

Single Pack SC18GH 220-240V 50Hz / 208-230V 60Hz CSCR

Single pack code number: **195B4175**

| Position | Title | Code | Amount |
|----------|--|----------|--------|
| 1 | Compressor SC18GH | 104G8861 | 1 |
| 2 | SC starting device (550mm) | 117-7039 | 1 |
| 3 | Cord relief | 103N1004 | 1 |
| 4 | Cover | 103N2008 | 1 |
| 5 | Bolt joint for one compressor M6 ø16mm | 118-1917 | 1 |

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Model

| | | | | |
|-------------|---------------|--|-------------|-----------------|
| Designation | SC18GH | 220-240V/50Hz 1~ 208-230V/60Hz 1~ | Sales code: | 104G8861 |
|-------------|---------------|--|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R134a, R513A |
| Oil viscosity | 22cST | Displacement | 17,69cm ³ / 1,08cu.in |
| Oil quantity | 504cm ³ / 17fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 1300g / 45,9oz | | |
| Free gas volume comp. | 1460cm ³ / 49,4fl.oz | | |
| Weight | 13,8kg / 30,4lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 3,5Ω (at 25°C) | | |
| Winding resistance aux | 13Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |



General - Configurations with SC18GH

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

Applications with SC18GH

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|-------------------------|----------------|----------------|----------------|----------------|
| Refrigerant | R134a | R513A | R134a | R513A |
| Application | HBP | HBP | HBP | HBP |
| 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 SC18GH

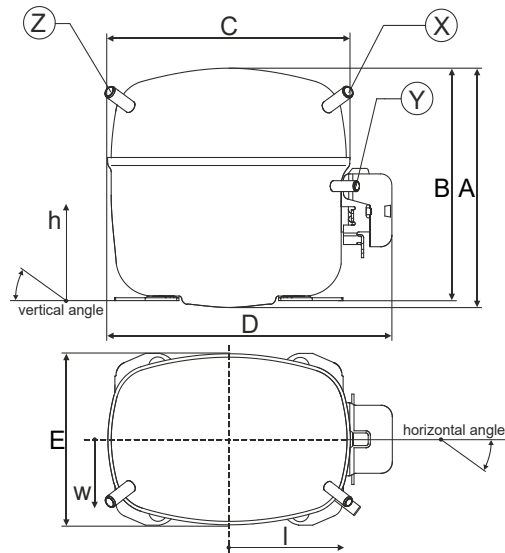
| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|------------------------------|----------------|----------------|----------------|----------------|
| Starting device type | relay | relay | relay | relay |
| Run capacitor | 10μF | 10μF | 10μF | 10μF |
| Start capacitor | 80μF | 80μF | 80μF | 80μF |
| LRA (locked rotor amps / 4s) | 22A | 22A | 21,2A | 21,2A |
| RLA (rated load amps / 1s) | 3,9A | 3,9A | 3,5A | 3,5A |
| Cut in current | 22A | 22A | 21,2A | 21,2A |

Model

Designation **SC18GH** 220-240V/50Hz 1~ 208-230V/60Hz 1~ Sales code: **104G8861**

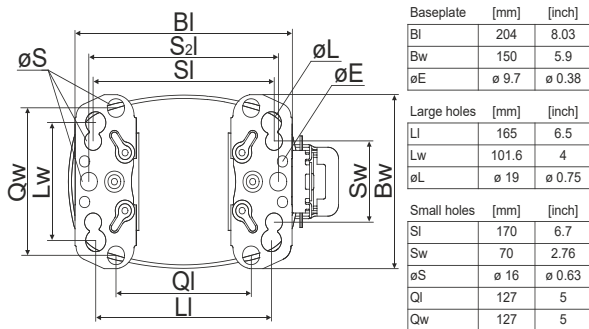
Compressor dimensions

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

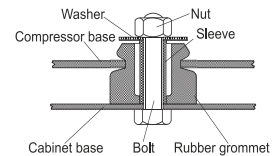


| Connectors | Suction | | Discharge | | Process | |
|----------------------------|----------------|--|--------------|--|--------------|--|
| | X | | Y | | Z | |
| Diameter [mm] | øi 10,11-10,29 | | øi 8,11-8,29 | | øi 6,11-6,29 | |
| (i:inside, o:outside) [in] | øi 0,4-0,41 | | øi 0,32-0,33 | | øi 0,24-0,25 | |
| 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 | |

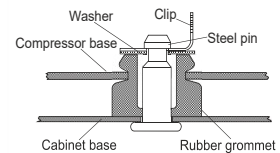
Compressor fixation



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

Provision for PE Grounding is located at the PE Stamp on the compressor

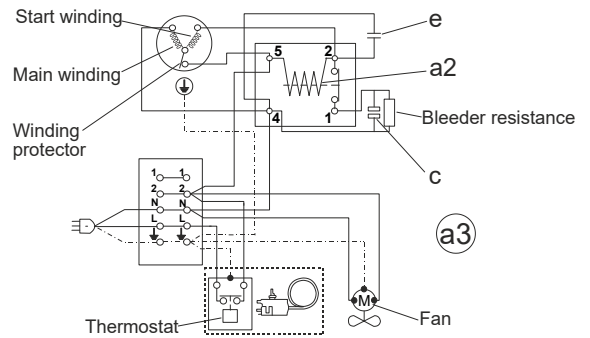
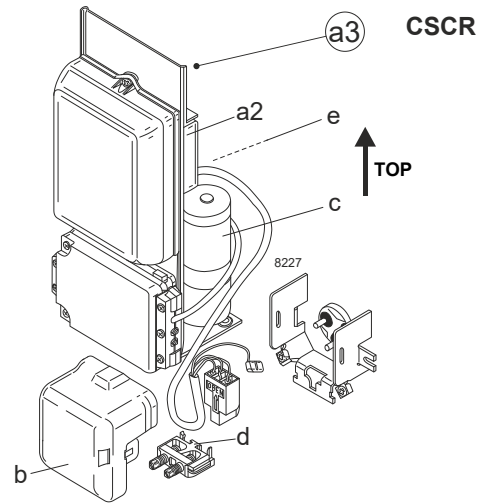
Model

| | | | | | |
|-------------|---------------|----------------------|---------|-------------|-----------------|
| Designation | SC18GH | 220-240V/50Hz | Conf. 1 | Sales code: | 104G8861 |
|-------------|---------------|----------------------|---------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | CSCR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R134a |
| Application | HBP |
| Voltage range | 198-254V |
| Starting torque | HST |
| Approvals | VDE |
| | UL |
| | CCC |
| | KC |

Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

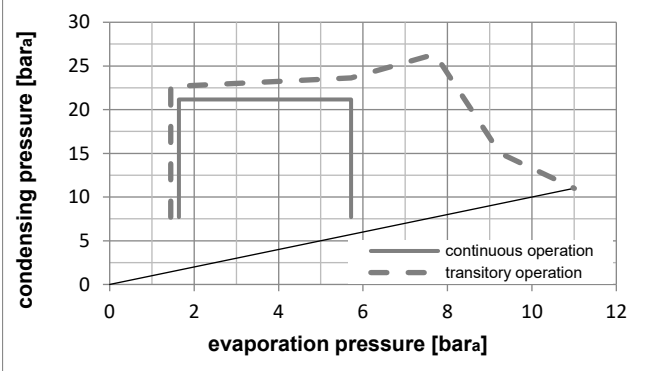
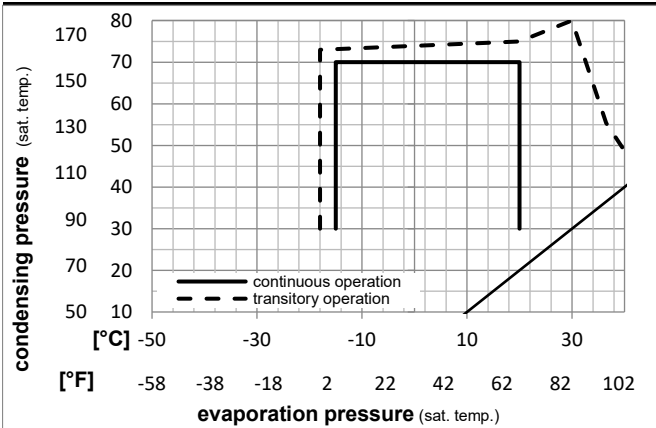
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s

Operation Limits

Operation pressure range



Components

| | | |
|----|------------------------|----------|
| a3 | SC starter kit (550mm) | 117-7039 |
| b | plastic cover | 103N2008 |
| d | cord relief | 103N1004 |

Alternative components

| | | |
|----|-------------------------|----------|
| a3 | SC starter kit (1000mm) | 117-7043 |
|----|-------------------------|----------|

Model

Designation **SC18GH** **220-240V/50Hz** Conf. 1 Sales code: **104G8861**

Optimization + standard conditions

R134a, 220V/50Hz, CSCR, fan 3m/s, VDE, UL, CCC, KC

| Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Power consumption | | | | | | | | |
|---|-----|-----|-----|--|--------|---------|---------------------|-------|----------|-----------|-------|------|--------|-------------|---|
| | | | | Return gas temp. | | | Current consumption | | | | | | | | |
| | | | | Liquid temp. | | | 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] | 7,2 | 54 | 35 | 46 | 1600,1 | 5465 | 1377,1 | 2,57 | 8,78 | 2,21 | 622,6 | 3,33 | 35,50 | ASHRAE HBP | |
| [°F] | 45 | 130 | 95 | 115 | | | | | | | | | | | |
| [°C] | 5 | 55 | 32 | 55 | 1310,2 | 4475 | 1127,6 | 2,17 | 7,40 | 1,87 | 604,6 | 3,26 | 32,29 | cecomaf HBP | |
| [°F] | 41 | 131 | 90 | 131 | | | | | | | | | | | |
| [°C] | 5 | 50 | 20 | 50 | 1362,6 | 4654 | 1172,7 | 2,35 | 8,02 | 2,02 | 579,9 | 3,15 | 34,34 | EN12900 HBP | |
| [°F] | 41 | 122 | 68 | 122 | | | | | | | | | | | |
| [°C] | -7 | 54 | 35 | 46 | 842,7 | 2878 | 725,2 | 1,74 | 5,95 | 1,50 | 483,7 | 2,79 | 18,39 | ASHRAE MBP | |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 639,5 | 2184 | 550,3 | 1,42 | 4,84 | 1,22 | 451,6 | 2,66 | 15,46 | cecomaf MBP | |
| [°F] | 14 | 131 | 90 | 131 | | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 747,8 | 2554 | 643,5 | 1,73 | 5,90 | 1,49 | 432,8 | 2,59 | 17,50 | EN12900 MBP | |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | | |

Performance tables

R134a, 220V/50Hz, CSCR, fan 3m/s, VDE, 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] | -15 | 5 | 596,9 | 2039 | 513,7 | 1,54 | 5,26 | 1,32 | 387,9 | 2,42 | 13,01 | | | |
| cond. pressure | -10 | 14 | 775,8 | 2649 | 667,6 | 1,79 | 6,12 | 1,54 | 432,8 | 2,59 | 16,98 | | | |
| pc= 45/113 | -5 | 23 | 989,5 | 3379 | 851,6 | 2,07 | 7,07 | 1,78 | 477,7 | 2,75 | 21,76 | | | |
| return gas temp. | 0 | 32 | 1242,7 | 4244 | 1069,5 | 2,39 | 8,16 | 2,06 | 520,4 | 2,90 | 27,48 | | | |
| RGT= 32/90 | 5 | 41 | 1539,8 | 5259 | 1325,2 | 2,76 | 9,42 | 2,37 | 558,5 | 3,04 | 34,28 | | | |
| liquid temp | 15 | 59 | 2283,9 | 7800 | 1965,6 | 3,73 | 12,74 | 3,21 | 612,3 | 3,31 | 51,73 | | | |
| Tliq= 45/113 | 20 | 68 | 2739,9 | 9357 | 2358,0 | 4,40 | 15,01 | 3,78 | 623,3 | 3,44 | 62,75 | | | |
| [°C / °F] | -15 | 5 | 485,4 | 1658 | 417,8 | 1,20 | 4,11 | 1,03 | 403,8 | 2,44 | 11,69 | | | |
| cond. pressure | -10 | 14 | 639,5 | 2184 | 550,3 | 1,42 | 4,84 | 1,22 | 451,6 | 2,66 | 15,46 | | | |
| pc= 55/131 | -5 | 23 | 825,2 | 2818 | 710,2 | 1,64 | 5,61 | 1,41 | 502,5 | 2,86 | 20,06 | | | |
| return gas temp | 0 | 32 | 1047,3 | 3577 | 901,4 | 1,89 | 6,45 | 1,63 | 554,3 | 3,06 | 25,62 | | | |
| RGT= 32/90 | 5 | 41 | 1310,2 | 4475 | 1127,6 | 2,17 | 7,40 | 1,87 | 604,6 | 3,26 | 32,29 | | | |
| liquid temp | 15 | 59 | 1976,5 | 6750 | 1701,0 | 2,86 | 9,76 | 2,46 | 691,9 | 3,63 | 49,64 | | | |
| Tliq= 55/131 | 20 | 68 | 2388,8 | 8158 | 2055,8 | 3,30 | 11,26 | 2,84 | 724,3 | 3,80 | 60,75 | | | |

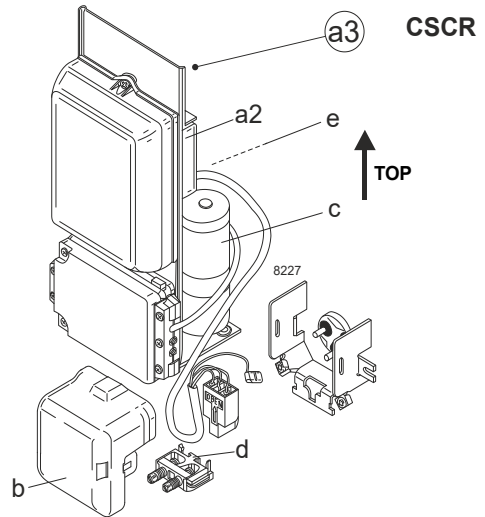
Model

| | | | | | |
|-------------|---------------|----------------------|---------|-------------|-----------------|
| Designation | SC18GH | 220-240V/50Hz | Conf. 2 | Sales code: | 104G8861 |
|-------------|---------------|----------------------|---------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | CSCR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R513A |
| Application | HBP |
| Voltage range | 198-254V |
| Starting torque | HST |
| Approvals | VDE |
| | UL |
| | CCC |

Electrical accessories / wiring diagram

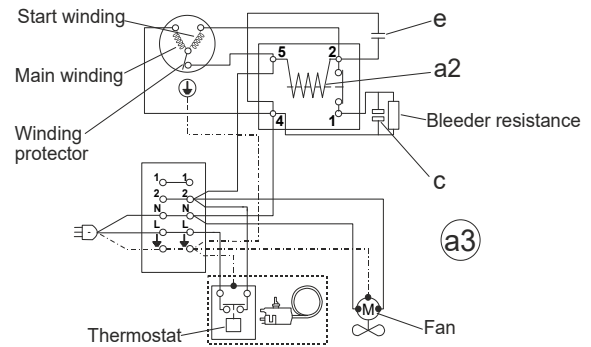


Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 43°C / 50 - 110°F

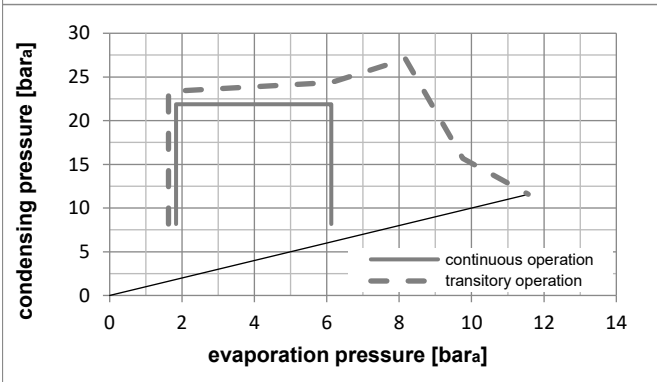
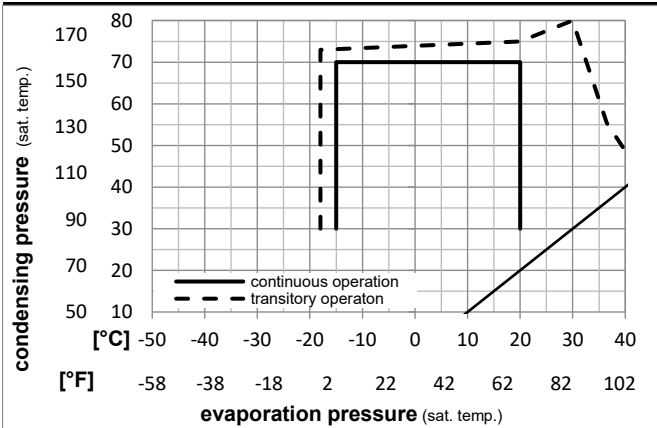
Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s



Operation Limits

Operation pressure range



Components

| | | |
|----|------------------------|----------|
| a3 | SC starter kit (550mm) | 117-7039 |
| b | plastic cover | 103N2008 |
| d | cord relief | 103N1004 |

Alternative components

| | | |
|----|-------------------------|----------|
| a3 | SC starter kit (1000mm) | 117-7043 |
|----|-------------------------|----------|

Model

| | | | | | |
|-------------|---------------|----------------------|----------------|-------------|-----------------|
| Designation | SC18GH | 220-240V/50Hz | Conf. 2 | Sales code: | 104G8861 |
|-------------|---------------|----------------------|----------------|-------------|-----------------|

Optimization + standard conditions

R513A, 220V/50Hz, CSCR, fan 3m/s, VDE, UL, CCC

| | | 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] | [°F] | | | | | | | | | | | | | | |
| | | 7,2 | 54 | 35 | 46 | 1645,0 | 5618 | 1415,7 | 2,53 | 8,63 | 2,17 | 651,3 | 3,44 | 40,86 | ASHRAE HBP |
| | | 45 | 130 | 95 | 115 | | | | | | | | | | |
| | | 5 | 55 | 32 | 55 | 1327,3 | 4533 | 1142,3 | 2,09 | 7,15 | 1,80 | 633,9 | 3,37 | 37,30 | cecomaf HBP |
| | | 41 | 131 | 90 | 131 | | | | | | | | | | |
| | | 5 | 50 | 20 | 50 | 1382,8 | 4722 | 1190,0 | 2,28 | 7,77 | 1,96 | 607,7 | 3,26 | 39,65 | EN12900 HBP |
| | | 41 | 122 | 68 | 122 | | | | | | | | | | |
| | | -7 | 54 | 35 | 46 | 885,4 | 3024 | 762,0 | 1,72 | 5,88 | 1,48 | 514,5 | 2,88 | 21,69 | ASHRAE MBP |
| | | 20 | 130 | 95 | 115 | | | | | | | | | | |
| | | -10 | 55 | 32 | 55 | 664,3 | 2269 | 571,7 | 1,38 | 4,70 | 1,18 | 482,8 | 2,75 | 18,37 | cecomaf MBP |
| | | 14 | 131 | 90 | 131 | | | | | | | | | | |
| | | -10 | 45 | 20 | 45 | 782,0 | 2671 | 673,0 | 1,69 | 5,79 | 1,46 | 461,4 | 2,66 | 20,73 | EN12900 MBP |
| | | 14 | 113 | 68 | 113 | | | | | | | | | | |

Performance tables

R513A, 220V/50Hz, CSCR, fan 3m/s, VDE, UL, CCC

| | 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] | -15 | 5 | 635,5 | 2170 | 546,9 | 1,53 | 5,21 | 1,31 | 416,5 | 2,47 | 15,57 | |
| cond. pressure | -10 | 14 | 817,8 | 2793 | 703,8 | 1,77 | 6,05 | 1,53 | 461,4 | 2,66 | 20,11 | |
| pc= 45/113 | -5 | 23 | 1034,2 | 3532 | 890,0 | 2,04 | 6,98 | 1,76 | 506,0 | 2,84 | 25,53 | |
| return gas temp. | 0 | 32 | 1289,0 | 4402 | 1109,3 | 2,35 | 8,03 | 2,02 | 548,0 | 3,01 | 31,97 | |
| RGT= 32/90 | 5 | 41 | 1586,4 | 5418 | 1365,3 | 2,71 | 9,26 | 2,33 | 585,2 | 3,17 | 39,57 | |
| liquid temp | 15 | 59 | 2326,1 | 7944 | 2001,9 | 3,66 | 12,49 | 3,15 | 636,0 | 3,37 | 58,85 | |
| Tliq= 45/113 | 20 | 68 | 2776,9 | 9484 | 2389,9 | 4,30 | 14,70 | 3,70 | 645,2 | 3,41 | 70,90 | |
| [°C / °F] | -15 | 5 | 509,9 | 1741 | 438,8 | 1,17 | 4,00 | 1,01 | 435,3 | 2,55 | 14,05 | |
| cond. pressure | -10 | 14 | 664,3 | 2269 | 571,7 | 1,38 | 4,70 | 1,18 | 482,8 | 2,75 | 18,37 | |
| pc= 55/131 | -5 | 23 | 849,2 | 2900 | 730,8 | 1,59 | 5,44 | 1,37 | 533,3 | 2,95 | 23,59 | |
| return gas temp | 0 | 32 | 1068,7 | 3650 | 919,8 | 1,83 | 6,25 | 1,57 | 584,4 | 3,16 | 29,85 | |
| RGT= 32/90 | 5 | 41 | 1327,3 | 4533 | 1142,3 | 2,09 | 7,15 | 1,80 | 633,9 | 3,37 | 37,30 | |
| liquid temp | 15 | 59 | 1978,3 | 6756 | 1702,5 | 2,75 | 9,39 | 2,37 | 719,1 | 3,72 | 56,50 | |
| Tliq= 55/131 | 20 | 68 | 2379,3 | 8126 | 2047,6 | 3,17 | 10,83 | 2,73 | 750,3 | 3,84 | 68,65 | |

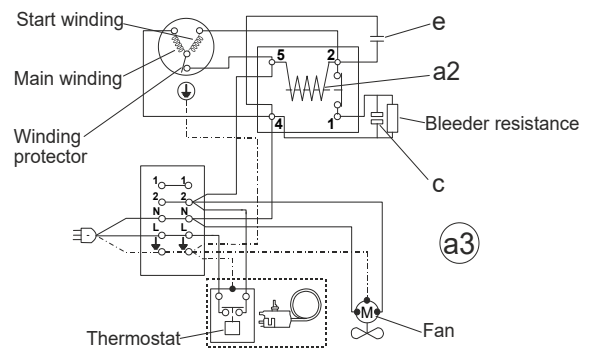
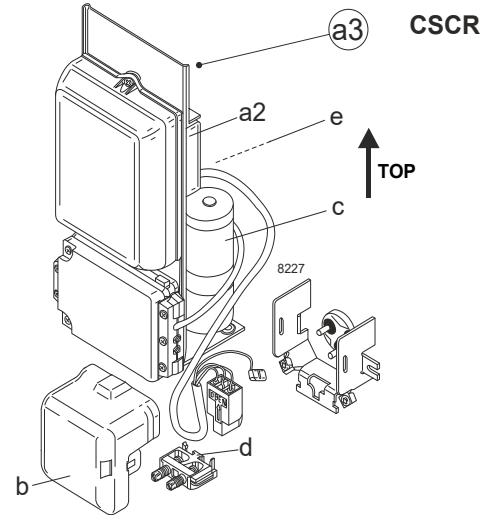
Model

| | | | | | |
|-------------|---------------|----------------------|----------------|-------------|-----------------|
| Designation | SC18GH | 208-230V/60Hz | Conf. 3 | Sales code: | 104G8861 |
|-------------|---------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | CSCR |
| Power supply (nominal) | 208-230V/60Hz 1~ |
| Refrigerant | R134a |
| Application | HBP |
| Voltage range | 198-254V |
| Starting torque | HST |
| Approvals | VDE |
| | UL |
| | CCC |
| | KC |

Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

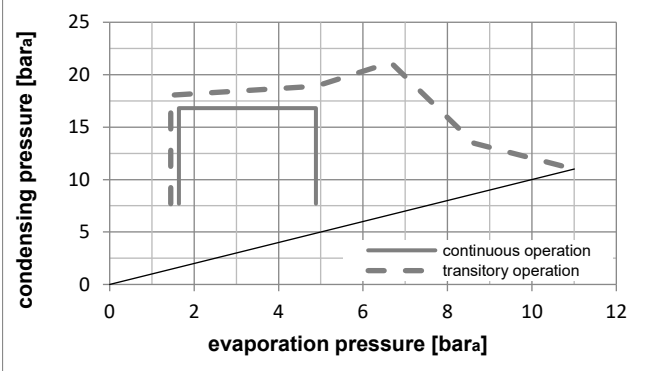
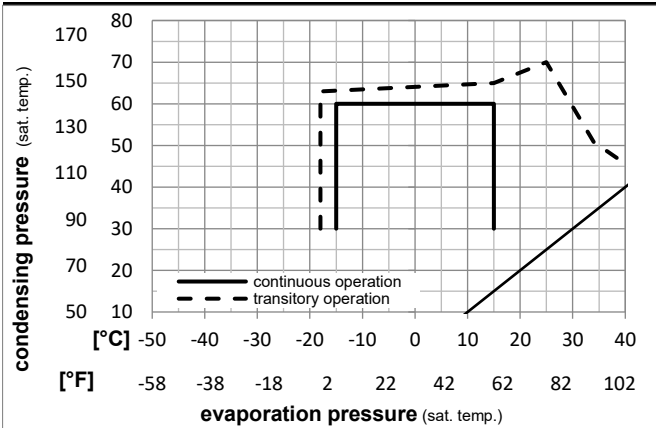
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s

Operation Limits

Operation pressure range



Components

| | | |
|----|------------------------|----------|
| a3 | SC starter kit (550mm) | 117-7039 |
| b | plastic cover | 103N2008 |
| d | cord relief | 103N1004 |

Alternative components

| | | |
|----|-------------------------|----------|
| a3 | SC starter kit (1000mm) | 117-7043 |
|----|-------------------------|----------|

Model

Designation **SC18GH** **208-230V/60Hz** Conf. 3 Sales code: **104G8861**

Optimization + standard conditions

R134a, 230V/60Hz, CSCR, fan 3m/s, VDE, UL, CCC, KC

| | | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | | | | Power consumption | | | | | | | | | |
|------|-----|---|------|-----|--------|------------------|----------|-------|----------|-----------|-------|---------------------|--------|-------------|----------------|----------|-----------|-----|-----|--------|--|
| | | Condensing pressure (saturation temperature) | | | | COP | | | | | | Current consumption | | | Ref. mass flow | | | | | | |
| | | Return gas temp. | | | | EER | | | | | | P1 | | | I | m | | | | | |
| | | Liquid temp. | | | | [W] | | | | | | [A] | | | [kg/h] | | | | | | |
| | | [W] | | | | [Btu/h] | | | | | | [kcal/h] | | | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| pe | pc | RGT | Tliq | | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | | | | | | | | |
| [°C] | 7,2 | 54 | 35 | 46 | 1839,2 | 6281 | 1582,9 | 2,51 | 8,57 | 2,16 | 733,1 | 3,47 | 40,80 | ASHRAE HBP | | | | | | | |
| [°F] | 45 | 130 | 95 | 115 | | | | | | | | | | | | | | | | | |
| [°C] | 5 | 55 | 32 | 55 | 1506,3 | 5144 | 1296,4 | 2,13 | 7,27 | 1,83 | 708,0 | 3,35 | 37,12 | cecomaf HBP | | | | | | | |
| [°F] | 41 | 131 | 90 | 131 | | | | | | | | | | | | | | | | | |
| [°C] | 5 | 50 | 20 | 50 | 1570,6 | 5364 | 1351,7 | 2,29 | 7,83 | 1,97 | 684,6 | 3,26 | 39,58 | EN12900 HBP | | | | | | | |
| [°F] | 41 | 122 | 68 | 122 | | | | | | | | | | | | | | | | | |
| [°C] | -7 | 54 | 35 | 46 | 977,1 | 3337 | 840,9 | 1,77 | 6,03 | 1,52 | 553,6 | 2,65 | 21,32 | ASHRAE MBP | | | | | | | |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 744,9 | 2544 | 641,0 | 1,46 | 4,97 | 1,25 | 511,5 | 2,45 | 18,01 | cecomaf MBP | | | | | | | |
| [°F] | 14 | 131 | 90 | 131 | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 872,3 | 2979 | 750,7 | 1,76 | 6,00 | 1,51 | 496,2 | 2,42 | 20,42 | EN12900 MBP | | | | | | | |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | | | | | | | | |

Performance tables

R134a, 230V/60Hz, CSCR, fan 3m/s, VDE, 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] | -15 | 5 | 702,5 | 2399 | 604,6 | 1,60 | 5,46 | 1,38 | 439,1 | 2,18 | 15,31 | | | |
| cond. pressure | -10 | 14 | 904,9 | 3091 | 778,8 | 1,82 | 6,23 | 1,57 | 496,2 | 2,42 | 19,80 | | | |
| pc= 45/113 | -5 | 23 | 1148,0 | 3920 | 987,9 | 2,07 | 7,08 | 1,78 | 553,5 | 2,66 | 25,24 | | | |
| return gas temp. | 0 | 32 | 1436,7 | 4906 | 1236,4 | 2,36 | 8,06 | 2,03 | 609,1 | 2,90 | 31,77 | | | |
| RGT= 32/90 | 5 | 41 | 1776,1 | 6066 | 1528,5 | 2,69 | 9,18 | 2,31 | 660,6 | 3,13 | 39,54 | | | |
| liquid temp | 10 | 50 | 2171,3 | 7416 | 1868,7 | 3,08 | 10,50 | 2,65 | 705,9 | 3,37 | 48,72 | | | |
| Tliq= 45/113 | 15 | 59 | 2627,4 | 8973 | 2261,2 | 3,54 | 12,08 | 3,04 | 742,9 | 3,60 | 59,51 | | | |
| [°C / °F] | -15 | 5 | 572,5 | 1955 | 492,7 | 1,27 | 4,35 | 1,10 | 449,5 | 2,14 | 13,78 | | | |
| cond. pressure | -10 | 14 | 744,9 | 2544 | 641,0 | 1,46 | 4,97 | 1,25 | 511,5 | 2,45 | 18,01 | | | |
| pc= 55/131 | -5 | 23 | 954,6 | 3260 | 821,5 | 1,66 | 5,65 | 1,42 | 576,7 | 2,75 | 23,20 | | | |
| return gas temp | 0 | 32 | 1206,7 | 4121 | 1038,5 | 1,88 | 6,41 | 1,62 | 642,9 | 3,05 | 29,52 | | | |
| RGT= 32/90 | 5 | 41 | 1506,3 | 5144 | 1296,4 | 2,13 | 7,27 | 1,83 | 708,0 | 3,35 | 37,12 | | | |
| liquid temp | 10 | 50 | 1858,5 | 6347 | 1599,4 | 2,41 | 8,24 | 2,08 | 769,8 | 3,65 | 46,20 | | | |
| Tliq= 55/131 | 15 | 59 | 2268,2 | 7746 | 1952,0 | 2,75 | 9,38 | 2,36 | 826,2 | 3,94 | 56,97 | | | |

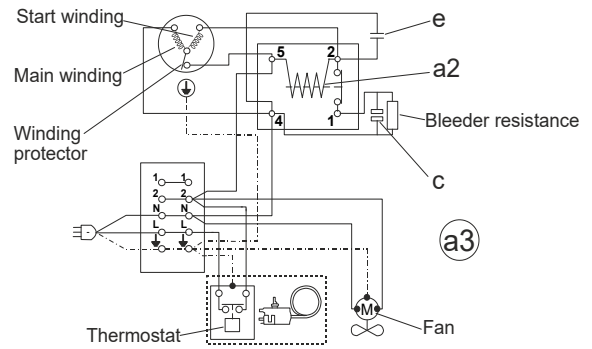
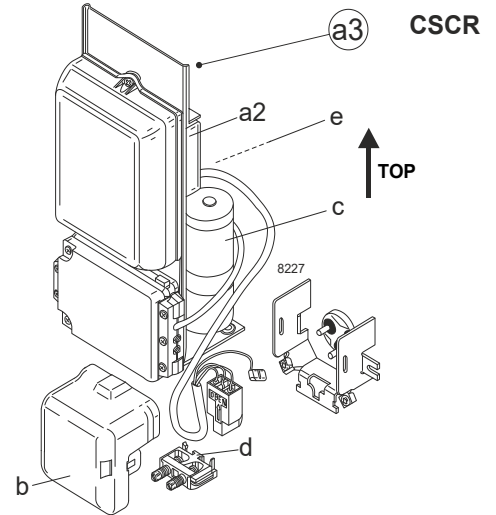
Model

| | | | | | |
|-------------|---------------|----------------------|----------------|-------------|-----------------|
| Designation | SC18GH | 208-230V/60Hz | Conf. 4 | Sales code: | 104G8861 |
|-------------|---------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | CSCR |
| Power supply (nominal) | 208-230V/60Hz 1~ |
| Refrigerant | R513A |
| Application | HBP |
| Voltage range | 198-254V |
| Starting torque | HST |
| Approvals | VDE |
| | UL |
| | CCC |

Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

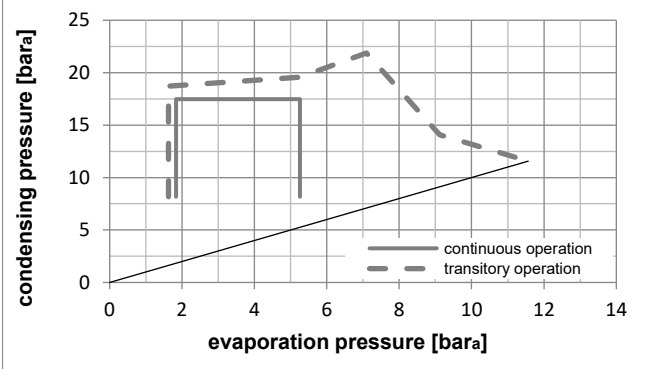
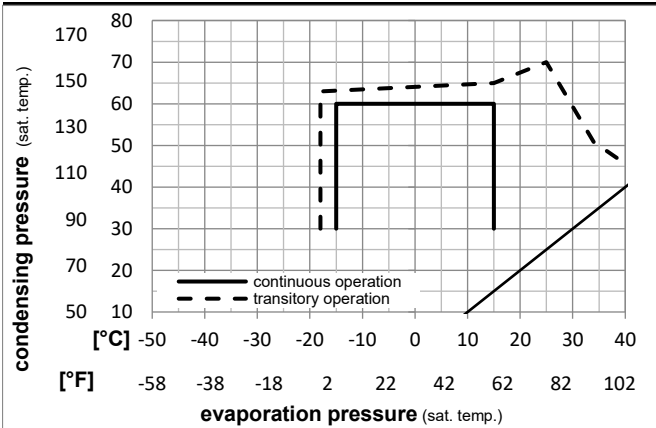
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s

Operation Limits

Operation pressure range



Components

| | | |
|----|------------------------|----------|
| a3 | SC starter kit (550mm) | 117-7039 |
| b | plastic cover | 103N2008 |
| d | cord relief | 103N1004 |

Alternative components

| | | |
|----|-------------------------|----------|
| a3 | SC starter kit (1000mm) | 117-7043 |
|----|-------------------------|----------|

Model

| | | | | | |
|-------------|---------------|----------------------|----------------|-------------|-----------------|
| Designation | SC18GH | 208-230V/60Hz | Conf. 4 | Sales code: | 104G8861 |
|-------------|---------------|----------------------|----------------|-------------|-----------------|

Optimization + standard conditions

R513A, 230V/60Hz, CSCR, fan 3m/s, VDE, UL, CCC

| | | 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] | [°F] | [°C] | [°F] | [°C] | [°F] | | | | | | | | | | | | |
| 7,2 | 45 | 54 | 130 | 35 | 95 | 46 | 115 | 1892,4 | 6463 | 1628,6 | 2,47 | 8,44 | 2,13 | 765,7 | 3,65 | 47,01 | ASHRAE HBP |
| 5 | 41 | 55 | 131 | 32 | 90 | 55 | 131 | 1527,2 | 5216 | 1314,3 | 2,06 | 7,04 | 1,77 | 741,0 | 3,53 | 42,92 | cecomaf HBP |
| 5 | 41 | 50 | 122 | 20 | 68 | 50 | 122 | 1595,1 | 5448 | 1372,8 | 2,23 | 7,60 | 1,92 | 716,3 | 3,41 | 45,74 | EN12900 HBP |
| -7 | 20 | 54 | 130 | 35 | 95 | 46 | 115 | 1027,5 | 3509 | 884,3 | 1,75 | 5,98 | 1,51 | 586,5 | 2,79 | 25,17 | ASHRAE MBP |
| -10 | 14 | 55 | 131 | 32 | 90 | 55 | 131 | 774,5 | 2645 | 666,6 | 1,42 | 4,86 | 1,22 | 544,3 | 2,59 | 21,42 | cecomaf MBP |
| -10 | 14 | 45 | 113 | 20 | 68 | 45 | 113 | 913,0 | 3118 | 785,8 | 1,73 | 5,92 | 1,49 | 526,6 | 2,50 | 24,20 | EN12900 MBP |

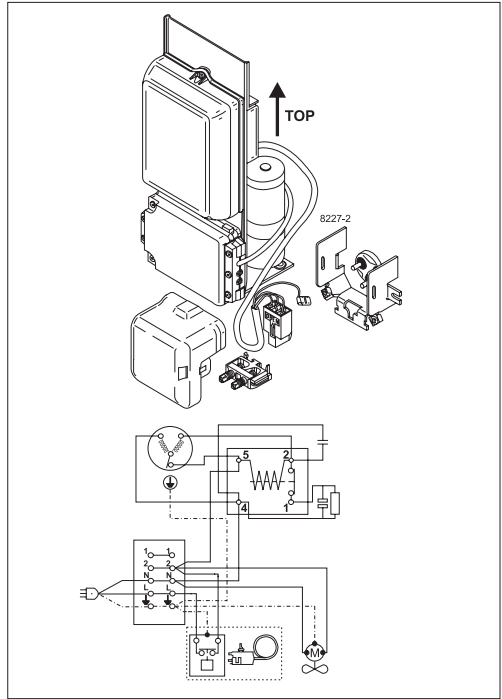
Performance tables

R513A, 230V/60Hz, CSCR, fan 3m/s, VDE, UL, CCC

| | 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] | -15 | 5 | 748,7 | 2557 | 644,4 | 1,60 | 5,45 | 1,37 | 469,2 | 2,23 | 18,35 | |
| cond. pressure | -10 | 14 | 954,7 | 3261 | 821,7 | 1,81 | 6,19 | 1,56 | 526,6 | 2,50 | 23,47 | |
| pc= 45/113 | -5 | 23 | 1200,7 | 4100 | 1033,3 | 2,06 | 7,02 | 1,77 | 584,2 | 2,78 | 29,64 | |
| return gas temp. | 0 | 32 | 1491,2 | 5093 | 1283,3 | 2,33 | 7,96 | 2,01 | 639,7 | 3,05 | 36,99 | |
| RGT= 32/90 | 5 | 41 | 1831,1 | 6253 | 1575,8 | 2,65 | 9,05 | 2,28 | 690,9 | 3,29 | 45,67 | |
| liquid temp | 10 | 50 | 2225,0 | 7599 | 1914,8 | 3,03 | 10,33 | 2,60 | 735,4 | 3,50 | 55,86 | |
| Tliq= 45/113 | 15 | 59 | 2677,6 | 9144 | 2304,4 | 3,47 | 11,86 | 2,99 | 771,1 | 3,68 | 67,75 | |
| [°C / °F] | -15 | 5 | 602,0 | 2056 | 518,1 | 1,25 | 4,27 | 1,08 | 482,0 | 2,29 | 16,58 | |
| cond. pressure | -10 | 14 | 774,5 | 2645 | 666,6 | 1,42 | 4,86 | 1,22 | 544,3 | 2,59 | 21,42 | |
| pc= 55/131 | -5 | 23 | 983,1 | 3357 | 846,0 | 1,61 | 5,51 | 1,39 | 609,8 | 2,90 | 27,31 | |
| return gas temp | 0 | 32 | 1232,4 | 4209 | 1060,6 | 1,82 | 6,23 | 1,57 | 676,1 | 3,22 | 34,42 | |
| RGT= 32/90 | 5 | 41 | 1527,2 | 5216 | 1314,3 | 2,06 | 7,04 | 1,77 | 741,0 | 3,53 | 42,92 | |
| liquid temp | 10 | 50 | 1872,2 | 6394 | 1611,3 | 2,33 | 7,97 | 2,01 | 802,3 | 3,83 | 53,00 | |
| Tliq= 55/131 | 15 | 59 | 2272,2 | 7760 | 1955,5 | 2,65 | 9,05 | 2,28 | 857,7 | 4,09 | 64,89 | |



SC Compressors





SC Compressors

Service/Repair – R290



8545



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