

Model

| | | | | |
|-------------|----------------|-----------------------------------|-------------|-----------------|
| Designation | SC10CLX | 220-240V/50Hz 1~ 220-240V/60Hz 1~ | Sales code: | 104L2512 |
|-------------|----------------|-----------------------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R404A, R507 |
| Oil viscosity | 32cST | Displacement | 10,29cm ³ / 0,63cu.in |
| Oil quantity | 500cm ³ / 16,9fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 1300g / 45,9oz | | |
| Free gas volume comp. | 1460cm ³ / 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

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

Applications with SC10CLX

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

Electrical data - Configurations with SC10CLX

| | Conf. 1 | Conf. 2 |
|------------------------------|----------------|----------------|
| Starting device type | relay | relay |
| Run capacitor | - / - | - / - |
| Start capacitor | 80μF | 80μF |
| LRA (locked rotor amps / 4s) | 16,2A | 15,6A |
| RLA (rated load amps / 1s) | 3,1A | 2,8A |
| Cut in current | 16,2A | 15,6A |
| IP class | 21 | 21 |

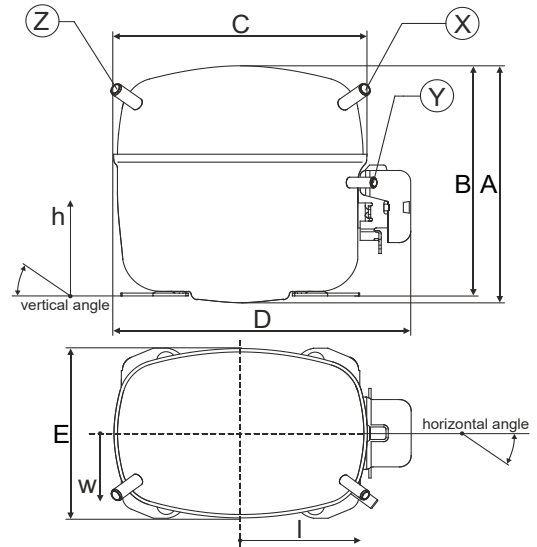
Model

Designation **SC10CLX** 220-240V/50Hz 1~ 220-240V/60Hz 1~ Sales code: **104L2512**

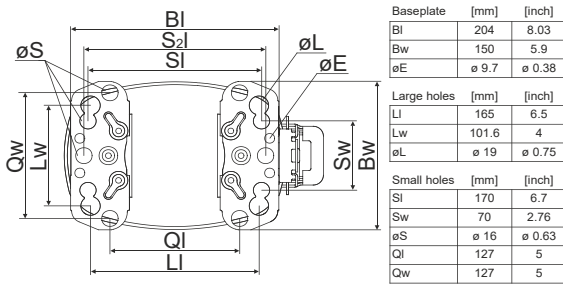
Compressor dimensions

| | | |
|----------------|-------------------|-----------------|
| Housing | 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 |

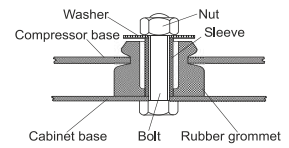
| Connectors | | Suction | Discharge | Process |
|-----------------------|------|----------------|------------------|----------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 9,54-9,72 | øi 6,41-6,59 | øi 6,41-6,59 |
| (i:inside, o:outside) | [in] | øi 0,38-0,38 | øi 0,25-0,26 | øi 0,25-0,26 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 37° | 37° | 143° |
| Vertical angle | ±2° | 30° | 0° | 150° |
| Position l/h/w | [mm] | 107/183/55 | 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 |



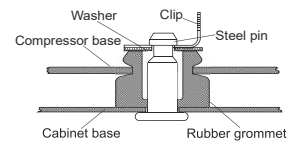
Compressor fixation



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 |

Model

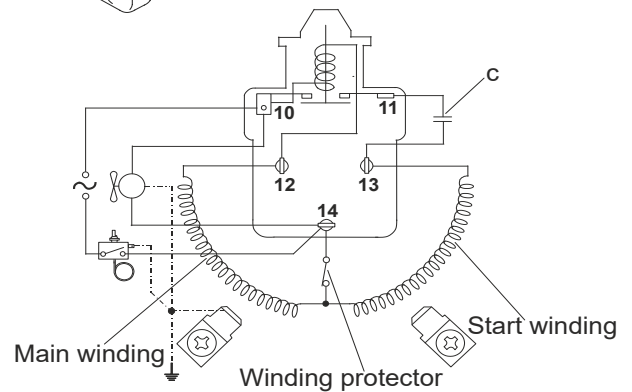
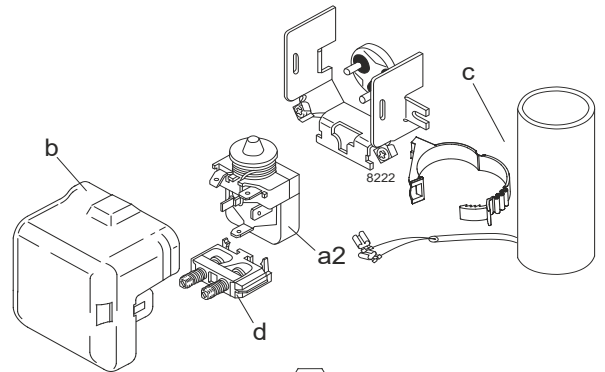
| | | | | | |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | SC10CLX | 220-240V/50Hz | Conf. 1 | Sales code: | 104L2512 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

Configuration

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

Electrical accessories / wiring diagram

CSIR

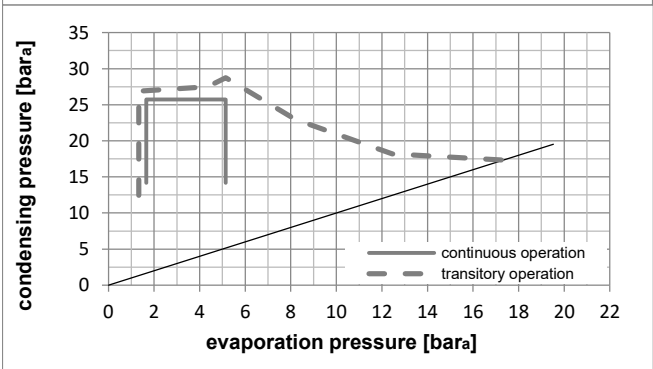
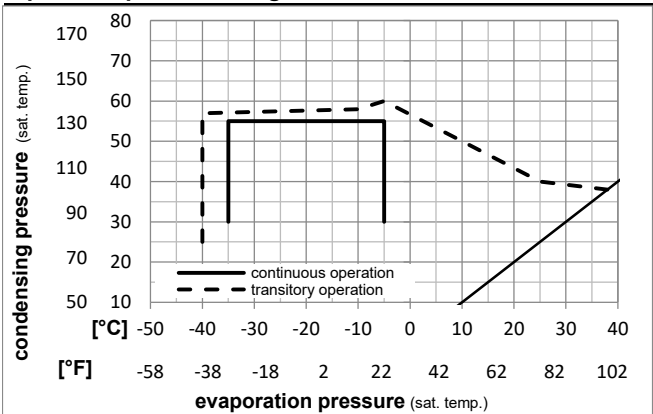


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| 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 | 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 **SC10CLX 220-240V/50Hz** Conf. 1 Sales code: **104L2512**

Optimization + standard conditions

R404A, 220V/50Hz, CSIR, fan 3m/s, CCC, UL, 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 | [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 | 394,8 | 1348 | 339,8 | 1,11 | 3,79 | 0,95 | 355,9 | 2,39 | 9,20 | ASHRAE LBP |
| [°F] | -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 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 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -23,3 | 48,9 | 4,44 | 48,9 | 307,8 | 1051 | 264,9 | 0,84 | 2,88 | 0,73 | 365,2 | 2,39 | 10,90 | ARI540 LBP |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | |
| [°C] | -23,3 | 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, CCC, UL, KC

| | pe | Cooling capacity | | | COP | EER | P1 | I | m | | | |
|------------------|-------|------------------|------|-------|------|-------|------|------|------|---------|----------|-------|
| | | [°C] | [°F] | [W] | | | | | | [Btu/h] | [kcal/h] | [W/W] |
| [°C / °F] | -35 | -31 | | 165,8 | 566 | 142,7 | 0,64 | 2,20 | 0,55 | 257,7 | 2,00 | 4,43 |
| cond. pressure | -30 | -22 | | 254,9 | 871 | 219,4 | 0,84 | 2,88 | 0,73 | 302,1 | 2,15 | 6,84 |
| pc= 45/113 | -25 | -13 | | 360,0 | 1229 | 309,8 | 1,02 | 3,50 | 0,88 | 351,6 | 2,32 | 9,71 |
| return gas temp. | -23,3 | -10 | | 399,6 | 1365 | 343,9 | 1,08 | 3,70 | 0,93 | 369,2 | 2,38 | 10,80 |
| RGT= 32/90 | -20 | -4 | | 482,8 | 1649 | 415,5 | 1,20 | 4,08 | 1,03 | 404,0 | 2,51 | 13,10 |
| 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 | -30 | -22 | | 169,4 | 578 | 145,8 | 0,60 | 2,03 | 0,51 | 284,6 | 2,11 | 5,26 |
| pc= 55/131 | -25 | -13 | | 257,9 | 881 | 221,9 | 0,77 | 2,62 | 0,66 | 336,0 | 2,31 | 8,06 |
| return gas temp | -23,3 | -10 | | 291,3 | 995 | 250,7 | 0,82 | 2,80 | 0,71 | 355,1 | 2,39 | 9,12 |
| RGT= 32/90 | -20 | -4 | | 361,4 | 1234 | 311,0 | 0,92 | 3,13 | 0,79 | 394,0 | 2,53 | 11,37 |
| 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 |

Model

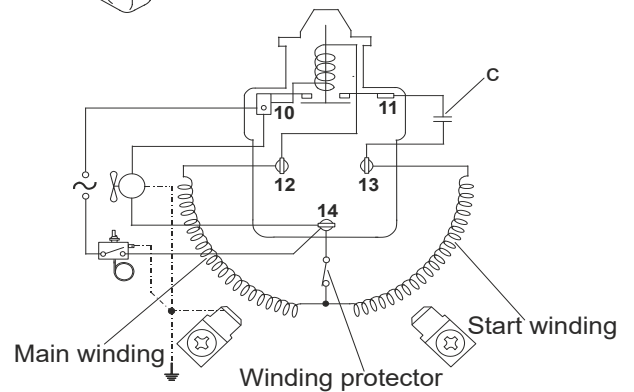
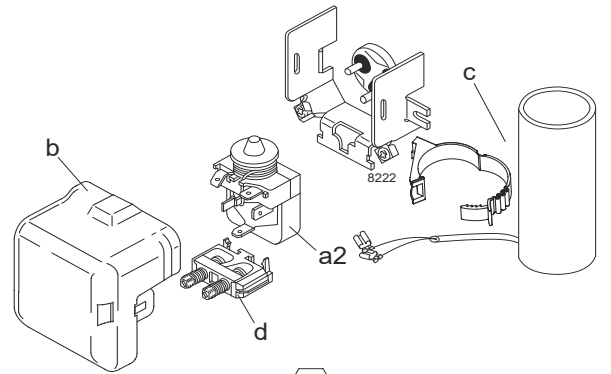
| | | | | | |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | SC10CLX | 208-230V/60Hz | Conf. 2 | Sales code: | 104L2512 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

Configuration

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

Electrical accessories / wiring diagram

CSIR

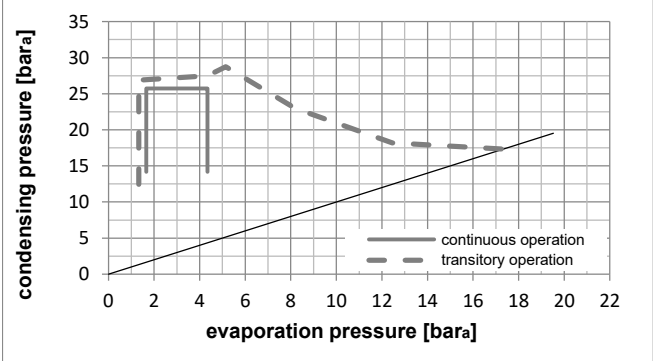
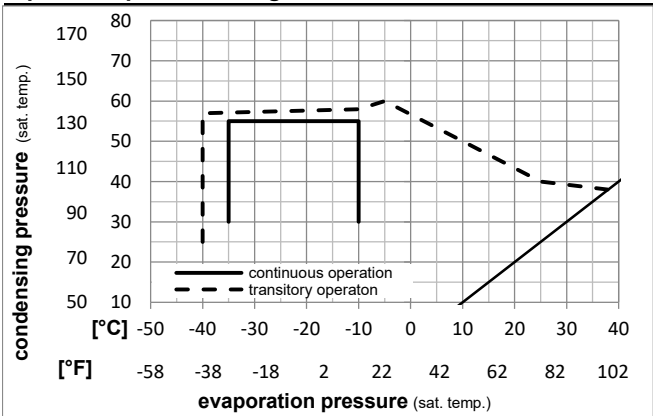


Ambient temperatures / system cooling

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

Model

Designation **SC10CLX 208-230V/60Hz** Conf. 2 Sales code: **104L2512**

Optimization + standard conditions

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

| | | 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 | 516,4 | 1764 | 444,4 | 1,16 | 3,95 | 0,99 | 446,9 | 2,63 | 12,03 | ASHRAE LBP | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 340,5 | 1163 | 293,0 | 0,81 | 2,77 | 0,70 | 420,0 | 2,54 | 10,64 | cecomaf LBP | |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 262,4 | 896 | 225,8 | 0,81 | 2,76 | 0,69 | 324,9 | 2,25 | 7,13 | EN12900 LBP | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | |
| [°C] | -23 | 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 | |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | | |
| [°C] | -23 | 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 | |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 223,9 | 765 | 192,7 | 0,74 | 2,52 | 0,63 | 303,9 | 2,19 | 5,99 | opt | |
| [°F] | -31 | 113 | 89,6 | 113 | | | | | | | | | | | |

Performance tables

R404A, 220V/60Hz, CSIR, fan 3m/s, CCC, UL, 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 | 223,9 | 765 | 192,7 | 0,74 | 2,52 | 0,63 | 303,9 | 2,19 | 5,99 |
| cond. pressure | -30 | -22 | 334,6 | 1143 | 287,9 | 0,90 | 3,09 | 0,78 | 369,8 | 2,36 | 8,98 |
| pc= 45/113 | -25 | -13 | 455,0 | 1554 | 391,6 | 1,06 | 3,61 | 0,91 | 430,0 | 2,55 | 12,27 |
| return gas temp. | -23 | -10 | 498,7 | 1703 | 429,2 | 1,11 | 3,78 | 0,95 | 450,1 | 2,62 | 13,48 |
| RGT= 32/90 | -20 | -4 | 588,3 | 2009 | 506,3 | 1,20 | 4,11 | 1,03 | 489,3 | 2,77 | 15,96 |
| 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 |
| [°C / °F] | -35 | -31 | 110,3 | 377 | 95,0 | 0,46 | 1,57 | 0,39 | 240,7 | 2,06 | 3,41 |
| cond. pressure | -30 | -22 | 222,8 | 761 | 191,8 | 0,66 | 2,27 | 0,57 | 335,3 | 2,28 | 6,93 |
| pc= 55/131 | -25 | -13 | 340,5 | 1163 | 293,0 | 0,81 | 2,77 | 0,70 | 420,0 | 2,54 | 10,64 |
| return gas temp | -23 | -10 | 382,2 | 1305 | 328,9 | 0,85 | 2,92 | 0,74 | 447,3 | 2,63 | 11,97 |
| RGT= 32/90 | -20 | -4 | 466,3 | 1593 | 401,3 | 0,93 | 3,19 | 0,80 | 499,4 | 2,82 | 14,67 |
| 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 |