

## Model

Designation **CU SC18MFX MG\_Y 230/1/50 CAP**



Sales code: 314G4002  
Engineering code: CUSC18MFX00CE

## Application Data

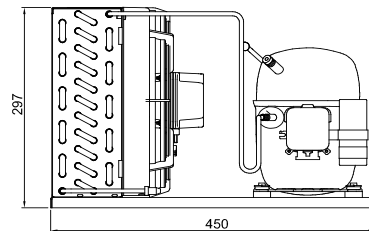
|                            |   |
|----------------------------|---|
| Power supply               | 220-240V / 50Hz 1~                      |
| Refrigerants               | R134a-R513A                             |
| Refr. charge - tech. limit | 1300g / 45,9oz                          |
| Starter                    | HST / capillary tube or expansion valve |
| Sound pressure (10m)       | 37dB(A)                                 |

## Configuration data

|                     | Conf. 1   | Conf. 2                                      |
|---------------------|---|--|
| Voltage range       | 187 - 254V / 50Hz                                     | 187 - 254V / 50Hz                            |
| Refrigerant         | R134a   | R513A  |
| Application         | MBP   | MBP  |
| Rated performance   | <u>pe=-10°C, Tsuc=20°C, Tamb=25°C, subccoling: 2K</u> |  |
| Cooling capacity    | 886W / 3028Btu/h                                      | 927W / 3166Btu/h                             |
| Power consumption   | 497,6W  | 533,1W                                       |
| Current consumption | 3,3A  | 3,5A   |
| COP/EER             | 1,78 / 6,08Btu/Wh                                     | 1,74 / 5,94Btu/Wh                            |
| Approvals           | Eco design (EU) 2015/1095,<br>CE, UK CA, VDE          | Eco design (EU) 2015/1095,<br>CE, UK CA, VDE |

## Compressor

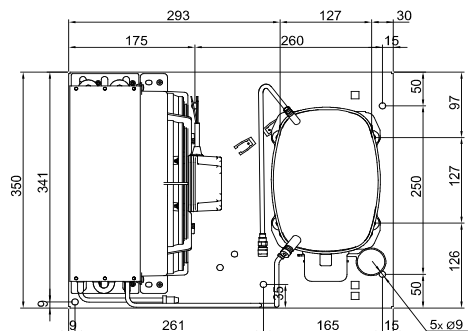
|                         |                                |
|-------------------------|--------------------------------|
| Designation             | <b>SC18MFX</b>                 |
| Motor configuration     | CSIR                           |
| Locked rotor amperage   | 20,43A                         |
| Rated load amperage     | 3,9A                           |
| Winding resistance main | 3,7Ω                           |
| Winding resistance aux  | 14Ω                            |
| Oil quantity            | 550cm <sup>3</sup> / 18,6fl.oz |
| Oil type                | POE                            |
| Horsepower rating       | 3/8 HP                         |



## Dimensions

### Condensing unit

|                        |  |
|------------------------|--|
| Height x Width x Depth | 297 x 350 x 450 [mm] / 11,7 x 13,8 x 17,7 [in] |
| Weight                 | 26,1kg / 57,6lbs                               |
| Suction adapter        | OD ø10mm / 2/5in                               |
| Discharge adapter      | OD ø6mm / 1/4in                                |
| Process connector      | ø6,2mm / 0,24in                                |



### Package data

|                        |  |
|------------------------|--|
| Height x Width x Depth | 350 x 450 x 550 [mm] / 13,8 x 17,7 x 21,7 [in] |
| Weight                 | 29,1kg / 64,2lbs                               |

## Model

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## Components Condensing-Unit / Spare Parts

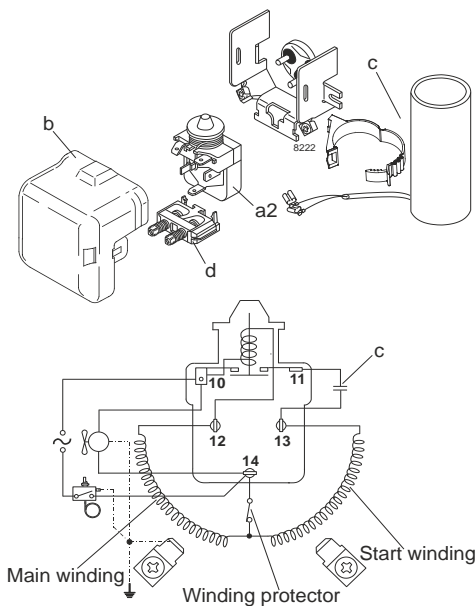
| Component          | Type                          | Spare part code number |
|--------------------|-------------------------------|------------------------|
| Compressor code    | SC18MFX                       | 104G8804               |
| Condenser          | Condenser (4 rows x 11 tubes) | 1140270F71             |
| Fan motor          | 16W                           | NET3T16PVN018          |
| Blade code         | ø254mm 22°                    | A254-22                |
| Air flow           | 519,9m³/h                     |                        |
| Receiver code      | not installed                 | -/-                    |
| Suction valve code | OD ø10mm / 2/5in              | -/-                    |
| Liquid valve code  | OD ø6mm / 1/4in               | -/-                    |

| Compressor starting equipment   | Spare part code number |
|---------------------------------|------------------------|
| pos. a2 - relay                 | 117U6019               |
| pos. c - start capacitor (80µF) | 117U5017               |
| pos. d - cord relief            | 103N1004               |
| pos. b - plastic cover          | 103N2008               |

## Wiring Sketch Compressor

## Wiring Sketch Condensing Unit

CSIR



## Model

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## Cooling performance - Conf. 1

|                            |   |               |                   |
|----------------------------|---|---------------|-------------------|
| Power supply               | 220-240V / 50Hz 1~                        | Voltage range | 187 - 254V / 50Hz |
| Refr. charge - tech. limit | 1300g / 45,9oz                            |               |                   |
| Starter                    | HST / capillary tube or expansion valve   |               |                   |
| Motor configuration        | CSIR                                      |               |                   |
| Refrigerant                | R134a                                     |               |                   |
| Application                | MBP                                       |               |                   |
| Approvals                  | Eco design (EU) 2015/1095, CE, UK CA, VDE |               |                   |

| ambient temperature     | [°C / °F] | 25 / 77 (suction gas temperature [°C / °F]: 20 / 68, subcooling: 2K) |          |         |          |        |        |         |
|-------------------------|-----------|--|----------|---------|----------|--------|--------|---------|
| evaporating temperature | [°C / °F] | -25 / -13  | -20 / -4 | -15 / 5 | -10 / 14 | 0 / 32 | 5 / 41 | 10 / 50 |
| cooling capacity        | [W]       | 448  | 572      | 718     | 886      | 1289   | 1520   | 1769    |
| COP                     | [W/W]     | 1,19   | 1,38     | 1,58    | 1,78     | 2,14   | 2,29   | 2,4     |
| cooling capacity        | [Btu/h]   | 1531   | 1955     | 2453    | 3027     | 4402   | 5192   | 6041    |
| power consumption       | [W]       | 378  | 415      | 455     | 498      | 601    | 664    | 738     |
| current consumption     | [A]       | 2,9  | 3        | 3,2     | 3,3      | 3,7    | 4      | 4,2     |

| ambient temperature     | [°C / °F] | 32 / 90 (suction gas temperature [°C / °F]: 20 / 68, subcooling: 2K) |          |         |          |        |        |         |
|-------------------------|-----------|--|----------|---------|----------|--------|--------|---------|
| evaporating temperature | [°C / °F] | -25 / -13  | -20 / -4 | -15 / 5 | -10 / 14 | 0 / 32 | 5 / 41 | 10 / 50 |
| cooling capacity        | [W]       | 404  | 520      | 655     | 810      | 1181   | 1394   | 1622    |
| COP                     | [W/W]     | 1,07   | 1,24     | 1,41    | 1,58     | 1,87   | 1,99   | 2,07    |
| cooling capacity        | [Btu/h]   | 1380   | 1774     | 2235    | 2766     | 4033   | 4759   | 5540    |
| power consumption       | [W]       | 379  | 421      | 466     | 514      | 631    | 702    | 785     |
| current consumption     | [A]       | 2,9  | 3,1      | 3,2     | 3,4      | 3,8    | 4,1    | 4,4     |

| ambient temperature     | [°C / °F] | 38 / 100 (suction gas temperature [°C / °F]: 20 / 68, subcooling: 2K) |          |         |          |        |        |  |
|-------------------------|-----------|---|----------|---------|----------|--------|--------|--|
| evaporating temperature | [°C / °F] | -25 / -13   | -20 / -4 | -15 / 5 | -10 / 14 | 0 / 32 | 5 / 41 |  |
| cooling capacity        | [W]       | 368   | 476      | 601     | 746      | 1088   | 1285   |  |
| COP                     | [W/W]     | 0,97  | 1,12     | 1,27    | 1,41     | 1,65   | 1,74   |  |
| cooling capacity        | [Btu/h]   | 1256  | 1625     | 2054    | 2546     | 3717   | 4390   |  |
| power consumption       | [W]       | 378   | 425      | 475     | 529      | 659    | 739    |  |
| current consumption     | [A]       | 2,9   | 3,1      | 3,3     | 3,5      | 3,9    | 4,2    |  |

| ambient temperature     | [°C / °F] | 43 / 109 (suction gas temperature [°C / °F]: 20 / 68, subcooling: 2K) |          |         |          |        |  |  |
|-------------------------|-----------|---|----------|---------|----------|--------|--|--|
| evaporating temperature | [°C / °F] | -25 / -13   | -20 / -4 | -15 / 5 | -10 / 14 | 0 / 32 |  |  |
| cooling capacity        | [W]       | 339   | 440      | 558     | 693      | 1012   |  |  |
| COP                     | [W/W]     | 0,9   | 1,03     | 1,16    | 1,28     | 1,47   |  |  |
| cooling capacity        | [Btu/h]   | 1157  | 1504     | 1906    | 2366     | 3456   |  |  |
| power consumption       | [W]       | 376   | 428      | 483     | 543      | 687    |  |  |
| current consumption     | [A]       | 2,9   | 3,1      | 3,3     | 3,5      | 4      |  |  |

## Model

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## Cooling performance - Conf. 2

|                            |   |               |                   |
|----------------------------|---|---------------|-------------------|
| Power supply               | 220-240V / 50Hz 1~                        | Voltage range | 187 - 254V / 50Hz |
| Refr. charge - tech. limit | 1300g / 45,9oz                            |               |                   |
| Starter                    | HST / capillary tube or expansion valve   |               |                   |
| Motor configuration        | CSIR                                      |               |                   |
| Refrigerant                | R513A                                     |               |                   |
| Application                | MBP                                       |               |                   |
| Approvals                  | Eco design (EU) 2015/1095, CE, UK CA, VDE |               |                   |

| ambient temperature     | [°C / °F] | 25 / 77 (suction gas temperature [°C / °F]: 20 / 68, subcooling: 2K) |          |         |          |        |        |         |
|-------------------------|-----------|--|----------|---------|----------|--------|--------|---------|
| evaporating temperature | [°C / °F] | -25 / -13  | -20 / -4 | -15 / 5 | -10 / 14 | 0 / 32 | 5 / 41 | 10 / 50 |
| cooling capacity        | [W]       | 485  | 611      | 759     | 927      | 1322   | 1545   | 1782    |
| COP                     | [W/W]     | 1,17   | 1,35     | 1,55    | 1,74     | 2,08   | 2,21   | 2,31    |
| cooling capacity        | [Btu/h]   | 1657   | 2088     | 2592    | 3166     | 4514   | 5277   | 6085    |
| power consumption       | [W]       | 413  | 451      | 491     | 533      | 635    | 698    | 773     |
| current consumption     | [A]       | 3,1  | 3,2      | 3,3     | 3,5      | 3,9    | 4,1    | 4,4     |

| ambient temperature     | [°C / °F] | 32 / 90 (suction gas temperature [°C / °F]: 20 / 68, subcooling: 2K) |          |         |          |        |        |         |
|-------------------------|-----------|--|----------|---------|----------|--------|--------|---------|
| evaporating temperature | [°C / °F] | -25 / -13  | -20 / -4 | -15 / 5 | -10 / 14 | 0 / 32 | 5 / 41 | 10 / 50 |
| cooling capacity        | [W]       | 436  | 553      | 688     | 841      | 1201   | 1403   | 1617    |
| COP                     | [W/W]     | 1,05   | 1,21     | 1,37    | 1,53     | 1,8    | 1,9    | 1,96    |
| cooling capacity        | [Btu/h]   | 1488   | 1887     | 2348    | 2873     | 4100   | 4792   | 5524    |
| power consumption       | [W]       | 415  | 458      | 502     | 551      | 667    | 738    | 823     |
| current consumption     | [A]       | 3,1  | 3,2      | 3,4     | 3,6      | 4      | 4,2    | 4,5     |

| ambient temperature     | [°C / °F] | 38 / 100 (suction gas temperature [°C / °F]: 20 / 68, subcooling: 2K) |          |         |          |        |        |  |
|-------------------------|-----------|---|----------|---------|----------|--------|--------|--|
| evaporating temperature | [°C / °F] | -25 / -13   | -20 / -4 | -15 / 5 | -10 / 14 | 0 / 32 | 5 / 41 |  |
| cooling capacity        | [W]       | 395   | 503      | 628     | 769      | 1097   | 1280   |  |
| COP                     | [W/W]     | 0,95  | 1,09     | 1,22    | 1,36     | 1,57   | 1,65   |  |
| cooling capacity        | [Btu/h]   | 1349  | 1719     | 2144    | 2625     | 3746   | 4373   |  |
| power consumption       | [W]       | 415   | 462      | 513     | 567      | 697    | 778    |  |
| current consumption     | [A]       | 3,1   | 3,2      | 3,4     | 3,6      | 4,1    | 4,4    |  |

| ambient temperature     | [°C / °F] | 43 / 109 (suction gas temperature [°C / °F]: 20 / 68, subcooling: 2K) |          |         |          |        |  |  |
|-------------------------|-----------|---|----------|---------|----------|--------|--|--|
| evaporating temperature | [°C / °F] | -25 / -13   | -20 / -4 | -15 / 5 | -10 / 14 | 0 / 32 |  |  |
| cooling capacity        | [W]       | 363   | 463      | 579     | 709      | 1010   |  |  |
| COP                     | [W/W]     | 0,88  | 0,99     | 1,11    | 1,22     | 1,39   |  |  |
| cooling capacity        | [Btu/h]   | 1238  | 1583     | 1976    | 2420     | 3450   |  |  |
| power consumption       | [W]       | 413   | 466      | 522     | 583      | 726    |  |  |
| current consumption     | [A]       | 3,1   | 3,3      | 3,5     | 3,7      | 4,2    |  |  |