

Single Pack TL4G 100-115V 50/60Hz RSIR

Single pack code number: **195B4451**

| Position | Title | Code | Amount |
|----------|--|----------|--------|
| 1 | Compressor TL4G | 102G3460 | 1 |
| 2 | PTC starting device (115V, 50hm, 6.3mm) | 103N0026 | 1 |
| 3 | Cord relief | 103N1010 | 1 |
| 4 | Cover | 103N2011 | 1 |
| 5 | Bolt joint for one compressor M6 ø16mm | 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 | TL4G | 100-115V/50Hz 1~ | 100-115V/60Hz 1~ | Sales code: | 102G3460 |
|-------------|-------------|------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|---------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R134a, R513A, 0 |
| Oil viscosity | 15cST | Displacement | 3,86cm ³ / 0,24cu.in |
| Oil quantity | 285cm ³ / 9,7fl.oz | Compressors on pallet | 125 |
| Refr. charge - tech. limit | 400g / 14,1oz | | |
| Free gas volume comp. | 1600cm ³ / 54,1fl.oz | | |
| Weight | 7,5kg / 16,5lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 3,2Ω (at 25°C) | | |
| Winding resistance aux | 3,4Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |



General - Configurations with TL4G

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 | Conf. 5 |
|------------------------|----------------|----------------|----------------|----------------|----------------|
| Motorconfiguration | CSIR | CSIR | RSIR | CSIR | CSIR |
| Power supply (nominal) | 100-115V/50Hz | 115V/60Hz | 100-115V/50Hz | 100-115V/50Hz | 115V/60Hz |
| Number of phases | 1 | 1 | 1 | 1 | 1 |
| Voltage range | 90-127V | 90-135V | 90-127V | 90-127V | 90-135V |
| Approvals | UL | UL | UL | UL | UL |
| Starting torque | HST | HST | LST | LST | LST |
| Note | - / - | | | | |

Applications with TL4G

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 | Conf. 5 |
|-------------------------|----------------|----------------|----------------|----------------|----------------|
| Refrigerant | R134a | R134a | R134a | R513A | R513A |
| Application | LBP+MBP+HBP | LBP+MBP+HBP | LBP+MBP+HBP | LBP+MBP+HBP | LBP+MBP+HBP |
| System cooling | static | static | static | static | static |
| Hot gas defrost | OK | OK | OK | OK | OK |
| Long interval pull down | OK | OK | OK | OK | OK |

Electrical data - Configurations with TL4G

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 | Conf. 5 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Starting device type | relay | relay | PTC | relay | relay |
| Run capacitor | - / - | - / - | - / - | - / - | - / - |
| Start capacitor | 240μF | 240μF | - / - | 240μF | 240μF |
| LRA (locked rotor amps / 4s/ U(N)) | 14,2A | | | | |
| RLA (rated load amps / 1s/ U(N)) | 2,5A | - / A | - / A | - / A | - / A |
| Cut in current (U(N)) | 22,6A | | | | |

Model

Designation

TL4G

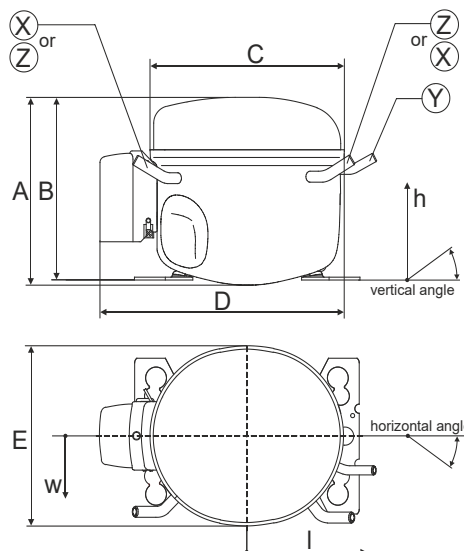
100-115V/50Hz 1~ 100-115V/60Hz 1~

Sales code:

102G3460

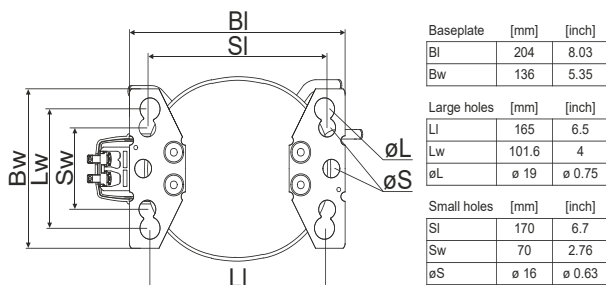
Compressor dimensions

| | | |
|----------------|-------------------|----------------|
| Housing | A Height | 174mm / 6,85in |
| | B Height | 168mm / 6,61in |
| | C Length shell | 176mm / 6,93in |
| | D Length w. cover | 222mm / 8,74in |
| | E Width | 156mm / 6,14in |



| Connectors | | Suction | Discharge | Process |
|------------------|----------------------------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 6,41-6,59 | øi 5,12-5,22 | øi 6,41-6,59 |
| | (i:inside, o:outside) [in] | øi 0,25-0,26 | øi 0,2-0,21 | øi 0,25-0,26 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 0° | 0° | 0° |
| Vertical angle | ±2° | 150° | 28° | 31,5° |
| Position l/h/w | [mm] | -102/105/66 | 117/108/30 | 95/105/71 |
| | [in] | -4/4,1/2,6 | 4,6/4,3/1,2 | 3,7/4,1/2,8 |
| 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 |

Application notes

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

Model

| | | | | | |
|-------------|-------------|----------------------|---------|-------------|-----------------|
| Designation | TL4G | 100-115V/50Hz | Conf. 1 | Sales code: | 102G3460 |
|-------------|-------------|----------------------|---------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 100-115V/50Hz 1~ |
| Refrigerant | R134a |
| Application | LBP+MBP+HBP |
| Voltage range | 90-127V |
| Starting torque | HST |
| Approvals | UL |

Electrical accessories / wiring diagram



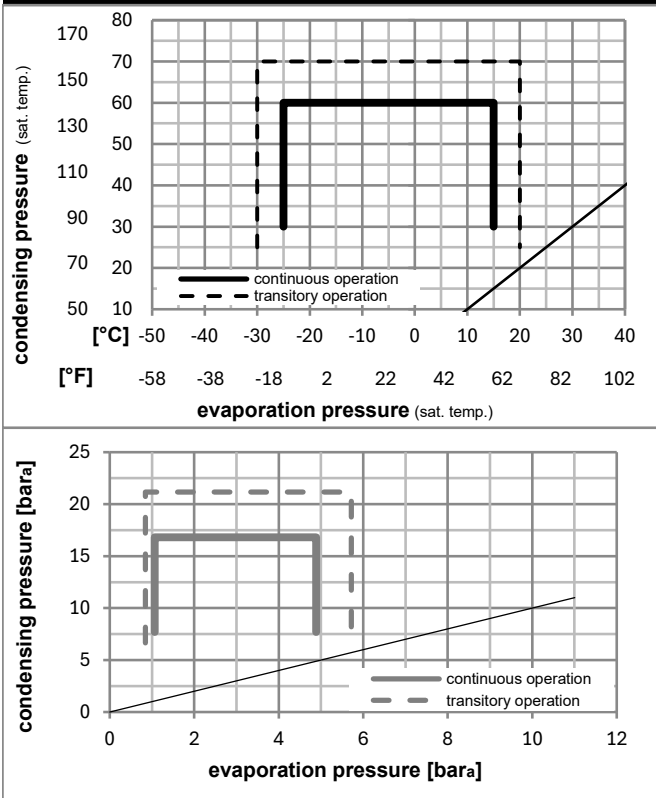
Ambient/ machine room temperatures minimum /maximum

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

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

Compressor cooling: static

Operation pressure range



Components

| | | |
|----|-------------------------|----------|
| a2 | assy. relay | 117U6003 |
| c | start capacitor (240µF) | 117U5023 |
| b | plastic cover | 103N2011 |
| d | cord relief | 103N1010 |

Model

| | | | | | |
|-------------|-------------|----------------------|----------------|-------------|-----------------|
| Designation | TL4G | 100-115V/50Hz | Conf. 1 | Sales code: | 102G3460 |
|-------------|-------------|----------------------|----------------|-------------|-----------------|

Optimization + standard conditions

R134a, 115V/50Hz, CSIR, static, UL

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Power consumption | | ASHRAE | |
|--|---|------|------|------|------------------|---------|----------|-------|----------|-----------|-------------------|------|--------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | I | m | | |
| | [°C] | [°F] | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| | -23 | 54 | 32 | 32 | 74,6 | 255 | 64,2 | 0,78 | 2,66 | 0,67 | 95,7 | 1,75 | 1,45 | ASHRAE LBP |
| | -10 | 130 | 90 | 90 | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 179,6 | 613 | 154,6 | 1,22 | 4,17 | 1,05 | 147,3 | 1,96 | 3,92 | ASHRAE MBP |
| | 20 | 130 | 95 | 115 | | | | | | | | | | |
| | 7,2 | 54 | 35 | 46 | 337,4 | 1152 | 290,4 | 1,71 | 5,85 | 1,47 | 197,0 | 2,41 | 7,49 | ASHRAE HBP |
| | 45 | 130 | 95 | 115 | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 28,3 | 97 | 24,4 | 0,35 | 1,20 | 0,30 | 80,7 | 1,68 | 0,62 | EN12900 LBP |
| | -31 | 104 | 68 | 104 | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 163,0 | 557 | 140,3 | 1,24 | 4,25 | 1,07 | 130,9 | 1,89 | 3,82 | EN12900 MBP |
| | 14 | 113 | 68 | 113 | | | | | | | | | | |
| | 5 | 50 | 20 | 50 | 288,8 | 986 | 248,6 | 1,57 | 5,38 | 1,35 | 183,5 | 2,29 | 7,28 | EN12900 HBP |
| | 41 | 122 | 68 | 122 | | | | | | | | | | |

Performance tables

R134a, 115V/50Hz, CSIR, static, UL

| | pe | | Cooling capacity | | | COP | EER | | P1 | I | m |
|------------------|------|------|------------------|---------|----------|------|----------|-----------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | [Btu/Wh] | [kcal/Wh] | | | |
| [°C / °F] | -25 | -13 | 68,1 | 233 | 58,6 | 0,73 | 2,48 | 0,62 | 93,9 | 1,75 | 1,48 |
| cond. pressure | -23 | -10 | 76,8 | 262 | 66,1 | 0,79 | 2,69 | 0,68 | 97,4 | 1,76 | 1,67 |
| pc= 45/113 | -9 | 15 | 173,9 | 594 | 149,6 | 1,31 | 4,48 | 1,13 | 132,5 | 1,90 | 3,81 |
| return gas temp. | -4 | 25 | 226,3 | 773 | 194,8 | 1,52 | 5,19 | 1,31 | 148,8 | 2,00 | 4,98 |
| RGT= 32/90 | 0 | 32 | 268,2 | 916 | 230,8 | 1,67 | 5,70 | 1,44 | 160,7 | 2,09 | 5,93 |
| liquid temp | 4,4 | 40 | 321,7 | 1099 | 276,8 | 1,84 | 6,30 | 1,59 | 174,5 | 2,22 | 7,16 |
| Tliq= 45/113 | 15 | 59 | 474,1 | 1619 | 408,0 | 2,29 | 7,82 | 1,97 | 207,1 | 2,68 | 10,74 |
| [°C / °F] | -25 | -13 | 53,7 | 183 | 46,2 | 0,59 | 2,01 | 0,51 | 91,1 | 1,73 | 1,28 |
| cond. pressure | -23 | -10 | 60,3 | 206 | 51,9 | 0,63 | 2,16 | 0,54 | 95,4 | 1,75 | 1,44 |
| pc= 55/131 | -9 | 15 | 140,2 | 479 | 120,6 | 1,02 | 3,47 | 0,87 | 137,9 | 1,91 | 3,39 |
| return gas temp | -4 | 25 | 185,8 | 635 | 159,9 | 1,18 | 4,03 | 1,02 | 157,3 | 2,03 | 4,52 |
| RGT= 32/90 | 0 | 32 | 222,9 | 761 | 191,9 | 1,30 | 4,45 | 1,12 | 171,2 | 2,14 | 5,45 |
| liquid temp | 4,4 | 40 | 271,0 | 925 | 233,2 | 1,45 | 4,94 | 1,24 | 187,5 | 2,30 | 6,67 |
| Tliq= 55/131 | 15 | 59 | 410,7 | 1403 | 353,5 | 1,82 | 6,21 | 1,56 | 225,9 | 2,84 | 10,32 |

Model

| | | | | | |
|-------------|-------------|------------------|----------------|-------------|-----------------|
| Designation | TL4G | 115V/60Hz | Conf. 2 | Sales code: | 102G3460 |
|-------------|-------------|------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|--------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 115V/60Hz 1~ |
| Refrigerant | R134a |
| Application | LBP+MBP+HBP |
| Voltage range | 90-135V |
| Starting torque | HST |
| Approvals | UL |

Electrical accessories / wiring diagram



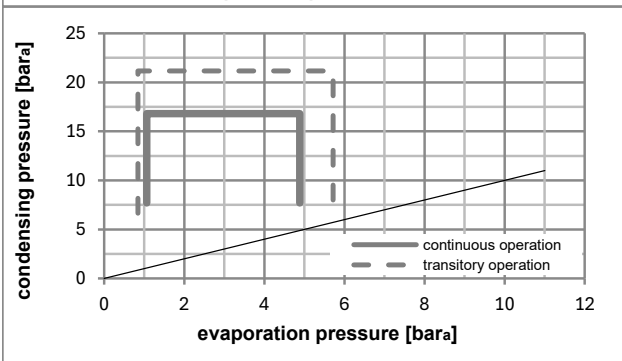
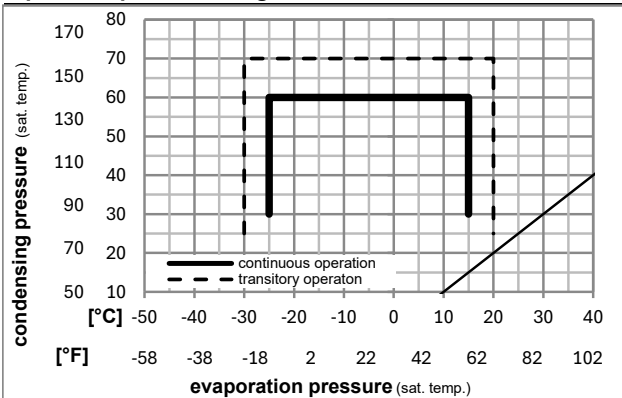
Ambient/ machine room temperatures minimum /maximum

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

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

Compressor cooling: static

Operation pressure range



Components

| | | |
|----|-------------------------|----------|
| a2 | assy. relay | 117U6003 |
| c | start capacitor (240μF) | 117U5023 |
| b | plastic cover | 103N2011 |
| d | cord relief | 103N1010 |

Model

| | | | | | |
|-------------|-------------|------------------|----------------|-------------|-----------------|
| Designation | TL4G | 115V/60Hz | Conf. 2 | Sales code: | 102G3460 |
|-------------|-------------|------------------|----------------|-------------|-----------------|

Optimization + standard conditions

R134a, 115V/60Hz, CSIR, static, UL

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | | | Power consumption | | | ASHRAE |
|--|---|------|------|------|------------------|---------|----------|------|-------|----------|-----------|-------------------|--------|-------------|--------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | |
| | [°C] | [°C] | [°C] | [°C] | | | | | | | [W] | [A] | [kg/h] | | |
| | -23 | 54 | 32 | 32 | 89,5 | 306 | 77,0 | 0,94 | 3,19 | 0,81 | 95,7 | 1,75 | 1,74 | ASHRAE LBP | |
| | [°F] | | | | | | | | | | | | | | |
| | -10 | 130 | 90 | 90 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 215,6 | 736 | 185,5 | 1,46 | 5,00 | 1,26 | 147,3 | 1,96 | 4,70 | ASHRAE MBP | |
| | [°F] | | | | | | | | | | | | | | |
| | 20 | 130 | 95 | 115 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | | |
| | 7,2 | 54 | 35 | 46 | 404,9 | 1383 | 348,5 | 2,06 | 7,02 | 1,77 | 197,0 | 2,41 | 8,98 | ASHRAE HBP | |
| | [°F] | | | | | | | | | | | | | | |
| | 45 | 130 | 95 | 115 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 34,0 | 116 | 29,2 | 0,42 | 1,44 | 0,36 | 80,7 | 1,68 | 0,75 | EN12900 LBP | |
| | [°F] | | | | | | | | | | | | | | |
| | -31 | 104 | 68 | 104 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 195,6 | 668 | 168,3 | 1,49 | 5,10 | 1,29 | 130,9 | 1,89 | 4,58 | EN12900 MBP | |
| | [°F] | | | | | | | | | | | | | | |
| | 14 | 113 | 68 | 113 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | | |
| | 5 | 50 | 20 | 50 | 346,6 | 1184 | 298,3 | 1,89 | 6,45 | 1,63 | 183,5 | 2,29 | 8,73 | EN12900 HBP | |
| | [°F] | | | | | | | | | | | | | | |
| | 41 | 122 | 68 | 122 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | | |

Performance tables

R134a, 115V/60Hz, CSIR, static, UL

| | pe | | Cooling capacity | | | COP | EER | | | P1 | I | m |
|------------------|------|------|------------------|---------|----------|------|-------|----------|-----------|------|-------|---|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | [W/W] | [Btu/Wh] | [kcal/Wh] | | | |
| [°C / °F] | -25 | -13 | 81,7 | 279 | 70,3 | 0,87 | 2,97 | 0,75 | 93,9 | 1,75 | 1,77 | |
| cond. pressure | -23 | -10 | 92,2 | 315 | 79,3 | 0,95 | 3,23 | 0,81 | 97,4 | 1,76 | 2,00 | |
| pc= 45/113 | -9 | 15 | 208,7 | 713 | 179,6 | 1,57 | 5,38 | 1,36 | 132,5 | 1,90 | 4,57 | |
| return gas temp. | -4 | 25 | 271,6 | 928 | 233,7 | 1,82 | 6,23 | 1,57 | 148,8 | 2,00 | 5,98 | |
| RGT= 32/90 | 0 | 32 | 321,9 | 1099 | 277,0 | 2,00 | 6,84 | 1,72 | 160,7 | 2,09 | 7,12 | |
| liquid temp | 4,4 | 40 | 386,0 | 1318 | 332,2 | 2,21 | 7,55 | 1,90 | 174,5 | 2,22 | 8,59 | |
| Tliq= 45/113 | 15 | 59 | 569,0 | 1943 | 489,7 | 2,75 | 9,38 | 2,36 | 207,1 | 2,68 | 12,89 | |
| [°C / °F] | -25 | -13 | 64,4 | 220 | 55,4 | 0,71 | 2,41 | 0,61 | 91,1 | 1,73 | 1,54 | |
| cond. pressure | -23 | -10 | 72,4 | 247 | 62,3 | 0,76 | 2,59 | 0,65 | 95,4 | 1,75 | 1,73 | |
| pc= 55/131 | -9 | 15 | 168,2 | 574 | 144,7 | 1,22 | 4,16 | 1,05 | 137,9 | 1,91 | 4,07 | |
| return gas temp | -4 | 25 | 222,9 | 761 | 191,9 | 1,42 | 4,84 | 1,22 | 157,3 | 2,03 | 5,43 | |
| RGT= 32/90 | 0 | 32 | 267,5 | 914 | 230,2 | 1,56 | 5,34 | 1,34 | 171,2 | 2,14 | 6,54 | |
| liquid temp | 4,4 | 40 | 325,2 | 1110 | 279,8 | 1,73 | 5,92 | 1,49 | 187,5 | 2,30 | 8,01 | |
| Tliq= 55/131 | 15 | 59 | 492,9 | 1683 | 424,2 | 2,18 | 7,45 | 1,88 | 225,9 | 2,84 | 12,38 | |

Model

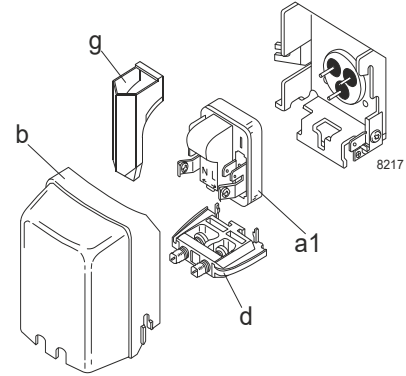
Designation **TL4G** **100-115V/50Hz** Conf. 3 Sales code: **102G3460**

Configuration

Motorconfiguration RSIR
 Power supply (nominal) 100-115V/50Hz 1~
 Refrigerant R134a
 Application LBP+MBP+HBP
 Voltage range 90-127V
 Starting torque LST
 Approvals UL

Electrical accessories / wiring diagram

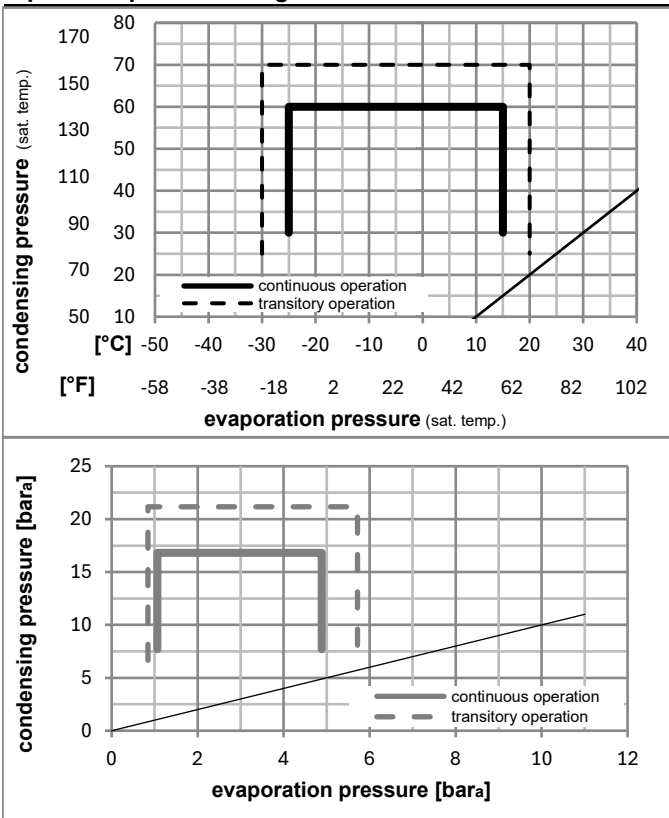
RSIR



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

| | | |
|----|---------------------------------|----------|
| a1 | PTC starter (115V, 50hm, 6.3mm) | 103N0026 |
| b | plastic cover | 103N2011 |
| d | cord relief | 103N1010 |
| g | protection screen for PTC | 103N0476 |

Alternative components

| | | |
|----|---------------------------------|----------|
| a1 | PTC starter (115V, 50hm, 4.8mm) | 103N0023 |
| b | plastic cover | 103N2011 |
| d | cord relief | 103N1010 |
| g | protection screen for PTC | 103N0476 |

Model

| | | | | | |
|-------------|-------------|----------------------|----------------|-------------|-----------------|
| Designation | TL4G | 100-115V/50Hz | Conf. 3 | Sales code: | 102G3460 |
|-------------|-------------|----------------------|----------------|-------------|-----------------|

Optimization + standard conditions

R134a, 115V/50Hz, RSIR, static, UL

| | | 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 | Current consumption | | Ref. mass flow | | | | | |
| [°C] | [°F] | | | | | | | | | | | [W] | [A] | [kg/h] | | | | | | | |
| -23 | -10 | 54 | 32 | 32 | 74,6 | 255 | 64,2 | 0,78 | 2,66 | 0,67 | 95,7 | 1,75 | 1,45 | | | | | | | ASHRAE LBP | |
| -7 | 20 | 54 | 35 | 46 | 179,6 | 613 | 154,6 | 1,22 | 4,17 | 1,05 | 147,3 | 1,96 | 3,92 | | | | | | | ASHRAE MBP | |
| 7,2 | 45 | 54 | 35 | 46 | 337,4 | 1152 | 290,4 | 1,71 | 5,85 | 1,47 | 197,0 | 2,41 | 7,49 | | | | | | | ASHRAE HBP | |
| -35 | -31 | 40 | 20 | 40 | 28,3 | 97 | 24,4 | 0,35 | 1,20 | 0,30 | 80,7 | 1,68 | 0,62 | | | | | | | EN12900 LBP | |
| -10 | 14 | 45 | 20 | 45 | 163,0 | 557 | 140,3 | 1,24 | 4,25 | 1,07 | 130,9 | 1,89 | 3,82 | | | | | | | EN12900 MBP | |
| 5 | 41 | 50 | 20 | 50 | 288,8 | 986 | 248,6 | 1,57 | 5,38 | 1,35 | 183,5 | 2,29 | 7,28 | | | | | | | EN12900 HBP | |

Performance tables

R134a, 115V/50Hz, RSIR, static, 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 | 68,1 | 233 | 58,6 | 0,73 | 2,48 | 0,62 | 93,9 | 1,75 | 1,48 |
| cond. pressure | -23 | -10 | 76,8 | 262 | 66,1 | 0,79 | 2,69 | 0,68 | 97,4 | 1,76 | 1,67 |
| pc= 45/113 | -9 | 15 | 173,9 | 594 | 149,6 | 1,31 | 4,48 | 1,13 | 132,5 | 1,90 | 3,81 |
| return gas temp. | -4 | 25 | 226,3 | 773 | 194,8 | 1,52 | 5,19 | 1,31 | 148,8 | 2,00 | 4,98 |
| RGT= 32/90 | 0 | 32 | 268,2 | 916 | 230,8 | 1,67 | 5,70 | 1,44 | 160,7 | 2,09 | 5,93 |
| liquid temp | 4,4 | 40 | 321,7 | 1099 | 276,8 | 1,84 | 6,30 | 1,59 | 174,5 | 2,22 | 7,16 |
| Tliq= 45/113 | 15 | 59 | 474,1 | 1619 | 408,0 | 2,29 | 7,82 | 1,97 | 207,1 | 2,68 | 10,74 |
| [°C / °F] | -25 | -13 | 53,7 | 183 | 46,2 | 0,59 | 2,01 | 0,51 | 91,1 | 1,73 | 1,28 |
| cond. pressure | -23 | -10 | 60,3 | 206 | 51,9 | 0,63 | 2,16 | 0,54 | 95,4 | 1,75 | 1,44 |
| pc= 55/131 | -9 | 15 | 140,2 | 479 | 120,6 | 1,02 | 3,47 | 0,87 | 137,9 | 1,91 | 3,39 |
| return gas temp | -4 | 25 | 185,8 | 635 | 159,9 | 1,18 | 4,03 | 1,02 | 157,3 | 2,03 | 4,52 |
| RGT= 32/90 | 0 | 32 | 222,9 | 761 | 191,9 | 1,30 | 4,45 | 1,12 | 171,2 | 2,14 | 5,45 |
| liquid temp | 4,4 | 40 | 271,0 | 925 | 233,2 | 1,45 | 4,94 | 1,24 | 187,5 | 2,30 | 6,67 |
| Tliq= 55/131 | 15 | 59 | 410,7 | 1403 | 353,5 | 1,82 | 6,21 | 1,56 | 225,9 | 2,84 | 10,32 |

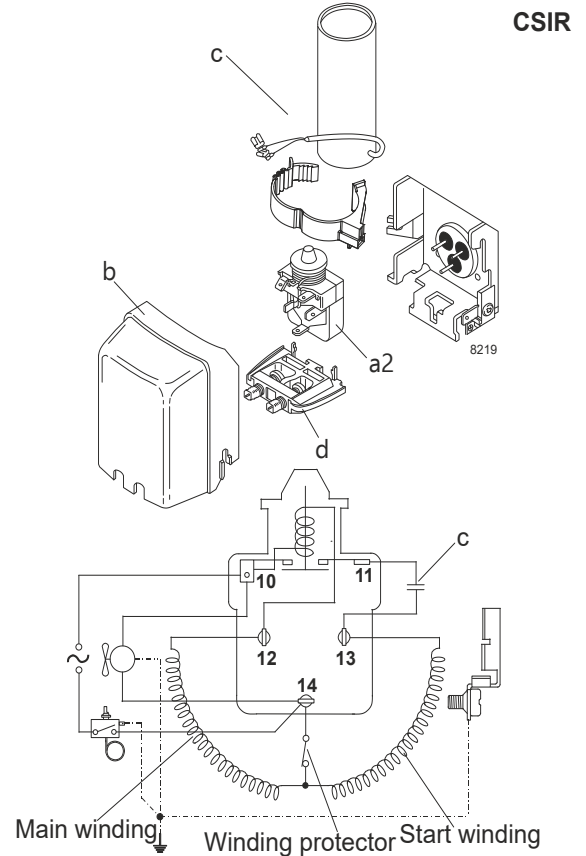
Model

| | | | | | |
|-------------|-------------|----------------------|----------------|-------------|-----------------|
| Designation | TL4G | 100-115V/50Hz | Conf. 4 | Sales code: | 102G3460 |
|-------------|-------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 100-115V/50Hz 1~ |
| Refrigerant | R513A |
| Application | LBP+MBP+HBP |
| Voltage range | 90-127V |
| Starting torque | LST |
| Approvals | UL |

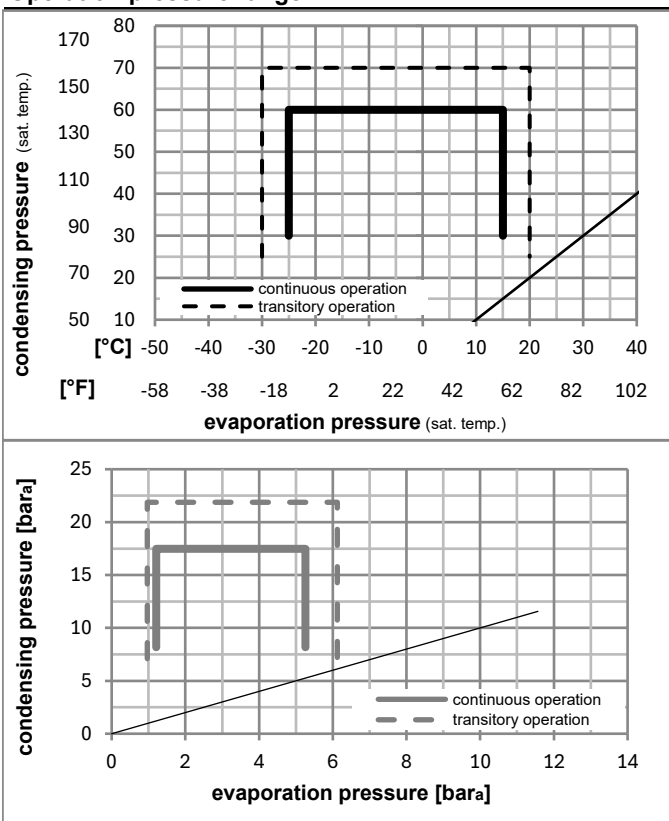
Electrical accessories / wiring diagram



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: | static |

Operation pressure range



Components

| | | |
|----|-------------------------|----------|
| a2 | assy. relay | 117U6003 |
| c | start capacitor (240µF) | 117U5023 |
| b | plastic cover | 103N2011 |
| d | cord relief | 103N1010 |

Model

| | | | | | |
|-------------|-------------|----------------------|----------------|-------------|-----------------|
| Designation | TL4G | 100-115V/50Hz | Conf. 4 | Sales code: | 102G3460 |
|-------------|-------------|----------------------|----------------|-------------|-----------------|

Optimization + standard conditions

R513A, 115V/50Hz, CSIR, static, UL

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Power consumption | | ASHRAE | |
|--|---|------|------|------|------------------|---------|----------|-------|----------|-----------|-------------------|------|--------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | I | m | | |
| | [°C] | [°F] | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| | -23 | 54 | 32 | 32 | 82,4 | 282 | 71,0 | 0,80 | 2,73 | 0,69 | 103,1 | 1,67 | 1,77 | ASHRAE LBP |
| | -10 | 130 | 90 | 90 | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 188,2 | 643 | 162,0 | 1,21 | 4,12 | 1,04 | 155,9 | 2,01 | 4,61 | ASHRAE MBP |
| | 20 | 130 | 95 | 115 | | | | | | | | | | |
| | 7,2 | 54 | 35 | 46 | 346,3 | 1183 | 298,0 | 1,68 | 5,74 | 1,45 | 206,1 | 2,39 | 8,60 | ASHRAE HBP |
| | 45 | 130 | 95 | 115 | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 31,6 | 108 | 27,2 | 0,36 | 1,22 | 0,31 | 88,3 | 1,60 | 0,78 | EN12900 LBP |
| | -31 | 104 | 68 | 104 | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 170,1 | 581 | 146,4 | 1,23 | 4,19 | 1,06 | 138,7 | 1,89 | 4,51 | EN12900 MBP |
| | 14 | 113 | 68 | 113 | | | | | | | | | | |
| | 5 | 50 | 20 | 50 | 292,6 | 999 | 251,8 | 1,52 | 5,20 | 1,31 | 192,3 | 2,28 | 8,39 | EN12900 HBP |
| | 41 | 122 | 68 | 122 | | | | | | | | | | |

Performance tables

R513A, 115V/50Hz, CSIR, static, UL

| | pe | | Cooling capacity | | | COP | EER | P1 | I | m | |
|------------------|------|------|------------------|---------|----------|------|------|------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | | | | | |
| [°C / °F] | -25 | -13 | 74,0 | 253 | 63,7 | 0,73 | 2,50 | 0,63 | 101,1 | 1,66 | 1,80 |
| cond. pressure | -23 | -10 | 83,1 | 284 | 71,5 | 0,79 | 2,71 | 0,68 | 104,6 | 1,68 | 2,03 |
| pc= 45/113 | -9 | 15 | 182,8 | 624 | 157,3 | 1,30 | 4,45 | 1,12 | 140,4 | 1,90 | 4,50 |
| return gas temp. | -4 | 25 | 235,7 | 805 | 202,9 | 1,50 | 5,13 | 1,29 | 157,0 | 2,02 | 5,83 |
| RGT= 32/90 | 0 | 32 | 277,8 | 949 | 239,1 | 1,64 | 5,61 | 1,41 | 169,0 | 2,10 | 6,89 |
| liquid temp | 4,4 | 40 | 331,1 | 1131 | 285,0 | 1,81 | 6,18 | 1,56 | 182,9 | 2,21 | 8,25 |
| Tliq= 45/113 | 15 | 59 | 482,0 | 1646 | 414,9 | 2,24 | 7,65 | 1,93 | 215,2 | 2,47 | 12,20 |
| [°C / °F] | -25 | -13 | 57,7 | 197 | 49,7 | 0,59 | 2,00 | 0,50 | 98,4 | 1,65 | 1,58 |
| cond. pressure | -23 | -10 | 64,6 | 220 | 55,6 | 0,63 | 2,14 | 0,54 | 102,8 | 1,67 | 1,77 |
| pc= 55/131 | -9 | 15 | 145,0 | 495 | 124,8 | 0,99 | 3,38 | 0,85 | 146,4 | 1,94 | 4,01 |
| return gas temp | -4 | 25 | 190,3 | 650 | 163,8 | 1,15 | 3,91 | 0,99 | 166,1 | 2,08 | 5,29 |
| RGT= 32/90 | 0 | 32 | 227,0 | 775 | 195,3 | 1,26 | 4,30 | 1,08 | 180,3 | 2,19 | 6,34 |
| liquid temp | 4,4 | 40 | 274,2 | 936 | 235,9 | 1,39 | 4,76 | 1,20 | 196,6 | 2,32 | 7,70 |
| Tliq= 55/131 | 15 | 59 | 410,6 | 1402 | 353,3 | 1,75 | 5,97 | 1,51 | 234,8 | 2,64 | 11,73 |

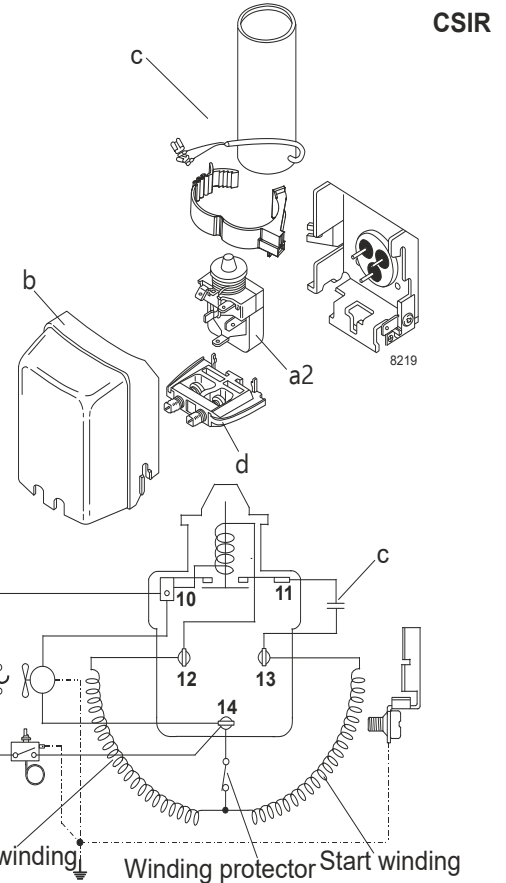
Model

| | | | | | |
|-------------|-------------|------------------|----------------|-------------|-----------------|
| Designation | TL4G | 115V/60Hz | Conf. 5 | Sales code: | 102G3460 |
|-------------|-------------|------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|--------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 115V/60Hz 1~ |
| Refrigerant | R513A |
| Application | LBP+MBP+HBP |
| Voltage range | 90-135V |
| Starting torque | LST |
| Approvals | UL |

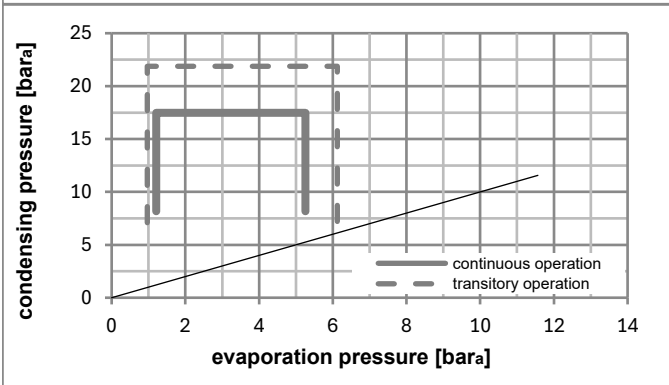
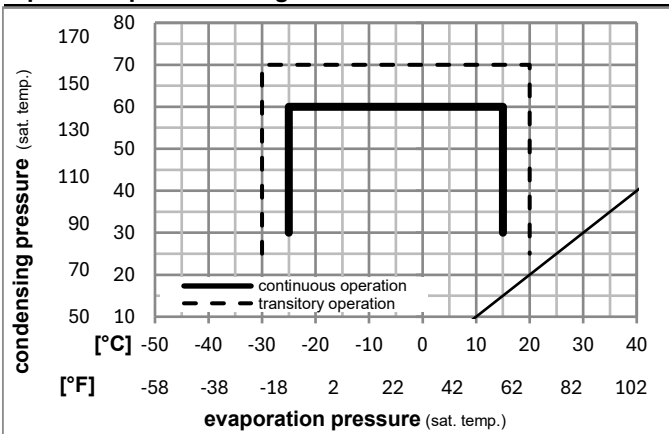
Electrical accessories / wiring diagram



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: | static |

Operation pressure range



Components

| | | |
|----|-------------------------|----------|
| a2 | assy. relay | 117U6003 |
| c | start capacitor (240µF) | 117U5023 |
| b | plastic cover | 103N2011 |
| d | cord relief | 103N1010 |

Model

| | | | | | |
|-------------|-------------|------------------|----------------|-------------|-----------------|
| Designation | TL4G | 115V/60Hz | Conf. 5 | Sales code: | 102G3460 |
|-------------|-------------|------------------|----------------|-------------|-----------------|

Optimization + standard conditions

R513A, 115V/60Hz, CSIR, static, UL

| | | 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 | Current consumption | | Ref. mass flow | | | | |
| [°C] | [°F] | [°C] | [°F] | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | [kg/h] | | | | | |
| -23 | -10 | 54 | 130 | 32 | 90 | 99,1 | 338 | 85,3 | 0,96 | 3,28 | 0,83 | 103,1 | 1,68 | 2,13 | | | | | | ASHRAE LBP |
| -7 | 20 | 54 | 130 | 35 | 95 | 226,2 | 773 | 194,7 | 1,45 | 4,96 | 1,25 | 155,9 | 2,01 | 5,54 | | | | | | ASHRAE MBP |
| 7,2 | 45 | 54 | 130 | 35 | 95 | 416,5 | 1422 | 358,4 | 2,03 | 6,92 | 1,74 | 205,5 | 2,38 | 10,35 | | | | | | ASHRAE HBP |
| -35 | -31 | 40 | 104 | 20 | 68 | 37,9 | 130 | 32,6 | 0,43 | 1,48 | 0,37 | 87,4 | 1,62 | 0,94 | | | | | | EN12900 LBP |
| -10 | 14 | 45 | 113 | 20 | 68 | 204,5 | 698 | 176,0 | 1,47 | 5,03 | 1,27 | 138,9 | 1,89 | 5,42 | | | | | | EN12900 MBP |
| 5 | 41 | 50 | 122 | 20 | 68 | 351,8 | 1201 | 302,7 | 1,83 | 6,25 | 1,58 | 192,1 | 2,27 | 10,09 | | | | | | EN12900 HBP |

Performance tables

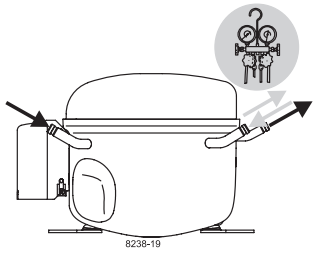
R513A, 115V/60Hz, CSIR, static, UL

| | 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 | 88,9 | 304 | 76,5 | 0,88 | 3,01 | 0,76 | 100,8 | 1,67 | 2,17 | |
| cond. pressure | -23 | -10 | 99,8 | 341 | 85,9 | 0,96 | 3,27 | 0,82 | 104,4 | 1,69 | 2,44 | |
| pc= 45/113 | -9 | 15 | 219,7 | 750 | 189,0 | 1,56 | 5,34 | 1,35 | 140,5 | 1,90 | 5,40 | |
| return gas temp. | -4 | 25 | 283,4 | 968 | 243,9 | 1,80 | 6,16 | 1,55 | 157,1 | 2,01 | 7,00 | |
| RGT= 32/90 | 0 | 32 | 333,9 | 1140 | 287,4 | 1,97 | 6,74 | 1,70 | 169,1 | 2,10 | 8,28 | |
| liquid temp | 4,4 | 40 | 398,1 | 1359 | 342,6 | 2,18 | 7,44 | 1,87 | 182,8 | 2,20 | 9,92 | |
| Tliq= 45/113 | 15 | 59 | 579,7 | 1980 | 498,9 | 2,70 | 9,23 | 2,33 | 214,5 | 2,46 | 14,67 | |
| [°C / °F] | -25 | -13 | 69,4 | 237 | 59,7 | 0,71 | 2,41 | 0,61 | 98,4 | 1,66 | 1,90 | |
| cond. pressure | -23 | -10 | 77,6 | 265 | 66,8 | 0,75 | 2,58 | 0,65 | 102,9 | 1,68 | 2,13 | |
| pc= 55/131 | -9 | 15 | 174,3 | 595 | 150,0 | 1,19 | 4,07 | 1,02 | 146,4 | 1,94 | 4,82 | |
| return gas temp | -4 | 25 | 228,8 | 781 | 196,9 | 1,38 | 4,71 | 1,19 | 166,0 | 2,08 | 6,36 | |
| RGT= 32/90 | 0 | 32 | 272,9 | 932 | 234,9 | 1,52 | 5,18 | 1,30 | 180,0 | 2,18 | 7,62 | |
| liquid temp | 4,4 | 40 | 329,7 | 1126 | 283,7 | 1,68 | 5,74 | 1,45 | 196,2 | 2,31 | 9,26 | |
| Tliq= 55/131 | 15 | 59 | 493,9 | 1687 | 425,1 | 2,11 | 7,22 | 1,82 | 233,6 | 2,63 | 14,11 | |

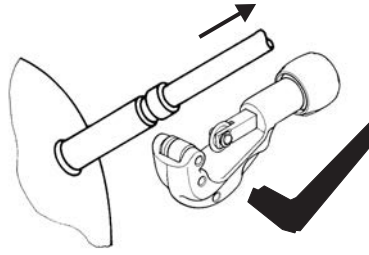
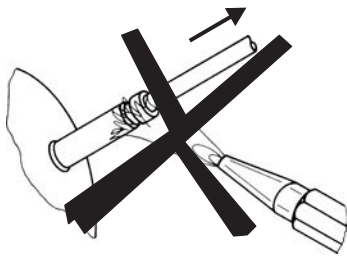


TL Compressors





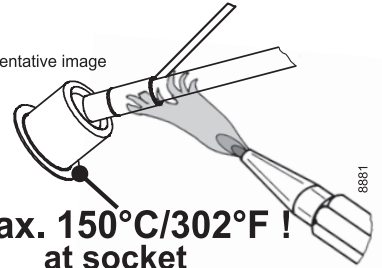
Service/Repair – R600a, R290



8545

Brazing on Suction Connectors (Direct Intake)

representative image



**! max. 150°C/302°F !
at socket**
brazing solder: phosphor (LP7) or silver

Refer to Product Bulletin:
**Brazing on Suction Connectors
(Compressors with Direct Suction Intake)**

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 subsequential 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