

Single Pack SC18CLX.2 115V 60Hz CSCR

Single pack code number: **195B4494**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor SC18CLX.2 | 104L2198 | 1 |
| 2 | Starting relay (RVA 7AA3R435) | 117-7441 | 1 |
| 3 | Run capacitor (23.5 μ F 190V, 6.3mm) | 117-7114 | 1 |
| 4 | Starting capacitor (410 μ F 125V, 6.3mm) | 117U5043 | 1 |
| 5 | Bolt joint for one compressor M6 \varnothing 16mm | 118-1917 | 1 |

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • www.secop.com

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.

Model

| | | | | |
|-------------|------------------|--------------|-------------|-----------------|
| Designation | SC18CLX.2 | 115V/60Hz 1~ | Sales code: | 104L2198 |
|-------------|------------------|--------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R404A, R452A, R507 |
| Oil viscosity | 32cST | Displacement | 17,69cm ³ / 1,08cu.in |
| Oil quantity | 550cm ³ / 18,6fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 1300g / 45,9oz | | |
| Free gas volume comp. | 1460cm ³ / 49,4fl.oz | | |
| Weight | 14,2kg / 31,3lbs | | |
| Motor protection | external | | |
| Winding resistance main | 0,6Ω (at 25°C) | | |
| Winding resistance aux | 3,2Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |



General - Configurations with SC18CLX.2

| | Conf. 1 | Conf. 2 |
|------------------------|---|----------------|
| Motorconfiguration | CSCR | CSCR |
| Power supply (nominal) | 115V/60Hz | 115V/60Hz |
| Number of phases | 1 | 1 |
| Voltage range | 103-127V | 103-127V |
| Approvals | UL | UL |
| Starting torque | HST | HST |
| Note | Protector and cover are included and pre-assembled to compressor. | |

Applications with SC18CLX.2

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

Electrical data - Configurations with SC18CLX.2

| | Conf. 1 | Conf. 2 |
|------------------------------|----------------|----------------|
| Starting device type | relay | relay |
| Run capacitor | 23,5μF | 23,5μF |
| Start capacitor | 410μF | 410μF |
| LRA (locked rotor amps / 4s) | 63A | 63A |
| RLA (rated load amps / 1s) | 9,6A | 9,6A |
| Cut in current | 63A | 63A |
| IP class | 21 | 21 |

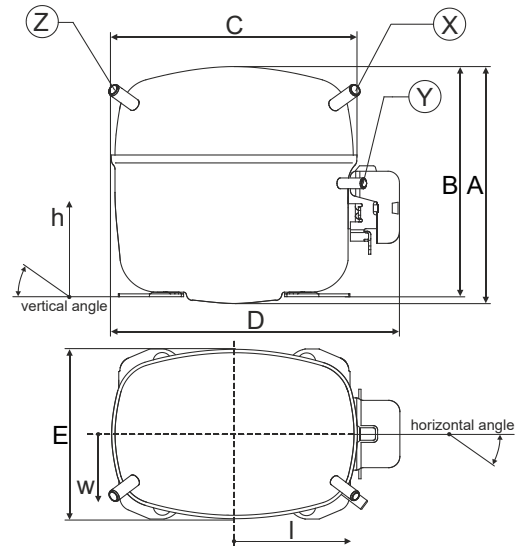
Model

| | | | | |
|-------------|------------------|--------------|-------------|-----------------|
| Designation | SC18CLX.2 | 115V/60Hz 1~ | Sales code: | 104L2198 |
|-------------|------------------|--------------|-------------|-----------------|

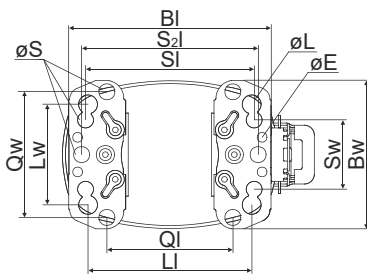
Compressor dimensions

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

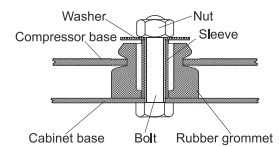


Compressor fixation

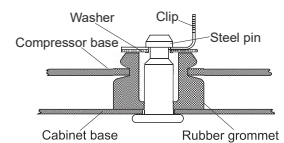


| Baseplate | [mm] | [inch] |
|-------------|-------|--------|
| BI | 204 | 8.03 |
| BW | 150 | 5.9 |
| øE | ø 9.7 | ø 0.38 |
| Large holes | [mm] | [inch] |
| LI | 165 | 6.5 |
| LW | 101.6 | 4 |
| øL | ø 19 | ø 0.75 |
| Small holes | [mm] | [inch] |
| SI | 170 | 6.7 |
| SW | 70 | 2.76 |
| øS | ø 16 | ø 0.63 |
| QI | 127 | 5 |
| Qw | 127 | 5 |

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.

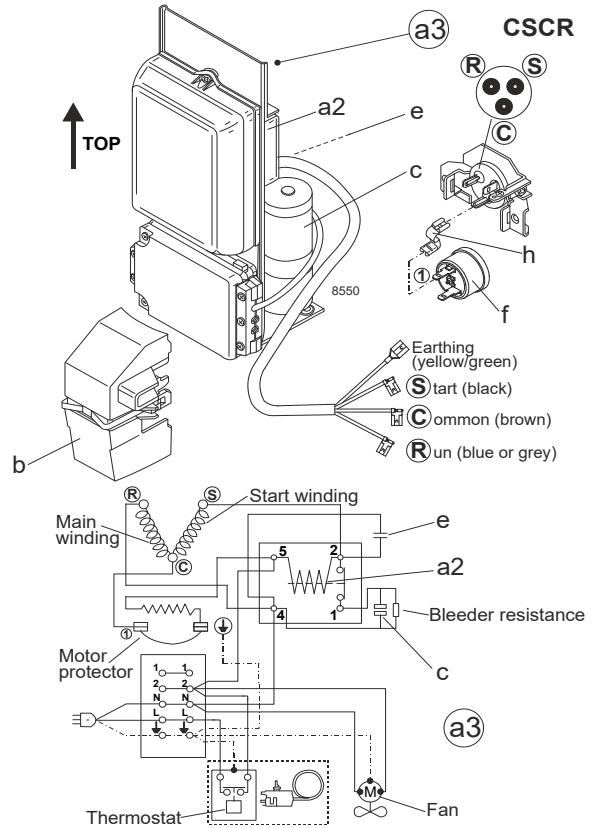
Model

Designation **SC18CLX.2 115V/60Hz** Conf. 1 Sales code: **104L2198**

Configuration

Motorconfiguration **CSCR**
 Power supply (nominal) **115V/60Hz 1~**
 Refrigerant **R404A**
 Application **LBP**
 Voltage range **103-127V**
 Starting torque **HST**
 Approvals **UL**

Electrical accessories / wiring diagram

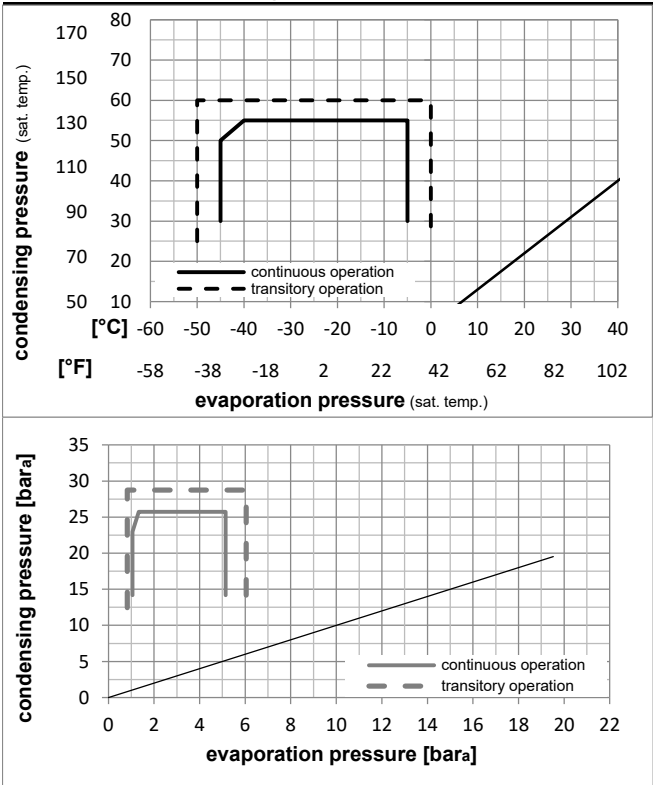


Ambient temperatures / system cooling

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

Operation pressure range



Components (protector + ~holder + cover: pre assembled)

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

Alternative comp. (protector + ~holder + cover: pre assemb.)

- 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 **SC18CLX.2 115V/60Hz** Conf. 1 Sales code: **104L2198**

Optimization + standard conditions

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

| Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | | Power consumption | | | | ASHRAE LBP | | |
|---|-------|------|------|--|---------|----------|-------|---------------------|-----------|------|-------|------------|----------------|-------------|
| 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] | -23,3 | 54,4 | 32,2 | 32,2 | 1072,9 | 3664 | 923,4 | 1,31 | 4,48 | 1,13 | 818,1 | 8,99 | | 25,00 |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 737,7 | 2519 | 634,9 | 0,94 | 3,21 | 0,81 | 784,8 | 8,76 | 23,06 | cecomaf LBP |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 569,0 | 1943 | 489,6 | 0,97 | 3,31 | 0,83 | 587,8 | 7,51 | 15,46 | EN12900 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -23,3 | 48,9 | 4,44 | 48,9 | 779,8 | 2663 | 671,1 | 0,97 | 3,30 | 0,83 | 807,9 | 8,92 | 27,61 | ARI540 LBP |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | |
| [°C] | -23,3 | 40,6 | 32,2 | 32,2 | 1156,3 | 3949 | 995,1 | 1,47 | 5,01 | 1,26 | 788,0 | 8,80 | 26,94 | AHAM LBP |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 523,1 | 1787 | 450,2 | 0,91 | 3,10 | 0,78 | 577,0 | 7,47 | 13,98 | opt |
| [°F] | -31 | 113 | 89,6 | 113 | | | | | | | | | | |

Performance tables

115V/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] | -45 | -49 | 108,7 | 371 | 93,6 | 0,34 | 1,16 | 0,29 | 320,1 | 6,25 | 2,89 |
| cond. pressure | -34,4 | -30 | 544,2 | 1859 | 468,4 | 0,92 | 3,15 | 0,80 | 589,1 | 7,54 | 14,55 |
| pc= 45/113 | -28,9 | -20 | 753,6 | 2574 | 648,6 | 1,08 | 3,67 | 0,93 | 700,8 | 8,21 | 20,25 |
| return gas temp. | -23,3 | -10 | 973,0 | 3323 | 837,4 | 1,22 | 4,16 | 1,05 | 799,3 | 8,87 | 26,29 |
| RGT= 32/90 | -20,6 | -5 | 1092,1 | 3730 | 939,9 | 1,29 | 4,41 | 1,11 | 845,3 | 9,20 | 29,61 |
| liquid temp | -15 | 5 | 1360,3 | 4646 | 1170,7 | 1,46 | 4,97 | 1,25 | 934,3 | 9,85 | 37,16 |
| Tliq= 45/113 | -5 | 23 | 1994,5 | 6812 | 1716,5 | 1,81 | 6,19 | 1,56 | 1099,9 | 11,02 | 55,45 |
| [°C / °F] | -45 | -49 | -101,7 | -347 | -87,5 | -0,43 | -1,47 | -0,37 | 236,6 | 5,93 | -3,12 |
| cond. pressure | -34,4 | -30 | 391,4 | 1337 | 336,8 | 0,69 | 2,37 | 0,60 | 563,6 | 7,43 | 12,11 |
| pc= 55/131 | -28,9 | -20 | 599,8 | 2048 | 516,2 | 0,86 | 2,93 | 0,74 | 700,0 | 8,22 | 18,66 |
| return gas temp | -23,3 | -10 | 796,6 | 2721 | 685,6 | 0,97 | 3,32 | 0,84 | 819,0 | 8,99 | 24,95 |
| RGT= 32/90 | -20,6 | -5 | 896,3 | 3061 | 771,4 | 1,03 | 3,50 | 0,88 | 873,7 | 9,38 | 28,18 |
| liquid temp | -15 | 5 | 1109,6 | 3790 | 955,0 | 1,14 | 3,88 | 0,98 | 977,1 | 10,15 | 35,19 |
| Tliq= 55/131 | -5 | 23 | 1590,7 | 5432 | 1368,9 | 1,37 | 4,69 | 1,18 | 1158,5 | 11,51 | 51,49 |

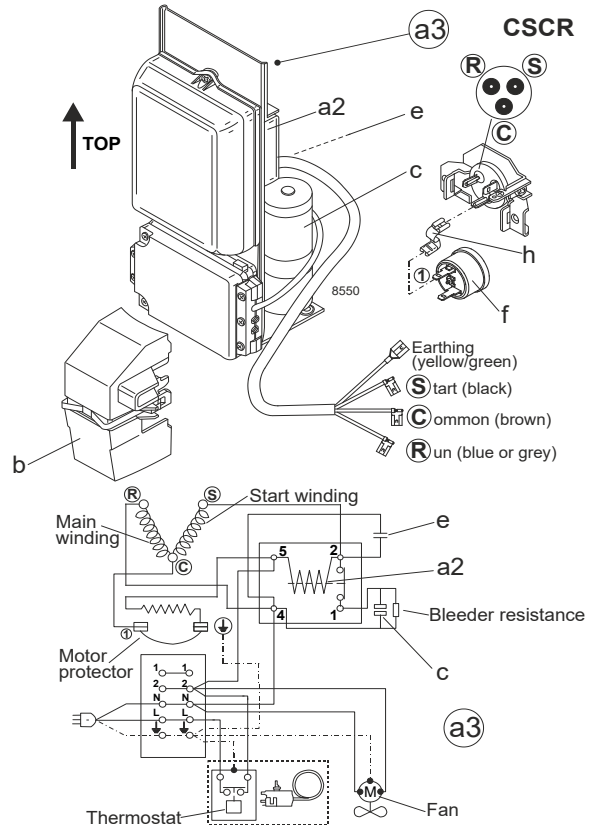
Model

| | | | | | |
|-------------|------------------|------------------|----------------|-------------|-----------------|
| Designation | SC18CLX.2 | 115V/60Hz | Conf. 2 | Sales code: | 104L2198 |
|-------------|------------------|------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|--------------|
| Motorconfiguration | CSCR |
| Power supply (nominal) | 115V/60Hz 1~ |
| Refrigerant | R452A |
| Application | LBP |
| Voltage range | 103-127V |
| Starting torque | HST |
| Approvals | UL |

Electrical accessories / wiring diagram

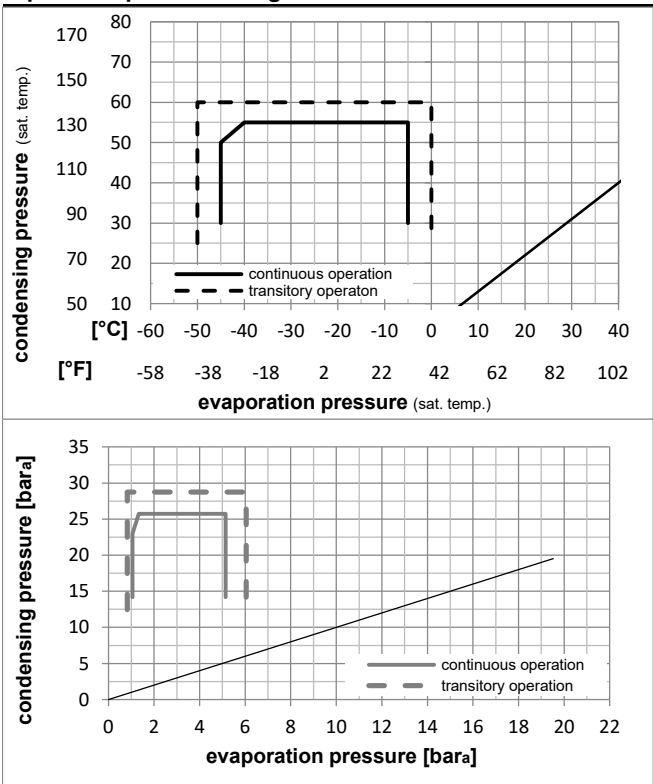


Ambient temperatures / system cooling

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

Operation pressure range



Components (protector + ~holder + cover: pre assembled)

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

Alternative comp. (protector + ~holder + cover: pre assemb.)

| | | |
|----|--------------------------------|----------|
| 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 **SC18CLX.2 115V/60Hz** Conf. **2** Sales code: **104L2198**

Optimization + standard conditions

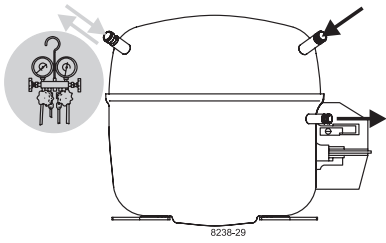
115V/60Hz, CSCR, fan 3m/s, UL

| Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | | Power consumption | | | | ASHRAE LBP | | |
|---|-------|------|------|--|---------|----------|-------|---------------------|-----------|------|-------|------------|----------------|-------------|
| 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] | -23,3 | 54,4 | 32,2 | 32,2 | 979,6 | 3346 | 843,1 | 1,27 | 4,33 | 1,09 | 773,4 | 8,83 | | 23,55 |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 679,6 | 2321 | 584,9 | 0,92 | 3,14 | 0,79 | 740,0 | 8,62 | 21,63 | cecomaf LBP |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 513,3 | 1753 | 441,7 | 0,93 | 3,18 | 0,80 | 551,5 | 7,41 | 14,33 | EN12900 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -23,3 | 48,9 | 4,44 | 48,9 | 723,0 | 2469 | 622,2 | 0,94 | 3,22 | 0,81 | 765,6 | 8,78 | 25,99 | ARI540 LBP |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | |
| [°C] | -23,3 | 40,6 | 32,2 | 32,2 | 1061,2 | 3624 | 913,3 | 1,42 | 4,84 | 1,22 | 748,5 | 8,67 | 25,51 | AHAM LBP |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 471,1 | 1609 | 405,5 | 0,87 | 2,98 | 0,75 | 540,2 | 7,34 | 12,93 | opt |
| [°F] | -31 | 113 | 89,6 | 113 | | | | | | | | | | |

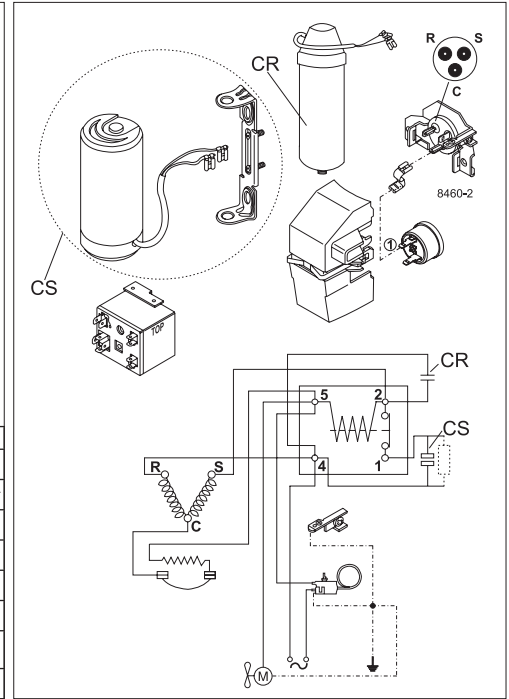
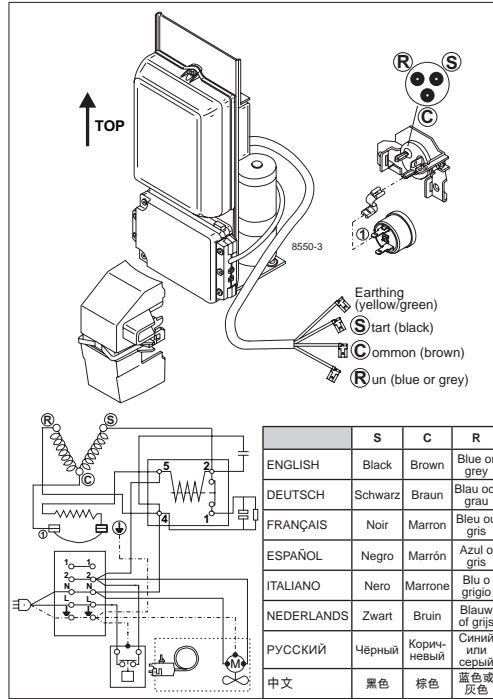
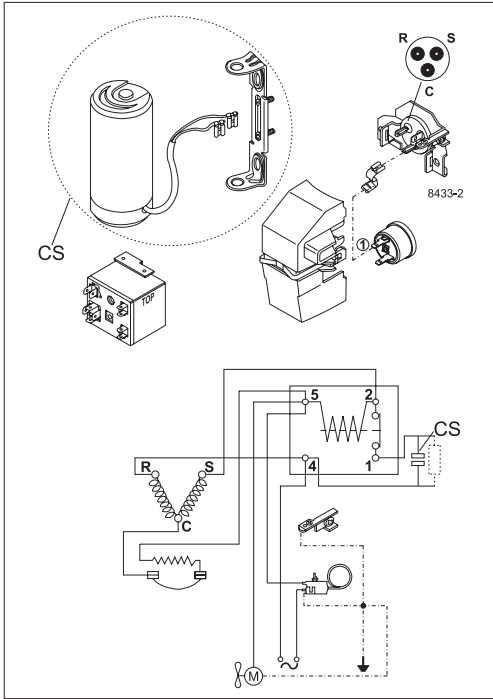
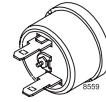
Performance tables

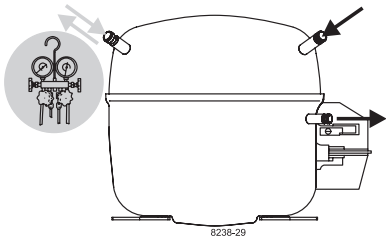
115V/60Hz, CSCR, fan 3m/s, UL

| | 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] | -45 | -49 | 87,0 | 297 | 74,9 | 0,29 | 1,00 | 0,25 | 296,1 | 5,78 | 2,37 |
| cond. pressure | -34,4 | -30 | 490,8 | 1676 | 422,4 | 0,89 | 3,04 | 0,77 | 551,9 | 7,41 | 13,48 |
| pc= 45/113 | -28,9 | -20 | 687,9 | 2349 | 592,0 | 1,04 | 3,56 | 0,90 | 660,7 | 8,11 | 18,96 |
| return gas temp. | -23,3 | -10 | 896,8 | 3063 | 771,8 | 1,18 | 4,04 | 1,02 | 758,4 | 8,73 | 24,85 |
| RGT= 32/90 | -20,6 | -5 | 1011,2 | 3453 | 870,2 | 1,26 | 4,29 | 1,08 | 804,5 | 9,03 | 28,10 |
| liquid temp | -15 | 5 | 1270,6 | 4339 | 1093,5 | 1,42 | 4,85 | 1,22 | 894,6 | 9,61 | 35,54 |
| Tliq= 45/113 | -5 | 23 | 1888,6 | 6450 | 1625,4 | 1,78 | 6,07 | 1,53 | 1063,4 | 10,69 | 53,67 |
| [°C / °F] | -45 | -49 | -104,7 | -358 | -90,1 | -0,49 | -1,68 | -0,42 | 213,0 | 5,24 | -3,28 |
| cond. pressure | -34,4 | -30 | 352,5 | 1204 | 303,3 | 0,67 | 2,30 | 0,58 | 523,9 | 7,23 | 11,12 |
| pc= 55/131 | -28,9 | -20 | 548,4 | 1873 | 472,0 | 0,84 | 2,85 | 0,72 | 656,4 | 8,08 | 17,38 |
| return gas temp | -23,3 | -10 | 736,1 | 2514 | 633,5 | 0,95 | 3,25 | 0,82 | 774,0 | 8,83 | 23,47 |
| RGT= 32/90 | -20,6 | -5 | 832,3 | 2842 | 716,2 | 1,00 | 3,43 | 0,86 | 828,7 | 9,18 | 26,62 |
| liquid temp | -15 | 5 | 1040,2 | 3552 | 895,2 | 1,11 | 3,81 | 0,96 | 933,2 | 9,85 | 33,53 |
| Tliq= 55/131 | -5 | 23 | 1514,9 | 5174 | 1303,8 | 1,35 | 4,63 | 1,17 | 1118,5 | 11,04 | 49,72 |



SC Compressors (External Protector)

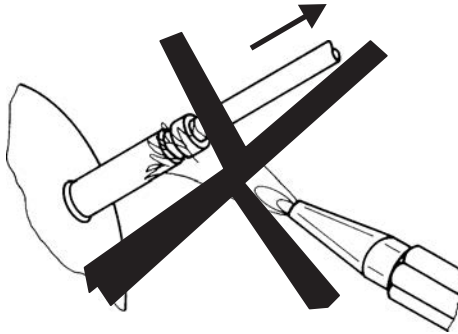




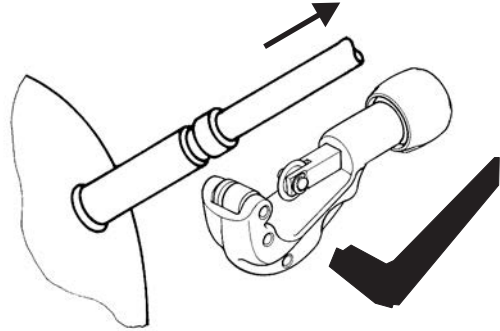
SC Compressors (External Protector)



Service/Repair – R290



8545



Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved. www.secop.com