

Model  
SC12G

Sales code:  
104G8240

Compressor Data

|                            |                       |
|----------------------------|-----------------------|
| Refrigerant(s)             | R134a / R513A         |
| Refr. charge - tech. limit | 1300g / 45.86oz       |
| Weight                     | 12.70 kg / 28.00lbs   |
| Displacement               | 12.87 cm3 / 0.79cu.in |
| Compressors on pallet      | 80                    |



General – Configurations With SC12G

| -                       | Conf. 1               | Conf. 2               | Conf. 3         | Conf. 4         | Conf. 5               |
|-------------------------|-----------------------|-----------------------|-----------------|-----------------|-----------------------|
| Motor configuration     | CSIR                  | CSIR                  | CSIR            | CSIR            | RSIR                  |
| Power supply (nominal)  | 220-240 V/50 Hz       | 220-240 V/60 Hz       | 220-240 V/50 Hz | 220-240 V/60 Hz | 220-240 V/50 Hz       |
| Number of phases        | 1                     | 1                     | 1               | 1               | 1                     |
| Voltage range           | 187-254 V             | 198-254 V             | 187-254 V       | 187-253 V       | 187-254 V             |
| Approvals               | VDE, UL, CCC, EAC, KC | VDE, UL, CCC, EAC, KC | VDE, UL, CCC    | VDE, UL, CCC    | VDE, UL, CCC, EAC, KC |
| Starting torque         | HST                   | HST                   | HST             | HST             | LST                   |
| Refrigerant             | R134a                 | R134a                 | R513A           | R513A           | R134a                 |
| Application             | LBP+MBP+HBP           | LBP                   | LBP+MBP+HBP     | LBP             | LBP+MBP+HBP           |
| Hot gas defrost         | OK                    | OK                    | OK              | OK              | OK                    |
| Long interval pull down | OK                    | OK                    | OK              | OK              | OK                    |

Application Notes

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

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### Compressor Design

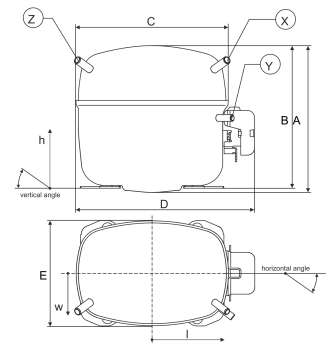
|                       |                                    |                         |               |
|-----------------------|------------------------------------|-------------------------|---------------|
| Oil type              | POE                                | Winding resistance main | 6.9 Ohm       |
| Oil viscosity         | 22cSt                              | Winding resistance aux  | 11 Ohm        |
| Oil quantity          | 550 / 18.60fl.oz                   | Max. winding temp.      | 125 °C        |
| Free gas volume comp. | 1,510 cm <sup>3</sup> / 51.06fl.oz | Max. discharge temp.    | 130°C / 266°F |
| Motor protection      | internal                           |                         |               |

### Compressor Dimensions

#### Housing

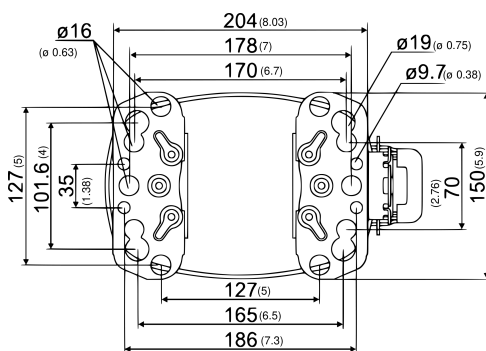
|                   |                 |
|-------------------|-----------------|
| A Height          | 209mm / 8.23in  |
| B Height          | 203mm / 7.99in  |
| C Length shell    | 218mm / 8.58in  |
| D Length w. cover | 255mm / 10.04in |
| E Width           | 151mm / 5.94in  |

[Find 3D Model here](#)

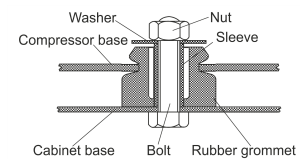


| Connectors            | Suction X                     | Discharge Y                   | Process Z                       |
|-----------------------|-------------------------------|-------------------------------|---------------------------------|
| Diameter [mm]         | øi 8.11–8.29 / 0.32–0.33in    | øi 6.11–6.29 / 0.24–0.25in    | øi 6.11–6.29 / 0.24–0.25in      |
| Material              | CU                            | CU                            | CU                              |
| Horizontal angle ±2°  | 37°                           | 37°                           | 143°                            |
| Vertical angle ±2°    | 30°                           | 0°                            | 150°                            |
| Position l/h/w [mm]   | 107/183/55 / 4.21/7.20/2.17in | 115/100/63 / 4.53/3.94/2.48in | -107/183/55 / -4.21/7.20/2.17in |
| Straight tube l. [mm] | 12 / 0.47in                   | 12 / 0.47in                   | 12 / 0.47in                     |

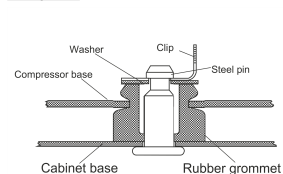
### Mounting Accessories



#### Bolt joint



#### Snap-on



Dimensions in mm [in]

|                            | 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   |

Model

SC12G

Configuration 1

Sales code:

104G8240

### Configuration

|                                    |                              |
|------------------------------------|------------------------------|
| Motor configuration                | <b>CSIR</b>                  |
| Power supply (nominal)             | <b>220-240 V/50 Hz 1~</b>    |
| Refrigerant                        | <b>R134a</b>                 |
| Application                        | <b>LBP+MBP+HBP</b>           |
| Voltage range                      | <b>187-254 V</b>             |
| Starting torque                    | <b>HST</b>                   |
| Approvals                          | <b>VDE, UL, CCC, EAC, KC</b> |
| Starting device type               | <b>relay</b>                 |
| Run capacitor                      | <b>-/-</b>                   |
| Start capacitor                    | <b>80 µF</b>                 |
| LRA (locked rotor amps / 4s/ U(N)) | <b>13 A</b>                  |
| RLA (rated load amps / 1s/ U(N))   | <b>2.5 A</b>                 |
| Cut in current (U(N))              | <b>17 A</b>                  |

### Ambient/ machine room temperatures minimum /maximum

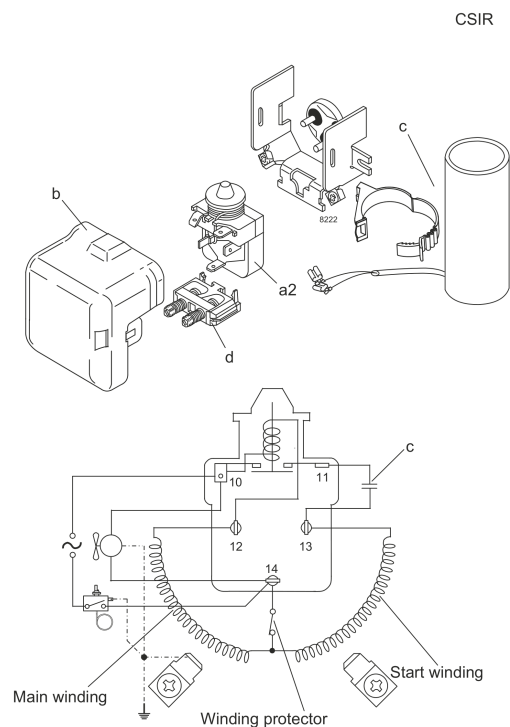
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

### System Cooling

fan 3m/s

### Electrical Accessories / Wiring Diagram



[View full size](#)

### Components

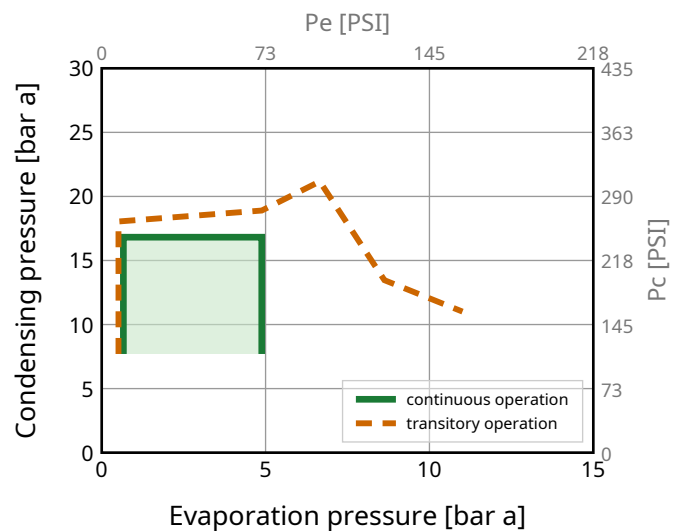
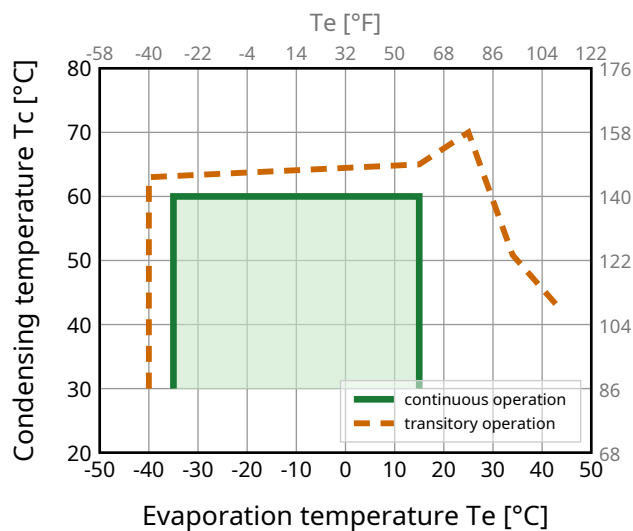
**a2** assy. relay 117U6003

**c** start capacitor (80µF) 117U5017

**d** cord relief 103N1004

**b** plastic cover 103N2009

### Operation Pressure Range



Model  
SC12G

Configuration 1

Sales code:  
104G8240

Standard Conditions

R134a, 220 V/50 Hz, CSIR, fan 3m/s

| pe           | pc            | RGT          | Tliq         | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |             |
|--------------|---------------|--------------|--------------|------------------|---------|----------|-------|----------|-----|------|--------|-------------|
| [°C]<br>[°F] | [°C]<br>[°F]  | [°C]<br>[°F] | [°C]<br>[°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |             |
| -23.3<br>-10 | 54.4<br>129.9 | 32.2<br>90   | 32.2<br>90   | 248              | 846     | 213      | 1.03  | 3.51     | 241 | 1.87 | 4.81   | ASHRAE LBP  |
| -6.7<br>20   | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 613              | 2093    | 528      | 1.60  | 5.46     | 384 | 2.33 | 13.36  | ASHRAE MBP  |
| 7.2<br>45    | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 1168             | 3987    | 1005     | 2.29  | 7.80     | 511 | 2.83 | 25.86  | ASHRAE HBP  |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104    | 123              | 421     | 106      | 0.75  | 2.55     | 165 | 1.73 | 2.70   | EN12900 LBP |
| -10<br>14    | 45<br>113     | 20<br>68     | 45<br>113    | 548              | 1870    | 471      | 1.62  | 5.51     | 339 | 2.15 | 12.78  | EN12900 MBP |
| 5<br>41      | 50<br>122     | 20<br>68     | 50<br>122    | 996              | 3400    | 857      | 2.10  | 7.16     | 475 | 2.67 | 25.00  | EN12900 HBP |

Performance Tables

R134a, 220 V/50 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

| pe   |      | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |
|------|------|------------------|---------|----------|-------|----------|-----|------|--------|
| [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |
| -35  | -31  | 103              | 350     | 88       | 0.65  | 2.21     | 158 | 1.69 | 2.21   |
| -30  | -22  | 161              | 550     | 139      | 0.84  | 2.86     | 193 | 1.76 | 3.48   |
| -20  | -4   | 325              | 1110    | 280      | 1.23  | 4.20     | 264 | 1.93 | 7.05   |
| -10  | 14   | 568              | 1937    | 488      | 1.67  | 5.71     | 339 | 2.15 | 12.40  |
| 0    | 32   | 908              | 3097    | 781      | 2.18  | 7.43     | 417 | 2.42 | 20.03  |
| 10   | 50   | 1365             | 4657    | 1174     | 2.75  | 9.40     | 496 | 2.75 | 30.55  |
| 15   | 59   | 1644             | 5608    | 1413     | 3.07  | 10.47    | 536 | 2.94 | 37.13  |

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

|     |     |      |      |      |      |      |     |      |       |
|-----|-----|------|------|------|------|------|-----|------|-------|
| -35 | -31 | 65   | 220  | 56   | 0.44 | 1.49 | 148 | 1.63 | 1.53  |
| -30 | -22 | 113  | 386  | 97   | 0.61 | 2.07 | 187 | 1.72 | 2.69  |
| -20 | -4  | 252  | 861  | 217  | 0.94 | 3.21 | 268 | 1.95 | 6.04  |
| -10 | 14  | 464  | 1584 | 399  | 1.31 | 4.46 | 355 | 2.24 | 11.19 |
| 0   | 32  | 768  | 2619 | 660  | 1.72 | 5.87 | 446 | 2.57 | 18.72 |
| 10  | 50  | 1182 | 4034 | 1017 | 2.19 | 7.46 | 540 | 2.96 | 29.29 |
| 15  | 59  | 1437 | 4904 | 1236 | 2.44 | 8.33 | 589 | 3.17 | 35.98 |

Model

SC12G

Configuration 2

Sales code:

104G8240

Configuration

|                                    |                       |
|------------------------------------|-----------------------|
| Motor configuration                | CSIR                  |
| Power supply (nominal)             | 220-240 V/60 Hz 1~    |
| Refrigerant                        | R134a                 |
| Application                        | LBP                   |
| Voltage range                      | 198-254 V             |
| Starting torque                    | HST                   |
| Approvals                          | VDE, UL, CCC, EAC, KC |
| Starting device type               | relay                 |
| Run capacitor                      | -/-                   |
| Start capacitor                    | 80 µF                 |
| LRA (locked rotor amps / 4s/ U(N)) | 13 A                  |
| RLA (rated load amps / 1s/ U(N))   | 2.5 A                 |
| Cut in current (U(N))              | 17 A                  |

Ambient/ machine room temperatures minimum /maximum

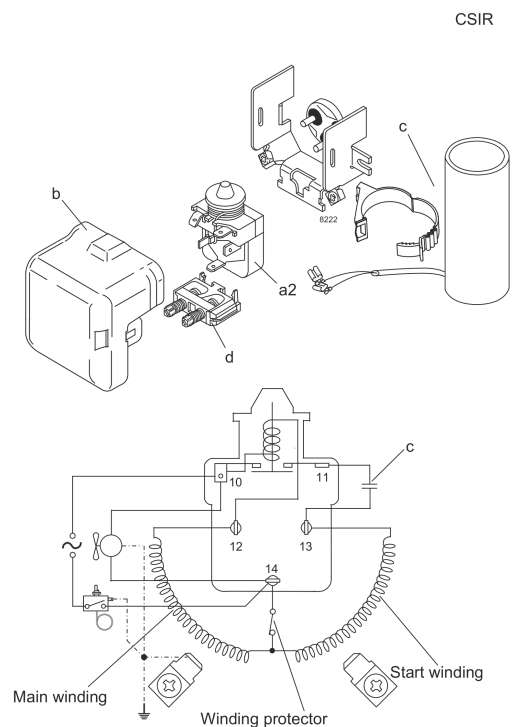
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

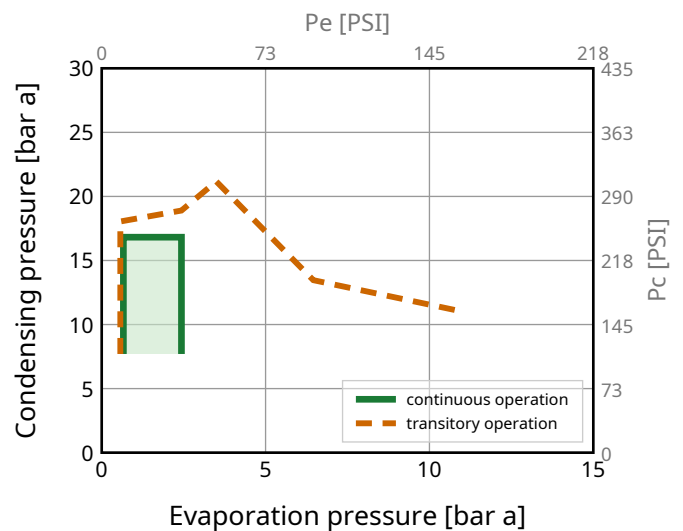
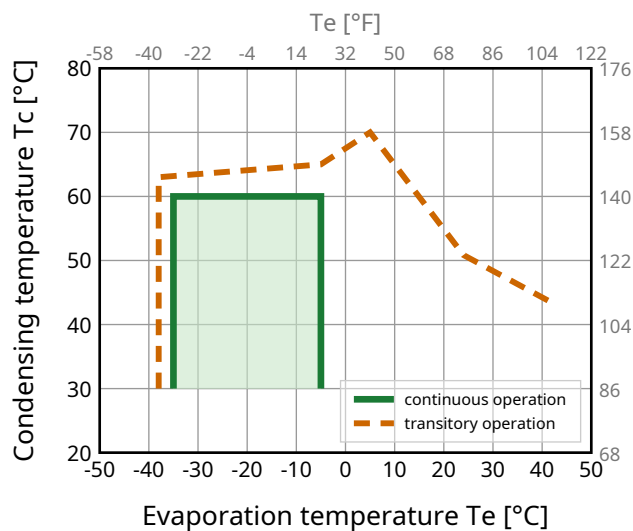
a2 assy. relay 117U6003

c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2009

Operation Pressure Range



Model  
SC12G

Configuration 2

Sales code:  
104G8240

Standard Conditions

R134a, 230 V/60 Hz, CSIR, fan 3m/s

| pe           | pc            | RGT          | Tliq         | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |             |
|--------------|---------------|--------------|--------------|------------------|---------|----------|-------|----------|-----|------|--------|-------------|
| [°C]<br>[°F] | [°C]<br>[°F]  | [°C]<br>[°F] | [°C]<br>[°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |             |
| -23.3<br>-10 | 54.4<br>129.9 | 32.2<br>90   | 32.2<br>90   | 288              | 984     | 248      | 1.03  | 3.50     | 281 | 2.06 | 5.59   | ASHRAE LBP  |
| -6.7<br>20   | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 716              | 2444    | 616      | 1.60  | 5.45     | 448 | 2.57 | 15.59  | ASHRAE MBP  |
| 7.2<br>45    | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 1366             | 4659    | 1174     | 2.29  | 7.80     | 598 | 3.12 | 30.23  | ASHRAE HBP  |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104    | 143              | 488     | 123      | 0.74  | 2.54     | 192 | 1.90 | 3.13   | EN12900 LBP |
| -10<br>14    | 45<br>113     | 20<br>68     | 45<br>113    | 640              | 2183    | 550      | 1.61  | 5.51     | 396 | 2.36 | 14.92  | EN12900 MBP |
| 5<br>41      | 50<br>122     | 20<br>68     | 50<br>122    | 1165             | 3974    | 1002     | 2.10  | 7.16     | 555 | 2.94 | 29.21  | EN12900 HBP |

Performance Tables

R134a, 230 V/60 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

| pe   |      | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |
|------|------|------------------|---------|----------|-------|----------|-----|------|--------|
| [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |
| -35  | -31  | 119              | 405     | 102      | 0.64  | 2.19     | 185 | 1.86 | 2.56   |
| -30  | -22  | 187              | 639     | 161      | 0.83  | 2.84     | 225 | 1.93 | 4.04   |
| -25  | -13  | 273              | 932     | 235      | 1.03  | 3.50     | 266 | 2.02 | 5.91   |
| -20  | -4   | 379              | 1294    | 326      | 1.23  | 4.19     | 309 | 2.12 | 8.22   |
| -15  | 5    | 508              | 1734    | 437      | 1.44  | 4.92     | 352 | 2.23 | 11.05  |
| -10  | 14   | 663              | 2261    | 570      | 1.67  | 5.71     | 396 | 2.36 | 14.47  |
| -5   | 23   | 846              | 2887    | 728      | 1.92  | 6.54     | 441 | 2.51 | 18.56  |

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

|     |     |     |      |     |      |      |     |      |       |
|-----|-----|-----|------|-----|------|------|-----|------|-------|
| -35 | -31 | 74  | 253  | 64  | 0.43 | 1.47 | 172 | 1.79 | 1.76  |
| -30 | -22 | 131 | 447  | 113 | 0.60 | 2.05 | 218 | 1.89 | 3.12  |
| -25 | -13 | 203 | 694  | 175 | 0.77 | 2.62 | 265 | 2.01 | 4.85  |
| -20 | -4  | 294 | 1003 | 253 | 0.94 | 3.20 | 313 | 2.15 | 7.03  |
| -15 | 5   | 406 | 1385 | 349 | 1.12 | 3.81 | 363 | 2.30 | 9.74  |
| -10 | 14  | 542 | 1848 | 466 | 1.31 | 4.46 | 415 | 2.46 | 13.06 |
| -5  | 23  | 704 | 2403 | 606 | 1.51 | 5.14 | 468 | 2.64 | 17.07 |

Model

SC12G

Configuration 3

Sales code:

104G8240

### Configuration

|                                    |                    |
|------------------------------------|--------------------|
| Motor configuration                | CSIR               |
| Power supply (nominal)             | 220-240 V/50 Hz 1~ |
| Refrigerant                        | R513A              |
| Application                        | LBP+MBP+HBP        |
| Voltage range                      | 187-254 V          |
| Starting torque                    | HST                |
| Approvals                          | VDE, UL, CCC       |
| Starting device type               | relay              |
| Run capacitor                      | -/-                |
| Start capacitor                    | 80 µF              |
| LRA (locked rotor amps / 4s/ U(N)) | 13 A               |
| RLA (rated load amps / 1s/ U(N))   | 2.5 A              |
| Cut in current (U(N))              | 17 A               |

### Ambient/ machine room temperatures minimum /maximum

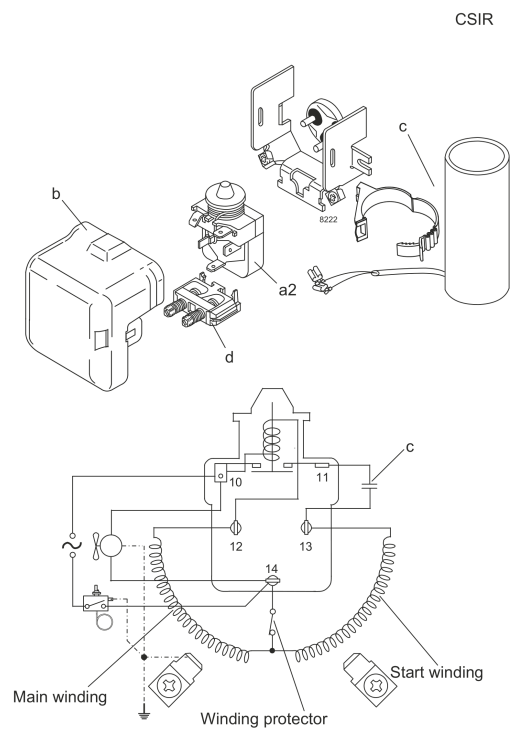
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

### System Cooling

fan 3m/s

### Electrical Accessories / Wiring Diagram



[View full size](#)

### Components

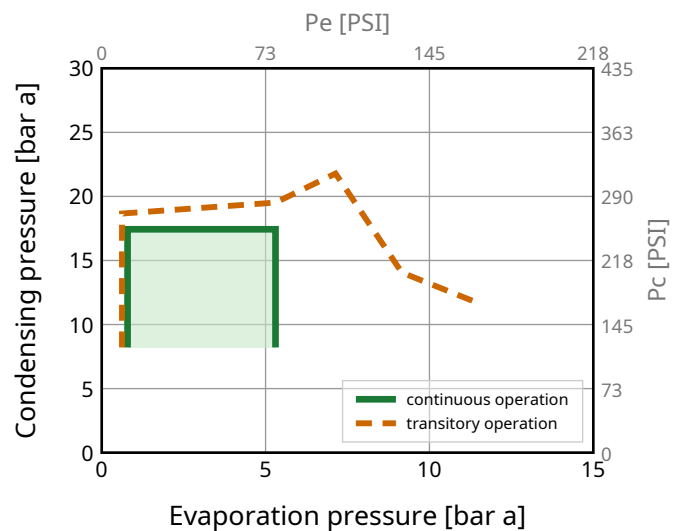
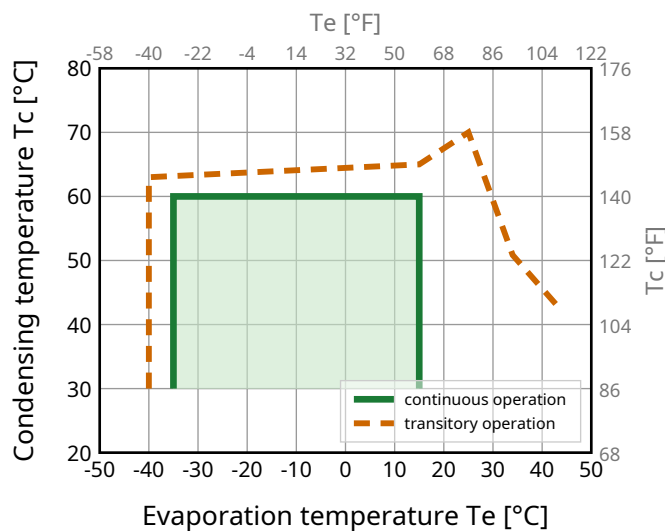
a2 assy. relay 117U6003

c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2009

### Operation Pressure Range



Model  
SC12G

Configuration 3

Sales code:  
104G8240

Standard Conditions

R513A, 220 V/50 Hz, CSIR, fan 3m/s

| pe           | pc            | RGT          | Tliq         | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |             |
|--------------|---------------|--------------|--------------|------------------|---------|----------|-------|----------|-----|------|--------|-------------|
| [°C]<br>[°F] | [°C]<br>[°F]  | [°C]<br>[°F] | [°C]<br>[°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |             |
| -23.3<br>-10 | 54.4<br>129.9 | 32.2<br>90   | 32.2<br>90   | 275              | 939     | 237      | 1.06  | 3.63     | 259 | 1.90 | 6.03   | ASHRAE LBP  |
| -6.7<br>20   | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 645              | 2199    | 554      | 1.59  | 5.43     | 405 | 2.41 | 16.07  | ASHRAE MBP  |
| 7.2<br>45    | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 1203             | 4104    | 1034     | 2.26  | 7.70     | 533 | 2.86 | 30.56  | ASHRAE HBP  |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104    | 139              | 476     | 120      | 0.78  | 2.67     | 178 | 1.62 | 3.50   | EN12900 LBP |
| -10<br>14    | 45<br>113     | 20<br>68     | 45<br>113    | 571              | 1948    | 491      | 1.59  | 5.44     | 358 | 2.25 | 15.46  | EN12900 MBP |
| 5<br>41      | 50<br>122     | 20<br>68     | 50<br>122    | 1004             | 3427    | 864      | 2.03  | 6.92     | 496 | 2.73 | 29.61  | EN12900 HBP |

Performance Tables

R513A, 220 V/50 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

| pe   |      | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |
|------|------|------------------|---------|----------|-------|----------|-----|------|--------|
| [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |
| -35  | -31  | 118              | 401     | 101      | 0.68  | 2.33     | 172 | 1.60 | 2.89   |
| -30  | -22  | 180              | 613     | 155      | 0.87  | 2.95     | 208 | 1.72 | 4.43   |
| -20  | -4   | 351              | 1197    | 302      | 1.25  | 4.25     | 282 | 1.98 | 8.71   |
| -10  | 14   | 599              | 2044    | 515      | 1.67  | 5.70     | 358 | 2.25 | 15.00  |
| 0    | 32   | 942              | 3215    | 810      | 2.16  | 7.37     | 436 | 2.52 | 23.87  |
| 10   | 50   | 1399             | 4772    | 1203     | 2.71  | 9.26     | 515 | 2.80 | 36.02  |
| 15   | 59   | 1675             | 5714    | 1440     | 3.02  | 10.30    | 555 | 2.94 | 43.60  |

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

|     |     |      |      |      |      |      |     |      |       |
|-----|-----|------|------|------|------|------|-----|------|-------|
| -35 | -31 | 75   | 256  | 64   | 0.46 | 1.58 | 162 | 1.56 | 2.06  |
| -30 | -22 | 126  | 430  | 108  | 0.62 | 2.12 | 203 | 1.71 | 3.48  |
| -20 | -4  | 269  | 919  | 232  | 0.94 | 3.20 | 288 | 2.00 | 7.49  |
| -10 | 14  | 483  | 1647 | 415  | 1.28 | 4.38 | 376 | 2.31 | 13.54 |
| 0   | 32  | 784  | 2675 | 674  | 1.68 | 5.72 | 468 | 2.63 | 22.29 |
| 10  | 50  | 1191 | 4065 | 1025 | 2.12 | 7.23 | 562 | 2.96 | 34.51 |
| 15  | 59  | 1440 | 4914 | 1239 | 2.36 | 8.06 | 610 | 3.13 | 42.23 |

Model

SC12G

Configuration 4

Sales code:

104G8240

### Configuration

|                                    |                    |
|------------------------------------|--------------------|
| Motor configuration                | CSIR               |
| Power supply (nominal)             | 220-240 V/60 Hz 1~ |
| Refrigerant                        | R513A              |
| Application                        | LBP                |
| Voltage range                      | 187-253 V          |
| Starting torque                    | HST                |
| Approvals                          | VDE, UL, CCC       |
| Starting device type               | relay              |
| Run capacitor                      | -/-                |
| Start capacitor                    | 80 µF              |
| LRA (locked rotor amps / 4s/ U(N)) | 13 A               |
| RLA (rated load amps / 1s/ U(N))   | 2.5 A              |
| Cut in current (U(N))              | 17 A               |

### Ambient/ machine room temperatures minimum /maximum

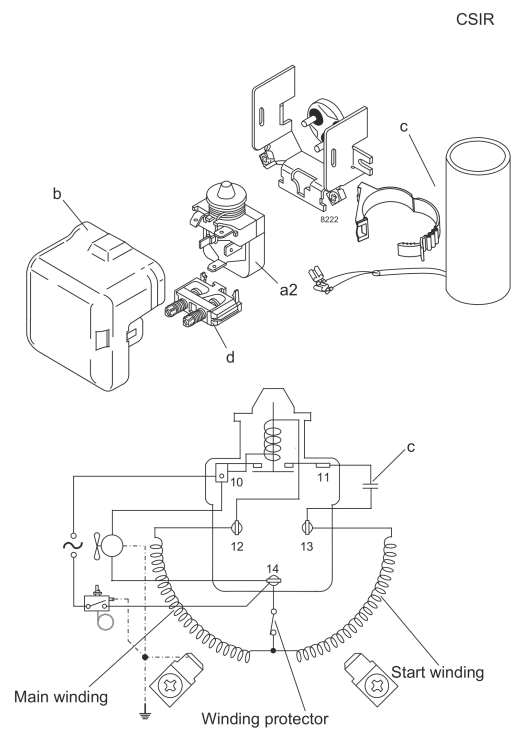
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

### System Cooling

fan 3m/s

### Electrical Accessories / Wiring Diagram



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### Components

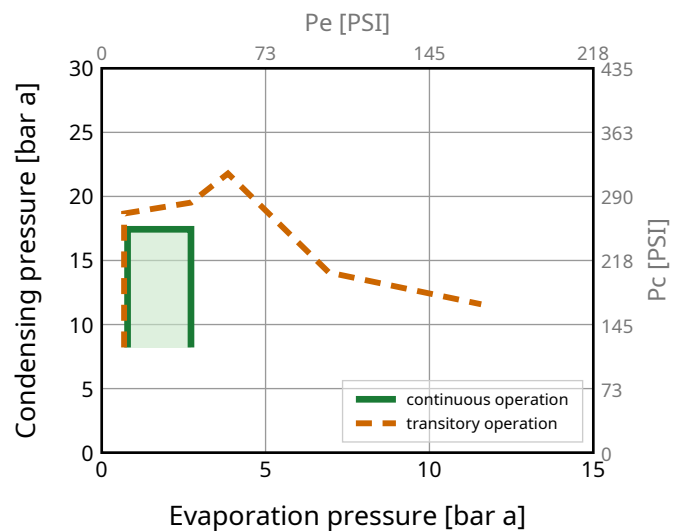
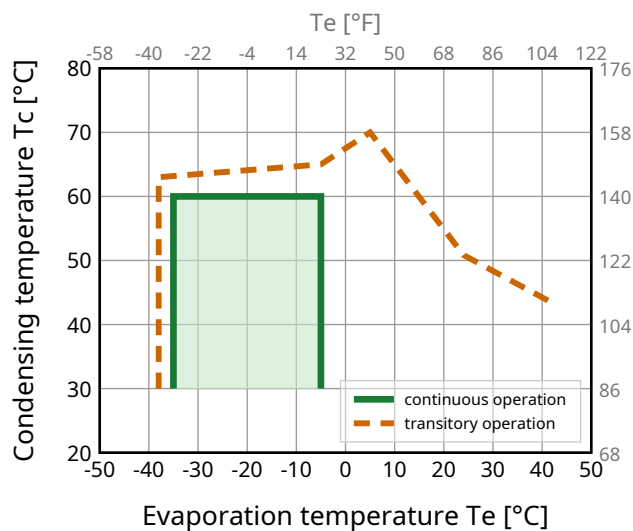
a2 assy. relay 117U6003

c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2009

### Operation Pressure Range



Model  
SC12G

Configuration 4

Sales code:  
104G8240

Standard Conditions

R513A, 230 V/60 Hz, CSIR, fan 3m/s

| pe           | pc            | RGT          | Tliq         | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |             |
|--------------|---------------|--------------|--------------|------------------|---------|----------|-------|----------|-----|------|--------|-------------|
| [°C]<br>[°F] | [°C]<br>[°F]  | [°C]<br>[°F] | [°C]<br>[°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |             |
| -23.3<br>-10 | 54.4<br>129.9 | 32.2<br>90   | 32.2<br>90   | 320              | 1092    | 275      | 1.04  | 3.56     | 307 | 2.11 | 7.01   | ASHRAE LBP  |
| -6.7<br>20   | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 752              | 2567    | 647      | 1.58  | 5.39     | 476 | 2.67 | 18.76  | ASHRAE MBP  |
| 7.2<br>45    | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 1405             | 4795    | 1208     | 2.25  | 7.67     | 625 | 3.16 | 35.70  | ASHRAE HBP  |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104    | 162              | 552     | 139      | 0.76  | 2.61     | 212 | 1.80 | 4.07   | EN12900 LBP |
| -10<br>14    | 45<br>113     | 20<br>68     | 45<br>113    | 666              | 2274    | 573      | 1.58  | 5.38     | 422 | 2.49 | 18.05  | EN12900 MBP |
| 5<br>41      | 50<br>122     | 20<br>68     | 50<br>122    | 1174             | 4004    | 1009     | 2.02  | 6.89     | 581 | 3.02 | 34.60  | EN12900 HBP |

Performance Tables

R513A, 230 V/60 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

| pe   |      | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |
|------|------|------------------|---------|----------|-------|----------|-----|------|--------|
| [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |
| -35  | -31  | 136              | 464     | 117      | 0.67  | 2.27     | 204 | 1.77 | 3.35   |
| -30  | -22  | 209              | 712     | 180      | 0.85  | 2.89     | 247 | 1.91 | 5.15   |
| -25  | -13  | 299              | 1020    | 257      | 1.03  | 3.52     | 290 | 2.06 | 7.39   |
| -20  | -4   | 409              | 1395    | 352      | 1.23  | 4.18     | 334 | 2.20 | 10.15  |
| -15  | 5    | 542              | 1848    | 466      | 1.43  | 4.89     | 378 | 2.35 | 13.49  |
| -10  | 14   | 699              | 2386    | 601      | 1.66  | 5.65     | 422 | 2.49 | 17.50  |
| -5   | 23   | 885              | 3019    | 761      | 1.89  | 6.46     | 467 | 2.64 | 22.27  |

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

|     |     |     |      |     |      |      |     |      |       |
|-----|-----|-----|------|-----|------|------|-----|------|-------|
| -35 | -31 | 86  | 294  | 74  | 0.45 | 1.52 | 194 | 1.74 | 2.37  |
| -30 | -22 | 146 | 498  | 125 | 0.60 | 2.06 | 242 | 1.90 | 4.03  |
| -25 | -13 | 221 | 753  | 190 | 0.76 | 2.59 | 291 | 2.06 | 6.12  |
| -20 | -4  | 314 | 1070 | 270 | 0.92 | 3.14 | 341 | 2.22 | 8.71  |
| -15 | 5   | 427 | 1456 | 367 | 1.09 | 3.72 | 392 | 2.39 | 11.91 |
| -10 | 14  | 563 | 1921 | 484 | 1.27 | 4.33 | 443 | 2.56 | 15.80 |
| -5  | 23  | 725 | 2474 | 624 | 1.46 | 4.99 | 496 | 2.73 | 20.47 |

Model

SC12G

Configuration 5

Sales code:

104G8240

### Configuration

|                                    |                       |
|------------------------------------|-----------------------|
| Motor configuration                | RSIR                  |
| Power supply (nominal)             | 220-240 V/50 Hz 1~    |
| Refrigerant                        | R134a                 |
| Application                        | LBP+MBP+HBP           |
| Voltage range                      | 187-254 V             |
| Starting torque                    | LST                   |
| Approvals                          | VDE, UL, CCC, EAC, KC |
| Starting device type               | PTC                   |
| Run capacitor                      | -/-                   |
| Start capacitor                    | -/-                   |
| LRA (locked rotor amps / 4s/ U(N)) | 13 A                  |
| RLA (rated load amps / 1s/ U(N))   | 2.5 A                 |
| Cut in current (U(N))              | 17 A                  |

### Ambient/ machine room temperatures minimum /maximum

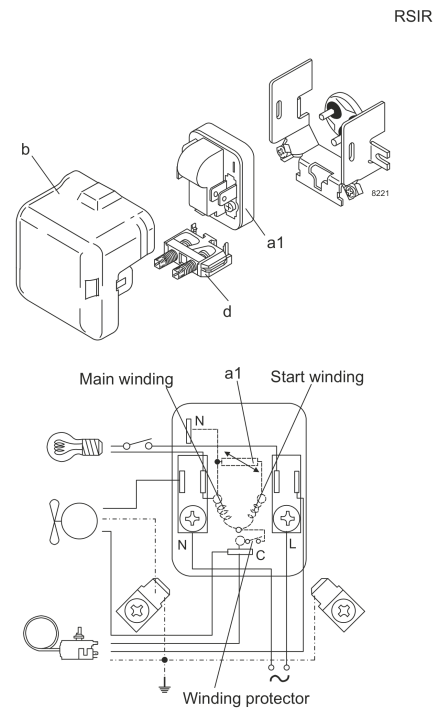
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

### System Cooling

fan 3m/s

### Electrical Accessories / Wiring Diagram



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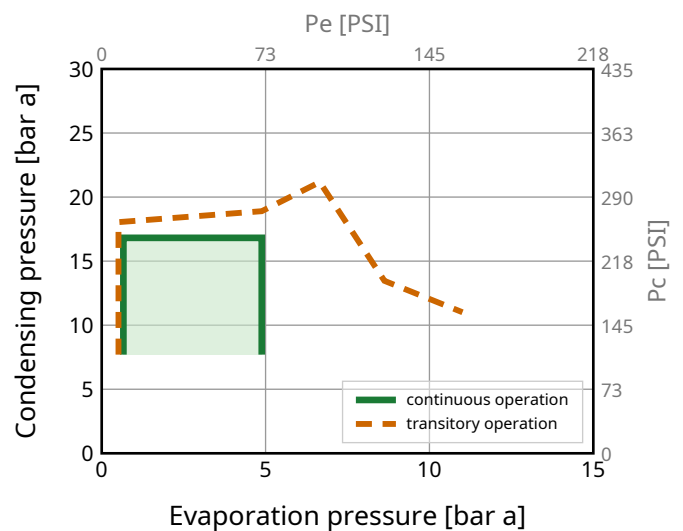
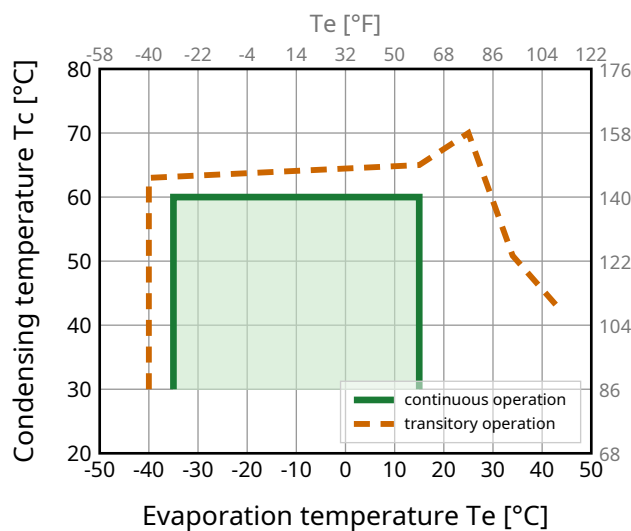
### Components

a1 PTC starter (220V, 250ohm, 6.3mm) 103N0011

d cord relief 103N1004

b plastic cover 103N2009

### Operation Pressure Range



Model  
SC12G

Configuration 5

Sales code:  
104G8240

Standard Conditions

R134a, 220 V/50 Hz, RSIR, fan 3m/s

| pe           | pc            | RGT          | Tliq         | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |             |
|--------------|---------------|--------------|--------------|------------------|---------|----------|-------|----------|-----|------|--------|-------------|
| [°C]<br>[°F] | [°C]<br>[°F]  | [°C]<br>[°F] | [°C]<br>[°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |             |
| -23.3<br>-10 | 54.4<br>129.9 | 32.2<br>90   | 32.2<br>90   | 248              | 846     | 213      | 1.03  | 3.51     | 241 | 1.87 | 4.81   | ASHRAE LBP  |
| -6.7<br>20   | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 613              | 2093    | 528      | 1.60  | 5.46     | 384 | 2.33 | 13.36  | ASHRAE MBP  |
| 7.2<br>45    | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 1168             | 3987    | 1005     | 2.29  | 7.80     | 511 | 2.83 | 25.86  | ASHRAE HBP  |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104    | 123              | 421     | 106      | 0.75  | 2.55     | 165 | 1.73 | 2.70   | EN12900 LBP |
| -10<br>14    | 45<br>113     | 20<br>68     | 45<br>113    | 548              | 1870    | 471      | 1.62  | 5.51     | 339 | 2.15 | 12.78  | EN12900 MBP |
| 5<br>41      | 50<br>122     | 20<br>68     | 50<br>122    | 996              | 3400    | 857      | 2.10  | 7.16     | 475 | 2.67 | 25.00  | EN12900 HBP |

Performance Tables

R134a, 220 V/50 Hz, RSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

| pe   |      | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |
|------|------|------------------|---------|----------|-------|----------|-----|------|--------|
| [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |
| -35  | -31  | 103              | 350     | 88       | 0.65  | 2.21     | 158 | 1.69 | 2.21   |
| -30  | -22  | 161              | 550     | 139      | 0.84  | 2.86     | 193 | 1.76 | 3.48   |
| -20  | -4   | 325              | 1110    | 280      | 1.23  | 4.20     | 264 | 1.93 | 7.05   |
| -10  | 14   | 568              | 1937    | 488      | 1.67  | 5.71     | 339 | 2.15 | 12.40  |
| 0    | 32   | 908              | 3097    | 781      | 2.18  | 7.43     | 417 | 2.42 | 20.03  |
| 10   | 50   | 1365             | 4657    | 1174     | 2.75  | 9.40     | 496 | 2.75 | 30.55  |
| 15   | 59   | 1644             | 5608    | 1413     | 3.07  | 10.47    | 536 | 2.94 | 37.13  |

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

|     |     |      |      |      |      |      |     |      |       |
|-----|-----|------|------|------|------|------|-----|------|-------|
| -35 | -31 | 65   | 220  | 56   | 0.44 | 1.49 | 148 | 1.63 | 1.53  |
| -30 | -22 | 113  | 386  | 97   | 0.61 | 2.07 | 187 | 1.72 | 2.69  |
| -20 | -4  | 252  | 861  | 217  | 0.94 | 3.21 | 268 | 1.95 | 6.04  |
| -10 | 14  | 464  | 1584 | 399  | 1.31 | 4.46 | 355 | 2.24 | 11.19 |
| 0   | 32  | 768  | 2619 | 660  | 1.72 | 5.87 | 446 | 2.57 | 18.72 |
| 10  | 50  | 1182 | 4034 | 1017 | 2.19 | 7.46 | 540 | 2.96 | 29.29 |
| 15  | 59  | 1437 | 4904 | 1236 | 2.44 | 8.33 | 589 | 3.17 | 35.98 |