

## Model

|             |                |                  |             |                 |
|-------------|----------------|------------------|-------------|-----------------|
| Designation | <b>GS34CLX</b> | 220-240V/50Hz 1~ | Sales code: | <b>107B0525</b> |
|-------------|----------------|------------------|-------------|-----------------|

## Compressor design

|                            |                                  |                       |                                 |
|----------------------------|----------------------------------|-----------------------|---------------------------------|
| Oil type                   | Polyolester                      | Refrigerant(s)        | <b>R404A, R507, R452A</b>       |
| Oil viscosity              | 46cST                            | Displacement          | 33,8cm <sup>3</sup> / 2,06cu.in |
| Oil quantity               | 906cm <sup>3</sup> / 30,6fl.oz   | Compressors on pallet | 48                              |
| Refr. charge - tech. limit | 2000g / 70,5oz                   |                       |                                 |
| Free gas volume comp.      | 3350cm <sup>3</sup> / 113,3fl.oz |                       |                                 |
| Weight                     | 20kg / 44,1lbs                   |                       |                                 |
| Motor protection           | 1# internal                      |                       |                                 |
| Winding resistance main    | 1,6Ω (at 25°C)                   |                       |                                 |
| Winding resistance aux     | 6,7Ω (at 25°C)                   |                       |                                 |
| Max. winding temp.         |                                  |                       |                                 |
| Max. discharge temp.       | 130°C / 266°F                    |                       |                                 |



## General - Configurations with GS34CLX

|                        | <b>Conf. 1</b>                                     | <b>Conf. 2</b> |
|------------------------|--|----------------|
| Motorconfiguration     | CSCR   | CSCR           |
| Power supply (nominal) | 220-240V/50Hz                                      | 220-240V/50Hz  |
| Number of phases       | 1  | 1              |
| Voltage range          | 198-254V   | 198-254V       |
| Approvals              | VDE, EAC   | VDE, EAC       |
| Starting torque        | HST  | HST            |
| Note                   | Cover, clamp, gasket: pre-assembled to compressor. |                |

## Applications with GS34CLX

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

## Electrical data - Configurations with GS34CLX

|                              | <b>Conf. 1</b> | <b>Conf. 2</b> |
|------------------------------|----------------|----------------|
| Starting device type         | relay          | relay          |
| Run capacitor                | 15μF           | 15μF           |
| Start capacitor              | 100μF          | 100μF          |
| LRA (locked rotor amps / 4s) | 40A            | 40A            |
| RLA (rated load amps / 1s)   | 5,6A           | 5,6A           |
| Cut in current               | 40A            | 40A            |
| IP class                     | 21             | 21             |

## Model

Designation

**GS34CLX**

220-240V/50Hz 1~

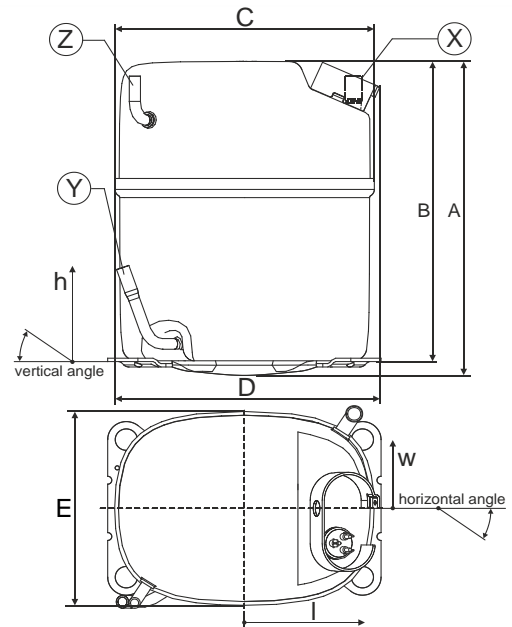
Sales code:

**107B0525**

## Compressor dimensions

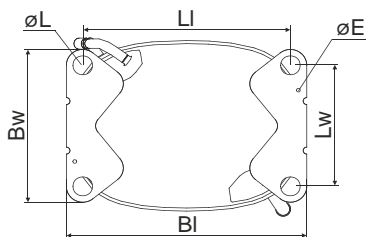
|                |                   |                 |
|----------------|-------------------|-----------------|
| <b>Housing</b> | A Height          | 279mm / 10,98in |
|                | B Height          | 267mm / 10,51in |
|                | C Length shell    | 224mm / 8,82in  |
|                | D Length w. cover | 232mm / 9,13in  |
|                | E Width           | 173mm / 6,81in  |

| Connectors                 | Suction        | Discharge     | Process      |     |
|----------------------------|----------------|---------------|--------------|-----|
|                            | X              | Y             | Z            |     |
| 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

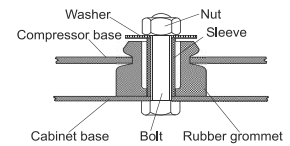
### Bolt joint



| 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

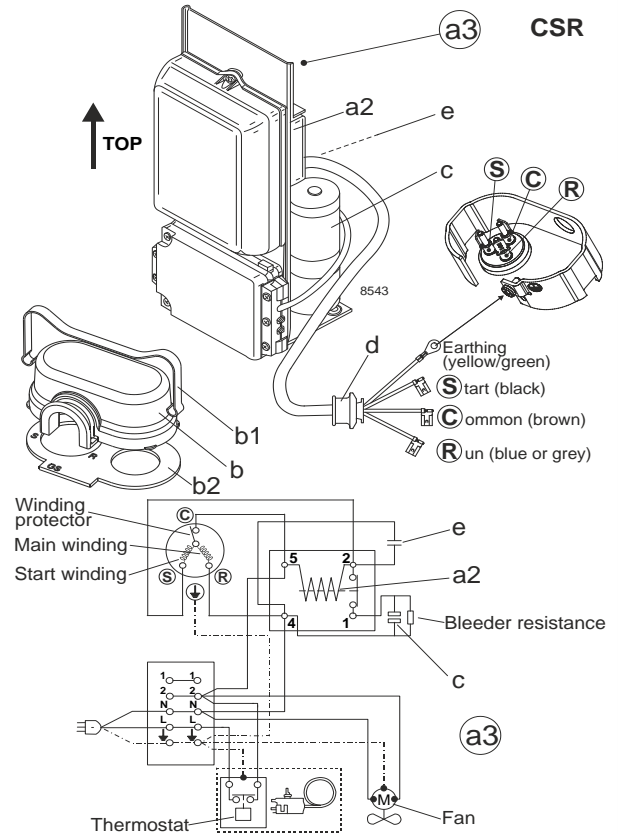
### Model

|             |                |                      |                |             |                 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | <b>GS34CLX</b> | <b>220-240V/50Hz</b> | <b>Conf. 1</b> | Sales code: | <b>107B0525</b> |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

### Configuration

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

### Electrical accessories / wiring diagram

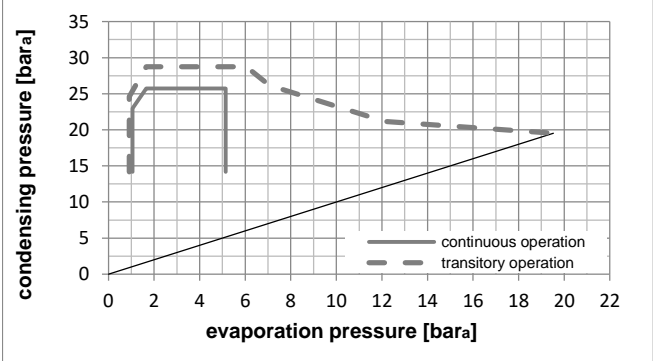
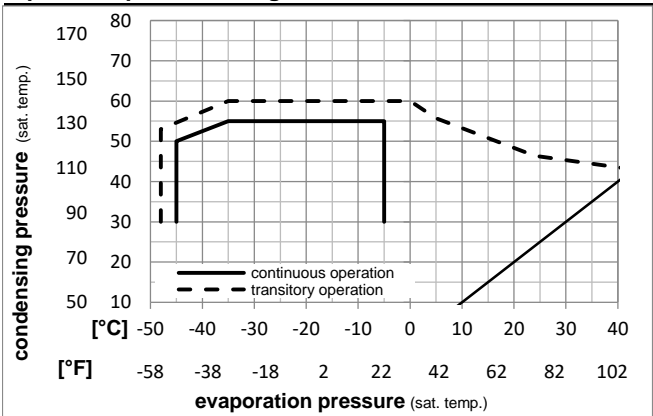


### Ambient temperatures / system cooling

|                           |              |
|---------------------------|--------------|
| 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                          | fan 3m/s | n/a | n/a |
| 38°C / 100°F                         | fan 3m/s | n/a | 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 | 117-7074 |
| b  | cover          | 107B9101 |
| b2 | gasket         | 107B9100 |
| b1 | clamp          | 107B9104 |

## Model

Designation **GS34CLX 220-240V/50Hz** Conf. 1 Sales code: **107B0525**

## Optimization + standard conditions

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

| Evaporating pressure (saturation temperature) |       |      |      |      | Condensing pressure (saturation temperature) |         |          |       |          |           | Power consumption   |      |        |                | ASHRAE<br>LBP |                     |
|---|-------|------|------|------|--|---------|----------|-------|----------|-----------|---------------------|------|--------|----------------|---------------|---------------------|
|   |       |      |      |      | Return gas temp.                             |         |          |       |          |           | Current consumption |      |        |                |               | Ref. mass flow<br>ṁ |
|   |       |      |      |      | Liquid temp.                                 |         |          |       |          |           |                     |      |        |                |               |                     |
|   |       |      |      |      | Cooling capacity                             |         |          |       |          |           |                     |      |        |                |               |                     |
|   | pe    | pc   | RGT  | Tliq | [W]  | [Btu/h] | [kcal/h] | COP   | EER      | [kcal/Wh] | P1                  | I    | ṁ      |                |               |                     |
| [°C]  | [°C]  | [°C] | [°C] | [°C] |  |         |          | [W/W] | [Btu/Wh] |           | [W]                 | [A]  | [kg/h] |                |               |                     |
| [°F]  | [°F]  | [°F] | [°F] | [°F] |  |         |          |       |          |           |                     |      |        |                |               |                     |
|   | -23,3 | 54,4 | 32,2 | 32,2 | 1912,6                                       | 6532    | 1646,0   | 1,44  | 4,93     | 1,24      | 1323,9              | 6,83 | 44,56  | ASHRAE<br>LBP  |               |                     |
|   | -10   | 130  | 90   | 90   |  |         |          |       |          |           |                     |      |        |                |               |                     |
| [°C]  | -25   | 55   | 32   | 55   | 1295,8                                       | 4425    | 1115,2   | 1,03  | 3,51     | 0,88      | 1262,1              | 6,58 | 40,50  | cecomaf<br>LBP |               |                     |
| [°F]  | -13   | 131  | 89,6 | 131  |  |         |          |       |          |           |                     |      |        |                |               |                     |
| [°C]  | -35   | 40   | 20   | 40   | 1003,5                                       | 3427    | 863,6    | 1,09  | 3,71     | 0,93      | 924,5               | 4,93 | 27,27  | EN12900<br>LBP |               |                     |
| [°F]  | -31   | 104  | 68   | 104  |  |         |          |       |          |           |                     |      |        |                |               |                     |
| [°C]  | -23,3 | 48,9 | 4,44 | 48,9 | 1412,2                                       | 4823    | 1215,4   | 1,08  | 3,69     | 0,93      | 1306,7              | 6,57 | 50,00  | ARI540 LBP     |               |                     |
| [°F]  | -10   | 120  | 40   | 120  |  |         |          |       |          |           |                     |      |        |                |               |                     |
| [°C]  | -23,3 | 40,6 | 32,2 | 32,2 | 2120,8                                       | 7243    | 1825,2   | 1,70  | 5,79     | 1,46      | 1250,5              | 6,29 | 49,42  | AHAM LBP       |               |                     |
| [°F]  | -10   | 105  | 90   | 90   |  |         |          |       |          |           |                     |      |        |                |               |                     |
| [°C]  | -35   | 45   | 32   | 45   | 935,7  | 3195    | 805,2    | 1,01  | 3,43     | 0,86      | 930,9               | 4,92 | 25,01  | opt            |               |                     |
| [°F]  | -31   | 113  | 89,6 | 113  |  |         |          |       |          |           |                     |      |        |                |               |                     |

## Performance tables

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

|                  | 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]        | -45  | -49  | 437,8            | 1495    | 376,7    | 0,71  | 2,42     | 0,61      | 618,4  | 3,91  | 11,63  |    |  |   |  |   |  |
| cond. pressure   | -35  | -31  | 935,7            | 3195    | 805,2    | 1,01  | 3,43     | 0,86      | 930,9  | 4,92  | 25,01  |    |  |   |  |   |  |
| pc= 45/113       | -30  | -22  | 1257,0           | 4293    | 1081,8   | 1,16  | 3,98     | 1,00      | 1079,3 | 5,52  | 33,74  |    |  |   |  |   |  |
| return gas temp. | -25  | -13  | 1636,5           | 5589    | 1408,4   | 1,33  | 4,54     | 1,14      | 1231,5 | 6,19  | 44,14  |    |  |   |  |   |  |
| RGT= 32/90       | -20  | -4   | 2081,9           | 7110    | 1791,7   | 1,49  | 5,10     | 1,28      | 1394,4 | 6,92  | 56,48  |    |  |   |  |   |  |
| liquid temp      | -15  | 5    | 2601,0           | 8883    | 2238,4   | 1,65  | 5,64     | 1,42      | 1574,8 | 7,72  | 71,05  |    |  |   |  |   |  |
| Tliq= 45/113     | -5   | 23   | 3893,8           | 13298   | 3351,0   | 1,93  | 6,60     | 1,66      | 2015,7 | 9,51  | 108,25 |    |  |   |  |   |  |
| [°C / °F]        | -45  | -49  | 264,6            | 904     | 227,7    | 0,54  | 1,85     | 0,47      | 489,3  | 3,73  | 8,13   |    |  |   |  |   |  |
| cond. pressure   | -35  | -31  | 696,3            | 2378    | 599,3    | 0,78  | 2,67     | 0,67      | 892,0  | 5,02  | 21,54  |    |  |   |  |   |  |
| pc= 55/131       | -30  | -22  | 971,3            | 3317    | 835,9    | 0,90  | 3,08     | 0,78      | 1077,7 | 5,77  | 30,19  |    |  |   |  |   |  |
| return gas temp  | -25  | -13  | 1295,8           | 4425    | 1115,2   | 1,03  | 3,51     | 0,88      | 1262,1 | 6,58  | 40,50  |    |  |   |  |   |  |
| RGT= 32/90       | -20  | -4   | 1677,5           | 5729    | 1443,7   | 1,16  | 3,95     | 0,99      | 1452,0 | 7,45  | 52,78  |    |  |   |  |   |  |
| liquid temp      | -15  | 5    | 2124,6           | 7256    | 1828,5   | 1,28  | 4,39     | 1,11      | 1654,3 | 8,39  | 67,38  |    |  |   |  |   |  |
| Tliq= 55/131     | -5   | 23   | 3249,1           | 11096   | 2796,2   | 1,53  | 5,23     | 1,32      | 2123,4 | 10,46 | 105,17 |    |  |   |  |   |  |

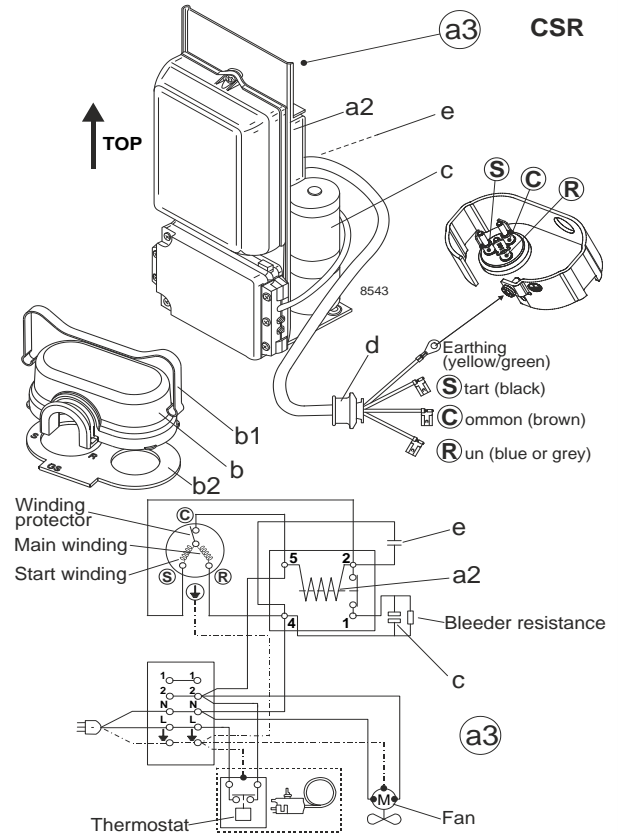
### Model

|             |                |                      |                |             |                 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | <b>GS34CLX</b> | <b>220-240V/50Hz</b> | <b>Conf. 2</b> | Sales code: | <b>107B0525</b> |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

### Configuration

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

### Electrical accessories / wiring diagram

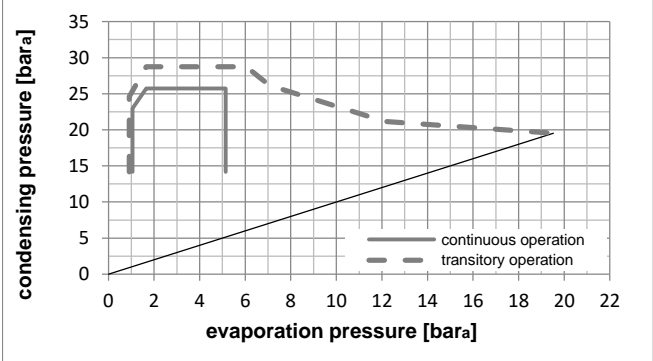
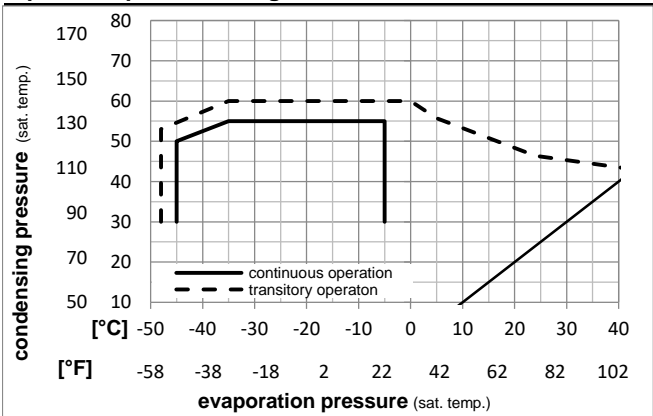


### Ambient temperatures / system cooling

|                           |              |
|---------------------------|--------------|
| 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                          | fan 3m/s | n/a | n/a |
| 38°C / 100°F                         | fan 3m/s | n/a | 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 | 117-7074 |
| b  | cover          | 107B9101 |
| b2 | gasket         | 107B9100 |
| b1 | clamp          | 107B9104 |

## Model

Designation **GS34CLX 220-240V/50Hz** Conf. 2 Sales code: **107B0525**

## Optimization + standard conditions

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

| 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]  | -23 | 54,4 | 32,2 | 32,2 | 1850,2                                       | 6319    | 1592,3   | 1,51         | 5,15     | 1,30      | 1227,1              | 5,56 | 44,47  | ASHRAE LBP     |  |
| [°F]  | -10 | 130  | 90   | 90   |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -25 | 55   | 32   | 55   | 1257,8                                       | 4295    | 1082,4   | 1,08         | 3,68     | 0,93      | 1168,3              | 5,39 | 40,02  | cecmaf LBP     |  |
| [°F]  | -13 | 131  | 89,6 | 131  |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -35 | 40   | 20   | 40   | 933,9  | 3189    | 803,7    | 1,10         | 3,75     | 0,95      | 849,8               | 4,43 | 26,08  | EN12900 LBP    |  |
| [°F]  | -31 | 104  | 68   | 104  |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -23 | 48,9 | 4,44 | 48,9 | 1382,0                                       | 4720    | 1189,4   | 1,14         | 3,89     | 0,98      | 1214,2              | 5,52 | 49,68  | ARI540 LBP     |  |
| [°F]  | -10 | 120  | 40   | 120  |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -23 | 40,6 | 32,2 | 32,2 | 2048,0                                       | 6994    | 1762,6   | 1,76         | 6,00     | 1,51      | 1165,5              | 5,38 | 49,23  | AHAM LBP       |  |
| [°F]  | -10 | 105  | 90   | 90   |  |         |          |              |          |           |                     |      |        |                |  |
| [°C]  | -35 | 45   | 32   | 45   | 869,0  | 2968    | 747,9    | 1,02         | 3,48     | 0,88      | 852,5               | 4,44 | 23,85  | opt            |  |
| [°F]  | -31 | 113  | 89,6 | 113  |  |         |          |              |          |           |                     |      |        |                |  |

## Performance tables

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

|                  | 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]        | -45  | -49              | 447,0  | 1527    | 384,7    | 0,86  | 2,93     | 0,74      | 520,2  | 3,44 | 12,20  |
| cond. pressure   | -35  | -31              | 869,0  | 2968    | 747,9    | 1,02  | 3,48     | 0,88      | 852,5  | 4,44 | 23,85  |
| pc= 45/113       | -30  | -22              | 1186,9 | 4053    | 1021,4   | 1,19  | 4,06     | 1,02      | 999,1  | 4,88 | 32,69  |
| return gas temp. | -25  | -13              | 1578,9 | 5392    | 1358,8   | 1,38  | 4,71     | 1,19      | 1144,9 | 5,32 | 43,68  |
| RGT= 32/90       | -20  | -4               | 2047,4 | 6992    | 1762,0   | 1,58  | 5,38     | 1,36      | 1298,9 | 5,78 | 56,93  |
| liquid temp      | -15  | 5                | 2595,1 | 8863    | 2233,3   | 1,77  | 6,03     | 1,52      | 1470,3 | 6,29 | 72,60  |
| Tliq= 45/113     | -5   | 23               | 3940,1 | 13456   | 3390,9   | 2,07  | 7,08     | 1,78      | 1901,7 | 7,59 | 111,96 |
| [°C / °F]        | -45  | -49              | 297,7  | 1017    | 256,2    | 0,75  | 2,56     | 0,64      | 397,5  | 3,07 | 9,33   |
| cond. pressure   | -35  | -31              | 644,0  | 2199    | 554,2    | 0,79  | 2,71     | 0,68      | 811,6  | 4,32 | 20,31  |
| pc= 55/131       | -30  | -22              | 916,3  | 3129    | 788,6    | 0,92  | 3,15     | 0,79      | 992,6  | 4,86 | 29,01  |
| return gas temp  | -25  | -13              | 1257,8 | 4295    | 1082,4   | 1,08  | 3,68     | 0,93      | 1168,3 | 5,39 | 40,02  |
| RGT= 32/90       | -20  | -4               | 1670,8 | 5706    | 1437,9   | 1,24  | 4,23     | 1,07      | 1347,9 | 5,92 | 53,48  |
| liquid temp      | -15  | 5                | 2158,1 | 7370    | 1857,3   | 1,40  | 4,78     | 1,21      | 1540,4 | 6,50 | 69,57  |
| Tliq= 55/131     | -5   | 23               | 3368,7 | 11505   | 2899,2   | 1,68  | 5,75     | 1,45      | 2001,2 | 7,88 | 110,57 |