Single
Packs

# Single Pack NLV8.0CN 100-240V 50/60Hz PM

Single pack code number: **195B4849**

| Position | Title | Code | Amount |
|---|---|---|---|
| 1 | Compressor NLV8.0CN | 105H7865 | 1 |
| 2 | Electronic unit NLV | 105N4866 | 1 |
| 3 | Cover | 103N2008 | 1 |
| 4 | 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**

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**型号**

**NLV8.0CN**

采购代码:

**105H7865**

## 压缩机数据

| | |
|---|---|
| 制冷剂 | **R290** |
| 制冷剂最大充注量 | **300g / 10.58oz** |
| 重量 | **10.80 kg / 23.81lbs** |
| 排气量 | **7.96 cm3 / 0.49cu.in** |
| 每托盘压缩机数量 | **80** |




## 基本信息 NLV8.0CN 和控制器

| – | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|---|---|---|---|---|
| 单包装采购代码: | 105N4866 | 105N4910 | 105N4960 | 105N4962 |
| 供电电源 (标称) | 100-240 V,50/60 Hz | 220-240 V,50/60 Hz | 100-240 V,50/60 Hz | 100-240 V,50/60 Hz |
| 电机相数 | 1~AC | 1~AC | 1~AC | 1~AC |
| 认证 | VDE, UL, CCC, CB | VDE, CCC | VDE, UL, CCC, CB | VDE, UL, CCC, CB |
| 启动力矩 | HST | HST | HST | HST |
| 制冷剂 | R290 | R290 | R290 | R290 |
| 应用 | L+MBP | L+MBP | L+MBP | L+MBP |
| 热气除霜 | OK | OK | OK | OK |
| 长时间高负荷运行 | OK | OK | OK | OK |
| 保护器类型 | Mechanic | Mechanic | Mechanic | Mechanic |

## 应用说明

- 保护接地（PE）端子位于压缩机上的 PE 冲压标记处
- 带伸缩连接管的直吸结构

**型号**
**NLV8.0CN**

采购代码:
**105H7865**

## 设计信息

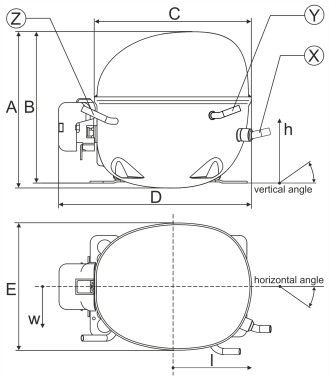
| | | | |
|---|---|---|---|
| 润滑油类型 | **POE** | 保护器类型 | **内置** |
| 润滑油黏度 | **32cSt** | 最高绕组温度 | **125 °C** |
| 润滑油注油量 | **300 / 10.14fl.oz** | 最高排气温度 | **130°C / 266°F** |
| 壳体内自由空间容积 | **2,360 cm3 / 79.80fl.oz** | | |

## 尺寸信息

**壳体**

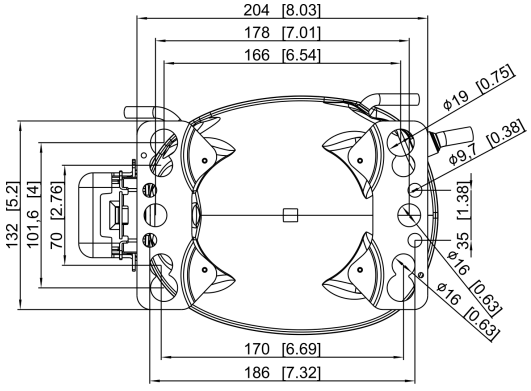
| | |
|---|---|
| A 高度 | **203mm / 7.99in** |
| B 高度 | **197mm / 7.76in** |
| C 外壳长度 | **205mm / 8.07in** |
| D 长度（含保护罩） | **252mm / 9.92in** |
| E 宽度 | **166mm / 6.54in** |

在此查找 3D 模型



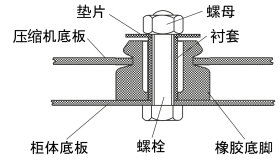

| 连接管 | 吸气管 X | 排气管 Y | 工艺管 Z |
|---|---|---|---|
| 直径 [mm] | øi 8.11–8.29 / 0.32–0.33in | øi 6.11–6.29 / 0.24–0.25in | øi 6.11–6.29 / 0.24–0.25in |
| 材料 | CU | CU | CU |
| 水平角度 ±2° | 0° | 0° | 0° |
| 垂直角度 ±2° | 15° | 21° | 155° |
| 位置 l/h/w [mm] | 132/68.5/56.7 / 5.20/2.70/2.23in | 94/101.7/81 / 3.70/4.00/3.19in | -109.3/94.3/72 / -4.30/3.71/2.83in |
| 直管长度 [mm] | 12 / 0.47in | 12 / 0.47in | 12 / 0.47in |

## 安装附件

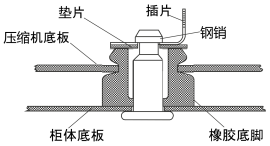



单位：mm [in]

螺栓式




插片式




| | 单台包装 | 批量包装 |
|---|---|---|
| 螺栓式 \| M6 \| ø16mm | 118-1917 | 118-1918 |
| 螺栓式 \| ø1/4" \| ø16mm | 118-1946 | – |
| 螺栓式 \| ø1/4" \| ø19mm | 118-1949 | – |
| 插片式 \| ø7,3 \| ø16mm | 118-1947 | 118-1919 |

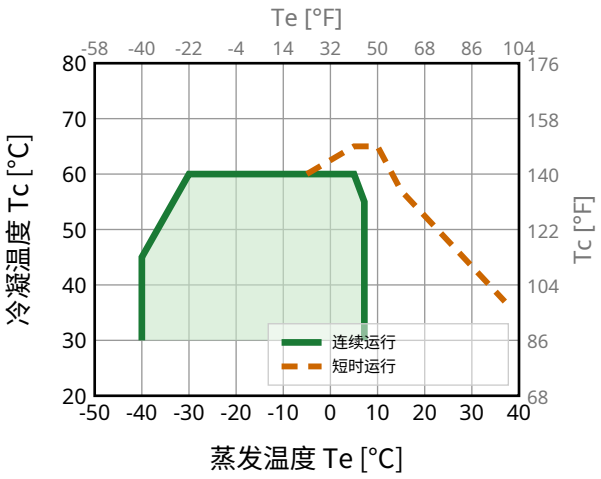
型号
**NLV8.0CN**

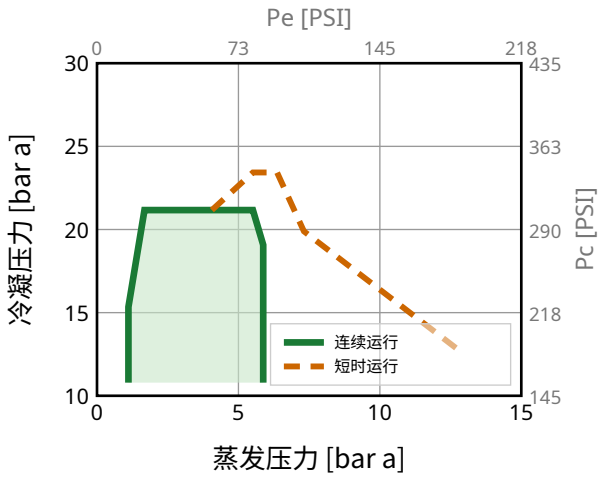
系统设计

采购代码:
**105H7865**

## 系统设计

### 运行范围 R290



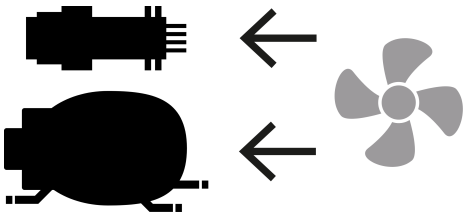




## 系统冷却条件

**压缩机和控制器冷却:** 风冷 3m/s

需保证压缩机与控制器的冷却风速达到3m/s

需保证气流能直接冷却控制器的散热片



## 附件（压缩机+控制器）

| | | |
|---|---|---|
| 103N2008 | 塑料保护罩 | 1 件 |

**型号** 采购代码:

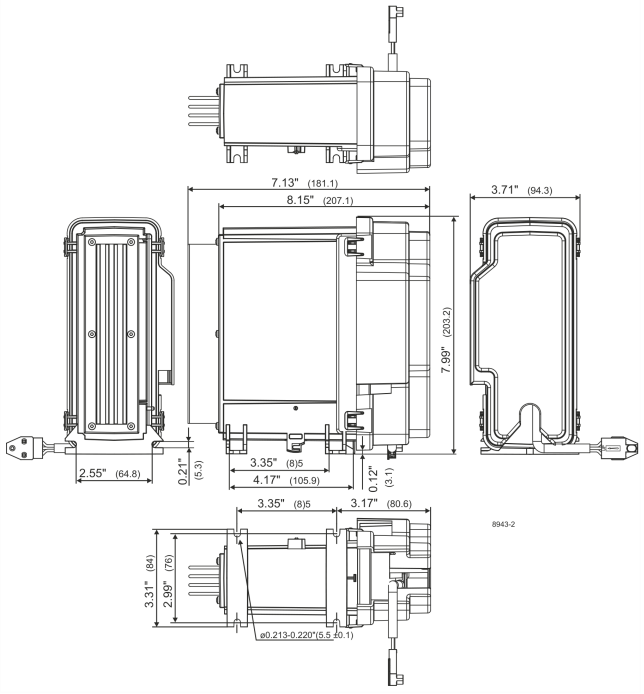
**NLV8.0CN** 控制器概览 **105H7865**

## 控制器概览

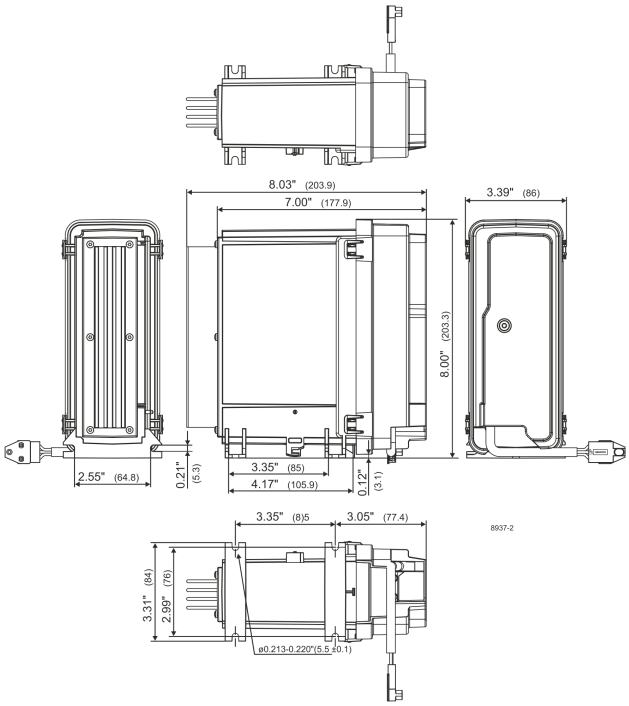
| – | **Conf. 1** | **Conf. 2** | **Conf. 3** | **Conf. 4** |
|---|---|---|---|---|
| 单包装采购代码: | 105N4866 | 105N4910 | 105N4960 | 105N4962 |
| 工业包装采购代码: | 105N4867 (8) | 105N4911 (8) | 105N4961 (8) | 105N4963 (8) |
| 标称电压: | 100-240 V,50/60 Hz | 220-240 V,50/60 Hz | 100-240 V,50/60 Hz | 100-240 V,50/60 Hz |
| 电压范围 | 90-150/180-270 V | 180-270 V | 90-150/180-270 V | 90-150/180-270 V |
| 最大输出功率 | 1000 W | 1000 W | 1000 W | 1000 W |
| 压缩机转速范围: | 2000-4500 rpm | 2000-4500 rpm | 2000-4500 rpm | 2000-4500 rpm |
| 电缆长度: | 680 mm | 680 mm | 680 mm | 915 mm |
| 防护等级: | IP43 | IP54 | IP54 | IP54 |
| 堵转电流: | 1,2 A | 1,2 A | 1,2 A | 1,2 A |
| AEO and Defrost pin | – | Yes | Yes | Yes |
| Frequency input | – | Yes | Yes | Yes |
| Modbus input | RS485 | SWI | SWI | SWI |
| 控制器接线 | » 控制器接线 | » 控制器接线 | » 控制器接线 | » 控制器接线 |

## 控制器尺寸

**Conf. 1**




**Conf. 2, 3, 4**




## 操作说明

变频压缩机及控制器的正确安装与运行，请参阅操作说明书。本文件包含控制器的电气安装、转速控制以及技术参数相关内容。
» 下载操作说明书

**型号**

**NLV8.0CN**

采购代码:

**105H7865**

## 标准工况下性能参数 — 2000 rpm

**R290**, 240 V/50 Hz, 风冷 3m/s

| pe | pc | RGT | Tliq | 制冷量 | | | 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 | **260** | 887 | 224 | **1.77** | 6.04 | 147 | 0.71 | 2.64 | **ASHRAE LBP** |
| -25 -13 | 55 131 | 32 89.6 | 55 131 | **192** | 654 | 165 | **1.36** | 4.64 | 141 | 0.69 | 2.40 | **CECOMAF LBP** |
| -35 -31 | 40 104 | 20 68 | 40 104 | **140** | 478 | 120 | **1.42** | 4.85 | 99 | 0.58 | 1.61 | **EN12900 LBP** |
| -6.7 20 | 54.4 129.9 | 35 95 | 46.1 115 | **482** | 1644 | 414 | **2.36** | 8.04 | 204 | 0.91 | 5.52 | **ASHRAE MBP** |
| -10 14 | 55 131 | 32 89.6 | 55 131 | **382** | 1303 | 328 | **1.95** | 6.67 | 196 | 0.88 | 4.86 | **CECOMAF MBP** |
| -10 14 | 45 113 | 20 68 | 45 113 | **421** | 1435 | 362 | **2.41** | 8.22 | 175 | 0.81 | 5.18 | **EN12900 MBP** |

## 性能参数表 — 2000 rpm

**R290**, 240 V/50 Hz, 风冷 3m/s

**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] |
| -40 | -40 | **92** | 315 | 79 | **1.07** | 3.65 | 86 | 0.56 | 1.04 |
| -30 | -22 | **176** | 599 | 151 | **1.51** | 5.14 | 117 | 0.62 | 1.99 |
| -20 | -4 | **289** | 986 | 249 | **1.95** | 6.66 | 148 | 0.72 | 3.29 |
| -10 | 14 | **437** | 1492 | 376 | **2.50** | 8.54 | 175 | 0.81 | 5.02 |
| 0 | 32 | **626** | 2136 | 538 | **3.27** | 11.15 | 192 | 0.87 | 7.28 |
| 10 | 50 | **860** | 2935 | 740 | **4.46** | 15.20 | 193 | 0.87 | 10.17 |

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| -40 | -40 | **68** | 232 | 58 | **0.77** | 2.63 | 88 | 0.56 | 0.84 |
| -30 | -22 | **144** | 491 | 124 | **1.18** | 4.02 | 122 | 0.64 | 1.80 |
| -20 | -4 | **247** | 842 | 212 | **1.54** | 5.27 | 160 | 0.76 | 3.11 |
| -10 | 14 | **382** | 1303 | 328 | **1.95** | 6.67 | 196 | 0.88 | 4.86 |
| 0 | 32 | **554** | 1892 | 477 | **2.48** | 8.45 | 224 | 0.99 | 7.15 |
| 10 | 50 | **770** | 2626 | 662 | **3.21** | 10.96 | 240 | 1.06 | 10.11 |

**型号**

**NLV8.0CN**

采购代码:

**105H7865**

## 标准工况下性能参数 — 4500 rpm

**R290**, 240 V/50 Hz, 风冷 3m/s

| pe | pc | RGT | Tliq | 制冷量 | | | 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 | **622** | 2124 | 535 | **1.83** | 6.23 | 341 | 1.49 | 6.32 | **ASHRAE LBP** |
| -25 -13 | 55 131 | 32 89.6 | 55 131 | **462** | 1578 | 398 | **1.41** | 4.81 | 328 | 1.43 | 5.80 | **CECOMAF LBP** |
| -35 -31 | 40 104 | 20 68 | 40 104 | **340** | 1160 | 292 | **1.48** | 5.06 | 229 | 1.04 | 3.90 | **EN12900 LBP** |
| -6.7 20 | 54.4 129.9 | 35 95 | 46.1 115 | **1098** | 3746 | 944 | **2.34** | 7.97 | 470 | 2.02 | 12.57 | **ASHRAE MBP** |
| -10 14 | 55 131 | 32 89.6 | 55 131 | **878** | 2994 | 755 | **1.95** | 6.66 | 449 | 1.93 | 11.16 | **CECOMAF MBP** |
| -10 14 | 45 113 | 20 68 | 45 113 | **953** | 3251 | 819 | **2.38** | 8.10 | 401 | 1.73 | 11.73 | **EN12900 MBP** |

## 性能参数表 — 4500 rpm

**R290**, 240 V/50 Hz, 风冷 3m/s

**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] |
| -40 | -40 | **230** | 785 | 198 | **1.14** | 3.89 | 202 | 0.93 | 2.59 |
| -30 | -22 | **423** | 1443 | 364 | **1.56** | 5.32 | 271 | 1.21 | 4.78 |
| -20 | -4 | **671** | 2289 | 577 | **1.97** | 6.72 | 341 | 1.49 | 7.63 |
| -10 | 14 | **990** | 3380 | 852 | **2.47** | 8.42 | 401 | 1.73 | 11.37 |
| 0 | 32 | **1398** | 4770 | 1202 | **3.16** | 10.79 | 442 | 1.90 | 16.25 |
| 10 | 50 | **1909** | 6515 | 1642 | **4.20** | 14.34 | 454 | 1.95 | 22.58 |

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| -40 | -40 | **169** | 575 | 145 | **0.81** | 2.76 | 208 | 0.96 | 2.10 |
| -30 | -22 | **354** | 1207 | 304 | **1.24** | 4.22 | 286 | 1.27 | 4.42 |
| -20 | -4 | **585** | 1995 | 503 | **1.58** | 5.39 | 370 | 1.60 | 7.36 |
| -10 | 14 | **878** | 2994 | 755 | **1.95** | 6.66 | 449 | 1.93 | 11.16 |
| 0 | 32 | **1249** | 4261 | 1074 | **2.43** | 8.28 | 515 | 2.21 | 16.10 |
| 10 | 50 | **1715** | 5851 | 1475 | **3.08** | 10.52 | 556 | 2.38 | 22.53 |

**型号**
**NLV8.0CN**

采购代码:
**105H7865**

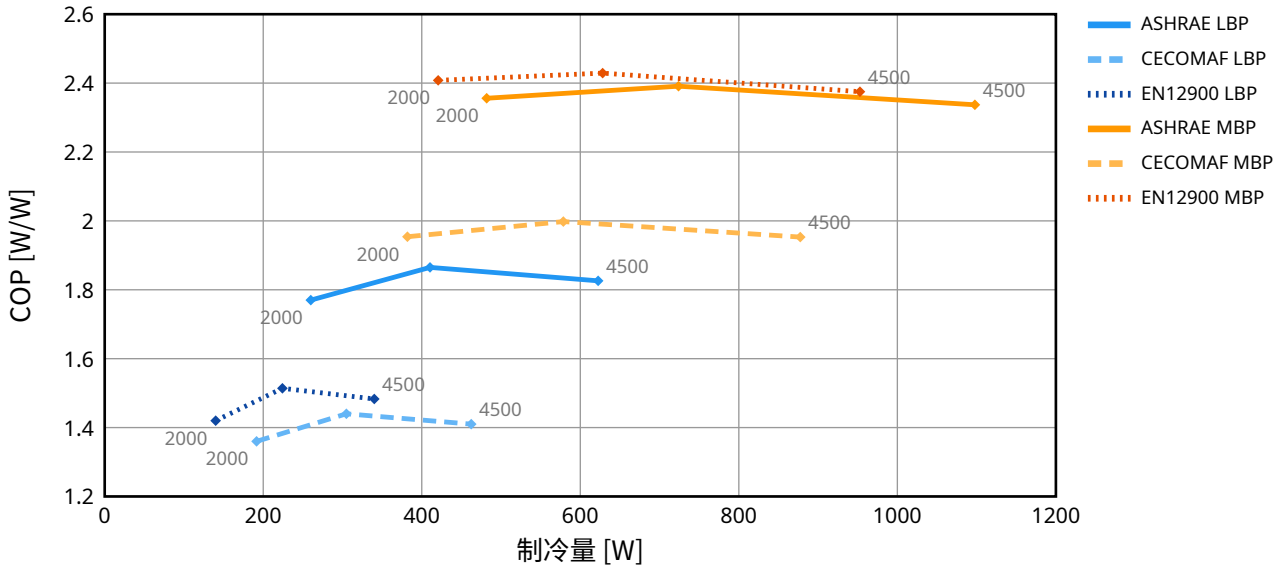
## 最佳性能

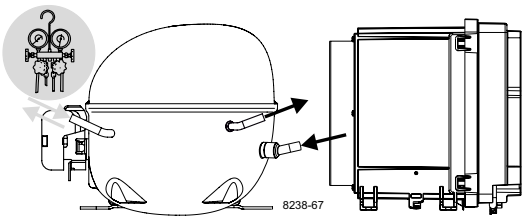
**R290**, 240 V/50 Hz, 风冷 3m/s
显示在每个标准工况下达到最高 COP 的转速 (RPM)。

| pe | pc | RGT | Tliq | 制冷量 | | | COP | EER | P | RPM | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [°C] [°F] | [°C] [°F] | [°C] [°F] | [°C] [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [rpm] | |
| -23.3 -10 | 54.4 129.9 | 32.2 90 | 32.2 90 | **410** | 1400 | 353 | **1.86** | 6.36 | 220 | **3000** | **ASHRAE LBP** |
| -25 -13 | 55 131 | 32 89.6 | 55 131 | **305** | 1040 | 262 | **1.44** | 4.91 | 212 | **3000** | **CECOMAF LBP** |
| -35 -31 | 40 104 | 20 68 | 40 104 | **224** | 765 | 193 | **1.51** | 5.17 | 148 | **3000** | **EN12900 LBP** |
| -6.7 20 | 54.4 129.9 | 35 95 | 46.1 115 | **724** | 2470 | 623 | **2.39** | 8.16 | 303 | **3000** | **ASHRAE MBP** |
| -10 14 | 55 131 | 32 89.6 | 55 131 | **579** | 1974 | 498 | **2.00** | 6.82 | 290 | **3000** | **CECOMAF MBP** |
| -10 14 | 45 113 | 20 68 | 45 113 | **628** | 2143 | 540 | **2.43** | 8.29 | 259 | **3000** | **EN12900 MBP** |

## 制冷量与 COP

**R290**, 240 V/50 Hz, 风冷 3m/s





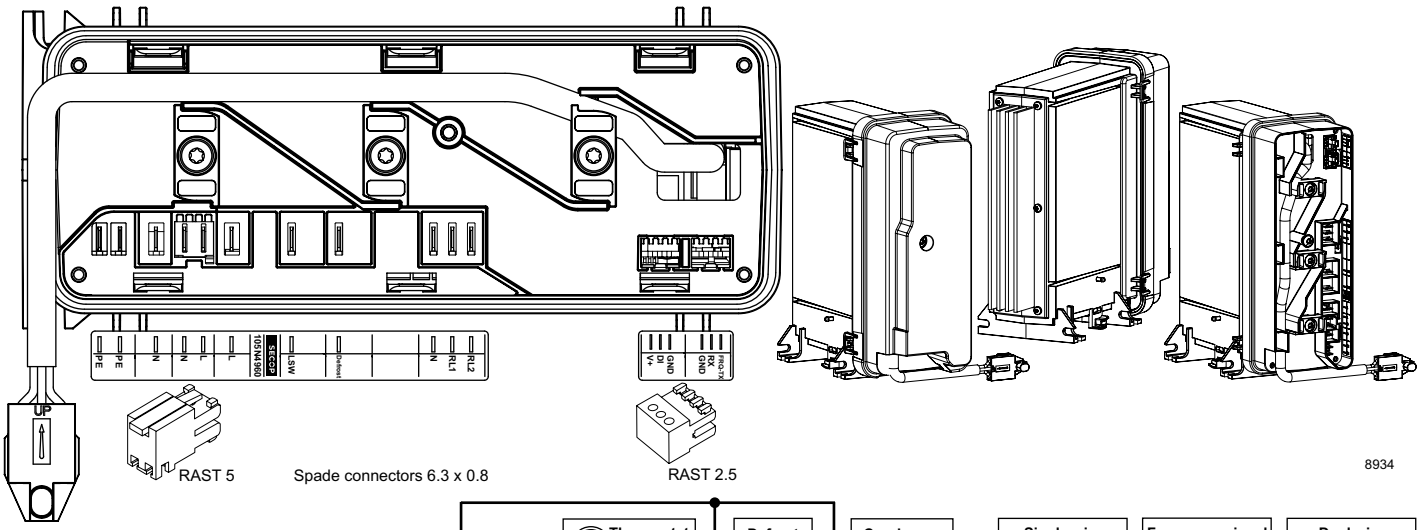

# Instructions

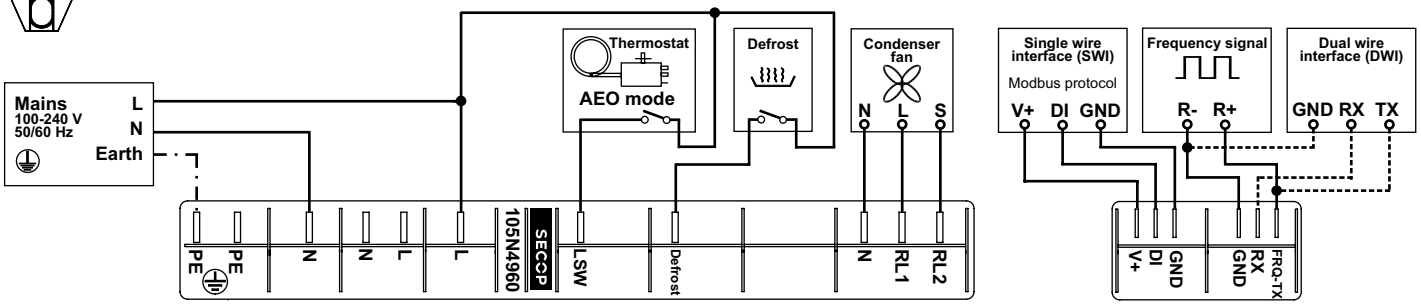
NLV/MN-UV Compressors
100-240 V, 50/60 Hz
105N4960/105N4964
Controllers

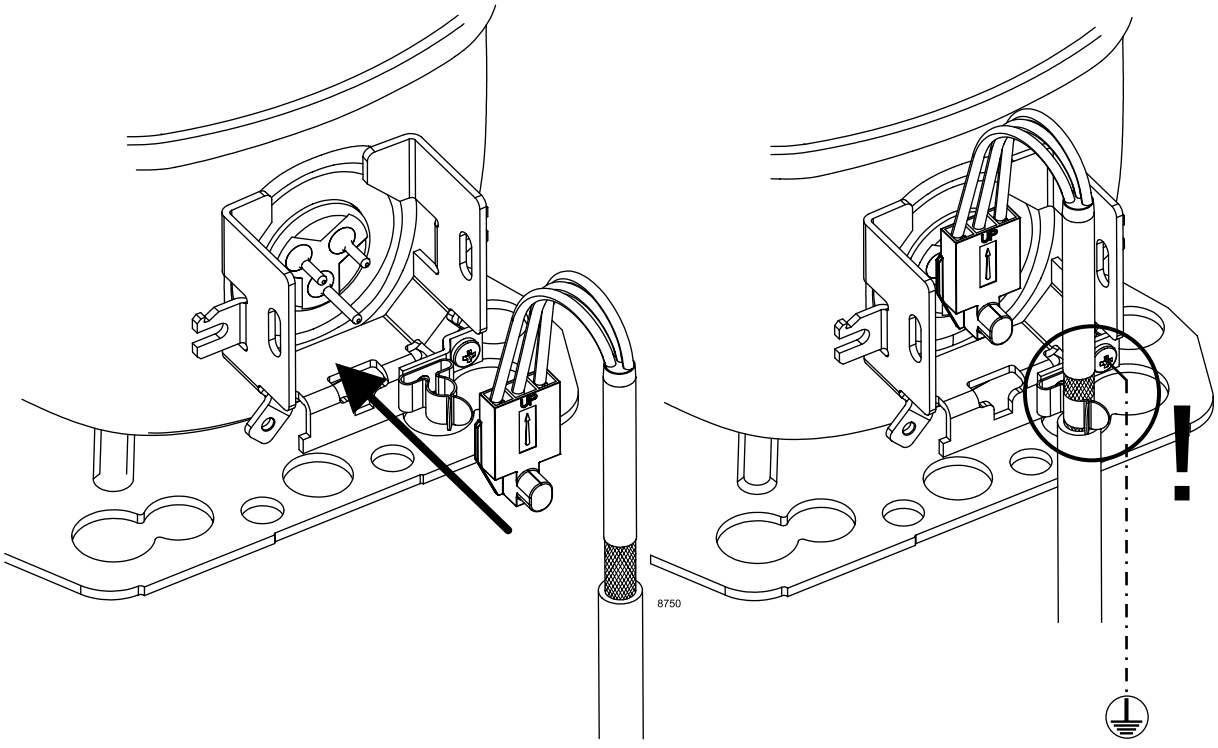
SECOP

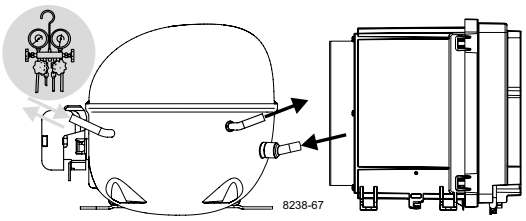
Keep electrical equipment clear from oil, chemicals, and water








# Instructions

NLV/MN-UV Compressors
100-240 V, 50/60 Hz
105N4960/105N4964
Controllers

SECOP

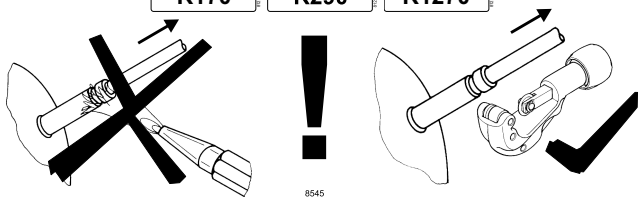
Keep electrical equipment clear from oil, chemicals, and water



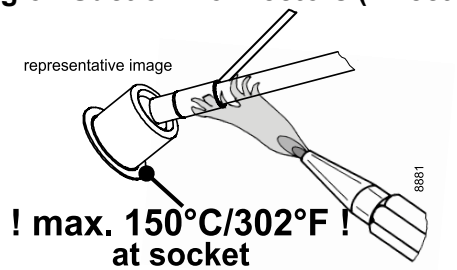
## Service/Repair – R170, R290, R1270

(applies to all flammable refrigerants)



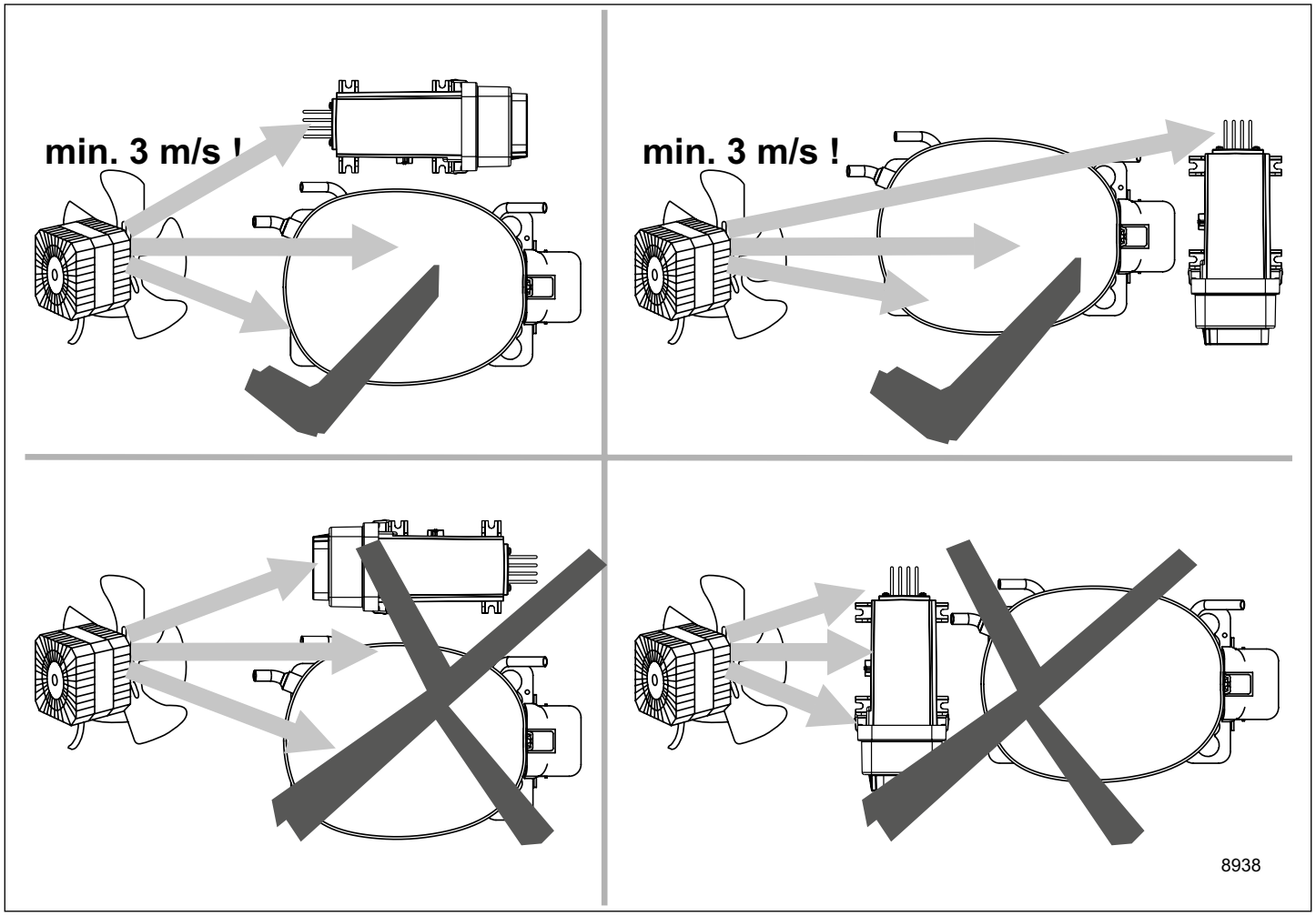

## Brazing on Suction Connectors (Direct Intake)




**! max. 150°C/302°F ! at socket**

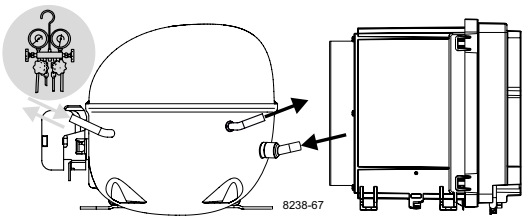
brazing solder: phosphor (LP7) or silver

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




| | |
|---|---|
| **Airflow** | 3 m/s |
| **Operating conditions** | + 5 °C to 43 °C - humidity < 90 % rH non condensing |
| **Storage conditions** | -25 °C to 70 °C - humidity < 90 % rH non condensing |
| **Supply voltage** | 100-240 V (± 10 %) |
| **Frequency** | 50/60 Hz |
| **Input power, max.** | 1000 W |

**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**



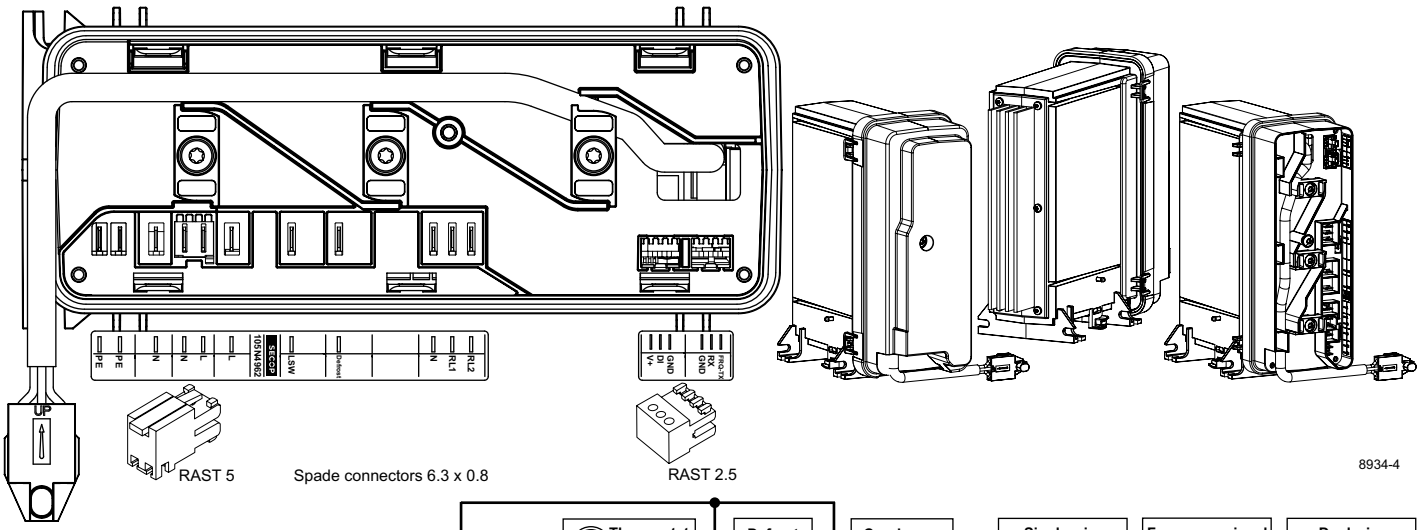

# Instructions

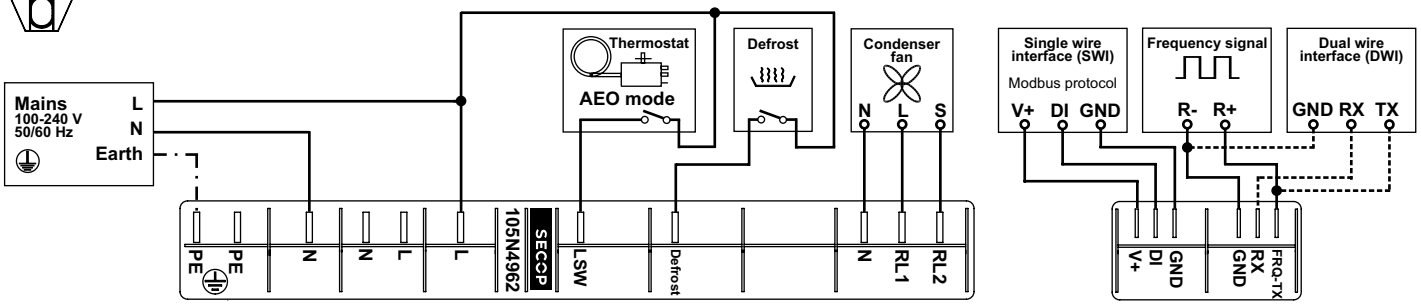
NLV/MN-UV Compressors
100-240 V, 50/60 Hz
105N4962/105N4966/
105N4972 Controllers

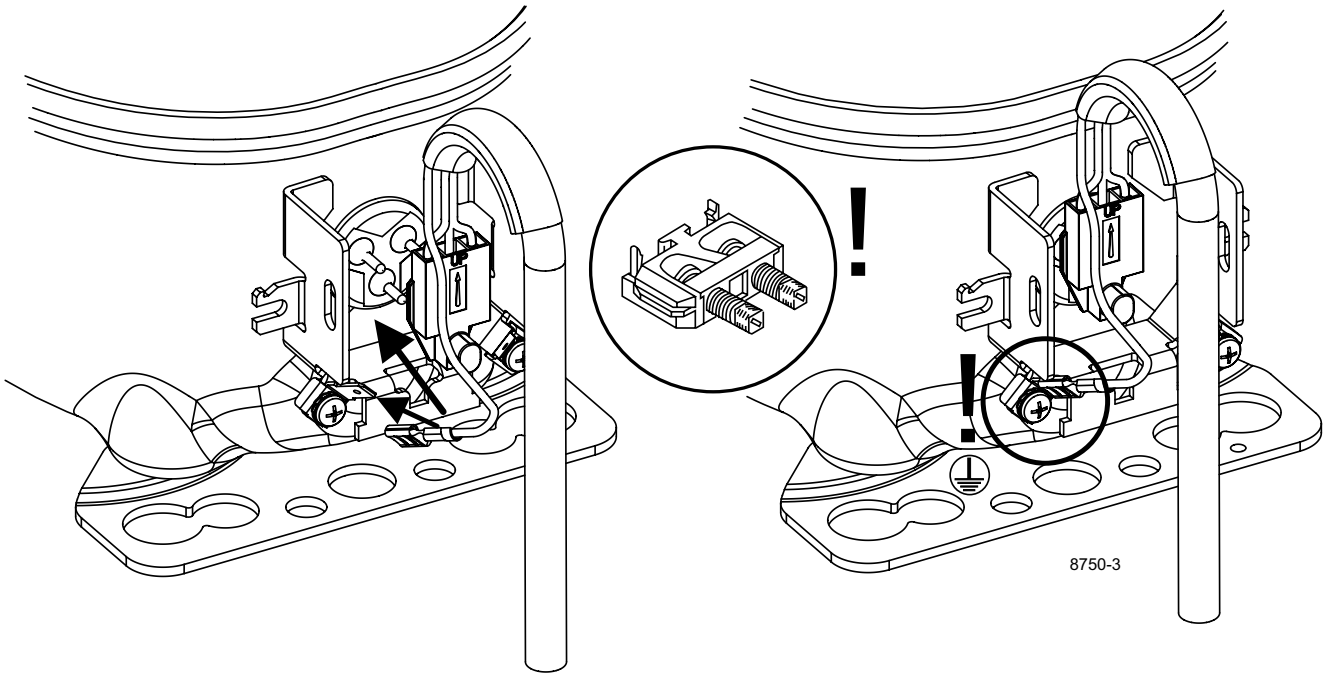
SECOP

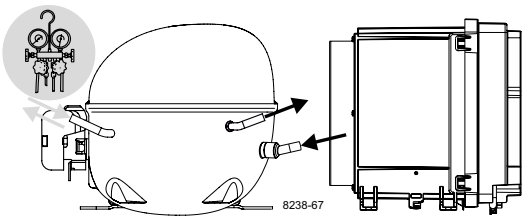
Keep electrical equipment clear from oil, chemicals, and water








# Instructions

NLV/MN-UV Compressors
100-240 V, 50/60 Hz
105N4962/105N4966/
105N4972 Controllers

SECOP

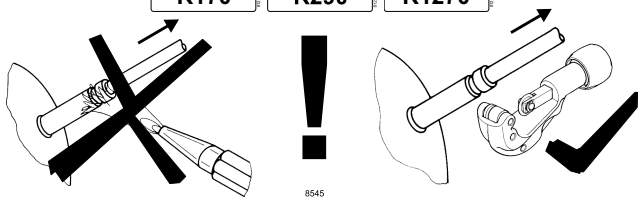
Keep electrical equipment clear from oil, chemicals, and water



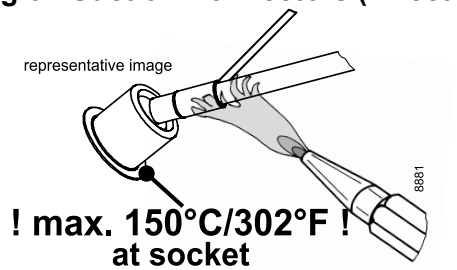
## Service/Repair – R170, R290, R1270

(applies to all flammable refrigerants)



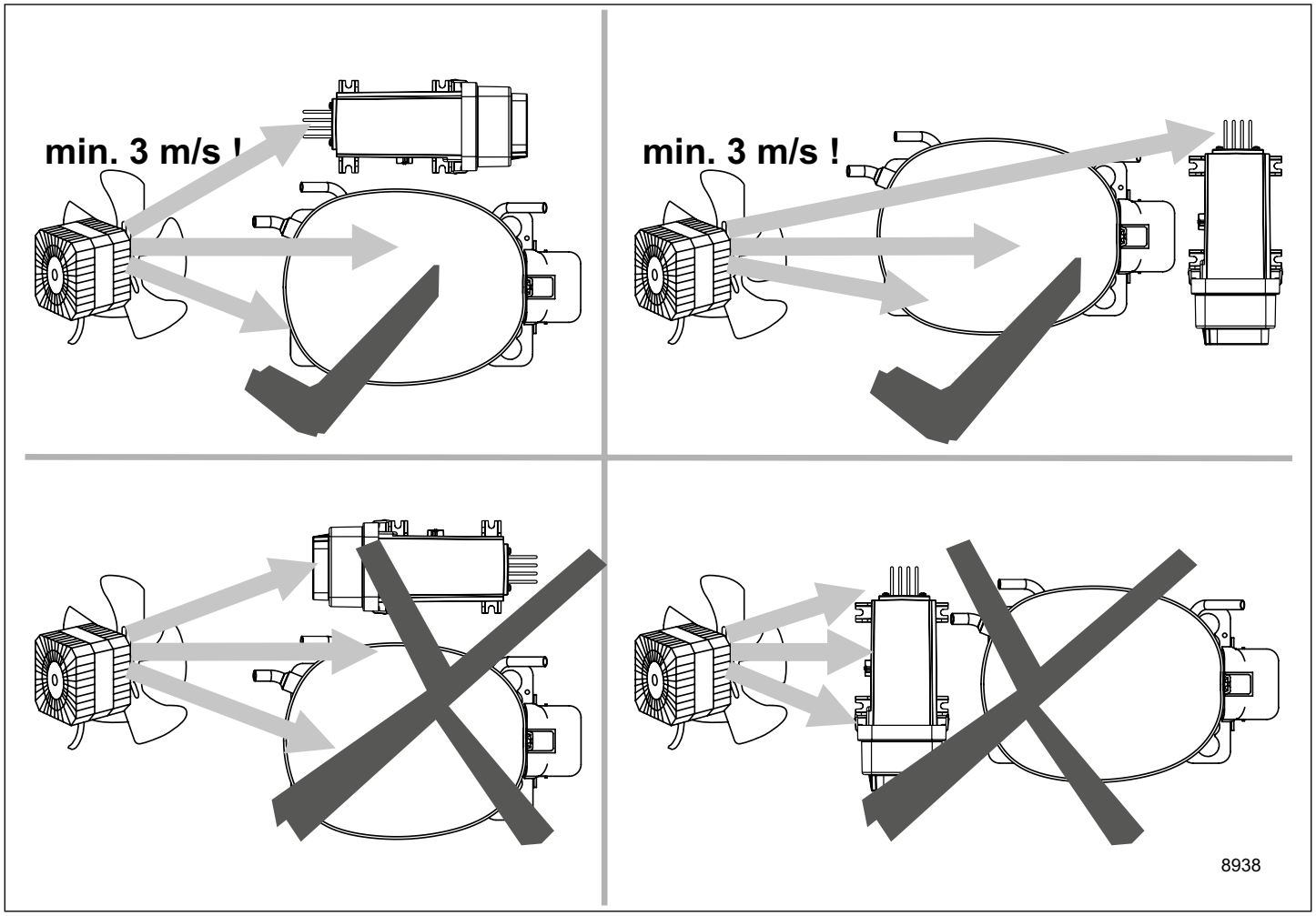

## Brazing on Suction Connectors (Direct Intake)




**! max. 150°C/302°F ! at socket**

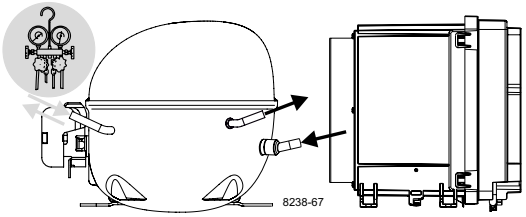
brazing solder: phosphor (LP7) or silver

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




| | |
|---|---|
| **Airflow** | 3 m/s |
| **Operating conditions** | + 5 °C to 43 °C - humidity < 90 % rH non condensing |
| **Storage conditions** | -25 °C to 70 °C - humidity < 90 % rH non condensing |
| **Supply voltage** | 100-240 V (± 10 %) |
| **Frequency** | 50/60 Hz |
| **Input power, max.** | 1000 W |

**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**



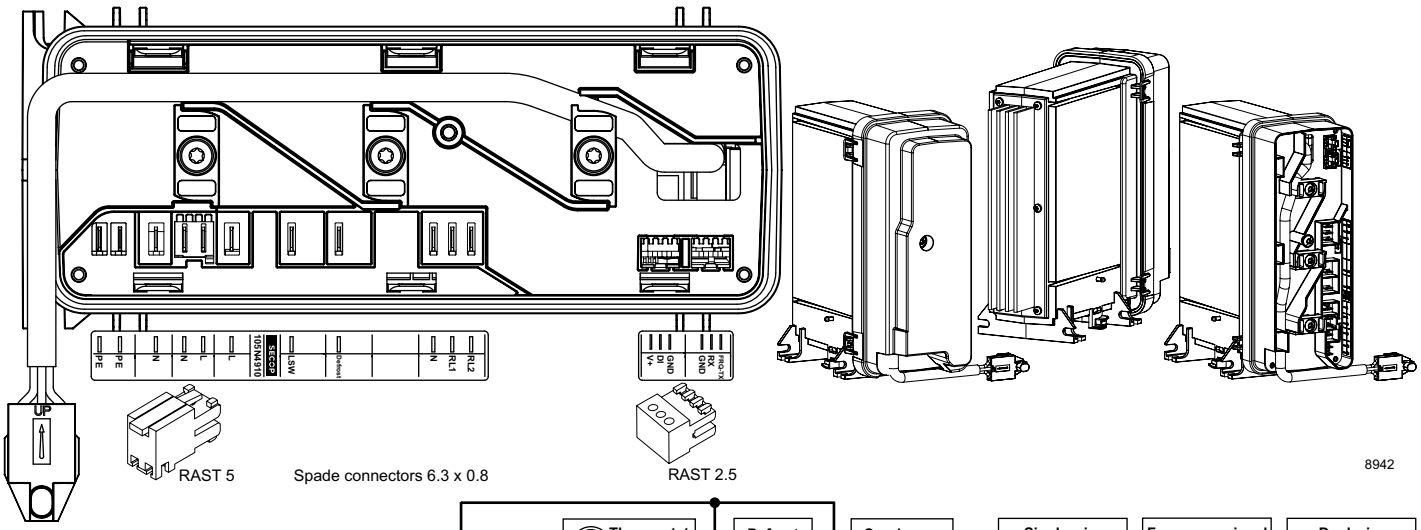

# Instructions

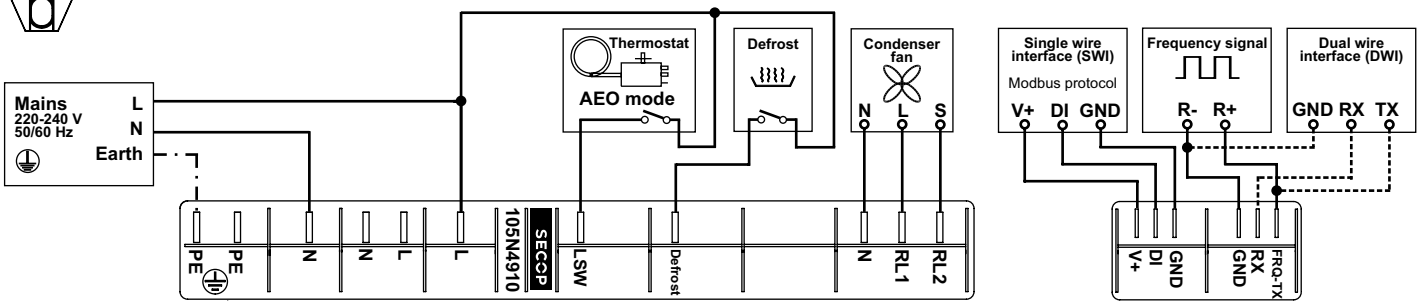
NLV/MN-UV Compressors
220-240 V, 50/60 Hz
105N491x Series
Controllers

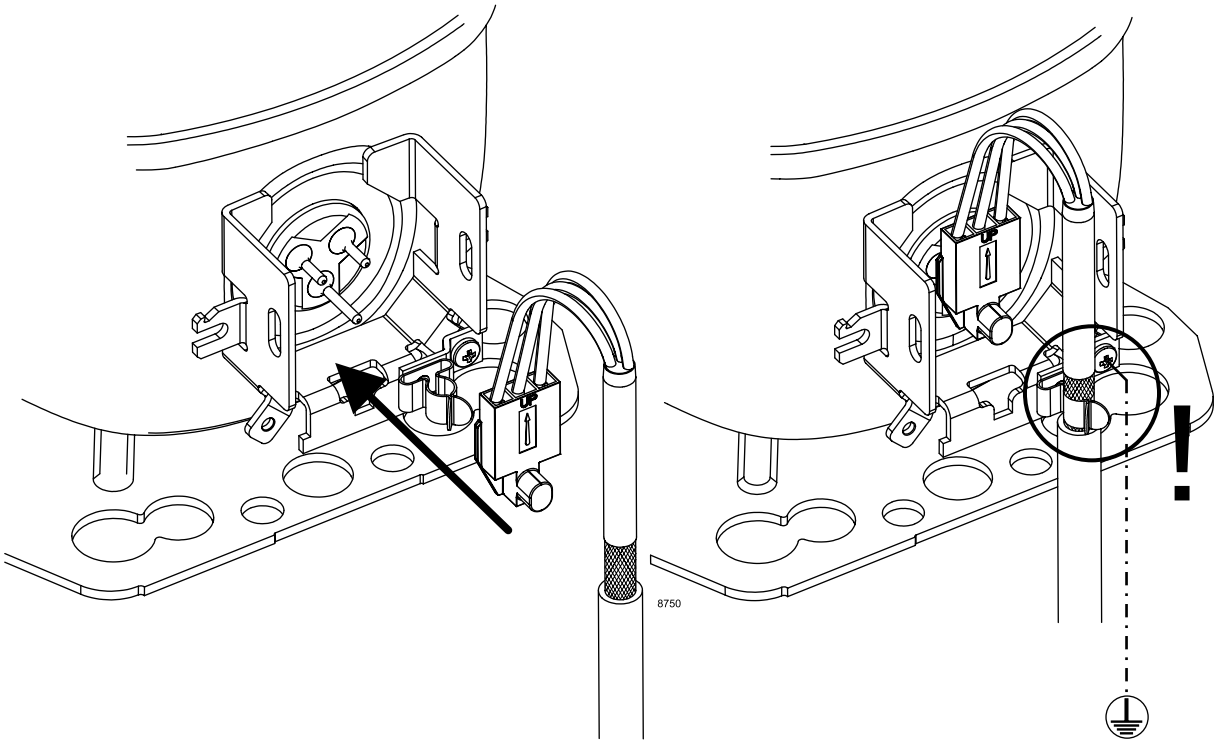
SECOP

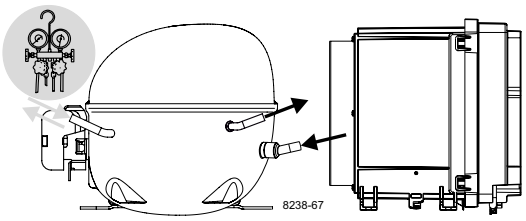
Keep electrical equipment clear from oil, chemicals, and water








# Instructions

NLV/MN-UV Compressors
220-240 V, 50/60 Hz
105N491x Series
Controllers

SECOP

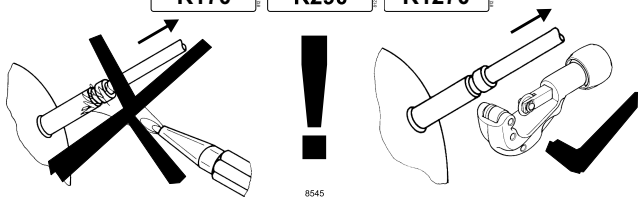
Keep electrical equipment clear from oil, chemicals, and water



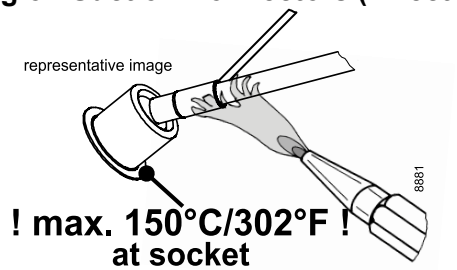
## Service/Repair – R170, R290, R1270

(applies to all flammable refrigerants)



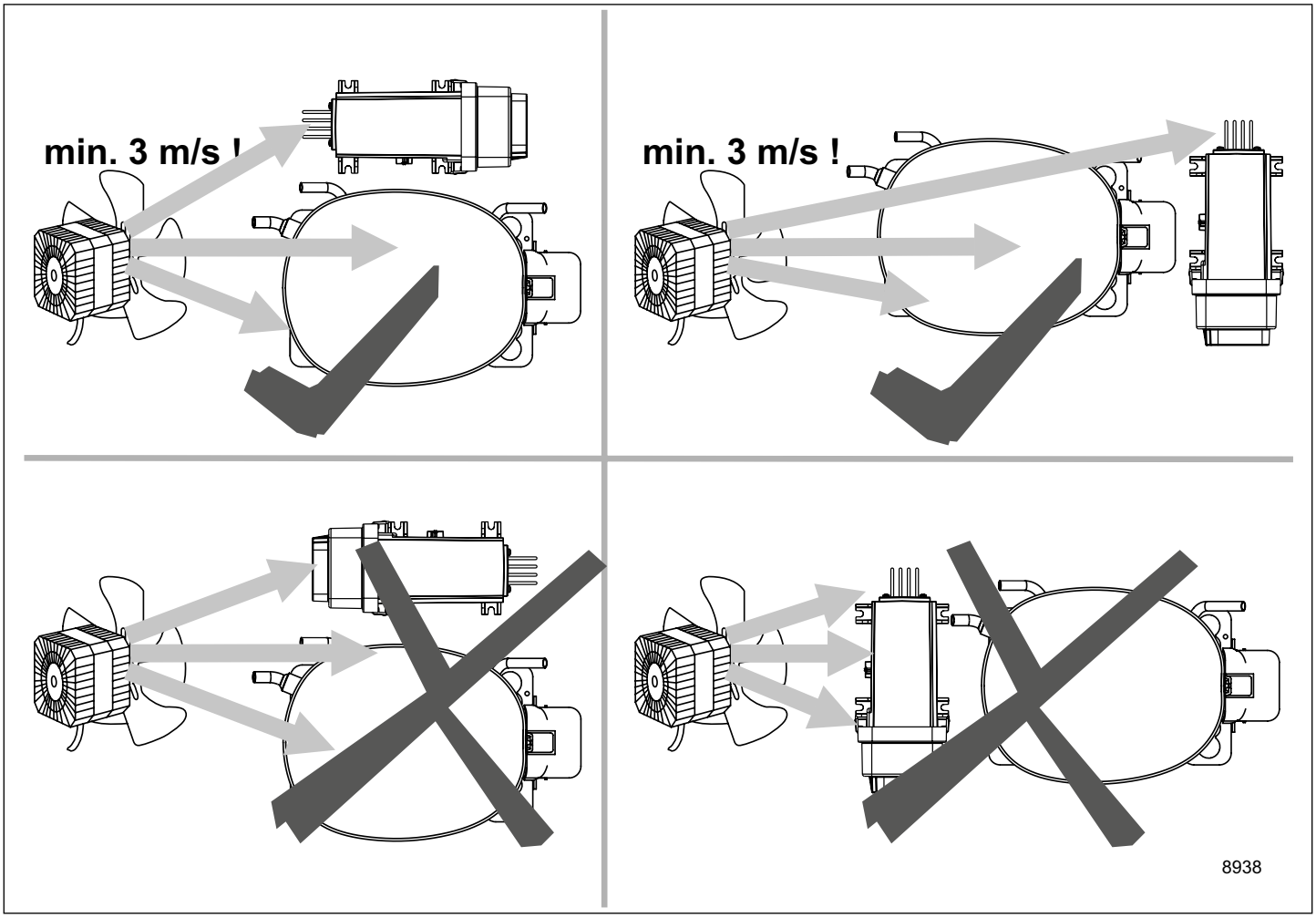

## Brazing on Suction Connectors (Direct Intake)




**! max. 150°C/302°F ! at socket**

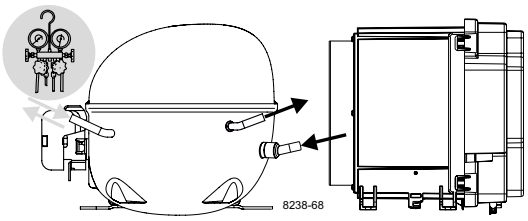
brazing solder: phosphor (LP7) or silver

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




| | |
|---|---|
| **Airflow** | 3 m/s |
| **Operating conditions** | + 5 °C to 43 °C - humidity < 90 % rH non condensing |
| **Storage conditions** | -25 °C to 70 °C - humidity < 90 % rH non condensing |
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| **Frequency** | 50/60 Hz |
| **Input power, max.** | 1000 W |

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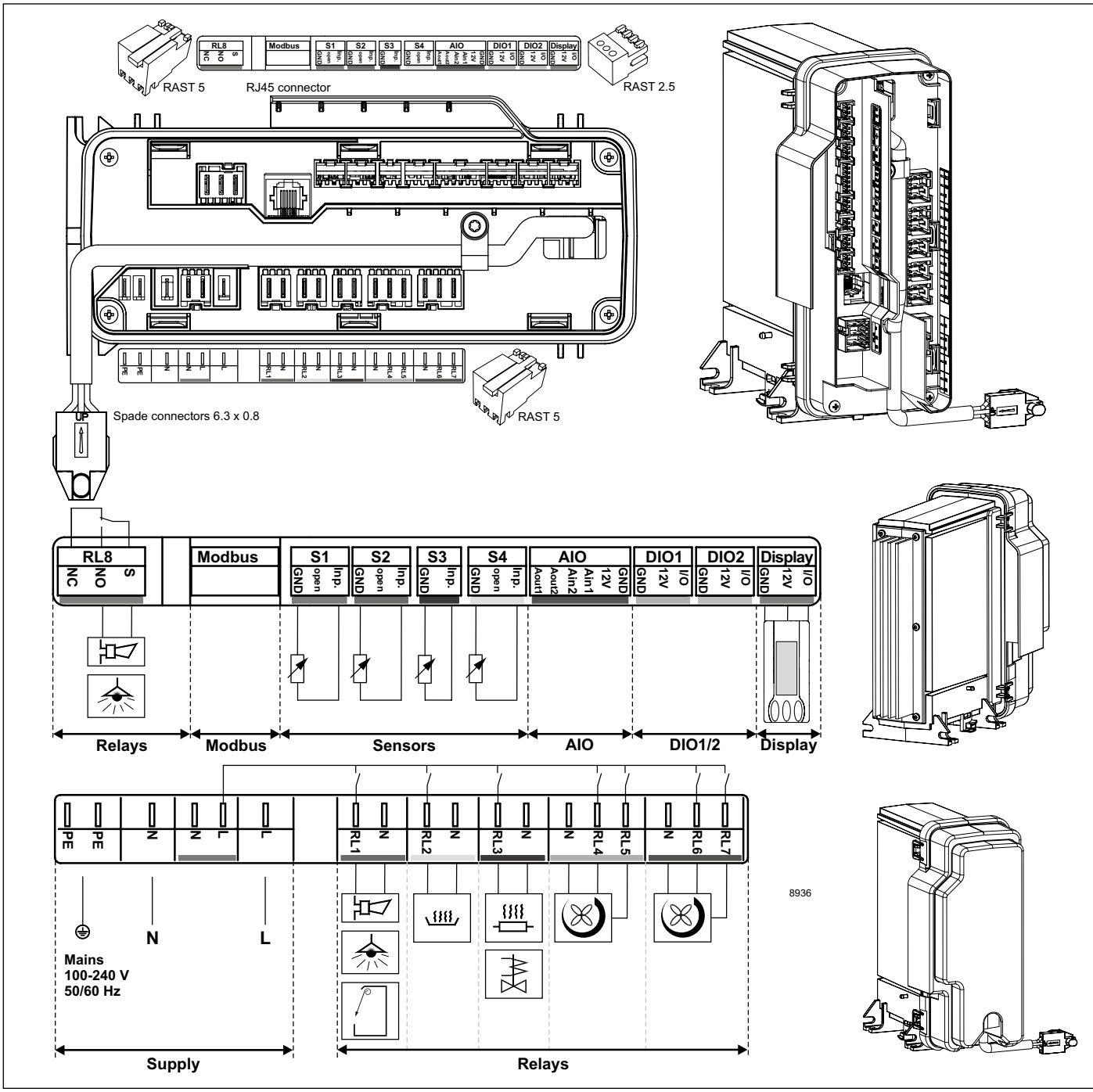

# Instructions

NLV Compressors
100-240 V, 50/60 Hz
105N486x Series
Controllers

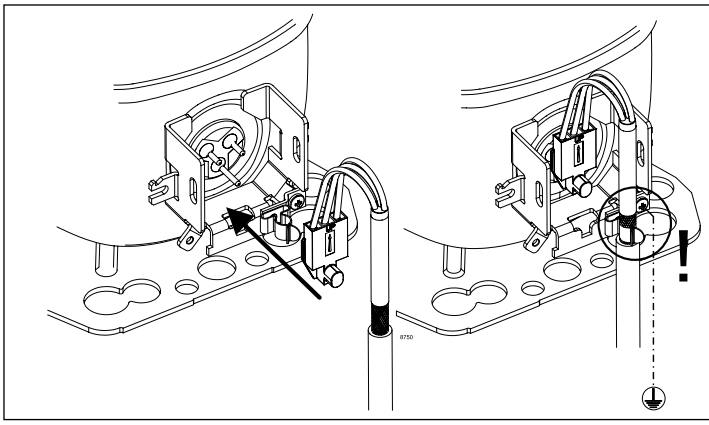
SECOP

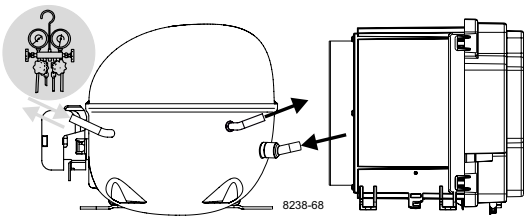
Keep electrical equipment clear from oil, chemicals, and water






| | | | |
|---|---|---|---|
| **Mains** | red | **S1** | red |
| **RL 1** | blue | **S2** | blue |
| **RL 2** | yellow | **S3** | black |
| **RL 3** | black | **S4** | yellow |
| **RL 4, 5** | grey | **AIO** | brown |
| **RL 6, 7** | brown | **DIO1** | grey |
| **RL 8** | green | **DIO2** | pink |
| | | **Display** | green |






# Instructions

NLV Compressors
100-240 V, 50/60 Hz
105N486x Series
Controllers

SECOP

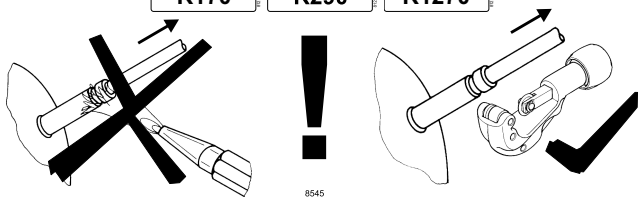
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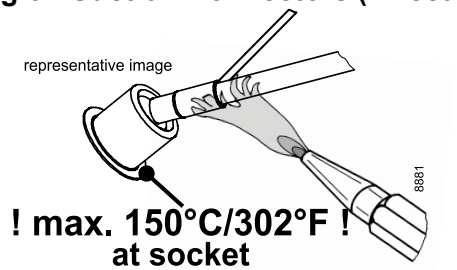
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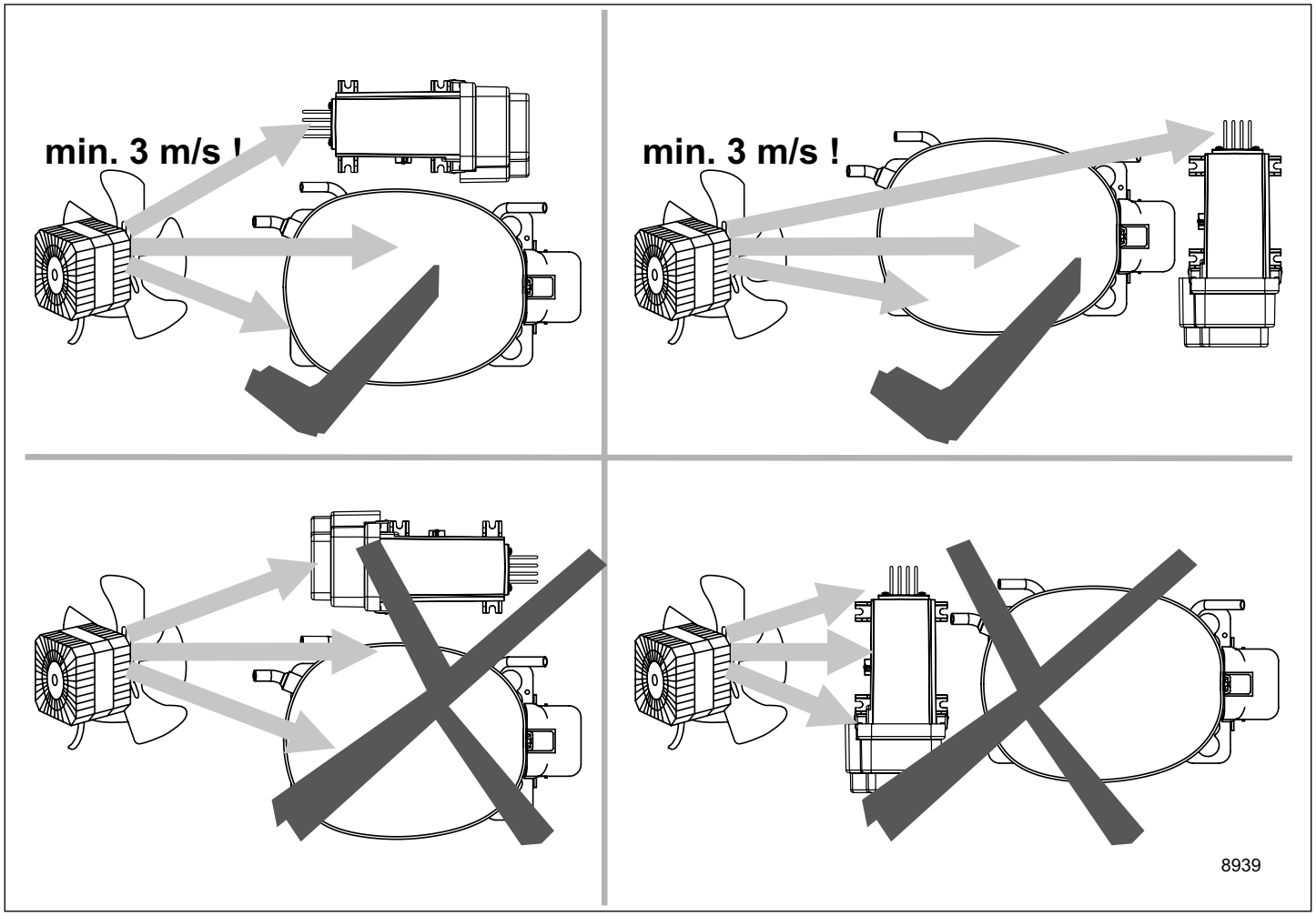

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