

Subtype KITA HRP R290

Certificate Holder	Templari S.p.A.
Address	Via C. Battisti, n° 169
ZIP	35031
City	Abano Terme (PD)
Country	IT
Certification Body	ICIM S.p.A.
Subtype title	KITA HRP R290
Registration number	ICIM-PDC-000216
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.4 kg
Certification Date	02.11.2023

Model Unità esterna KITA-HRP-10, 3Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-HRP-10, 3Ph, vers. MONOBLOCCO R-290
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Colder Climate
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 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	213 %	150 %
Prated	8.52 kW	7.92 kW
SCOP	5.40	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	7.01 kW
COP Tj = -7°C	3.32	2.34
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.71 kW	4.45 kW
COP Tj = +2°C	5.29	3.77
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.27 kW	4.09 kW
COP Tj = +7°C	7.63	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.20 kW
COP Tj = 12°C	10.77	8.07
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.54 kW	7.01 kW
COP Tj = Tbiv	3.32	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.93 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900

WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.50 kW	1.50 kW
Annual energy consumption Qhe	3257 kWh	4282 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	178 %	131 %
Prated	7.39 kW	7.00 kW
SCOP	4.53	3.36
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.09 kW	4.82 kW
COP Tj = -7°C	3.98	2.90
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.75 kW	4.57 kW
COP Tj = +2°C	5.87	4.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.30 kW	4.18 kW
COP Tj = +7°C	7.42	6.06
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.24 kW
COP Tj = 12°C	10.77	9.22
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.03 kW	5.71 kW
COP Tj = Tbiv	2.81	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.82 kW	4.49 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.18	1.55
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.50 kW	2.50 kW
Annual energy consumption Qhe	4024 kWh	5134 kWh
Pdh Tj = -15°C (if TOL	6.03	5.71

COP Tj = -15°C (if TOL	2.81	2.04
Cdh Tj = -15 °C	0.900	0.900

Model Unità esterna KITA-HRP-12, 3Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-HRP-12, 3Ph, vers. MONOBLOCCO R-290
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Colder Climate
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 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	210 %	149 %
Prated	9.97 kW	9.32 kW
SCOP	5.32	3.81
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.82 kW	8.25 kW
COP Tj = -7°C	3.16	2.22
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.35 kW	5.08 kW
COP Tj = +2°C	5.15	3.76
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.27 kW	4.09 kW
COP Tj = +7°C	7.63	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.20 kW
COP Tj = 12°C	10.78	8.07
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.82 kW	8.25 kW
COP Tj = Tbiv	3.16	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.13 kW	7.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900

WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.80 kW	1.80 kW
Annual energy consumption Qhe	3870 kWh	5056 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	180 %	133 %
Prated	8.68 kW	8.28 kW
SCOP	4.57	3.40
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.19 kW	5.02 kW
COP Tj = -7°C	3.93	2.88
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.75 kW	4.57 kW
COP Tj = +2°C	5.87	4.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.30 kW	4.18 kW
COP Tj = +7°C	7.42	6.06
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.24 kW
COP Tj = 12°C	10.78	9.22
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.08 kW	6.75 kW
COP Tj = Tbiv	2.70	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.68 kW	5.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.00 kW	3.00 kW
Annual energy consumption Q_{he}	4683 kWh	6005 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if TOL	7.08	6.75
COP $T_j = -15^{\circ}\text{C}$ (if TOL	2.70	1.96
$C_{dh} T_j = -15^{\circ}\text{C}$	0.900	0.900

Model Unità esterna KITA-HRP-14, 3Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-HRP-14, 3Ph, vers. MONOBLOCCO R-290
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Colder Climate
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 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	207 %	148 %
Prated	11.65 kW	10.88 kW
SCOP	5.25	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	9.62 kW
COP Tj = -7°C	3.02	2.08
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.23 kW	5.82 kW
COP Tj = +2°C	5.02	3.71
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.27 kW	4.09 kW
COP Tj = +7°C	7.63	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.20 kW
COP Tj = 12°C	10.77	8.57
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.30 kW	9.62 kW
COP Tj = Tbiv	3.02	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.48 kW	8.73 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900

WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.10 kW	2.10 kW
Annual energy consumption Qhe	4588 kWh	5946 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	179 %	133 %
Prated	10.13 kW	9.71 kW
SCOP	4.54	3.39
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.19 kW	5.90 kW
COP Tj = -7°C	3.80	2.81
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.75 kW	4.57 kW
COP Tj = +2°C	5.87	4.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.30 kW	4.18 kW
COP Tj = +7°C	7.42	6.06
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.24 kW
COP Tj = 12°C	10.77	9.22
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.26 kW	7.92 kW
COP Tj = Tbiv	2.58	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.66 kW	6.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.01	1.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.50 kW	3.50 kW
Annual energy consumption Q_{he}	5495 kWh	7067 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if TOL	8.26	7.92
COP $T_j = -15^{\circ}\text{C}$ (if TOL	2.58	1.86
$C_{dh} T_j = -15^{\circ}\text{C}$	0.900	0.900

Model Unità esterna KITA-HRP-16, 3Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-HRP-16, 3Ph, vers. MONOBLOCCO R-290
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Colder Climate
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 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	204 %	147 %
Prated	12.47 kW	11.31 kW
SCOP	5.17	3.74
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.03 kW	10.01 kW
COP Tj = -7°C	2.95	2.03
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.73 kW	6.07 kW
COP Tj = +2°C	4.91	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.42 kW	4.09 kW
COP Tj = +7°C	7.63	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.20 kW
COP Tj = 12°C	10.77	7.92
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.03 kW	10.01 kW
COP Tj = Tbiv	2.95	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.14 kW	9.17 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900

WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.20 kW	2.20 kW
Annual energy consumption Qhe	4985 kWh	6244 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	178 %	132 %
Prated	10.63 kW	10.09 kW
SCOP	4.51	3.37
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.49 kW	6.09 kW
COP Tj = -7°C	3.73	2.79
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.94 kW	4.57 kW
COP Tj = +2°C	5.72	4.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.30 kW	4.18 kW
COP Tj = +7°C	7.42	6.06
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.24 kW
COP Tj = 12°C	10.77	9.02
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.67 kW	8.23 kW
COP Tj = Tbiv	2.53	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.98	1.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.50 kW	3.50 kW
Annual energy consumption Q_{he}	5808 kWh	7374 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if TOL	8.67	8.23
COP $T_j = -15^{\circ}\text{C}$ (if TOL	2.53	1.81
$C_{dh} T_j = -15^{\circ}\text{C}$	0.900	0.900

Model Unità esterna KITA-HRP-10, 1Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-HRP-10, 1Ph, vers. MONOBLOCCO R-290
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	213 %	150 %
Prated	8.52 kW	7.92 kW
SCOP	5.40	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	7.01 kW
COP Tj = -7°C	3.32	2.34
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.71 kW	4.45 kW
COP Tj = +2°C	5.29	3.77
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.27 kW	4.09 kW
COP Tj = +7°C	7.63	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.20 kW
COP Tj = 12°C	10.77	8.07
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.54 kW	7.01 kW
COP Tj = Tbiv	3.32	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.93 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900

WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.50 kW	1.50 kW
Annual energy consumption Qhe	3257 kWh	4282 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	178 %	131 %
Prated	7.39 kW	7.00 kW
SCOP	4.53	3.36
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.09 kW	4.82 kW
COP Tj = -7°C	3.98	2.90
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.75 kW	4.57 kW
COP Tj = +2°C	5.87	4.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.30 kW	4.18 kW
COP Tj = +7°C	7.42	6.06
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.24 kW
COP Tj = 12°C	10.77	9.22
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.03 kW	5.71 kW
COP Tj = Tbiv	2.81	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.82 kW	4.49 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.18	1.55
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.50 kW	2.50 kW
Annual energy consumption Q_{he}	4024 kWh	5134 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if TOL	6.03	5.71
COP $T_j = -15^{\circ}\text{C}$ (if TOL	2.81	2.04
$C_{dh} T_j = -15^{\circ}\text{C}$	0.900	0.900

Model Unità esterna KITA-HRP-12, 1Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-HRP-12, 1Ph, vers. MONOBLOCCO R-290
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	210 %	149 %
Prated	9.97 kW	9.32 kW
SCOP	5.32	3.81
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.82 kW	8.25 kW
COP Tj = -7°C	3.16	2.22
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.35 kW	5.08 kW
COP Tj = +2°C	5.15	3.76
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.27 kW	4.09 kW
COP Tj = +7°C	7.63	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.20 kW
COP Tj = 12°C	10.78	8.07
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.82 kW	8.25 kW
COP Tj = Tbiv	3.16	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.13 kW	7.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900

WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.80 kW	1.80 kW
Annual energy consumption Q _{he}	3870 kWh	5056 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η _s	180 %	133 %
Prated	8.68 kW	8.28 kW
SCOP	4.57	3.40
T _{biv}	-15 °C	-15 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	5.19 kW	5.02 kW
COP T _j = -7°C	3.93	2.88
C _{dh} T _j = -7 °C	0.900	0.900
P _{dh} T _j = +2°C	4.75 kW	4.57 kW
COP T _j = +2°C	5.87	4.27
C _{dh} T _j = +2 °C	0.900	0.900
P _{dh} T _j = +7°C	4.30 kW	4.18 kW
COP T _j = +7°C	7.42	6.06
C _{dh} T _j = +7 °C	0.900	0.900
P _{dh} T _j = 12°C	4.31 kW	4.24 kW
COP T _j = 12°C	10.78	9.22
C _{dh} T _j = +12 °C	0.900	0.900
P _{dh} T _j = T _{biv}	7.08 kW	6.75 kW
COP T _j = T _{biv}	2.70	1.96
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	5.68 kW	5.30 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.11	1.50
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.900	0.900
WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.00 kW	3.00 kW
Annual energy consumption Q_{he}	4683 kWh	6005 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if TOL	7.08	6.75
COP $T_j = -15^{\circ}\text{C}$ (if TOL	2.70	1.96
$C_{dh} T_j = -15^{\circ}\text{C}$	0.900	0.900

Model Unità esterna KITA-HRP-14, 1Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-HRP-14, 1Ph, vers. MONOBLOCCO R-290
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	207 %	148 %
Prated	11.65 kW	10.88 kW
SCOP	5.25	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	9.62 kW
COP Tj = -7°C	3.02	2.08
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.23 kW	5.82 kW
COP Tj = +2°C	5.02	3.71
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.27 kW	4.09 kW
COP Tj = +7°C	7.63	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.20 kW
COP Tj = 12°C	10.77	8.57
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.30 kW	9.62 kW
COP Tj = Tbiv	3.02	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.48 kW	8.73 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900

WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.10 kW	2.10 kW
Annual energy consumption Qhe	4588 kWh	5946 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	179 %	133 %
Prated	10.13 kW	9.71 kW
SCOP	4.54	3.39
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.19 kW	5.90 kW
COP Tj = -7°C	3.80	2.81
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.75 kW	4.57 kW
COP Tj = +2°C	5.87	4.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.30 kW	4.18 kW
COP Tj = +7°C	7.42	6.06
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.24 kW
COP Tj = 12°C	10.77	9.22
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.26 kW	7.92 kW
COP Tj = Tbiv	2.58	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.66 kW	6.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.01	1.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.50 kW	3.50 kW
Annual energy consumption Q_{he}	5495 kWh	7067 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if TOL	8.26	7.92
COP $T_j = -15^{\circ}\text{C}$ (if TOL	2.58	1.86
$C_{dh} T_j = -15^{\circ}\text{C}$	0.900	0.900

Model Unità esterna KITA-HRP-16, 1Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-HRP-16, 1Ph, vers. MONOBLOCCO R-290
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	204 %	147 %
Prated	12.47 kW	11.31 kW
SCOP	5.17	3.74
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.03 kW	10.01 kW
COP Tj = -7°C	2.95	2.03
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.73 kW	6.07 kW
COP Tj = +2°C	4.91	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.42 kW	4.09 kW
COP Tj = +7°C	7.63	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.20 kW
COP Tj = 12°C	10.77	7.92
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.03 kW	10.01 kW
COP Tj = Tbiv	2.95	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.14 kW	9.17 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900

WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.20 kW	2.20 kW
Annual energy consumption Qhe	4985 kWh	6244 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	178 %	132 %
Prated	10.63 kW	10.09 kW
SCOP	4.51	3.37
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.49 kW	6.09 kW
COP Tj = -7°C	3.73	2.79
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.94 kW	4.57 kW
COP Tj = +2°C	5.72	4.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.30 kW	4.18 kW
COP Tj = +7°C	7.42	6.06
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.31 kW	4.24 kW
COP Tj = 12°C	10.77	9.02
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.67 kW	8.23 kW
COP Tj = Tbiv	2.53	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.98	1.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	31 W	31 W
PSB	24 W	24 W
PCK	35 W	35 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.50 kW	3.50 kW
Annual energy consumption Q_{he}	5808 kWh	7374 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if TOL	8.67	8.23
$COP T_j = -15^{\circ}\text{C}$ (if TOL	2.53	1.81
$C_{dh} T_j = -15^{\circ}\text{C}$	0.900	0.900