

Single Pack KLE4.0GFTX 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4758**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor KLE4.0GFTX | 106G5403 | 1 |
| 2 | Starting capacitor (80 μ F 220V, 6.3mm) | 117U5001 | 1 |
| 3 | Starting relay (QLZ-4.6A, overload protector T1189/L6) | 117U7073 | 1 |
| 4 | KL accessories | 103N1060 | 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 | KLE4.0GFTX | 220-240V/50Hz 1~ 208-230V/60Hz 1~ | Sales code: | 106G5403 |
|-------------|-------------------|-----------------------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|--|-----------------------|------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R134a, R513A |
| Oil viscosity | 19,2cSt | Displacement | 4cm ³ / 0,24cu.in |
| Oil quantity | 240cm ³ / 8,1fl.oz | Compressors on pallet | 100 |
| Refr. charge - tech. limit | 250g / 8,8oz | | |
| Free gas volume comp. | 1560cm ³ / 52,7fl.oz | | |
| Weight | 8,9kg / 19,6lbs | | |
| Motor protection | external | | |
| Winding resistance main | 13,1Ω (at 25°C) | | |
| Winding resistance aux | 25,3Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |
| Additional note | Good robustness against liquid intake. Ice-cube maker optimization - indirect suction intake. | | |



General - Configurations with KLE4.0GFTX

| | Conf. 1 | Conf. 2 |
|------------------------|--------------------------|--------------------------|
| Motorconfiguration | CSIR | CSIR |
| Power supply (nominal) | 220-240V/50Hz | 208-230V/60Hz |
| Number of phases | 1 | 1 |
| Voltage range | 187-254V | 198-253V |
| Approvals | VDE, (UL,CB) in progress | VDE, (UL,CB) in progress |
| Starting torque | HST | HST |
| Note | - / - | |

Applications with KLE4.0GFTX

| | Conf. 1 | Conf. 2 |
|-------------------------|----------------|----------------|
| Refrigerant | R134a | R134a |
| Application | LBP+MBP+HBP | LBP+MBP |
| System cooling | static | static |
| Hot gas defrost | OK | OK |
| Long interval pull down | OK | OK |

Electrical data - Configurations with KLE4.0GFTX

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

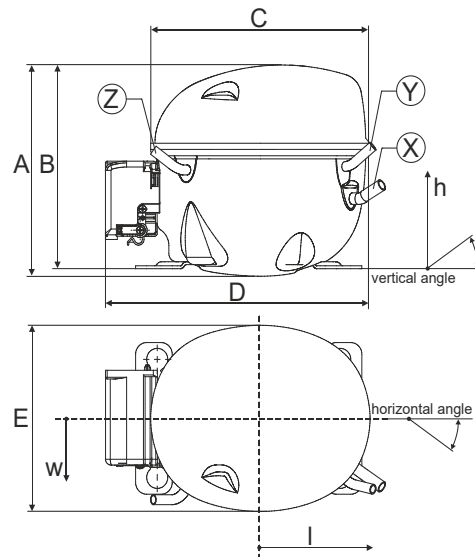
Model

| | | | | |
|-------------|-------------------|-----------------------------------|-------------|-----------------|
| Designation | KLE4.0GFTX | 220-240V/50Hz 1~ 208-230V/60Hz 1~ | Sales code: | 106G5403 |
|-------------|-------------------|-----------------------------------|-------------|-----------------|

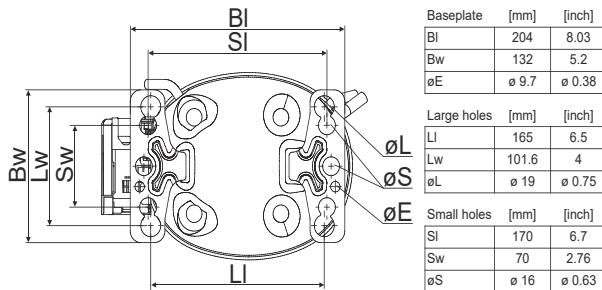
Compressor dimensions

| | | |
|----------------|-------------------|----------------|
| Housing | A Height | 182mm / 7,17in |
| | B Height | 175mm / 6,89in |
| | C Length shell | 198mm / 7,8in |
| | D Length w. cover | 238mm / 9,37in |
| | E Width | 160mm / 6,3in |

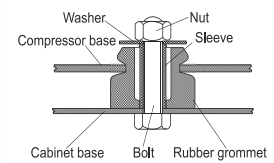
| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|-------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 6,16-6,24 | øi 5,1-5,2 | øi 6,11-6,29 |
| (i:inside, o:outside) | [in] | øi 0,24-0,25 | øi 0,2-0,2 | øi 0,24-0,25 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 35° | 13° | 0° |
| Vertical angle | ±2° | 30° | 40° | 145° |
| Position l/h/w | [mm] | 119/73/59 | 117/107/66 | -88/101/71 |
| | [in] | 4,7/2,9/2,3 | 4,6/4,2/2,6 | -3,5/4/2,8 |
| Straight tube l. | [mm] | 14 | 14 | 14 |
| | [in] | 0,5 | 0,5 | 0,5 |



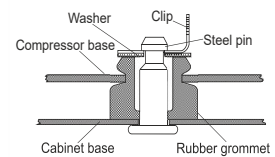
Compressor fixation



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

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

Suctiongas connector and Process connector can be switched (minor loss of cooling capacity)

Model

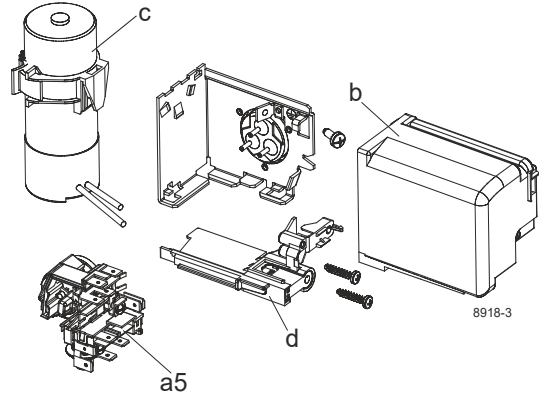
| | | | | | |
|-------------|-------------------|----------------------|---------|-------------|-----------------|
| Designation | KLE4.0GFTX | 220-240V/50Hz | Conf. 1 | Sales code: | 106G5403 |
|-------------|-------------------|----------------------|---------|-------------|-----------------|

Configuration

| | |
|------------------------|----------------------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R134a |
| Application | LBP+MBP+HBP |
| Voltage range | 187-254V |
| Starting torque | HST |
| Approvals | VDE (UL,CB) in progress |

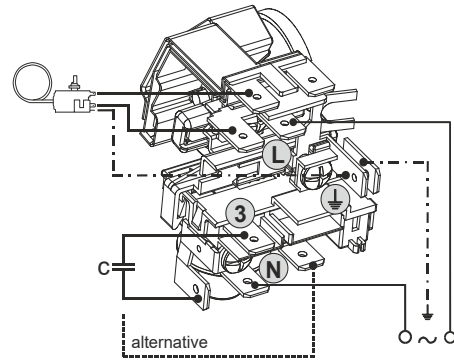
Electrical accessories / wiring diagram

CSIR

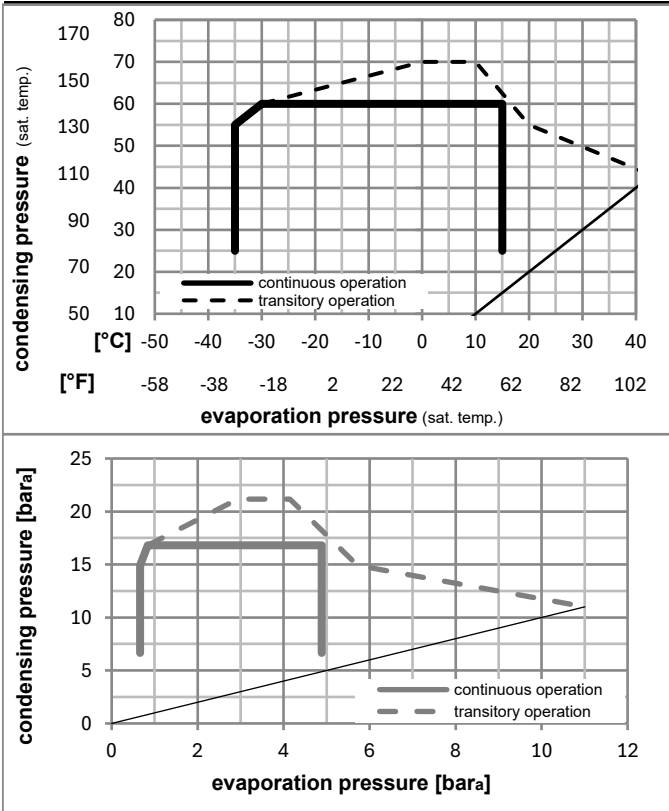


Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| Ambient temperature range: | 10 - 43°C / 50 - 110°F |
| Machine room temperature range: | 10 - 48°C / 50 - 119°F |
| Compressor cooling: | static |



Operation pressure range



Components

| | | |
|------|------------------------------------|----------|
| a5 | current relay (T1189/L6-S3) | 117U7073 |
| c | start capacitor (80µF, 6.3mm) | 117U5001 |
| b, d | cover + clamp + screws(5VA) in bag | 103N1060 |

Alternative components

| | | |
|------|------------------------------------|----------|
| b, d | 100x cover + clamp + screws(5VA) | 103N2060 |
| b, d | cover + clamp + screws(5VA-compl.) | 103N0600 |

Model

Designation **KLE4.0GFTX** **220-240V/50Hz** Conf. 1 Sales code: **106G5403**

Optimization + standard conditions

R134a, 220V/50Hz, CSIR, static, VDE, (UL,CB) in progress

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Power consumption | | ASHRAE | |
|--|---|------|------|------|------------------|---------|----------|-------|----------|-----------|-------------------|------|--------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | I | m | | |
| | [°C] | [°C] | [°C] | [°C] | | | | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| | -23 | 54 | 32 | 32 | 101,4 | 346 | 87,3 | 1,14 | 3,90 | 0,98 | 88,8 | 1,15 | 1,97 | ASHRAE LBP |
| | [°F] | | | | | | | | | | | | | |
| | -10 | 130 | 90 | 90 | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 221,7 | 757 | 190,8 | 1,77 | 6,03 | 1,52 | 125,5 | 1,23 | 4,84 | ASHRAE MBP |
| | [°F] | | | | | | | | | | | | | |
| | 20 | 130 | 95 | 115 | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | 7,2 | 54 | 35 | 46 | 398,3 | 1360 | 342,8 | 2,58 | 8,81 | 2,22 | 154,4 | 1,31 | 8,84 | ASHRAE HBP |
| | [°F] | | | | | | | | | | | | | |
| | 45 | 130 | 95 | 115 | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 46,0 | 157 | 39,6 | 0,72 | 2,47 | 0,62 | 63,5 | 1,10 | 1,01 | EN12900 LBP |
| | [°F] | | | | | | | | | | | | | |
| | -31 | 104 | 68 | 104 | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 191,3 | 653 | 164,6 | 1,74 | 5,93 | 1,49 | 110,1 | 1,20 | 4,48 | EN12900 MBP |
| | [°F] | | | | | | | | | | | | | |
| | 14 | 113 | 68 | 113 | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | 5 | 50 | 20 | 50 | 339,4 | 1159 | 292,1 | 2,36 | 8,07 | 2,03 | 143,6 | 1,28 | 8,55 | EN12900 HBP |
| | [°F] | | | | | | | | | | | | | |
| | 41 | 122 | 68 | 122 | | | | | | | | | | |
| | | | | | | | | | | | | | | |

Performance tables

R134a, 220V/50Hz, CSIR, static, VDE, (UL,CB) in progress

| | pe | | Cooling capacity | | | COP | EER | P1 | I | m | |
|------------------|------|------|------------------|---------|----------|------|-------|------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | | | | | |
| [°C / °F] | -35 | -31 | 43,4 | 148 | 37,4 | 0,69 | 2,34 | 0,59 | 63,3 | 1,10 | 0,94 |
| cond. pressure | -25 | -13 | 86,8 | 296 | 74,7 | 1,05 | 3,57 | 0,90 | 82,9 | 1,14 | 1,88 |
| pc= 45/113 | -15 | 5 | 154,2 | 527 | 132,7 | 1,52 | 5,20 | 1,31 | 101,2 | 1,18 | 3,36 |
| return gas temp. | -10 | 14 | 198,5 | 678 | 170,8 | 1,80 | 6,15 | 1,55 | 110,1 | 1,20 | 4,34 |
| RGT= 32/90 | 0 | 32 | 310,9 | 1062 | 267,6 | 2,43 | 8,31 | 2,09 | 127,7 | 1,24 | 6,88 |
| liquid temp | 5 | 41 | 380,4 | 1299 | 327,4 | 2,78 | 9,51 | 2,40 | 136,6 | 1,26 | 8,47 |
| Tliq= 45/113 | 15 | 59 | 548,6 | 1874 | 472,1 | 3,54 | 12,09 | 3,05 | 154,9 | 1,31 | 12,43 |
| [°C / °F] | -35 | -31 | 35,4 | 121 | 30,5 | 0,59 | 2,01 | 0,51 | 60,0 | 1,10 | 0,84 |
| cond. pressure | -25 | -13 | 73,8 | 252 | 63,5 | 0,87 | 2,97 | 0,75 | 84,9 | 1,15 | 1,76 |
| pc= 55/131 | -15 | 5 | 132,4 | 452 | 114,0 | 1,23 | 4,19 | 1,06 | 107,8 | 1,19 | 3,19 |
| return gas temp | -10 | 14 | 170,8 | 583 | 147,0 | 1,44 | 4,91 | 1,24 | 118,8 | 1,22 | 4,13 |
| RGT= 32/90 | 0 | 32 | 268,7 | 918 | 231,3 | 1,92 | 6,55 | 1,65 | 140,0 | 1,27 | 6,57 |
| liquid temp | 5 | 41 | 329,4 | 1125 | 283,5 | 2,19 | 7,48 | 1,88 | 150,5 | 1,30 | 8,12 |
| Tliq= 55/131 | 15 | 59 | 477,3 | 1630 | 410,8 | 2,78 | 9,50 | 2,40 | 171,5 | 1,36 | 11,99 |

Model

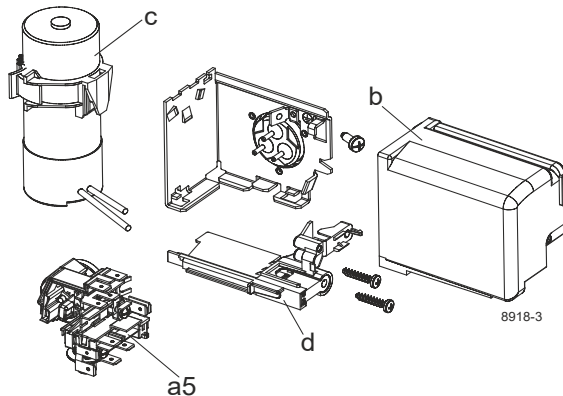
| | | | | | |
|-------------|-------------------|----------------------|----------------|-------------|-----------------|
| Designation | KLE4.0GFTX | 208-230V/60Hz | Conf. 2 | Sales code: | 106G5403 |
|-------------|-------------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|----------------------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 208-230V/60Hz 1~ |
| Refrigerant | R134a |
| Application | LBP+MBP |
| Voltage range | 198-253V |
| Starting torque | HST |
| Approvals | VDE (UL,CB) in progress |

Electrical accessories / wiring diagram

CSIR

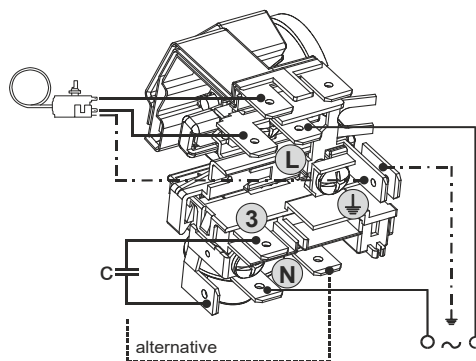


Ambient/ machine room temperatures minimum /maximum

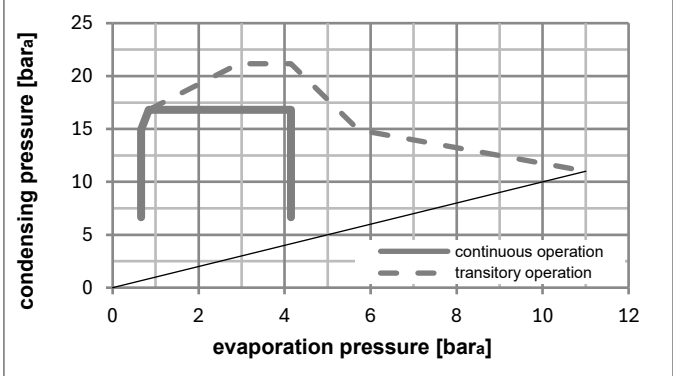
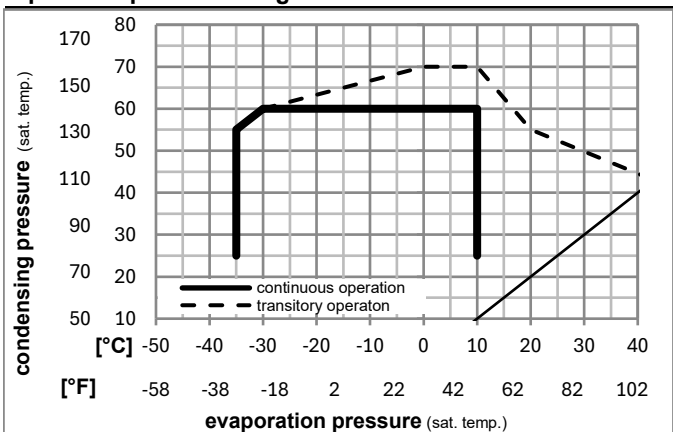
Ambient temperature range: 10 - 43°C / 50 - 110°F

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

Compressor cooling: static



Operation pressure range



Components

| | | |
|------|------------------------------------|----------|
| a5 | current relay (T1189/L6-S3) | 117U7073 |
| c | start capacitor (80µF, 6.3mm) | 117U5001 |
| b, d | cover + clamp + screws(5VA) in bag | 103N1060 |

Alternative components

| | | |
|------|------------------------------------|----------|
| b, d | 100x cover + clamp + screws(5VA) | 103N2060 |
| b, d | cover + clamp + screws(5VA-compl.) | 103N0600 |

Model

Designation **KLE4.0GFTX** **208-230V/60Hz** Conf. 2 Sales code: **106G5403**

Optimization + standard conditions

R134a, 230V/60Hz, CSIR, static, VDE, (UL,CB) in progress

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Return gas temp. | | | Liquid temp. | | | Cooling capacity | | | COP | EER | Power consumption | | | |
|------|---|-----|-----|------|--|---------|----------|------------------|----------|-----------|--------------|------|-------|------------------|-----|--------|-----|-----|-------------------|--|-------------|--|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | [W] | [A] | [kg/h] | | | | | | |
| [°C] | -23 | 54 | 32 | 32 | 122,9 | 420 | 105,8 | 1,20 | 4,10 | 1,03 | 102,4 | 1,10 | 2,39 | | | | | | | | ASHRAE LBP | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | | | | | | | | |
| [°C] | -7 | 54 | 35 | 46 | 261,5 | 893 | 225,1 | 1,81 | 6,20 | 1,56 | 144,1 | 1,19 | 5,71 | | | | | | | | ASHRAE MBP | |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | | | | | | | | | |
| [°C] | 7,2 | 54 | 35 | 46 | 465,1 | 1589 | 400,3 | 2,58 | 8,82 | 2,22 | 180,1 | 1,28 | 10,32 | | | | | | | | ASHRAE HBP | |
| [°F] | 45 | 130 | 95 | 115 | | | | | | | | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 55,1 | 188 | 47,4 | 0,76 | 2,59 | 0,65 | 72,7 | 1,06 | 1,21 | | | | | | | | EN12900 LBP | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 224,4 | 767 | 193,2 | 1,76 | 6,00 | 1,51 | 127,8 | 1,15 | 5,25 | | | | | | | | EN12900 MBP | |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | | | | | | | | | |
| [°C] | 5 | 50 | 20 | 50 | 395,7 | 1351 | 340,6 | 2,34 | 7,98 | 2,01 | 169,3 | 1,25 | 9,97 | | | | | | | | EN12900 HBP | |
| [°F] | 41 | 122 | 68 | 122 | | | | | | | | | | | | | | | | | | |

Performance tables

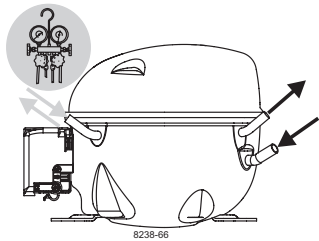
R134a, 230V/60Hz, CSIR, static, VDE, (UL,CB) in progress

| | 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 | 50,9 | 174 | 43,8 | 0,71 | 2,42 | 0,61 | 71,8 | 1,06 | 1,10 | |
| cond. pressure | -25 | -13 | 104,5 | 357 | 90,0 | 1,10 | 3,77 | 0,95 | 94,7 | 1,09 | 2,26 | |
| pc= 45/113 | -15 | 5 | 182,4 | 623 | 157,0 | 1,56 | 5,33 | 1,34 | 116,8 | 1,13 | 3,98 | |
| return gas temp. | -10 | 14 | 232,9 | 795 | 200,4 | 1,82 | 6,22 | 1,57 | 127,8 | 1,15 | 5,10 | |
| RGT= 32/90 | 0 | 32 | 361,9 | 1236 | 311,5 | 2,40 | 8,21 | 2,07 | 150,6 | 1,20 | 8,00 | |
| liquid temp | 5 | 41 | 442,5 | 1511 | 380,8 | 2,72 | 9,29 | 2,34 | 162,6 | 1,23 | 9,85 | |
| Tliq= 45/113 | 15 | 59 | 640,8 | 2188 | 551,5 | 3,40 | 11,60 | 2,92 | 188,7 | 1,30 | 14,51 | |
| [°C / °F] | -35 | -31 | 38,9 | 133 | 33,5 | 0,54 | 1,85 | 0,47 | 71,7 | 1,06 | 0,93 | |
| cond. pressure | -25 | -13 | 89,4 | 305 | 77,0 | 0,91 | 3,10 | 0,78 | 98,4 | 1,10 | 2,14 | |
| pc= 55/131 | -15 | 5 | 158,6 | 542 | 136,5 | 1,28 | 4,38 | 1,10 | 123,7 | 1,14 | 3,82 | |
| return gas temp | -10 | 14 | 202,7 | 692 | 174,5 | 1,49 | 5,08 | 1,28 | 136,2 | 1,17 | 4,90 | |
| RGT= 32/90 | 0 | 32 | 314,9 | 1075 | 271,0 | 1,95 | 6,66 | 1,68 | 161,6 | 1,23 | 7,70 | |
| liquid temp | 5 | 41 | 385,0 | 1315 | 331,3 | 2,20 | 7,53 | 1,90 | 174,7 | 1,26 | 9,49 | |
| Tliq= 55/131 | 15 | 59 | 558,0 | 1906 | 480,3 | 2,76 | 9,41 | 2,37 | 202,5 | 1,34 | 14,02 | |



KL Compressors

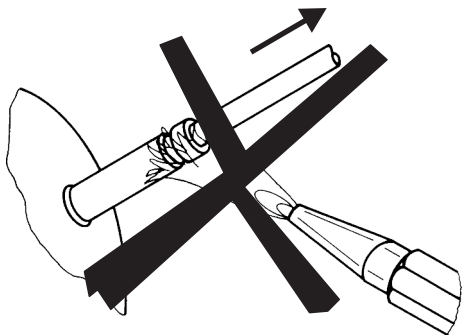




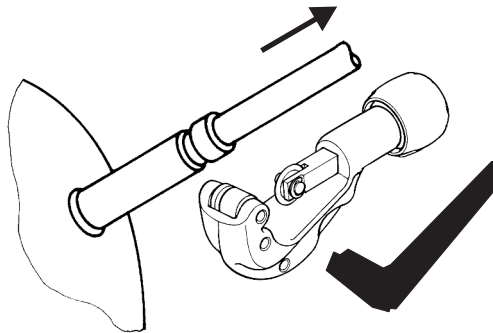
KL Compressors



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