

Model

| | | | | | |
|-------------|------------------|------------------|------------------|-------------|-----------------|
| Designation | SC12CLX.2 | 220-240V/50Hz 1~ | 220-240V/60Hz 1~ | Sales code: | 104L2697 |
|-------------|------------------|------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R404A, R452A, R507 |
| Oil viscosity | 32cST | Displacement | 12,87cm ³ / 0,79cu.in |
| Oil quantity | 494cm ³ / 16,7fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 1300g / 45,9oz | | |
| Free gas volume comp. | 1510cm ³ / 51,1fl.oz | | |
| Weight | 13,7kg / 30,2lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 3,7Ω (at 25°C) | | |
| Winding resistance aux | 14Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |



General - Configurations with SC12CLX.2

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Motorconfiguration | CSIR | CSIR | CSIR | CSIR |
| Power supply (nominal) | 220-240V/50Hz | 208-230V/60Hz | 220-240V/50Hz | 208-230V/60Hz |
| Number of phases | 1 | 1 | 1 | 1 |
| Voltage range | 198-254V | 198-254V | 198-254V | 198-254V |
| Approvals | UL, VDE, CCC, KC, EAC | UL, VDE, CCC, KC, EAC | UL, VDE, CCC, KC, EAC | UL, VDE, CCC, KC, EAC |
| Starting torque | HST | HST | HST | HST |
| Note | - / - | | | |

Applications with SC12CLX.2

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|-------------------------|----------------|----------------|----------------|----------------|
| Refrigerant | R404A | R404A | R452A | R452A |
| Application | LBP | LBP | LBP | LBP |
| System cooling | fan 3m/s | fan 3m/s | fan 3m/s | fan 3m/s |
| Hot gas defrost | OK | OK | OK | OK |
| Long interval pull down | OK | OK | OK | OK |

Electrical data - Configurations with SC12CLX.2

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|------------------------------|----------------|----------------|----------------|----------------|
| Starting device type | relay | relay | relay | relay |
| Run capacitor | - / - | - / - | - / - | - / - |
| Start capacitor | 80μF | 80μF | 80μF | 80μF |
| LRA (locked rotor amps / 4s) | 23,4A | 23,4A | 23,4A | 23,4A |
| RLA (rated load amps / 1s) | 4,3A | 4,3A | 4,3A | 4,3A |
| Cut in current | 23,4A | 23,4A | 23,4A | 23,4A |
| IP class | 21 | 21 | 21 | 21 |

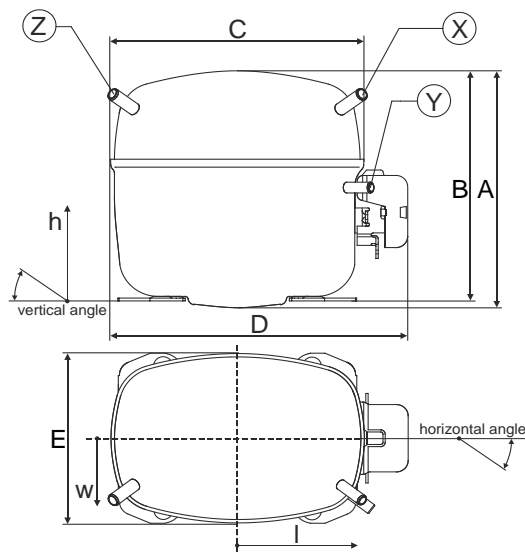
Model

Designation **SC12CLX.2** 220-240V/50Hz 1~ 220-240V/60Hz 1~ Sales code: **104L2697**

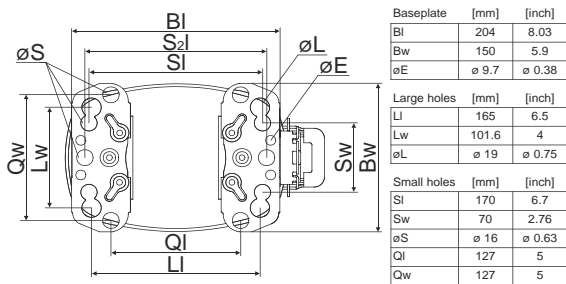
Compressor dimensions

| | | |
|----------------|-------------------|-----------------|
| 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 |

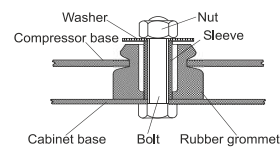
| Connectors | Suction | Discharge | Process |
|----------------------------|--------------|--------------|--------------|
| | X | Y | Z |
| Diameter [mm] | øi 8,11-8,29 | øi 6,11-6,29 | øi 6,11-6,29 |
| (i:inside, o:outside) [in] | øi 0,32-0,33 | øi 0,24-0,25 | øi 0,24-0,25 |
| Material | copper | copper | 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 |
| | [in] | 0,5 | 0,5 |



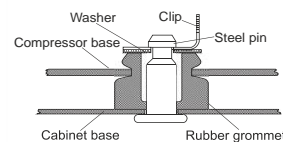
Compressor fixation



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

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

Model

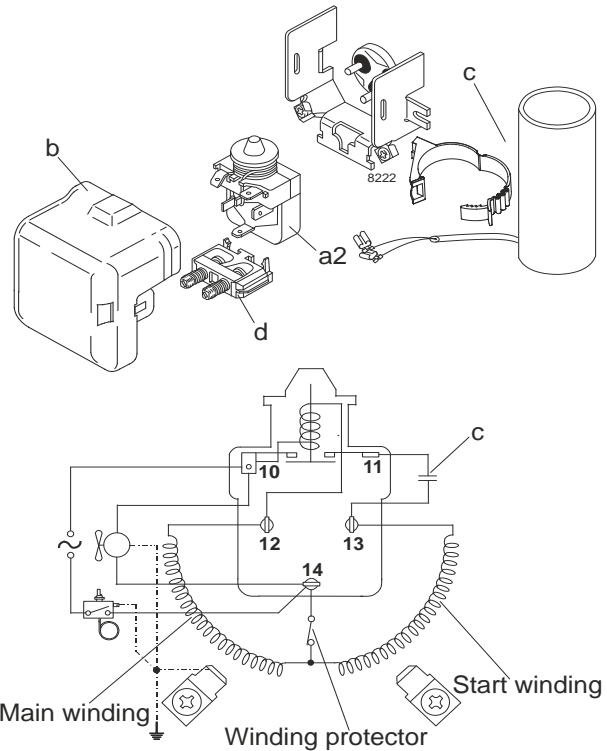
| | | | | | |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | SC12CLX.2 | 220-240V/50Hz | Conf. 1 | Sales code: | 104L2697 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|-------------------------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R404A |
| Application | LBP |
| Voltage range | 198-254V |
| Starting torque | HST |
| Approvals | UL VDE CCC KC EAC |

Electrical accessories / wiring diagram

CSIR

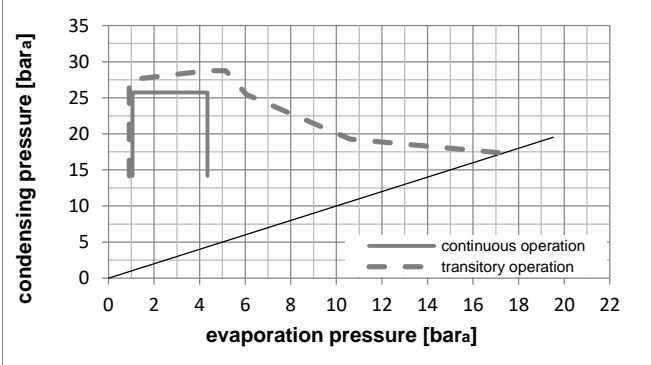
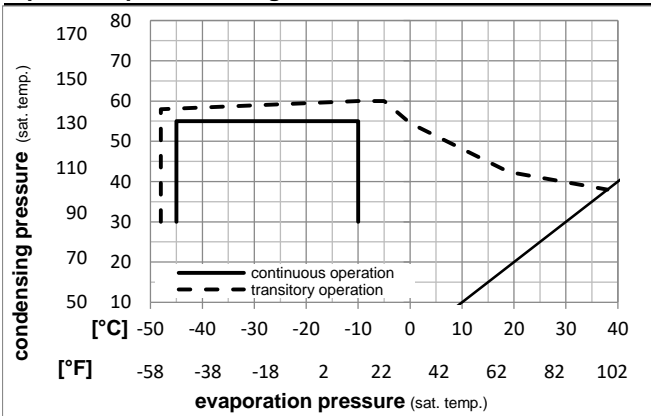


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| 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

| | | |
|----|------------------------|----------|
| a2 | relay | 117U6019 |
| c | start capacitor (80µF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2008 |

Alternative components

| | | |
|----|-----------------------------------|----------|
| a2 | relay | 117U6019 |
| c | start capacitor i-pack 40# (80µF) | 117U5067 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2008 |

Model

Designation **SC12CLX.2 220-240V/50Hz** Conf. 1 Sales code: **104L2697**

Optimization + standard conditions

R404A, 220V/50Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC, EAC

| Evaporating pressure (saturation temperature) | | | | | | | | | | | | | | |
|---|-------|------|------|------|-------|---------|----------|-------|----------|-----------|-------|------|--------|-------------|
| Condensing pressure (saturation temperature) | | | | | | | | | | | | | | |
| Return gas temp. | | | | | | | | | | | | | | |
| Liquid temp. | | | | | | | | | | | | | | |
| Cooling capacity | | | | | | | | | | | | | | |
| COP | | | | | | | | | | | | | | |
| EER | | | | | | | | | | | | | | |
| Power consumption | | | | | | | | | | | | | | |
| Current consumption | | | | | | | | | | | | | | |
| Ref. mass flow | | | | | | | | | | | | | | |
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | |
| [°C] | [°C] | [°C] | [°C] | [°C] | | | | | | | [W] | [A] | [kg/h] | |
| [°F] | -23,3 | 54,4 | 32,2 | 32,2 | 591,9 | 2022 | 509,4 | 1,15 | 3,92 | 0,99 | 515,6 | 3,35 | 13,79 | ASHRAE LBP |
| | -10 | 130 | 90 | 90 | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 398,5 | 1361 | 342,9 | 0,80 | 2,75 | 0,69 | 495,0 | 3,28 | 12,45 | cecomaf LBP |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 321,6 | 1098 | 276,7 | 0,89 | 3,03 | 0,76 | 362,6 | 3,02 | 8,74 | EN12900 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -23,3 | 48,9 | 4,44 | 48,9 | 447,2 | 1527 | 384,9 | 0,89 | 3,04 | 0,77 | 503,0 | 3,35 | 15,83 | ARI540 LBP |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | |
| [°C] | -23,3 | 40,6 | 32,2 | 32,2 | 684,3 | 2337 | 588,9 | 1,41 | 4,81 | 1,21 | 485,6 | 3,33 | 15,95 | AHAM LBP |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 293,7 | 1003 | 252,8 | 0,81 | 2,75 | 0,69 | 364,5 | 3,00 | 7,85 | opt |
| [°F] | -31 | 113 | 89,6 | 113 | | | | | | | | | | |

Performance tables

R404A, 220V/50Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC, EAC

| | pe | Cooling capacity | | | COP | EER | P1 | I | m | | | |
|------------------|-----|------------------|------|--------|------|-------|------|------|------|---------|----------|-------|
| | | [°C] | [°F] | [W] | | | | | | [Btu/h] | [kcal/h] | [W/W] |
| [°C / °F] | -45 | -49 | | 130,2 | 445 | 112,1 | 0,51 | 1,76 | 0,44 | 253,2 | 2,77 | 3,46 |
| cond. pressure | -35 | -31 | | 293,7 | 1003 | 252,8 | 0,81 | 2,75 | 0,69 | 364,5 | 3,00 | 7,85 |
| pc= 45/113 | -30 | -22 | | 398,7 | 1362 | 343,1 | 0,95 | 3,25 | 0,82 | 419,5 | 3,13 | 10,70 |
| return gas temp. | -25 | -13 | | 522,2 | 1783 | 449,4 | 1,10 | 3,75 | 0,95 | 475,5 | 3,29 | 14,09 |
| RGT= 32/90 | -20 | -4 | | 666,4 | 2276 | 573,5 | 1,25 | 4,27 | 1,08 | 533,4 | 3,46 | 18,08 |
| liquid temp | -15 | 5 | | 833,5 | 2847 | 717,3 | 1,40 | 4,79 | 1,21 | 594,4 | 3,65 | 22,77 |
| Tliq= 45/113 | -10 | 14 | | 1025,9 | 3503 | 882,9 | 1,56 | 5,31 | 1,34 | 659,4 | 3,86 | 28,25 |
| [°C / °F] | -45 | -49 | | 62,4 | 213 | 53,7 | 0,27 | 0,93 | 0,23 | 230,3 | 2,64 | 1,92 |
| cond. pressure | -35 | -31 | | 204,1 | 697 | 175,6 | 0,56 | 1,91 | 0,48 | 364,9 | 2,93 | 6,31 |
| pc= 55/131 | -30 | -22 | | 293,5 | 1003 | 252,6 | 0,68 | 2,33 | 0,59 | 430,0 | 3,10 | 9,12 |
| return gas temp | -25 | -13 | | 398,5 | 1361 | 342,9 | 0,80 | 2,75 | 0,69 | 495,0 | 3,28 | 12,45 |
| RGT= 32/90 | -20 | -4 | | 521,0 | 1779 | 448,4 | 0,93 | 3,17 | 0,80 | 561,0 | 3,49 | 16,39 |
| liquid temp | -15 | 5 | | 663,4 | 2266 | 571,0 | 1,05 | 3,60 | 0,91 | 629,1 | 3,71 | 21,04 |
| Tliq= 55/131 | -10 | 14 | | 828,0 | 2828 | 712,6 | 1,18 | 4,04 | 1,02 | 700,2 | 3,95 | 26,51 |

Model

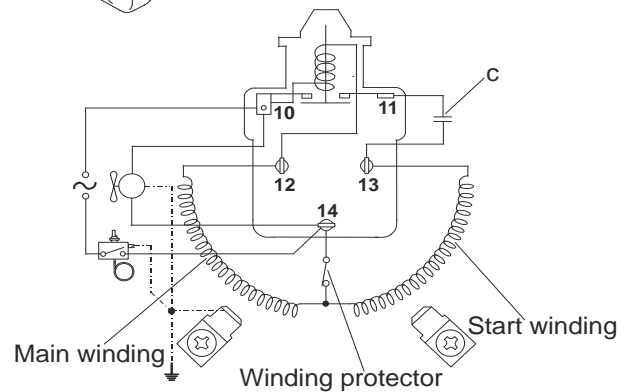
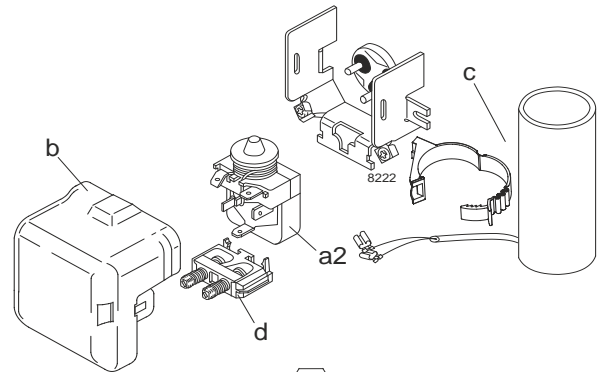
Designation **SC12CLX.2** 208-230V/60Hz Conf. 2 Sales code: **104L2697**

Configuration

Motorconfiguration CSIR
 Power supply (nominal) 208-230V/60Hz 1~
 Refrigerant R404A
 Application LBP
 Voltage range 198-254V
 Starting torque HST
 Approvals
 UL
 VDE
 CCC
 KC
 EAC

Electrical accessories / wiring diagram

CSIR

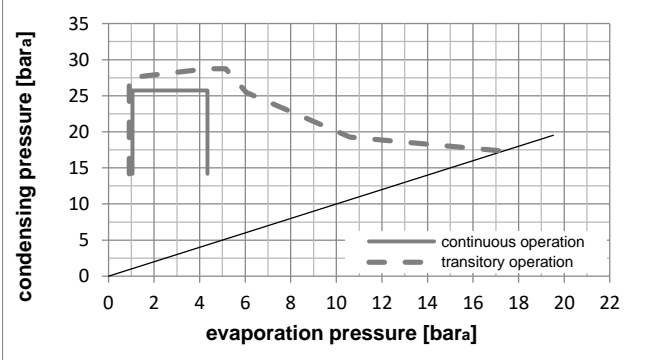
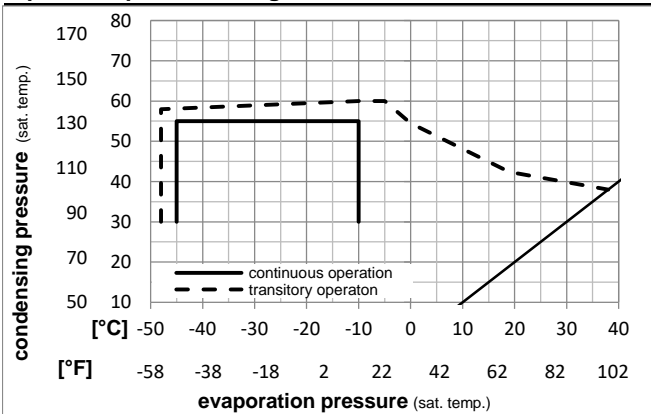


Ambient temperatures / system cooling

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

| | | |
|----|------------------------|----------|
| a2 | relay | 117U6019 |
| c | start capacitor (80µF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2008 |

Alternative components

| | | |
|----|-----------------------------------|----------|
| a2 | relay | 117U6019 |
| c | start capacitor i-pack 40# (80µF) | 117U5067 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2008 |

Model

Designation **SC12CLX.2 208-230V/60Hz** Conf. 2 Sales code: **104L2697**

Optimization + standard conditions

R404A, 220V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC, 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 | 705,2 | 2408 | 606,9 | 1,19 | 4,07 | 1,03 | 592,0 | 3,09 | 16,43 | ASHRAE LBP | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 472,6 | 1614 | 406,7 | 0,84 | 2,85 | 0,72 | 565,6 | 3,00 | 14,77 | cecmaf LBP | |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 378,5 | 1293 | 325,7 | 0,96 | 3,27 | 0,82 | 395,7 | 2,62 | 10,28 | EN12900 LBP | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | |
| [°C] | -23 | 48,9 | 4,44 | 48,9 | 535,6 | 1829 | 461,0 | 0,93 | 3,18 | 0,80 | 575,8 | 3,09 | 18,96 | ARI540 LBP | |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | | |
| [°C] | -23 | 40,6 | 32,2 | 32,2 | 824,1 | 2814 | 709,2 | 1,49 | 5,08 | 1,28 | 553,5 | 3,07 | 19,20 | AHAM LBP | |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 343,1 | 1172 | 295,3 | 0,86 | 2,94 | 0,74 | 398,1 | 2,60 | 9,17 | opt | |
| [°F] | -31 | 113 | 89,6 | 113 | | | | | | | | | | | |

Performance tables

R404A, 220V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC, 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 | 141,0 | 482 | 121,3 | 0,55 | 1,89 | 0,48 | 255,2 | 2,28 | 3,75 |
| cond. pressure | -35 | -31 | 343,1 | 1172 | 295,3 | 0,86 | 2,94 | 0,74 | 398,1 | 2,60 | 9,17 |
| pc= 45/113 | -30 | -22 | 472,9 | 1615 | 407,0 | 1,01 | 3,45 | 0,87 | 468,7 | 2,79 | 12,70 |
| return gas temp. | -25 | -13 | 625,6 | 2137 | 538,4 | 1,16 | 3,95 | 1,00 | 540,6 | 3,01 | 16,88 |
| RGT= 32/90 | -20 | -4 | 803,9 | 2745 | 691,8 | 1,31 | 4,46 | 1,12 | 615,0 | 3,25 | 21,81 |
| liquid temp | -15 | 5 | 1010,5 | 3451 | 869,7 | 1,46 | 4,98 | 1,25 | 693,2 | 3,52 | 27,60 |
| Tliq= 45/113 | -10 | 14 | 1248,3 | 4263 | 1074,3 | 1,61 | 5,49 | 1,38 | 776,8 | 3,81 | 34,38 |
| [°C / °F] | -45 | -49 | 57,1 | 195 | 49,2 | 0,25 | 0,86 | 0,22 | 225,7 | 2,10 | 1,75 |
| cond. pressure | -35 | -31 | 232,3 | 793 | 199,9 | 0,58 | 1,99 | 0,50 | 398,5 | 2,50 | 7,18 |
| pc= 55/131 | -30 | -22 | 342,9 | 1171 | 295,1 | 0,71 | 2,43 | 0,61 | 482,1 | 2,74 | 10,66 |
| return gas temp | -25 | -13 | 472,6 | 1614 | 406,7 | 0,84 | 2,85 | 0,72 | 565,6 | 3,00 | 14,77 |
| RGT= 32/90 | -20 | -4 | 624,1 | 2132 | 537,1 | 0,96 | 3,28 | 0,83 | 650,4 | 3,28 | 19,64 |
| liquid temp | -15 | 5 | 800,2 | 2733 | 688,7 | 1,08 | 3,70 | 0,93 | 737,8 | 3,59 | 25,38 |
| Tliq= 55/131 | -10 | 14 | 1003,7 | 3428 | 863,8 | 1,21 | 4,13 | 1,04 | 829,1 | 3,92 | 32,13 |

Model

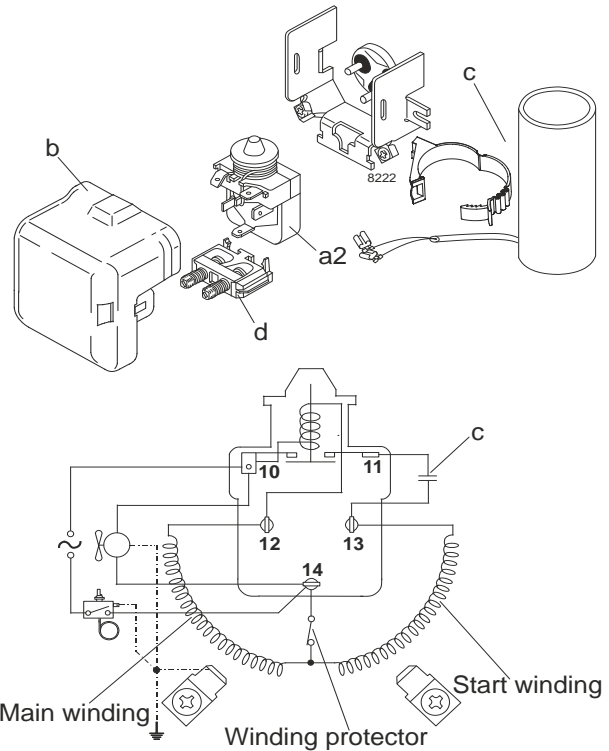
| | | | | | |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | SC12CLX.2 | 220-240V/50Hz | Conf. 3 | Sales code: | 104L2697 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|-------------------------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R452A |
| Application | LBP |
| Voltage range | 198-254V |
| Starting torque | HST |
| Approvals | UL VDE CCC KC EAC |

Electrical accessories / wiring diagram

CSIR

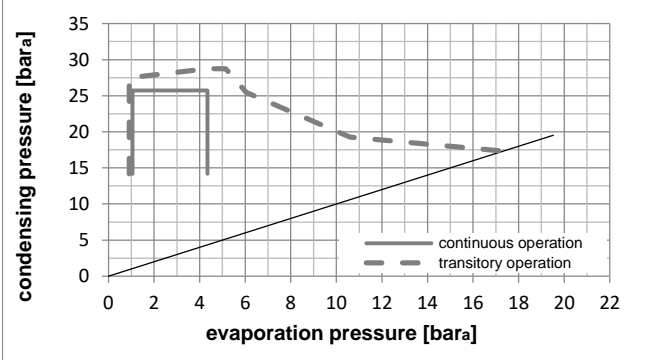
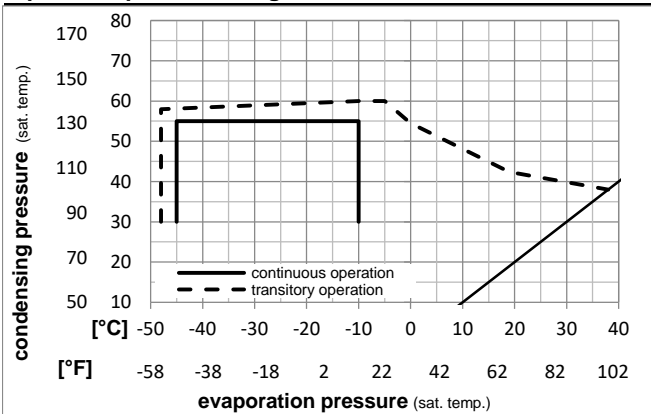


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| 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

| | | |
|----|------------------------|----------|
| a2 | relay | 117U6019 |
| c | start capacitor (80µF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2008 |

Alternative components

| | | |
|----|-----------------------------------|----------|
| a2 | relay | 117U6019 |
| c | start capacitor i-pack 40# (80µF) | 117U5067 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2008 |

Model

Designation **SC12CLX.2 220-240V/50Hz** Conf. **3** Sales code: **104L2697**

Optimization + standard conditions

R452A, 220V/50Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC, EAC

| Evaporating pressure (saturation temperature) | | | | | | | | | | | | | | |
|---|-------|------|------|------|-------|---------|----------|-------|----------|-----------|-------|------|--------|-------------|
| Condensing pressure (saturation temperature) | | | | | | | | | | | | | | |
| Return gas temp. | | | | | | | | | | | | | | |
| Liquid temp. | | | | | | | | | | | | | | |
| Cooling capacity | | | | | | | | | | | | | | |
| COP | | | | | | | | | | | | | | |
| EER | | | | | | | | | | | | | | |
| Power consumption | | | | | | | | | | | | | | |
| Current consumption | | | | | | | | | | | | | | |
| Ref. mass flow | | | | | | | | | | | | | | |
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | |
| [°C] | [°C] | [°C] | [°C] | [°C] | | | | | | | [W] | [A] | [kg/h] | |
| [°F] | -23,3 | 54,4 | 32,2 | 32,2 | 541,3 | 1849 | 465,8 | 1,13 | 3,87 | 0,97 | 477,9 | 3,31 | 13,01 | ASHRAE LBP |
| | -10 | 130 | 90 | 90 | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 367,3 | 1254 | 316,1 | 0,80 | 2,74 | 0,69 | 457,2 | 3,25 | 11,69 | cecomaf LBP |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 290,0 | 990 | 249,6 | 0,88 | 2,99 | 0,75 | 331,3 | 2,87 | 8,10 | EN12900 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -23,3 | 48,9 | 4,44 | 48,9 | 415,5 | 1419 | 357,6 | 0,89 | 3,04 | 0,76 | 467,5 | 3,28 | 14,93 | ARI540 LBP |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | |
| [°C] | -23,3 | 40,6 | 32,2 | 32,2 | 629,7 | 2151 | 542,0 | 1,39 | 4,75 | 1,20 | 452,6 | 3,24 | 15,14 | AHAM LBP |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 264,1 | 902 | 227,3 | 0,80 | 2,72 | 0,69 | 331,7 | 2,88 | 7,25 | opt |
| [°F] | -31 | 113 | 89,6 | 113 | | | | | | | | | | |

Performance tables

R452A, 220V/50Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC, EAC

| | pe | Cooling capacity | | | COP | EER | P1 | I | m | | | |
|------------------|-----|------------------|------|-------|------|-------|------|------|------|---------|----------|-------|
| | | [°C] | [°F] | [W] | | | | | | [Btu/h] | [kcal/h] | [W/W] |
| [°C / °F] | -45 | -49 | | 110,7 | 378 | 95,3 | 0,50 | 1,71 | 0,43 | 221,3 | 2,55 | 3,02 |
| cond. pressure | -35 | -31 | | 264,1 | 902 | 227,3 | 0,80 | 2,72 | 0,69 | 331,7 | 2,88 | 7,25 |
| pc= 45/113 | -30 | -22 | | 363,4 | 1241 | 312,7 | 0,94 | 3,21 | 0,81 | 386,1 | 3,04 | 10,01 |
| return gas temp. | -25 | -13 | | 480,9 | 1643 | 413,9 | 1,09 | 3,72 | 0,94 | 441,5 | 3,21 | 13,30 |
| RGT= 32/90 | -20 | -4 | | 619,2 | 2115 | 532,9 | 1,24 | 4,24 | 1,07 | 498,9 | 3,38 | 17,22 |
| liquid temp | -15 | 5 | | 780,5 | 2666 | 671,7 | 1,40 | 4,77 | 1,20 | 559,4 | 3,56 | 21,83 |
| Tliq= 45/113 | -10 | 14 | | 967,3 | 3304 | 832,5 | 1,55 | 5,29 | 1,33 | 624,1 | 3,75 | 27,25 |
| [°C / °F] | -45 | -49 | | 49,2 | 168 | 42,3 | 0,25 | 0,86 | 0,22 | 195,0 | 2,47 | 1,54 |
| cond. pressure | -35 | -31 | | 182,2 | 622 | 156,8 | 0,56 | 1,90 | 0,48 | 328,2 | 2,87 | 5,75 |
| pc= 55/131 | -30 | -22 | | 267,0 | 912 | 229,8 | 0,68 | 2,32 | 0,59 | 392,7 | 3,06 | 8,46 |
| return gas temp | -25 | -13 | | 367,3 | 1254 | 316,1 | 0,80 | 2,74 | 0,69 | 457,2 | 3,25 | 11,69 |
| RGT= 32/90 | -20 | -4 | | 485,4 | 1658 | 417,8 | 0,93 | 3,17 | 0,80 | 522,8 | 3,45 | 15,54 |
| liquid temp | -15 | 5 | | 623,8 | 2130 | 536,9 | 1,06 | 3,61 | 0,91 | 590,7 | 3,65 | 20,11 |
| Tliq= 55/131 | -10 | 14 | | 784,8 | 2680 | 675,4 | 1,19 | 4,05 | 1,02 | 661,8 | 3,87 | 25,51 |

Model

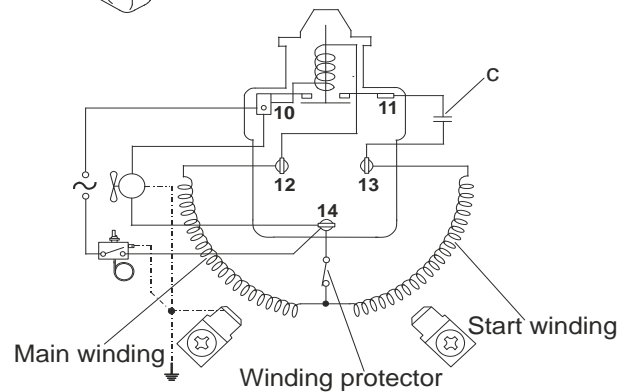
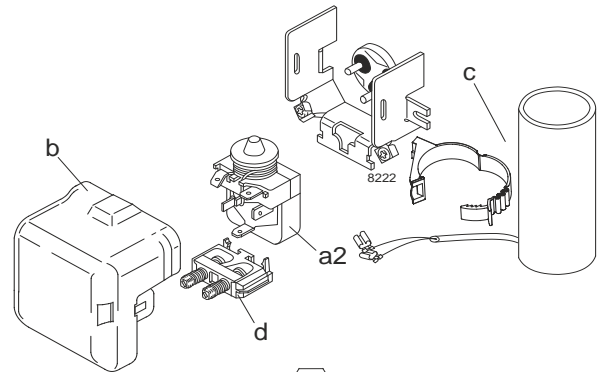
Designation **SC12CLX.2** 208-230V/60Hz Conf. 4 Sales code: **104L2697**

Configuration

Motorconfiguration CSIR
 Power supply (nominal) 208-230V/60Hz 1~
 Refrigerant R452A
 Application LBP
 Voltage range 198-254V
 Starting torque HST
 Approvals
 UL
 VDE
 CCC
 KC
 EAC

Electrical accessories / wiring diagram

CSIR

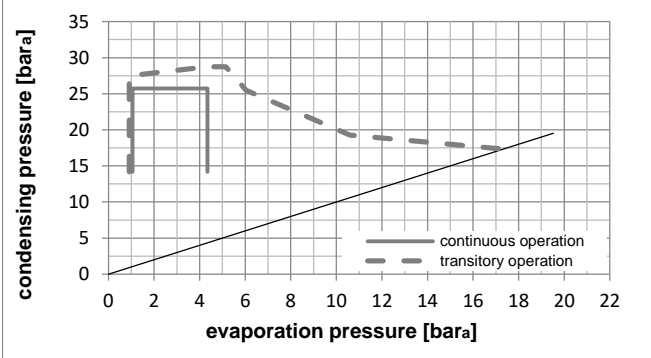
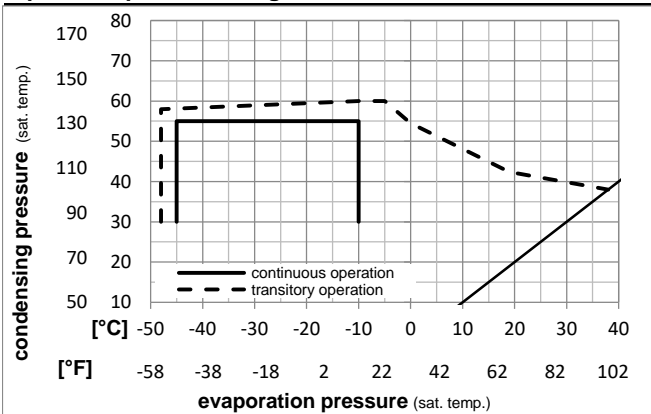


Ambient temperatures / system cooling

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

a2 relay 117U6019
 c start capacitor (80µF) 117U5017
 d cord relief 103N1004
 b plastic cover 103N2008

Alternative components

a2 relay 117U6019
 c start capacitor i-pack 40# (80µF) 117U5067
 d cord relief 103N1004
 b plastic cover 103N2008

Model

Designation **SC12CLX.2 208-230V/60Hz** Conf. 4 Sales code: **104L2697**

Optimization + standard conditions

R452A, 220V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC, EAC

| Evaporating pressure (saturation temperature) | | | | | Condensing pressure (saturation temperature) | | | | | | Power consumption | | | | ASHRAE LBP |
|---|-------|------|------|------|--|---------|----------|-------|----------|-----------|---------------------|------|--------|----------------|---------------|
| | | | | | Return gas temp. | | | | | | Current consumption | | | | |
| | | | | | Liquid temp. | | | | | | Ref. mass flow | | | | |
| | | | | | Cooling capacity | | | | | | COP EER | | | | |
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | | |
| [°C] | [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | | |
| [°F] | -23,3 | 54,4 | 32,2 | 32,2 | 643,9 | 2199 | 554,2 | 1,17 | 3,99 | 1,00 | 551,6 | 3,08 | 15,48 | ASHRAE LBP | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 435,1 | 1486 | 374,4 | 0,83 | 2,83 | 0,71 | 525,3 | 3,00 | 13,85 | cecomaf LBP | |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 340,8 | 1164 | 293,3 | 0,94 | 3,19 | 0,80 | 364,5 | 2,47 | 9,52 | EN12900 LBP | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | |
| [°C] | -23,3 | 48,9 | 4,44 | 48,9 | 497,0 | 1697 | 427,7 | 0,92 | 3,16 | 0,80 | 537,9 | 3,04 | 17,86 | ARI540 LBP | |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | | |
| [°C] | -23,3 | 40,6 | 32,2 | 32,2 | 757,5 | 2587 | 651,9 | 1,46 | 4,99 | 1,26 | 518,3 | 2,98 | 18,21 | AHAM LBP | |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 308,1 | 1052 | 265,1 | 0,84 | 2,88 | 0,73 | 365,4 | 2,47 | 8,45 | opt | |
| [°F] | -31 | 113 | 89,6 | 113 | | | | | | | | | | | |

Performance tables

R452A, 220V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC, 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 | 119,5 | 408 | 102,8 | 0,53 | 1,80 | 0,45 | 227,2 | 2,01 | 3,26 |
| cond. pressure | -35 | -31 | 308,1 | 1052 | 265,1 | 0,84 | 2,88 | 0,73 | 365,4 | 2,47 | 8,45 |
| pc= 45/113 | -30 | -22 | 430,5 | 1470 | 370,4 | 0,99 | 3,39 | 0,85 | 434,2 | 2,70 | 11,86 |
| return gas temp. | -25 | -13 | 575,5 | 1965 | 495,2 | 1,14 | 3,90 | 0,98 | 504,4 | 2,93 | 15,92 |
| RGT= 32/90 | -20 | -4 | 746,0 | 2548 | 642,0 | 1,29 | 4,41 | 1,11 | 577,6 | 3,17 | 20,74 |
| liquid temp | -15 | 5 | 945,0 | 3227 | 813,2 | 1,44 | 4,93 | 1,24 | 655,0 | 3,43 | 26,43 |
| Tliq= 45/113 | -10 | 14 | 1175,3 | 4014 | 1011,5 | 1,59 | 5,44 | 1,37 | 738,1 | 3,70 | 33,11 |
| [°C / °F] | -45 | -49 | 44,2 | 151 | 38,0 | 0,23 | 0,77 | 0,20 | 195,0 | 1,91 | 1,38 |
| cond. pressure | -35 | -31 | 207,2 | 708 | 178,3 | 0,57 | 1,95 | 0,49 | 362,0 | 2,46 | 6,53 |
| pc= 55/131 | -30 | -22 | 311,6 | 1064 | 268,1 | 0,70 | 2,40 | 0,60 | 443,4 | 2,73 | 9,87 |
| return gas temp | -25 | -13 | 435,1 | 1486 | 374,4 | 0,83 | 2,83 | 0,71 | 525,3 | 3,00 | 13,85 |
| RGT= 32/90 | -20 | -4 | 580,7 | 1983 | 499,7 | 0,95 | 3,26 | 0,82 | 608,9 | 3,27 | 18,59 |
| liquid temp | -15 | 5 | 751,2 | 2565 | 646,5 | 1,08 | 3,69 | 0,93 | 695,7 | 3,56 | 24,21 |
| Tliq= 55/131 | -10 | 14 | 949,6 | 3243 | 817,3 | 1,21 | 4,12 | 1,04 | 787,0 | 3,86 | 30,86 |