

## Single Pack SCE15MNX 208-230V 60Hz CSCR

Single pack code number: **195B4328**

| Position | Title                                      | Code     | Amount |
|----------|--|----------|--------|
| 1        | Compressor SCE15MNX                        | 104H8579 | 1      |
| 2        | SC starting device (550mm)                 | 117-7808 | 1      |
| 3        | Bolt joint for one compressor   M6   ø16mm | 118-1917 | 1      |

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## Model

|             |                 |                  |             |                 |
|-------------|-----------------|------------------|-------------|-----------------|
| Designation | <b>SCE15MNX</b> | 208-230V/60Hz 1~ | Sales code: | <b>104H8579</b> |
|-------------|-----------------|------------------|-------------|-----------------|

## Compressor design

|                            |                                 |                       |                                  |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type                   | Polyolester                     | Refrigerant(s)        | <b>R290</b>                      |
| Oil viscosity              | 32cSt                           | Displacement          | 15,28cm <sup>3</sup> / 0,93cu.in |
| Oil quantity               | 541cm <sup>3</sup> / 18,3fl.oz  | Compressors on pallet | 80                               |
| Refr. charge - tech. limit | 450g / 15,9oz                   |                       |                                  |
| Free gas volume comp.      | 1460cm <sup>3</sup> / 49,4fl.oz |                       |                                  |
| Weight                     | 14,2kg / 31,3lbs                |                       |                                  |
| Motor protection           | external                        |                       |                                  |
| Winding resistance main    | 3,12Ω (at 25°C)                 |                       |                                  |
| Winding resistance aux     | 11,25Ω (at 25°C)                |                       |                                  |
| Max. winding temp.         | 125°C / 257°F                   |                       |                                  |
| Max. discharge temp.       | 130°C / 266°F                   |                       |                                  |



## General - Configurations with SCE15MNX

|                        |   |
|------------------------|---|
|                        | <b>Conf. 1</b>  |
| Motorconfiguration     | CSCR  |
| Power supply (nominal) | 208-230V/60Hz   |
| Number of phases       | 1   |
| Voltage range          | 187-253V  |
| Approvals              | UL  |
| Starting torque        | HST   |
| Note                   | Protector and cover are included and pre-assembled to compressor. |

## Applications with SCE15MNX

|                         |                |
|-------------------------|----------------|
|                         | <b>Conf. 1</b> |
| Refrigerant             | R290           |
| Application             | MBP            |
| System cooling          | fan 3m/s       |
| Hot gas defrost         | OK             |
| Long interval pull down | OK             |

## Electrical data - Configurations with SCE15MNX

|                                    |                |
|------------------------------------|----------------|
|                                    | <b>Conf. 1</b> |
| Starting device type               | relay          |
| Run capacitor                      | 10μF           |
| Start capacitor                    | 80μF           |
| LRA (locked rotor amps / 4s/ U(N)) | 24,22A         |
| RLA (rated load amps / 1s/ U(N))   | 3,85A          |
| Cut in current (U(N))              | 24,22A         |

## Model

Designation

**SCE15MNX**

208-230V/60Hz 1~

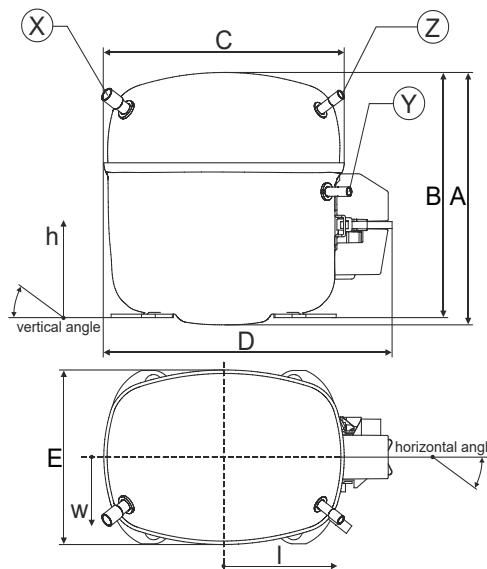
Sales code:

**104H8579**

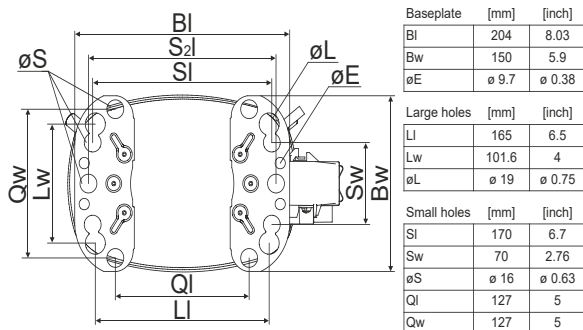
## Compressor dimensions

| Housing | A Height          | 219mm / 8,62in  |
|---------|-------------------|-----------------|
|         | B Height          | 213mm / 8,39in  |
|         | C Length shell    | 218mm / 8,58in  |
|         | D Length w. cover | 255mm / 10,04in |
|         | E Width           | 151mm / 5,94in  |

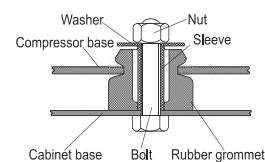
| Connectors            |      | Suction      | Discharge    | Process      |
|-----------------------|------|--------------|--------------|--------------|
|                       |      | X            | Y            | Z            |
| Diameter              | [mm] | øi 9,54-9,72 | øi 6,41-6,59 | øi 6,41-6,59 |
| (i:inside, o:outside) | [in] | øi 0,38-0,38 | øi 0,25-0,26 | øi 0,25-0,26 |
| Material              |      | copper       | copper       | copper       |
| Horizontal angle      | ±2°  | 37°          | 37°          | 143°         |
| Vertical angle        | ±2°  | 30°          | 0°           | 150°         |
| Position l/h/w        | [mm] | 107/193/55   | 115/110/63   | -107/193/55  |
|                       | [in] | 4,2/7,6/2,2  | 4,5/4,3/2,5  | -4,2/7,6/2,2 |
| Straight tube l.      | [mm] | 12           | 12           | 12           |
|                       | [in] | 0,5          | 0,5          | 0,5          |



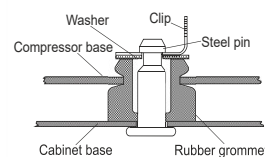
## Compressor fixation



## Bolt joint



## Snap-on



## Mounting accessories

|                            | 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   |

## Application notes

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

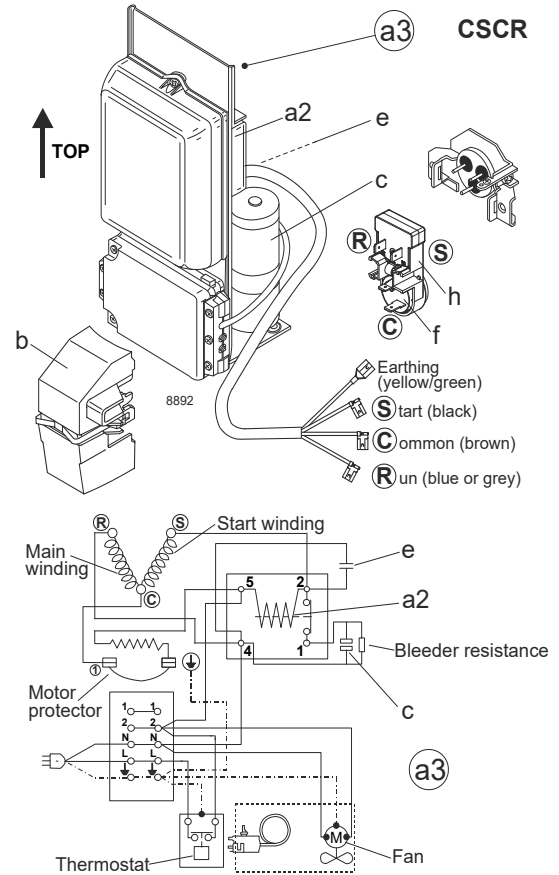
## Model

|             |                 |                      |                |             |                 |
|-------------|-----------------|----------------------|----------------|-------------|-----------------|
| Designation | <b>SCE15MNX</b> | <b>208-230V/60Hz</b> | <b>Conf. 1</b> | Sales code: | <b>104H8579</b> |
|-------------|-----------------|----------------------|----------------|-------------|-----------------|

## Configuration

|                        |                  |
|------------------------|------------------|
| Motor configuration    | CSCR             |
| Power supply (nominal) | 208-230V/60Hz 1~ |
| Refrigerant            | R290             |
| Application            | MBP              |
| Voltage range          | 187-253V         |
| Starting torque        | HST              |
| Approvals              | UL               |

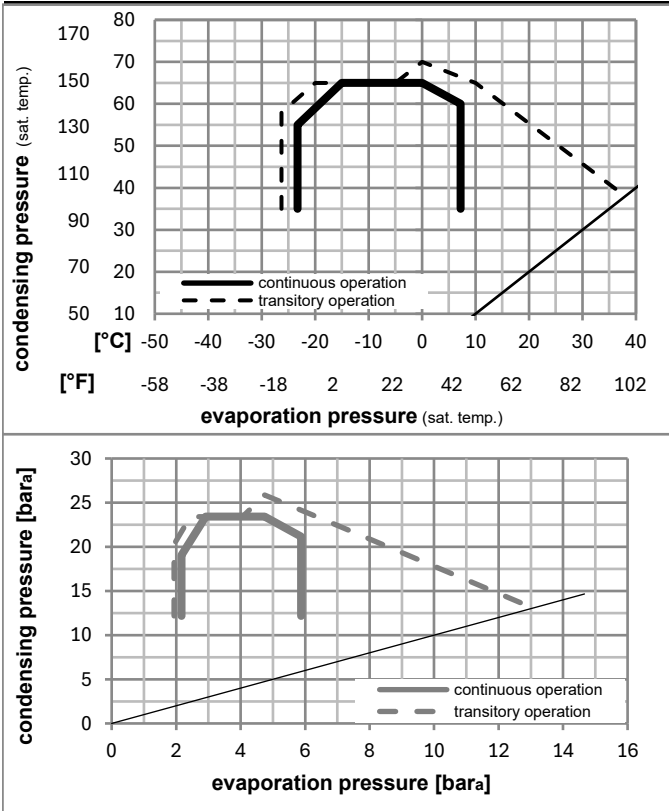
## Electrical accessories / wiring diagram



## Ambient/ machine room temperatures minimum /maximum

|                                 |                        |
|---------------------------------|------------------------|
| Ambient temperature range:      | 10 - 43°C / 50 - 110°F |
| Machine room temperature range: | 10 - 48°C / 50 - 119°F |
| Compressor cooling:             | fan 3m/s               |

## Operation pressure range



## Components (protector (f)+ holder (h)+ cover (b): pre assembled)

|       |                         |          |
|-------|-------------------------|----------|
| a3    | SC starter kit (550mm)  | 117-7808 |
| f / h | protector assy. (T1116) | 117U8002 |
| b     | plastic cover + clamp   | 117U1021 |

## Alternative comp.

|    |                                |          |
|----|--------------------------------|----------|
| a2 | potential relay (RVA2AM3R A89) | 117-7601 |
| e  | run capacitor (10µF, 6.3mm)    | 117-7121 |
| c  | start capacitor (80µF)         | 117U5373 |

## Noise emission

|                      |                  |
|----------------------|------------------|
| Operation pressures: | pe: -10°C / 14°F |
|                      | pc: 45°C / 113°F |
| Motor speed appr.:   | 3500rpm          |
| Lw(A):               | 60dB(A)          |

## Model

Designation **SCE15MNX** **208-230V/60Hz** Conf. 1 Sales code: **104H8579**

## Optimization + standard conditions

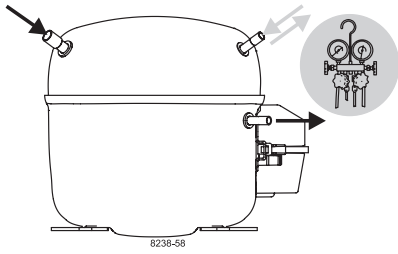
R290, 230V/60Hz, CSCR, fan 3m/s, UL

|      |      | Evaporating pressure (saturation temperature) |      |                  |      | Cooling capacity |         |          | COP   |          |                     | EER  |      |                | Power consumption |       |             |
|------|------|---|------|------------------|------|------------------|---------|----------|-------|----------|---------------------|------|------|----------------|-------------------|-------|-------------|
|      |      | Condensing pressure (saturation temperature)  |      | Return gas temp. |      | Liquid temp.     |         |          |       |          | Current consumption |      |      | Ref. mass flow |                   |       |             |
|      |      | pe  | pc   | RGT              | Tliq | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh]           | P1   | I    | m              | [W]               | [A]   | [kg/h]      |
| [°C] | [°F] | [°C]  | [°F] | [°C]             | [°F] |                  |         |          |       |          |                     |      |      |                |                   |       |             |
| -7   | 20   | 54  | 130  | 35               | 95   | 46               | 115     | 1554,0   | 5307  | 1337,4   | 2,25                | 7,70 | 1,94 | 689,5          | 3,12              | 17,73 | ASHRAE MBP  |
| -10  | 14   | 55  | 131  | 32               | 90   | 55               | 131     | 1223,3   | 4178  | 1052,7   | 1,87                | 6,40 | 1,61 | 652,9          | 2,95              | 15,47 | cecomaf MBP |
| -10  | 14   | 45  | 113  | 20               | 68   | 45               | 113     | 1376,1   | 4700  | 1184,3   | 2,21                | 7,56 | 1,91 | 621,3          | 2,75              | 16,90 | EN12900 MBP |
| -7   | 20   | 49  | 120  | 18               | 65   | 49               | 120     | 1466,5   | 5008  | 1262,1   | 2,19                | 7,49 | 1,89 | 668,8          | 3,00              | 19,04 | ARI540 MBP  |
| -10  | 14   | 45  | 113  | 32               | 90   | 45               | 113     | 1432,6   | 4892  | 1232,9   | 2,31                | 7,87 | 1,98 | 621,3          | 2,75              | 16,39 | opt         |
| -25  | -13  | 45  | 113  | 32               | 90   | 45               | 113     | 719,9    | 2459  | 619,6    | 1,57                | 5,35 | 1,35 | 459,8          | 2,07              | 8,12  | opt         |

## Performance tables

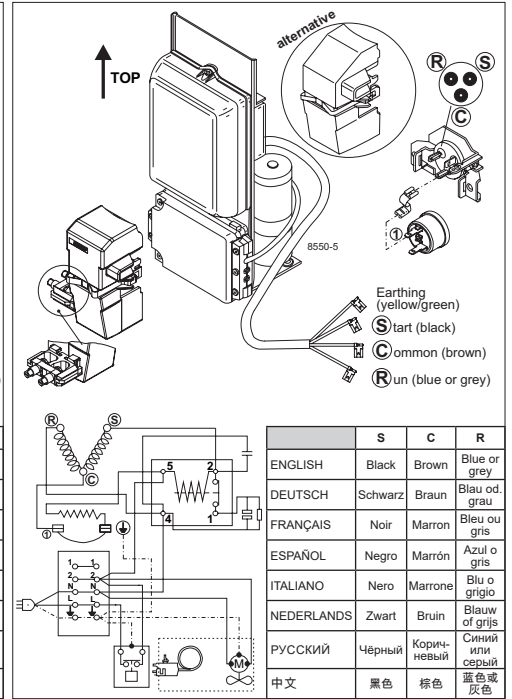
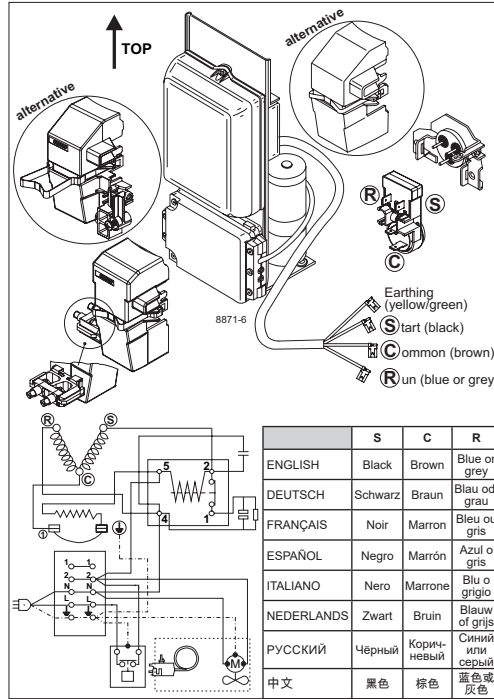
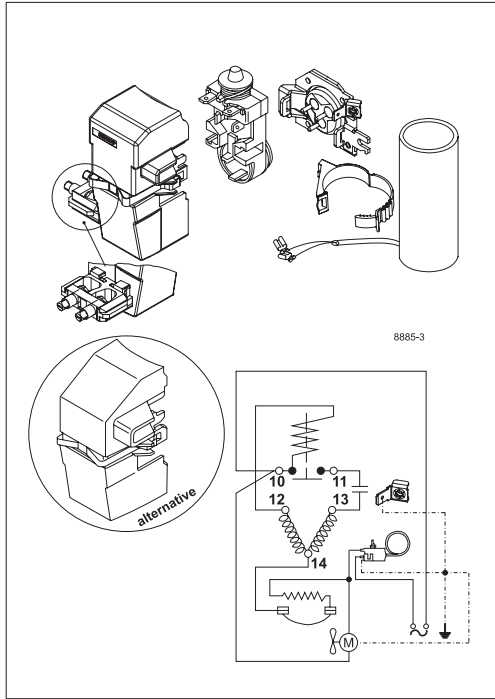
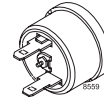
R290, 230V/60Hz, CSCR, fan 3m/s, UL

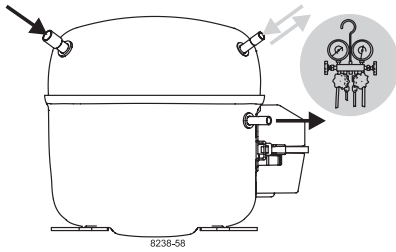
|                  | pe   |      | Cooling capacity |         |          | COP   | EER      | P1        | I     | m    |        |
|------------------|------|------|------------------|---------|----------|-------|----------|-----------|-------|------|--------|
|                  | [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W]   | [A]  | [kg/h] |
| [°C / °F]        | -25  | -13  | 719,9            | 2459    | 619,6    | 1,57  | 5,35     | 1,35      | 459,8 | 2,07 | 8,12   |
| cond. pressure   | -23  | -10  | 789,5            | 2696    | 679,4    | 1,65  | 5,63     | 1,42      | 478,9 | 2,15 | 8,92   |
| pc= 45/113       | -15  | 5    | 1171,2           | 4000    | 1008,0   | 2,05  | 7,00     | 1,76      | 571,7 | 2,54 | 13,33  |
| return gas temp. | -9   | 15   | 1463,3           | 4997    | 1259,3   | 2,34  | 7,98     | 2,01      | 626,3 | 2,77 | 16,75  |
| RGT= 32/90       | -4   | 25   | 1791,7           | 6119    | 1541,9   | 2,67  | 9,13     | 2,30      | 670,4 | 2,95 | 20,66  |
| liquid temp      | 0    | 32   | 2046,0           | 6987    | 1760,8   | 2,95  | 10,09    | 2,54      | 692,8 | 3,05 | 23,73  |
| Tliq= 45/113     | 7,2  | 45   | 2578,4           | 8806    | 2219,0   | 3,63  | 12,39    | 3,12      | 710,6 | 3,13 | 30,29  |
| [°C / °F]        | -25  | -13  | 571,7            | 1952    | 492,0    | 1,24  | 4,23     | 1,07      | 461,5 | 2,09 | 7,12   |
| cond. pressure   | -23  | -10  | 634,7            | 2168    | 546,2    | 1,31  | 4,49     | 1,13      | 483,0 | 2,18 | 7,91   |
| pc= 55/131       | -15  | 5    | 982,8            | 3356    | 845,8    | 1,66  | 5,68     | 1,43      | 591,1 | 2,68 | 12,36  |
| return gas temp  | -9   | 15   | 1251,7           | 4275    | 1077,2   | 1,90  | 6,48     | 1,63      | 659,5 | 2,98 | 15,84  |
| RGT= 32/90       | -4   | 25   | 1556,1           | 5314    | 1339,2   | 2,16  | 7,38     | 1,86      | 720,1 | 3,25 | 19,86  |
| liquid temp      | 0    | 32   | 1793,2           | 6124    | 1543,3   | 2,37  | 8,10     | 2,04      | 755,9 | 3,41 | 23,03  |
| Tliq= 55/131     | 7,2  | 45   | 2292,9           | 7831    | 1973,3   | 2,86  | 9,76     | 2,46      | 802,2 | 3,61 | 29,87  |



# SCE Compressors

## (External Protector)

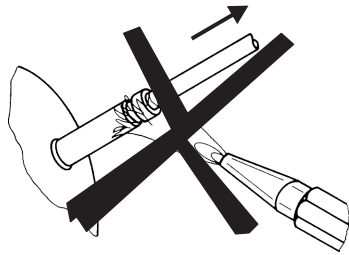




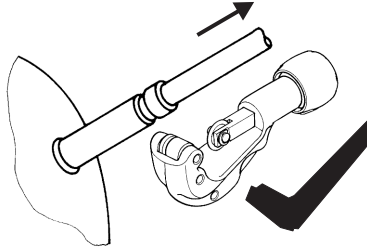
# SCE Compressors (External Protector)



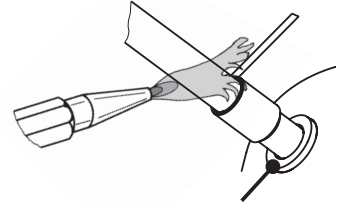
## Service/Repair – R290



8545



## Brazing on Suction Connectors (Direct Intake)



**! max. 350°C/662°F !**  
**at socket**  
 brazing solder: phosphor (LP7) or silver

8882

Refer to Product Bulletin:  
**Brazing on Suction Connectors**  
**(SCE Compressors with Direct Suction Intake)**

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