

## Single Pack SC18MLX.3 220-240V 50Hz CSCR

Single pack code number: **195B4330**

| Position | Title                                      | Code     | Amount |
|----------|--|----------|--------|
| 1        | Compressor SC18MLX.3                       | 104L2146 | 1      |
| 2        | SC starting device (550mm)                 | 117-7027 | 1      |
| 3        | Cord relief                                | 103N1004 | 1      |
| 4        | Cover                                      | 103N2009 | 1      |
| 5        | Bolt joint for one compressor   M6   ø16mm | 118-1917 | 1      |

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## Model

|             |                  |                         |             |                 |
|-------------|------------------|-------------------------|-------------|-----------------|
| Designation | <b>SC18MLX.3</b> | <b>220-240V/50Hz 1~</b> | Sales code: | <b>104L2146</b> |
|-------------|------------------|-------------------------|-------------|-----------------|

## Compressor design

|                            |                                 |                       |                                  |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type                   | Polyolester                     | Refrigerant(s)        | <b>R404A, R452A, R507</b>        |
| Oil viscosity              | 32cST                           | Displacement          | 17,68cm <sup>3</sup> / 1,08cu.in |
| Oil quantity               | 550cm <sup>3</sup> / 18,6fl.oz  | Compressors on pallet | 80                               |
| Refr. charge - tech. limit | 1300g / 45,9oz                  |                       |                                  |
| Free gas volume comp.      | 1460cm <sup>3</sup> / 49,4fl.oz |                       |                                  |
| Weight                     | 14kg / 30,9lbs                  |                       |                                  |
| Motor protection           | 1# internal                     |                       |                                  |
| Winding resistance main    | 3,4Ω (at 25°C)                  |                       |                                  |
| Winding resistance aux     | 14,4Ω (at 25°C)                 |                       |                                  |
| Max. winding temp.         | 125°C / 257°F                   |                       |                                  |
| Max. discharge temp.       | 130°C / 266°F                   |                       |                                  |



## General - Configurations with SC18MLX.3

|                        | <b>Conf. 1</b> | <b>Conf. 2</b> | <b>Conf. 3</b> | <b>Conf. 4</b> |
|------------------------|----------------|----------------|----------------|----------------|
| Motorconfiguration     | CSCR           | CSCR           | CSCR           | CSCR           |
| Power supply (nominal) | 220-240V/50Hz  | 220-240V/50Hz  | 220-240V/50Hz  | 220-240V/50Hz  |
| Number of phases       | 1              | 1              | 1              | 1              |
| Voltage range          | 198-254V       | 198-254V       | 198-254V       | 198-254V       |
| Approvals              | CCC, EAC, VDE  | CCC, EAC, VDE  |                |                |
| Starting torque        | HST            | HST            | HST            | HST            |
| Note                   | - / -          |                |                |                |

## Applications with SC18MLX.3

|                         | <b>Conf. 1</b> | <b>Conf. 2</b> | <b>Conf. 3</b> | <b>Conf. 4</b> |
|-------------------------|----------------|----------------|----------------|----------------|
| Refrigerant             | R404A          | R452A          | R448A          | R449A          |
| Application             | MBP            | MBP            | MBP            | MBP            |
| System cooling          | fan 3m/s       | fan 3m/s       | fan 3m/s       | fan 3m/s       |
| Hot gas defrost         | OK             | OK             | OK             | OK             |
| Long interval pull down | OK             | OK             | OK             | OK             |

## Electrical data - Configurations with SC18MLX.3

|                              | <b>Conf. 1</b> | <b>Conf. 2</b> | <b>Conf. 3</b> | <b>Conf. 4</b> |
|------------------------------|----------------|----------------|----------------|----------------|
| Starting device type         | relay          | relay          | relay          | relay          |
| Run capacitor                | 10μF           | 10μF           | 10μF           | 10μF           |
| Start capacitor              | 80μF           | 80μF           | 80μF           | 80μF           |
| LRA (locked rotor amps / 4s) | 23,4A          | 23,4A          | 23,4A          | 23,4A          |
| RLA (rated load amps / 1s)   | 4,3A           | 4,3A           | 4,3A           | 4,3A           |
| Cut in current               | 23,4A          | 23,4A          | 23,4A          | 23,4A          |

## Model

|             |                  |                  |             |                 |
|-------------|------------------|------------------|-------------|-----------------|
| Designation | <b>SC18MLX.3</b> | 220-240V/50Hz 1~ | Sales code: | <b>104L2146</b> |
|-------------|------------------|------------------|-------------|-----------------|

## Compressor dimensions

|                |                   |                 |
|----------------|-------------------|-----------------|
| <b>Housing</b> | A Height          | 219mm / 8,62in  |
|                | B Height          | 213mm / 8,39in  |
|                | C Length shell    | 239mm / 9,41in  |
|                | D Length w. cover | 255mm / 10,04in |
|                | E Width           | 151mm / 5,94in  |

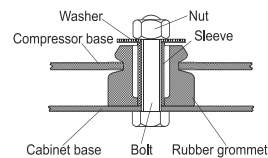


| Connectors                 | Suction        |  | Discharge    |  | Process      |  |
|----------------------------|----------------|--|--------------|--|--------------|--|
|                            | X              |  | Y            |  | Z            |  |
| Diameter [mm]              | øi 10,11-10,29 |  | øi 6,11-6,29 |  | øi 6,11-6,29 |  |
| (i:inside, o:outside) [in] | øi 0,4-0,41    |  | øi 0,24-0,25 |  | øi 0,24-0,25 |  |
| Material                   | copper         |  | copper       |  | copper       |  |
| Horizontal angle ±2°       | 37°            |  | 37°          |  | 143°         |  |
| Vertical angle ±2°         | 30°            |  | 0°           |  | 150°         |  |
| Position l/h/w [mm]        | 107/193/55     |  | 115/110/63   |  | -107/193/55  |  |
| [in]                       | 4,2/7,6/2,2    |  | 4,5/4,3/2,5  |  | -4,2/7,6/2,2 |  |
| Straight tube l. [mm]      | 12             |  | 12           |  | 12           |  |
| [in]                       | 0,5            |  | 0,5          |  | 0,5          |  |

## Compressor fixation



## Bolt joint



## Snap-on



| Mounting accessories       | one comp. | multi pack |
|----------------------------|-----------|------------|
| Bolt joint   M6   ø16mm    | 118-1917  | 118-1918   |
| Bolt joint   ø1/4"   ø16mm | 118-1946  |            |
| Bolt joint   ø1/4"   ø19mm | 118-1949  |            |
| Snap-on   ø7,3   ø16mm     | 118-1947  | 118-1919   |

## Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

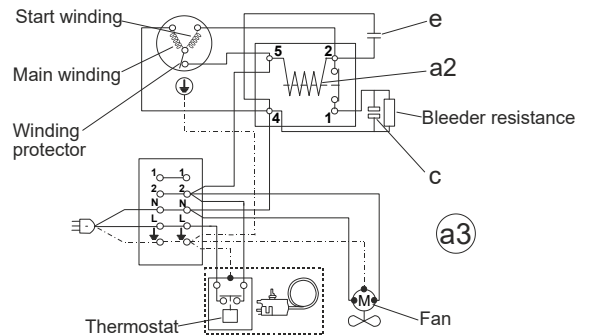
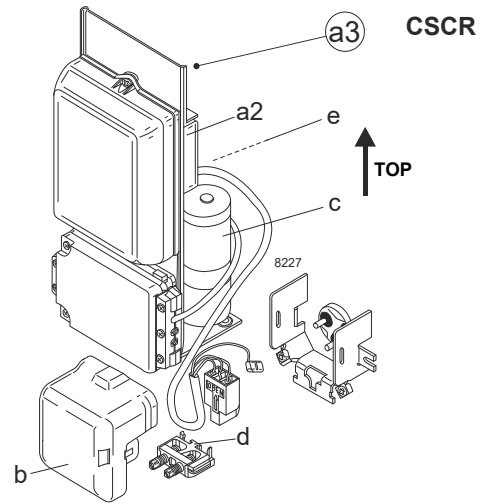
## Model

|             |                  |                      |         |             |                 |
|-------------|------------------|----------------------|---------|-------------|-----------------|
| Designation | <b>SC18MLX.3</b> | <b>220-240V/50Hz</b> | Conf. 1 | Sales code: | <b>104L2146</b> |
|-------------|------------------|----------------------|---------|-------------|-----------------|

## Configuration

|                        |                  |
|------------------------|------------------|
| Motorconfiguration     | CSCR             |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant            | R404A            |
| Application            | MBP              |
| Voltage range          | 198-254V         |
| Starting torque        | HST              |
| Approvals              | CCC              |
|                        | EAC              |
|                        | VDE              |

## Electrical accessories / wiring diagram



## Ambient/ machine room temperatures minimum /maximum

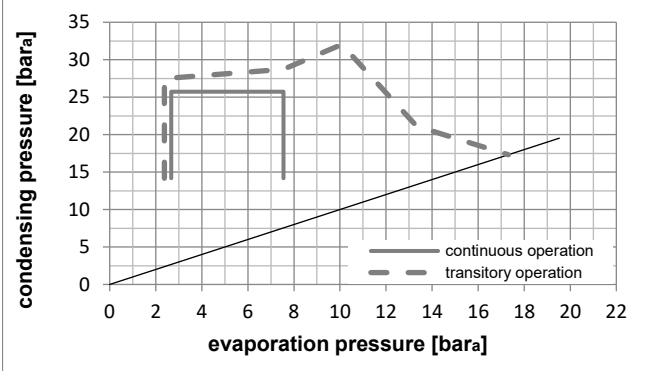
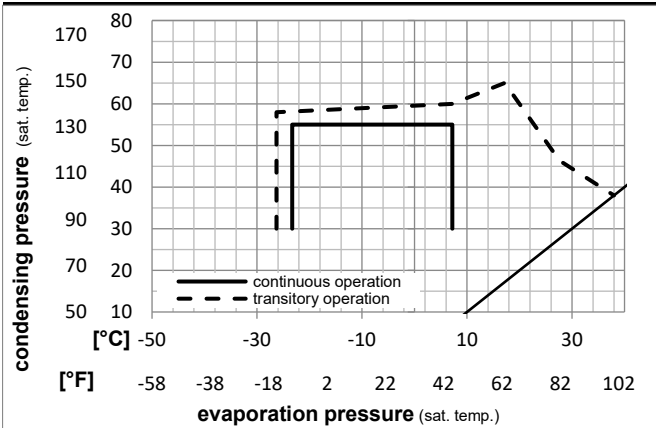
Ambient temperature range: 10 - 38°C / 50 - 101°F

Machine room temperature range: 10 - 43°C / 50 - 110°F

Compressor cooling: fan 3m/s

## Operation Limits

### Operation pressure range



### Components

|    |                        |          |
|----|------------------------|----------|
| a3 | SC starter kit (550mm) | 117-7027 |
| b  | plastic cover          | 103N2009 |
| d  | cord relief            | 103N1004 |

### Alternative components

|    |                             |          |
|----|-----------------------------|----------|
| a3 | SC starter kit (1000mm)     | 117-7040 |
| a3 | SC starter kit (650mm)      | 117-7046 |
| c  | start capacitor (80µF)      | 117U5373 |
| e  | run capacitor (10µF, 6.3mm) | 117-7112 |

## Model

Designation **SC18MLX.3** **220-240V/50Hz** Conf. 1 Sales code: **104L2146**

## Optimization + standard conditions

R404A, 220V/50Hz, CSCR, fan 3m/s, CCC, EAC, VDE

| Evaporating pressure (saturation temperature) |     |     |      | Condensing pressure (saturation temperature) |         |          | Return gas temp. |          |           | Liquid temp. |        |        | Cooling capacity |     |        | COP | EER | Power consumption |  |  | Ref. mass flow<br>m | ASHRAE MBP |
|---|-----|-----|------|--|---------|----------|------------------|----------|-----------|--------------|--------|--------|------------------|-----|--------|-----|-----|-------------------|--|--|---------------------|------------|
| pe  | pc  | RGT | Tliq | [W]  | [Btu/h] | [kcal/h] | [W/W]            | [Btu/Wh] | [kcal/Wh] | P1           | I      | [kg/h] | [W]              | [A] | [kg/h] |     |     |                   |  |  |                     |            |
| [°C]  | -7  | 54  | 35   | 46   | 1684,7  | 5753     | 1449,8           | 1,67     | 5,70      | 1,44         | 1008,5 | 4,61   | 46,35            |     |        |     |     |                   |  |  |                     |            |
| [°F]  | 20  | 130 | 95   | 115  |         |          |                  |          |           |              |        |        |                  |     |        |     |     |                   |  |  |                     |            |
| [°C]  | -10 | 55  | 32   | 55   | 1260,1  | 4304     | 1084,5           | 1,32     | 4,51      | 1,14         | 954,0  | 4,42   | 40,34            |     |        |     |     |                   |  |  |                     |            |
| [°F]  | 14  | 131 | 90   | 131  |         |          |                  |          |           |              |        |        |                  |     |        |     |     |                   |  |  |                     |            |
| [°C]  | -10 | 45  | 20   | 45   | 1467,5  | 5012     | 1263,0           | 1,67     | 5,71      | 1,44         | 878,1  | 4,40   | 44,20            |     |        |     |     |                   |  |  |                     |            |
| [°F]  | 14  | 113 | 68   | 113  |         |          |                  |          |           |              |        |        |                  |     |        |     |     |                   |  |  |                     |            |
| [°C]  | -7  | 49  | 18   | 49   | 1530,1  | 5225     | 1316,8           | 1,60     | 5,45      | 1,37         | 958,8  | 4,61   | 50,00            |     |        |     |     |                   |  |  |                     |            |
| [°F]  | 20  | 120 | 65   | 120  |         |          |                  |          |           |              |        |        |                  |     |        |     |     |                   |  |  |                     |            |
| [°C]  | -10 | 45  | 32   | 45   | 1557,5  | 5319     | 1340,4           | 1,77     | 6,06      | 1,53         | 878,1  | 4,40   | 42,89            |     |        |     |     |                   |  |  |                     |            |
| [°F]  | 14  | 113 | 90   | 113  |         |          |                  |          |           |              |        |        |                  |     |        |     |     |                   |  |  |                     |            |
| [°C]  | -25 | 45  | 32   | 45   | 810,8   | 2769     | 697,8            | 1,24     | 4,25      | 1,07         | 652,2  | 3,78   | 21,87            |     |        |     |     |                   |  |  |                     |            |
| [°F]  | -13 | 113 | 90   | 113  |         |          |                  |          |           |              |        |        |                  |     |        |     |     |                   |  |  |                     |            |

## Performance tables

R404A, 220V/50Hz, CSCR, fan 3m/s, CCC, EAC, VDE

|                  | pe   |      | Cooling capacity |         |          | COP   | EER      |           | P1     | I    | m      |
|------------------|------|------|------------------|---------|----------|-------|----------|-----------|--------|------|--------|
|                  | [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W]    | [A]  | [kg/h] |
| [°C / °F]        | -23  | -10  | 877,2            | 2996    | 754,9    | 1,29  | 4,42     | 1,11      | 677,8  | 3,85 | 23,71  |
| cond. pressure   | -20  | -4   | 1018,4           | 3478    | 876,4    | 1,40  | 4,78     | 1,20      | 727,4  | 3,98 | 27,63  |
| pc= 45/113       | -15  | 5    | 1265,8           | 4323    | 1089,3   | 1,58  | 5,38     | 1,36      | 802,9  | 4,18 | 34,58  |
| return gas temp. | -10  | 14   | 1557,5           | 5319    | 1340,4   | 1,77  | 6,06     | 1,53      | 878,1  | 4,40 | 42,89  |
| RGT= 32/90       | -5   | 23   | 1898,0           | 6482    | 1633,4   | 1,99  | 6,81     | 1,72      | 952,4  | 4,63 | 52,76  |
| liquid temp      | 0    | 32   | 2291,8           | 7827    | 1972,3   | 2,24  | 7,63     | 1,92      | 1025,3 | 4,87 | 64,43  |
| Tliq= 45/113     | 7,2  | 45   | 2961,6           | 10114   | 2548,8   | 2,63  | 8,98     | 2,26      | 1126,9 | 5,24 | 84,93  |
| [°C / °F]        | -23  | -10  | 710,7            | 2427    | 611,6    | 0,99  | 3,37     | 0,85      | 719,5  | 3,75 | 22,26  |
| cond. pressure   | -20  | -4   | 823,1            | 2811    | 708,4    | 1,06  | 3,62     | 0,91      | 776,7  | 3,91 | 25,90  |
| pc= 55/131       | -15  | 5    | 1022,3           | 3491    | 879,8    | 1,18  | 4,04     | 1,02      | 864,8  | 4,16 | 32,42  |
| return gas temp  | -10  | 14   | 1260,1           | 4304    | 1084,5   | 1,32  | 4,51     | 1,14      | 954,0  | 4,42 | 40,34  |
| RGT= 32/90       | -5   | 23   | 1541,1           | 5263    | 1326,2   | 1,48  | 5,04     | 1,27      | 1043,8 | 4,70 | 49,88  |
| liquid temp      | 0    | 32   | 1869,6           | 6385    | 1609,0   | 1,65  | 5,63     | 1,42      | 1133,6 | 4,98 | 61,31  |
| Tliq= 55/131     | 7,2  | 45   | 2435,4           | 8317    | 2095,9   | 1,93  | 6,59     | 1,66      | 1262,1 | 5,42 | 81,73  |

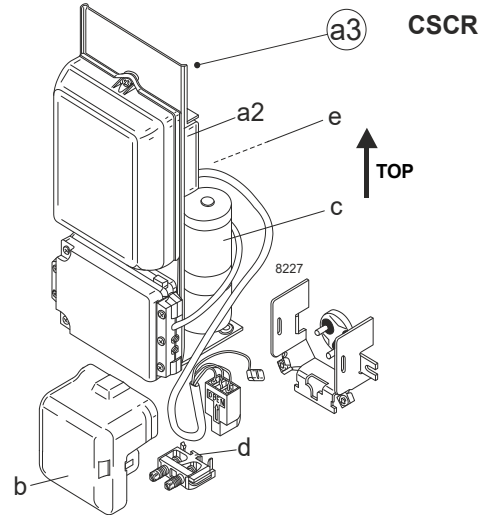
## Model

|             |                  |                      |         |             |                 |
|-------------|------------------|----------------------|---------|-------------|-----------------|
| Designation | <b>SC18MLX.3</b> | <b>220-240V/50Hz</b> | Conf. 2 | Sales code: | <b>104L2146</b> |
|-------------|------------------|----------------------|---------|-------------|-----------------|

## Configuration

|                        |                  |
|------------------------|------------------|
| Motorconfiguration     | CSCR             |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant            | R452A            |
| Application            | MBP              |
| Voltage range          | 198-254V         |
| Starting torque        | HST              |
| Approvals              | CCC              |
|                        | EAC              |
|                        | VDE              |

## Electrical accessories / wiring diagram

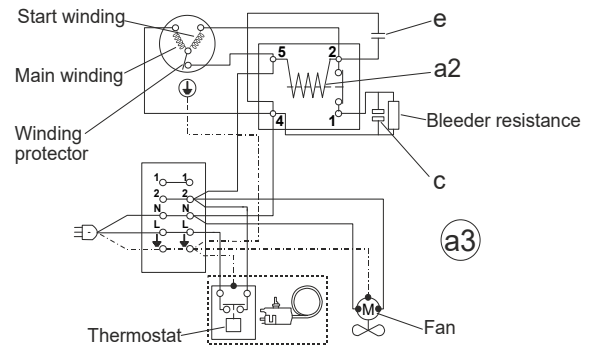


## Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 38°C / 50 - 101°F

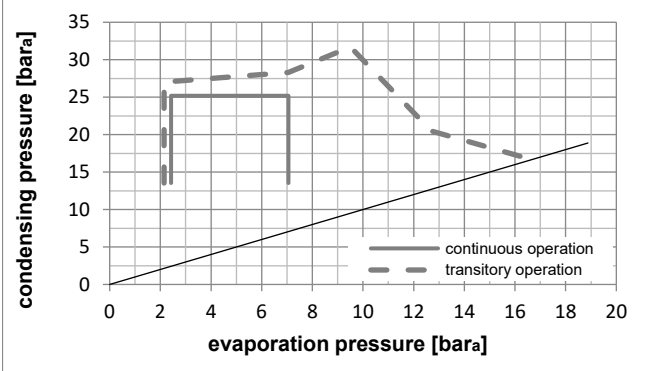
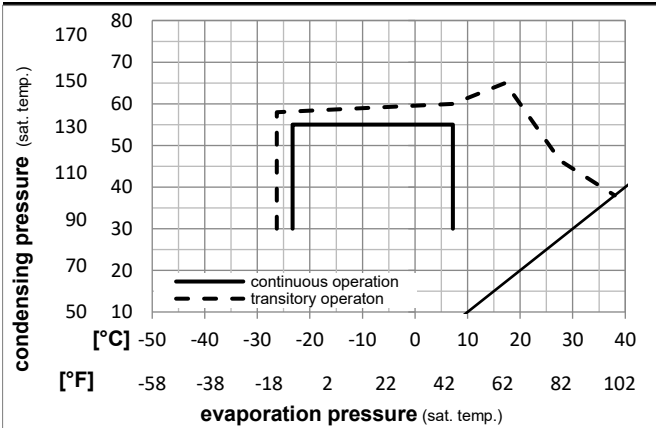
Machine room temperature range: 10 - 43°C / 50 - 110°F

Compressor cooling: fan 3m/s



## Operation Limits

### Operation pressure range



### Components

|    |                        |          |
|----|------------------------|----------|
| a3 | SC starter kit (550mm) | 117-7027 |
| b  | plastic cover          | 103N2009 |
| d  | cord relief            | 103N1004 |

### Alternative components

|    |                             |          |
|----|-----------------------------|----------|
| a3 | SC starter kit (1000mm)     | 117-7040 |
| a3 | SC starter kit (650mm)      | 117-7046 |
| c  | start capacitor (80µF)      | 117U5373 |
| e  | run capacitor (10µF, 6.3mm) | 117-7112 |

## Model

|             |                  |                      |                |             |                 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | <b>SC18MLX.3</b> | <b>220-240V/50Hz</b> | <b>Conf. 2</b> | Sales code: | <b>104L2146</b> |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

## Optimization + standard conditions

R452A, 220V/50Hz, CSCR, fan 3m/s, CCC, EAC, VDE

|      |      | Evaporating pressure (saturation temperature) |     |     |      | Condensing pressure (saturation temperature) |         |          |       |          | Power consumption   |      |                |        |      |       |                    |
|------|------|---|-----|-----|------|--|---------|----------|-------|----------|---------------------|------|----------------|--------|------|-------|--------------------|
|      |      | Return gas temp.                              |     |     |      | Liquid temp.                                 |         |          |       |          | Current consumption |      | Ref. mass flow |        |      |       |                    |
|      |      | Cooling capacity                              |     |     |      | COP  |         | EER      |       | P1       | I                   | m    |                |        |      |       |                    |
|      |      | pe  | pc  | RGT | Tliq | [W]  | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh]           | [W]  | [A]            | [kg/h] |      |       |                    |
| [°C] | [°F] |   |     |     |      |  |         |          |       |          |                     |      |                |        |      |       |                    |
| -7   | 20   | 54  | 130 | 35  | 95   | 46   | 115     | 1592,9   | 5440  | 1370,9   | 1,66                | 5,66 | 1,43           | 960,7  | 4,50 | 44,81 | <b>ASHRAE MBP</b>  |
| -10  | 14   | 55  | 131 | 32  | 90   | 55   | 131     | 1193,3   | 4075  | 1027,0   | 1,32                | 4,50 | 1,14           | 904,7  | 4,25 | 38,79 | <b>cecomaf MBP</b> |
| -10  | 14   | 45  | 113 | 20  | 68   | 45   | 113     | 1385,1   | 4731  | 1192,1   | 1,66                | 5,67 | 1,43           | 834,3  | 4,01 | 42,56 | <b>EN12900 MBP</b> |
| -7   | 20   | 49  | 120 | 18  | 65   | 49   | 120     | 1453,7   | 4965  | 1251,1   | 1,59                | 5,43 | 1,37           | 914,0  | 4,31 | 48,23 | <b>ARI540 MBP</b>  |
| -10  | 14   | 45  | 113 | 32  | 90   | 45   | 113     | 1467,8   | 5013  | 1263,2   | 1,76                | 6,01 | 1,51           | 834,3  | 4,01 | 41,36 | <b>opt</b>         |
| -25  | -13  | 45  | 113 | 32  | 90   | 45   | 113     | 746,0    | 2548  | 642,0    | 1,23                | 4,19 | 1,06           | 608,3  | 3,08 | 20,64 | <b>opt</b>         |

## Performance tables

R452A, 220V/50Hz, CSCR, fan 3m/s, CCC, EAC, VDE

|                  | pe   |      | Cooling capacity |         |          | COP   | EER      |           | P1     | I    | m      |
|------------------|------|------|------------------|---------|----------|-------|----------|-----------|--------|------|--------|
|                  | [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W]    | [A]  | [kg/h] |
| [°C / °F]        | -23  | -10  | 809,7            | 2765    | 696,8    | 1,28  | 4,36     | 1,10      | 633,6  | 3,18 | 22,44  |
| cond. pressure   | -20  | -4   | 945,6            | 3229    | 813,8    | 1,38  | 4,73     | 1,19      | 683,1  | 3,38 | 26,29  |
| pc= 45/113       | -15  | 5    | 1184,7           | 4046    | 1019,5   | 1,56  | 5,33     | 1,34      | 758,5  | 3,69 | 33,14  |
| return gas temp. | -10  | 14   | 1467,8           | 5013    | 1263,2   | 1,76  | 6,01     | 1,51      | 834,3  | 4,01 | 41,36  |
| RGT= 32/90       | -5   | 23   | 1799,6           | 6146    | 1548,7   | 1,98  | 6,75     | 1,70      | 909,9  | 4,33 | 51,14  |
| liquid temp      | 0    | 32   | 2184,6           | 7461    | 1880,1   | 2,22  | 7,58     | 1,91      | 984,9  | 4,66 | 62,70  |
| Tliq= 45/113     | 7,2  | 45   | 2841,9           | 9706    | 2445,8   | 2,61  | 8,90     | 2,24      | 1090,8 | 5,13 | 83,02  |
| [°C / °F]        | -23  | -10  | 655,8            | 2240    | 564,4    | 0,98  | 3,35     | 0,84      | 668,9  | 3,25 | 20,91  |
| cond. pressure   | -20  | -4   | 765,2            | 2613    | 658,6    | 1,05  | 3,60     | 0,91      | 726,1  | 3,48 | 24,49  |
| pc= 55/131       | -15  | 5    | 959,9            | 3278    | 826,1    | 1,18  | 4,02     | 1,01      | 814,5  | 3,85 | 30,94  |
| return gas temp  | -10  | 14   | 1193,3           | 4075    | 1027,0   | 1,32  | 4,50     | 1,14      | 904,7  | 4,25 | 38,79  |
| RGT= 32/90       | -5   | 23   | 1470,2           | 5021    | 1265,3   | 1,48  | 5,04     | 1,27      | 996,2  | 4,66 | 48,26  |
| liquid temp      | 0    | 32   | 1795,2           | 6131    | 1545,0   | 1,65  | 5,63     | 1,42      | 1088,7 | 5,09 | 59,61  |
| Tliq= 55/131     | 7,2  | 45   | 2356,8           | 8049    | 2028,3   | 1,93  | 6,58     | 1,66      | 1222,6 | 5,73 | 79,88  |

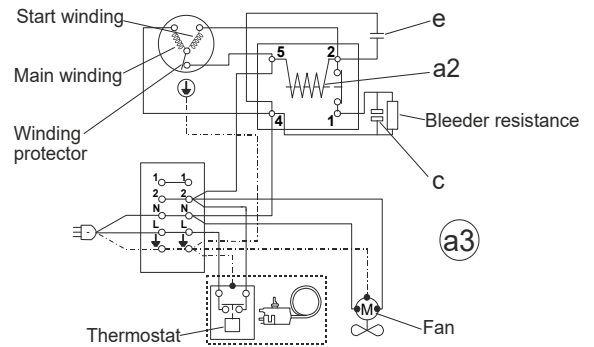
## Model

|             |                  |                      |                |             |                 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | <b>SC18MLX.3</b> | <b>220-240V/50Hz</b> | <b>Conf. 3</b> | Sales code: | <b>104L2146</b> |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

## Configuration

|                        |                  |
|------------------------|------------------|
| Motorconfiguration     | CSCR             |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant            | R448A            |
| Application            | MBP              |
| Voltage range          | 198-254V         |
| Starting torque        | HST              |
| Approvals              |                  |

## Electrical accessories / wiring diagram



## Ambient/ machine room temperatures minimum /maximum

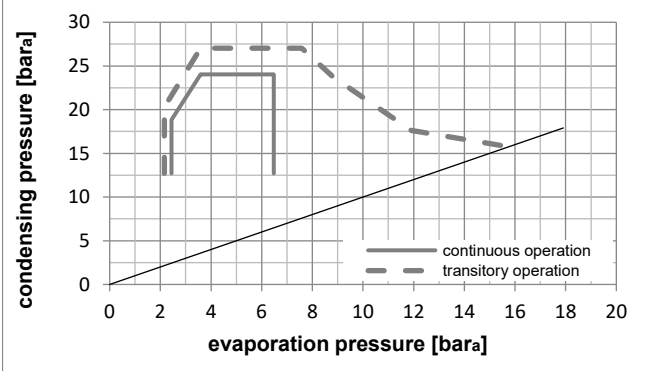
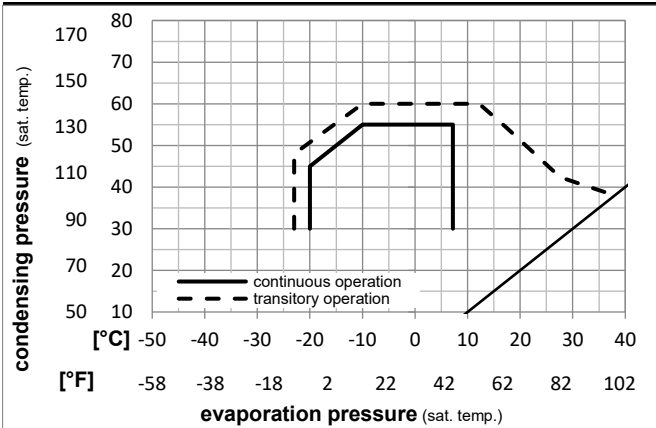
Ambient temperature range: 10 - 38°C / 50 - 101°F

Machine room temperature range: 10 - 43°C / 50 - 110°F

Compressor cooling: fan 3m/s

## Operation Limits

### Operation pressure range



### Components

|    |                        |          |
|----|------------------------|----------|
| a3 | SC starter kit (550mm) | 117-7027 |
| b  | plastic cover          | 103N2009 |
| d  | cord relief            | 103N1004 |

### Alternative components

|    |                             |          |
|----|-----------------------------|----------|
| a3 | SC starter kit (1000mm)     | 117-7040 |
| a3 | SC starter kit (650mm)      | 117-7046 |
| c  | start capacitor (80µF)      | 117U5373 |
| e  | run capacitor (10µF, 6.3mm) | 117-7112 |



## Model

Designation **SC18MLX.3** **220-240V/50Hz** Conf. 3 Sales code: **104L2146**

## Optimization + standard conditions

R448A, 220V/50Hz, CSCR, fan 3m/s,

|      |      | Evaporating pressure (saturation temperature) |      |              |      | Condensing pressure (saturation temperature) |         |          |       |          |           | Power consumption |                |        |      |       |                    |
|------|------|---|------|--------------|------|--|---------|----------|-------|----------|-----------|-------------------|----------------|--------|------|-------|--------------------|
|      |      | Return gas temp.                              |      | Liquid temp. |      | Cooling capacity                             |         | COP      | EER   |          | P1        | I                 | Ref. mass flow |        |      |       |                    |
|      |      | pe  | pc   | RGT          | Tliq | [W]  | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W]               | [A]            | [kg/h] |      |       |                    |
| [°C] | [°F] | [°C]  | [°F] | [°C]         | [°F] |  |         |          |       |          |           |                   |                |        |      |       |                    |
| -7   | 20   | 54  | 130  | 35           | 95   | 46   | 115     | 1537,7   | 5252  | 1323,4   | 1,68      | 5,73              | 1,44           | 916,1  | 4,44 | 33,59 | <b>ASHRAE MBP</b>  |
| -10  | 14   | 55  | 131  | 32           | 90   | 55   | 131     | 1182,0   | 4037  | 1017,2   | 1,37      | 4,69              | 1,18           | 861,1  | 4,28 | 28,95 | <b>cecomaf MBP</b> |
| -10  | 14   | 45  | 113  | 20           | 68   | 45   | 113     | 1355,9   | 4631  | 1166,9   | 1,71      | 5,84              | 1,47           | 792,8  | 4,09 | 31,72 | <b>EN12900 MBP</b> |
| -7   | 20   | 49  | 120  | 18           | 65   | 49   | 120     | 1451,6   | 4958  | 1249,3   | 1,67      | 5,69              | 1,43           | 871,0  | 4,31 | 36,10 | <b>ARI540 MBP</b>  |
| -10  | 14   | 45  | 113  | 32           | 90   | 45   | 113     | 1411,0   | 4819  | 1214,3   | 1,78      | 6,08              | 1,53           | 792,8  | 4,09 | 30,83 | <b>opt</b>         |
| -25  | -13  | 45  | 113  | 32           | 90   | 45   | 113     | 700,8    | 2393  | 603,1    | 1,23      | 4,19              | 1,06           | 571,1  | 3,47 | 15,07 | <b>opt</b>         |

## Performance tables

R448A, 220V/50Hz, CSCR, fan 3m/s,

|                  | pe   |      | Cooling capacity |         |          | COP   | EER      |           | P1     | I    | m      |
|------------------|------|------|------------------|---------|----------|-------|----------|-----------|--------|------|--------|
|                  | [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W]    | [A]  | [kg/h] |
| [°C / °F]        | -20  | -4   | 895,6            | 3059    | 770,8    | 1,39  | 4,75     | 1,20      | 644,3  | 3,68 | 19,34  |
| cond. pressure   | -15  | 5    | 1130,6           | 3861    | 973,0    | 1,57  | 5,38     | 1,35      | 718,3  | 3,88 | 24,55  |
| pc= 45/113       | -10  | 14   | 1411,0           | 4819    | 1214,3   | 1,78  | 6,08     | 1,53      | 792,8  | 4,09 | 30,83  |
| return gas temp. | -7   | 20   | 1623,5           | 5545    | 1397,2   | 1,93  | 6,59     | 1,66      | 842,0  | 4,23 | 35,64  |
| RGT= 32/90       | -5   | 23   | 1742,2           | 5950    | 1499,3   | 2,01  | 6,86     | 1,73      | 867,3  | 4,30 | 38,35  |
| liquid temp      | 0    | 32   | 2129,4           | 7272    | 1832,6   | 2,26  | 7,72     | 1,95      | 941,5  | 4,51 | 47,29  |
| Tliq= 45/113     | 7,2  | 45   | 2796,1           | 9549    | 2406,4   | 2,67  | 9,12     | 2,30      | 1046,8 | 4,80 | 63,07  |
| [°C / °F]        | -20  | -4   | 746,1            | 2548    | 642,1    | 1,09  | 3,71     | 0,94      | 686,5  | 3,80 | 18,04  |
| cond. pressure   | -15  | 5    | 943,3            | 3222    | 811,8    | 1,22  | 4,17     | 1,05      | 772,8  | 4,04 | 22,94  |
| pc= 55/131       | -10  | 14   | 1182,0           | 4037    | 1017,2   | 1,37  | 4,69     | 1,18      | 861,1  | 4,28 | 28,95  |
| return gas temp  | -7   | 20   | 1364,7           | 4661    | 1174,5   | 1,48  | 5,06     | 1,28      | 920,2  | 4,45 | 33,60  |
| RGT= 32/90       | -5   | 23   | 1467,3           | 5011    | 1262,8   | 1,54  | 5,27     | 1,33      | 950,9  | 4,54 | 36,24  |
| liquid temp      | 0    | 32   | 1804,8           | 6164    | 1553,2   | 1,73  | 5,92     | 1,49      | 1041,9 | 4,79 | 45,01  |
| Tliq= 55/131     | 7,2  | 45   | 2392,7           | 8172    | 2059,2   | 2,04  | 6,96     | 1,75      | 1174,1 | 5,16 | 60,73  |

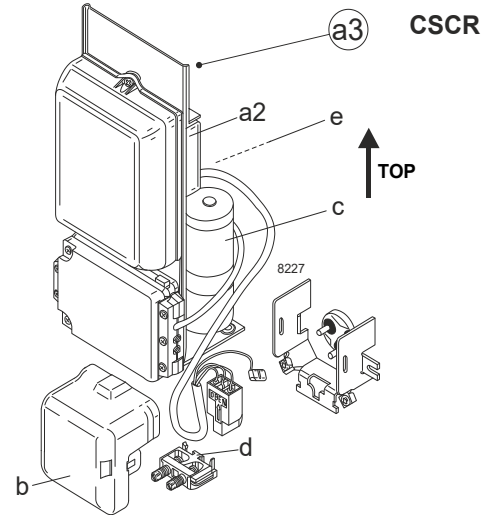
### Model

|             |                  |                      |         |             |                 |
|-------------|------------------|----------------------|---------|-------------|-----------------|
| Designation | <b>SC18MLX.3</b> | <b>220-240V/50Hz</b> | Conf. 4 | Sales code: | <b>104L2146</b> |
|-------------|------------------|----------------------|---------|-------------|-----------------|

### Configuration

|                        |                  |
|------------------------|------------------|
| Motorconfiguration     | CSCR             |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant            | R449A            |
| Application            | MBP              |
| Voltage range          | 198-254V         |
| Starting torque        | HST              |
| Approvals              |                  |

### Electrical accessories / wiring diagram

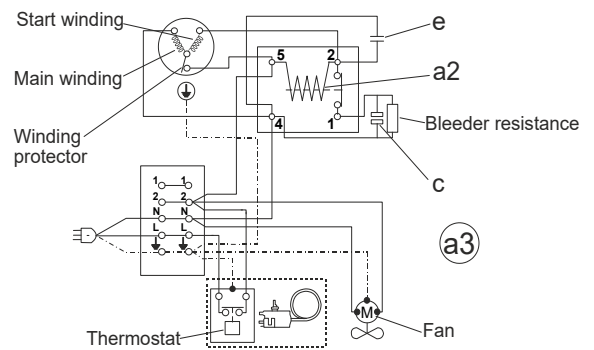


### Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 38°C / 50 - 101°F

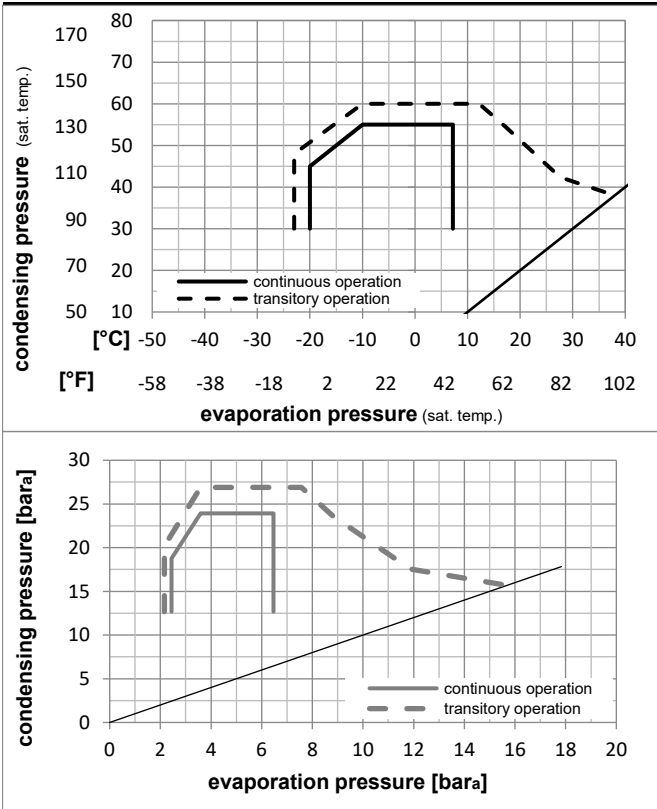
Machine room temperature range: 10 - 43°C / 50 - 110°F

Compressor cooling: fan 3m/s



### Operation Limits

#### Operation pressure range



#### Components

|    |                        |          |
|----|------------------------|----------|
| a3 | SC starter kit (550mm) | 117-7027 |
| b  | plastic cover          | 103N2009 |
| d  | cord relief            | 103N1004 |

#### Alternative components

|    |                             |          |
|----|-----------------------------|----------|
| a3 | SC starter kit (1000mm)     | 117-7040 |
| a3 | SC starter kit (650mm)      | 117-7046 |
| c  | start capacitor (80µF)      | 117U5373 |
| e  | run capacitor (10µF, 6.3mm) | 117-7112 |

## Model

Designation **SC18MLX.3** **220-240V/50Hz** Conf. 4 Sales code: **104L2146**

## Optimization + standard conditions

R449A, 220V/50Hz, CSCR, fan 3m/s,

|      |      | Evaporating pressure (saturation temperature) |      |      |      | Cooling capacity |         |          | COP   | EER      | Power consumption   |       |      |        |             |
|------|------|---|------|------|------|------------------|---------|----------|-------|----------|---------------------|-------|------|--------|-------------|
|      |      | Condensing pressure (saturation temperature)  |      |      |      | Return gas temp. |         |          |       |          | Current consumption |       |      |        |             |
|      |      | Liquid temp.                                  |      |      |      | Cooling capacity |         |          |       |          | Ref. mass flow      |       |      |        |             |
|      |      | pe  | pc   | RGT  | Tliq | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh]           | P1    | I    | m      |             |
| [°C] | [°F] | [°C]  | [°F] | [°C] | [°C] |                  |         |          |       |          |                     | [W]   | [A]  | [kg/h] |             |
| -7   | 20   | 54  | 130  | 35   | 46   | 1529,4           | 5223    | 1316,2   | 1,68  | 5,73     | 1,44                | 911,1 | 4,42 | 34,07  | ASHRAE MBP  |
| -10  | 14   | 55  | 131  | 32   | 55   | 1174,1           | 4010    | 1010,4   | 1,37  | 4,68     | 1,18                | 856,8 | 4,27 | 29,36  | cecomaf MBP |
| -10  | 14   | 45  | 113  | 20   | 45   | 1347,0           | 4600    | 1159,2   | 1,71  | 5,83     | 1,47                | 789,4 | 4,08 | 32,17  | EN12900 MBP |
| -7   | 20   | 49  | 120  | 18   | 49   | 1440,7           | 4920    | 1239,9   | 1,66  | 5,68     | 1,43                | 866,7 | 4,30 | 36,62  | ARI540 MBP  |
| -10  | 14   | 45  | 113  | 32   | 45   | 1403,1           | 4792    | 1207,6   | 1,78  | 6,07     | 1,53                | 789,4 | 4,08 | 31,27  | opt         |
| -25  | -13  | 45  | 113  | 32   | 45   | 697,8            | 2383    | 600,6    | 1,23  | 4,18     | 1,05                | 569,5 | 3,47 | 15,30  | opt         |

## Performance tables

R449A, 220V/50Hz, CSCR, fan 3m/s,

|                  | pe   |      | Cooling capacity |         |          | COP   | EER      |           | P1     | I    | m      |
|------------------|------|------|------------------|---------|----------|-------|----------|-----------|--------|------|--------|
|                  | [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W]    | [A]  | [kg/h] |
| [°C / °F]        | -20  | -4   | 891,3            | 3044    | 767,1    | 1,39  | 4,74     | 1,19      | 642,1  | 3,67 | 19,63  |
| cond. pressure   | -15  | 5    | 1124,7           | 3841    | 967,9    | 1,57  | 5,37     | 1,35      | 715,6  | 3,88 | 24,90  |
| pc= 45/113       | -10  | 14   | 1403,1           | 4792    | 1207,6   | 1,78  | 6,07     | 1,53      | 789,4  | 4,08 | 31,27  |
| return gas temp. | -7   | 20   | 1614,2           | 5513    | 1389,2   | 1,93  | 6,58     | 1,66      | 838,1  | 4,22 | 36,14  |
| RGT= 32/90       | -5   | 23   | 1731,9           | 5915    | 1490,5   | 2,01  | 6,85     | 1,73      | 863,2  | 4,29 | 38,89  |
| liquid temp      | 0    | 32   | 2116,3           | 7228    | 1821,4   | 2,26  | 7,72     | 1,94      | 936,6  | 4,50 | 47,94  |
| Tliq= 45/113     | 7,2  | 45   | 2778,2           | 9488    | 2391,0   | 2,67  | 9,12     | 2,30      | 1040,5 | 4,79 | 63,93  |
| [°C / °F]        | -20  | -4   | 741,8            | 2533    | 638,4    | 1,08  | 3,70     | 0,93      | 684,0  | 3,79 | 18,31  |
| cond. pressure   | -15  | 5    | 937,4            | 3201    | 806,7    | 1,22  | 4,16     | 1,05      | 769,4  | 4,03 | 23,28  |
| pc= 55/131       | -10  | 14   | 1174,1           | 4010    | 1010,4   | 1,37  | 4,68     | 1,18      | 856,8  | 4,27 | 29,36  |
| return gas temp  | -7   | 20   | 1355,3           | 4629    | 1166,4   | 1,48  | 5,06     | 1,27      | 915,2  | 4,44 | 34,08  |
| RGT= 32/90       | -5   | 23   | 1457,1           | 4976    | 1254,0   | 1,54  | 5,26     | 1,33      | 945,5  | 4,52 | 36,75  |
| liquid temp      | 0    | 32   | 1791,7           | 6119    | 1542,0   | 1,73  | 5,91     | 1,49      | 1035,2 | 4,77 | 45,65  |
| Tliq= 55/131     | 7,2  | 45   | 2374,8           | 8110    | 2043,8   | 2,04  | 6,96     | 1,75      | 1165,4 | 5,14 | 61,58  |



# SC Compressors





# SC Compressors

## Service/Repair – R290



8545



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