

i-FX Q2 R513A Air Cooled Chillers

Outdoor Installation (498.6 to 1125kW)

Our Climaveneta range of i-FX-Q2 units are air cooled chillers, designed to produce chilled and hot water simultaneously and efficiently using variable frequency drive compressors.

Available with lower GWP R513A refrigerant, the new i-FXQ2 chillers apply variable speed technology in all of its main components, achieving top-level performances in any load condition.



Key Features & Benefits:

- Total Inverter Technology
- Multiple Heat Recovery Configurations
- ErP2021 compliant
- Low noise
- Energy efficient
- Available with lower GWP R513A refrigerant



i-FX-Q2

Air Cooled Chillers with R513A refrigerant
(520.5 to 1125kW)

| MODEL | | 0502 | 0532 | 0602 | 0652 | 0702 | 0802 | 0902 | 1002 | 1102 |
|---|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 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 |
| PERFORMANCE | | | | | | | | | | |
| COOLING ONLY (GROSS VALUE) | | | | | | | | | | |
| COOLING CAPACITY ¹ | kW | 520.5 | 536.1 | 570.0 | 670.8 | 712.2 | 787.4 | 982.0 | 1048 | 1125 |
| TOTAL POWER INPUT ¹ | kW | 180.4 | 181.2 | 189.0 | 229.8 | 238.9 | 261.5 | 344.9 | 356.6 | 411.4 |
| EER ¹ | kW/kW | 2.885 | 2.959 | 3.016 | 2.919 | 2.981 | 3.011 | 2.847 | 2.939 | 2.735 |
| COOLING ONLY (EN14511 VALUE) | | | | | | | | | | |
| COOLING CAPACITY ^{1,2} | kW | 485.9 | 529.2 | 568.5 | 624.8 | 686.6 | 785.6 | 912.3 | 982.3 | 1079 |
| EER ^{1,2} | kW/kW | 2.980 | 2.980 | 2.980 | 2.990 | 2.980 | 2.980 | 3.020 | 3.000 | 2.850 |
| HEATING ONLY (GROSS VALUE) | | | | | | | | | | |
| TOTAL HEATING CAPACITY ³ | kW | 496.8 | 496.8 | 531.0 | 643.9 | 684.9 | 764.8 | 939.9 | 988.7 | 1071 |
| TOTAL POWER INPUT ³ | kW | 152.9 | 152.9 | 160.1 | 195.5 | 205.8 | 224.6 | 294.3 | 311.5 | 332.4 |
| COP ³ | kW/kW | 3.249 | 3.249 | 3.317 | 3.294 | 3.328 | 3.405 | 3.194 | 3.174 | 3.222 |
| HEATING ONLY (EN14511 VALUE) | | | | | | | | | | |
| TOTAL HEATING CAPACITY ^{3,3} | kW | 464.1 | 49.3 | 532.0 | 600.0 | 660.7 | 766.8 | 873.3 | 940.2 | 1030 |
| COP ^{3,3} | kW/kW | 3.320 | 3.280 | 3.300 | 3.340 | 3.330 | 3.380 | 3.340 | 3.370 | 3.350 |
| COOLING WITH HEAT RECOVERY (EN14511 VALUE) | | | | | | | | | | |
| COOLING CAPACITY ^{2,4} | kW | 487.0 | 531.0 | 569.0 | 622.0 | 680.3 | 782.6 | 911.8 | 984.4 | 1098 |
| TOTAL POWER INPUT ^{2,4} | kW | 145.8 | 160.6 | 170.6 | 185.8 | 205.7 | 234.7 | 275.9 | 292.7 | 329.6 |
| RECOVERY HEAT EXCHANGER CAPACITY ^{2,4} | kW | 624.2 | 682.1 | 729.5 | 796.9 | 874.0 | 1003 | 1171 | 1260 | 1408 |
| TER | kW/kW | 7.620 | 7.553 | 7.613 | 7.637 | 7.555 | 7.609 | 7.546 | 7.667 | 7.603 |
| ENERGY EFFICIENCY | | | | | | | | | | |
| SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281) | | | | | | | | | | |
| AMBIENT REFRIGERATION | | | | | | | | | | |
| P _{RATED,C} ⁷ | | 485.9 | 529.2 | 568.5 | 624.8 | 686.6 | 785 | 912.3 | 982.3 | 1079.0 |
| SEER ^{7,8} | | 5.15 | 5.09 | 5.11 | 5.08 | 5.12 | 5.02 | 4.73 | 4.66 | 4.63 |
| PERFORMANCE η _s ^{7,9} | | 203.0 | 201.0 | 202.0 | 200.0 | 202.0 | 198.0 | 186.0 | 183.0 | 182.0 |
| EXCHANGERS | | | | | | | | | | |
| HEAT EXCHANGER USER SIDE IN REFRIGERATION | | | | | | | | | | |
| WATER FLOW ¹ | l/s | 24.89 | 25.64 | 27.26 | 32.08 | 34.06 | 37.65 | 46.96 | 50.12 | 53.78 |
| PRESSURE DROP AT THE HEAT EXCHANGER ¹ | kPa | 40.8 | 51.6 | 32.5 | 40.5 | 45.4 | 29.0 | 39.7 | 42.3 | 51.4 |
| HEAT EXCHANGER USER SIDE IN HEATING | | | | | | | | | | |
| WATER FLOW ³ | l/s | 23.98 | 23.98 | 25.63 | 31.08 | 33.06 | 36.92 | 45.37 | 47.73 | 53.68 |
| PRESSURE DROP AT THE HEAT EXCHANGER ³ | kPa | 26.5 | 26.5 | 21.9 | 31.9 | 35.3 | 32.9 | 49.6 | 39.6 | 33.2 |
| REFRIGERANT CIRCUIT | | | | | | | | | | |
| COMPRESSORS NR. | No. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| NUMBER OF CAPACITY STEPS | No. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIRCUITS | No. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| REGULATION | | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless |
| REFRIGERANT | | R513A | R513A | R513A | R513A | R513A | R513A | R513A | R513A | R513A |
| REFRIGERANT CHARGE | kg | 253 | 257 | 307 | 338 | 372 | 425 | 451 | 473 | 473 |
| OIL CHARGE | kg | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 60.0 | 60.0 | 60.0 |
| RC (ASHARE) ⁵ | kg/kW | 0.49 | 0.52 | 0.54 | 0.51 | 0.53 | 0.55 | 0.46 | 0.46 | 0.42 |
| NOISE LEVEL | | | | | | | | | | |
| SOUND PRESSURE ⁶ | dB(A) | 67 | 67 | 68 | 69 | 69 | 68 | 70 | 70 | 70 |
| SOUND POWER LEVEL IN COOLING ^{10,11} | dB(A) | 100 | 100 | 100 | 102 | 102 | 101 | 103 | 103 | 103 |
| SOUND POWER LEVEL IN HEATING ^{10,12} | dB(A) | 100 | 100 | 100 | 102 | 102 | 101 | 103 | 103 | 103 |
| SIZE AND WEIGHT | | | | | | | | | | |
| WIDTH (A) ¹³ | mm | 8150 | 8150 | 8900 | 9650 | 10400 | 10400 | 10400 | 11900 | 11900 |
| DEPTH (B) ¹³ | mm | 2260 | 2260 | 2260 | 2260 | 2260 | 2260 | 2260 | 2260 | 2260 |
| HEIGHT (H) ¹³ | mm | 2530 | 2530 | 2530 | 2530 | 2530 | 2530 | 2530 | 2530 | 2530 |
| OPERATING WEIGHT ¹³ | kg | 8350 | 8380 | 9080 | 9590 | 10060 | 11010 | 12310 | 14110 | 14150 |

Eurovent Certified Data

- Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
 - Values in compliance with EN14511.
 - Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
 - Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C.
 - Rated in accordance with AHRI Standard 550/590.
 - 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.
 - Parameter calculated according to [REGULATION (EU) N. 2016/2281].
 - Seasonal energy efficiency ratio.
 - Seasonal space cooling energy efficiency.
 - 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.
- Not available

i-FX-Q2

Air Cooled Chillers with R513A refrigerant
Low Noise Version (498.6 to 1039kW)

| MODEL | | 0502 | 0532 | 0602 | 0652 | 0702 | 0802 | 0902 | 1002 | 1102 |
|---|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 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 |
| PERFORMANCE | | | | | | | | | | |
| COOLING ONLY (GROSS VALUE) | | | | | | | | | | |
| COOLING CAPACITY ¹ | kW | 498.6 | 513.3 | 549.0 | 646.7 | 686.7 | 765.6 | 905.4 | 981.9 | 1039 |
| TOTAL POWER INPUT ¹ | kW | 183.1 | 184.0 | 188.8 | 229.5 | 235.8 | 261.6 | 322.0 | 347.6 | 386.2 |
| EER ¹ | kW/kW | 2.723 | 2.790 | 2.908 | 2.818 | 2.912 | 2.927 | 2.812 | 2.825 | 2.690 |
| COOLING ONLY (EN14511 VALUE) | | | | | | | | | | |
| COOLING CAPACITY ^{1,2} | kW | 466.1 | 506.6 | 547.6 | 602.3 | 662.8 | 763.9 | 878.7 | 949.1 | 1036 |
| EER ^{1,2} | kW/kW | 2.850 | 2.840 | 2.880 | 2.920 | 2.930 | 2.900 | 2.850 | 2.860 | 2.660 |
| HEATING ONLY (GROSS VALUE) | | | | | | | | | | |
| TOTAL HEATING CAPACITY ³ | kW | 492.0 | 492.0 | 526.1 | 637.4 | 678.9 | 756.3 | 881.6 | 948.9 | 1018 |
| TOTAL POWER INPUT ³ | kW | 150.9 | 150.9 | 157.6 | 192.7 | 203.0 | 221.5 | 265.7 | 283.7 | 301.1 |
| COP ³ | kW/kW | 3.260 | 3.260 | 3.334 | 3.308 | 3.344 | 3.414 | 3.318 | 3.345 | 3.381 |
| HEATING ONLY (EN14511 VALUE) | | | | | | | | | | |
| TOTAL HEATING CAPACITY ^{3,3} | kW | 459.6 | 487.6 | 527.1 | 594.3 | 654.9 | 758.2 | 862.8 | 930.9 | 1020 |
| COP ^{3,3} | kW/kW | 3.330 | 3.290 | 3.320 | 3.360 | 3.350 | 3.390 | 3.340 | 3.380 | 3.360 |
| COOLING WITH HEAT RECOVERY (EN14511 VALUE) | | | | | | | | | | |
| COOLING CAPACITY ^{2,4} | kW | 487.2 | 531.2 | 569.1 | 622.2 | 680.5 | 782.6 | 912.1 | 984.6 | 1098 |
| TOTAL POWER INPUT ^{2,4} | kW | 145.6 | 160.2 | 170.4 | 185.4 | 205.4 | 234.5 | 274.7 | 291.7 | 329.3 |
| RECOVERY HEAT EXCHANGER CAPACITY ^{2,4} | kW | 624.2 | 681.9 | 729.4 | 796.7 | 873.8 | 1003 | 1170 | 1259 | 1407 |
| TER | kW/kW | 7.630 | 7.572 | 7.616 | 7.654 | 7.566 | 7.614 | 7.579 | 7.693 | 7.607 |
| ENERGY EFFICIENCY | | | | | | | | | | |
| SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281) | | | | | | | | | | |
| AMBIENT REFRIGERATION | | | | | | | | | | |
| P _{RATED,C} ⁷ | | 466.1 | 506.6 | 547.6 | 602.3 | 662.8 | 763.9 | 878.7 | 949.1 | 1036.0 |
| SEER ^{7,8} | | 5.10 | 5.07 | 5.07 | 5.07 | 5.12 | 4.96 | 4.70 | 4.62 | 4.60 |
| PERFORMANCE η _s ^{7,9} | | 201.0 | 200.0 | 200.0 | 200.0 | 202.0 | 195.0 | 185.0 | 182.0 | 181.0 |
| EXCHANGERS | | | | | | | | | | |
| HEAT EXCHANGER USER SIDE IN REFRIGERATION | | | | | | | | | | |
| WATER FLOW ¹ | l/s | 23.84 | 24.55 | 26.26 | 30.93 | 32.84 | 36.61 | 43.30 | 46.96 | 49.69 |
| PRESSURE DROP AT THE HEAT EXCHANGER ¹ | kPa | 37.5 | 47.3 | 30.2 | 37.6 | 42.3 | 27.4 | 36.8 | 39.5 | 47.4 |
| HEAT EXCHANGER USER SIDE IN HEATING | | | | | | | | | | |
| WATER FLOW ³ | l/s | 23.75 | 23.75 | 25.39 | 30.77 | 32.77 | 36.51 | 42.55 | 45.80 | 49.13 |
| PRESSURE DROP AT THE HEAT EXCHANGER ³ | kPa | 26.0 | 26.0 | 21.5 | 31.3 | 34.7 | 32.1 | 43.7 | 36.4 | 30.0 |
| REFRIGERANT CIRCUIT | | | | | | | | | | |
| COMPRESSORS NR. | No. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| NUMBER OF CAPACITY STEPS | No. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIRCUITS | No. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| REGULATION | | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless |
| REFRIGERANT | | R513A | R513A | R513A | R513A | R513A | R513A | R513A | R513A | R513A |
| REFRIGERANT CHARGE | kg | 253 | 275 | 307 | 338 | 372 | 425 | 451 | 473 | 473 |
| OIL CHARGE | kg | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 60.0 | 60.0 | 60.0 |
| RC (ASHARE) ⁵ | kg/kW | 0.51 | 0.54 | 0.57 | 0.53 | 0.55 | 0.56 | 0.50 | 0.49 | 0.46 |
| NOISE LEVEL | | | | | | | | | | |
| SOUND PRESSURE ⁶ | dB(A) | 57 | 58 | 58 | 59 | 59 | 59 | 61 | 61 | 59 |
| SOUND POWER LEVEL IN COOLING ^{10,11} | dB(A) | 90 | 91 | 91 | 92 | 92 | 92 | 94 | 94 | 92 |
| SOUND POWER LEVEL IN HEATING ^{10,12} | dB(A) | 90 | 91 | 91 | 92 | 92 | 92 | 94 | 94 | 92 |
| SIZE AND WEIGHT | | | | | | | | | | |
| WIDTH (A) ¹³ | mm | 8150 | 8150 | 8900 | 9650 | 10400 | 10400 | 10400 | 11900 | 11900 |
| DEPTH (B) ¹³ | mm | 2260 | 2260 | 2260 | 2260 | 2260 | 2260 | 2260 | 2260 | 2260 |
| HEIGHT (H) ¹³ | mm | 2530 | 2530 | 2530 | 2530 | 2530 | 2530 | 2530 | 2530 | 2530 |
| OPERATING WEIGHT ¹³ | kg | 8800 | 8830 | 9530 | 10040 | 10510 | 11450 | 12750 | 14560 | 14600 |

Eurovent Certified Data

- Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- Values in compliance with EN14511.
- Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C.
- Rated in accordance with AHRI Standard 550/590.
- 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.
- Parameter calculated according to [REGULATION (EU) N. 2016/2281].
- Seasonal energy efficiency ratio.
- Seasonal space cooling energy efficiency.
- 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.
- Not available



Telephone: **01707 282880**
email: air.conditioning@meuk.mee.com
les.mitsubishielectric.co.uk



@meuk_les
[@green_gateway](https://twitter.com/green_gateway)



Mitsubishi Electric Living
Environmental Systems UK



Mitsubishi Electric
Cooling and Heating UK



[mitsubishielectricuk_les](https://www.instagram.com/mitsubishielectricuk_les)



Mitsubishi Electric Living
Environmental Systems UK



thehub.mitsubishielectric.co.uk

UNITED KINGDOM Mitsubishi Electric Europe Living Environment Systems Division, Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, England. Telephone: 01707 282880 Fax: 01707 278881
IRELAND Mitsubishi Electric Europe, Westgate Business Park, Ballymount, Dublin 24, Ireland. Telephone: (01) 419 8800 Fax: (01) 419 8890 International code: (003531)

Country of origin: United Kingdom - Japan - Thailand - Malaysia. ©Mitsubishi Electric Europe 2021. Mitsubishi and Mitsubishi Electric are trademarks of Mitsubishi Electric Europe B.V. The company reserves the right to make any variation in technical specification to the equipment described, or to withdraw or replace products without prior notification or public announcement. Mitsubishi Electric is constantly developing and improving its products. All descriptions, illustrations, drawings and specifications in this publication present only general particulars and shall not form part of any contract. All goods are supplied subject to the Company's General Conditions of Sale, a copy of which is available on request. Third-party product and brand names may be trademarks or registered trademarks of their respective owners.

Note: The fuse rating is for guidance only. Please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2088), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), R1234ze (GWP:7) or R1234yf (GWP:4). *These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP:1975), R32 (GWP:550), R407C (GWP:1650) or R134a (GWP:1300).

Effective as of March 2021



greengateway.mitsubishielectric.co.uk