## 6.1 GENERAL TECHNICAL DATA i-FX-W (1+i)-G05

[ SI System ]

| i-FX-W (1+i)-G05 | | | 1402 | 1752 | 1902 | 2152 | 2602 | 3002 | 3402 | 3852 | 4252 | 4652 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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** | | | | | | | | | | | | |
| **PERFORMANCE MAX** | | | | | | | | | | | | |
| **COOLING ONLY (GROSS VALUE)** | | | | | | | | | | | | |
| **Cooling capacity** | (1)(4) | **kW** | **532,3** | **665,0** | **721,0** | **819,3** | **998,7** | **1143** | **1296** | **1472** | **1607** | **1784** |
| Total power input | (1)(4) | kW | 102,0 | 124,6 | 135,4 | 154,6 | 189,4 | 216,0 | 243,1 | 275,6 | 303,9 | 343,4 |
| EER | (1)(4) | kW/kW | 5,219 | 5,337 | 5,325 | 5,299 | 5,273 | 5,292 | 5,331 | 5,341 | 5,288 | 5,195 |
| **HEATING ONLY (GROSS VALUE)** | | | | | | | | | | | | |
| **Total heating capacity** | (2)(4) | **kW** | **592,6** | **731,1** | **801,5** | **910,9** | **1098** | **1255** | **1445** | **1640** | **1772** | **1948** |
| Total power input | (2)(4) | kW | 128,9 | 157,3 | 171,5 | 195,9 | 236,4 | 269,8 | 303,8 | 344,3 | 377,4 | 424,2 |
| COP | (2)(4) | kW/kW | 4,597 | 4,648 | 4,673 | 4,650 | 4,645 | 4,652 | 4,756 | 4,763 | 4,695 | 4,592 |
| **EXCHANGERS** | | | | | | | | | | | | |
| **HEAT EXCHANGER USER SIDE IN COOLING** | | | | | | | | | | | | |
| Water flow | (1)(4) | l/s | 25,45 | 31,80 | 34,48 | 39,18 | 47,76 | 54,66 | 61,97 | 70,41 | 76,87 | 85,33 |
| Pressure drop at the heat exchanger | (1)(4) | kPa | 32,1 | 41,3 | 37,4 | 37,0 | 36,7 | 39,9 | 37,8 | 36,6 | 40,6 | 53,8 |
| **HEAT EXCHANGER USER SIDE IN HEATING** | | | | | | | | | | | | |
| Water flow | (2)(4) | l/s | 28,61 | 35,29 | 38,69 | 43,97 | 52,99 | 60,58 | 69,74 | 79,17 | 85,55 | 94,03 |
| Pressure drop at the heat exchanger | (2)(4) | kPa | 40,6 | 37,8 | 42,7 | 42,1 | 38,6 | 31,9 | 36,6 | 32,5 | 32,2 | 30,9 |
| **HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION** | | | | | | | | | | | | |
| Water flow | (1)(4) | l/s | 30,22 | 37,63 | 40,81 | 46,41 | 56,61 | 64,76 | 73,34 | 83,30 | 91,08 | 101,4 |
| Pressure drop at the heat exchanger | (1)(4) | kPa | 45,3 | 42,9 | 47,5 | 46,9 | 44,0 | 36,4 | 40,4 | 36,0 | 36,6 | 36,0 |
| **HEAT EXCHANGER SOURCE SIDE IN HEATING** | | | | | | | | | | | | |
| Water flow | (2)(4) | l/s | 34,17 | 38,89 | 44,44 | 50,00 | 59,72 | 68,05 | 86,11 | 97,22 | 97,22 | 97,22 |
| Pressure drop at the heat exchanger | (2)(4) | kPa | 57,8 | 61,7 | 62,2 | 60,3 | 57,3 | 61,8 | 73,0 | 69,8 | 64,9 | 69,8 |
| **NOISE LEVEL** | | | | | | | | | | | | |
| Sound Pressure | (7)(4) | dB(A) | 82 | 82 | 81 | 83 | 83 | 83 | 82 | 82 | 84 | 84 |
| Sound power level in cooling | (1)(4)(8) | dB(A) | 100 | 100 | 100 | 102 | 102 | 102 | 102 | 102 | 104 | 104 |
| Sound power level in heating | (2)(4)(8) | dB(A) | 100 | 100 | 100 | 102 | 102 | 102 | 102 | 102 | 104 | 104 |
| **SELEZIONE NOMINALE - DATI CERTIFICATI EUROVENT** | | | | | | | | | | | | |
| **COOLING ONLY (EN14511 VALUE)** | | | | | | | | | | | | |
| **Cooling capacity** | (1)(3)(5) | **kW** | **487,6** | **609,4** | **660,7** | **751,5** | **916,2** | **1048** | **1189** | **1351** | **1485** | **1636** |
| EER | (1)(3)(5) | kW/kW | 5,180 | 5,290 | 5,280 | 5,280 | 5,290 | 5,320 | 5,370 | 5,410 | 5,330 | 5,270 |
| Cooling energy class | (1)(3)(5) | | - | - | - | - | - | - | - | - | - | - |
| **HEATING ONLY (EN14511 VALUE)** | | | | | | | | | | | | |
| **Total heating capacity** | (2)(3)(5) | **kW** | **543,5** | **670,7** | **734,9** | **835,4** | **1006** | **1150** | **1321** | **1499** | **1633** | **1781** |
| COP | (2)(3)(5) | kW/kW | 4,510 | 4,570 | 4,580 | 4,590 | 4,610 | 4,630 | 4,700 | 4,730 | 4,670 | 4,610 |
| Cooling energy class | (2)(3)(5) | | - | - | - | - | - | - | - | - | - | - |
| **EXCHANGERS** | | | | | | | | | | | | |
| **HEAT EXCHANGER USER SIDE IN COOLING** | | | | | | | | | | | | |
| Water flow | (1)(5) | l/s | 23,34 | 29,16 | 31,62 | 35,96 | 43,84 | 50,15 | 56,88 | 64,63 | 71,06 | 78,30 |
| Pressure drop at the heat exchanger | (1)(3)(5) | kPa | 27,0 | 34,7 | 31,5 | 31,2 | 30,9 | 33,6 | 31,9 | 30,9 | 34,7 | 45,3 |
| **HEAT EXCHANGER USER SIDE IN HEATING** | | | | | | | | | | | | |
| Water flow | (2)(5) | l/s | 26,21 | 32,35 | 35,45 | 40,30 | 48,55 | 55,47 | 63,73 | 72,34 | 78,81 | 85,93 |
| Pressure drop at the heat exchanger | (2)(3)(5) | kPa | 34,1 | 31,7 | 35,8 | 35,4 | 32,4 | 26,7 | 30,5 | 27,1 | 27,4 | 25,8 |
| **HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION** | | | | | | | | | | | | |
| Water flow | (1)(5) | l/s | 27,61 | 34,38 | 37,29 | 42,42 | 51,72 | 59,11 | 66,96 | 76,02 | 83,76 | 92,41 |
| Pressure drop at the heat exchanger | (1)(3)(5) | kPa | 37,8 | 35,8 | 39,6 | 39,2 | 36,7 | 30,3 | 33,7 | 30,0 | 30,9 | 29,9 |
| **HEAT EXCHANGER SOURCE SIDE IN HEATING** | | | | | | | | | | | | |
| Water flow | (2)(5) | l/s | 34,17 | 38,89 | 44,44 | 50,00 | 59,72 | 68,06 | 84,97 | 96,56 | 97,22 | 97,22 |
| Pressure drop at the heat exchanger | (2)(3)(5) | kPa | 57,8 | 61,7 | 62,2 | 60,3 | 57,3 | 61,8 | 71,1 | 68,9 | 64,9 | 69,8 |
| **NOISE LEVEL** | | | | | | | | | | | | |
| Sound Pressure | (7)(5) | dB(A) | 82 | 82 | 81 | 83 | 83 | 83 | 82 | 82 | 84 | 84 |
| Sound power level in cooling | (1)(5)(8) | dB(A) | 100 | 100 | 100 | 102 | 102 | 102 | 102 | 102 | 104 | 104 |
| Sound power level in heating | (2)(5)(8) | dB(A) | 100 | 100 | 100 | 102 | 102 | 102 | 102 | 102 | 104 | 104 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | | | | |
| Compressors nr. | | N° | 2 | 2 | 2 | 2 | 2 | 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 | 1 | 1 | 1 | 1 | 1 |
| Regulation | | | STEPSLESS | STEPSLESS | STEPSLESS | STEPSLESS | STEPSLESS | STEPSLESS | STEPSLESS | STEPSLESS | STEPSLESS | STEPSLESS |
| Min. capacity step | | % | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Refrigerant | | | R513A | R513A | R513A | R513A | R513A | R513A | R513A | R513A | R513A | R513A |
| Refrigerant charge | (10) | kg | 130 | 176 | 181 | 195 | 284 | 325 | 347 | 356 | 372 | 372 |
| Oil charge | | kg | 30,0 | 44,0 | 38,0 | 38,0 | 60,0 | 60,0 | 60,0 | 60,0 | 62,0 | 64,0 |
| Rc (ASHRAE) | (6)(10) | kg/kW | - | - | - | - | - | - | - | - | - | - |
| **SIZE AND WEIGHT** | | | | | | | | | | | | |
| A | (9) | mm | 2950 | 3310 | 3310 | 3310 | 4475 | 4475 | 4570 | 4650 | 4650 | 4850 |
| B | (9) | mm | 1320 | 1425 | 1445 | 1480 | 1410 | 1405 | 1435 | 1495 | 1495 | 1495 |
| H | (9) | mm | 1805 | 1935 | 2000 | 2150 | 2250 | 2250 | 2380 | 2500 | 2500 | 2500 |
| Operating weight | (9) | kg | 3350 | 4280 | 4410 | 4830 | 6630 | 7470 | 8220 | 8800 | 8930 | 9340 |

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 User side exchanger hot water temperature (in/out) 40,00°C/45,00°C; Source side exchanger water temperature(in/out) 10,00°C/6,70°C (or the maximum calculated temperature coming from the maximum flow rate allowed )
3 Values in compliance with EN14511
4 Unit performance with inverter compressor at maximum speeds.
5 Unit performance with inverter compressor at nominal speed.
6 Rated in accordance with AHRI Standard 550/590
7 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.
8 Sound power on the basis of measurements taken in compliance with ISO 9614.
9 Unit in standard configuration, without optional accessories.
10 Nominal value, please refer always to the printed value on the unit data plate.
- Not available
Data certified in EUROVENT

## 8.1 TECHNICAL DATA SEASONAL EFFICIENCY IN COOLING (EN14825 VALUE)

[ SI System ]

**ENERGY EFFICIENCY**

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

| i-FX-W (1+i)-G05 | | | 1402 | 1752 | 1902 | 2152 | 2602 | 3002 | 3402 | 3852 | 4252 | 4652 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Prated,c** | (1) | kW | 487,6 | 609,4 | 660,7 | 751,5 | 916,2 | 1048,0 | 1189,0 | 1351,0 | 1485,0 | 1636,0 |
| **SEER** | (1) (2) | - | 7,98 | 7,93 | 7,89 | 8,01 | 8,11 | 8,09 | 7,95 | 8,02 | 7,85 | 7,81 |
| **Performance ηs** | (1) (3) | % | 316,0 | 314,0 | 313,0 | 317,0 | 321,0 | 321,0 | 315,0 | 318,0 | 311,0 | 310,0 |

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 [$GWP_{100}$ 631] fluorinated greenhouse gases.
Data certified in EUROVENT