

Model  
SCE18CNLX

Sales code:  
104H7878

Compressor Data

|                            |                       |
|----------------------------|-----------------------|
| Refrigerant(s)             | R290                  |
| Refr. charge - tech. limit | 450g / 15.87oz        |
| Weight                     | 14.20 kg / 31.31lbs   |
| Displacement               | 17.68 cm3 / 1.08cu.in |
| Compressors on pallet      | 80                    |



General – Configurations With SCE18CNLX

| -                      | Conf. 1     | Conf. 2     |
|------------------------|-------------|-------------|
| Motor configuration    | CSCR        | CSCR        |
| Power supply (nominal) | 115 V/60 Hz | 115 V/60 Hz |
| Number of phases       | 1           | 1           |
| Voltage range          | 103-127 V   | 95-135 V    |
| Approvals              | UL          | UL          |
| Starting torque        | HST         | HST         |
| Refrigerant            | R290        | R290        |
| Application            | LBP         | LBP         |
| Hot gas defrost        | OK          | OK          |

Application Notes

- Protector and cover are included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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### Compressor Design

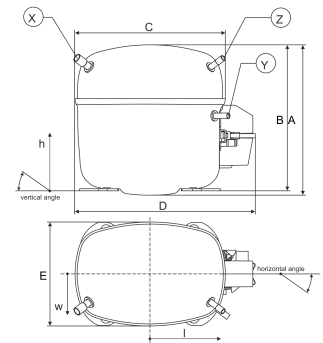
|                       |                                          |                         |                      |
|-----------------------|------------------------------------------|-------------------------|----------------------|
| Oil type              | <b>POE</b>                               | Winding resistance main | <b>0.82 Ohm</b>      |
| Oil viscosity         | <b>32cSt</b>                             | Winding resistance aux  | <b>2.9 Ohm</b>       |
| Oil quantity          | <b>550 / 18.60fl.oz</b>                  | Max. winding temp.      | <b>125 °C</b>        |
| Free gas volume comp. | <b>1,460 cm<sup>3</sup> / 49.37fl.oz</b> | Max. discharge temp.    | <b>140°C / 284°F</b> |
| Motor protection      | <b>external</b>                          |                         |                      |

### Compressor Dimensions

#### Housing

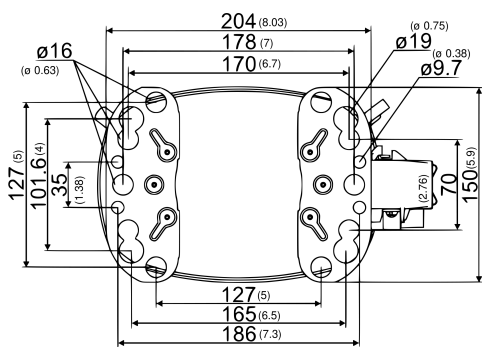
|                   |                        |
|-------------------|------------------------|
| A Height          | <b>219mm / 8.62in</b>  |
| B Height          | <b>213mm / 8.39in</b>  |
| C Length shell    | <b>218mm / 8.58in</b>  |
| D Length w. cover | <b>255mm / 10.04in</b> |
| E Width           | <b>151mm / 5.94in</b>  |

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| 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                     |

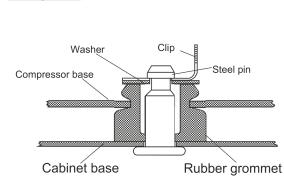
### Mounting Accessories



#### 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   |

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Configuration 1

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Configuration

|                                    |                               |
|------------------------------------|-------------------------------|
| Motor configuration                | <b>CSCR</b>                   |
| Power supply (nominal)             | <b>115 V/60 Hz 1~</b>         |
| Refrigerant                        | <b>R290</b>                   |
| Application                        | <b>LBP</b>                    |
| Voltage range                      | <b>103-127 V</b>              |
| Starting torque                    | <b>HST</b>                    |
| Approvals                          | <b>UL</b>                     |
| Starting device type               | <b>relay</b>                  |
| Run capacitor                      | <b>23.5 <math>\mu</math>F</b> |
| Start capacitor                    | <b>280 <math>\mu</math>F</b>  |
| LRA (locked rotor amps / 4s/ U(N)) | <b>43.13 A</b>                |
| RLA (rated load amps / 1s/ U(N))   | <b>8.3 A</b>                  |
| Cut in current (U(N))              | <b>43.13 A</b>                |

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

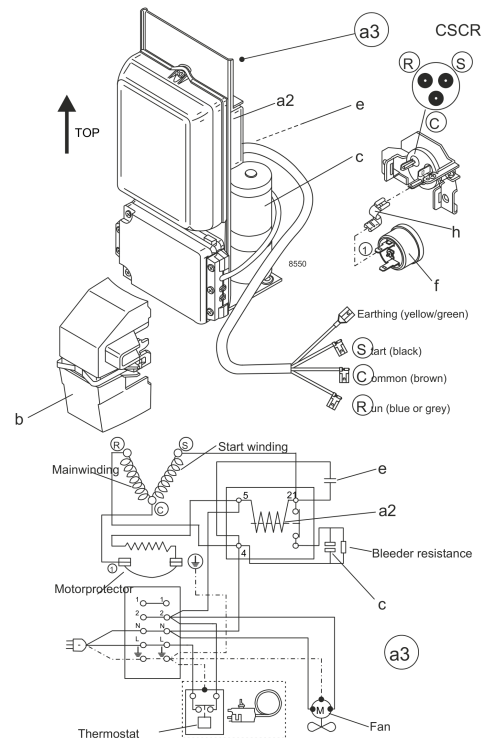
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

**System Cooling**

fan 3m/s

Electrical Accessories / Wiring Diagram



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**Components (protector + ~holder + cover: pre assembled)**

**a3** SC starter kit (550mm) 117-7801

**h** protector holder 117U0439

**f** ext. protector (T1100) 117U3219

**b** plastic cover + clamp 117U1021

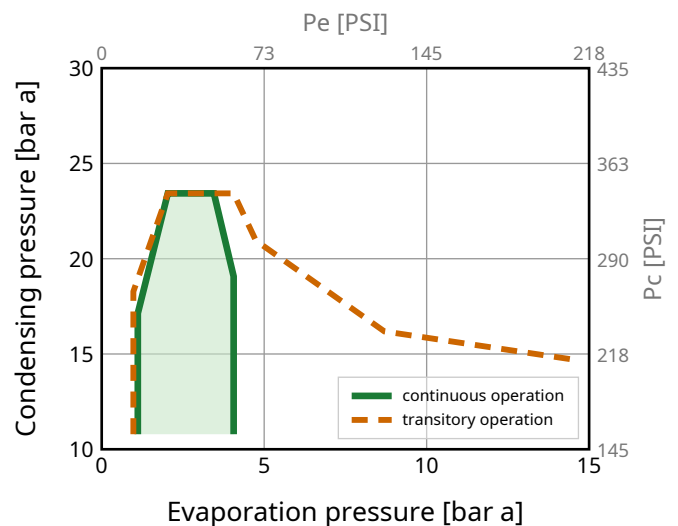
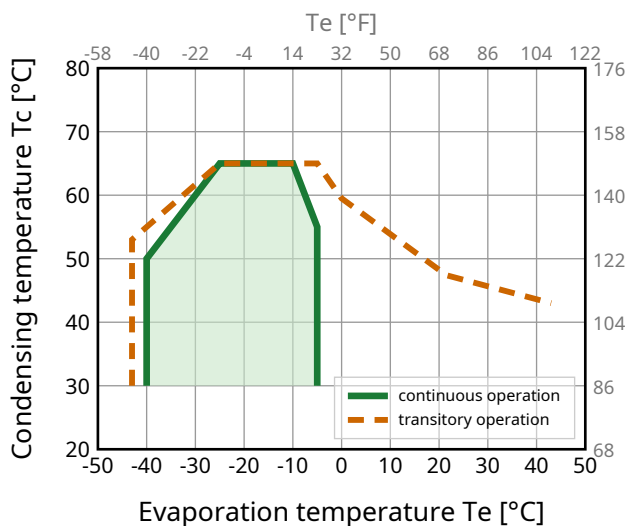
**Alternative components**

**a2** potential relay (RVA 7AA3R) 117-7441

**e** run capacitor (23,5 $\mu$ F, 6.3mm) 117-7133

**c** start capacitor (280 $\mu$ F, 6.3mm) 117U5350

Operation Pressure Range



Model  
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Configuration 1

Sales code:  
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Standard Conditions

R290, 115 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    | 949              | 3238    | 816      | 1.62  | 5.52     | 587 | 5.90 | 9.64   | ASHRAE LBP  |
| -25<br>-13   | 55<br>131     | 32<br>89.6   | 55<br>131     | 694              | 2368    | 597      | 1.25  | 4.25     | 557 | 5.66 | 8.70   | CECOMAF LBP |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104     | 466              | 1589    | 401      | 1.16  | 3.96     | 401 | 4.46 | 5.34   | EN12900 LBP |
| -23.3<br>-10 | 48.8<br>119.8 | 4.4<br>39.9  | 48.8<br>119.8 | 791              | 2698    | 680      | 1.36  | 4.64     | 581 | 5.84 | 10.98  | ARI540 LBP  |
| -23.3<br>-10 | 40.6<br>105.1 | 32.2<br>90   | 32.2<br>90    | 1079             | 3682    | 928      | 1.91  | 6.51     | 565 | 5.71 | 10.96  | AHAM LBP    |
| -35<br>-31   | 45<br>113     | 32<br>89.6   | 45<br>113     | 404              | 1377    | 347      | 1.03  | 3.50     | 393 | 4.41 | 4.55   | opt LBP     |

Performance Tables

R290, 115 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] |
| -40  | -40  | 163              | 556     | 140      | 0.53  | 1.81     | 308 | 3.82 | 1.83   |
| -35  | -31  | 404              | 1377    | 347      | 1.03  | 3.50     | 393 | 4.41 | 4.55   |
| -30  | -22  | 628              | 2142    | 540      | 1.33  | 4.52     | 473 | 5.00 | 7.09   |
| -25  | -13  | 852              | 2906    | 732      | 1.55  | 5.29     | 549 | 5.58 | 9.65   |
| -20  | -4   | 1091             | 3721    | 938      | 1.76  | 6.01     | 620 | 6.16 | 12.41  |
| -15  | 5    | 1360             | 4642    | 1170     | 1.99  | 6.78     | 685 | 6.70 | 15.54  |
| -10  | 14   | 1677             | 5721    | 1442     | 2.25  | 7.68     | 745 | 7.22 | 19.25  |
| -5   | 23   | 2055             | 7011    | 1767     | 2.57  | 8.78     | 799 | 7.70 | 23.73  |

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

|     |     |      |      |      |      |      |     |      |       |
|-----|-----|------|------|------|------|------|-----|------|-------|
| -40 | -40 | 76   | 259  | 65   | 0.27 | 0.93 | 278 | 3.62 | 0.94  |
| -35 | -31 | 296  | 1011 | 255  | 0.79 | 2.71 | 374 | 4.28 | 3.69  |
| -30 | -22 | 497  | 1696 | 427  | 1.06 | 3.63 | 467 | 4.96 | 6.21  |
| -25 | -13 | 694  | 2368 | 597  | 1.25 | 4.25 | 557 | 5.66 | 8.70  |
| -20 | -4  | 902  | 3079 | 776  | 1.40 | 4.78 | 644 | 6.36 | 11.36 |
| -15 | 5   | 1138 | 3884 | 979  | 1.56 | 5.34 | 728 | 7.07 | 14.40 |
| -10 | 14  | 1417 | 4835 | 1219 | 1.75 | 5.99 | 807 | 7.77 | 18.02 |
| -5  | 23  | 1754 | 5986 | 1509 | 1.99 | 6.78 | 883 | 8.45 | 22.46 |

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Configuration 2

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Configuration

|                                    |                               |
|------------------------------------|-------------------------------|
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| Refrigerant                        | <b>R290</b>                   |
| Application                        | <b>LBP</b>                    |
| Voltage range                      | <b>95-135 V</b>               |
| Starting torque                    | <b>HST</b>                    |
| Approvals                          | <b>UL</b>                     |
| Starting device type               | <b>relay</b>                  |
| Run capacitor                      | <b>23.5 <math>\mu</math>F</b> |
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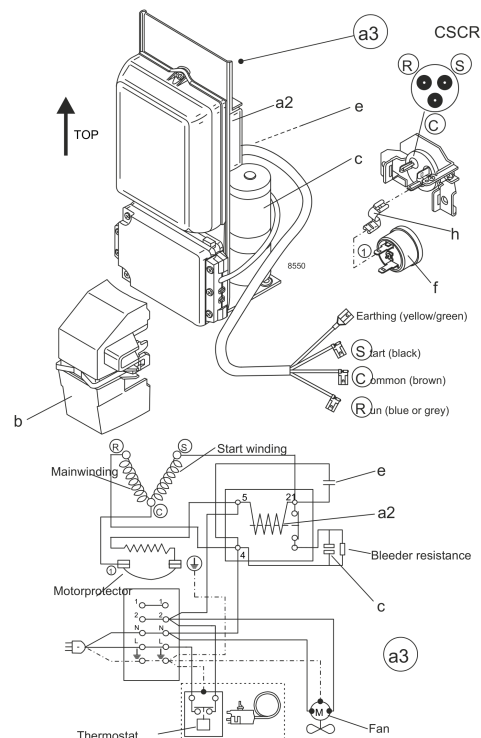
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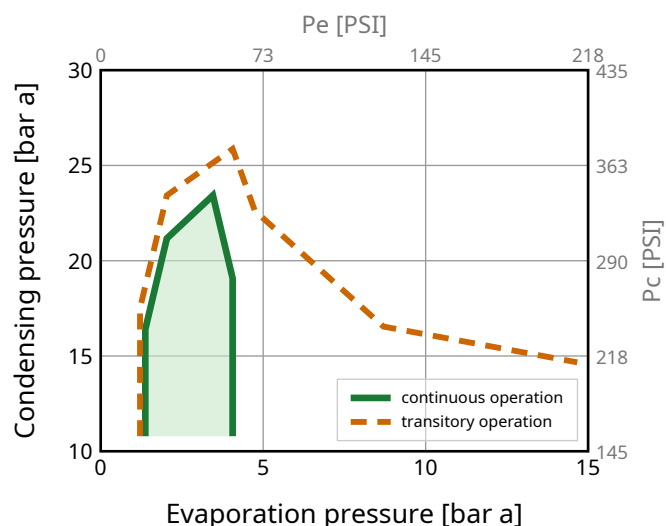
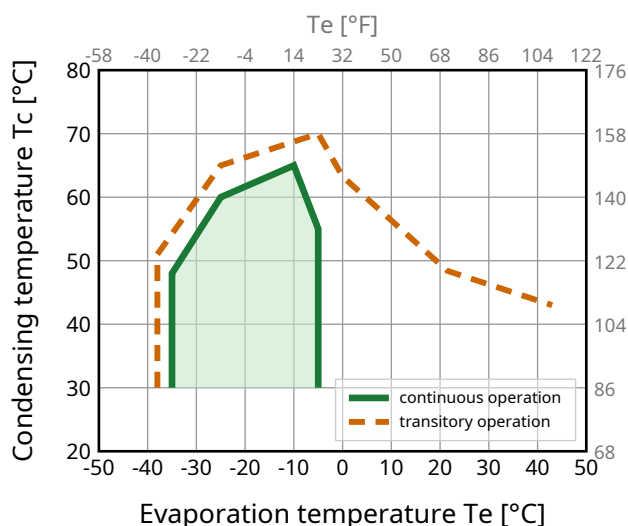
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