

Model  
SC15CLX.2

Sales code:  
104L2897

Compressor Data

|                            |                       |
|----------------------------|-----------------------|
| Refrigerant(s)             | R404A / R507 / R452A  |
| Refr. charge - tech. limit | 1300g / 45.86oz       |
| Weight                     | 13.80 kg / 30.42lbs   |
| Displacement               | 15.28 cm3 / 0.93cu.in |
| Compressors on pallet      | 80                    |



General – Configurations With SC15CLX.2

| -                       | Conf. 1         | Conf. 2         |
|-------------------------|-----------------|-----------------|
| Motor configuration     | CSCR            | CSCR            |
| Power supply (nominal)  | 208-230 V/60 Hz | 208-230 V/60 Hz |
| Number of phases        | 1               | 1               |
| Voltage range           | 187-254 V       | 187-254 V       |
| Approvals               | UL, KC          | UL              |
| Starting torque         | HST             | HST             |
| Refrigerant             | R404A           | R452A           |
| Application             | LBP             | LBP             |
| Hot gas defrost         | OK              | OK              |
| Long interval pull down | OK              | OK              |

Application Notes

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

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### Compressor Design

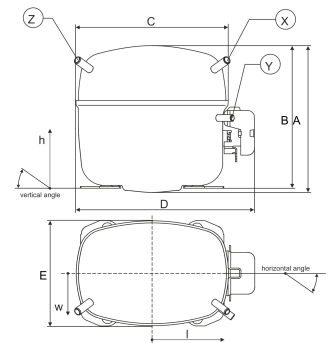
|                       |                                    |                         |               |
|-----------------------|------------------------------------|-------------------------|---------------|
| Oil type              | POE                                | Winding resistance main | 3.4 Ohm       |
| Oil viscosity         | 32cSt                              | Winding resistance aux  | 14.4 Ohm      |
| Oil quantity          | 499 / 16.87fl.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

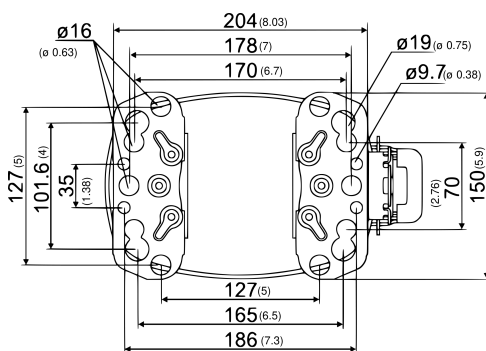
|                   |                 |
|-------------------|-----------------|
| A Height          | 219mm / 8.62in  |
| B Height          | 213mm / 8.39in  |
| C Length shell    | 239mm / 9.41in  |
| D Length w. cover | 255mm / 10.04in |
| E Width           | 151mm / 5.94in  |

[Find 3D Model here](#)

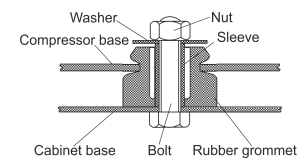


| Connectors            | Suction X                     | Discharge Y                   | Process Z                       |
|-----------------------|-------------------------------|-------------------------------|---------------------------------|
| Diameter [mm]         | øi 9.54–9.72 / 0.38–0.38in    | øi 6.41–6.59 / 0.25–0.26in    | øi 6.41–6.59 / 0.25–0.26in      |
| Material              | CU                            | CU                            | CU                              |
| Horizontal angle ±2°  | 37°                           | 37°                           | 143°                            |
| Vertical angle ±2°    | 30°                           | 0°                            | 150°                            |
| Position l/h/w [mm]   | 107/193/55 / 4.21/7.60/2.17in | 115/110/63 / 4.53/4.33/2.48in | -107/193/55 / -4.21/7.60/2.17in |
| Straight tube l. [mm] | 12 / 0.47in                   | 12 / 0.47in                   | 12 / 0.47in                     |

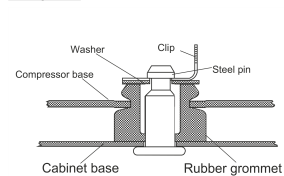
### Mounting Accessories



#### 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

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Configuration 1

Sales code:

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Configuration

|                                    |                    |
|------------------------------------|--------------------|
| Motor configuration                | CSCR               |
| Power supply (nominal)             | 208-230 V/60 Hz 1~ |
| Refrigerant                        | R404A              |
| Application                        | LBP                |
| Voltage range                      | 187-254 V          |
| Starting torque                    | HST                |
| Approvals                          | UL, KC             |
| Starting device type               | relay              |
| Run capacitor                      | 10 $\mu$ F         |
| Start capacitor                    | 80 $\mu$ F         |
| LRA (locked rotor amps / 4s/ U(N)) | 23.4 A             |
| RLA (rated load amps / 1s/ U(N))   | 4.3 A              |
| Cut in current (U(N))              | 23.4 A             |

Ambient/ machine room temperatures minimum /maximum

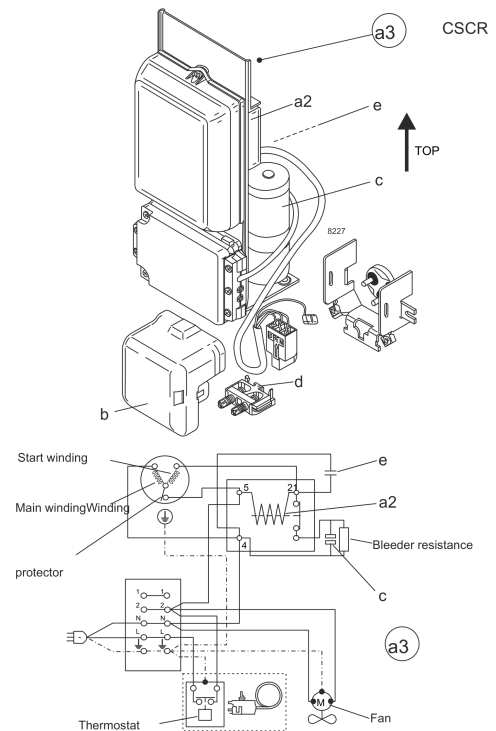
Ambient temperature range: 10 - 38°C / 50 - 100°F

Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

a3 SC starter kit (550mm) 117-7039

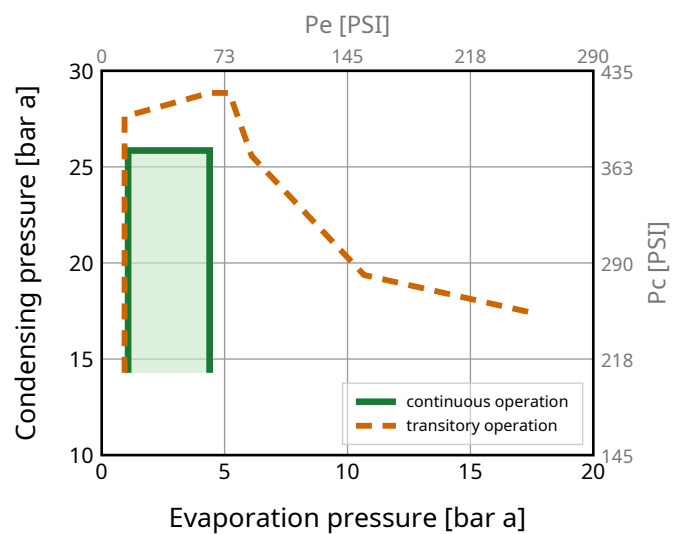
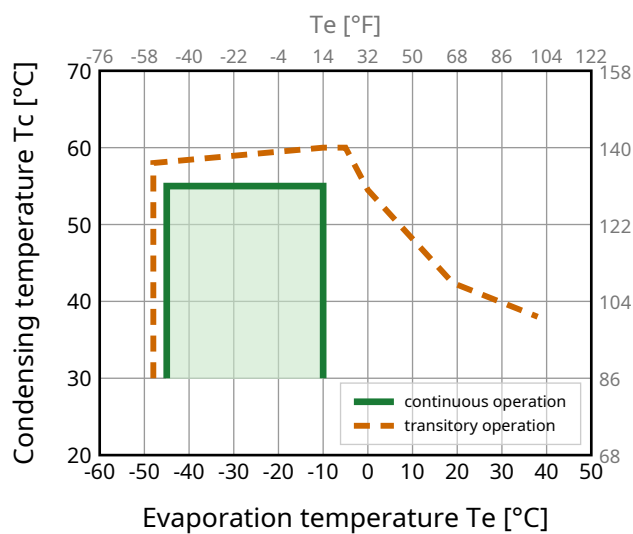
b plastic cover 103N2008

d cord relief 103N1004

Alternative components

a3 SC starter kit (1000mm) 117-7043

Operation Pressure Range



Model  
SC15CLX.2

Configuration 1

Sales code:  
104L2897

Standard Conditions

R404A, 230 V/60 Hz, CSCR, 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    | 882              | 3010    | 759      | 1.33  | 4.54     | 663 | 3.09 | 20.51  | ASHRAE LBP  |
| -25<br>-13   | 55<br>131     | 32<br>89.6   | 55<br>131     | 592              | 2021    | 509      | 0.93  | 3.18     | 636 | 2.96 | 18.47  | CECOMAF LBP |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104     | 478              | 1632    | 411      | 1.03  | 3.50     | 466 | 2.22 | 12.96  | EN12900 LBP |
| -23.3<br>-10 | 48.8<br>119.8 | 4.4<br>39.9  | 48.8<br>119.8 | 668              | 2279    | 574      | 1.03  | 3.52     | 647 | 3.05 | 23.57  | ARI540 LBP  |
| -23.3<br>-10 | 40.6<br>105.1 | 32.2<br>90   | 32.2<br>90    | 1019             | 3477    | 876      | 1.63  | 5.57     | 625 | 2.96 | 23.69  | AHAM LBP    |
| -35<br>-31   | 45<br>113     | 32<br>89.6   | 45<br>113     | 437              | 1490    | 375      | 0.93  | 3.18     | 469 | 2.22 | 11.64  | opt LBP     |

Performance Tables

R404A, 230 V/60 Hz, CSCR, 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] |
| -45  | -49  | 194              | 661     | 166      | 0.59  | 2.03     | 326 | 1.60 | 5.13   |
| -40  | -40  | 305              | 1040    | 262      | 0.77  | 2.61     | 398 | 1.90 | 8.10   |
| -35  | -31  | 437              | 1490    | 375      | 0.93  | 3.18     | 469 | 2.22 | 11.64  |
| -30  | -22  | 593              | 2023    | 510      | 1.10  | 3.75     | 539 | 2.55 | 15.87  |
| -25  | -13  | 776              | 2649    | 668      | 1.27  | 4.33     | 611 | 2.89 | 20.89  |
| -20  | -4   | 991              | 3380    | 852      | 1.45  | 4.93     | 686 | 3.24 | 26.82  |
| -15  | 5    | 1239             | 4228    | 1066     | 1.62  | 5.53     | 764 | 3.60 | 33.79  |
| -10  | 14   | 1525             | 5204    | 1312     | 1.80  | 6.14     | 848 | 3.98 | 41.93  |

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

|     |     |      |      |      |      |      |     |      |       |
|-----|-----|------|------|------|------|------|-----|------|-------|
| -45 | -49 | 93   | 317  | 80   | 0.31 | 1.07 | 296 | 1.46 | 2.84  |
| -40 | -40 | 190  | 648  | 163  | 0.49 | 1.69 | 384 | 1.82 | 5.84  |
| -35 | -31 | 303  | 1035 | 261  | 0.65 | 2.21 | 469 | 2.19 | 9.36  |
| -30 | -22 | 436  | 1489 | 375  | 0.79 | 2.70 | 553 | 2.56 | 13.53 |
| -25 | -13 | 592  | 2021 | 509  | 0.93 | 3.18 | 636 | 2.96 | 18.47 |
| -20 | -4  | 775  | 2643 | 666  | 1.07 | 3.66 | 721 | 3.36 | 24.32 |
| -15 | 5   | 986  | 3365 | 848  | 1.22 | 4.16 | 809 | 3.77 | 31.23 |
| -10 | 14  | 1231 | 4200 | 1059 | 1.37 | 4.67 | 900 | 4.20 | 39.35 |

Model

SC15CLX.2

Configuration 2

Sales code:

104L2897

Configuration

|                                    |                           |
|------------------------------------|---------------------------|
| Motor configuration                | <b>CSCR</b>               |
| Power supply (nominal)             | <b>208-230 V/60 Hz 1~</b> |
| Refrigerant                        | <b>R452A</b>              |
| Application                        | <b>LBP</b>                |
| Voltage range                      | <b>187-254 V</b>          |
| Starting torque                    | <b>HST</b>                |
| Approvals                          | <b>UL</b>                 |
| Starting device type               | <b>relay</b>              |
| Run capacitor                      | <b>10 µF</b>              |
| Start capacitor                    | <b>80 µF</b>              |
| LRA (locked rotor amps / 4s/ U(N)) | <b>23.4 A</b>             |
| RLA (rated load amps / 1s/ U(N))   | <b>4.3 A</b>              |
| Cut in current (U(N))              | <b>23.4 A</b>             |

**Ambient/ machine room temperatures minimum /maximum**

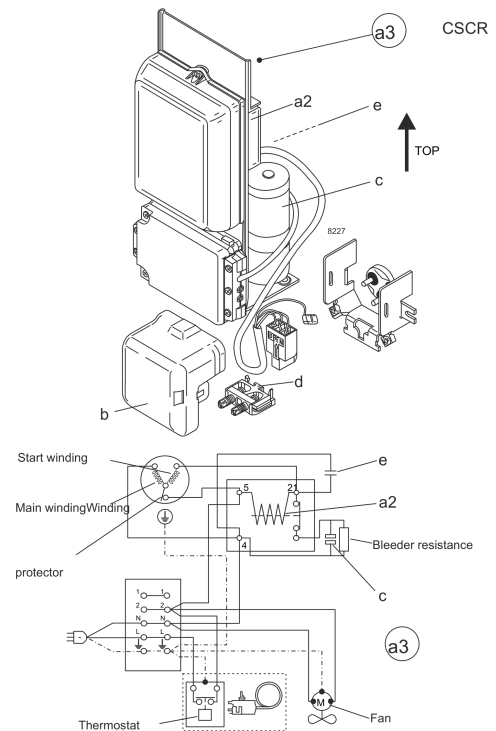
Ambient temperature range: 10 - 38°C / 50 - 100°F

Machine room temp. compressor: 10 - 43°C / 50 - 109°F

**System Cooling**

fan 3m/s

Electrical Accessories / Wiring Diagram



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**Components**

**a3** SC starter kit (550mm) 117-7039

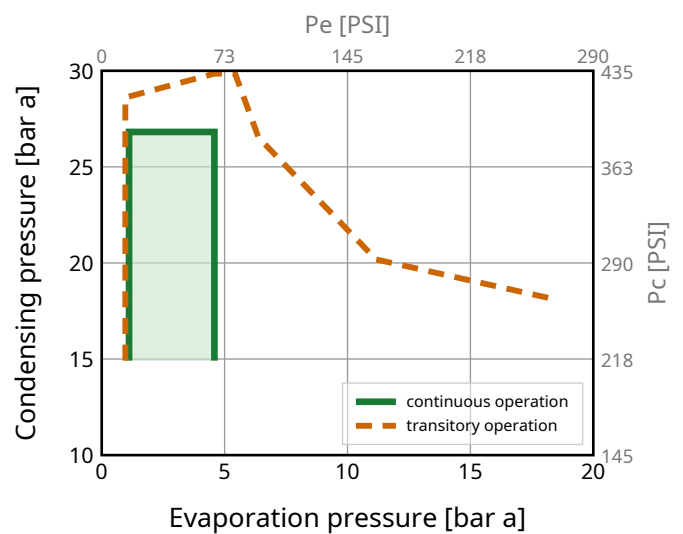
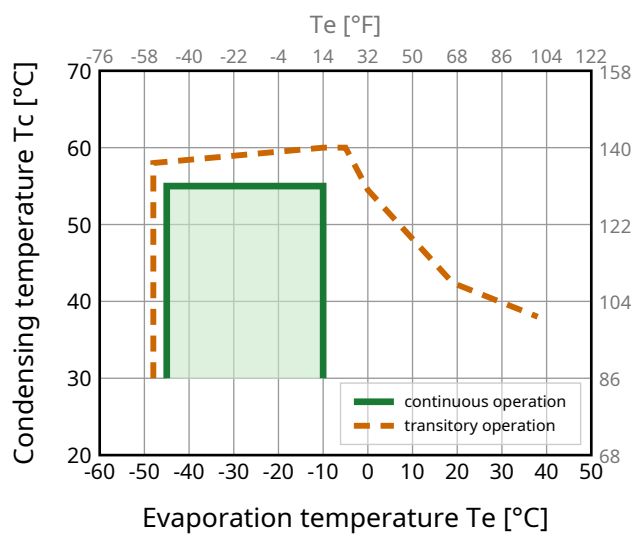
**b** plastic cover 103N2008

**d** cord relief 103N1004

**Alternative components**

**a3** SC starter kit (1000mm) 117-7043

Operation Pressure Range



Model  
SC15CLX.2

Configuration 2

Sales code:  
104L2897

Standard Conditions

R452A, 230 V/60 Hz, CSCR, 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    | 810              | 2764    | 697      | 1.31  | 4.47     | 619 | 2.91 | 19.61  | ASHRAE LBP  |
| -25<br>-13   | 55<br>131     | 32<br>89.6   | 55<br>131     | 545              | 1860    | 469      | 0.92  | 3.14     | 592 | 2.79 | 17.59  | CECOMAF LBP |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104     | 430              | 1468    | 370      | 1.00  | 3.42     | 430 | 2.06 | 12.12  | EN12900 LBP |
| -23.3<br>-10 | 48.8<br>119.8 | 4.4<br>39.9  | 48.8<br>119.8 | 619              | 2111    | 532      | 1.02  | 3.49     | 605 | 2.85 | 22.58  | ARI540 LBP  |
| -23.3<br>-10 | 40.6<br>105.1 | 32.2<br>90   | 32.2<br>90    | 939              | 3204    | 808      | 1.60  | 5.47     | 586 | 2.76 | 22.72  | AHAM LBP    |
| -35<br>-31   | 45<br>113     | 32<br>89.6   | 45<br>113     | 392              | 1337    | 337      | 0.91  | 3.10     | 431 | 2.06 | 10.85  | opt LBP     |

Performance Tables

R452A, 230 V/60 Hz, CSCR, 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] |
| -45  | -49  | 164              | 559     | 141      | 0.56  | 1.92     | 291 | 1.43 | 4.51   |
| -40  | -40  | 268              | 913     | 230      | 0.74  | 2.53     | 361 | 1.75 | 7.39   |
| -35  | -31  | 392              | 1337    | 337      | 0.91  | 3.10     | 431 | 2.06 | 10.85  |
| -30  | -22  | 539              | 1840    | 464      | 1.08  | 3.68     | 500 | 2.37 | 15.01  |
| -25  | -13  | 714              | 2437    | 614      | 1.25  | 4.26     | 571 | 2.69 | 19.97  |
| -20  | -4   | 920              | 3137    | 791      | 1.43  | 4.86     | 645 | 3.03 | 25.86  |
| -15  | 5    | 1159             | 3954    | 997      | 1.60  | 5.47     | 723 | 3.38 | 32.82  |
| -10  | 14   | 1436             | 4899    | 1235     | 1.78  | 6.07     | 807 | 3.75 | 41.00  |

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

|     |     |      |      |      |      |      |     |      |       |
|-----|-----|------|------|------|------|------|-----|------|-------|
| -45 | -49 | 72   | 246  | 62   | 0.28 | 0.96 | 257 | 1.28 | 2.29  |
| -40 | -40 | 163  | 556  | 140  | 0.48 | 1.62 | 342 | 1.66 | 5.19  |
| -35 | -31 | 270  | 921  | 232  | 0.63 | 2.16 | 426 | 2.04 | 8.62  |
| -30 | -22 | 396  | 1351 | 341  | 0.78 | 2.65 | 509 | 2.41 | 12.71 |
| -25 | -13 | 545  | 1860 | 469  | 0.92 | 3.14 | 592 | 2.79 | 17.59 |
| -20 | -4  | 720  | 2458 | 620  | 1.06 | 3.63 | 677 | 3.17 | 23.40 |
| -15 | 5   | 926  | 3159 | 796  | 1.21 | 4.13 | 764 | 3.56 | 30.31 |
| -10 | 14  | 1164 | 3973 | 1001 | 1.36 | 4.64 | 856 | 3.98 | 38.49 |