

Subtype MULTITHERMA 21 HD

Certificate Holder	IGLOO Sp. z o.o.
Address	Stary Wiśnicz 289
ZIP	32-720
City	Nowy Wiśnicz
Country	PL
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)
Subtype title	MULTITHERMA 21 HD
Registration number	037-0189-24
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	2.2 kg
Certification Date	10.12.2024
Testing basis	HP Keymark certification scheme rules rev. no.13

**Model MultiTherma 21 HD + MultiTherma PRO 16-25**

Model name	MultiTherma 21 HD + MultiTherma PRO 16-25
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.29 kW	5.42 kW
El input	1.29 kW	1.94 kW
COP	4.88	2.79

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	55 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	164 %	122 %
Prated	8.42 kW	8.02 kW
SCOP	4.17	3.13
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.35 kW	7.59 kW
COP Tj = -7°C	2.66	2.01
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.49 kW	4.64 kW
COP Tj = +2°C	3.94	2.98
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.80 kW	2.67 kW
COP Tj = +7°C	5.76	4.22
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.31 kW	3.09 kW
COP Tj = 12°C	7.36	5.42
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.02 kW
COP Tj = Tbiv	2.58	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.42 kW	8.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	27 W	27 W
PTO	57 W	57 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4175 kWh	5299 kWh

**Model MultiTherma 21 HD Cascade + MultiTherma PRO 16-25**

Model name	MultiTherma 21 HD Cascade + MultiTherma PRO 16-25
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water**
**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.29 kW	5.42 kW
El input	1.29 kW	1.94 kW
COP	4.88	2.79

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	55 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	164 %	122 %
Prated	8.42 kW	8.02 kW
SCOP	4.17	3.13
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.35 kW	7.59 kW
COP Tj = -7°C	2.66	2.01
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.49 kW	4.64 kW
COP Tj = +2°C	3.94	2.98
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.80 kW	2.67 kW
COP Tj = +7°C	5.76	4.22
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.31 kW	3.09 kW
COP Tj = 12°C	7.36	5.42
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.02 kW
COP Tj = Tbiv	2.58	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.42 kW	8.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	27 W	27 W
PTO	57 W	57 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4175 kWh	5299 kWh

**Model MultiTherma 21 HD + MultiTherma BASIC 16-25**

Model name	MultiTherma 21 HD + MultiTherma BASIC 16-25
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.29 kW	5.42 kW
El input	1.25 kW	1.88 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	55 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	169 %	126 %
Prated	8.42 kW	8.02 kW
SCOP	4.29	3.22
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.35 kW	7.59 kW
COP Tj = -7°C	2.66	2.01
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.49 kW	4.64 kW
COP Tj = +2°C	4.09	3.08
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.80 kW	2.67 kW
COP Tj = +7°C	5.98	4.39
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.31 kW	3.09 kW
COP Tj = 12°C	7.65	5.62
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.02 kW
COP Tj = Tbiv	2.58	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.42 kW	8.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	27 W	27 W
PTO	57 W	57 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4054 kWh	5153 kWh

**Model MultiTherma 21 HD Cascade + MultiTherma BASIC 16-25**

Model name	MultiTherma 21 HD Cascade + MultiTherma BASIC 16-25
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water**
**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.29 kW	5.42 kW
El input	1.25 kW	1.88 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	55 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	169 %	126 %
Prated	8.42 kW	8.02 kW
SCOP	4.29	3.22
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.35 kW	7.59 kW
COP Tj = -7°C	2.66	2.01
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.49 kW	4.64 kW
COP Tj = +2°C	4.09	3.08
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.80 kW	2.67 kW
COP Tj = +7°C	5.98	4.39
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.31 kW	3.09 kW
COP Tj = 12°C	7.65	5.62
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.02 kW
COP Tj = Tbiv	2.58	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.42 kW	8.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	27 W	27 W
PTO	57 W	57 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4054 kWh	5153 kWh

**Model MultiTherma 21 HD + ElectroBox**

Model name	MultiTherma 21 HD + ElectroBox
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.29 kW	5.42 kW
El input	1.22 kW	1.83 kW
COP	5.17	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	55 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	130 %
Prated	8.42 kW	8.02 kW
SCOP	4.45	3.33
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.35 kW	7.59 kW
COP Tj = -7°C	2.76	2.09
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.49 kW	4.64 kW
COP Tj = +2°C	4.25	3.20
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.80 kW	2.67 kW
COP Tj = +7°C	6.22	4.54
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.31 kW	3.09 kW
COP Tj = 12°C	7.94	5.84
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.02 kW
COP Tj = Tbiv	2.60	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.42 kW	8.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	27 W	27 W
PTO	57 W	57 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3906 kWh	4972 kWh

**Model MultiTherma 21 HD Cascade + ElectroBox**

Model name	MultiTherma 21 HD Cascade + ElectroBox
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.29 kW	5.42 kW
El input	1.22 kW	1.83 kW
COP	5.17	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	55 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	130 %
Prated	8.42 kW	8.02 kW
SCOP	4.45	3.33
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.35 kW	7.59 kW
COP Tj = -7°C	2.76	2.09
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.49 kW	4.64 kW
COP Tj = +2°C	4.25	3.20
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.80 kW	2.67 kW
COP Tj = +7°C	6.22	4.54
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.31 kW	3.09 kW
COP Tj = 12°C	7.94	5.84
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.02 kW
COP Tj = Tbiv	2.60	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.42 kW	8.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	27 W	27 W
PTO	57 W	57 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3906 kWh	4972 kWh

**Model MultiTherma 21 HD**

Model name	MultiTherma 21 HD
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.29 kW	5.42 kW
El input	1.22 kW	1.83 kW
COP	5.17	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	55 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	130 %
Prated	8.42 kW	8.02 kW
SCOP	4.45	3.33
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.35 kW	7.59 kW
COP Tj = -7°C	2.76	2.09
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.49 kW	4.64 kW
COP Tj = +2°C	4.25	3.20
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.80 kW	2.67 kW
COP Tj = +7°C	6.22	4.54
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.31 kW	3.09 kW
COP Tj = 12°C	7.94	5.84
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.02 kW
COP Tj = Tbiv	2.60	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.42 kW	8.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	27 W	27 W
PTO	57 W	57 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3906 kWh	4972 kWh

**Model MultiTherma 21 HD Cascade**

Model name	MultiTherma 21 HD Cascade
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.29 kW	5.42 kW
El input	1.22 kW	1.83 kW
COP	5.17	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	55 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	130 %
Prated	8.42 kW	8.02 kW
SCOP	4.45	3.33
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.35 kW	7.59 kW
COP Tj = -7°C	2.76	2.09
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.49 kW	4.64 kW
COP Tj = +2°C	4.25	3.20
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.80 kW	2.67 kW
COP Tj = +7°C	6.22	4.54
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.31 kW	3.09 kW
COP Tj = 12°C	7.94	5.84
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.02 kW
COP Tj = Tbiv	2.60	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.42 kW	8.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	27 W	27 W
PTO	57 W	57 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3906 kWh	4972 kWh