

Model

| | | | | |
|-------------|----------------|--------------|-------------|-----------------|
| Designation | SC15MNX | 115V/60Hz 1~ | Sales code: | 104H7570 |
|-------------|----------------|--------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 32cSt | Displacement | 15,28cm ³ / 0,93cu.in |
| Oil quantity | 549cm ³ / 18,6fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 150g / 5,3oz | | |
| Free gas volume comp. | 1460cm ³ / 49,4fl.oz | | |
| Weight | 14,2kg / 31,3lbs | | |
| Motor protection | external | | |
| Winding resistance main | 0,66Ω (at 25°C) | | |
| Winding resistance aux | 2,7Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 135°C / 275°F | | |



General - Configurations with SC15MNX

| | Conf. 1 | Conf. 2 |
|------------------------|----------------|----------------|
| Motorconfiguration | CSIR | CSCR |
| Power supply (nominal) | 115V/60Hz | 115V/60Hz |
| Number of phases | 1 | 1 |
| Voltage range | 100-127V | 100-127V |
| Approvals | UL | UL |
| Starting torque | HST | HST |
| Note | - / - | |

Applications with SC15MNX

| | Conf. 1 | Conf. 2 |
|-------------------------|----------------|----------------|
| Refrigerant | R290 | R290 |
| Application | MBP | MBP |
| System cooling | fan 3m/s | fan 3m/s |
| Hot gas defrost | OK | OK |
| Long interval pull down | OK | OK |

Electrical data - Configurations with SC15MNX

| | Conf. 1 | Conf. 2 |
|------------------------------|----------------|----------------|
| Starting device type | relay | relay |
| Run capacitor | -/- | 23,5μF |
| Start capacitor | 410μF | 410μF |
| LRA (locked rotor amps / 4s) | 56,8A | 54,2A |
| RLA (rated load amps / 1s) | 9,8A | 8,8A |
| Cut in current | 56,8A | 54,2A |
| IP class | 21 | 21 |

Model

Designation

SC15MNX

115V/60Hz 1~

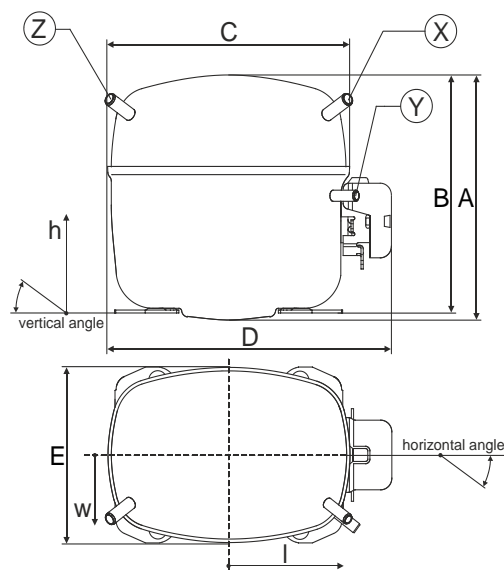
Sales code:

104H7570

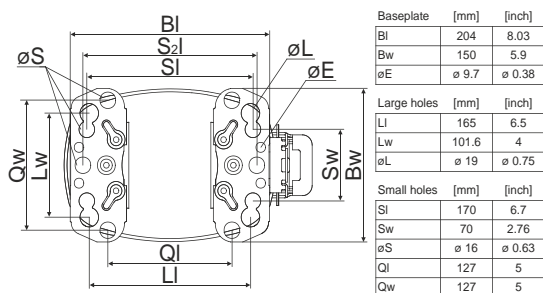
Compressor dimensions

| 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 |

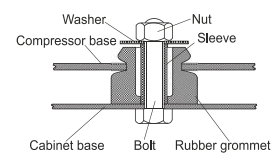
| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 9,54-9,72 | øi 6,41-6,59 | øi 6,11-6,29 |
| (i:inside, o:outside) | [in] | øi 0,38-0,38 | øi 0,25-0,26 | øi 0,24-0,25 |
| Material | | 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 | 12 |
| | [in] | 0,5 | 0,5 | 0,5 |



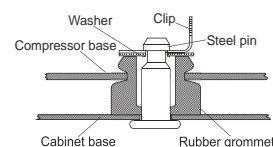
Compressor fixation



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 |

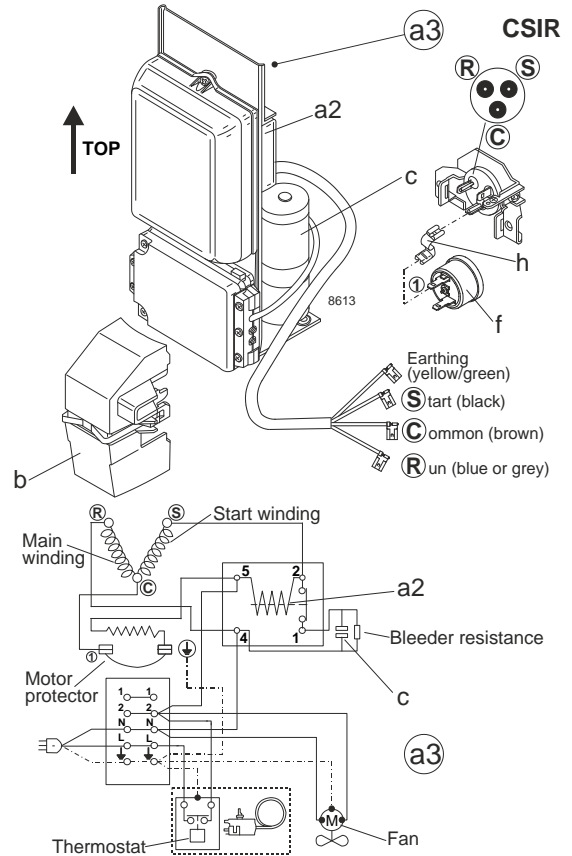
Model

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|-------------|----------------|------------------|----------------|-------------|-----------------|
| Designation | SC15MNX | 115V/60Hz | Conf. 1 | Sales code: | 104H7570 |
|-------------|----------------|------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|--------------|
| Motor configuration | CSIR |
| Power supply (nominal) | 115V/60Hz 1~ |
| Refrigerant | R290 |
| Application | MBP |
| Voltage range | 100-127V |
| Starting torque | HST |
| Approvals | UL SA3693 |

Electrical accessories / wiring diagram

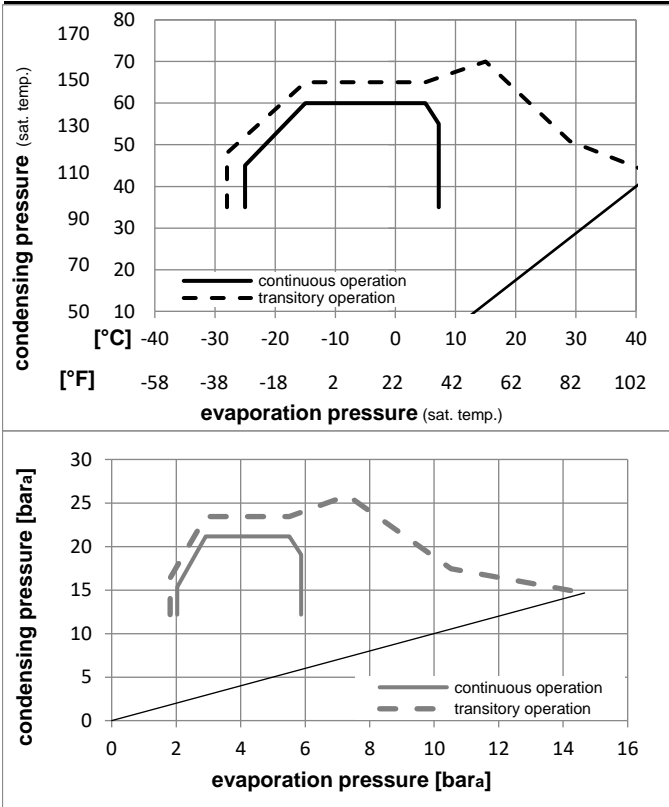


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| Ambient temperature min.: | 10°C / 50°F |
| Ambient temperature max.: | 43°C / 110°F |

| System cooling (n/a: outside limits) | | | |
|--------------------------------------|-----|----------|-----|
| T ambient | LBP | MBP | HBP |
| 32°C / 90°F | n/a | fan 3m/s | n/a |
| 38°C / 100°F | n/a | fan 3m/s | n/a |
| 43°C / 110°F | n/a | fan 3m/s | n/a |

Operation pressure range



Components

| | | |
|----|---------------------------|----------|
| a3 | SC starter kit | 117-7053 |
| f | ext. protector (T0761/46) | 117U3212 |
| b | plastic cover | 117U1021 |

Alternative components

| | | |
|----|--------------------------------|----------|
| a2 | potential relay (RVA 7AA3R) | 117-7441 |
| c | start capacitor (410µF, 6.3mm) | 117U5043 |
| f | ext. protector (T0761/46) | 117U3212 |
| b | plastic cover | 117U1021 |

Model

Designation **SC15MNX 115V/60Hz** Conf. 1 Sales code: **104H7570**

Optimization + standard conditions

115V/60Hz 1~, CSIR, fan 3m/s, UL

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Return gas temp. | | | Liquid temp. | | | Cooling capacity | | | COP | EER | Power consumption | | | ASHRAE MBP |
|------|---|------|------|------|--|---------|----------|------------------|----------|-----------|--------------|------|-------|------------------|-----|--------|-----|-----|-------------------|--|-------------|------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | [W] | [A] | [kg/h] | | | | | | |
| [°C] | -6,66 | 54,4 | 35 | 46,1 | 1404,4 | 4796 | 1208,6 | 1,77 | 6,05 | 1,52 | 793,3 | 9,31 | 16,02 | | | | | | | | | |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 1129,2 | 3856 | 971,8 | 1,48 | 5,06 | 1,28 | 761,6 | 9,09 | 14,28 | | | | | | | | cecomaf MBP | |
| [°F] | 14 | 131 | 89,6 | 131 | | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 1229,7 | 4200 | 1058,3 | 1,76 | 5,99 | 1,51 | 700,6 | 8,73 | 15,10 | | | | | | | | EN12900 MBP | |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | | | | | | | | | |
| [°C] | -6,66 | 48,9 | 18,3 | 48,9 | 1307,7 | 4466 | 1125,4 | 1,73 | 5,91 | 1,49 | 755,4 | 9,08 | 16,98 | | | | | | | | ARI540 MBP | |
| [°F] | 20 | 120 | 65 | 120 | | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 45 | 32 | 45 | 1280,2 | 4372 | 1101,7 | 1,83 | 6,24 | 1,57 | 700,6 | 8,73 | 14,65 | | | | | | | | opt | |
| [°F] | 14 | 113 | 89,6 | 113 | | | | | | | | | | | | | | | | | | |
| [°C] | -25 | 45 | 32 | 45 | 642,1 | 2193 | 552,6 | 1,20 | 4,10 | 1,03 | 534,9 | 7,74 | 7,24 | | | | | | | | opt | |
| [°F] | -13 | 113 | 89,6 | 113 | | | | | | | | | | | | | | | | | | |

Performance tables

115V/60Hz 1~, CSIR, 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 | 642,1 | 2193 | 552,6 | 1,20 | 4,10 | 1,03 | 534,9 | 7,74 | 7,24 | | |
| cond. pressure | -23,3 | -10 | 718,3 | 2453 | 618,1 | 1,28 | 4,38 | 1,10 | 559,4 | 7,87 | 8,11 | | |
| pc= 45/113 | -15 | 5 | 1065,1 | 3638 | 916,6 | 1,62 | 5,54 | 1,40 | 656,9 | 8,44 | 12,12 | | |
| return gas temp. | -9,4 | 15 | 1305,9 | 4460 | 1123,8 | 1,85 | 6,33 | 1,59 | 704,9 | 8,76 | 14,95 | | |
| RGT= 32/90 | -3,9 | 25 | 1595,0 | 5447 | 1372,7 | 2,14 | 7,31 | 1,84 | 745,6 | 9,05 | 18,39 | | |
| liquid temp | 0 | 32 | 1844,9 | 6301 | 1587,7 | 2,39 | 8,16 | 2,06 | 772,5 | 9,25 | 21,40 | | |
| Tliq= 45/113 | 7,2 | 45 | 2458,3 | 8395 | 2115,6 | 2,98 | 10,17 | 2,56 | 825,8 | 9,62 | 28,88 | | |
| [°C / °F] | -25 | -13 | 482,8 | 1649 | 415,5 | 0,89 | 3,06 | 0,77 | 539,7 | 7,78 | 6,01 | | |
| cond. pressure | -23,3 | -10 | 569,5 | 1945 | 490,1 | 1,00 | 3,40 | 0,86 | 571,5 | 7,95 | 7,10 | | |
| pc= 55/131 | -15 | 5 | 933,0 | 3186 | 802,9 | 1,33 | 4,54 | 1,14 | 701,6 | 8,70 | 11,73 | | |
| return gas temp. | -9,4 | 15 | 1151,4 | 3932 | 990,9 | 1,50 | 5,12 | 1,29 | 767,6 | 9,13 | 14,58 | | |
| RGT= 32/90 | -3,9 | 25 | 1391,4 | 4752 | 1197,5 | 1,69 | 5,77 | 1,45 | 823,3 | 9,53 | 17,76 | | |
| liquid temp | 0 | 32 | 1591,1 | 5434 | 1369,3 | 1,85 | 6,33 | 1,59 | 859,0 | 9,79 | 20,44 | | |
| Tliq= 55/131 | 7,2 | 45 | 2076,3 | 7091 | 1786,9 | 2,25 | 7,67 | 1,93 | 924,7 | 10,28 | 27,05 | | |

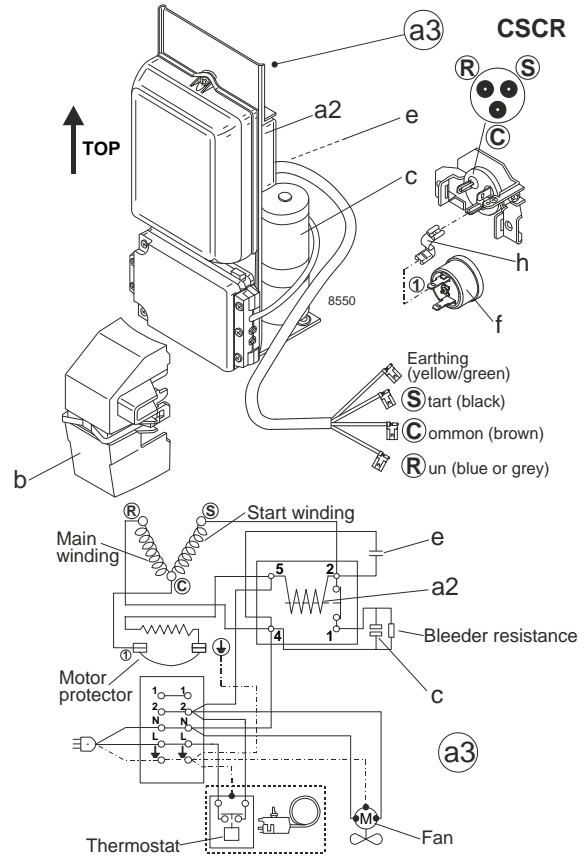
Model

| | | | | | |
|-------------|----------------|------------------|----------------|-------------|-----------------|
| Designation | SC15MNX | 115V/60Hz | Conf. 2 | Sales code: | 104H7570 |
|-------------|----------------|------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|--------------|
| Motorconfiguration | CSCR |
| Power supply (nominal) | 115V/60Hz 1~ |
| Refrigerant | R290 |
| Application | MBP |
| Voltage range | 100-127V |
| Starting torque | HST |
| Approvals | UL SA3693 |

Electrical accessories / wiring diagram

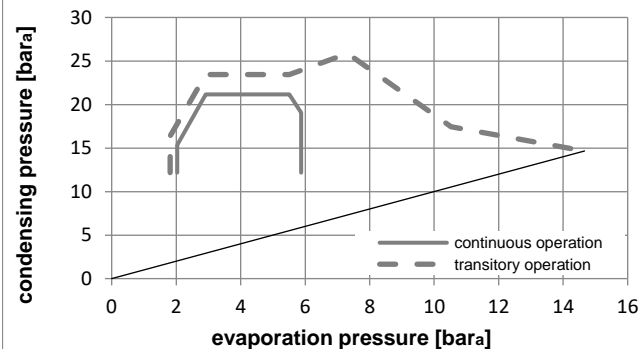
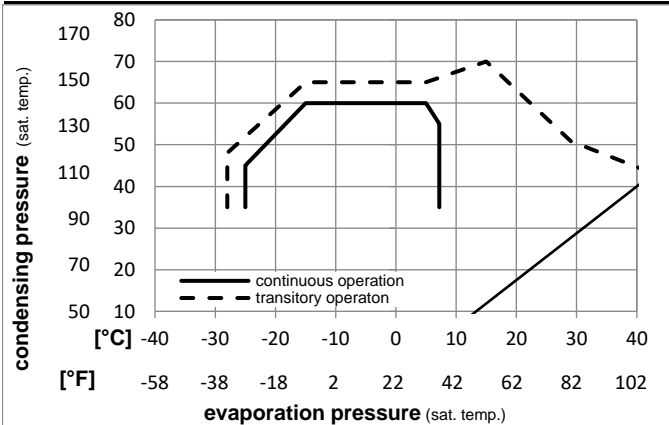


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| Ambient temperature min.: | 10°C / 50°F |
| Ambient temperature max.: | 43°C / 110°F |

| System cooling (n/a: outside limits) | | | |
|--------------------------------------|-----|----------|-----|
| T ambient | LBP | MBP | HBP |
| 32°C / 90°F | n/a | fan 3m/s | n/a |
| 38°C / 100°F | n/a | fan 3m/s | n/a |
| 43°C / 110°F | n/a | fan 3m/s | n/a |

Operation pressure range



Components

| | | |
|----|---------------------------|----------|
| a3 | SC starter kit | 117-7045 |
| f | ext. protector (T0761/46) | 117U3212 |
| b | plastic cover | 117U1021 |

Alternative components

| | | |
|----|--------------------------------|----------|
| a2 | potential relay (RVA 7AA3R) | 117-7441 |
| e | run capacitor (23,5μF, 6.3mm) | 117-7114 |
| c | start capacitor (410μF, 6.3mm) | 117U5043 |
| f | ext. protector (T0761/46) | 117U3212 |
| b | plastic cover | 117U1021 |

Model

Designation **SC15MNX 115V/60Hz** Conf. 2 Sales code: **104H7570**

Optimization + standard conditions

115V/60Hz 1~, CSCR, fan 3m/s, UL

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Return gas temp. | | | Liquid temp. | | | Cooling capacity | | | COP | EER | Power consumption | | | ASHRAE MBP |
|------|---|------|------|------|--|---------|----------|------------------|----------|-----------|--------------|------|-------|------------------|-----|--------|-----|-----|-------------------|--|-------------|------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | [W] | [A] | [kg/h] | | | | | | |
| [°C] | -6,66 | 54,4 | 35 | 46,1 | 1422,3 | 4857 | 1224,0 | 1,88 | 6,42 | 1,62 | 756,2 | 8,88 | 16,22 | | | | | | | | | |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 1142,8 | 3903 | 983,5 | 1,57 | 5,37 | 1,35 | 726,5 | 8,67 | 14,46 | | | | | | | | cecomaf MBP | |
| [°F] | 14 | 131 | 89,6 | 131 | | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 1247,9 | 4262 | 1074,0 | 1,87 | 6,38 | 1,61 | 668,1 | 8,32 | 15,32 | | | | | | | | EN12900 MBP | |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | | | | | | | | | |
| [°C] | -6,66 | 48,9 | 18,3 | 48,9 | 1326,0 | 4529 | 1141,2 | 1,84 | 6,29 | 1,59 | 719,9 | 8,65 | 17,22 | | | | | | | | ARI540 MBP | |
| [°F] | 20 | 120 | 65 | 120 | | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 45 | 32 | 45 | 1299,1 | 4437 | 1118,0 | 1,94 | 6,64 | 1,67 | 668,1 | 8,32 | 14,86 | | | | | | | | opt | |
| [°F] | 14 | 113 | 89,6 | 113 | | | | | | | | | | | | | | | | | | |
| [°C] | -25 | 45 | 32 | 45 | 659,9 | 2254 | 567,9 | 1,27 | 4,35 | 1,10 | 518,6 | 7,50 | 7,44 | | | | | | | | opt | |
| [°F] | -13 | 113 | 89,6 | 113 | | | | | | | | | | | | | | | | | | |

Performance tables

115V/60Hz 1~, 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 | 659,9 | 2254 | 567,9 | 1,27 | 4,35 | 1,10 | 518,6 | 7,50 | 7,44 | | |
| cond. pressure | -23,3 | -10 | 734,7 | 2509 | 632,3 | 1,36 | 4,65 | 1,17 | 540,1 | 7,60 | 8,30 | | |
| pc= 45/113 | -15 | 5 | 1081,3 | 3693 | 930,6 | 1,72 | 5,88 | 1,48 | 627,7 | 8,07 | 12,30 | | |
| return gas temp. | -9,4 | 15 | 1325,2 | 4526 | 1140,4 | 1,97 | 6,73 | 1,70 | 672,2 | 8,35 | 15,17 | | |
| RGT= 32/90 | -3,9 | 25 | 1617,3 | 5524 | 1391,9 | 2,28 | 7,78 | 1,96 | 710,3 | 8,62 | 18,65 | | |
| liquid temp | 0 | 32 | 1868,1 | 6380 | 1607,7 | 2,54 | 8,68 | 2,19 | 735,1 | 8,80 | 21,67 | | |
| Tliq= 45/113 | 7,2 | 45 | 2477,1 | 8460 | 2131,8 | 3,16 | 10,81 | 2,72 | 782,7 | 9,12 | 29,10 | | |
| [°C / °F] | -25 | -13 | 496,5 | 1695 | 427,3 | 0,95 | 3,24 | 0,82 | 523,2 | 7,54 | 6,18 | | |
| cond. pressure | -23,3 | -10 | 581,4 | 1986 | 500,4 | 1,05 | 3,60 | 0,91 | 551,8 | 7,68 | 7,25 | | |
| pc= 55/131 | -15 | 5 | 943,8 | 3223 | 812,2 | 1,41 | 4,81 | 1,21 | 670,6 | 8,32 | 11,87 | | |
| return gas temp. | -9,4 | 15 | 1165,4 | 3980 | 1002,9 | 1,59 | 5,44 | 1,37 | 732,2 | 8,71 | 14,75 | | |
| RGT= 32/90 | -3,9 | 25 | 1409,1 | 4812 | 1212,7 | 1,80 | 6,14 | 1,55 | 784,4 | 9,07 | 17,98 | | |
| liquid temp | 0 | 32 | 1610,3 | 5500 | 1385,9 | 1,97 | 6,73 | 1,70 | 817,4 | 9,32 | 20,68 | | |
| Tliq= 55/131 | 7,2 | 45 | 2093,3 | 7149 | 1801,5 | 2,39 | 8,16 | 2,06 | 876,2 | 9,74 | 27,27 | | |