

Subtype KITA MP 18-20 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 MP 18-20 R290
Registration number	ICIM-PDC-000223
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.8 kg
Certification Date	02.11.2023
Testing basis	V12

Model Unità esterna KITA-MP-18, 3Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-MP-18, 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	51 dB(A)	51 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	212 %	164 %
Prated	15.00 kW	14.32 kW
SCOP	5.38	4.18
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.27 kW	12.67 kW
COP Tj = -7°C	3.38	2.41
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.08 kW	7.71 kW
COP Tj = +2°C	5.38	4.15
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.96 kW	5.77 kW
COP Tj = +7°C	7.16	5.63
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.96 kW	5.52 kW
COP Tj = 12°C	8.44	8.39
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.27 kW	12.67 kW
COP Tj = Tbiv	3.38	2.41
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.23 kW	11.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.07	2.12
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	2.60 kW	2.60 kW
Annual energy consumption Qhe	5759 kWh	7081 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	184 %	144 %
Prated	13.15 kW	12.63 kW
SCOP	4.67	3.67
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.96 kW	7.64 kW
COP Tj = -7°C	4.03	3.09
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.75 kW	6.58 kW
COP Tj = +2°C	5.92	4.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	6.00 kW	5.87 kW
COP Tj = +7°C	7.57	6.29
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.96 kW	5.34 kW
COP Tj = 12°C	8.44	8.54
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.73 kW	10.30 kW
COP Tj = Tbiv	2.85	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.60 kW	8.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.18	1.51
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	4.50 kW	4.50 kW
Annual energy consumption Q _{he}	6947 kWh	8494 kWh
P _{dh} T _j = -15°C (if TOL	10.73	10.30
COP T _j = -15°C (if TOL	2.85	2.07
C _{dh} T _j = -15 °C	0.900	0.900

Model Unità esterna KITA-MP-20, 3Ph, vers. MONOBLOCCO R-290

Model name	Unità esterna KITA-MP-20, 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	51 dB(A)	51 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	207 %	162 %
Prated	18.56 kW	17.65 kW
SCOP	5.25	4.12
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	16.42 kW	15.61 kW
COP Tj = -7°C	3.23	2.27
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	9.99 kW	9.50 kW
COP Tj = +2°C	5.17	4.07
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	6.06 kW	5.76 kW
COP Tj = +7°C	7.07	5.63
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.96 kW	5.52 kW
COP Tj = 12°C	8.44	8.36
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	16.42 kW	15.61 kW
COP Tj = Tbiv	3.23	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.14 kW	14.36 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.00
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	3.20 kW	3.20 kW
Annual energy consumption Qhe	7306 kWh	8861 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	183 %	143 %
Prated	16.35 kW	15.72 kW
SCOP	4.66	3.66
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.89 kW	9.52 kW
COP Tj = -7°C	3.88	2.99
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.75 kW	6.57 kW
COP Tj = +2°C	5.92	4.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	6.00 kW	5.87 kW
COP Tj = +7°C	7.59	6.30
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.96 kW	5.34 kW
COP Tj = 12°C	8.44	8.53
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.33 kW	12.83 kW
COP Tj = Tbiv	2.75	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.82 kW	10.36 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.12	1.46
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	5.20 kW	5.20 kW
Annual energy consumption Q_{he}	8645 kWh	10587 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if TOL	13.33	12.83
COP $T_j = -15^{\circ}\text{C}$ (if TOL	2.75	1.98
$C_{dh} T_j = -15^{\circ}\text{C}$	0.900	0.900