Singolo
Imballi

# Single Pack NF7FK 115-127V 60Hz CSIR

Codice Imballo Singolo: **195B4155**

| Posizione | Titolo | Codice | Quantità |
|---|---|---|---|
| 1 | Compressor NF7FK | 105G5728 | 1 |
| 2 | Starting relay (overload protector MRT30AEZ-6) | 117U4132 | 1 |
| 3 | Starting capacitor (320µF 125V, 6.3mm) | 117U5022 | 1 |
| 4 | Cord relief | 117U0349 | 2 |
| 5 | Cover | 117U1021 | 1 |
| 6 | 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 non si assume alcuna responsabilità per eventuali errori presenti in cataloghi, brochure e altro materiale stampato. Secop si riserva il diritto di modificare i propri prodotti senza preavviso. Ciò vale anche per i prodotti già ordinati, a condizione che tali modifiche possano essere apportate senza che siano necessarie modifiche successive alle specifiche già concordate. Tutti i marchi presenti in questo materiale sono di proprietà delle rispettive aziende. Secop e il logo Secop sono marchi di Secop GmbH. Tutti i diritti sono riservati.

**Model**
**NF7FK**

Sales code:
**105G5728**

## Compressor Data

| | |
|---|---|
| Refrigerant(s) | **R134a** |
| Refr. charge - tech. limit | **400g / 14.11oz** |
| Weight | **10.50 kg / 23.15lbs** |
| Displacement | **7.27 cm3 / 0.44cu.in** |
| Compressors on pallet | **80** |

## General – Configurations With NF7FK

| – | **Conf. 1** | **Conf. 2** |
|---|---|---|
| Motor configuration | CSIR | RSIR |
| Power supply (nominal) | 115-127 V/60 Hz | 115-127 V/60 Hz |
| Number of phases | 1 | 1 |
| Voltage range | 95-135 V | 95-135 V |
| Approvals | UL, EAC | UL, EAC |
| Starting torque | HST | LST |
| Refrigerant | R134a | R134a |
| Application | LBP+MBP | LBP+MBP |
| Long interval pull down | OK | OK |

## Application Notes

- Electrical equipment is included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

**Model**
**NF7FK**

Sales code:
**105G5728**

## Compressor Design

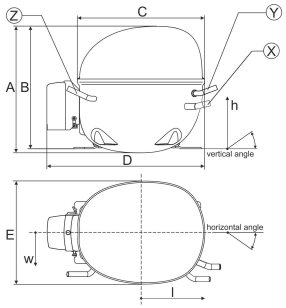
| | | | |
|---|---|---|---|
| Oil type | **POE** | Winding resistance main | **2.04 Ohm** |
| Oil viscosity | **32cSt** | Winding resistance aux | **9.13 Ohm** |
| Oil quantity | **268 / 9.06fl.oz** | Max. winding temp. | **125 °C** |
| Free gas volume comp. | **2,360 cm3 / 79.80fl.oz** | Max. discharge temp. | **130°C / 266°F** |
| Motor protection | **internal** | | |

## Compressor Dimensions

**Housing**

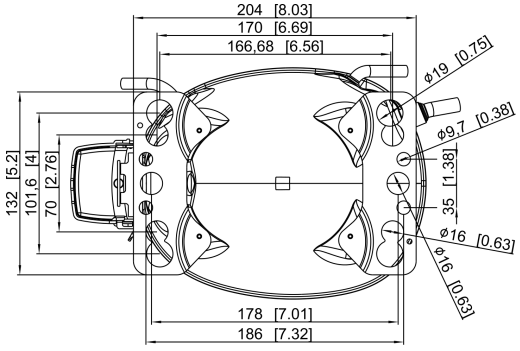
| | |
|---|---|
| A Height | **197mm / 7.76in** |
| B Height | **191mm / 7.52in** |
| C Length shell | **205mm / 8.07in** |
| D Length w. cover | **254mm / 10.00in** |
| E Width | **166mm / 6.54in** |

Find 3D Model here



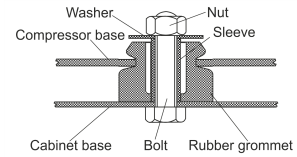

| Connectors | Suction X | Discharge Y | Process Z |
|---|---|---|---|
| Diameter [mm] | øi 8.11–8.29 / 0.32–0.33in | øi 6.41–6.59 / 0.25–0.26in | øi 6.41–6.59 / 0.25–0.26in |
| Material | CU | CU | CU |
| Horizontal angle ±2° | 0° | 0° | 0° |
| Vertical angle ±2° | 15° | 35° | 155° |
| Position l/h/w [mm] | 125.5/75.5/78 / 4.94/2.97/3.07in | 133/102.5/54 / 5.24/4.04/2.13in | -107/93.5/72 / -4.21/3.68/2.83in |
| Straight tube l. [mm] | 12 / 0.47in | 12 / 0.47in | 12 / 0.47in |

## Mounting Accessories

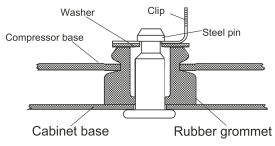



Dimensions in mm [in]

Bolt joint




Snap-on




| | one comp. | multi pack |
|---|---|---|
| Bolt joint \| M6 \| ø16mm | 118-1917 | 118-1918 |
| Bolt joint \| ø1/4" \| ø16mm | 118-1946 | – |
| Bolt joint \| ø1/4" \| ø19mm | 118-1949 | – |
| Snap-on \| ø7,3 \| ø16mm | 118-1947 | 118-1919 |

**Model**
**NF7FK** Configuration 1

Sales code:
**105G5728**

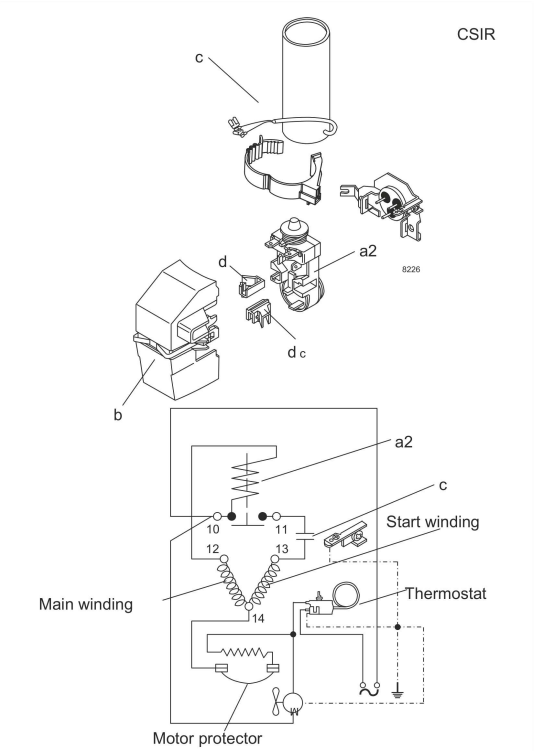
## Configuration

| | |
|---|---|
| Motor configuration | **CSIR** |
| Power supply (nominal) | **115-127 V/60 Hz 1~** |
| Refrigerant | **R134a** |
| Application | **LBP+MBP** |
| Voltage range | **95-135 V** |
| Starting torque | **HST** |
| Approvals | **UL, EAC** |
| Starting device type | **relay** |
| Run capacitor | **-/-** |
| Start capacitor | **320 µF** |
| LRA (locked rotor amps / 4s/ U(N)) | **24 A** |
| RLA (rated load amps / 1s/ U(N)) | **3.6 A** |

**Ambient/ machine room temperatures minimum /maximum**
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

**System Cooling**
static

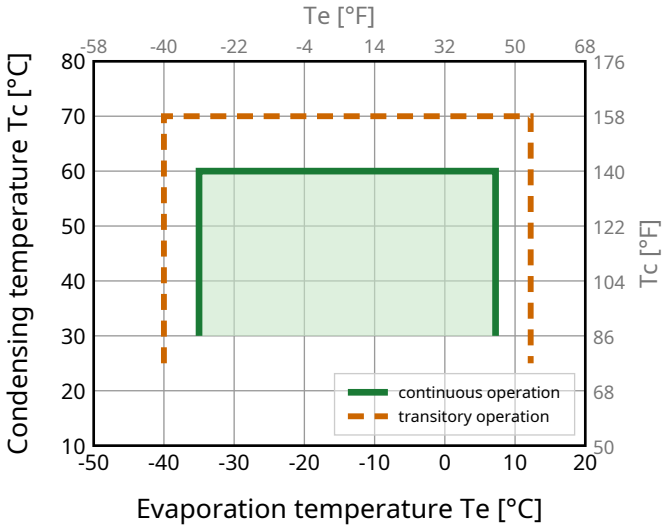
## Electrical Accessories / Wiring Diagram

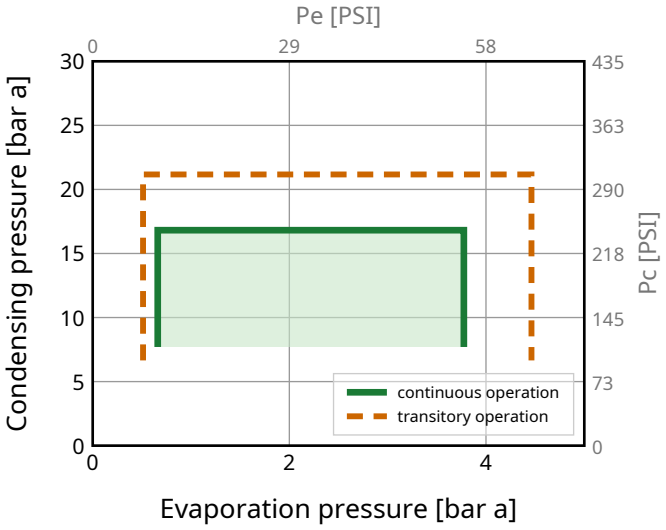



View full size

**Components (already pre-assembled)**
**a2** current relay 117U4132
**c** start capacitor (320µF) 117U5022
**b** plastic cover + clamp 117U1021
**d/dc** cord relief 117U0349

## Operation Pressure Range



**Model** Sales code:

**NF7FK** Configuration 1 **105G5728**

## Standard Conditions

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

| pe | pc | RGT | Tliq | Cooling capacity | | | COP | EER | P | I | ṁ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [°C] [°F] | [°C] [°F] | [°C] [°F] | [°C] [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A] | [kg/h] | |
| -23.3 -10 | 54.4 129.9 | 32.2 90 | 32.2 90 | **244** | 833 | 210 | **1.20** | 4.09 | 204 | 2.87 | 4.74 | **ASHRAE LBP** |
| -25 -13 | 55 131 | 32 89.6 | 55 131 | **180** | 614 | 155 | **0.93** | 3.17 | 194 | 2.82 | 4.29 | **CECOMAF LBP** |
| -35 -31 | 40 104 | 20 68 | 40 104 | **120** | 408 | 103 | **0.98** | 3.34 | 122 | 2.52 | 2.62 | **EN12900 LBP** |
| -6.7 20 | 54.4 129.9 | 35 95 | 46.1 115 | **486** | 1660 | 418 | **1.60** | 5.47 | 303 | 3.45 | 10.59 | **ASHRAE MBP** |
| -10 14 | 55 131 | 32 89.6 | 55 131 | **380** | 1298 | 327 | **1.33** | 4.55 | 285 | 3.34 | 9.17 | **CECOMAF MBP** |
| -10 14 | 45 113 | 20 68 | 45 113 | **424** | 1446 | 364 | **1.59** | 5.41 | 267 | 3.20 | 9.88 | **EN12900 MBP** |

## Performance Tables

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

**pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F**

| pe | | Cooling capacity | | | COP | EER | P | I | ṁ |
|---|---|---|---|---|---|---|---|---|---|
| [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A] | [kg/h] |
| -35 | -31 | **112** | 381 | 96 | **0.92** | 3.15 | 121 | 2.50 | 2.41 |
| -30 | -22 | **156** | 534 | 135 | **1.02** | 3.48 | 153 | 2.63 | 3.38 |
| -20 | -4 | **273** | 931 | 235 | **1.28** | 4.37 | 213 | 2.90 | 5.92 |
| -10 | 14 | **439** | 1497 | 377 | **1.64** | 5.61 | 267 | 3.20 | 9.58 |
| 0 | 32 | **672** | 2291 | 578 | **2.11** | 7.19 | 319 | 3.53 | 14.82 |
| 7.2 | 45 | **890** | 3036 | 765 | **2.50** | 8.53 | 356 | 3.78 | 19.83 |

**pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| -35 | -31 | **91** | 309 | 78 | **0.71** | 2.43 | 127 | 2.50 | 2.15 |
| -30 | -22 | **132** | 451 | 114 | **0.82** | 2.80 | 161 | 2.66 | 3.15 |
| -20 | -4 | **236** | 805 | 203 | **1.05** | 3.57 | 225 | 2.98 | 5.64 |
| -10 | 14 | **380** | 1298 | 327 | **1.33** | 4.55 | 285 | 3.34 | 9.17 |
| 0 | 32 | **583** | 1989 | 501 | **1.70** | 5.78 | 344 | 3.72 | 14.21 |
| 7.2 | 45 | **774** | 2641 | 666 | **2.00** | 6.82 | 387 | 4.01 | 19.08 |

**Model**
**NF7FK** Configuration 2

Sales code:
**105G5728**

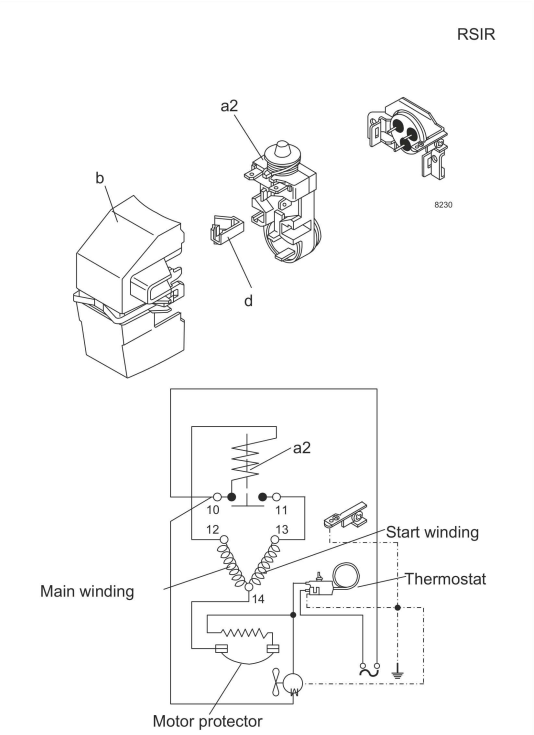
## Configuration

| | |
|---|---|
| Motor configuration | **RSIR** |
| Power supply (nominal) | **115-127 V/60 Hz 1~** |
| Refrigerant | **R134a** |
| Application | **LBP+MBP** |
| Voltage range | **95-135 V** |
| Starting torque | **LST** |
| Approvals | **UL, EAC** |
| Starting device type | **PTC** |
| Run capacitor | **-/-** |
| Start capacitor | **-/-** |
| RLA (rated load amps / 1s/ U(N)) | **-/-A** |

**Ambient/ machine room temperatures minimum /maximum**
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

**System Cooling**
static

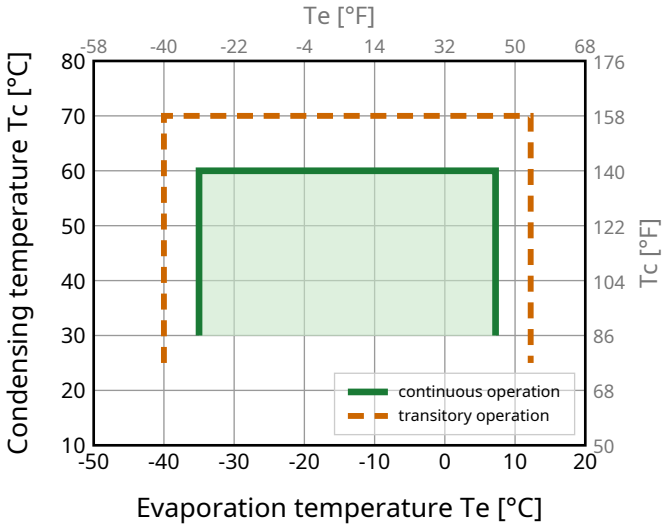
## Electrical Accessories / Wiring Diagram

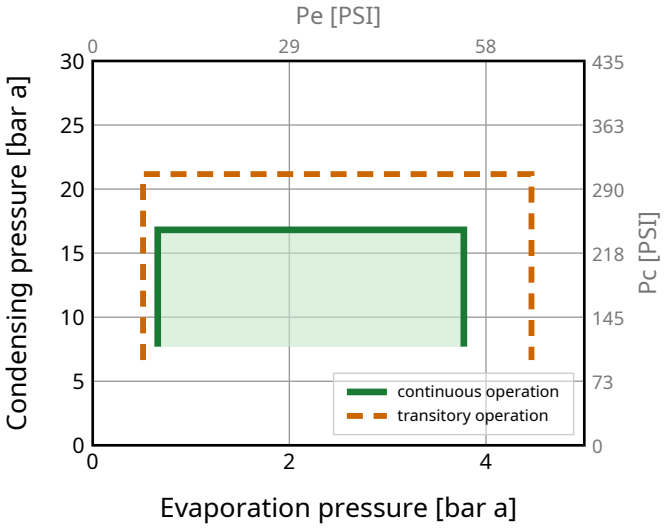



View full size

**Components (already pre-assembled)**
starter kit 117U4131
**b** plastic cover + clamp 117U1021
**d/dc** cord relief 117U0349

## Operation Pressure Range



**Model**
**NF7FK** Configuration 2

Sales code:
**105G5728**

## Standard Conditions

**R134a**, 115 V/60 Hz, RSIR, static

| pe | pc | RGT | Tliq | Cooling capacity | | | COP | EER | P | I | ṁ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [°C] [°F] | [°C] [°F] | [°C] [°F] | [°C] [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A] | [kg/h] | |
| -23.3 -10 | 54.4 129.9 | 32.2 90 | 32.2 90 | **244** | 833 | 210 | **1.20** | 4.09 | 204 | 2.87 | 4.74 | **ASHRAE LBP** |
| -25 -13 | 55 131 | 32 89.6 | 55 131 | **180** | 614 | 155 | **0.93** | 3.17 | 194 | 2.82 | 4.29 | **CECOMAF LBP** |
| -35 -31 | 40 104 | 20 68 | 40 104 | **120** | 408 | 103 | **0.98** | 3.34 | 122 | 2.52 | 2.62 | **EN12900 LBP** |
| -6.7 20 | 54.4 129.9 | 35 95 | 46.1 115 | **486** | 1660 | 418 | **1.60** | 5.47 | 303 | 3.45 | 10.59 | **ASHRAE MBP** |
| -10 14 | 55 131 | 32 89.6 | 55 131 | **380** | 1298 | 327 | **1.33** | 4.55 | 285 | 3.34 | 9.17 | **CECOMAF MBP** |
| -10 14 | 45 113 | 20 68 | 45 113 | **424** | 1446 | 364 | **1.59** | 5.41 | 267 | 3.20 | 9.88 | **EN12900 MBP** |

## Performance Tables

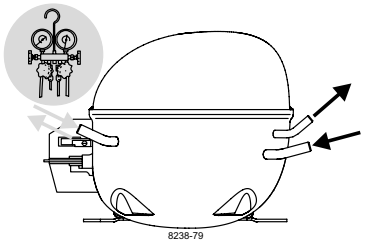
**R134a**, 115 V/60 Hz, RSIR, static

**pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F**

| pe | | Cooling capacity | | | COP | EER | P | I | ṁ |
|---|---|---|---|---|---|---|---|---|---|
| [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A] | [kg/h] |
| -35 | -31 | **112** | 381 | 96 | **0.92** | 3.15 | 121 | 2.50 | 2.41 |
| -30 | -22 | **156** | 534 | 135 | **1.02** | 3.48 | 153 | 2.63 | 3.38 |
| -20 | -4 | **273** | 931 | 235 | **1.28** | 4.37 | 213 | 2.90 | 5.92 |
| -10 | 14 | **439** | 1497 | 377 | **1.64** | 5.61 | 267 | 3.20 | 9.58 |
| 0 | 32 | **672** | 2291 | 578 | **2.11** | 7.19 | 319 | 3.53 | 14.82 |
| 7.2 | 45 | **890** | 3036 | 765 | **2.50** | 8.53 | 356 | 3.78 | 19.83 |

**pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| -35 | -31 | **91** | 309 | 78 | **0.71** | 2.43 | 127 | 2.50 | 2.15 |
| -30 | -22 | **132** | 451 | 114 | **0.82** | 2.80 | 161 | 2.66 | 3.15 |
| -20 | -4 | **236** | 805 | 203 | **1.05** | 3.57 | 225 | 2.98 | 5.64 |
| -10 | 14 | **380** | 1298 | 327 | **1.33** | 4.55 | 285 | 3.34 | 9.17 |
| 0 | 32 | **583** | 1989 | 501 | **1.70** | 5.78 | 344 | 3.72 | 14.21 |
| 7.2 | 45 | **774** | 2641 | 666 | **2.00** | 6.82 | 387 | 4.01 | 19.08 |



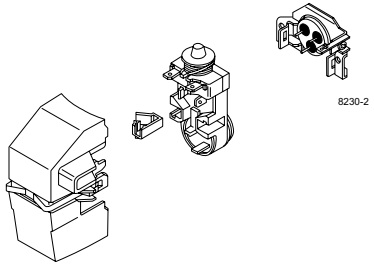

# NF Compressors

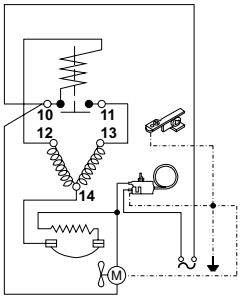
SECOP

Keep electrical equipment clear from oil, chemicals, and water

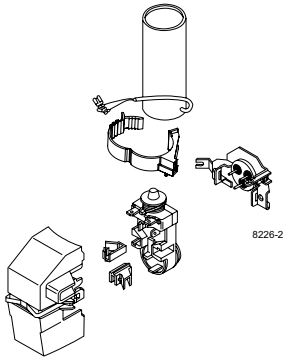
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

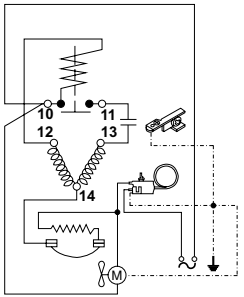
## RSIR



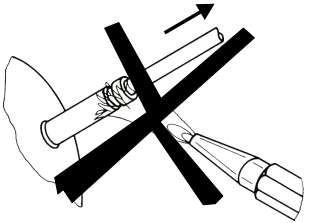

## CSIR

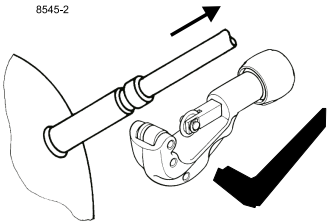


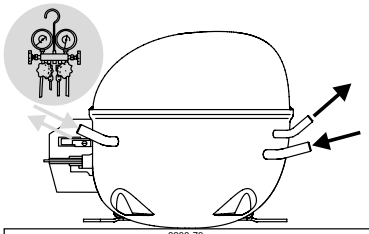




## Service/Repair – R1234yf

(applies to all flammable refrigerants)







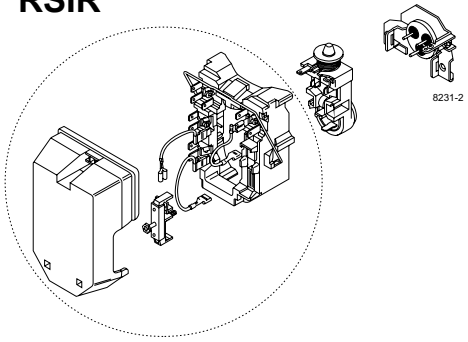

# NF Compressors

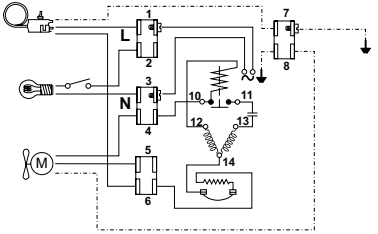
SECOP

Keep electrical equipment clear from oil, chemicals, and water

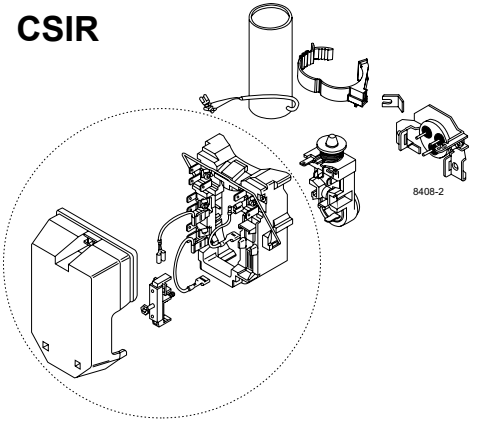
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

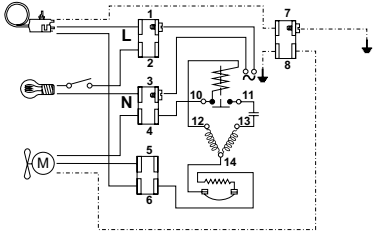
## RSIR



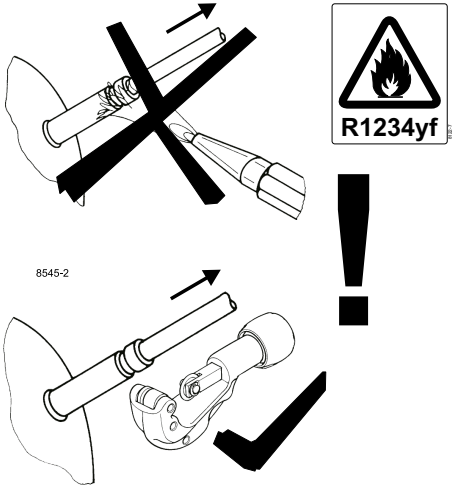

## CSIR




## Service/Repair – R1234yf

(applies to all flammable refrigerants)




**Dismantling, recycling, disposal:** At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**