



**Outdoor heat pump unit for the production of chilled/hot water with semi-hermetic screw compressors optimized for R513A, axial-flow fans, external coil with copper tubes and aluminium fins, shell and tubes heat exchanger designed by Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A. and electronic expansion valve.**

**Base and supporting structure and panels are galvanized epoxy powder coated steel with increased thickness.**

**These units are designed for two-pipes systems and are able to produce hot or cold water according to the selected operation mode; the precise thermoregulation guarantees an optimal response to load's changes, in every operating condition.**

### Control



#### Electronic control W3000 TE

W3000TE features a large keyboard and wide LCD display for an easy and safe access to the machine setup and a complete view of unit's status. The assessment and intervention on the unit is managed through a multi-level menu, with selectable user's language. An optional extra is the touch screen interface: 7.0" WVGA colour display with adjustable LED backlight and front USB port. The touch screen technology allows intuitive navigation between the various screens, safe access to the data with a three-level password protection as well as the graphic display of the performance of some monitored measurements. Complete alarm management system is available, with the "black-box" and the alarm history display functions. For the systems made of several units, the adjustment of the resources is performed by optional proprietary devices. Consumption metering and performance measurement are possible and supervision can be developed via proprietary devices or the integration in third party systems by means of the most common protocols ModBus, Bacnet, Bacnet-over-IP, LonWorks.

Compatibility with remote keyboard (up to 8 units). The programmable timer allows the creation of an operating profile up to 4 typical days and 10 time bands. Continuous modulation of the unit capacity, based on PID algorithms and referring to the water delivery temperature.

### Refrigerant



### Versions

B	Basic	SL-CA	Super Low noise version, Class A of efficiency
CA	Class A of efficiency		
LN-CA	Low Noise, Class A of efficiency		

### Configurations

-	Basic function	D	Partial condensing heat recovery function
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### Features

#### HIGH EFFICIENCY

Unit in Class A as per Eurovent (in heating). High efficiency for low energy consumption during the operating hours.

#### LOW GWP REFRIGERANT

New generation refrigerant R513A, with reduced greenhouse effect in comparison with traditional HFC refrigerants (Global Warming Potential GWP of R513A = 572, GWP of R134a = 1300 as per IPCC rev. 5th) and zero impact on the ozone layer. Not flammable (ASHRAE 34, ISO 817: class A1).

#### SMART DEFROST

The advanced self-adaptive proprietary defrosting logics take into account all the operating parameters and the external conditions: the number and duration of the defrost cycles are therefore reduced to the minimum necessary ensuring an increase in efficiency and net heating capacity of the units.

#### COMPACTNESS

Reduced dimensions, for easy installation even in sites with space constraints

#### WIDE OPERATING RANGE

Unit's operation guaranteed with external air temperature down to -10 °C during winter and up to 50 °C during summer.

#### HOT WATER SUPPLY

Supply of hot water in use up to 60°C, offering maximum versatility with respect to different plant engineering solutions

### Accessories

- Hydronic group
- VPF (Variable Primary Flow) kit: variable flow pumps with on board regulation
- Set-up for remote connectivity with ModBus/Echelon protocol cards
- Kit HWT, High Water Temperature, to produce hot water up to 60°C
- Soft start

FOCS-N-G05/B		2022	2222	2422	2722	3222	3622	4222	4822
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>									
<b>COOLING ONLY (GROSS VALUE)</b>									
Cooling capacity	(1) kW	449,7	494,0	530,9	662,8	790,9	916,2	1029	1146
Total power input	(1) kW	169,5	184,1	193,9	233,6	278,2	304,4	350,4	396,9
EER	(1) kW/kW	2,653	2,683	2,738	2,837	2,843	3,010	2,937	2,887
ESEER	(1) kW/kW	3,640	3,680	3,740	4,130	4,020	4,000	4,120	4,040
<b>COOLING ONLY (EN14511 VALUE)</b>									
Cooling capacity	(1)(2) kW	448,5	492,6	529,3	661,1	788,7	913,9	1026	1143
EER	(1)(2) kW/kW	2,630	2,660	2,710	2,810	2,810	2,980	2,900	2,860
ESEER	(1)(2) kW/kW	3,540	3,580	3,620	4,020	3,910	3,900	3,980	3,930
Cooling energy class		D	D	C	C	C	B	B	C
<b>HEATING ONLY (GROSS VALUE)</b>									
Total heating capacity	(3) kW	483,4	528,9	568,2	705,5	832,1	955,4	1083	1207
Total power input	(3) kW	158,4	172,5	185,0	218,9	257,0	288,0	328,4	369,9
COP	(3) kW/kW	3,052	3,066	3,071	3,223	3,238	3,317	3,298	3,263
<b>HEATING ONLY (EN14511 VALUE)</b>									
Total heating capacity	(3)(2) kW	484,8	530,6	570,2	707,6	834,7	958,0	1087	1211
COP	(3)(2) kW/kW	3,030	3,050	3,050	3,200	3,220	3,300	3,270	3,240
Cooling energy class		B	B	B	A	A	A	A	A
<b>ENERGY EFFICIENCY</b>									
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>									
<b>Ambient refrigeration</b>									
Prated,c	(10) kW	-	-	-	661	789	914	1026	1143
SEER	(10)(11)	-	-	-	4,14	4,10	4,10	4,15	4,11
Performance ηs	(10)(12) %	-	-	-	163	161	161	163	161
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>									
PDesign	(4) kW	339	366	400	-	-	-	-	-
SCOP	(4)(13)	3,19	3,20	3,19	-	-	-	-	-
Performance ηs	(4)(14) %	125	125	125	-	-	-	-	-
Seasonal efficiency class	(15)	-	-	-	-	-	-	-	-
<b>EXCHANGERS</b>									
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>									
Water flow	(1) l/s	21,50	23,62	25,39	31,69	37,82	43,81	49,20	54,80
Pressure drop	(1) kPa	30,0	33,3	38,4	32,5	36,7	33,3	42,3	37,0
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>									
Water flow	(3) l/s	23,33	25,53	27,43	34,06	40,17	46,12	52,30	58,27
Pressure drop	(3) kPa	35,3	38,9	44,8	37,6	41,4	36,9	47,9	41,8
<b>REFRIGERANT CIRCUIT</b>									
Compressors nr.	N°	2	2	2	2	2	2	2	2
No. Circuits	N°	2	2	2	2	2	2	2	2
Refrigerant charge	kg	184	213	230	258	311	385	437	483
<b>NOISE LEVEL</b>									
Sound Pressure	(5) dB(A)	79	80	80	80	81	80	82	81
Sound power level in cooling	(6)(7) dB(A)	99	101	101	101	102	102	104	104
Sound power level in heating	(6)(8) dB(A)	99	101	101	101	102	102	104	104
<b>SIZE AND WEIGHT</b>									
Operating weight	(9) kg	5900	6330	6420	7290	9390	10400	10700	11310
A	(9) mm	4900	5800	5800	7000	7900	10000	10000	11800
B	(9) mm	2260	2260	2260	2260	2260	2260	2260	2260
H	(9) mm	2430	2430	2430	2430	2430	2430	2430	2430

#### Notes

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain R513A [GWP<sub>100</sub> 631] fluorinated greenhouse gases.  
Certified data in EUROVENT

FOCS-N-G05/CA		2022	2222	2422	2622	2722	3222	3622	4222	4822	
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	
<b>PERFORMANCE</b>											
<b>COOLING ONLY (GROSS VALUE)</b>											
Cooling capacity	(1)	kW	459,6	502,8	537,8	586,0	671,6	802,9	928,9	1041	1162
Total power input	(1)	kW	164,0	176,2	188,1	209,6	226,5	269,8	296,3	348,8	385,2
EER	(1)	kW/kW	2,802	2,854	2,859	2,796	2,965	2,976	3,135	2,985	3,017
ESEER	(1)	kW/kW	3,820	3,850	3,850	3,880	4,290	4,130	4,150	4,160	4,190
<b>COOLING ONLY (EN14511 VALUE)</b>											
Cooling capacity	(1)(2)	kW	458,4	501,4	536,1	584,7	669,8	800,6	926,5	1038	1159
EER	(1)(2)	kW/kW	2,770	2,820	2,820	2,770	2,930	2,940	3,100	2,950	2,980
ESEER	(1)(2)	kW/kW	3,720	3,750	3,730	3,800	4,150	4,000	4,040	4,020	4,070
Cooling energy class			C	C	C	C	B	B	A	B	B
<b>HEATING ONLY (GROSS VALUE)</b>											
Total heating capacity	(3)	kW	474,9	525,3	558,7	595,6	689,4	812,5	932,0	1062	1178
Total power input	(3)	kW	149,3	162,5	174,2	184,5	205,6	241,7	269,1	312,8	346,9
COP	(3)	kW/kW	3,181	3,233	3,207	3,228	3,353	3,362	3,463	3,395	3,396
<b>HEATING ONLY (EN14511 VALUE)</b>											
Total heating capacity	(3)(2)	kW	476,3	526,9	560,6	597,0	691,4	814,9	934,5	1065	1181
COP	(3)(2)	kW/kW	3,160	3,210	3,180	3,210	3,330	3,340	3,440	3,370	3,370
Cooling energy class			B	A	B	A	A	A	A	A	A
<b>ENERGY EFFICIENCY</b>											
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>											
<b>Ambient refrigeration</b>											
Prated,c	(10)	kW	-	-	-	-	670	801	926	1038	1159
SEER	(10)(11)		-	-	-	-	4,23	4,14	4,20	4,19	4,24
Performance ηs	(10)(12)	%	-	-	-	-	166	163	165	165	167
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>											
PDesign	(4)	kW	342	372	361	393	-	-	-	-	-
SCOP	(4)(13)		3,38	3,41	3,38	3,56	-	-	-	-	-
Performance ηs	(4)(14)	%	132	133	132	139	-	-	-	-	-
Seasonal efficiency class	(15)		-	-	-	-	-	-	-	-	-
<b>EXCHANGERS</b>											
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>											
Water flow	(1)	l/s	21,98	24,05	25,72	28,02	32,11	38,39	44,42	49,77	55,59
Pressure drop	(1)	kPa	31,3	34,5	39,4	26,5	33,4	37,8	34,3	43,3	38,0
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>											
Water flow	(3)	l/s	22,92	25,36	26,97	28,75	33,28	39,22	44,99	51,24	56,85
Pressure drop	(3)	kPa	34,1	38,3	43,4	27,9	35,9	39,5	35,2	45,9	39,8
<b>REFRIGERANT CIRCUIT</b>											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Refrigerant charge		kg	233	256	253	276	288	391	495	518	618
<b>NOISE LEVEL</b>											
Sound Pressure	(5)	dB(A)	79	80	80	80	80	81	80	81	81
Sound power level in cooling	(6)(7)	dB(A)	99	101	101	101	101	102	102	104	104
Sound power level in heating	(6)(8)	dB(A)	99	101	101	101	101	102	102	104	104
<b>SIZE AND WEIGHT</b>											
Operating weight	(9)	kg	6050	6630	6710	6950	7480	9620	10650	11260	11690
A	(9)	mm	4900	5800	5800	5800	7000	7900	10000	11800	11800
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2430	2430	2430	2430	2430	2430	2430	2430	2430

**Notes**

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
- Sound power on the basis of measurements made in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
- Seasonal space cooling energy efficiency
- Seasonal coefficient of performance
- Seasonal space heating energy efficiency
- Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

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Certified data in EUROVENT

FOCS-N-G05/LN-CA		2022	2222	2422	2622	2722	3222	3622	4222	4822	
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	
<b>PERFORMANCE</b>											
<b>COOLING ONLY (GROSS VALUE)</b>											
Cooling capacity	(1)	kW	444,3	492,0	524,2	564,0	654,5	779,5	903,5	1013	1130
Total power input	(1)	kW	166,8	176,3	189,9	214,0	228,4	272,7	295,2	347,9	387,6
EER	(1)	kW/kW	2,664	2,791	2,760	2,636	2,866	2,858	3,061	2,912	2,915
ESEER	(1)	kW/kW	3,780	3,850	3,840	3,860	4,250	4,110	4,140	4,150	4,190
<b>COOLING ONLY (EN14511 VALUE)</b>											
Cooling capacity	(1)(2)	kW	443,2	490,6	522,6	562,8	652,8	777,4	901,3	1010	1127
EER	(1)(2)	kW/kW	2,640	2,760	2,730	2,620	2,840	2,830	3,030	2,880	2,890
ESEER	(1)(2)	kW/kW	3,680	3,740	3,730	3,780	4,130	4,000	4,030	4,020	4,070
Cooling energy class			D	C	C	D	C	C	B	C	C
<b>HEATING ONLY (GROSS VALUE)</b>											
Total heating capacity	(3)	kW	471,6	525,3	558,7	591,5	689,4	812,5	932,0	1062	1178
Total power input	(3)	kW	149,3	162,5	174,2	184,5	205,6	241,7	269,1	312,8	346,9
COP	(3)	kW/kW	3,159	3,233	3,207	3,206	3,353	3,362	3,463	3,395	3,396
<b>HEATING ONLY (EN14511 VALUE)</b>											
Total heating capacity	(3)(2)	kW	472,9	526,9	560,6	592,9	691,4	814,9	934,5	1065	1181
COP	(3)(2)	kW/kW	3,140	3,210	3,180	3,190	3,330	3,340	3,440	3,370	3,370
Cooling energy class			B	A	B	B	A	A	A	A	A
<b>ENERGY EFFICIENCY</b>											
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>											
<b>Ambient refrigeration</b>											
Prated,c	(10)	kW	-	-	-	-	653	777	901	1010	1127
SEER	(10)(11)		-	-	-	-	4,22	4,11	4,17	4,18	4,22
Performance ηs	(10)(12)	%	-	-	-	-	166	162	164	164	166
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>											
PDesign	(4)	kW	340	372	361	391	-	-	-	-	-
SCOP	(4)(13)		3,36	3,41	3,38	3,53	-	-	-	-	-
Performance ηs	(4)(14)	%	131	133	132	138	-	-	-	-	-
Seasonal efficiency class	(15)		-	-	-	-	-	-	-	-	-
<b>EXCHANGERS</b>											
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>											
Water flow	(1)	l/s	21,25	23,53	25,07	26,97	31,30	37,28	43,21	48,44	54,04
Pressure drop	(1)	kPa	29,3	33,0	37,5	24,5	31,7	35,7	32,4	41,1	36,0
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>											
Water flow	(3)	l/s	22,77	25,36	26,97	28,55	33,28	39,22	44,99	51,24	56,85
Pressure drop	(3)	kPa	33,6	38,3	43,4	27,5	35,9	39,5	35,2	45,9	39,8
<b>REFRIGERANT CIRCUIT</b>											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Refrigerant charge		kg	242	267	284	306	316	391	541	535	596
<b>NOISE LEVEL</b>											
Sound Pressure	(5)	dB(A)	73	74	74	74	74	75	74	75	75
Sound power level in cooling	(6)(7)	dB(A)	93	95	95	95	95	96	96	98	98
Sound power level in heating	(6)(8)	dB(A)	94	96	96	96	96	97	97	99	99
<b>SIZE AND WEIGHT</b>											
Operating weight	(9)	kg	6120	6610	6700	6930	7580	9730	10800	11400	11860
A	(9)	mm	4900	5800	5800	5800	7000	7900	10000	11800	11800
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2430	2430	2430	2430	2430	2430	2430	2430	2430

- Notes**
- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
  - Values in compliance with EN14511
  - Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
  - Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
  - Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
  - Sound power on the basis of measurements made in compliance with ISO 9614.
  - Sound power level in cooling, outdoors.
  - Sound power level in heating, outdoors.
  - Unit in standard configuration/execution, without optional accessories.
  - Parameter calculated according to [REGULATION (EU) N. 2016/2281]
  - Seasonal energy efficiency ratio
  - Seasonal space cooling energy efficiency
  - Seasonal coefficient of performance
  - Seasonal space heating energy efficiency
  - Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]
- The units highlighted in this publication contain R513A [GWP<sub>100</sub> 631] fluorinated greenhouse gases.  
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FOCS-N-G05/SL-CA		2022	2222	2422	2622	2722	3222	3622	4222	4822	
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	
<b>PERFORMANCE</b>											
<b>COOLING ONLY (GROSS VALUE)</b>											
Cooling capacity	(1)	kW	440,7	487,9	519,6	558,6	648,7	771,5	895,0	1004	1119
Total power input	(1)	kW	169,4	178,7	192,6	217,5	231,0	275,9	297,4	350,6	391,5
EER	(1)	kW/kW	2,602	2,730	2,698	2,568	2,808	2,796	3,009	2,864	2,858
ESEER	(1)	kW/kW	3,760	3,840	3,830	3,850	4,270	4,110	4,150	4,180	4,200
<b>COOLING ONLY (EN14511 VALUE)</b>											
Cooling capacity	(1)(2)	kW	439,6	486,6	518,0	557,4	647,1	769,4	892,8	1001	1116
EER	(1)(2)	kW/kW	2,580	2,700	2,670	2,550	2,780	2,770	2,980	2,830	2,830
ESEER	(1)(2)	kW/kW	3,670	3,740	3,710	3,770	4,160	3,990	4,040	4,040	4,080
Cooling energy class			D	C	D	D	C	C	B	C	C
<b>HEATING ONLY (GROSS VALUE)</b>											
Total heating capacity	(3)	kW	465,6	519,6	551,8	583,9	681,1	802,2	919,9	1050	1162
Total power input	(3)	kW	147,7	160,8	172,4	182,6	202,8	238,4	265,1	308,1	341,9
COP	(3)	kW/kW	3,152	3,231	3,201	3,198	3,358	3,365	3,470	3,408	3,399
<b>HEATING ONLY (EN14511 VALUE)</b>											
Total heating capacity	(3)(2)	kW	466,9	521,2	553,7	585,2	683,0	804,6	922,3	1053	1165
COP	(3)(2)	kW/kW	3,130	3,210	3,180	3,180	3,340	3,340	3,450	3,380	3,380
Cooling energy class			B	A	B	B	A	A	A	A	A
<b>ENERGY EFFICIENCY</b>											
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>											
<b>Ambient refrigeration</b>											
Prated,c	(10)	kW	-	-	-	-	647	769	893	1001	1116
SEER	(10)(11)		-	-	-	-	4,23	4,10	4,18	4,19	4,22
Performance ηs	(10)(12)	%	-	-	-	-	166	161	164	165	166
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>											
PDesign	(4)	kW	340	371	365	393	-	-	-	-	-
SCOP	(4)(13)		3,39	3,44	3,41	3,56	-	-	-	-	-
Performance ηs	(4)(14)	%	132	135	134	139	-	-	-	-	-
Seasonal efficiency class	(15)		-	-	-	-	-	-	-	-	-
<b>EXCHANGERS</b>											
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>											
Water flow	(1)	l/s	21,08	23,33	24,85	26,71	31,02	36,90	42,80	48,01	53,53
Pressure drop	(1)	kPa	28,8	32,5	36,8	24,0	31,2	34,9	31,8	40,3	35,3
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>											
Water flow	(3)	l/s	22,47	25,08	26,64	28,18	32,88	38,72	44,40	50,67	56,11
Pressure drop	(3)	kPa	32,7	37,5	42,3	26,8	35,0	38,5	34,2	44,9	38,8
<b>REFRIGERANT CIRCUIT</b>											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Refrigerant charge		kg	243	268	285	307	317	391	541	536	598
<b>NOISE LEVEL</b>											
Sound Pressure	(5)	dB(A)	69	70	70	70	70	71	70	71	71
Sound power level in cooling	(6)(7)	dB(A)	89	91	91	91	91	92	92	94	94
Sound power level in heating	(6)(8)	dB(A)	90	92	92	92	92	93	93	95	95
<b>SIZE AND WEIGHT</b>											
Operating weight	(9)	kg	6190	6680	6770	7010	7650	9820	10890	11510	11950
A	(9)	mm	4900	5800	5800	5800	7000	7900	10000	11800	11800
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2430	2430	2430	2430	2430	2430	2430	2430	2430

**Notes**

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
  - Values in compliance with EN14511
  - Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
  - Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
  - Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
  - Sound power on the basis of measurements made in compliance with ISO 9614.
  - Sound power level in cooling, outdoors.
  - Sound power level in heating, outdoors.
  - Unit in standard configuration/execution, without optional accessories.
  - Parameter calculated according to [REGULATION (EU) N. 2016/2281]
  - Seasonal energy efficiency ratio
  - Seasonal space cooling energy efficiency
  - Seasonal coefficient of performance
  - Seasonal space heating energy efficiency
  - Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]
- The units highlighted in this publication contain R513A [GWP<sub>100</sub> 631] fluorinated greenhouse gases.  
 Certified data in EUROVENT

**Dimensional drawing**

