

**Model**

|             |                |                         |             |                 |
|-------------|----------------|-------------------------|-------------|-----------------|
| Designation | <b>GS21MLX</b> | <b>220-240V/50Hz 1~</b> | Sales code: | <b>107B0523</b> |
|-------------|----------------|-------------------------|-------------|-----------------|

**Compressor design**

|                            |                                  |                       |                                 |
|----------------------------|----------------------------------|-----------------------|---------------------------------|
| Oil type                   | Polyolester                      | Refrigerant(s)        | <b>R404A, R507, R452A</b>       |
| Oil viscosity              | 32,5cST                          | Displacement          | 21,2cm <sup>3</sup> / 1,29cu.in |
| Oil quantity               | 902cm <sup>3</sup> / 30,5fl.oz   | Compressors on pallet | 48                              |
| Refr. charge - tech. limit | 2000g / 70,5oz                   |                       |                                 |
| Free gas volume comp.      | 3350cm <sup>3</sup> / 113,3fl.oz |                       |                                 |
| Weight                     | 19,1kg / 42,1lbs                 |                       |                                 |
| Motor protection           | 1# internal                      |                       |                                 |
| Winding resistance main    | 2,5Ω (at 25°C)                   |                       |                                 |
| Winding resistance aux     | 6,7Ω (at 25°C)                   |                       |                                 |
| Max. winding temp.         |                                  |                       |                                 |
| Max. discharge temp.       | 130°C / 266°F                    |                       |                                 |



**General - Configurations with GS21MLX**

|                        | <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              | VDE  | VDE            | VDE            | VDE            |
| Starting torque        | HST  | HST            | HST            | HST            |
| Note                   | Cover, clamp, gasket: pre-assembled to compressor. |                |                |                |

**Applications with GS21MLX**

|                         | <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 GS21MLX**

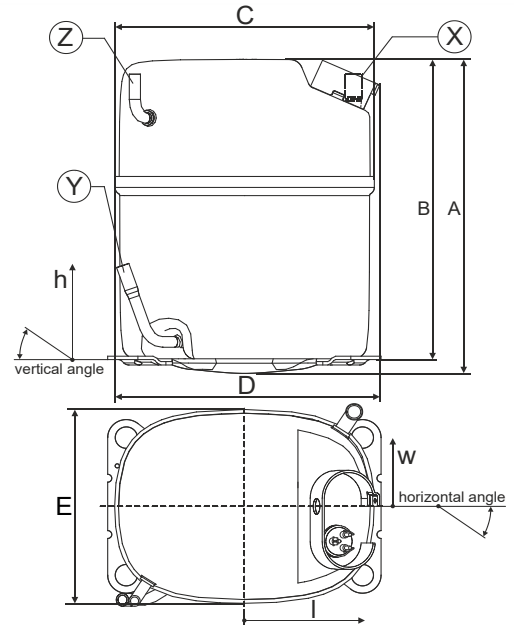
|                              | <b>Conf. 1</b> | <b>Conf. 2</b> | <b>Conf. 3</b> | <b>Conf. 4</b> |
|------------------------------|----------------|----------------|----------------|----------------|
| Starting device type         | relay          | relay          | relay          | relay          |
| Run capacitor                | 20μF           | 20μF           | 20μF           | 20μF           |
| Start capacitor              | 80μF           | 80μF           | 80μF           | 80μF           |
| LRA (locked rotor amps / 4s) | 24A            | 24A            | 24A            | 24A            |
| RLA (rated load amps / 1s)   | 4,7A           | 4,7A           | 4,7A           | 4,7A           |
| Cut in current               | 24A            | 24A            | 24A            | 24A            |
| IP class                     | 21             | 21             | 21             | 21             |

**Model**

Designation **GS21MLX** 220-240V/50Hz 1~ Sales code: **107B0523**

**Compressor dimensions**

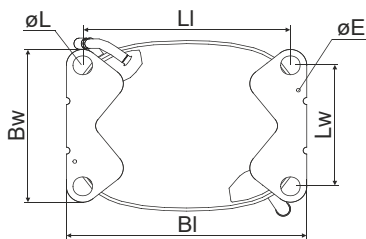
|                |                   |                |
|----------------|-------------------|----------------|
| <b>Housing</b> | A Height          | 259mm / 10,2in |
|                | B Height          | 247mm / 9,72in |
|                | C Length shell    | 224mm / 8,82in |
|                | D Length w. cover | 232mm / 9,13in |
|                | E Width           | 173mm / 6,81in |



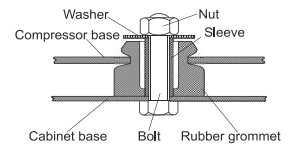
| <b>Connectors</b>     |      | <b>Suction</b> | <b>Discharge</b> | <b>Process</b> |
|-----------------------|------|----------------|------------------|----------------|
|                       |      | <b>X</b>       | <b>Y</b>         | <b>Z</b>       |
| Diameter              | [mm] | øi 12,75-13,05 | øi 8,15-8,25     | øi 6,4-6,6     |
| (i:inside, o:outside) | [in] | øi 0,5-0,51    | øi 0,32-0,32     | øi 0,25-0,26   |
| Material              |      | copper         | copper           | copper         |
| Horizontal angle      | ±2°  | 0°             | 0°               | 0°             |
| Vertical angle        | ±2°  | 90°            | 71°              | 90°            |
| Position l/h/w        | [mm] | -95/234/-84    | -105/84/-84      | 95/234/84      |
|                       | [in] | -3,7/9,2/-3,3  | -4,1/3,3/-3,3    | 3,7/9,2/3,3    |
| Straight tube l.      | [mm] | 18             | 23               | 15             |
|                       | [in] | 0,7            | 0,9              | 0,6            |

**Compressor fixation**

**Bolt joint**



| Baseplate   | [mm]  | [inch] |
|-------------|-------|--------|
| BI          | 235   | 9.25   |
| Bw          | 154   | 6.06   |
| øE          | ø 3.6 | ø 0.14 |
| Large holes | [mm]  | [inch] |
| LI          | 203   | 7.99   |
| Lw          | 122   | 4.80   |
| øL          | ø 19  | ø 0.75 |



**Mounting accessories**

Bolt joint | M8 | ø19mm one comp. 107B9150

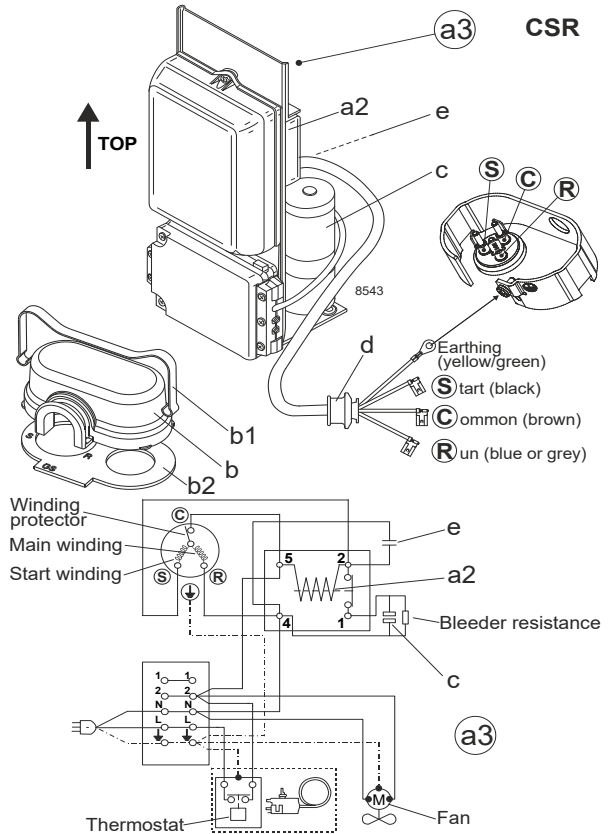
**Model**

Designation **GS21MLX 220-240V/50Hz** Conf. 1 Sales code: **107B0523**

**Configuration**

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

**Electrical accessories / wiring diagram**

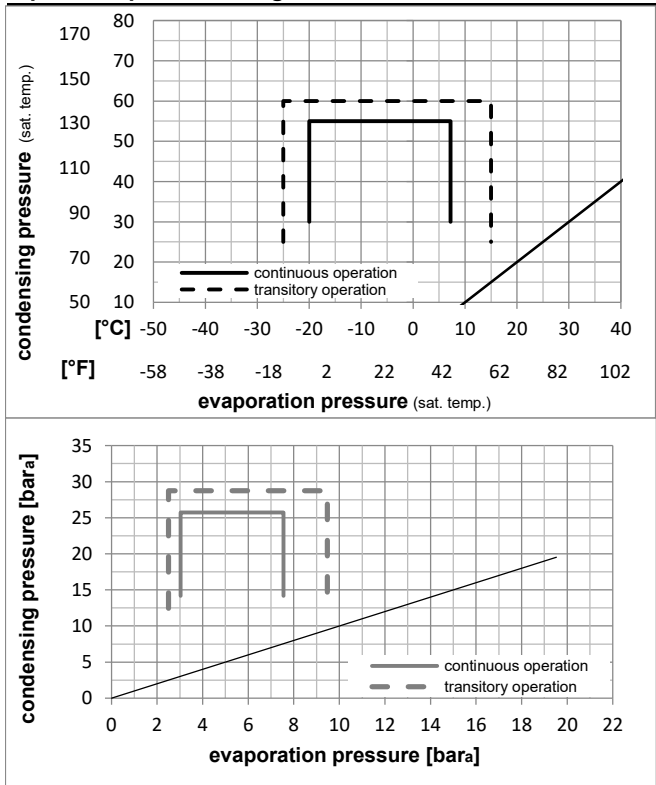


**Ambient temperatures / system cooling**

Ambient temperature min.: **10°C / 50°F**  
 Ambient temperature max.: **38°C / 101°F**

| System cooling (n/a: outside limits) |     |          |     |
|--------------------------------------|-----|----------|-----|
| T ambient                            | LBP | MBP      | HBP |
| 32°C / 90°F                          | n/a | fan 3m/s | n/a |
| 38°C / 100°F                         | n/a | fan 3m/s | n/a |
| 43°C / 110°F                         | n/a | n/a      | n/a |

**Operation pressure range**



**Components (cover, clamp, gasket: pre assembled)**

- a3 GS starter kit (600mm) 117-7070
- b cover 107B9101
- b2 gasket 107B9100
- b1 clamp 107B9104

**Model**

Designation **GS21MLX 220-240V/50Hz** Conf. 1 Sales code: **107B0523**

**Optimization + standard conditions**

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

|      | Evaporating pressure (saturation temperature) |      |      |      | Condensing pressure (saturation temperature) |         |          | Return gas temp. |          |           | Liquid temp. |      |       | Cooling capacity |     |        | COP | EER | Power consumption |  |             | ASHRAE MBP |
|------|---|------|------|------|--|---------|----------|------------------|----------|-----------|--------------|------|-------|------------------|-----|--------|-----|-----|-------------------|--|-------------|------------|
|      | pe  | pc   | RGT  | Tliq | [W]  | [Btu/h] | [kcal/h] | [W/W]            | [Btu/Wh] | [kcal/Wh] | P1           | I    | m     | [W]              | [A] | [kg/h] |     |     |                   |  |             |            |
| [°C] | -6,66   | 54,4 | 35   | 46,1 | 1986,2                                       | 6783    | 1709,4   | 1,79             | 6,12     | 1,54      | 1109,1       | 5,21 | 54,65 |                  |     |        |     |     |                   |  |             |            |
| [°F] | 20  | 130  | 95   | 115  |  |         |          |                  |          |           |              |      |       |                  |     |        |     |     |                   |  |             |            |
| [°C] | -10   | 55   | 32   | 55   | 1466,5                                       | 5008    | 1262,1   | 1,40             | 4,79     | 1,21      | 1045,9       | 4,91 | 46,95 |                  |     |        |     |     |                   |  | cecomaf MBP |            |
| [°F] | 14  | 131  | 89,6 | 131  |  |         |          |                  |          |           |              |      |       |                  |     |        |     |     |                   |  |             |            |
| [°C] | -10   | 45   | 20   | 45   | 1747,6                                       | 5968    | 1504,0   | 1,81             | 6,18     | 1,56      | 965,1        | 4,56 | 52,64 |                  |     |        |     |     |                   |  | EN12900 MBP |            |
| [°F] | 14  | 113  | 68   | 113  |  |         |          |                  |          |           |              |      |       |                  |     |        |     |     |                   |  |             |            |
| [°C] | -6,66   | 48,9 | 18,3 | 48,9 | 1824,3                                       | 6230    | 1570,0   | 1,73             | 5,91     | 1,49      | 1054,7       | 4,98 | 59,61 |                  |     |        |     |     |                   |  | ARI540 MBP  |            |
| [°F] | 20  | 120  | 65   | 120  |  |         |          |                  |          |           |              |      |       |                  |     |        |     |     |                   |  |             |            |
| [°C] | -10   | 45   | 32   | 45   | 1856,4                                       | 6340    | 1597,7   | 1,92             | 6,57     | 1,66      | 965,1        | 4,56 | 51,12 |                  |     |        |     |     |                   |  | opt         |            |
| [°F] | 14  | 113  | 89,6 | 113  |  |         |          |                  |          |           |              |      |       |                  |     |        |     |     |                   |  |             |            |
| [°C] | -25   | 45   | 32   | 45   | 895,6  | 3059    | 770,8    | 1,27             | 4,34     | 1,09      | 704,4        | 3,40 | 24,16 |                  |     |        |     |     |                   |  | opt         |            |
| [°F] | -13   | 113  | 89,6 | 113  |  |         |          |                  |          |           |              |      |       |                  |     |        |     |     |                   |  |             |            |

**Performance tables**

R404A, 220V/50Hz, CSCR, fan 3m/s, 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]        | -20  | -4               | 1159,6 | 3960    | 998,0    | 1,46  | 4,97     | 1,25      | 796,8  | 3,79 | 31,46  |
| cond. pressure   | -15  | 5                | 1477,3 | 5045    | 1271,4   | 1,67  | 5,71     | 1,44      | 882,9  | 4,17 | 40,36  |
| pc= 45/113       | -10  | 14               | 1856,4 | 6340    | 1597,7   | 1,92  | 6,57     | 1,66      | 965,1  | 4,56 | 51,12  |
| return gas temp. | -6,7 | 20               | 2144,0 | 7322    | 1845,2   | 2,11  | 7,19     | 1,81      | 1018,4 | 4,82 | 59,40  |
| RGT= 32/90       | -5   | 23               | 2304,8 | 7871    | 1983,5   | 2,20  | 7,53     | 1,90      | 1045,9 | 4,95 | 64,07  |
| liquid temp      | 0    | 32               | 2830,9 | 9668    | 2436,3   | 2,51  | 8,57     | 2,16      | 1127,6 | 5,34 | 79,58  |
| Tliq= 45/113     | 7,2  | 45               | 3744,1 | 12787   | 3222,2   | 2,99  | 10,22    | 2,57      | 1251,5 | 5,91 | 107,36 |
| [°C / °F]        | -20  | -4               | 909,1  | 3105    | 782,3    | 1,10  | 3,75     | 0,95      | 827,0  | 3,97 | 28,60  |
| cond. pressure   | -15  | 5                | 1164,1 | 3976    | 1001,9   | 1,24  | 4,23     | 1,07      | 939,4  | 4,44 | 36,92  |
| pc= 55/131       | -10  | 14               | 1466,5 | 5008    | 1262,1   | 1,40  | 4,79     | 1,21      | 1045,9 | 4,91 | 46,95  |
| return gas temp  | -6,7 | 20               | 1695,9 | 5792    | 1459,5   | 1,52  | 5,20     | 1,31      | 1114,0 | 5,23 | 54,68  |
| RGT= 32/90       | -5   | 23               | 1824,3 | 6230    | 1570,0   | 1,59  | 5,42     | 1,37      | 1148,7 | 5,39 | 59,05  |
| liquid temp      | 0    | 32               | 2245,9 | 7670    | 1932,9   | 1,80  | 6,13     | 1,55      | 1250,4 | 5,87 | 73,65  |
| Tliq= 55/131     | 7,2  | 45               | 2985,0 | 10194   | 2568,9   | 2,13  | 7,28     | 1,84      | 1399,5 | 6,56 | 100,18 |

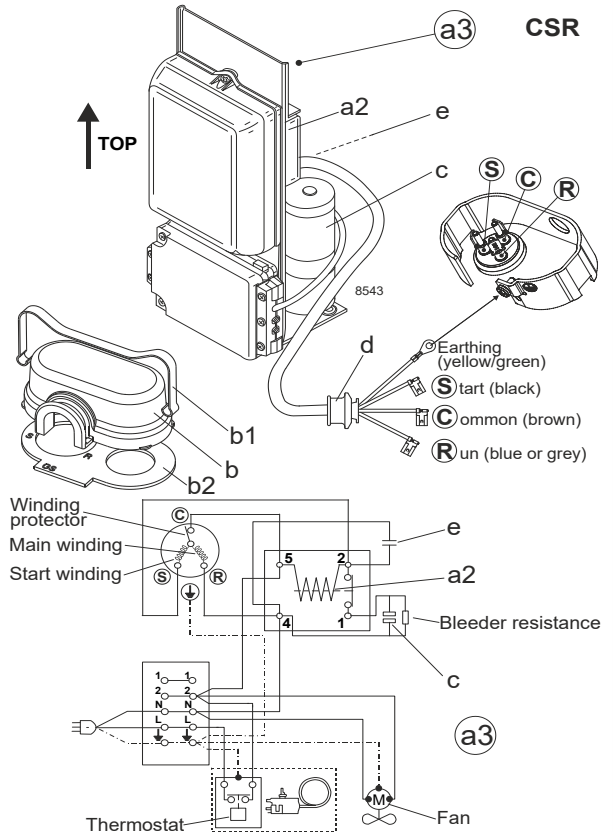
**Model**

Designation **GS21MLX 220-240V/50Hz** Conf. 2 Sales code: **107B0523**

**Configuration**

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

**Electrical accessories / wiring diagram**

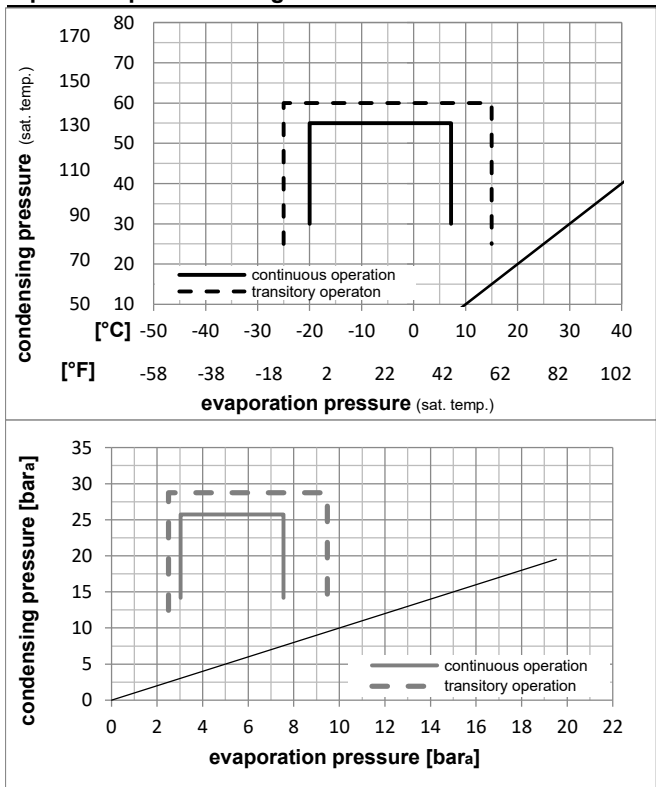


**Ambient temperatures / system cooling**

Ambient temperature min.: **10°C / 50°F**  
 Ambient temperature max.: **38°C / 101°F**

| System cooling (n/a: outside limits) |     |          |     |
|--------------------------------------|-----|----------|-----|
| T ambient                            | LBP | MBP      | HBP |
| 32°C / 90°F                          | n/a | fan 3m/s | n/a |
| 38°C / 100°F                         | n/a | fan 3m/s | n/a |
| 43°C / 110°F                         | n/a | n/a      | n/a |

**Operation pressure range**



**Components (cover, clamp, gasket: pre assembled)**

- a3 GS starter kit (600mm) 117-7070
- b cover 107B9101
- b2 gasket 107B9100
- b1 clamp 107B9104

**Model**

Designation **GS21MLX 220-240V/50Hz** Conf. **2** Sales code: **107B0523**

**Optimization + standard conditions**

R452A, 220V/50Hz, CSCR, fan 3m/s, 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]  | -6,7 | 54,4 | 35   | 46,1 | 2019,3                                       | 6896    | 1737,8   | 1,92         | 6,55     | 1,65      | 1052,4              | 5,89 | 56,81  | ASHRAE MBP     |  |
| [°F]  | 20   | 130  | 95   | 115  |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -10  | 55   | 32   | 55   | 1491,9                                       | 5095    | 1284,0   | 1,51         | 5,16     | 1,30      | 988,1               | 5,61 | 48,49  | cecograf MBP   |  |
| [°F]  | 14   | 131  | 89,6 | 131  |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -10  | 45   | 20   | 45   | 1746,1                                       | 5963    | 1502,7   | 1,91         | 6,52     | 1,64      | 914,0               | 5,29 | 53,65  | EN12900 MBP    |  |
| [°F]  | 14   | 113  | 68   | 113  |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -6,7 | 48,9 | 18,3 | 48,9 | 1847,4                                       | 6309    | 1589,9   | 1,84         | 6,30     | 1,59      | 1002,1              | 5,67 | 61,29  | ARI540 MBP     |  |
| [°F]  | 20   | 120  | 65   | 120  |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -10  | 45   | 32   | 45   | 1852,0                                       | 6325    | 1593,8   | 2,03         | 6,92     | 1,74      | 914,0               | 5,29 | 52,18  | opt            |  |
| [°F]  | 14   | 113  | 89,6 | 113  |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -25  | 45   | 32   | 45   | 869,8  | 2970    | 748,5    | 1,33         | 4,53     | 1,14      | 655,1               | 4,18 | 24,06  | opt            |  |
| [°F]  | -13  | 113  | 89,6 | 113  |  |         |          |              |          |           |                     |      |        |                |  |

**Performance tables**

R452A, 220V/50Hz, CSCR, fan 3m/s, 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]        | -20  | -4               | 1137,4 | 3884    | 978,8    | 1,53  | 5,21     | 1,31      | 745,7  | 4,57 | 31,63  |
| cond. pressure   | -15  | 5                | 1461,6 | 4991    | 1257,8   | 1,76  | 6,00     | 1,51      | 831,3  | 4,94 | 40,89  |
| pc= 45/113       | -10  | 14               | 1852,0 | 6325    | 1593,8   | 2,03  | 6,92     | 1,74      | 914,0  | 5,29 | 52,18  |
| return gas temp. | -6,7 | 20               | 2150,8 | 7345    | 1851,0   | 2,22  | 7,59     | 1,91      | 968,1  | 5,53 | 60,93  |
| RGT= 32/90       | -5   | 23               | 2318,7 | 7919    | 1995,5   | 2,33  | 7,95     | 2,00      | 996,0  | 5,65 | 65,89  |
| liquid temp      | 0    | 32               | 2872,5 | 9810    | 2472,1   | 2,66  | 9,09     | 2,29      | 1079,7 | 6,01 | 82,44  |
| Tliq= 45/113     | 7,2  | 45               | 3846,6 | 13137   | 3310,4   | 3,19  | 10,88    | 2,74      | 1207,7 | 6,56 | 112,38 |
| [°C / °F]        | -20  | -4               | 905,8  | 3094    | 779,6    | 1,17  | 4,01     | 1,01      | 771,3  | 4,68 | 29,00  |
| cond. pressure   | -15  | 5                | 1172,2 | 4003    | 1008,8   | 1,33  | 4,54     | 1,14      | 882,0  | 5,16 | 37,79  |
| pc= 55/131       | -10  | 14               | 1491,9 | 5095    | 1284,0   | 1,51  | 5,16     | 1,30      | 988,1  | 5,61 | 48,49  |
| return gas temp  | -6,7 | 20               | 1737,0 | 5932    | 1494,9   | 1,64  | 5,61     | 1,41      | 1056,8 | 5,91 | 56,81  |
| RGT= 32/90       | -5   | 23               | 1875,1 | 6404    | 1613,7   | 1,72  | 5,86     | 1,48      | 1092,0 | 6,06 | 61,54  |
| liquid temp      | 0    | 32               | 2332,7 | 7967    | 2007,6   | 1,95  | 6,66     | 1,68      | 1195,9 | 6,51 | 77,45  |
| Tliq= 55/131     | 7,2  | 45               | 3146,7 | 10747   | 2708,1   | 2,33  | 7,96     | 2,01      | 1349,9 | 7,17 | 106,65 |

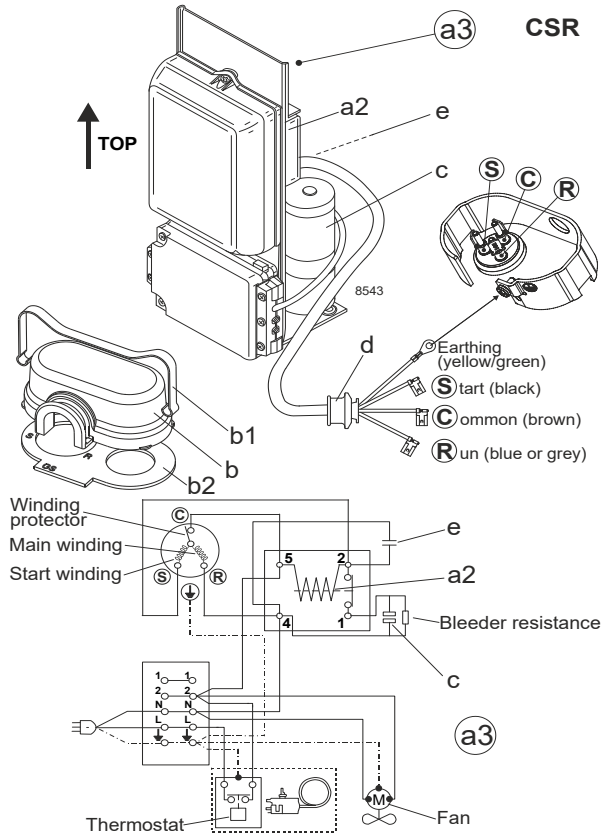
**Model**

|             |                |                      |                |             |                 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | <b>GS21MLX</b> | <b>220-240V/50Hz</b> | <b>Conf. 3</b> | Sales code: | <b>107B0523</b> |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

**Configuration**

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

**Electrical accessories / wiring diagram**

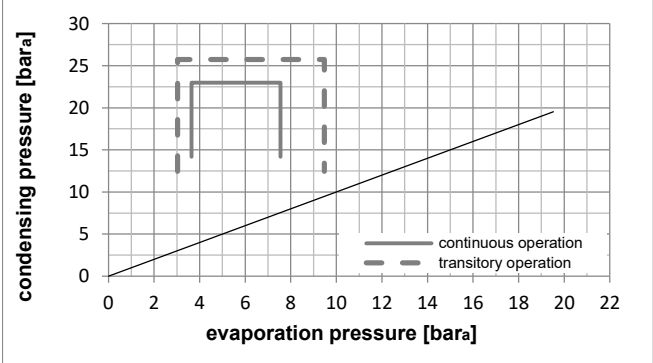
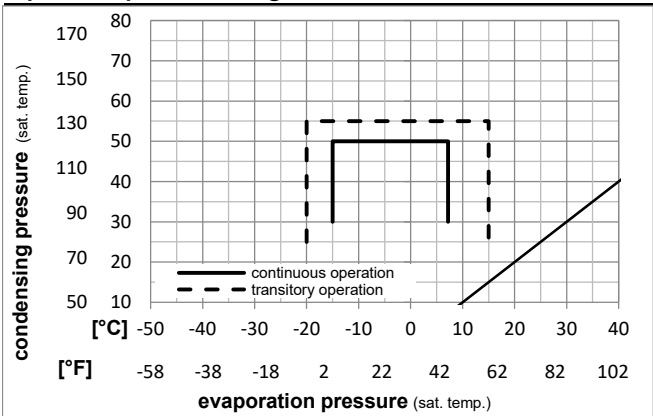


**Ambient temperatures / system cooling**

|                           |              |
|---------------------------|--------------|
| Ambient temperature min.: | 10°C / 50°F  |
| Ambient temperature max.: | 38°C / 101°F |

| System cooling (n/a: outside limits) |     |          |     |
|--------------------------------------|-----|----------|-----|
| T ambient                            | LBP | MBP      | HBP |
| 32°C / 90°F                          | n/a | fan 3m/s | n/a |
| 38°C / 100°F                         | n/a | fan 3m/s | n/a |
| 43°C / 110°F                         | n/a | n/a      | n/a |

**Operation pressure range**



**Components (cover, clamp, gasket: pre assembled)**

|    |                        |          |
|----|------------------------|----------|
| a3 | GS starter kit (600mm) | 117-7070 |
| b  | cover                  | 107B9101 |
| b2 | gasket                 | 107B9100 |
| b1 | clamp                  | 107B9104 |

**Model**

Designation **GS21MLX 220-240V/50Hz** Conf. **3** Sales code: **107B0523**

**Optimization + standard conditions**

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

| Evaporating pressure (saturation temperature) |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
|---|-------|------|------|------|--------|---------|----------|-------|----------|-----------|--------|------|--------|-------------|
| Condensing pressure (saturation temperature)  |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
| Return gas temp.                              |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
| Liquid temp.                                  |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
| Cooling capacity                              |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
| COP   |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
| EER   |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
| Power consumption                             |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
| Current consumption                           |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
| Ref. mass flow                                |       |      |      |      |        |         |          |       |          |           |        |      |        |             |
|   | pe    | pc   | RGT  | Tliq | [W]    | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1     | I    | m      |             |
| [°C]  | [°C]  | [°C] | [°C] | [°C] |        |         |          |       |          |           | [W]    | [A]  | [kg/h] |             |
| [°F]  | 20    | 130  | 95   | 115  | 1895,3 | 6473    | 1631,2   | 1,89  | 6,46     | 1,63      | 1001,9 | 4,73 | 41,40  | ASHRAE MBP  |
| [°C]  | -10   | 55   | 32   | 55   | 1435,4 | 4902    | 1235,3   | 1,53  | 5,23     | 1,32      | 938,1  | 4,45 | 35,15  | cecomaf MBP |
| [°F]  | 14    | 131  | 89,6 | 131  |        |         |          |       |          |           |        |      |        |             |
| [°C]  | -10   | 45   | 20   | 45   | 1672,2 | 5711    | 1439,1   | 1,93  | 6,59     | 1,66      | 867,1  | 4,14 | 39,12  | EN12900 MBP |
| [°F]  | 14    | 113  | 68   | 113  |        |         |          |       |          |           |        |      |        |             |
| [°C]  | -6,66 | 48,9 | 18,3 | 48,9 | 1800,8 | 6150    | 1549,8   | 1,89  | 6,45     | 1,63      | 953,5  | 4,52 | 44,79  | ARI540 MBP  |
| [°F]  | 20    | 120  | 65   | 120  |        |         |          |       |          |           |        |      |        |             |
| [°C]  | -10   | 45   | 32   | 45   | 1741,6 | 5948    | 1498,9   | 2,01  | 6,86     | 1,73      | 867,1  | 4,14 | 38,06  | opt         |
| [°F]  | 14    | 113  | 89,6 | 113  |        |         |          |       |          |           |        |      |        |             |
| [°C]  | -25   | 45   | 32   | 45   | 795,5  | 2717    | 684,6    | 1,30  | 4,44     | 1,12      | 612,3  | 3,02 | 17,11  | opt         |
| [°F]  | -13   | 113  | 89,6 | 113  |        |         |          |       |          |           |        |      |        |             |

**Performance tables**

R448A, 220V/50Hz, CSCR, fan 3m/s, 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]        | -15   | 5                | 1363,1 | 4655    | 1173,1   | 1,74  | 5,93     | 1,49      | 785,4  | 3,78 | 29,60  |
| cond. pressure   | -12,2 | 10               | 1566,2 | 5349    | 1347,9   | 1,88  | 6,43     | 1,62      | 831,4  | 3,98 | 34,12  |
| pc= 45/113       | -10   | 14               | 1741,6 | 5948    | 1498,9   | 2,01  | 6,86     | 1,73      | 867,1  | 4,14 | 38,06  |
| return gas temp. | -6,7  | 20               | 2032,9 | 6943    | 1749,5   | 2,21  | 7,54     | 1,90      | 920,8  | 4,38 | 44,63  |
| RGT= 32/90       | -5    | 23               | 2197,0 | 7503    | 1890,8   | 2,32  | 7,91     | 1,99      | 948,6  | 4,50 | 48,36  |
| liquid temp      | 0     | 32               | 2740,1 | 9358    | 2358,2   | 2,66  | 9,07     | 2,29      | 1032,0 | 4,87 | 60,85  |
| Tliq= 45/113     | 7,2   | 45               | 3700,1 | 12637   | 3184,4   | 3,19  | 10,89    | 2,74      | 1160,1 | 5,43 | 83,46  |
| [°C / °F]        | -15   | 5                | 1117,2 | 3815    | 961,5    | 1,34  | 4,58     | 1,15      | 833,6  | 3,99 | 27,17  |
| cond. pressure   | -12,2 | 10               | 1287,9 | 4399    | 1108,4   | 1,44  | 4,93     | 1,24      | 892,4  | 4,25 | 31,44  |
| pc= 55/131       | -10   | 14               | 1435,4 | 4902    | 1235,3   | 1,53  | 5,23     | 1,32      | 938,1  | 4,45 | 35,15  |
| return gas temp  | -6,7  | 20               | 1680,7 | 5740    | 1446,4   | 1,67  | 5,70     | 1,44      | 1006,1 | 4,75 | 41,38  |
| RGT= 32/90       | -5    | 23               | 1819,3 | 6213    | 1565,7   | 1,75  | 5,97     | 1,50      | 1041,1 | 4,91 | 44,93  |
| liquid temp      | 0     | 32               | 2279,8 | 7786    | 1962,0   | 1,99  | 6,80     | 1,71      | 1144,9 | 5,36 | 56,86  |
| Tliq= 55/131     | 7,2   | 45               | 3101,8 | 10593   | 2669,5   | 2,39  | 8,15     | 2,05      | 1300,1 | 6,05 | 78,73  |



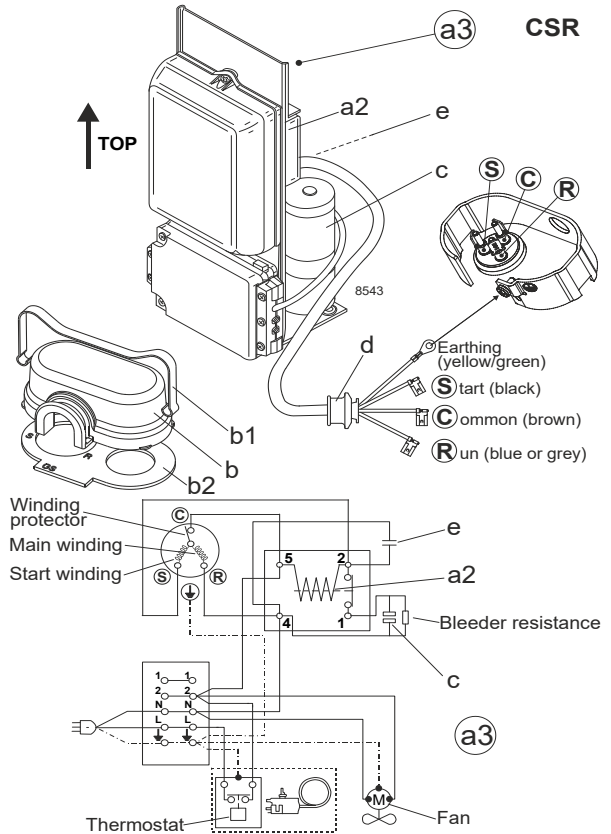
**Model**

Designation **GS21MLX 220-240V/50Hz** Conf. 4 Sales code: **107B0523**

**Configuration**

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

**Electrical accessories / wiring diagram**

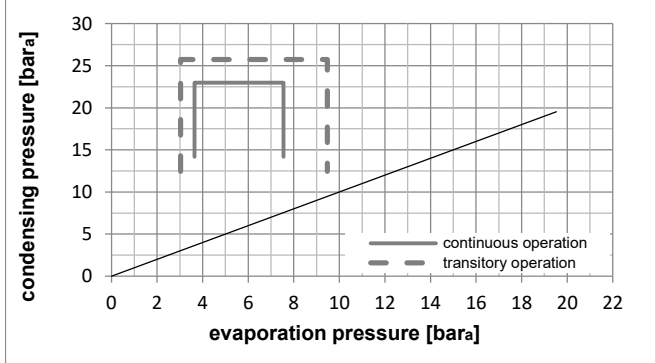
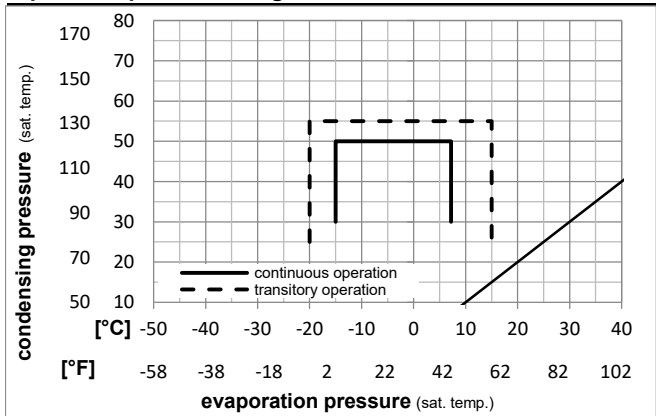


**Ambient temperatures / system cooling**

Ambient temperature min.: **10°C / 50°F**  
 Ambient temperature max.: **38°C / 101°F**

| System cooling (n/a: outside limits) |     |          |     |
|--------------------------------------|-----|----------|-----|
| T ambient                            | LBP | MBP      | HBP |
| 32°C / 90°F                          | n/a | fan 3m/s | n/a |
| 38°C / 100°F                         | n/a | fan 3m/s | n/a |
| 43°C / 110°F                         | n/a | n/a      | n/a |

**Operation pressure range**



**Components (cover, clamp, gasket: pre assembled)**

- a3 GS starter kit (600mm) 117-7070
- b cover 107B9101
- b2 gasket 107B9100
- b1 clamp 107B9104

**Model**

Designation **GS21MLX 220-240V/50Hz** Conf. **4** Sales code: **107B0523**

**Optimization + standard conditions**

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

| Evaporating pressure (saturation temperature) |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
|---|------|------|------|--------|------|---------|----------|-------|----------|-----------|------|-------|---------|-----|
| Condensing pressure (saturation temperature)  |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
| Return gas temp.                              |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
| Liquid temp.                                  |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
| Cooling capacity                              |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
| COP   |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
| EER   |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
| Power consumption                             |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
| Current consumption                           |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
| Ref. mass flow                                |      |      |      |        |      |         |          |       |          |           |      |       |         |     |
|   | pe   | pc   | RGT  | Tliq   | [W]  | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1   | I     | m       |     |
| [°C]  | [°C] | [°C] | [°C] | [°C]   | [W]  | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W]  | [A]   | [kg/h]  |     |
| -6,66   | 54,4 | 35   | 46,1 | 1888,0 | 6448 | 1624,8  | 1,90     | 6,47  | 1,63     | 996,3     | 4,71 | 42,06 | ASHRAE  | MBP |
| [°F]  | 20   | 130  | 95   | 115    |      |         |          |       |          |           |      |       |         |     |
| -10   | 55   | 32   | 55   | 1428,1 | 4877 | 1229,0  | 1,53     | 5,23  | 1,32     | 933,3     | 4,43 | 35,72 | cecomaf | MBP |
| [°F]  | 14   | 131  | 89,6 | 131    |      |         |          |       |          |           |      |       |         |     |
| -10   | 45   | 20   | 45   | 1663,3 | 5680 | 1431,4  | 1,93     | 6,58  | 1,66     | 863,3     | 4,12 | 39,72 | EN12900 | MBP |
| [°F]  | 14   | 113  | 68   | 113    |      |         |          |       |          |           |      |       |         |     |
| -6,66   | 48,9 | 18,3 | 48,9 | 1789,8 | 6112 | 1540,3  | 1,89     | 6,44  | 1,62     | 948,6     | 4,50 | 45,49 | ARI540  | MBP |
| [°F]  | 20   | 120  | 65   | 120    |      |         |          |       |          |           |      |       |         |     |
| -10   | 45   | 32   | 45   | 1734,2 | 5923 | 1492,5  | 2,01     | 6,86  | 1,73     | 863,3     | 4,12 | 38,65 | opt     |     |
| [°F]  | 14   | 113  | 89,6 | 113    |      |         |          |       |          |           |      |       |         |     |
| -25   | 45   | 32   | 45   | 793,3  | 2709 | 682,7   | 1,30     | 4,44  | 1,12     | 610,5     | 3,01 | 17,39 | opt     |     |
| [°F]  | -13  | 113  | 89,6 | 113    |      |         |          |       |          |           |      |       |         |     |

**Performance tables**

R449A, 220V/50Hz, CSCR, fan 3m/s, 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]        | -15   | 5                | 1357,9 | 4637    | 1168,6   | 1,74  | 5,93     | 1,49      | 782,3  | 3,77 | 30,07  |
| cond. pressure   | -12,2 | 10               | 1559,8 | 5327    | 1342,4   | 1,88  | 6,44     | 1,62      | 827,8  | 3,97 | 34,66  |
| pc= 45/113       | -10   | 14               | 1734,2 | 5923    | 1492,5   | 2,01  | 6,86     | 1,73      | 863,3  | 4,12 | 38,65  |
| return gas temp. | -6,7  | 20               | 2023,8 | 6911    | 1741,7   | 2,21  | 7,54     | 1,90      | 916,4  | 4,36 | 45,32  |
| RGT= 32/90       | -5    | 23               | 2186,9 | 7469    | 1882,0   | 2,32  | 7,91     | 1,99      | 943,8  | 4,48 | 49,10  |
| liquid temp      | 0     | 32               | 2726,6 | 9312    | 2346,5   | 2,66  | 9,07     | 2,29      | 1026,2 | 4,84 | 61,77  |
| Tliq= 45/113     | 7,2   | 45               | 3680,3 | 12569   | 3167,3   | 3,19  | 10,91    | 2,75      | 1152,3 | 5,39 | 84,69  |
| [°C / °F]        | -15   | 5                | 1112,0 | 3798    | 957,0    | 1,34  | 4,58     | 1,15      | 829,9  | 3,98 | 27,61  |
| cond. pressure   | -12,2 | 10               | 1281,6 | 4377    | 1103,0   | 1,44  | 4,93     | 1,24      | 888,1  | 4,23 | 31,95  |
| pc= 55/131       | -10   | 14               | 1428,1 | 4877    | 1229,0   | 1,53  | 5,23     | 1,32      | 933,3  | 4,43 | 35,72  |
| return gas temp  | -6,7  | 20               | 1671,8 | 5710    | 1438,8   | 1,67  | 5,71     | 1,44      | 1000,5 | 4,73 | 42,04  |
| RGT= 32/90       | -5    | 23               | 1809,4 | 6180    | 1557,2   | 1,75  | 5,97     | 1,50      | 1035,0 | 4,88 | 45,64  |
| liquid temp      | 0     | 32               | 2266,9 | 7742    | 1950,9   | 1,99  | 6,81     | 1,72      | 1137,1 | 5,33 | 57,75  |
| Tliq= 55/131     | 7,2   | 45               | 3083,0 | 10529   | 2653,2   | 2,39  | 8,17     | 2,06      | 1289,3 | 6,00 | 79,94  |