

5.1 GENERAL TECHNICAL DATA

FX-W-G05/H

[SI System]

FX-W-G05/H			0551	0651	0751	0851	0951	1102	1302	1402	1502	1602
Power supply			V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50									
PERFORMANCE												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)	kW	124,3	140,5	166,3	198,2	221,7	252,4	285,1	311,9	345,2	366,2
Total power input	(1)	kW	25,50	28,41	35,57	40,52	46,10	51,04	56,86	64,04	71,26	76,05
EER	(1)	kW/kW	4,875	4,947	4,671	4,894	4,809	4,949	5,011	4,873	4,842	4,812
ESEER	(1)	kW/kW										
COOLING ONLY (EN14511 VALUE)												
Cooling capacity	(1)(2)	kW	123,9	140,1	165,8	197,5	220,8	251,4	284,1	310,7	344,2	365,1
EER	(1)(2)	kW/kW	4,710	4,780	4,500	4,720	4,630	4,770	4,840	4,690	4,690	4,660
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-	-	-	-	-
Cooling energy class			B	B	C	B	C	B	B	B	B	B
HEATING ONLY (GROSS VALUE)												
Total heating capacity	(3)	kW	142,4	161,8	191,6	225,6	253,5	287,9	327,0	357,6	393,8	418,6
Total power input	(3)	kW	33,24	37,16	45,11	51,32	58,46	66,52	74,35	82,35	90,39	96,36
COP	(3)	kW/kW	4,289	4,349	4,248	4,398	4,333	4,329	4,395	4,340	4,356	4,342
HEATING ONLY (EN14511 VALUE)												
Total heating capacity	(3)(2)	kW	142,8	162,3	192,2	226,2	254,2	288,6	327,8	358,5	394,9	419,6
COP	(3)(2)	kW/kW	4,150	4,210	4,090	4,220	4,130	4,140	4,200	4,130	4,190	4,170
Cooling energy class			B	B	C	B	C	C	B	C	B	B
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN REFRIGERATION												
Water flow	(1)	l/s	5,944	6,719	7,954	9,478	10,60	12,07	13,63	14,91	16,51	17,51
Pressure drop	(1)	kPa	19,8	19,7	27,6	32,9	41,2	41,0	38,5	46,1	32,0	36,0
HEAT EXCHANGER USER SIDE IN HEATING												
Water flow	(3)	l/s	8,853	10,11	11,89	14,13	15,82	17,96	20,49	22,22	24,61	26,14
Pressure drop	(3)	kPa	44,0	44,6	61,7	73,2	91,8	90,7	87,1	102	71,0	80,1
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION												
Water flow	(1)	l/s	7,133	8,045	9,611	11,37	12,75	14,45	16,29	17,90	19,83	21,06
Pressure drop	(1)	kPa	22,1	25,9	31,0	27,0	26,5	22,7	26,6	29,3	33,0	28,9
HEAT EXCHANGER SOURCE SIDE IN HEATING												
Water flow	(3)	l/s	6,871	7,808	9,249	10,89	12,24	13,90	15,79	17,26	19,01	20,21
Pressure drop	(3)	kPa	20,5	24,4	28,7	24,7	24,5	21,0	25,0	27,2	30,3	26,6
REFRIGERANT CIRCUIT												
Compressors nr.		N°	1	1	1	1	1	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0	0
No. Circuits		N°	1	1	1	1	1	2	2	2	2	2
Regulation			STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS									
Min. capacity step		%	25	25	25	25	25	25	25	25	25	25
Refrigerant			R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A
Refrigerant charge		kg	23,1	33,6	31,5	58,8	56,7	46,2	67,2	65,1	63,0	90,3
Oil charge		kg	10,0	10,0	15,0	15,0	15,0	20,0	20,0	25,0	30,0	30,0
Rc (ASHRAE)	(4)	kg/kW	-	-	0,19	-	-	-	-	0,21	0,19	0,25
NOISE LEVEL												
Sound Pressure	(5)	dB(A)	75	75	76	76	76	78	77	78	78	78
Sound power level in cooling	(6)(7)	dB(A)	92	92	93	93	93	95	95	96	96	96
Sound power level in heating	(6)(8)	dB(A)	92	92	93	93	93	95	95	96	96	96
SIZE AND WEIGHT												
A	(9)	mm	2400	2600	2700	3000	3000	3000	3100	3100	3200	3200
B	(9)	mm	920	920	950	960	960	1100	1100	1100	1100	1200
H	(9)	mm	1500	1500	1500	1500	1500	1500	1500	1500	1600	1600
Operating weight	(9)	kg	1050	1110	1280	1450	1460	1710	1820	1990	2280	2430

Notes:

1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger water (in/out) 30,00°C/35,00°C.

2 Values in compliance with EN14511

3 Plant (side) heating exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger water (in/out) 10,00°C/7,00°C

4 Rated in accordance with AHRI Standard 550/590 (2011 with addendum 1).

5 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.

6 Sound power on the basis of measurements made in compliance with ISO 9614.

7 Sound power level in cooling, indoors.

8 Sound power level in heating, indoors.

9 Unit in standard configuration/execution, without optional accessories.

- Not available

Certified data in EUROVENT

GENERAL TECHNICAL DATA

FX-W-G05/H

[SI System]

FX-W-G05/H		1752	
Power supply		V/ph/Hz	400/3/50
PERFORMANCE			
COOLING ONLY (GROSS VALUE)			
Cooling capacity	(1)	kW	400,6
Total power input	(1)	kW	86,66
EER	(1)	kW/kW	4,621
ESEER	(1)	kW/kW	-
COOLING ONLY (EN14511 VALUE)			
Cooling capacity	(1)(2)	kW	399,2
EER	(1)(2)	kW/kW	4,480
ESEER	(1)(2)	kW/kW	-
Cooling energy class		C	
HEATING ONLY (GROSS VALUE)			
Total heating capacity	(3)	kW	460,2
Total power input	(3)	kW	109,7
COP	(3)	kW/kW	4,195
HEATING ONLY (EN14511 VALUE)			
Total heating capacity	(3)(2)	kW	461,1
COP	(3)(2)	kW/kW	4,040
Cooling energy class		C	
EXCHANGERS			
HEAT EXCHANGER USER SIDE IN REFRIGERATION			
Water flow	(1)	l/s	19,16
Pressure drop	(1)	kPa	43,0
HEAT EXCHANGER USER SIDE IN HEATING			
Water flow	(3)	l/s	26,94
Pressure drop	(3)	kPa	85,1
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION			
Water flow	(1)	l/s	23,19
Pressure drop	(1)	kPa	24,8
HEAT EXCHANGER SOURCE SIDE IN HEATING			
Water flow	(3)	l/s	22,21
Pressure drop	(3)	kPa	22,8
REFRIGERANT CIRCUIT			
Compressors nr.		N°	2
Number of capacity steps		N°	0
No. Circuits		N°	2
Regulation		STEPLESS	
Min. capacity step		%	25
Refrigerant		R513A	
Refrigerant charge		kg	116
Oil charge		kg	30,0
Rc (ASHRAE)	(4)	kg/kW	-
NOISE LEVEL			
Sound Pressure	(5)	dB(A)	78
Sound power level in cooling	(6)(7)	dB(A)	96
Sound power level in heating	(6)(8)	dB(A)	96
SIZE AND WEIGHT			
A	(9)	mm	3200
B	(9)	mm	1200
H	(9)	mm	1600
Operating weight	(9)	kg	2590

Notes:

1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger water (in/out) 30,00°C/35,00°C.

2 Values in compliance with EN14511

3 Plant (side) heating exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger water (in/out) 10,00°C/7,00°C

4 Rated in accordance with AHRI Standard 550/590 (2011 with addendum 1).

5 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.

6 Sound power on the basis of measurements made in compliance with ISO 9614.

7 Sound power level in cooling, indoors.

8 Sound power level in heating, indoors.

9 Unit in standard configuration/execution, without optional accessories.

- Not available

Certified data in EUROVENT

6.1 TECHNICAL DATA SEASONAL EFFICIENCY IN HEATING (EN14825 VALUE)

FX-W-G05/H

[SI System]

FX-W-G05/H - LOW TEMPERATURE application			0551	0651	0751	0851	0951	1102
Power supply	(V/ph/Hz)		400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
WEATHER CONDITIONS - WARMER								
Rated heat output at T _{designh}	(1)(2)	kW	149	168	200	237	264	301
Bivalent temperature	(1)(2)	°C	2	2	2	2	2	2
SCOP	(1)(2)		5,50	5,45	5,33	5,24	5,19	5,48
Seasonal space heating energy efficiency	(1)(2)	%	212	210	205	201	200	211
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-
WEATHER CONDITIONS - AVERAGE								
Rated heat output at T _{designh}	(1)(2)	kW	169	190	227	269	299	341
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		5,70	5,67	5,56	5,49	5,43	5,63
Seasonal space heating energy efficiency	(1)(2)	%	220	219	215	212	209	217
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-
WEATHER CONDITIONS - COLDER								
Rated heat output at T _{designh}	(1)(2)	kW	184	207	247	293	326	371
Bivalent temperature	(1)(2)	°C	-15	-15	-15	-15	-15	-15
SCOP	(1)(2)		5,80	5,78	5,60	5,57	5,54	5,79
Seasonal space heating energy efficiency	(1)(2)	%	224	223	216	215	213	224
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Type of calculation with fixed flow and variable temperature.

FX-W-G05/H - LOW TEMPERATURE application			1302
Power supply	(V/ph/Hz)		400/3/50
WEATHER CONDITIONS - WARMER			
Rated heat output at T _{designh}	(1)(2)	kW	339
Bivalent temperature	(1)(2)	°C	2
SCOP	(1)(2)		5,47
Seasonal space heating energy efficiency	(1)(2)	%	211
Seasonal space heating energy efficiency class	(1)(2)		-
WEATHER CONDITIONS - AVERAGE			
Rated heat output at T _{designh}	(1)(2)	kW	384
Bivalent temperature	(1)(2)	°C	-7
SCOP	(1)(2)		5,62
Seasonal space heating energy efficiency	(1)(2)	%	217
Seasonal space heating energy efficiency class	(1)(2)		-
WEATHER CONDITIONS - COLDER			
Rated heat output at T _{designh}	(1)(2)	kW	418
Bivalent temperature	(1)(2)	°C	-15
SCOP	(1)(2)		5,77
Seasonal space heating energy efficiency	(1)(2)	%	223
Seasonal space heating energy efficiency class	(1)(2)		-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Type of calculation with fixed flow and variable temperature.

7.1 TECHNICAL DATA SEASONAL EFFICIENCY IN COOLING (EN14825 VALUE)

[SI System]

ENERGY EFFICIENCY

SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)

Ambient refrigeration

FX-W-G05/H			0551	0651	0751	0851	0951	1102	1302	1402	1502	1602
Prated,c	(1)	kW	123,9	140,1	165,8	197,5	220,8	251,4	284,1	310,7	344,2	365,1
SEER	(1) (2)	-	5,37	5,37	5,36	5,40	5,35	5,64	5,62	5,58	5,61	5,61
Performance η_s	(1) (3)	%	207,0	207,0	206,0	208,0	206,0	218,0	217,0	215,0	216,0	217,0
FX-W-G05/H			1752									
Prated,c	(1)	kW	399,2									
SEER	(1) (2)	-	5,57									
Performance η_s	(1) (3)	%	215,0									

Notes:

(1) Parameter calculated according to [REGULATION (EU) N. 2016/2281]

(2) Seasonal energy efficiency ratio

(3) Seasonal space cooling energy efficiency

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

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