

## Single Pack SC10CLX 220-240V 50/60Hz CSIR

Single pack code number: **195B4339**

| Position | Title   | Code     | Amount |
|----------|---|----------|--------|
| 1        | Compressor SC10CLX                                      | 104L2536 | 1      |
| 2        | Starting relay  | 117U6005 | 1      |
| 3        | Starting capacitor (80 $\mu$ F 220V, 6.3mm)             | 117U5017 | 1      |
| 4        | Cord relief   | 103N1004 | 1      |
| 5        | Cover   | 103N2008 | 1      |
| 6        | Bolt joint for one compressor   M6   $\varnothing$ 16mm | 118-1917 | 1      |

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**Model**

|             |                |  |             |                 |
|-------------|----------------|--|-------------|-----------------|
| Designation | <b>SC10CLX</b> | <b>220-240V/50Hz 1~ 220-240V/60Hz 1~</b> | Sales code: | <b>104L2536</b> |
|-------------|----------------|--|-------------|-----------------|

**Compressor design**

|                            |                                 |                       |                                  |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type                   | Polyolester                     | Refrigerant(s)        | <b>R404A</b>                     |
| Oil viscosity              | 32cST                           | Displacement          | 10,29cm <sup>3</sup> / 0,63cu.in |
| Oil quantity               | 500cm <sup>3</sup> / 16,9fl.oz  | Compressors on pallet | 80                               |
| Refr. charge - tech. limit | 1300g / 45,9oz                  |                       |                                  |
| Free gas volume comp.      | 1460cm <sup>3</sup> / 49,4fl.oz |                       |                                  |
| Weight                     | 13,2kg / 29,1lbs                |                       |                                  |
| Motor protection           | 1# internal                     |                       |                                  |
| Winding resistance main    | 5,13Ω (at 25°C)                 |                       |                                  |
| Winding resistance aux     | 13,51Ω (at 25°C)                |                       |                                  |
| Max. winding temp.         | 125°C / 257°F                   |                       |                                  |
| Max. discharge temp.       | 130°C / 266°F                   |                       |                                  |



**General - Configurations with SC10CLX**

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

**Applications with SC10CLX**

|                         | <b>Conf. 1</b> | <b>Conf. 2</b> |
|-------------------------|----------------|----------------|
| Refrigerant             | R404A          | R404A          |
| Application             | LBP            | LBP+MBP        |
| System cooling          | fan 3m/s       | fan 3m/s       |
| Hot gas defrost         | OK             | OK             |
| Long interval pull down | OK             | OK             |

**Electrical data - Configurations with SC10CLX**

|                              | <b>Conf. 1</b> | <b>Conf. 2</b> |
|------------------------------|----------------|----------------|
| Starting device type         | relay          | relay          |
| Run capacitor                | - / -          | - / -          |
| Start capacitor              | 80μF           | 80μF           |
| LRA (locked rotor amps / 4s) | 15,6A          | 16,2A          |
| RLA (rated load amps / 1s)   | 2,8A           | 3,1A           |
| Cut in current               | 15,6A          | 16,2A          |

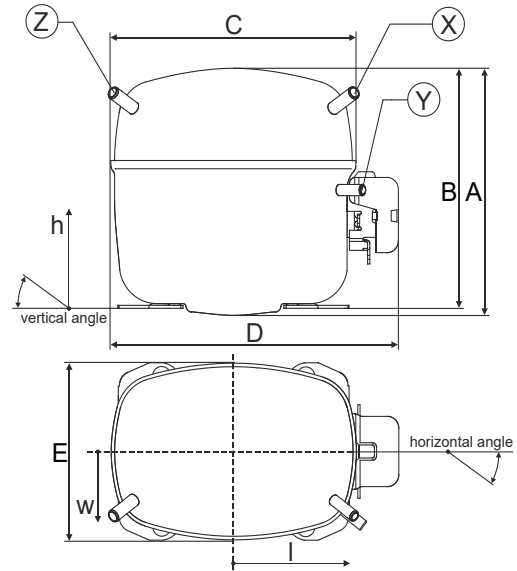
**Model**

Designation **SC10CLX** 220-240V/50Hz 1~ 220-240V/60Hz 1~ Sales code: **104L2536**

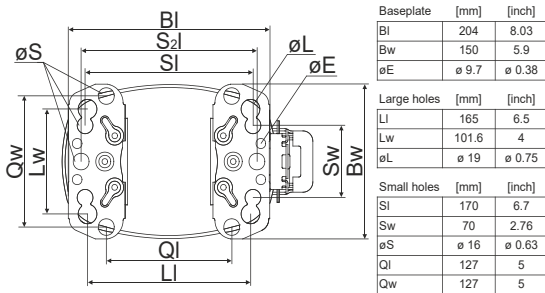
**Compressor dimensions**

|                |                   |                 |
|----------------|-------------------|-----------------|
| <b>Housing</b> | 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  |

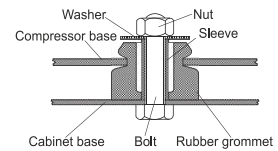
| Connectors                 | Suction<br>X | Discharge<br>Y | Process<br>Z |
|----------------------------|--------------|----------------|--------------|
| Diameter [mm]              | øi 9,54-9,72 | øi 6,41-6,59   | øi 6,41-6,59 |
| (i:inside, o:outside) [in] | øi 0,38-0,38 | øi 0,25-0,26   | øi 0,25-0,26 |
| Material                   | copper       | copper         | copper       |
| Horizontal angle ±2°       | 37°          | 37°            | 143°         |
| Vertical angle ±2°         | 30°          | 0°             | 150°         |
| Position l/h/w [mm]        | 107/183/55   | 115/100/63     | -107/183/55  |
| [in]                       | 4,2/7,2/2,2  | 4,5/3,9/2,5    | -4,2/7,2/2,2 |
| Straight tube l. [mm]      | 12           | 12             | 12           |
| [in]                       | 0,5          | 0,5            | 0,5          |



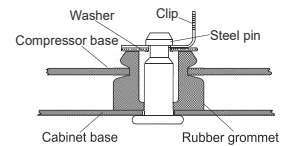
**Compressor fixation**



**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**

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

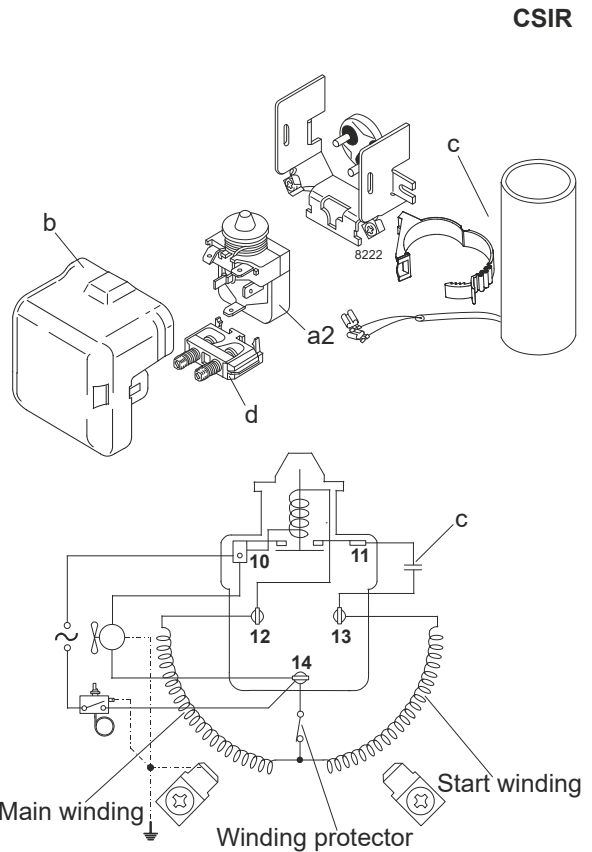
### Model

|             |                |                      |                |             |                 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | <b>SC10CLX</b> | <b>208-230V/60Hz</b> | <b>Conf. 1</b> | Sales code: | <b>104L2536</b> |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

### Configuration

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

### Electrical accessories / wiring diagram

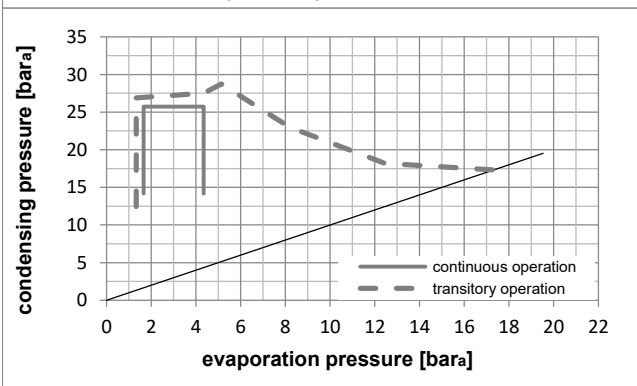
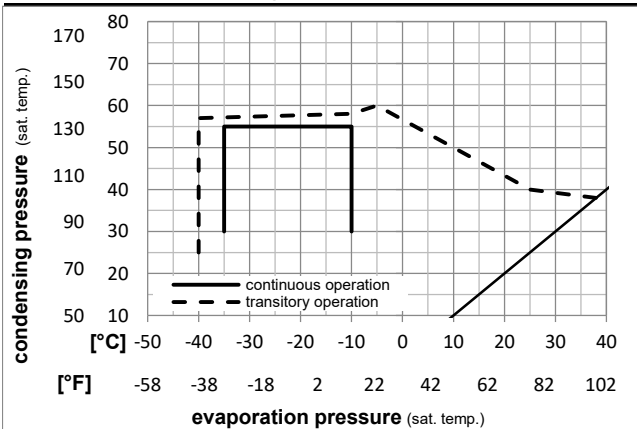


### Ambient temperatures / system cooling

|                           |              |
|---------------------------|--------------|
| 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                  | 117U6005 |
| c  | start capacitor (80µF) | 117U5017 |
| d  | cord relief            | 103N1004 |
| b  | plastic cover          | 103N2008 |

**Model**

Designation **SC10CLX 208-230V/60Hz** Conf. 1 Sales code: **104L2536**

**Optimization + standard conditions**

R404A, 220V/60Hz, CSIR, fan 3m/s, UL, CCC, KC

| 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 |       |         |                  |       |              |           | P1               | I    | m      |     |  |     |  |                   |  |                     |  |                |             |
| [°C]  | [°C] | [°C]   | [°C] | [W]   | [Btu/h] | [kcal/h]         | [W/W] | [Btu/Wh]     | [kcal/Wh] | [W]              | [A]  | [kg/h] |     |  |     |  |                   |  |                     |  |                |             |
| -23,3   | 54,4 | 32,2   | 32,2 | 516,4 | 1764    | 444,4            | 1,16  | 3,95         | 0,99      | 446,9            | 2,63 | 12,03  |     |  |     |  |                   |  |                     |  |                | ASHRAE LBP  |
| -10   | 130  | 90   | 90   |       |         |                  |       |              |           |                  |      |        |     |  |     |  |                   |  |                     |  |                |             |
| -25   | 55   | 32   | 55   | 340,5 | 1163    | 293,0            | 0,81  | 2,77         | 0,70      | 420,0            | 2,54 | 10,64  |     |  |     |  |                   |  |                     |  |                | cecomaf LBP |
| -13   | 131  | 89,6   | 131  |       |         |                  |       |              |           |                  |      |        |     |  |     |  |                   |  |                     |  |                |             |
| -35   | 40   | 20   | 40   | 262,4 | 896     | 225,8            | 0,81  | 2,76         | 0,69      | 324,9            | 2,25 | 7,13   |     |  |     |  |                   |  |                     |  |                | EN12900 LBP |
| -31   | 104  | 68   | 104  |       |         |                  |       |              |           |                  |      |        |     |  |     |  |                   |  |                     |  |                |             |
| -23,3   | 48,9 | 4,44   | 48,9 | 391,6 | 1337    | 337,0            | 0,87  | 2,98         | 0,75      | 449,2            | 2,63 | 13,86  |     |  |     |  |                   |  |                     |  |                | ARI540 LBP  |
| -10   | 120  | 40   | 120  |       |         |                  |       |              |           |                  |      |        |     |  |     |  |                   |  |                     |  |                |             |
| -23,3   | 40,6 | 32,2   | 32,2 | 597,9 | 2042    | 514,6            | 1,34  | 4,58         | 1,15      | 445,8            | 2,61 | 13,93  |     |  |     |  |                   |  |                     |  |                | AHAM LBP    |
| -10   | 105  | 90   | 90   |       |         |                  |       |              |           |                  |      |        |     |  |     |  |                   |  |                     |  |                |             |
| -35   | 45   | 32   | 45   | 223,9 | 765     | 192,7            | 0,74  | 2,52         | 0,63      | 303,9            | 2,19 | 5,99   |     |  |     |  |                   |  |                     |  |                | opt         |
| -31   | 113  | 89,6   | 113  |       |         |                  |       |              |           |                  |      |        |     |  |     |  |                   |  |                     |  |                |             |

**Performance tables**

R404A, 220V/60Hz, CSIR, fan 3m/s, UL, CCC, KC

| [°C / °F]        | 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] |
| -35              | -31   | 223,9            | 765   | 192,7   | 0,74     | 2,52  | 0,63     | 303,9     | 2,19  | 5,99 |        |
| cond. pressure   | -28,9 | -20              | 360,4 | 1231    | 310,1    | 0,94  | 3,21     | 0,81      | 383,5 | 2,40 | 9,68   |
| pc= 45/113       | -26,1 | -15              | 427,2 | 1459    | 367,7    | 1,02  | 3,50     | 0,88      | 416,9 | 2,51 | 11,51  |
| return gas temp. | -23,3 | -10              | 497,9 | 1700    | 428,5    | 1,11  | 3,78     | 0,95      | 449,7 | 2,62 | 13,45  |
| RGT= 32/90       | -20,6 | -5               | 572,8 | 1956    | 492,9    | 1,19  | 4,05     | 1,02      | 482,6 | 2,75 | 15,53  |
| liquid temp      | -15   | 5                | 737,5 | 2519    | 634,7    | 1,34  | 4,56     | 1,15      | 552,1 | 3,02 | 20,15  |
| Tliq= 45/113     | -10   | 14               | 905,7 | 3093    | 779,4    | 1,45  | 4,96     | 1,25      | 623,2 | 3,30 | 24,94  |
| -35              | -31   | 110,3            | 377   | 95,0    | 0,46     | 1,57  | 0,39     | 240,7     | 2,06  | 3,41 |        |
| cond. pressure   | -28,9 | -20              | 248,4 | 848     | 213,8    | 0,70  | 2,39     | 0,60      | 354,8 | 2,34 | 7,73   |
| pc= 55/131       | -26,1 | -15              | 313,7 | 1071    | 270,0    | 0,78  | 2,67     | 0,67      | 401,8 | 2,48 | 9,79   |
| return gas temp  | -23,3 | -10              | 381,4 | 1302    | 328,2    | 0,85  | 2,91     | 0,73      | 446,8 | 2,63 | 11,94  |
| RGT= 32/90       | -20,6 | -5               | 451,9 | 1543    | 388,9    | 0,92  | 3,14     | 0,79      | 490,7 | 2,79 | 14,21  |
| liquid temp      | -15   | 5                | 603,4 | 2061    | 519,3    | 1,04  | 3,56     | 0,90      | 578,2 | 3,13 | 19,14  |
| Tliq= 55/131     | -10   | 14               | 754,8 | 2578    | 649,6    | 1,14  | 3,90     | 0,98      | 661,0 | 3,47 | 24,16  |

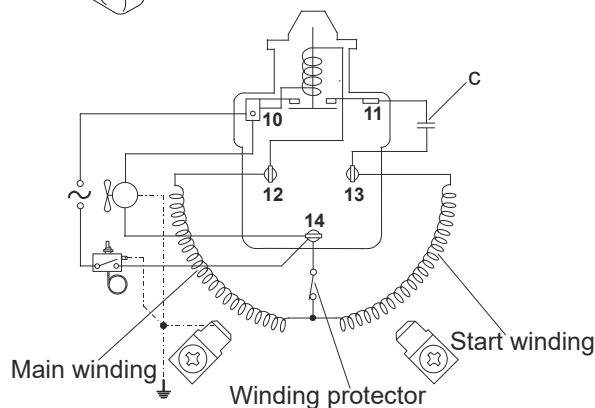
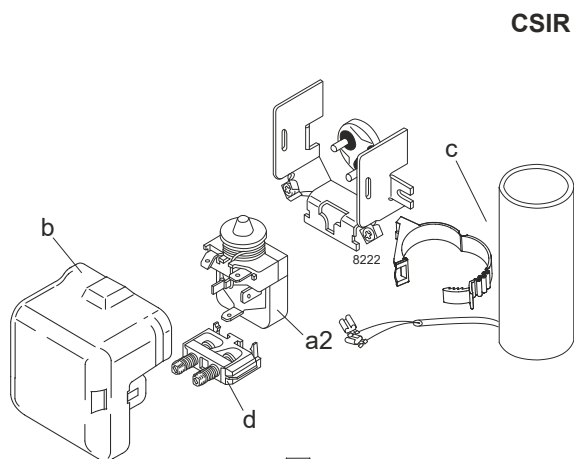
### Model

|             |                |                      |                |             |                 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | <b>SC10CLX</b> | <b>220-240V/50Hz</b> | <b>Conf. 2</b> | Sales code: | <b>104L2536</b> |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

### Configuration

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

### Electrical accessories / wiring diagram

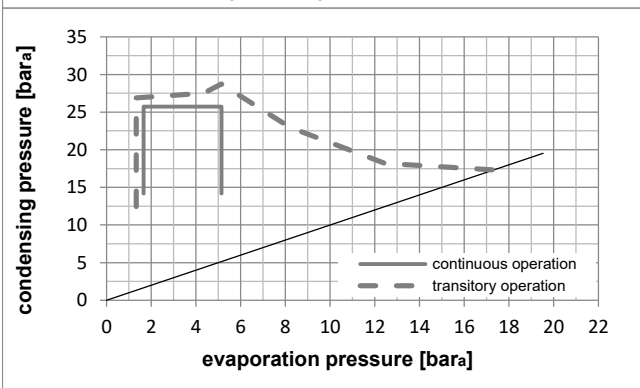
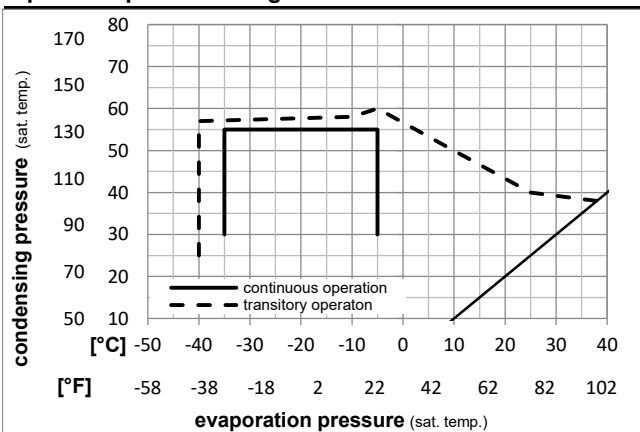


### Ambient temperatures / system cooling

|                           |              |
|---------------------------|--------------|
| 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 | fan 3m/s | n/a |
| 38°C / 100°F                         | fan 3m/s | fan 3m/s | n/a |
| 43°C / 110°F                         | n/a      | n/a      | n/a |

### Operation pressure range



### Components

|    |                        |          |
|----|------------------------|----------|
| a2 | relay                  | 117U6005 |
| c  | start capacitor (80µF) | 117U5017 |
| d  | cord relief            | 103N1004 |
| b  | plastic cover          | 103N2008 |

**Model**

|             |                |                      |                |             |                 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | <b>SC10CLX</b> | <b>220-240V/50Hz</b> | <b>Conf. 2</b> | Sales code: | <b>104L2536</b> |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

**Optimization + standard conditions**

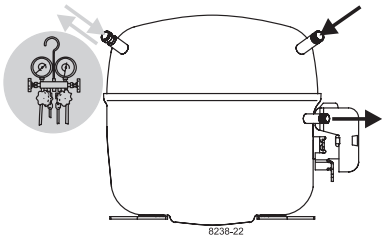
R404A, 220V/50Hz, CSIR, fan 3m/s, UL, CCC, KC

| Evaporating pressure (saturation temperature) |      |      |      |      | Condensing pressure (saturation temperature) |         |          |              |          |           | Power consumption   |      |        | ASHRAE<br>LBP  |                |
|---|------|------|------|------|--|---------|----------|--------------|----------|-----------|---------------------|------|--------|----------------|----------------|
|   |      |      |      |      | Return gas temp.                             |         |          | Liquid temp. |          |           | Current consumption |      |        |                | Ref. mass flow |
|   |      |      |      |      |  |         |          |              |          |           | P1                  | I    | m      |                |                |
| pe  | pc   | RGT  | Tliq |      | [W]  | [Btu/h] | [kcal/h] | COP          | EER      |           | [W]                 | [A]  | [kg/h] |                |                |
| [°C]  | [°C] | [°C] | [°C] |      |  |         |          | [W/W]        | [Btu/Wh] | [kcal/Wh] |                     |      |        |                |                |
| [°F]  | -23  | 54,4 | 32,2 | 32,2 | 394,8  | 1348    | 339,8    | 1,11         | 3,79     | 0,95      | 355,9               | 2,39 | 9,20   |                |                |
|   | -10  | 130  | 90   | 90   |  |         |          |              |          |           |                     |      |        |                |                |
| [°C]  | -25  | 55   | 32   | 55   | 257,9  | 881     | 221,9    | 0,77         | 2,62     | 0,66      | 336,0               | 2,31 | 8,06   | cecomaf<br>LBP |                |
| [°F]  | -13  | 131  | 89,6 | 131  |  |         |          |              |          |           |                     |      |        |                |                |
| [°C]  | -35  | 40   | 20   | 40   | 194,0  | 663     | 167,0    | 0,74         | 2,51     | 0,63      | 263,7               | 2,03 | 5,27   | EN12900<br>LBP |                |
| [°F]  | -31  | 104  | 68   | 104  |  |         |          |              |          |           |                     |      |        |                |                |
| [°C]  | -23  | 48,9 | 4,44 | 48,9 | 307,8  | 1051    | 264,9    | 0,84         | 2,88     | 0,73      | 365,2               | 2,39 | 10,90  | ARI540<br>LBP  |                |
| [°F]  | -10  | 120  | 40   | 120  |  |         |          |              |          |           |                     |      |        |                |                |
| [°C]  | -23  | 40,6 | 32,2 | 32,2 | 491,1  | 1677    | 422,7    | 1,33         | 4,54     | 1,14      | 369,7               | 2,37 | 11,44  | AHAM LBP       |                |
| [°F]  | -10  | 105  | 90   | 90   |  |         |          |              |          |           |                     |      |        |                |                |
| [°C]  | -35  | 45   | 32   | 45   | 165,8  | 566     | 142,7    | 0,64         | 2,20     | 0,55      | 257,7               | 2,00 | 4,43   | opt            |                |
| [°F]  | -31  | 113  | 89,6 | 113  |  |         |          |              |          |           |                     |      |        |                |                |

**Performance tables**

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

|                  | 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]        | -35  | -31  | 165,8            | 566     | 142,7    | 0,64  | 2,20     | 0,55      | 257,7 | 2,00 | 4,43   |    |   |   |
| cond. pressure   | -29  | -20  | 276,8            | 945     | 238,2    | 0,89  | 3,02     | 0,76      | 312,7 | 2,19 | 7,44   |    |   |   |
| pc= 45/113       | -26  | -15  | 335,1            | 1145    | 288,4    | 0,98  | 3,36     | 0,85      | 340,3 | 2,28 | 9,03   |    |   |   |
| return gas temp. | -23  | -10  | 398,8            | 1362    | 343,2    | 1,08  | 3,69     | 0,93      | 368,8 | 2,38 | 10,78  |    |   |   |
| RGT= 32/90       | -21  | -5   | 468,2            | 1599    | 402,9    | 1,18  | 4,02     | 1,01      | 398,1 | 2,49 | 12,69  |    |   |   |
| liquid temp      | -15  | 5    | 625,3            | 2136    | 538,1    | 1,37  | 4,67     | 1,18      | 457,0 | 2,72 | 17,08  |    |   |   |
| Tliq= 45/113     | -5   | 23   | 977,0            | 3337    | 840,8    | 1,76  | 6,00     | 1,51      | 556,0 | 3,19 | 27,16  |    |   |   |
| [°C / °F]        | -35  | -31  | 94,0             | 321     | 80,9     | 0,39  | 1,33     | 0,33      | 242,1 | 1,93 | 2,91   |    |   |   |
| cond. pressure   | -29  | -20  | 187,8            | 641     | 161,7    | 0,64  | 2,17     | 0,55      | 295,4 | 2,16 | 5,84   |    |   |   |
| pc= 55/131       | -26  | -15  | 237,0            | 809     | 203,9    | 0,73  | 2,50     | 0,63      | 324,0 | 2,27 | 7,40   |    |   |   |
| return gas temp  | -23  | -10  | 290,6            | 993     | 250,1    | 0,82  | 2,80     | 0,71      | 354,7 | 2,38 | 9,10   |    |   |   |
| RGT= 32/90       | -21  | -5   | 349,1            | 1192    | 300,4    | 0,90  | 3,08     | 0,78      | 387,3 | 2,51 | 10,98  |    |   |   |
| liquid temp      | -15  | 5    | 481,9            | 1646    | 414,7    | 1,06  | 3,61     | 0,91      | 456,3 | 2,77 | 15,28  |    |   |   |
| Tliq= 55/131     | -5   | 23   | 781,3            | 2668    | 672,4    | 1,34  | 4,56     | 1,15      | 584,9 | 3,31 | 25,29  |    |   |   |



# SC Compressors







# SC Compressors

## Service/Repair – R290



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