

## 4.1 GENERAL TECHNICAL DATA

## FX-FC-Z /T+

[ SI System ]

| FX-FC-Z /T+                                      |     |         | 1502     | 1702     | 1902     | 2002     | 2202     | 2602     | 2702     | 3002     | 3202     | 3402     |
|--------------------------------------------------|-----|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 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 |
| <b>PERFORMANCE</b>                               |     |         |          |          |          |          |          |          |          |          |          |          |
| <b>FREE-COOLING OFF (GROSS VALUE)</b>            |     |         |          |          |          |          |          |          |          |          |          |          |
| Cooling capacity                                 | (1) | kW      | 335      | 372      | 433      | 481      | 530      | 619      | 665      | 695      | 753      | 826      |
| Compressors power input                          | (1) | kW      | 76,9     | 86,6     | 98,6     | 113      | 121      | 148      | 161      | 175      | 183      | 192      |
| Total power input                                | (1) | kW      | 88,9     | 103      | 115      | 133      | 141      | 172      | 185      | 199      | 211      | 224      |
| EER                                              | (1) | kW/kW   | 3,77     | 3,63     | 3,77     | 3,62     | 3,77     | 3,59     | 3,60     | 3,49     | 3,57     | 3,69     |
| <b>Free Cooling (Tae = 10,0°C)</b>               |     |         |          |          |          |          |          |          |          |          |          |          |
| Free cooling capacity                            | (1) | kW      | 108      | 122      | 141      | 156      | 173      | 205      | 218      | 223      | 248      | 266      |
| % Free cooling                                   | (1) | %       | 32       | 33       | 33       | 32       | 33       | 33       | 33       | 32       | 33       | 32       |
| <b>TOTAL FREE-COOLING (GROSS VALUE)</b>          |     |         |          |          |          |          |          |          |          |          |          |          |
| Cooling capacity                                 | (2) | kW      | 335      | 372      | 433      | 481      | 530      | 619      | 665      | 695      | 753      | 826      |
| Total power input                                | (2) | kW      | 12,0     | 16,0     | 16,0     | 20,0     | 20,0     | 24,0     | 24,0     | 24,0     | 28,0     | 32,0     |
| EER                                              | (2) | kW/kW   | 27,96    | 23,28    | 27,03    | 24,05    | 26,51    | 25,79    | 27,72    | 28,96    | 26,90    | 25,82    |
| Total free-cooling temperature                   | (2) | °C      | 1,2      | 1,4      | 1,4      | 1,4      | 1,5      | 1,8      | 1,8      | 1,4      | 1,8      | 1,2      |
| <b>EXCHANGERS</b>                                |     |         |          |          |          |          |          |          |          |          |          |          |
| <b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b> |     |         |          |          |          |          |          |          |          |          |          |          |
| Glycol                                           | (1) | %       | 30       | 30       | 30       | 30       | 30       | 30       | 30       | 30       | 30       | 30       |
| Water flow                                       | (1) | l/s     | 17,77    | 19,73    | 22,92    | 25,48    | 28,10    | 32,80    | 35,24    | 36,82    | 39,90    | 43,78    |
| Pressure drop                                    | (1) | kPa     | 68,7     | 84,7     | 78,3     | 86,3     | 63,2     | 77,5     | 65,2     | 71,1     | 62,4     | 75,1     |
| <b>REFRIGERANT CIRCUIT</b>                       |     |         |          |          |          |          |          |          |          |          |          |          |
| 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°      | 2        | 2        | 2        | 2        | 2        | 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                                      |     |         | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    |
| Refrigerant charge                               |     | kg      | 85,0     | 90,0     | 108      | 119      | 128      | 141      | 145      | 175      | 180      | 190      |
| Oil charge                                       |     | kg      | 30,0     | 30,0     | 30,0     | 30,0     | 44,0     | 44,0     | 38,0     | 38,0     | 38,0     | 49,0     |
| <b>FANS</b>                                      |     |         |          |          |          |          |          |          |          |          |          |          |
| Quantity                                         |     | N°      | 6        | 8        | 8        | 10       | 10       | 12       | 12       | 12       | 14       | 16       |
| Air flow                                         |     | m³/s    | 35,93    | 43,27    | 47,48    | 54,88    | 58,82    | 64,28    | 67,43    | 67,43    | 77,20    | 90,75    |
| Fans power input                                 |     | kW      | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     |
| <b>NOISE LEVEL</b>                               |     |         |          |          |          |          |          |          |          |          |          |          |
| Sound Pressure                                   | (3) | dB(A)   | 67       | 68       | 68       | 68       | 69       | 70       | 69       | 69       | 69       | 69       |
| Sound power level in cooling                     | (4) | dB(A)   | 99       | 100      | 100      | 100      | 101      | 102      | 102      | 102      | 102      | 102      |
| <b>SIZE AND WEIGHT</b>                           |     |         |          |          |          |          |          |          |          |          |          |          |
| A                                                | (5) | mm      | 4000     | 4000     | 4900     | 4900     | 5800     | 5800     | 6400     | 6400     | 7000     | 7900     |
| B                                                | (5) | mm      | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     |
| H                                                | (5) | mm      | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     |
| Operating weight                                 | (5) | kg      | 4880     | 4990     | 5520     | 5700     | 7000     | 7410     | 8270     | 8310     | 8750     | 9600     |

### Notes:

1 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Source (side) heat exchanger air (in) 30,0°C; Ethylene glycol 30%.

2 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Ethylene glycol 30%.

3 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.

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

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

- Not available

## GENERAL TECHNICAL DATA

## FX-FC-Z /T+

[ SI System ]

| FX-FC-Z /T+                                      |     |         | 3602     | 3902     | 4202     | 4502     | 4802     | 5402     | 6002     |
|--------------------------------------------------|-----|---------|----------|----------|----------|----------|----------|----------|----------|
| 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 |
| <b>PERFORMANCE</b>                               |     |         |          |          |          |          |          |          |          |
| <b>FREE-COOLING OFF (GROSS VALUE)</b>            |     |         |          |          |          |          |          |          |          |
| Cooling capacity                                 | (1) | kW      | 881      | 944      | 1013     | 1093     | 1189     | 1325     | 1412     |
| Compressors power input                          | (1) | kW      | 213      | 234      | 245      | 266      | 270      | 323      | 368      |
| Total power input                                | (1) | kW      | 245      | 266      | 277      | 306      | 318      | 371      | 416      |
| EER                                              | (1) | kW/kW   | 3,59     | 3,55     | 3,65     | 3,57     | 3,74     | 3,57     | 3,40     |
| <b>Free Cooling (T<sub>ae</sub> = 10,0°C)</b>    |     |         |          |          |          |          |          |          |          |
| Free cooling capacity                            | (1) | kW      | 286      | 295      | 316      | 346      | 383      | 421      | 449      |
| % Free cooling                                   | (1) | %       | 33       | 31       | 31       | 32       | 32       | 32       | 32       |
| <b>TOTAL FREE-COOLING (GROSS VALUE)</b>          |     |         |          |          |          |          |          |          |          |
| Cooling capacity                                 | (2) | kW      | 881      | 944      | 1013     | 1093     | 1189     | 1325     | 1412     |
| Total power input                                | (2) | kW      | 32,0     | 32,0     | 32,0     | 40,0     | 48,0     | 48,0     | 48,0     |
| EER                                              | (2) | kW/kW   | 27,54    | 29,51    | 31,66    | 27,33    | 24,77    | 27,60    | 29,42    |
| Total free-cooling temperature                   | (2) | °C      | 1,6      | 1,1      | 1,1      | 1,3      | 1,2      | 1,3      | 1,3      |
| <b>EXCHANGERS</b>                                |     |         |          |          |          |          |          |          |          |
| <b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b> |     |         |          |          |          |          |          |          |          |
| Glycol                                           | (1) | %       | 30       | 30       | 30       | 30       | 30       | 30       | 30       |
| Water flow                                       | (1) | l/s     | 46,70    | 50,03    | 53,65    | 57,91    | 62,98    | 70,20    | 74,78    |
| Pressure drop                                    | (1) | kPa     | 77,0     | 95,0     | 98,1     | 83,3     | 98,5     | 89,7     | 102      |
| <b>REFRIGERANT CIRCUIT</b>                       |     |         |          |          |          |          |          |          |          |
| Compressors nr.                                  |     | N°      | 2        | 2        | 2        | 2        | 2        | 2        | 2        |
| Number of capacity steps                         |     | N°      | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| No. Circuits                                     |     | N°      | 2        | 2        | 2        | 2        | 2        | 2        | 2        |
| Regulation                                       |     |         | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS |
| Min. capacity step                               |     | %       | 25       | 25       | 25       | 25       | 25       | 25       | 25       |
| Refrigerant                                      |     |         | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    |
| Refrigerant charge                               |     | kg      | 199      | 220      | 244      | 290      | 295      | 310      | 330      |
| Oil charge                                       |     | kg      | 60,0     | 60,0     | 60,0     | 60,0     | 60,0     | 60,0     | 64,0     |
| <b>FANS</b>                                      |     |         |          |          |          |          |          |          |          |
| Quantity                                         |     | N°      | 16       | 16       | 16       | 20       | 24       | 24       | 24       |
| Air flow                                         |     | m³/s    | 88,23    | 88,23    | 92,43    | 106,08   | 132,98   | 128,57   | 134,86   |
| Fans power input                                 |     | kW      | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     |
| <b>NOISE LEVEL</b>                               |     |         |          |          |          |          |          |          |          |
| Sound Pressure                                   | (3) | dB(A)   | 70       | 70       | 70       | 72       | 73       | 73       | 73       |
| Sound power level in cooling                     | (4) | dB(A)   | 103      | 103      | 103      | 105      | 106      | 106      | 106      |
| <b>SIZE AND WEIGHT</b>                           |     |         |          |          |          |          |          |          |          |
| A                                                | (5) | mm      | 7900     | 7900     | 10000    | 10000    | 11800    | 11800    | 13000    |
| B                                                | (5) | mm      | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     |
| H                                                | (5) | mm      | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     |
| Operating weight                                 | (5) | kg      | 10470    | 10570    | 12680    | 13180    | 13710    | 14930    | 15810    |

### Notes:

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2 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Ethylene glycol 30%.

3 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.

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

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## GENERAL TECHNICAL DATA

## FX-FC-Z /SL-T+

[ SI System ]

| FX-FC-Z /SL-T+                                   |     |         | 1502     | 1702     | 1902     | 2002     | 2202     | 2602     | 2702     | 3002     | 3202     | 3402     |
|--------------------------------------------------|-----|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 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 |
| <b>PERFORMANCE</b>                               |     |         |          |          |          |          |          |          |          |          |          |          |
| <b>FREE-COOLING OFF (GROSS VALUE)</b>            |     |         |          |          |          |          |          |          |          |          |          |          |
| Cooling capacity                                 | (1) | kW      | 332      | 372      | 426      | 476      | 522      | 625      | 656      | 712      | 745      | 787      |
| Compressors power input                          | (1) | kW      | 81,0     | 90,0     | 105      | 119      | 129      | 151      | 171      | 175      | 193      | 215      |
| Total power input                                | (1) | kW      | 89,8     | 98,8     | 116      | 130      | 142      | 167      | 186      | 193      | 210      | 232      |
| EER                                              | (1) | kW/kW   | 3,69     | 3,77     | 3,69     | 3,66     | 3,66     | 3,75     | 3,53     | 3,70     | 3,54     | 3,39     |
| <b>Free Cooling (Tae = 10,0°C)</b>               |     |         |          |          |          |          |          |          |          |          |          |          |
| Free cooling capacity                            | (1) | kW      | 105      | 114      | 133      | 147      | 169      | 195      | 207      | 223      | 236      | 243      |
| % Free cooling                                   | (1) | %       | 32       | 31       | 31       | 31       | 32       | 31       | 31       | 31       | 32       | 31       |
| <b>TOTAL FREE-COOLING (GROSS VALUE)</b>          |     |         |          |          |          |          |          |          |          |          |          |          |
| Cooling capacity                                 | (2) | kW      | 332      | 372      | 426      | 476      | 522      | 625      | 656      | 712      | 745      | 787      |
| Total power input                                | (2) | kW      | 9,60     | 9,60     | 12,0     | 12,0     | 14,4     | 16,8     | 16,8     | 19,2     | 19,2     | 19,2     |
| EER                                              | (2) | kW/kW   | 34,55    | 38,76    | 35,53    | 39,67    | 36,22    | 37,20    | 39,06    | 37,08    | 38,80    | 41,00    |
| Total free-cooling temperature                   | (2) | °C      | 0,6      | 0,7      | 0,6      | 0,6      | 0,7      | 0,5      | 0,9      | 0,7      | 0,9      | 0,6      |
| <b>EXCHANGERS</b>                                |     |         |          |          |          |          |          |          |          |          |          |          |
| <b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b> |     |         |          |          |          |          |          |          |          |          |          |          |
| Glycol                                           | (1) | %       | 30       | 30       | 30       | 30       | 30       | 30       | 30       | 30       | 30       | 30       |
| Water flow                                       | (1) | l/s     | 17,57    | 19,71    | 22,59    | 25,22    | 27,64    | 33,11    | 34,77    | 37,72    | 39,47    | 41,70    |
| Pressure drop                                    | (1) | kPa     | 67,2     | 84,5     | 76,1     | 84,6     | 61,2     | 79,0     | 63,4     | 74,6     | 61,0     | 68,2     |
| <b>REFRIGERANT CIRCUIT</b>                       |     |         |          |          |          |          |          |          |          |          |          |          |
| 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°      | 2        | 2        | 2        | 2        | 2        | 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                                      |     |         | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    |
| Refrigerant charge                               |     | kg      | 98,0     | 104      | 124      | 137      | 147      | 162      | 167      | 201      | 207      | 219      |
| Oil charge                                       |     | kg      | 30,0     | 30,0     | 30,0     | 30,0     | 44,0     | 44,0     | 38,0     | 38,0     | 38,0     | 49,0     |
| <b>FANS</b>                                      |     |         |          |          |          |          |          |          |          |          |          |          |
| Quantity                                         |     | N°      | 8        | 8        | 10       | 10       | 12       | 14       | 14       | 16       | 16       | 16       |
| Air flow                                         |     | m³/s    | 30,10    | 33,68    | 38,26    | 41,46    | 46,30    | 55,35    | 53,57    | 63,26    | 61,22    | 61,22    |
| Fans power input                                 |     | kW      | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     |
| <b>NOISE LEVEL</b>                               |     |         |          |          |          |          |          |          |          |          |          |          |
| Sound Pressure                                   | (3) | dB(A)   | 57       | 57       | 57       | 58       | 59       | 58       | 58       | 59       | 59       | 59       |
| Sound power level in cooling                     | (4) | dB(A)   | 89       | 89       | 89       | 90       | 91       | 91       | 91       | 92       | 92       | 92       |
| <b>SIZE AND WEIGHT</b>                           |     |         |          |          |          |          |          |          |          |          |          |          |
| A                                                | (5) | mm      | 4000     | 4900     | 4900     | 5800     | 5800     | 7000     | 7000     | 7900     | 7900     | 7900     |
| B                                                | (5) | mm      | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     |
| H                                                | (5) | mm      | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     |
| Operating weight                                 | (5) | kg      | 5380     | 5950     | 6040     | 6600     | 7500     | 8250     | 9070     | 9550     | 10040    | 10590    |

### Notes:

1 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Source (side) heat exchanger air (in) 30,0°C; Ethylene glycol 30%.

2 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Ethylene glycol 30%.

3 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.

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

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

- Not available

## GENERAL TECHNICAL DATA

## FX-FC-Z /SL-T+

[ SI System ]

| FX-FC-Z /SL-T+                                   |     |         | 3602     | 3902     | 4202     | 4502     | 4802     | 5402     |
|--------------------------------------------------|-----|---------|----------|----------|----------|----------|----------|----------|
| Power supply                                     |     | V/ph/Hz | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 |
| <b>PERFORMANCE</b>                               |     |         |          |          |          |          |          |          |
| <b>FREE-COOLING OFF (GROSS VALUE)</b>            |     |         |          |          |          |          |          |          |
| Cooling capacity                                 | (1) | kW      | 878      | 938      | 984      | 1097     | 1139     | 1288     |
| Compressors power input                          | (1) | kW      | 223      | 244      | 263      | 274      | 301      | 351      |
| Total power input                                | (1) | kW      | 245      | 266      | 285      | 301      | 328      | 377      |
| EER                                              | (1) | kW/kW   | 3,59     | 3,52     | 3,46     | 3,65     | 3,48     | 3,41     |
| <b>Free Cooling (Tae = 10,0°C)</b>               |     |         |          |          |          |          |          |          |
| Free cooling capacity                            | (1) | kW      | 280      | 289      | 296      | 346      | 352      | 384      |
| % Free cooling                                   | (1) | %       | 32       | 31       | 30       | 32       | 31       | 30       |
| <b>TOTAL FREE-COOLING (GROSS VALUE)</b>          |     |         |          |          |          |          |          |          |
| Cooling capacity                                 | (2) | kW      | 878      | 938      | 984      | 1097     | 1139     | 1288     |
| Total power input                                | (2) | kW      | 24,0     | 24,0     | 24,0     | 28,8     | 28,8     | 28,8     |
| EER                                              | (2) | kW/kW   | 36,58    | 39,10    | 40,99    | 38,09    | 39,55    | 44,72    |
| Total free-cooling temperature                   | (2) | °C      | 0,9      | 0,5      | 0,1      | 0,8      | 0,5      | 0,0      |
| <b>EXCHANGERS</b>                                |     |         |          |          |          |          |          |          |
| <b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b> |     |         |          |          |          |          |          |          |
| Glycol                                           | (1) | %       | 30       | 30       | 30       | 30       | 30       | 30       |
| Water flow                                       | (1) | l/s     | 46,51    | 49,71    | 52,12    | 58,09    | 60,32    | 68,25    |
| Pressure drop                                    | (1) | kPa     | 69,8     | 86,2     | 92,6     | 83,8     | 90,4     | 84,8     |
| <b>REFRIGERANT CIRCUIT</b>                       |     |         |          |          |          |          |          |          |
| Compressors nr.                                  |     | N°      | 2        | 2        | 2        | 2        | 2        | 2        |
| Number of capacity steps                         |     | N°      | 0        | 0        | 0        | 0        | 0        | 0        |
| No. Circuits                                     |     | N°      | 2        | 2        | 2        | 2        | 2        | 2        |
| Regulation                                       |     |         | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS |
| Min. capacity step                               |     | %       | 25       | 25       | 25       | 25       | 25       | 25       |
| Refrigerant                                      |     |         | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    |
| Refrigerant charge                               |     | kg      | 229      | 253      | 281      | 334      | 339      | 357      |
| Oil charge                                       |     | kg      | 60,0     | 60,0     | 60,0     | 60,0     | 60,0     | 60,0     |
| <b>FANS</b>                                      |     |         |          |          |          |          |          |          |
| Quantity                                         |     | N°      | 20       | 20       | 20       | 24       | 24       | 24       |
| Air flow                                         |     | m³/s    | 73,33    | 73,33    | 73,33    | 88,76    | 88,76    | 94,13    |
| Fans power input                                 |     | kW      | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     |
| <b>NOISE LEVEL</b>                               |     |         |          |          |          |          |          |          |
| Sound Pressure                                   | (3) | dB(A)   | 59       | 59       | 59       | 61       | 61       | 62       |
| Sound power level in cooling                     | (4) | dB(A)   | 92       | 92       | 92       | 94       | 94       | 95       |
| <b>SIZE AND WEIGHT</b>                           |     |         |          |          |          |          |          |          |
| A                                                | (5) | mm      | 10000    | 10000    | 10000    | 11800    | 11800    | 13000    |
| B                                                | (5) | mm      | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     |
| H                                                | (5) | mm      | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     |
| Operating weight                                 | (5) | kg      | 13020    | 13060    | 13560    | 14970    | 15060    | 16360    |

### Notes:

1 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Source (side) heat exchanger air (in) 30,0°C; Ethylene glycol 30%.

2 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Ethylene glycol 30%.

3 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.

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

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

- Not available

## GENERAL TECHNICAL DATA

## FX-FC-Z /NG /T+

[ SI System ]

| FX-FC-Z /NG /T+                                  |     |         | 1502     | 1702     | 1902     | 2002     | 2202     | 2602     | 2702     | 3002     | 3202     | 3402     |
|--------------------------------------------------|-----|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 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 |
| <b>PERFORMANCE</b>                               |     |         |          |          |          |          |          |          |          |          |          |          |
| <b>FREE-COOLING OFF (GROSS VALUE)</b>            |     |         |          |          |          |          |          |          |          |          |          |          |
| Cooling capacity                                 | (1) | kW      | 345      | 383      | 444      | 494      | 545      | 636      | 683      | 714      | 774      | 849      |
| Compressors power input                          | (1) | kW      | 77,5     | 87,0     | 99,1     | 114      | 122      | 149      | 161      | 176      | 184      | 193      |
| Total power input                                | (1) | kW      | 89,5     | 103      | 115      | 134      | 142      | 173      | 185      | 200      | 212      | 225      |
| EER                                              | (1) | kW/kW   | 3,85     | 3,71     | 3,86     | 3,70     | 3,85     | 3,67     | 3,68     | 3,57     | 3,65     | 3,78     |
| <b>Free Cooling (Tae = 10,0°C)</b>               |     |         |          |          |          |          |          |          |          |          |          |          |
| Free cooling capacity                            | (1) | kW      | 92,5     | 105      | 120      | 134      | 148      | 176      | 188      | 192      | 213      | 229      |
| % Free cooling                                   | (1) | %       | 27       | 27       | 27       | 27       | 27       | 28       | 27       | 27       | 28       | 27       |
| <b>TOTAL FREE-COOLING (GROSS VALUE)</b>          |     |         |          |          |          |          |          |          |          |          |          |          |
| Cooling capacity                                 | (2) | kW      | 345      | 383      | 444      | 494      | 545      | 636      | 683      | 714      | 774      | 849      |
| Total power input                                | (2) | kW      | 15,0     | 23,5     | 21,5     | 27,5     | 27,5     | 35,0     | 35,0     | 35,0     | 43,0     | 47,0     |
| EER                                              | (2) | kW/kW   | 22,97    | 16,28    | 20,66    | 17,96    | 19,80    | 18,17    | 19,52    | 20,39    | 17,99    | 18,06    |
| Total free-cooling temperature                   | (2) | °C      | -1,4     | -1,2     | -1,3     | -1,2     | -1,2     | -0,8     | -0,9     | -1,2     | -0,9     | -1,4     |
| <b>EXCHANGERS</b>                                |     |         |          |          |          |          |          |          |          |          |          |          |
| <b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b> |     |         |          |          |          |          |          |          |          |          |          |          |
| Glycol                                           | (1) | %       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| Water flow                                       | (1) | l/s     | 16,49    | 18,31    | 21,26    | 23,64    | 26,06    | 30,42    | 32,69    | 34,16    | 37,02    | 40,61    |
| Pressure drop                                    | (1) | kPa     | 100      | 123      | 113      | 121      | 117      | 118      | 107      | 116      | 123      | 107      |
| <b>REFRIGERANT CIRCUIT</b>                       |     |         |          |          |          |          |          |          |          |          |          |          |
| 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°      | 2        | 2        | 2        | 2        | 2        | 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                                      |     |         | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    |
| Refrigerant charge                               |     | kg      | 85,0     | 90,0     | 108      | 119      | 128      | 141      | 145      | 175      | 180      | 190      |
| Oil charge                                       |     | kg      | 30,0     | 30,0     | 30,0     | 30,0     | 44,0     | 44,0     | 38,0     | 38,0     | 38,0     | 49,0     |
| <b>FANS</b>                                      |     |         |          |          |          |          |          |          |          |          |          |          |
| Quantity                                         |     | N°      | 6        | 8        | 8        | 10       | 10       | 12       | 12       | 12       | 14       | 16       |
| Air flow                                         |     | m³/s    | 35,93    | 43,27    | 47,48    | 54,88    | 58,82    | 64,28    | 67,43    | 67,43    | 77,20    | 90,75    |
| Fans power input                                 |     | kW      | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     |
| <b>NOISE LEVEL</b>                               |     |         |          |          |          |          |          |          |          |          |          |          |
| Sound Pressure                                   | (3) | dB(A)   | 67       | 68       | 68       | 68       | 69       | 70       | 69       | 69       | 69       | 69       |
| Sound power level in cooling                     | (4) | dB(A)   | 99       | 100      | 100      | 100      | 101      | 102      | 102      | 102      | 102      | 102      |
| <b>SIZE AND WEIGHT</b>                           |     |         |          |          |          |          |          |          |          |          |          |          |
| A                                                | (5) | mm      | 4000     | 4000     | 4900     | 4900     | 5800     | 5800     | 6400     | 6400     | 7000     | 7900     |
| B                                                | (5) | mm      | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     |
| H                                                | (5) | mm      | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     |
| Operating weight                                 | (5) | kg      | 5270     | 5470     | 6020     | 6250     | 7520     | 8000     | 9020     | 9060     | 9420     | 10300    |

### Notes:

1 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Source (side) heat exchanger air (in) 30,0°C; Ethylene glycol 0%.

2 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Ethylene glycol 0%.

3 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.

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

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

- Not available

## GENERAL TECHNICAL DATA

## FX-FC-Z /NG /T+

[ SI System ]

| FX-FC-Z /NG /T+                                  |     |         | 3602     | 3902     | 4202     | 4502     | 4802     | 5402     | 6002     |
|--------------------------------------------------|-----|---------|----------|----------|----------|----------|----------|----------|----------|
| 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 |
| <b>PERFORMANCE</b>                               |     |         |          |          |          |          |          |          |          |
| <b>FREE-COOLING OFF (GROSS VALUE)</b>            |     |         |          |          |          |          |          |          |          |
| Cooling capacity                                 | (1) | kW      | 905      | 970      | 1040     | 1123     | 1221     | 1361     | 1450     |
| Compressors power input                          | (1) | kW      | 215      | 235      | 247      | 268      | 271      | 325      | 370      |
| Total power input                                | (1) | kW      | 246      | 267      | 279      | 308      | 319      | 373      | 418      |
| EER                                              | (1) | kW/kW   | 3,67     | 3,63     | 3,73     | 3,65     | 3,82     | 3,65     | 3,47     |
| <b>Free Cooling (Tae = 10,0°C)</b>               |     |         |          |          |          |          |          |          |          |
| Free cooling capacity                            | (1) | kW      | 246      | 254      | 272      | 298      | 330      | 363      | 386      |
| % Free cooling                                   | (1) | %       | 27       | 26       | 26       | 27       | 27       | 27       | 27       |
| <b>TOTAL FREE-COOLING (GROSS VALUE)</b>          |     |         |          |          |          |          |          |          |          |
| Cooling capacity                                 | (2) | kW      | 905      | 970      | 1040     | 1123     | 1221     | 1361     | 1450     |
| Total power input                                | (2) | kW      | 47,0     | 47,0     | 50,5     | 62,0     | 66,5     | 70,0     | 70,0     |
| EER                                              | (2) | kW/kW   | 19,26    | 20,63    | 20,59    | 18,11    | 18,36    | 19,44    | 20,71    |
| Total free-cooling temperature                   | (2) | °C      | -1,0     | -1,6     | -1,6     | -1,3     | -1,4     | -1,3     | -1,3     |
| <b>EXCHANGERS</b>                                |     |         |          |          |          |          |          |          |          |
| <b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b> |     |         |          |          |          |          |          |          |          |
| Glycol                                           | (1) | %       | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| Water flow                                       | (1) | l/s     | 43,32    | 46,41    | 49,77    | 53,72    | 58,42    | 65,12    | 69,37    |
| Pressure drop                                    | (1) | kPa     | 114      | 137      | 157      | 131      | 155      | 165      | 187      |
| <b>REFRIGERANT CIRCUIT</b>                       |     |         |          |          |          |          |          |          |          |
| Compressors nr.                                  |     | N°      | 2        | 2        | 2        | 2        | 2        | 2        | 2        |
| Number of capacity steps                         |     | N°      | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| No. Circuits                                     |     | N°      | 2        | 2        | 2        | 2        | 2        | 2        | 2        |
| Regulation                                       |     |         | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS |
| Min. capacity step                               |     | %       | 25       | 25       | 25       | 25       | 25       | 25       | 25       |
| Refrigerant                                      |     |         | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    |
| Refrigerant charge                               |     | kg      | 199      | 220      | 244      | 290      | 295      | 310      | 330      |
| Oil charge                                       |     | kg      | 60,0     | 60,0     | 60,0     | 60,0     | 60,0     | 60,0     | 64,0     |
| <b>FANS</b>                                      |     |         |          |          |          |          |          |          |          |
| Quantity                                         |     | N°      | 16       | 16       | 16       | 20       | 24       | 24       | 24       |
| Air flow                                         |     | m³/s    | 88,23    | 88,23    | 92,43    | 106,08   | 132,98   | 128,57   | 134,86   |
| Fans power input                                 |     | kW      | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     | 2,00     |
| <b>NOISE LEVEL</b>                               |     |         |          |          |          |          |          |          |          |
| Sound Pressure                                   | (3) | dB(A)   | 70       | 70       | 70       | 72       | 73       | 73       | 73       |
| Sound power level in cooling                     | (4) | dB(A)   | 103      | 103      | 103      | 105      | 106      | 106      | 106      |
| <b>SIZE AND WEIGHT</b>                           |     |         |          |          |          |          |          |          |          |
| A                                                | (5) | mm      | 7900     | 7900     | 10000    | 10000    | 11800    | 11800    | 13000    |
| B                                                | (5) | mm      | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     |
| H                                                | (5) | mm      | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     |
| Operating weight                                 | (5) | kg      | 11280    | 11370    | 13070    | 13570    | 14490    | 15760    | 16680    |

### Notes:

1 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Source (side) heat exchanger air (in) 30,0°C; Ethylene glycol 0%.

2 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Ethylene glycol 0%.

3 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.

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

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

- Not available

## GENERAL TECHNICAL DATA

## FX-FC-Z /NG /SL-T+

[ SI System ]

| FX-FC-Z /NG /SL-T+                               |     |         | 1502     | 1702     | 1902     | 2002     | 2202     | 2602     | 2702     | 3002     | 3202     | 3402     |
|--------------------------------------------------|-----|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 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 |
| <b>PERFORMANCE</b>                               |     |         |          |          |          |          |          |          |          |          |          |          |
| <b>FREE-COOLING OFF (GROSS VALUE)</b>            |     |         |          |          |          |          |          |          |          |          |          |          |
| Cooling capacity                                 | (1) | kW      | 341      | 382      | 438      | 489      | 536      | 642      | 674      | 731      | 765      | 808      |
| Compressors power input                          | (1) | kW      | 81,4     | 90,4     | 105      | 120      | 130      | 152      | 171      | 176      | 194      | 216      |
| Total power input                                | (1) | kW      | 90,2     | 99,2     | 116      | 131      | 143      | 168      | 187      | 193      | 212      | 234      |
| EER                                              | (1) | kW/kW   | 3,78     | 3,85     | 3,77     | 3,74     | 3,74     | 3,82     | 3,61     | 3,78     | 3,61     | 3,46     |
| <b>Free Cooling (Tae = 10,0°C)</b>               |     |         |          |          |          |          |          |          |          |          |          |          |
| Free cooling capacity                            | (1) | kW      | 89,5     | 97,8     | 114      | 125      | 145      | 166      | 177      | 191      | 203      | 208      |
| % Free cooling                                   | (1) | %       | 26       | 26       | 26       | 26       | 27       | 26       | 26       | 26       | 26       | 26       |
| <b>TOTAL FREE-COOLING (GROSS VALUE)</b>          |     |         |          |          |          |          |          |          |          |          |          |          |
| Cooling capacity                                 | (2) | kW      | 341      | 382      | 438      | 489      | 536      | 642      | 674      | 731      | 765      | 808      |
| Total power input                                | (2) | kW      | 12,6     | 13,6     | 17,5     | 17,5     | 21,9     | 27,8     | 27,8     | 30,2     | 30,2     | 34,2     |
| EER                                              | (2) | kW/kW   | 27,03    | 28,10    | 25,02    | 27,94    | 24,46    | 23,09    | 24,24    | 24,22    | 25,33    | 23,64    |
| Total free-cooling temperature                   | (2) | °C      | -2,0     | -1,9     | -2,0     | -2,1     | -2,0     | -2,1     | -1,7     | -2,1     | -1,7     | -2,0     |
| <b>EXCHANGERS</b>                                |     |         |          |          |          |          |          |          |          |          |          |          |
| <b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b> |     |         |          |          |          |          |          |          |          |          |          |          |
| Glycol                                           | (1) | %       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| Water flow                                       | (1) | l/s     | 16,30    | 18,29    | 20,96    | 23,40    | 25,64    | 30,72    | 32,25    | 34,99    | 36,61    | 38,69    |
| Pressure drop                                    | (1) | kPa     | 97,8     | 123      | 110      | 118      | 113      | 120      | 104      | 122      | 120      | 97,0     |
| <b>REFRIGERANT CIRCUIT</b>                       |     |         |          |          |          |          |          |          |          |          |          |          |
| 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°      | 2        | 2        | 2        | 2        | 2        | 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                                      |     |         | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    |
| Refrigerant charge                               |     | kg      | 98,0     | 104      | 124      | 137      | 147      | 162      | 167      | 201      | 207      | 219      |
| Oil charge                                       |     | kg      | 30,0     | 30,0     | 30,0     | 30,0     | 44,0     | 44,0     | 38,0     | 38,0     | 38,0     | 49,0     |
| <b>FANS</b>                                      |     |         |          |          |          |          |          |          |          |          |          |          |
| Quantity                                         |     | N°      | 8        | 8        | 10       | 10       | 12       | 14       | 14       | 16       | 16       | 16       |
| Air flow                                         |     | m³/s    | 30,10    | 33,68    | 38,26    | 41,46    | 46,30    | 55,35    | 53,57    | 63,26    | 61,22    | 61,22    |
| Fans power input                                 |     | kW      | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     |
| <b>NOISE LEVEL</b>                               |     |         |          |          |          |          |          |          |          |          |          |          |
| Sound Pressure                                   | (3) | dB(A)   | 57       | 57       | 57       | 58       | 59       | 58       | 58       | 59       | 59       | 59       |
| Sound power level in cooling                     | (4) | dB(A)   | 89       | 89       | 89       | 90       | 91       | 91       | 91       | 92       | 92       | 92       |
| <b>SIZE AND WEIGHT</b>                           |     |         |          |          |          |          |          |          |          |          |          |          |
| A                                                | (5) | mm      | 4000     | 4900     | 4900     | 5800     | 5800     | 7000     | 7000     | 7900     | 7900     | 7900     |
| B                                                | (5) | mm      | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     |
| H                                                | (5) | mm      | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     |
| Operating weight                                 | (5) | kg      | 5770     | 6360     | 6520     | 7160     | 8020     | 8890     | 9590     | 10070    | 10570    | 11290    |

### Notes:

1 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Source (side) heat exchanger air (in) 30,0°C; Ethylene glycol 0%.

2 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Ethylene glycol 0%.

3 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.

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

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

- Not available

## GENERAL TECHNICAL DATA

## FX-FC-Z /NG /SL-T+

[ SI System ]

| FX-FC-Z /NG /SL-T+                               |     |         | 3602     | 3902     | 4202     | 4502     | 4802     | 5402     |
|--------------------------------------------------|-----|---------|----------|----------|----------|----------|----------|----------|
| Power supply                                     |     | V/ph/Hz | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 | 400/3/50 |
| <b>PERFORMANCE</b>                               |     |         |          |          |          |          |          |          |
| <b>FREE-COOLING OFF (GROSS VALUE)</b>            |     |         |          |          |          |          |          |          |
| Cooling capacity                                 | (1) | kW      | 902      | 964      | 1010     | 1126     | 1169     | 1323     |
| Compressors power input                          | (1) | kW      | 224      | 245      | 264      | 276      | 303      | 353      |
| Total power input                                | (1) | kW      | 246      | 267      | 286      | 302      | 329      | 380      |
| EER                                              | (1) | kW/kW   | 3,67     | 3,61     | 3,54     | 3,73     | 3,55     | 3,48     |
| <b>Free Cooling (Tae = 10,0°C)</b>               |     |         |          |          |          |          |          |          |
| Free cooling capacity                            | (1) | kW      | 240      | 248      | 254      | 296      | 302      | 329      |
| % Free cooling                                   | (1) | %       | 27       | 26       | 25       | 26       | 26       | 25       |
| <b>TOTAL FREE-COOLING (GROSS VALUE)</b>          |     |         |          |          |          |          |          |          |
| Cooling capacity                                 | (2) | kW      | 902      | 964      | 1010     | 1126     | 1169     | 1323     |
| Total power input                                | (2) | kW      | 39,0     | 39,0     | 42,5     | 47,3     | 47,3     | 50,8     |
| EER                                              | (2) | kW/kW   | 23,12    | 24,71    | 23,76    | 23,81    | 24,71    | 26,04    |
| Total free-cooling temperature                   | (2) | °C      | -1,7     | -2,2     | -2,5     | -1,8     | -2,1     | -2,6     |
| <b>EXCHANGERS</b>                                |     |         |          |          |          |          |          |          |
| <b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b> |     |         |          |          |          |          |          |          |
| Glycol                                           | (1) | %       | 0        | 0        | 0        | 0        | 0        | 0        |
| Water flow                                       | (1) | l/s     | 43,15    | 46,11    | 48,35    | 53,89    | 55,96    | 63,31    |
| Pressure drop                                    | (1) | kPa     | 113      | 135      | 148      | 132      | 142      | 156      |
| <b>REFRIGERANT CIRCUIT</b>                       |     |         |          |          |          |          |          |          |
| Compressors nr.                                  |     | N°      | 2        | 2        | 2        | 2        | 2        | 2        |
| Number of capacity steps                         |     | N°      | 0        | 0        | 0        | 0        | 0        | 0        |
| No. Circuits                                     |     | N°      | 2        | 2        | 2        | 2        | 2        | 2        |
| Regulation                                       |     |         | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS | STEPLESS |
| Min. capacity step                               |     | %       | 25       | 25       | 25       | 25       | 25       | 25       |
| Refrigerant                                      |     |         | R134a    | R134a    | R134a    | R134a    | R134a    | R134a    |
| Refrigerant charge                               |     | kg      | 229      | 253      | 281      | 334      | 339      | 357      |
| Oil charge                                       |     | kg      | 60,0     | 60,0     | 60,0     | 60,0     | 60,0     | 60,0     |
| <b>FANS</b>                                      |     |         |          |          |          |          |          |          |
| Quantity                                         |     | N°      | 20       | 20       | 20       | 24       | 24       | 24       |
| Air flow                                         |     | m³/s    | 73,33    | 73,33    | 73,33    | 88,76    | 88,76    | 94,13    |
| Fans power input                                 |     | kW      | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     | 1,10     |
| <b>NOISE LEVEL</b>                               |     |         |          |          |          |          |          |          |
| Sound Pressure                                   | (3) | dB(A)   | 59       | 59       | 59       | 61       | 61       | 62       |
| Sound power level in cooling                     | (4) | dB(A)   | 92       | 92       | 92       | 94       | 94       | 95       |
| <b>SIZE AND WEIGHT</b>                           |     |         |          |          |          |          |          |          |
| A                                                | (5) | mm      | 10000    | 10000    | 10000    | 11800    | 11800    | 13000    |
| B                                                | (5) | mm      | 2260     | 2260     | 2260     | 2260     | 2260     | 2260     |
| H                                                | (5) | mm      | 2500     | 2500     | 2500     | 2500     | 2500     | 2500     |
| Operating weight                                 | (5) | kg      | 13810    | 13850    | 13970    | 15590    | 15680    | 17220    |

### Notes:

1 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Source (side) heat exchanger air (in) 30,0°C; Ethylene glycol 0%.

2 Plant (side) cooling exchanger water (in/out) 15,0°C/10,0°C; Ethylene glycol 0%.

3 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.

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

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

- Not available

## GENERAL TECHNICAL DATA

### ENERGY EFFICIENCY

#### SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281) Process Refrigeration at high temperature

| FX-FC-Z /T+ |         |    | 1502  | 1702  | 1902  | 2002  | 2202  | 2602  | 2702  | 3002  | 3202  | 3402  | 3602  | 3902  | 4202  |
|-------------|---------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Prated,c    | (1)     | kW | 292,7 | 327,5 | 379,3 | 422,1 | 465,9 | 542,3 | 584,2 | 610,4 | 661,7 | 726,1 | 772,8 | 826,3 | 886,6 |
| SEPR        | (1) (2) | -  | 5,95  | 5,68  | 6,15  | 5,84  | 6,12  | 5,99  | 5,98  | 5,93  | 6,00  | 6,00  | 5,91  | 5,75  | 5,80  |
| FX-FC-Z /T+ |         |    | 4502  | 4802  | 5402  | 6002  |       |       |       |       |       |       |       |       |       |
| Prated,c    | (1)     | kW | 960,6 | 1049  | 1168  | 1240  |       |       |       |       |       |       |       |       |       |
| SEPR        | (1) (2) | -  | 5,75  | 5,92  | 5,89  | 5,69  |       |       |       |       |       |       |       |       |       |

| FX-FC-Z /SL-T+ |         |    | 1502  | 1702  | 1902  | 2002  | 2202  | 2602  | 2702  | 3002  | 3202  | 3402  | 3602  | 3902  | 4202  |
|----------------|---------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Prated,c       | (1)     | kW | 288,9 | 326,7 | 373,1 | 416,9 | 457,5 | 547,2 | 575,5 | 625,2 | 653,7 | 689,7 | 769,0 | 820,1 | 859,3 |
| SEPR           | (1) (2) | -  | 6,02  | 5,88  | 6,26  | 6,30  | 6,24  | 6,26  | 6,18  | 6,24  | 6,28  | 6,07  | 6,13  | 5,97  | 5,80  |
| FX-FC-Z /SL-T+ |         |    | 4502  | 4802  | 5402  |       |       |       |       |       |       |       |       |       |       |
| Prated,c       | (1)     | kW | 962,7 | 1003  | 1133  |       |       |       |       |       |       |       |       |       |       |
| SEPR           | (1) (2) | -  | 6,16  | 6,07  | 6,08  |       |       |       |       |       |       |       |       |       |       |

| FX-FC-Z /NG /T+ |         |    | 1502  | 1702  | 1902  | 2002  | 2202  | 2602  | 2702  | 3002  | 3202  | 3402  | 3602  | 3902  | 4202  |
|-----------------|---------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Prated,c        | (1)     | kW | 292,0 | 326,5 | 378,2 | 420,9 | 464,3 | 540,8 | 582,5 | 608,5 | 659,4 | 724,3 | 770,8 | 823,8 | 883,3 |
| SEPR            | (1) (2) | -  | 5,56  | 5,10  | 5,64  | 5,33  | 5,54  | 5,38  | 5,39  | 5,37  | 5,53  | 5,42  | 5,37  | 5,26  | 5,21  |
| FX-FC-Z /NG /T+ |         |    | 4502  | 4802  | 5402  | 6002  |       |       |       |       |       |       |       |       |       |
| Prated,c        | (1)     | kW | 957,6 | 1045  | 1163  | 1235  |       |       |       |       |       |       |       |       |       |
| SEPR            | (1) (2) | -  | 5,17  | 5,35  | 5,27  | 5,15  |       |       |       |       |       |       |       |       |       |

| FX-FC-Z /NG /SL-T+ |         |    | 1502  | 1702  | 1902  | 2002  | 2202  | 2602  | 2702  | 3002  | 3202  | 3402  | 3602  | 3902  | 4202  |
|--------------------|---------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Prated,c           | (1)     | kW | 288,1 | 325,7 | 372,1 | 415,7 | 456,0 | 545,6 | 573,9 | 623,2 | 651,4 | 688,1 | 766,8 | 817,5 | 856,2 |
| SEPR               | (1) (2) | -  | 5,62  | 5,43  | 5,75  | 5,79  | 5,65  | 5,64  | 5,56  | 5,64  | 5,66  | 5,47  | 5,54  | 5,43  | 5,21  |
| FX-FC-Z /NG /SL-T+ |         |    | 4502  | 4802  | 5402  |       |       |       |       |       |       |       |       |       |       |
| Prated,c           | (1)     | kW | 959,7 | 999,2 | 1129  |       |       |       |       |       |       |       |       |       |       |
| SEPR               | (1) (2) | -  | 5,52  | 5,46  | 5,44  |       |       |       |       |       |       |       |       |       |       |

Notes:

- (1) Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]  
(2) Seasonal process cooling energy index