



Outdoor unit for the production of chilled water with semi-hermetic variable-speed screw compressors optimized for R513A, axial-flow fans, micro-channel full-aluminum condensing coils, single-pass shell and tubes evaporator designed by Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A. and electronic expansion valve.

Base and supporting structure and panels are of galvanized epoxy powder coated steel with increased thickness. Eurovent certification.

The screw compressors feature the variable speed technology thanks to the integrated refrigerant cooled inverter, for the maximum compactness and operating flexibility. Moreover, they feature the Variable Vi (compression ratio) technology, to change the internal geometry according to the operating conditions.

Thanks to the accurate sizing of all internal components and the use of variable speed technology, the unit ensures flexibility, reliability and maximum efficiency in every operating condition.

Control



W3000TE

W3000TE control is available with the new KIPLink user interface. Based on WiFi technology, it allows one to operate on the unit directly from the smartphone or tablet. Using KIPLink, it is possible to turn the unit on and off, adjust the set-point, plot the main operating variables, monitor the status of the various components and display / reset the alarms. As alternatives, the Touch interface, with a 7" WVGA colour display and USB port, or the Large keyboard, with a wide LCD display and led icons, are available. Temperature control characterized by the continuous capacity modulation, based on PID algorithms with dynamic neutral zone related to the leaving water temperature. Complete alarm management system is available, with the "black-box" and the alarm history display functions.

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 manages a weekly schedule organized into time bands (up to 10 daily time bands associated with different operating set points) to optimise unit performance by minimising power consumption during periods of inactivity. As an option (VPF package), the capacity modulation is integrated with the modulation of the water flow, by means of inverter and dedicated resources for the hydraulic circuit.

Refrigerant



Versions

K	Standard efficiency	A	High efficiency
SL-K	Super low noise, standard efficiency	SL-A	Super low noise, high efficiency

Configurations

-	Basic function	R	Total condensing heat recovery function
D	Partial condensing heat recovery function		

Features

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).

HIGH EFFICIENCY

Very high efficiency at full and partial load, at the highest market levels, thanks to the adopted technological solutions. These units ensure low operating costs and therefore a quick payback time.

ErP COMPLIANT 2021

Thanks to the inverter technology and the accurate design, the units already comply and exceed the minimum seasonal energy efficiency requirements that will start from 2021, imposed by the eco-sustainable design Directive 2009/125/EC.

WIDE OPERATING RANGE

The accurate condensation control (variable fan speed regulation as per standard on every model), the availability of devoted kits and smart control logics allow unit's operation from -20°C up to 55°C of outdoor air temperature and from -8°C to 20°C of evaporator leaving water temperature.

REDUCED FOOTPRINT

These new units have a reduced footprint, making them the best solution both for new plants (thanks to high efficiency) and for the replacement of obsolete units in existing plants, offering a very high efficiency increase with same dimensions and cooling capacity.

ALUMINIUM MICRO-CHANNEL HEAT EXCHANGERS

The full aluminium micro-channel condenser coils deliver high efficiency whilst ensuring a reduced refrigerant volume and a lower unit weight. The e-coating protection (optional) grants the highest level of resistance to corrosion in any condition, even in the most aggressive environments.

INTEGRATED HYDRONIC GROUP

The built-in hydronic group (optional) includes the main water circuit components. The 2 pumps are in twin configuration and available with 2 or 4-pole motor, fixed or variable speed, high or low head.

HARMONY BETWEEN UNIT AND PLANT

Low inrush current and power factor higher than similar fixed speed units, permit an easy electrical installation which is not stressed during start-up and with no need of extra devices for power factor correction. The use of VSD technology allows the unit to partialize in a stepless way, with consequent lower fluctuations of leaving water temperature.

Accessories

- Noise reducer (only on not silenced versions)
- EC fans with electronic DC brushless motor (for K versions)
- Microchannel coils with e-coating protection
- Traditional coils with copper tubes and aluminium fins, also available with pre-painted fins or Fin Guard Silver protective treatment.
- Leak detector
- Kit HT to increase the unit operating range
- Hydronic group
- VPF (Variable Primary Flow) system
- Set-up for remote connectivity with ModBus, Mitsubishi M-Net, Echelon, Bacnet, Bacnet over-IP.

i-FX-G05/K			2202	2602	2652	2702	2722	3152	3602
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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	478,6	531,1	561,2	598,1	656,7	720,7	801,4
Total power input	(1)	kW	172,0	189,2	198,6	209,1	237,2	263,0	290,3
EER	(1)	kW/kW	2,783	2,807	2,826	2,860	2,769	2,740	2,761
ESEER	(1)	kW/kW	4,660	4,670	4,670	4,630	4,630	4,720	4,700
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	477,3	529,4	559,6	596,2	654,7	718,2	798,9
EER	(1)(2)	kW/kW	2,750	2,770	2,800	2,830	2,740	2,710	2,730
ESEER	(1)(2)	kW/kW	4,480	4,460	4,480	4,430	4,430	4,490	4,490
Cooling energy class			C	C	C	C	C	C	C
ENERGY EFFICIENCY									
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)									
Ambient refrigeration									
Prated,c	(7)	kW	477	529	560	596	655	718	799
SEER	(7)(8)		4,77	4,78	4,73	4,76	4,76	4,82	4,83
Performance ηs	(7)(9)	%	188	188	186	187	187	190	190
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	22,89	25,40	26,84	28,60	31,40	34,47	38,33
Pressure drop	(1)	kPa	32,0	39,5	35,2	40,0	38,3	46,2	40,7
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	79,0	87,0	92,0	101	108	120	135
NOISE LEVEL									
Sound Pressure	(3)	dB(A)	67	68	68	68	69	68	68
Sound power level in cooling	(4)(5)	dB(A)	99	100	100	100	101	101	101
SIZE AND WEIGHT									
A	(6)	mm	4150	5400	5400	5400	5400	6650	6650
B	(6)	mm	2260	2260	2260	2260	2260	2260	2260
H	(6)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(6)	kg	4790	5360	5360	5420	5730	6150	6240

i-FX-G05/K			3902	4202	4502	4802	4812	4822	5412
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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	874,1	932,0	990,3	1029	1054	1128	1169
Total power input	(1)	kW	312,1	331,0	358,1	383,8	366,8	405,3	430,5
EER	(1)	kW/kW	2,801	2,816	2,765	2,681	2,874	2,783	2,715
ESEER	(1)	kW/kW	4,610	4,620	4,670	4,730	4,650	4,650	4,790
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	871,3	928,7	987,3	1026	1050	1124	1166
EER	(1)(2)	kW/kW	2,770	2,780	2,730	2,650	2,830	2,750	2,690
ESEER	(1)(2)	kW/kW	4,410	4,400	4,480	4,520	4,430	4,430	4,590
Cooling energy class			C	C	C	D	C	C	D
ENERGY EFFICIENCY									
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)									
Ambient refrigeration									
Prated,c	(7)	kW	871	929	987	1026	1050	1124	1166
SEER	(7)(8)		4,79	4,82	4,77	4,80	4,79	4,82	4,89
Performance ηs	(7)(9)	%	189	190	188	189	189	190	193
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	41,80	44,57	47,36	49,20	50,41	53,94	55,90
Pressure drop	(1)	kPa	42,8	48,7	42,4	45,8	48,1	51,7	41,7
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	146	155	161	168	174	189	193
NOISE LEVEL									
Sound Pressure	(3)	dB(A)	69	70	70	71	71	72	72
Sound power level in cooling	(4)(5)	dB(A)	102	103	103	104	104	105	105
SIZE AND WEIGHT									
A	(6)	mm	7900	7900	7900	7900	9150	9150	9150
B	(6)	mm	2260	2260	2260	2260	2260	2260	2260
H	(6)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(6)	kg	6730	6810	7410	7760	8360	8470	8560

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
- Average sound pressure level at 10m 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.
- 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

The units highlighted in this publication contain R513A [GWP₁₀₀ 631] fluorinated greenhouse gases.
 Certified data in EUROVENT

i-FX-G05/K		6002	6022	6303	6903	7203	7213	7223
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
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1) kW	1242	1302	1409	1493	1559	1649	1697
Total power input	(1) kW	438,8	477,1	498,8	544,8	578,9	596,2	618,5
EER	(1) kW/kW	2,830	2,729	2,825	2,740	2,693	2,766	2,744
ESEER	(1) kW/kW	4,810	4,810	4,610	4,660	4,660	4,620	4,650
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2) kW	1238	1297	1405	1488	1555	1644	1691
EER	(1)(2) kW/kW	2,800	2,690	2,790	2,710	2,670	2,730	2,710
ESEER	(1)(2) kW/kW	4,580	4,560	4,410	4,440	4,480	4,430	4,430
Cooling energy class		C	D	C	C	D	C	C
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(7) kW	1238	1297	1405	1488	1555	1644	1691
SEER	(7)(8)	4,90	4,90	4,74	4,77	4,76	4,76	4,79
Performance ηs	(7)(9) %	193	193	187	188	187	187	189
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	59,42	62,28	67,38	71,40	74,58	78,86	81,17
Pressure drop	(1) kPa	47,1	51,8	45,9	51,5	39,6	44,3	50,4
REFRIGERANT CIRCUIT								
Compressors nr.	N°	2	2	3	3	3	3	3
No. Circuits	N°	2	2	3	3	3	3	3
Refrigerant charge	kg	208	214	236	244	254	273	288
NOISE LEVEL								
Sound Pressure	(3) dB(A)	72	72	72	72	72	73	73
Sound power level in cooling	(4)(5) dB(A)	105	105	105	105	105	106	106
SIZE AND WEIGHT								
A	(6) mm	10400	10400	11650	11650	11650	12900	12900
B	(6) mm	2260	2260	2260	2260	2260	2260	2260
H	(6) mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(6) kg	9030	9060	10880	11620	11940	12420	12440

Notes

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- Values in compliance with EN14511
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i-FX-G05/SL-K			2202	2602	2652	2702	2722	3152	3602
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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	477,0	516,7	554,6	578,0	662,9	711,3	774,2
Total power input	(1)	kW	168,1	177,0	195,5	212,2	228,3	260,2	295,6
EER	(1)	kW/kW	2,838	2,919	2,837	2,724	2,904	2,734	2,619
ESEER	(1)	kW/kW	4,810	4,800	4,770	4,660	4,750	4,760	4,750
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	475,7	515,1	553,0	576,3	660,9	708,9	772,0
EER	(1)(2)	kW/kW	2,810	2,880	2,810	2,690	2,870	2,700	2,590
ESEER	(1)(2)	kW/kW	4,480	4,590	4,570	4,470	4,560	4,540	4,560
Cooling energy class			C	C	C	D	C	C	D
ENERGY EFFICIENCY									
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)									
Ambient refrigeration									
Prated,c	(7)	kW	476	515	553	576	661	709	772
SEER	(7)(8)		4,91	4,88	4,83	4,74	4,89	4,90	4,87
Performance ηs	(7)(9)	%	194	192	190	187	193	193	192
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	22,81	24,71	26,52	27,64	31,70	34,02	37,02
Pressure drop	(1)	kPa	31,8	37,4	34,4	37,3	39,1	45,0	38,0
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	83,0	91,0	97,0	101	116	125	135
NOISE LEVEL									
Sound Pressure	(3)	dB(A)	60	61	61	61	61	61	61
Sound power level in cooling	(4)(5)	dB(A)	92	93	93	93	94	94	94
SIZE AND WEIGHT									
A	(6)	mm	5400	5400	5400	5400	6650	6650	6650
B	(6)	mm	2260	2260	2260	2260	2260	2260	2260
H	(6)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(6)	kg	5510	5680	5700	5720	6480	6510	6550

i-FX-G05/SL-K			3902	4202	4502	4802	4812	4822	5412
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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	845,6	903,1	972,7	1028	1046	1120	1162
Total power input	(1)	kW	317,7	336,9	356,8	373,5	359,4	397,2	422,1
EER	(1)	kW/kW	2,662	2,681	2,726	2,752	2,910	2,820	2,753
ESEER	(1)	kW/kW	4,640	4,640	4,760	4,850	4,740	4,800	4,880
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	843,1	900,1	969,8	1025	1042	1116	1159
EER	(1)(2)	kW/kW	2,630	2,650	2,700	2,720	2,870	2,780	2,720
ESEER	(1)(2)	kW/kW	4,450	4,430	4,560	4,610	4,530	4,560	4,670
Cooling energy class			D	D	C	C	C	C	C
ENERGY EFFICIENCY									
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)									
Ambient refrigeration									
Prated,c	(7)	kW	843	900	970	1025	1042	1116	1159
SEER	(7)(8)		4,76	4,78	4,86	4,95	4,89	4,93	5,00
Performance ηs	(7)(9)	%	187	188	191	195	192	194	197
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	40,44	43,19	46,52	49,15	50,01	53,58	55,57
Pressure drop	(1)	kPa	40,1	45,7	40,9	45,7	47,3	51,0	41,2
REFRIGERANT CIRCUIT									
Compressors nr.		N°	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	146	155	168	178	183	198	204
NOISE LEVEL									
Sound Pressure	(3)	dB(A)	62	63	63	63	63	63	63
Sound power level in cooling	(4)(5)	dB(A)	95	96	96	96	96	96	96
SIZE AND WEIGHT									
A	(6)	mm	7900	7900	9150	9150	10400	10400	10400
B	(6)	mm	2260	2260	2260	2260	2260	2260	2260
H	(6)	mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(6)	kg	7070	7150	8290	8670	9110	9110	9360

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
- Average sound pressure level at 10m 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.
- 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

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i-FX-G05/SL-K		6002	6022	6303	6903	7203	7213	7223
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
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1) kW	1199	1290	1365	1474	1541	1590	1635
Total power input	(1) kW	446,5	470,5	507,7	541,1	572,2	610,0	633,6
EER	(1) kW/kW	2,685	2,742	2,689	2,724	2,693	2,607	2,580
ESEER	(1) kW/kW	4,880	4,880	4,760	4,880	4,810	4,800	4,810
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2) kW	1195	1286	1361	1469	1537	1586	1630
EER	(1)(2) kW/kW	2,650	2,710	2,660	2,690	2,670	2,580	2,550
ESEER	(1)(2) kW/kW	4,660	4,630	4,570	4,650	4,630	4,610	4,610
Cooling energy class		D	C	D	D	D	D	D
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(7) kW	1195	1286	1361	1469	1537	1586	1630
SEER	(7)(8)	4,95	4,99	4,77	4,94	4,84	4,84	4,85
Performance ηs	(7)(9) %	195	197	188	194	191	190	191
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	57,32	61,67	65,28	70,50	73,70	76,02	78,18
Pressure drop	(1) kPa	43,9	50,8	43,1	50,2	38,7	41,2	46,7
REFRIGERANT CIRCUIT								
Compressors nr.	N°	2	2	3	3	3	3	3
No. Circuits	N°	2	2	3	3	3	3	3
Refrigerant charge	kg	208	224	236	255	267	278	288
NOISE LEVEL								
Sound Pressure	(3) dB(A)	63	63	63	63	63	64	64
Sound power level in cooling	(4)(5) dB(A)	96	96	96	96	96	97	97
SIZE AND WEIGHT								
A	(6) mm	10400	11650	11650	12900	12900	12900	12900
B	(6) mm	2260	2260	2260	2260	2260	2260	2260
H	(6) mm	2500	2500	2500	2500	2500	2500	2500
Operating weight	(6) kg	9370	9780	11350	12550	12870	12890	12910

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
- Average sound pressure level at 10m 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.
- Unit in standard configuration/execution, without optional accessories.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- Seasonal energy efficiency ratio
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i-FX-G05/A		2202	2602	2652	2702	2722	3152	3602	3902
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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1) kW	510,2	551,9	590,0	626,9	684,3	767,2	839,9	899,4
Total power input	(1) kW	163,5	177,8	189,4	203,0	222,2	257,2	286,0	303,4
EER	(1) kW/kW	3,120	3,104	3,115	3,088	3,080	2,983	2,937	2,964
ESEER	(1) kW/kW	5,080	5,200	5,160	5,060	5,050	5,040	5,070	5,060
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2) kW	508,7	550,4	588,2	624,8	682,1	765,0	837,1	896,4
EER	(1)(2) kW/kW	3,080	3,070	3,080	3,050	3,040	2,950	2,900	2,930
ESEER	(1)(2) kW/kW	4,860	4,980	4,920	4,810	4,820	4,830	4,810	4,810
Cooling energy class		B	B	B	B	B	B	B	B
ENERGY EFFICIENCY									
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)									
Ambient refrigeration									
Prated,c	(7) kW	509	550	588	625	682	765	837	896
SEER	(7)(8)	5,26	5,27	5,26	5,20	5,21	5,21	5,22	5,17
Performance ηs	(7)(9) %	207	208	207	205	205	206	206	204
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1) l/s	24,40	26,39	28,22	29,98	32,73	36,69	40,16	43,01
Pressure drop	(1) kPa	36,4	34,0	38,9	43,9	41,6	37,3	44,7	45,3
REFRIGERANT CIRCUIT									
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	91,0	93,0	100	106	115	130	141	153
NOISE LEVEL									
Sound Pressure	(3) dB(A)	67	68	67	67	68	68	68	69
Sound power level in cooling	(4)(5) dB(A)	99	100	100	100	101	101	101	102
SIZE AND WEIGHT									
A	(6) mm	5400	5400	6650	6650	6650	7900	7900	9150
B	(6) mm	2260	2260	2260	2260	2260	2260	2260	2260
H	(6) mm	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(6) kg	5270	5330	5730	5800	6130	6610	6670	7130

i-FX-G05/A		4202	4502	4802	4822	5412	5703	6303	6603
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
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1) kW	959,4	1028	1099	1162	1230	1334	1467	1520
Total power input	(1) kW	320,6	340,0	358,2	388,6	401,1	452,6	493,4	518,9
EER	(1) kW/kW	2,993	3,024	3,068	2,990	3,067	2,947	2,973	2,929
ESEER	(1) kW/kW	5,080	5,090	5,060	5,020	5,060	5,030	4,990	5,010
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2) kW	955,9	1025	1095	1159	1226	1330	1463	1516
EER	(1)(2) kW/kW	2,950	2,980	3,020	2,960	3,030	2,910	2,940	2,900
ESEER	(1)(2) kW/kW	4,810	4,840	4,800	4,810	4,810	4,820	4,810	4,810
Cooling energy class		B	B	B	B	B	B	B	B
ENERGY EFFICIENCY									
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)									
Ambient refrigeration									
Prated,c	(7) kW	956	1025	1095	1159	1226	1330	1463	1516
SEER	(7)(8)	5,12	5,26	5,21	5,16	5,22	5,15	5,06	5,12
Performance ηs	(7)(9) %	202	207	206	203	206	203	199	202
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1) l/s	45,88	49,16	52,54	55,59	58,81	63,78	70,16	72,70
Pressure drop	(1) kPa	51,6	45,7	50,1	41,2	46,2	41,1	35,1	37,7
REFRIGERANT CIRCUIT									
Compressors nr.	N°	2	2	2	2	2	3	3	3
No. Circuits	N°	2	2	2	2	2	3	3	3
Refrigerant charge	kg	162	174	185	199	209	227	260	258
NOISE LEVEL									
Sound Pressure	(3) dB(A)	70	70	71	72	72	72	72	72
Sound power level in cooling	(4)(5) dB(A)	103	103	104	105	105	105	105	105
SIZE AND WEIGHT									
A	(6) mm	9150	10400	10400	10400	11650	12900	12900	12900
B	(6) mm	2260	2260	2260	2260	2260	2260	2260	2260
H	(6) mm	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(6) kg	7150	8270	8750	8850	9390	11000	11150	11500

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
- Average sound pressure level at 10m 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.
- 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

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i-FX-G05/SL-A			2202	2602	2652	2702	2722	3152	3602	3902
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
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	498,8	559,5	581,8	615,1	682,8	751,6	811,9	891,5
Total power input	(1)	kW	162,3	182,7	185,5	202,2	216,8	251,1	275,3	295,2
EER	(1)	kW/kW	3,073	3,062	3,136	3,042	3,149	2,993	2,949	3,020
ESEER	(1)	kW/kW	5,110	5,110	5,150	5,080	5,100	5,060	5,080	5,080
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	497,4	557,9	580,0	613,4	680,6	749,5	809,4	888,6
EER	(1)(2)	kW/kW	3,040	3,030	3,100	3,010	3,110	2,960	2,910	2,980
ESEER	(1)(2)	kW/kW	4,900	4,890	4,910	4,860	4,850	4,840	4,850	4,840
Cooling energy class			B	B	A	B	A	B	B	B
ENERGY EFFICIENCY										
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)										
Ambient refrigeration										
Prated,c	(7)	kW	497	558	580	613	681	750	809	889
SEER	(7)(8)		5,27	5,27	5,30	5,23	5,27	5,28	5,28	5,24
Performance ηs	(7)(9)	%	208	208	209	206	208	208	208	207
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	23,85	26,76	27,82	29,42	32,65	35,94	38,83	42,63
Pressure drop	(1)	kPa	34,8	35,0	37,8	33,6	41,5	35,8	41,8	44,5
REFRIGERANT CIRCUIT										
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	91,0	101	106	112	123	136	148	162
NOISE LEVEL										
Sound Pressure	(3)	dB(A)	60	60	60	60	61	61	61	62
Sound power level in cooling	(4)(5)	dB(A)	92	93	93	93	94	94	94	95
SIZE AND WEIGHT										
A	(6)	mm	5400	6650	6650	6650	7900	7900	9150	10400
B	(6)	mm	2260	2260	2260	2260	2260	2260	2260	2260
H	(6)	mm	2500	2500	2500	2500	2500	2500	2500	2500
Operating weight	(6)	kg	5590	6030	6070	6400	6930	6970	7460	8000

i-FX-G05/SL-A			4202	4502	4802	4822	5412	5703	6303	
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	
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	942,8	1016	1086	1149	1213	1332	1462	
Total power input	(1)	kW	312,4	331,8	350,0	380,1	393,2	456,9	493,5	
EER	(1)	kW/kW	3,018	3,062	3,103	3,023	3,085	2,915	2,963	
ESEER	(1)	kW/kW	5,080	5,120	5,090	5,060	5,120	5,030	5,000	
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	939,4	1013	1082	1146	1209	1328	1458	
EER	(1)(2)	kW/kW	2,970	3,020	3,060	2,990	3,050	2,880	2,930	
ESEER	(1)(2)	kW/kW	4,810	4,860	4,830	4,840	4,870	4,820	4,820	
Cooling energy class			B	B	B	B	B	C	B	
ENERGY EFFICIENCY										
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)										
Ambient refrigeration										
Prated,c	(7)	kW	939	1013	1082	1146	1209	1328	1458	
SEER	(7)(8)		5,17	5,31	5,29	5,25	5,33	5,17	4,99	
Performance ηs	(7)(9)	%	204	209	209	207	210	204	197	
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	45,09	48,60	51,92	54,96	58,00	63,72	69,92	
Pressure drop	(1)	kPa	49,8	44,7	48,9	40,3	44,9	41,0	34,8	
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	3	3	
No. Circuits		N°	2	2	2	2	2	3	3	
Refrigerant charge		kg	171	184	197	210	220	237	260	
NOISE LEVEL										
Sound Pressure	(3)	dB(A)	63	63	63	63	63	63	63	
Sound power level in cooling	(4)(5)	dB(A)	96	96	96	96	96	96	96	
SIZE AND WEIGHT										
A	(6)	mm	10400	11650	11650	11650	12900	12900	12900	
B	(6)	mm	2260	2260	2260	2260	2260	2260	2260	
H	(6)	mm	2500	2500	2500	2500	2500	2500	2500	
Operating weight	(6)	kg	8070	9050	9450	9630	10030	11520	11520	

Notes

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Dimensional drawing

