power (B0/W45) ¹⁾	kW	4,89	6,85	8,67	9,98	12,30	14,75
Thermal power (B0/W55) ¹⁾	kW	4,67	6,46	8,22	9,76	11,65	13,77
COP (B0/W35) ¹⁾	-	4,37	4,42	4,45	4,52	4,54	4,46
COP (B0/W45) ¹⁾	-	3,37	3,42	3,47	3,41	3,47	3,52
COP (B0/W55) ¹⁾	-	2,66	2,69	2,70	2,75	2,76	2,71
SCOP (B0/W35)	-	5,55	5,66	5,72	5,86	5,77	5,77
SCOP (B0/W45)	-	4,14	4,22	4,26	4,37	4,3	4,3
SCOP (B0/W55)	-	3,99	4,07	4,11	4,22	4,15	4,15
Brine circuit							
Rated flow (DT = 3K) ²⁾	m³/h	1,50	2,0	2,50	3,00	3,50	4,0
Permissible external pressure drop ²⁾	kPa	73	80	89	70	55	52
Maximum pressure	bar	4					
Volume (internal)	l	5					6
Operating temperature	°C	from -10 to +20					
Connection (Cu)	mm	28					
Compressor							
Type		Spiral "Scroll"					
Mass of refrigerant R 407C ³⁾	kg	1,20	1,30	1,35	1,40	1,50	1,50
Maximum pressure	bar	30					
Heating system							
Rated flow (DT = 7K)	m³/h	1,00	1,50	2,00	2,00	2,20	2,20
Min, flow temperature	°C	15					
Max, flow temperature	°C	65					
Max, permissible operating pressure	bar	4,0					
Hot water tank volume	l	200					
Capacity material	-	Stainless steel 1,4404					
Connection (Cu)	mm	28					
Power network connection values							
Electrical connections		3/N/PE 400V/ 50Hz					
Inertial fuse; with electric heater 3kW/ 6kW/ 9kW	A	10/16/20	16/16/20	16/20/25	16/25/25	20/25/32	20/25/32
Compressor rated power (B0/W35)	kW	1,19	1,64	2,06	2,56	3,06	3,46
Max, current with inrush current limiter	A	4,10	5,20	6,80	8,23	10,10	11,8
Type of protection	IP	IP20					
General information							
Permissible ambient temperatures	°C	from +10 to +35					
Sound power level ⁴⁾	dBA	42					45
Dimensions (width x depth x height)	mm	700 x 700 x 1750					
Weight (without packaging)	kg	187	195	200	215	220	230

1) With internal pump according to EN 14511

2) With ethylene glycol

3) Greenhouse potential, GWP100 = 1774

4) According to EN 3743-1

Technical data of IGLU® Aleut WTI variable capacity heat pump with integrated water heater

	Units	Aleut 7 WTI			Aleut 12 WTI			Aleut 18 WTI		
Power network connection values										
Electrical connections		400 V 3 N-50 Hz								
Inertial fuse; with electric heater 3/6/9 kW	A	16-20-25			16-20-25			16-20-25		
Compressor rated power consumption (B0/W35) @ 60 rps	kW	1.91			1.73			2.84		
Compressor Max. current	A	5.85			6.85			10.70		
Type of protection	IP	X1								
Heat (electric) power of a heat pump / COP (B0/W35)										
	kW	Heating capacity (kW)	Input power (kW)	COP	Heating capacity (kW)	Input power (kW)	COP	Heating capacity (kW)	Input power (kW)	COP
Compressor power @ 1200 rpm	kW	2,10	0,50	4,20	3,00	0,70	4,29	4,60	0,90	5,11
Compressor power @ 2100 rpm	kW	3,76	0,77	4,86	5,20	1,00	5,20	8,10	1,40	5,79
Compressor power @ 3500 rpm	kW	6,40	1,20	5,33	8,75	1,64	5,33	13,45	2,41	5,59
Compressor power @ 4300 rpm	kW	7,90	1,60	4,94	10,75	2,02	5,33	16,53	2,96	5,59
Compressor power @ 5300 rpm	kW	N/A	N/A	N/A	12,10	2,70	4,48	20,8	4,30	4,84
Heat (electric) power of a heat pump / COP (B0/W55)										
Compressor power @ 1200 rpm	kW	1,90	0,80	2,38	2,80	0,86	3,27	4,15	1,25	3,32
Compressor power @ 2110 rpm	kW	3,55	1,11	3,20	4,92	1,51	3,27	7,30	2,20	3,32
Compressor power @ 3500 rpm	kW	6,00	1,80	3,33	8,19	2,49	3,29	12,10	3,50	3,46
Compressor power @ 4300 rpm	kW	7,40	2,30	3,22	10,03	2,99	3,36	14,87	4,30	3,46
Compressor power @ 5300 rpm	kW	N/A	N/A	N/A	12,20	3,80	3,21	18,60	5,60	3,32
SCOP										
FLOOR HEATING (35 C°) average climate conditions	kW	5,6			5,72			5,95		
SCOP										
RADIATOR HEATING (55 C°) average climate conditions	kW	3,98			4,14			4,44		

- 1) With internal pump according to EN 14511
- 2) With ethylene glycol
- 3) Greenhouse potential, GWP100 = 1774
- 4) According to EN 3743-1

Brine circuit				
Rated flow (DT = 3K) ²⁾	m ³ /h	2,0	3,00	4,0
Permissible external pressure drop ²⁾	kPa	80	70	52
Maximum pressure	bar	4		
Volume (internal)	l	5		6
Operating temperature	°C	from -10 to +20		
Connection (Cu)	mm	28		
Compressor				
Type		"Scroll"		
Mass of refrigerant R410A	kg	1.3	1.5	2.2
Maximum pressure	bar	45		
Heating system				
Hot water tank volume	l	200		
Max. permissible operating pressure	bar	4.00		
Max. supply temperature	°C	65		
Nominal flow (DT = 6K)	m ³ /h	1	1.4	2.1
Min. flow temperature	°C	15		
DHW tank material	-	Stainless steel 1,4404		
Connection (Cu)	mm	28		
General information				
Permissible ambient temperatures	°C	from +10 to +35		
2Sound power level ⁵⁾	dBA	30-42	30-43	34-43
Dimensions (width x depth x height)	mm	700 x 700 x 1750		
Weight (without packaging)	kg	245	260	284

1) With internal pump according to EN 14511

2) With ethylene glycol

3) Greenhouse potential, GWP100 = 1774

4) According to EN 3743-1

Technical data of IGLU® Aleut I variable capacity heat pump

	Units	Aleut 7 I			Aleut 12 I			Aleut 18 I		
Power network connection values										
Electrical connections		400 V 3 N-50 Hz								
Inertial fuse; with electric heater 3/6/9 kW	A	16-20-25			16-20-25			16-20-25		
Compressor rated power consumption (B0/W35) @ 60 rps	kW	1.91			1.73			2.84		
Compressor Max. current	A	5.85			6.85			10.70		
Type of protection	IP	X1								
Heat (electric) power of a heat pump / COP (B0/W35)										
	kW	Heating capacity (kW)	Input power (kW)	COP	Heating capacity (kW)	Input power (kW)	COP	Heating capacity (kW)	Input power (kW)	COP
Compressor power @ 1200 rpm	kW	2,10	0,50	4,20	3,00	0,70	4,29	4,60	0,90	5,11
Compressor power @ 2100 rpm	kW	3,76	0,77	4,86	5,20	1,00	5,20	8,10	1,40	5,79
Compressor power @ 3500 rpm	kW	6,40	1,20	5,33	8,75	1,64	5,33	13,45	2,41	5,59
Compressor power @ 4300 rpm	kW	7,90	1,60	4,94	10,75	2,02	5,33	16,53	2,96	5,59
Compressor power @ 5300 rpm	kW	N/A	N/A	N/A	12,10	2,70	4,48	20,80	4,30	4,84
Heat (electric) power of a heat pump / COP (B0/W55)										
Compressor power @ 1200 rpm	kW	1,90	0,80	2,38	2,80	0,86	3,27	4,15	1,25	3,32
Compressor power @ 2110 rpm	kW	3,55	1,11	3,20	4,92	1,51	3,27	7,30	2,20	3,32
Compressor power @ 3500 rpm	kW	6,00	1,80	3,33	8,19	2,49	3,29	12,10	3,50	3,46
Compressor power @ 4300 rpm	kW	7,40	2,30	3,22	10,03	2,99	3,36	14,87	4,30	3,46
Compressor power @ 5300 rpm	kW	N/A	N/A	N/A	12,20	3,80	3,21	18,60	5,60	3,32
SCOP										
FLOOR HEATING (35 C°) average climate conditions	kW	5,6			5,72			5,95		
SCOP										
RADIATOR HEATING (55 C°) average climate conditions	kW	3,98			4,14			4,44		

- 1) With internal pump according to EN 14511
- 2) With ethylene glycol
- 3) Greenhouse potential, GWP100 = 1774
- 4) According to EN 3743-1

Brine circuit				
Rated flow (DT = 3K) ²⁾	m³/h	2,0	3,00	4,0
Permissible external pressure drop ²⁾	kPa	80	70	52
Maximum pressure	bar	4		
Volume (internal)	l	5		6
Operating temperature	°C	from -10 to +20		
Connection (Cu)	mm	28		
Compressor				
Type		"Scroll"		
Mass of refrigerant R410A	kg	1.3	1.5	2.2
Maximum pressure	bar	45		
Heating system				
Max. permissible operating pressure	bar	4.00		
Max. supply temperature	°C	65		
Nominal flow (DT = 6K)	m³/h	1	1.4	2.1
Min. flow temperature	°C	15		
Connection (Cu)	mm	28		
General information				
Permissible ambient temperatures	°C	from +10 to +35		
2Sound power level ⁵⁾	dBA	30-42	30-43	34-43
Dimensions (width x depth x height)	mm	600 x 600 x 1700		
Weight (without packaging)	kg	132	160	175

Recommended maximum heating coil area for hot water boiler:

Thermal power, kW	Coil area, m²
5 – 7	< 2,5
9 – 11	< 3
13	< 3,5
16 – 18	< 4
24	< 6

Note: for higher power heat pumps hot water capacity should be „fresh water“ type

- 1) With internal pump according to EN 14511
- 2) With ethylene glycol
- 3) Greenhouse potential, GWP100 = 1774
- 4) According to EN 3743-1

Annex to the technical characteristics according to European Commission Regulation No 813/2013

Technical data of IGLU® Aleut 5 fixed capacity heat pump

Model	IGLU Aleut 5
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	No
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit	Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	5,24	kW	Seasonal energy efficiency for space heating	η_s	147	%
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j				Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7$ °C	P_{dh}	5,50	kW	$T_j = -7$ °C	COP_d or PER_d	5,52	—
$T_j = +2$ °C	P_{dh}	5,58	kW	$T_j = +2$ °C	COP_d or PER_d	5,64	—
$T_j = +7$ °C	P_{dh}	5,72	kW	$T_j = +7$ °C	COP_d or PER_d	5,71	—
$T_j = +12$ °C	P_{dh}	5,81	kW	$T_j = +12$ °C	COP_d or PER_d	5,85	—
$T_j = (T_{iv})$ - bivalent temperature mode	P_{dh}	-	kW	$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	—	—
T_j = operating limit temperature	P_{dh}	-	kW	T_j = operating limit temperature	COP_d or PER_d	—	°C
Air-to-water heat pump: $T_j = -15$ °C (where TOL < -20 °C)	P_{dh}	-	kW	Air-to-water heat pump: $T_j = -15$ °C (where TOL < -20 °C)	COP_d or PER_d	-	—
Bivalent temperature	T_{biv}	-	°C	Air-to-water heat pump: operating limit temperature	TOL	-	°C
Power in cyclic heating mode	P_{cyc}	-	kW	Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Decreased efficiency in cyclic mode	C_{dh}	0,99	—	Heating water limit operating temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0,009	kW	Rated thermal power	P_{sup}	-	kW
Thermostat-off mode	P_{TO}	0,009	kW	Type of energy input	Electricity		
Standby mode	P_{SB}	0,064	kW				
Crankcase heater mode	P_{CK}	-	kW				
Other parameters							
Capacity control	fixed			Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Sound power level, indoors/outdoors	L_{WA}	42	dB	Ground-to-water heat pump: water flow, outdoor heat exchanger		1,5	m ³ /h
Emissions of nitrogen oxides	NO_x	-	mg/kWh				
Contact details	IGLU TECH UAB			Ukmerges st. 364-3, Vilnius, Lithuania			

Technical data of IGLU® Aleut 7 fixed capacity heat pump

Model	IGLU Aleut 7
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	No
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
	P_{rated}	7,25	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	7,59	kW
$T_j = +2\text{ °C}$	P_{dh}	7,69	kW
$T_j = +7\text{ °C}$	P_{dh}	7,85	kW
$T_j = +12\text{ °C}$	P_{dh}	7,92	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
T_j = operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cyc}	-	kW
Decreased efficiency in cyclic mode	C_{dh}	0,99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0,009	kW
Thermostat-off mode	P_{TO}	0,009	kW
Standby mode	P_{SB}	0,064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	42	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	150	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d or PER_d	5,53	—
$T_j = +2\text{ °C}$	COP_d or PER_d	5,65	—
$T_j = +7\text{ °C}$	COP_d or PER_d	5,74	—
$T_j = +12\text{ °C}$	COP_d or PER_d	5,84	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	-	—
T_j = operating limit temperature	COP_d or PER_d	-	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d or PER_d	-	—
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	60	°C
Supplementary heater			
Rated thermal power	P_{sup}	-	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		2,0	m ³ /h
Ukmerges st. 364-3, Vilnius, Lithuania			

Technical data of IGLU® Aleut 9 fixed capacity heat pump

Model	IGLU Aleut 9
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	No
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	9,22	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	9,60	kW
$T_j = +2\text{ °C}$	P_{dh}	9,69	kW
$T_j = +7\text{ °C}$	P_{dh}	9,73	kW
$T_j = +12\text{ °C}$	P_{dh}	9,82	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
T_j = operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cych}	-	kW
Decreased efficiency in cyclic mode	C_{dh}	0,99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0,009	kW
Thermostat-off mode	P_{TO}	0,009	kW
Standby mode	P_{SB}	0,064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	42	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	151	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d or PER_d	5,54	—
$T_j = +2\text{ °C}$	COP_d or PER_d	5,66	—
$T_j = +7\text{ °C}$	COP_d or PER_d	5,79	—
$T_j = +12\text{ °C}$	COP_d or PER_d	5,85	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	-	—
T_j = operating limit temperature	COP_d or PER_d	-	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d or PER_d	-	—
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	60	°C
Supplementary heater			
Rated thermal power	P_{sup}	-	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		2,5	m ³ /h
Ukmerges st. 364-3, Vilnius, Lithuania			

Technical data of IGLU® Aleut 11 fixed capacity heat pump

Model	IGLU Aleut 11
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	No
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	10,95	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	11,56	kW
$T_j = +2\text{ °C}$	P_{dh}	11,60	kW
$T_j = +7\text{ °C}$	P_{dh}	11,65	kW
$T_j = +12\text{ °C}$	P_{dh}	11,87	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
T_j = operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cyc}	-	kW
Decreased efficiency in cyclic mode	C_{dh}	0,99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0,009	kW
Thermostat-off mode	P_{TO}	0,009	kW
Standby mode	P_{SB}	0,064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	42	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	155	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d or PER_d	5,69	—
$T_j = +2\text{ °C}$	COP_d or PER_d	5,75	—
$T_j = +7\text{ °C}$	COP_d or PER_d	5,89	—
$T_j = +12\text{ °C}$	COP_d or PER_d	6,08	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	-	—
T_j = operating limit temperature	COP_d a or PER_d	-	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d or PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	60	°C
Supplementary heater			
Rated thermal power	P_{sup}	-	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		3,0	m ³ /h
Ukmerges st. 364-3, Vilnius, Lithuania			

Technical data of IGLU® Aleut 13 fixed capacity heat pump

Model	IGLU Aleut 13
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	No
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	13,07	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	13,53	kW
$T_j = +2\text{ °C}$	P_{dh}	13,71	kW
$T_j = +7\text{ °C}$	P_{dh}	13,71	kW
$T_j = +12\text{ °C}$	P_{dh}	14,05	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
$T_j =$ operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cyc}	-	kW
Decreased efficiency in cyclic mode	C_{dh}	0,99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0,009	kW
Thermostat-off mode	P_{TO}	0,009	kW
Standby mode	P_{SB}	0,064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	42	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	153	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d or PER_d	5,51	—
$T_j = +2\text{ °C}$	COP_d or PER_d	5,84	—
$T_j = +7\text{ °C}$	COP_d or PER_d	5,98	—
$T_j = +12\text{ °C}$	COP_d or PER_d	6,24	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	—	—
$T_j =$ operating limit temperature	COP_d or PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d or PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	60	°C
Supplementary heater			
Rated thermal power	P_{sup}	-	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		3,5	m ³ /h
Contact details	Ukmerges st. 364-3, Vilnius, Lithuania		

Technical data of IGLU® Aleut 16 fixed capacity heat pump

Model	IGLU Aleut 16
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	No
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	15,45	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	15,95	kW
$T_j = +2\text{ °C}$	P_{dh}	16,10	kW
$T_j = +7\text{ °C}$	P_{dh}	16,25	kW
$T_j = +12\text{ °C}$	P_{dh}	16,40	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
$T_j =$ operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cych}	-	kW
Decreased efficiency in cyclic mode	C_{dh}	0,99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0,009	kW
Thermostat-off mode	P_{TO}	0,009	kW
Standby mode	P_{SB}	0,064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	45	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	149	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d or PER_d	5,52	—
$T_j = +2\text{ °C}$	COP_d or PER_d	5,74	—
$T_j = +7\text{ °C}$	COP_d or PER_d	5,87	—
$T_j = +12\text{ °C}$	COP_d or PER_d	5,98	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	—	—
$T_j =$ operating limit temperature	COP_d or PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d or PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	60	°C
Supplementary heater			
Rated thermal power	P_{sup}	-	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		4,0	m ³ /h
Contact details	Ukmerges st. 364-3, Vilnius, Lithuania		

Technical data of IGLU® Aleut 5 WT fixed capacity heat pump with boiler

Model	IGLU Aleut 5 WT
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	5,24	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	5,50	kW
$T_j = +2\text{ °C}$	P_{dh}	5,58	kW
$T_j = +7\text{ °C}$	P_{dh}	5,72	kW
$T_j = +12\text{ °C}$	P_{dh}	5,81	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
$T_j =$ operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cych}	-	kW
Decreased efficiency in cyclic mode	C_{dh}	0,99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0,009	kW
Thermostat-off mode	P_{TO}	0,009	kW
Standby mode	P_{SB}	0,064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	42	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	147	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d or PER_d	5,52	—
$T_j = +2\text{ °C}$	COP_d or PER_d	5,64	—
$T_j = +7\text{ °C}$	COP_d or PER_d	5,71	—
$T_j = +12\text{ °C}$	COP_d or PER_d	5,85	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	-	—
$T_j =$ operating limit temperature	COP_d or PER_d	-	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d or PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	60	°C
Supplementary heater			
Rated thermal power	P_{sup}	3/6/9	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		1,5	m ³ /h
Contact details	Ukmerges st. 364-3, Vilnius, Lithuania		

Technical data of IGLU® Aleut 7 WT fixed capacity heat pump with boiler

Model	IGLU Aleut 7 WT
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit	Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	7,25	kW	Seasonal energy efficiency for space heating	η_s	150	%
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j				Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	7,59	kW	$T_j = -7\text{ °C}$	COP_d or PER_d	5,53	–
$T_j = +2\text{ °C}$	P_{dh}	7,69	kW	$T_j = +2\text{ °C}$	COP_d or PER_d	5,65	–
$T_j = +7\text{ °C}$	P_{dh}	7,85	kW	$T_j = +7\text{ °C}$	COP_d or PER_d	5,74	–
$T_j = +12\text{ °C}$	P_{dh}	7,92	kW	$T_j = +12\text{ °C}$	COP_d or PER_d	5,84	–
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW	$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	–	–
T_j = operating limit temperature	P_{dh}	-	kW	T_j = operating limit temperature	COP_d or PER_d	–	°C
Air-to-water heat pump $T_j = -15\text{ °C}$ (where $TOL < -20\text{ °C}$)	P_{dh}	-	kW	Air-to-water heat pump: $T_j = -15\text{ °C}$ (where $TOL < -20\text{ °C}$)	COP_d or PER_d	-	
Bivalent temperature	T_{biv}	-	°C	Air-to-water heat pump: operating limit temperature	TOL	-	°C
Power in cyclic heating mode	P_{cyc}	-	kW	Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	– or %
Decreased efficiency in cyclic mode	C_{dh}	0,99	—	Heating water limit operating temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0,009	kW	Rated thermal power	P_{sup}	3/6/9	kW
Thermostat-off mode	P_{TO}	0,009	kW	Type of energy input	Electricity		
Standby mode	P_{SB}	0,064	kW				
Crankcase heater mode	P_{CK}	-	kW				
Other parameters							
Capacity control	fixed			Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Sound power level, indoors/outdoors	L_{WA}	42	dB	Ground-to-water heat pump: water flow, outdoor heat exchanger		2,0	m ³ /h
Emissions of nitrogen oxides	NO_x	-	mg/kWh				
Contact details	IGLU TECH UAB			Ukmerges st. 364-3, Vilnius, Lithuania			

Technical data of IGLU® Aleut 9 WT fixed capacity heat pump with boiler

Model	IGLU Aleut 9 WT
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit	Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	9,22	kW	Seasonal energy efficiency for space heating	η_s	151	%
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j				Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	9,60	kW	$T_j = -7\text{ °C}$	COP_d or PER_d	5,54	–
$T_j = +2\text{ °C}$	P_{dh}	9,69	kW	$T_j = +2\text{ °C}$	COP_d or PER_d	5,66	–
$T_j = +7\text{ °C}$	P_{dh}	9,73	kW	$T_j = +7\text{ °C}$	COP_d or PER_d	5,79	–
$T_j = +12\text{ °C}$	P_{dh}	9,82	kW	$T_j = +12\text{ °C}$	COP_d or PER_d	5,85	–
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW	$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	–	–
$T_j =$ operating limit temperature	P_{dh}	-	kW	$T_j =$ operating limit temperature	COP_d or PER_d	–	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where $TOL < -20\text{ °C}$)	P_{dh}	-	kW	Air-to-water heat pump: $T_j = -15\text{ °C}$ (where $TOL < -20\text{ °C}$)	COP_d or PER_d	-	
Bivalent temperature	T_{biv}	-	°C	Air-to-water heat pump: operating limit temperature	TOL	-	°C
Power in cyclic heating mode	P_{cych}	-	kW	Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	– or %
Decreased efficiency in cyclic mode	C_{dh}	0,99	—	Heating water limit operating temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0,009	kW	Rated thermal power	P_{sup}	3/6/9	kW
Thermostat-off mode	P_{TO}	0,009	kW	Type of energy input	Electricity		
Standby mode	P_{SB}	0,064	kW				
Crankcase heater mode	P_{CK}	-	kW				
Other parameters							
Capacity control	fixed			Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Sound power level, indoors/outdoors	L_{WA}	42	dB	Ground-to-water heat pump: water flow, outdoor heat exchanger		2,5	m ³ /h
Emissions of nitrogen oxides	NO_x	-	mg/kWh				
Contact details	IGLU TECH UAB			Ukmerges st. 364-3, Vilnius, Lithuania			

Technical data of IGLU® Aleut 11 WT fixed capacity heat pump with boiler

Model	IGLU Aleut 11 WT
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit	Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	10,95	kW	Seasonal energy efficiency for space heating	η_s	155	%
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j				Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	11,56	kW	$T_j = -7\text{ °C}$	COP_d or PER_d	5,69	—
$T_j = +2\text{ °C}$	P_{dh}	11,60	kW	$T_j = +2\text{ °C}$	COP_d or PER_d	5,75	—
$T_j = +7\text{ °C}$	P_{dh}	11,65	kW	$T_j = +7\text{ °C}$	COP_d or PER_d	5,89	—
$T_j = +12\text{ °C}$	P_{dh}	11,87	kW	$T_j = +12\text{ °C}$	COP_d or PER_d	6,08	—
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW	$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	—	—
T_j = operating limit temperature	P_{dh}	-	kW	T_j = operating limit temperature	COP_d or PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW	Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d or PER_d	-	—
Bivalent temperature	T_{biv}	-	°C	Air-to-water heat pump: operating limit temperature	TOL	-	°C
Power in cyclic heating mode	P_{cych}	-	kW	Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Decreased efficiency in cyclic mode	C_{dh}	0,99	—	Heating water limit operating temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0,009	kW	Rated thermal power	P_{sup}	3/6/9	kW
Thermostat-off mode	P_{TO}	0,009	kW	Type of energy input	Electricity		
Standby mode	P_{SB}	0,064	kW				
Crankcase heater mode	P_{CK}	-	kW				
Other parameters							
Capacity control	fixed			Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Sound power level, indoors/outdoors	L_{WA}	42	dB	Ground-to-water heat pump: water flow, outdoor heat exchanger		3,0	m ³ /h
Emissions of nitrogen oxides	NO_x	-	mg/kWh				
Contact details	IGLU TECH UAB			Ukmerges st. 364-3, Vilnius, Lithuania			

Technical data of IGLU® Aleut 13 WT fixed capacity heat pump with boiler

Model	IGLU Aleut 13 WT
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit	Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	13,07	kW	Seasonal energy efficiency for space heating	η_s	153	%
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j				Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	13,53	kW	$T_j = -7\text{ °C}$	COP_d or PER_d	5,51	—
$T_j = +2\text{ °C}$	P_{dh}	13,71	kW	$T_j = +2\text{ °C}$	COP_d or PER_d	5,84	—
$T_j = +7\text{ °C}$	P_{dh}	13,71	kW	$T_j = +7\text{ °C}$	COP_d or PER_d	5,98	—
$T_j = +12\text{ °C}$	P_{dh}	14,05	kW	$T_j = +12\text{ °C}$	COP_d or PER_d	6,24	—
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW	$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	—	—
T_j = operating limit temperature	P_{dh}	-	kW	T_j = operating limit temperature	COP_d a or PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where $TOL < -20\text{ °C}$)	P_{dh}	-	kW	Air-to-water heat pump: $T_j = -15\text{ °C}$ (where $TOL < -20\text{ °C}$)	COP_d or PER_d	-	
Bivalent temperature	T_{biv}	-	°C	Air-to-water heat pump: operating limit temperature	TOL	-	°C
Power in cyclic heating mode	P_{cyc}	-	kW	Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Decreased efficiency in cyclic mode	C_{dh}	0,99	—	Heating water limit operating temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0,009	kW	Rated thermal power	P_{sup}	3/6/9	kW
Thermostat-off mode	P_{TO}	0,009	kW	Type of energy input	Electricity		
Standby mode	P_{SB}	0,064	kW				
Crankcase heater mode	P_{CK}	-	kW				
Other parameters							
Capacity control	fixed			Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Sound power level, indoors/outdoors	L_{WA}	42	dB	Ground-to-water heat pump: water flow, outdoor heat exchanger		3,5	m ³ /h
Emissions of nitrogen oxides	NO_x	-	mg/kWh				
Contact details	IGLU TECH UAB			Ukmerges st. 364-3, Vilnius, Lithuania			

Technical data of IGLU® Aleut 16 WT fixed capacity heat pump with boiler

Model	IGLU Aleut 16 WT
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	15,45	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	15,95	kW
$T_j = +2\text{ °C}$	P_{dh}	16,10	kW
$T_j = +7\text{ °C}$	P_{dh}	16,25	kW
$T_j = +12\text{ °C}$	P_{dh}	16,40	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
T_j = operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where $TOL < -20\text{ °C}$)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cyc}	-	kW
Decreased efficiency in cyclic mode	C_{dh}	0,99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0,009	kW
Thermostat-off mode	P_{TO}	0,009	kW
Standby mode	P_{SB}	0,064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	45	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	149	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d or PER_d	5,52	—
$T_j = +2\text{ °C}$	COP_d or PER_d	5,74	—
$T_j = +7\text{ °C}$	COP_d or PER_d	5,87	—
$T_j = +12\text{ °C}$	COP_d or PER_d	5,98	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d or PER_d	—	—
T_j = operating limit temperature	COP_d or PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where $TOL < -20\text{ °C}$)	COP_d or PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	60	°C
Supplementary heater			
Rated thermal power	P_{sup}	3/6/9	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		4,0	m ³ /h
Ukmerges st. 364-3, Vilnius, Lithuania			

Technical data of IGLU® Aleut 7 WTI variable capacity heat pump with integrated boiler

	IGLU Aleut 7 WTI
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	7	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	5,705	kW
$T_j = +2\text{ °C}$	P_{dh}	3,403	kW
$T_j = +7\text{ °C}$	P_{dh}	2,202	kW
$T_j = +12\text{ °C}$	P_{dh}	2,103	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
$T_j =$ operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cyc}	1,5-7	kW
Decreased efficiency in cyclic mode	C_{dh}	0.99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.009	kW
Thermostat-off mode	P_{TO}	0.009	kW
Standby mode	P_{SB}	0.064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	33-44	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	150	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d arba PER_d	4,855	—
$T_j = +2\text{ °C}$	COP_d arba PER_d	5,702	—
$T_j = +7\text{ °C}$	COP_d arba PER_d	6,153	—
$T_j = +12\text{ °C}$	COP_d arba PER_d	5,774	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d arba PER_d	—	—
$T_j =$ operating limit temperature	COP_d arba PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d arba PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	65	°C
Supplementary heater			
Rated thermal power	P_{sup}	3/6/9	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		2.0	m ³ /h
Contact details	Ukmerges st. 364-3, Vilnius, Lithuania		

Technical data of IGLU® Aleut 12 WTI variable capacity heat pump with integrated boiler

	IGLU Aleut 12 WTI
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	12	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	9,403	kW
$T_j = +2\text{ °C}$	P_{dh}	5,705	kW
$T_j = +7\text{ °C}$	P_{dh}	3,702	kW
$T_j = +12\text{ °C}$	P_{dh}	2,901	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
$T_j =$ operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cyc}	3÷12	kW
Decreased efficiency in cyclic mode	C_{dh}	0.99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.009	kW
Thermostat-off mode	P_{TO}	0.009	kW
Standby mode	P_{SB}	0.064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	33-44	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	157	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d arba PER_d	4,772	—
$T_j = +2\text{ °C}$	COP_d arba PER_d	5,821	—
$T_j = +7\text{ °C}$	COP_d arba PER_d	6,403	—
$T_j = +12\text{ °C}$	COP_d arba PER_d	5,975	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d arba PER_d	—	—
$T_j =$ operating limit temperature	COP_d arba PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d arba PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-25	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	65	°C
Supplementary heater			
Rated thermal power	P_{sup}	3/6/9	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		2.0	m ³ /h
Contact details	Ukmerges st. 364-3, Vilnius, Lithuania		

Technical data of IGLU® Aleut 18 WTI variable capacity heat pump with integrated boiler

	IGLU Aleut 18 WTI
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	16	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	13.9	kW
$T_j = +2\text{ °C}$	P_{dh}	8.4	kW
$T_j = +7\text{ °C}$	P_{dh}	5,4	kW
$T_j = +12\text{ °C}$	P_{dh}	4,3	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
$T_j =$ operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cych}	4±18	kW
Decreased efficiency in cyclic mode	C_{dh}	0.99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.009	kW
Thermostat-off mode	P_{TO}	0.009	kW
Standby mode	P_{SB}	0.064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	33-44	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	168	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d arba PER_d	5,04	—
$T_j = +2\text{ °C}$	COP_d arba PER_d	5,91	—
$T_j = +7\text{ °C}$	COP_d arba PER_d	6,65	—
$T_j = +12\text{ °C}$	COP_d arba PER_d	6,49	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d arba PER_d	—	—
$T_j =$ operating limit temperature	COP_d arba PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d arba PER_d	-	—
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	65	°C
Supplementary heater			
Rated thermal power	P_{sup}	3/6/9	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		3.0	m ³ /h
Contact details	Ukmerges st. 364-3, Vilnius, Lithuania		

Technical data of IGLU® Aleut 7 I variable capacity heat pump

	IGLU Aleut 7 I
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	7	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	5,705	kW
$T_j = +2\text{ °C}$	P_{dh}	3,403	kW
$T_j = +7\text{ °C}$	P_{dh}	2,202	kW
$T_j = +12\text{ °C}$	P_{dh}	2,103	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
T_j = operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cyc}	1,5-7	kW
Decreased efficiency in cyclic mode	C_{dh}	0.99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.009	kW
Thermostat-off mode	P_{TO}	0.009	kW
Standby mode	P_{SB}	0.064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	33-44	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	150	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d arba PER_d	4,855	—
$T_j = +2\text{ °C}$	COP_d arba PER_d	5,702	—
$T_j = +7\text{ °C}$	COP_d arba PER_d	6,153	—
$T_j = +12\text{ °C}$	COP_d arba PER_d	5,774	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d arba PER_d	—	—
T_j = operating limit temperature	COP_d arba PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d arba PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	65	°C
Supplementary heater			
Rated thermal power	P_{sup}	3/6/9	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		2.0	m ³ /h
Contact details	Ukmerges st. 364-3, Vilnius, Lithuania		

Technical data of IGLU® Aleut 12 I variable capacity heat pump

	IGLU Aleut 12 I
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	12	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	9,405	kW
$T_j = +2\text{ °C}$	P_{dh}	5,705	kW
$T_j = +7\text{ °C}$	P_{dh}	3,702	kW
$T_j = +12\text{ °C}$	P_{dh}	2,901	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
T_j = operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cyc}	3÷12	kW
Decreased efficiency in cyclic mode	C_{dh}	0.99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.009	kW
Thermostat-off mode	P_{TO}	0.009	kW
Standby mode	P_{SB}	0.064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	33-44	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	157	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d arba PER_d	4,772	-
$T_j = +2\text{ °C}$	COP_d arba PER_d	5,821	-
$T_j = +7\text{ °C}$	COP_d arba PER_d	6,403	-
$T_j = +12\text{ °C}$	COP_d arba PER_d	5,975	-
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d arba PER_d	-	-
T_j = operating limit temperature	COP_d arba PER_d	-	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d arba PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	- or %
Heating water limit operating temperature	WTOL	65	°C
Supplementary heater			
Rated thermal power	P_{sup}	3/6/9	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		2.0	m ³ /h
Contact details	Ukmerges st. 364-3, Vilnius, Lithuania		

Technical data of IGLU® Aleut 18 I variable capacity heat pump

	IGLU Aleut 18 I
Air-to-water heat pump	No
Water-to-water heat pump	No
Ground-to-water heat pump	Yes
Low temperature heat pump	No
Equipped with supplementary heater	Yes
Supplementary heater is used	No

Parameters applied using average temperature are declared. Parameters are declared under average climatic conditions.

Parameter	Conventional representation	Value	Measurement unit
Rated thermal power	P_{rated}	16	kW
Declared part load heating capacity at 20 °C indoor temperature and outdoor temperature T_j			
$T_j = -7\text{ °C}$	P_{dh}	13.9	kW
$T_j = +2\text{ °C}$	P_{dh}	8.4	kW
$T_j = +7\text{ °C}$	P_{dh}	5.4	kW
$T_j = +12\text{ °C}$	P_{dh}	4.3	kW
$T_j = (T_{biv})$ - bivalent temperature mode	P_{dh}	-	kW
$T_j =$ operating limit temperature	P_{dh}	-	kW
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	P_{dh}	-	kW
Bivalent temperature	T_{biv}	-	°C
Power in cyclic heating mode	P_{cyc}	4±18	kW
Decreased efficiency in cyclic mode	C_{dh}	0.99	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.009	kW
Thermostat-off mode	P_{TO}	0.009	kW
Standby mode	P_{SB}	0.064	kW
Crankcase heater mode	P_{CK}	-	kW
Other parameters			
Capacity control	fixed		
Sound power level, indoors/outdoors	L_{WA}	33-44	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh
Contact details	IGLU TECH UAB		

Parameter	Conventional representation	Value	Measurement unit
Seasonal energy efficiency for space heating	η_s	228	%
Declared efficiency coefficient or ratio of primary energy to radiant heat output at room temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	COP_d arba PER_d	5,04	—
$T_j = +2\text{ °C}$	COP_d arba PER_d	5,91	—
$T_j = +7\text{ °C}$	COP_d arba PER_d	6,65	—
$T_j = +12\text{ °C}$	COP_d arba PER_d	6,49	—
$T_j = (T_{biv})$ - bivalent temperature mode	COP_d arba PER_d	—	—
$T_j =$ operating limit temperature	COP_d arba PER_d	—	°C
Air-to-water heat pump: $T_j = -15\text{ °C}$ (where TOL < -20°C)	COP_d arba PER_d	-	
Air-to-water heat pump: operating limit temperature	TOL	-	°C
Cyclical efficiency	COP_{cyc} or PER_{cyc}	-	— or %
Heating water limit operating temperature	WTOL	65	°C
Supplementary heater			
Rated thermal power	P_{sup}	3/6/9	kW
Type of energy input	Electricity		
Air-to-water heat pump: rated air flow rate, outdoor	—		m ³ /h
Ground-to-water heat pump: water flow, outdoor heat exchanger		3.0	m ³ /h
Contact details	Ukmerges st. 364-3, Vilnius, Lithuania		

IGLU ALEUT TECHNICAL DATA VERSION: 1.4.2

© UAB IGLU TECH 2023