Single
Packs

Single Pack NLV10CN 100-240V 50/60Hz PM

Single pack code number: **195B4839**

Position	Title	Code	Amount
1	Compressor NLV10CN	105H7065	1
2	Electronic unit NLV	105N4961	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
NLV10CN

采购代码:
105H7065

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	**10.09 cm3 / 0.62cu.in**
每托盘压缩机数量	**80**



基本信息 NLV10CN 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

NLV10CN

采购代码:

105H7065

设计信息

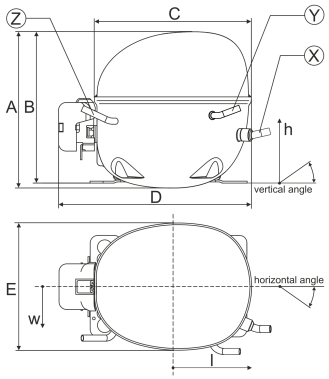
润滑油类型	**POE**	保护器类型	**内置**
润滑油黏度	**32cSt**	最高绕组温度	**125 °C**
润滑油注油量	**300 / 10.14fl.oz**	最高排气温度	**130°C / 266°F**
壳体内自由空间容积	**2,360 cm3 / 79.80fl.oz**		

尺寸信息

壳体

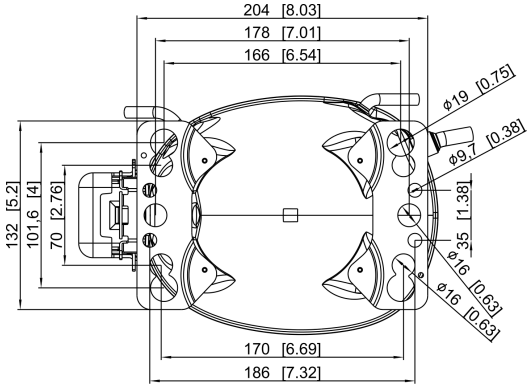
A 高度	**203mm / 7.99in**
B 高度	**197mm / 7.76in**
C 外壳长度	**205mm / 8.07in**
D 长度（含保护罩）	**252mm / 9.92in**
E 宽度	**166mm / 6.54in**

在此查找 3D 模型



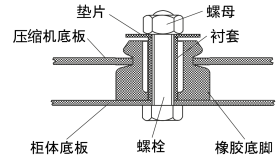
连接管	吸气管 X	排气管 Y	工艺管 Z
直径 [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
材料	CU	CU	CU
水平角度 ±2°	0°	0°	0°
垂直角度 ±2°	15°	21°	155°
位置 l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in	-109.3/94.3/72 / -4.30/3.71/2.83in
直管长度 [mm]	12 / 0.47in	12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

安装附件

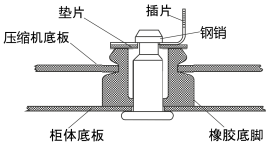


单位：mm [in]

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

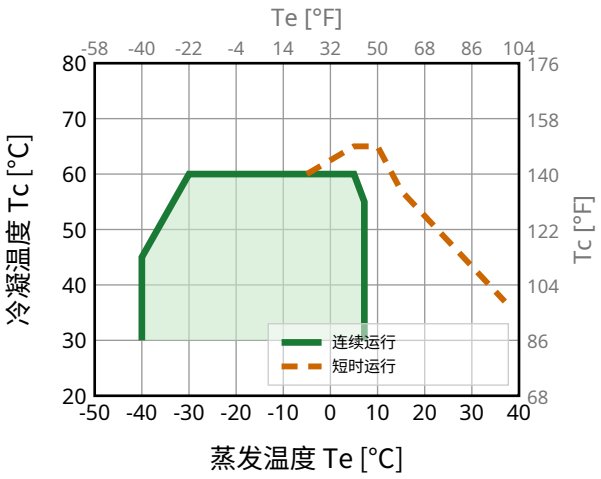
型号
NLV10CN

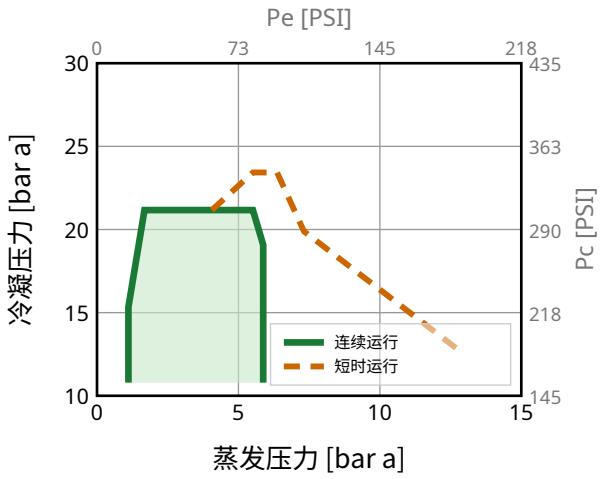
系统设计

采购代码:
105H7065

系统设计

运行范围 R290



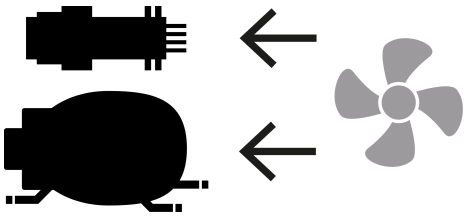


系统冷却条件

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:

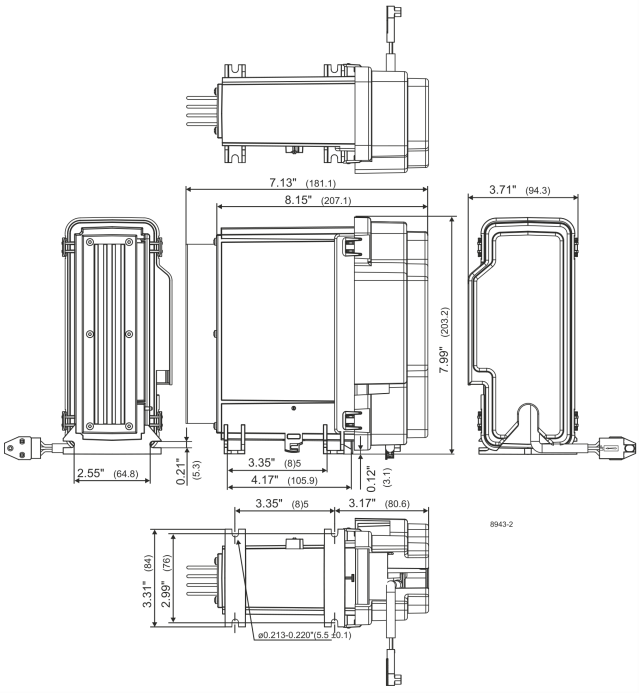
NLV10CN 控制器概览 **105H7065**

控制器概览

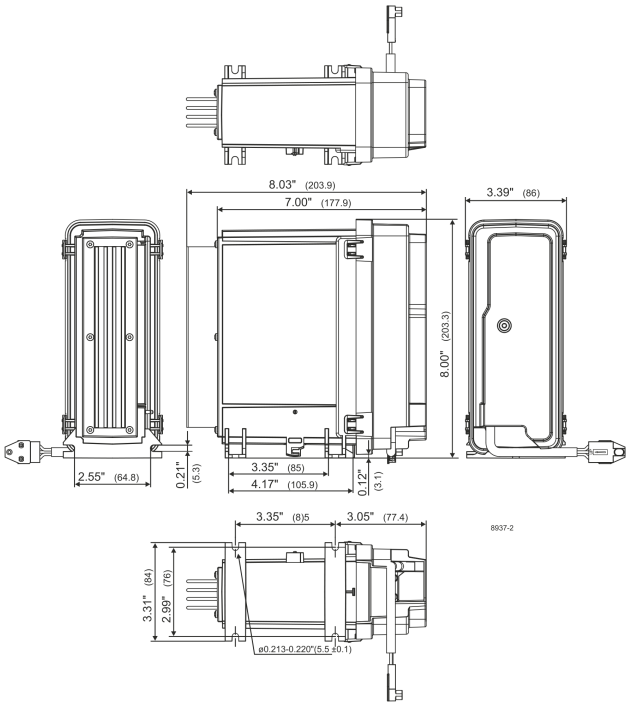
–	**Conf. 1**	**Conf. 2**	**Conf. 3**	**Conf. 4**
单包装采购代码:	105N4866	105N4910	105N4960	105N4962
工业包装采购代码:	105N4867 (8)	105N4911 (8)	105N4961 (8)	105N4963 (8)
标称电压:	100-240 V,50/60 Hz	220-240 V,50/60 Hz	100-240 V,50/60 Hz	100-240 V,50/60 Hz
电压范围	90-150/180-270 V	180-270 V	90-150/180-270 V	90-150/180-270 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 采购代码:

NLV10CN **105H7065**

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	**341**	1165	294	**1.76**	6.02	194	0.87	3.47	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**254**	867	219	**1.36**	4.64	187	0.85	3.19	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**187**	639	161	**1.44**	4.90	131	0.67	2.15	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**608**	2074	523	**2.26**	7.70	269	1.17	6.96	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**484**	1651	416	**1.89**	6.44	257	1.12	6.16	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**529**	1806	455	**2.31**	7.89	229	1.01	6.51	**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	**132**	450	114	**1.09**	3.74	120	0.65	1.48
-30	-22	**232**	792	200	**1.51**	5.15	154	0.73	2.62
-20	-4	**369**	1258	317	**1.91**	6.53	193	0.87	4.20
-10	14	**550**	1877	473	**2.40**	8.21	229	1.01	6.32
0	32	**785**	2677	675	**3.11**	10.60	253	1.10	9.12
10	50	**1081**	3688	929	**4.23**	14.44	255	1.12	12.78

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

-40	-40	**105**	358	90	**0.80**	2.72	132	0.69	1.30
-30	-22	**197**	671	169	**1.19**	4.06	165	0.77	2.46
-20	-4	**320**	1093	276	**1.53**	5.21	210	0.93	4.03
-10	14	**484**	1651	416	**1.89**	6.44	257	1.12	6.16
0	32	**696**	2375	599	**2.35**	8.00	297	1.29	8.98
10	50	**965**	3293	830	**3.00**	10.25	321	1.40	12.68

型号

NLV10CN

采购代码:

105H7065

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	**799**	2728	687	**1.81**	6.19	440	1.90	8.12	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**596**	2032	512	**1.41**	4.80	423	1.82	7.46	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**439**	1499	378	**1.49**	5.09	294	1.30	5.04	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1414**	4826	1216	**2.25**	7.69	627	2.68	16.20	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1128**	3848	970	**1.90**	6.48	594	2.54	14.34	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1230**	4198	1058	**2.29**	7.80	538	2.30	15.14	**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	**310**	1056	266	**1.19**	4.06	260	1.17	3.48
-30	-22	**544**	1856	468	**1.56**	5.32	349	1.52	6.15
-20	-4	**860**	2936	740	**1.93**	6.60	445	1.91	9.79
-10	14	**1279**	4365	1100	**2.38**	8.11	538	2.30	14.69
0	32	**1820**	6211	1565	**2.95**	10.07	617	2.64	21.17
10	50	**2504**	8543	2153	**3.73**	12.73	671	2.87	29.61

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

-40	-40	**245**	837	211	**0.90**	3.06	273	1.22	3.05
-30	-22	**462**	1576	397	**1.25**	4.27	369	1.60	5.77
-20	-4	**749**	2557	644	**1.56**	5.33	480	2.06	9.43
-10	14	**1128**	3848	970	**1.90**	6.48	594	2.54	14.34
0	32	**1617**	5518	1391	**2.31**	7.86	702	3.00	20.85
10	50	**2238**	7635	1924	**2.83**	9.65	791	3.38	29.40

型号
NLV10CN

采购代码:
105H7065

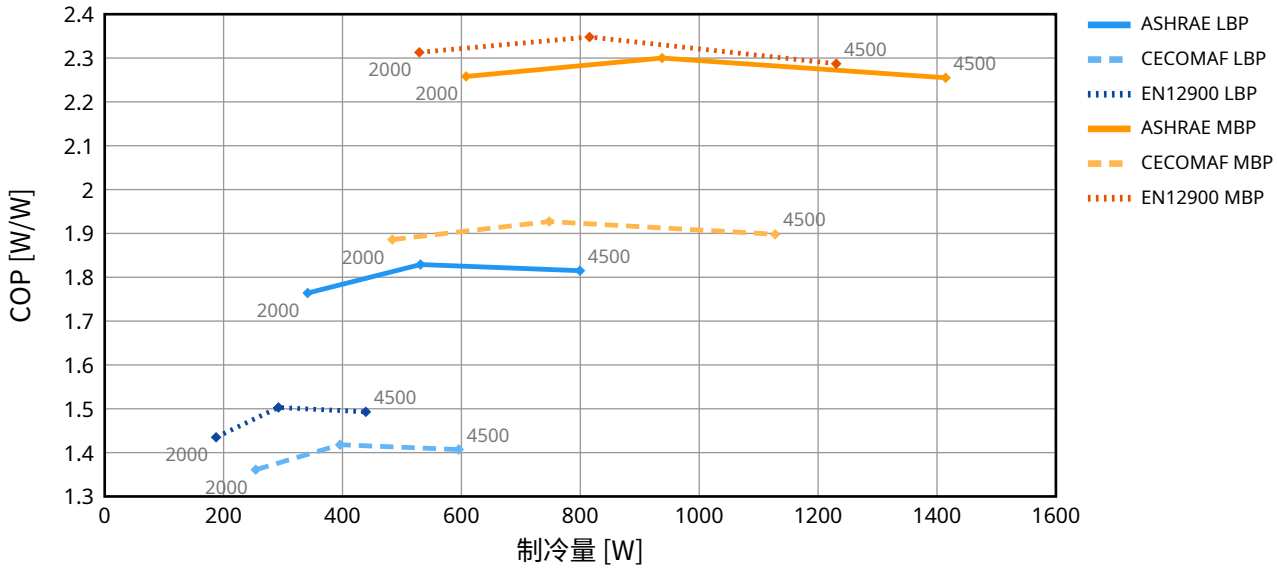
最佳性能

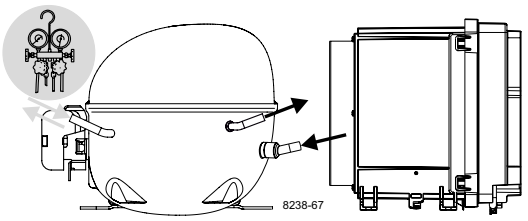
R290, 240 V/50 Hz, 风冷 3m/s
显示在每个标准工况下达到最高 COP 的转速 (RPM)。

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	**531**	1812	457	**1.83**	6.24	290	**3000**	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**396**	1351	341	**1.42**	4.84	279	**3000**	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**292**	997	251	**1.50**	5.13	194	**3000**	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**938**	3199	806	**2.30**	7.85	408	**3000**	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**748**	2551	643	**1.93**	6.57	388	**3000**	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**816**	2783	701	**2.35**	8.01	347	**3000**	**EN12900 MBP**

制冷量与 COP

R290, 240 V/50 Hz, 风冷 3m/s





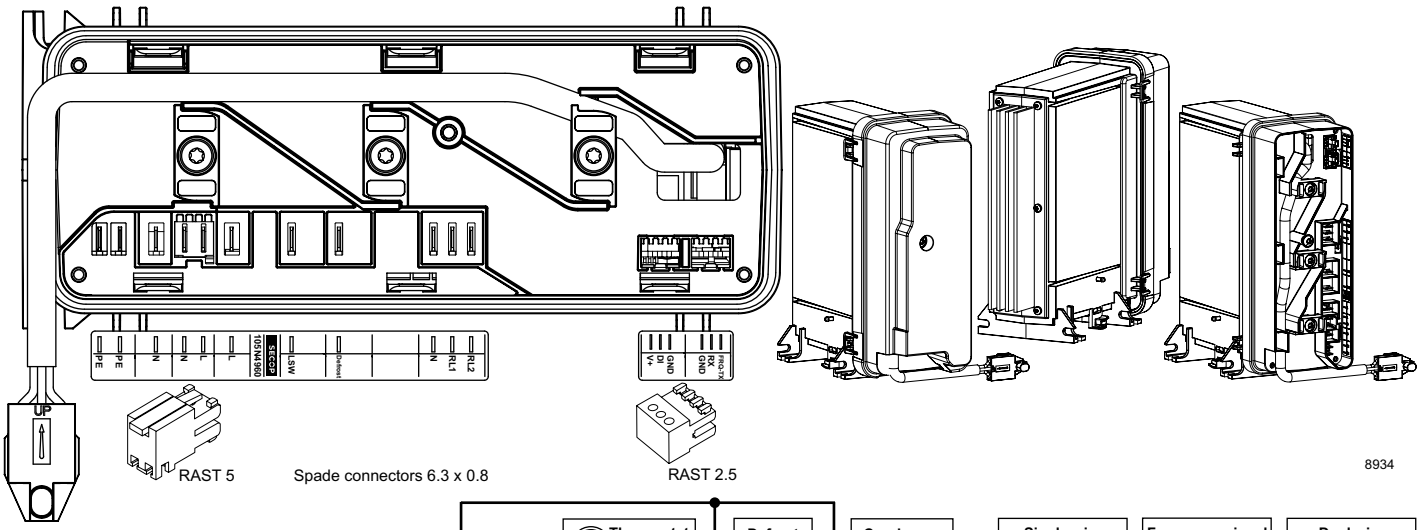
Instructions

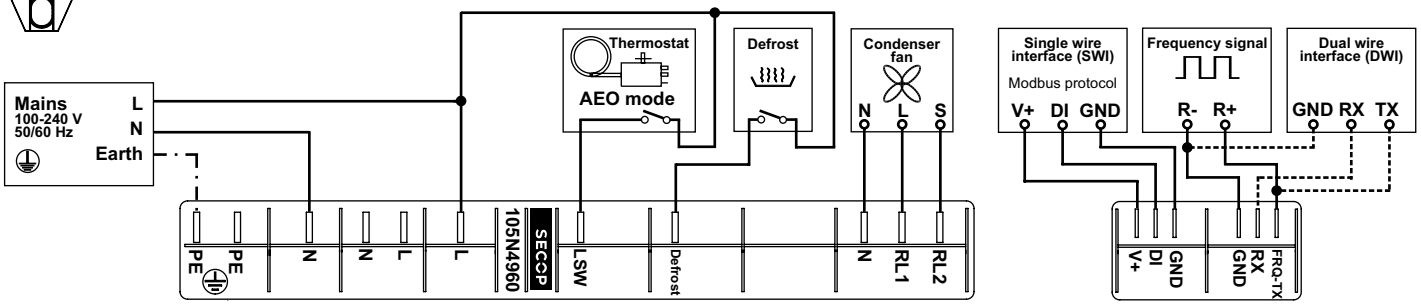
NLV/MN-UV Compressors
100-240 V, 50/60 Hz
105N4960/105N4964
Controllers

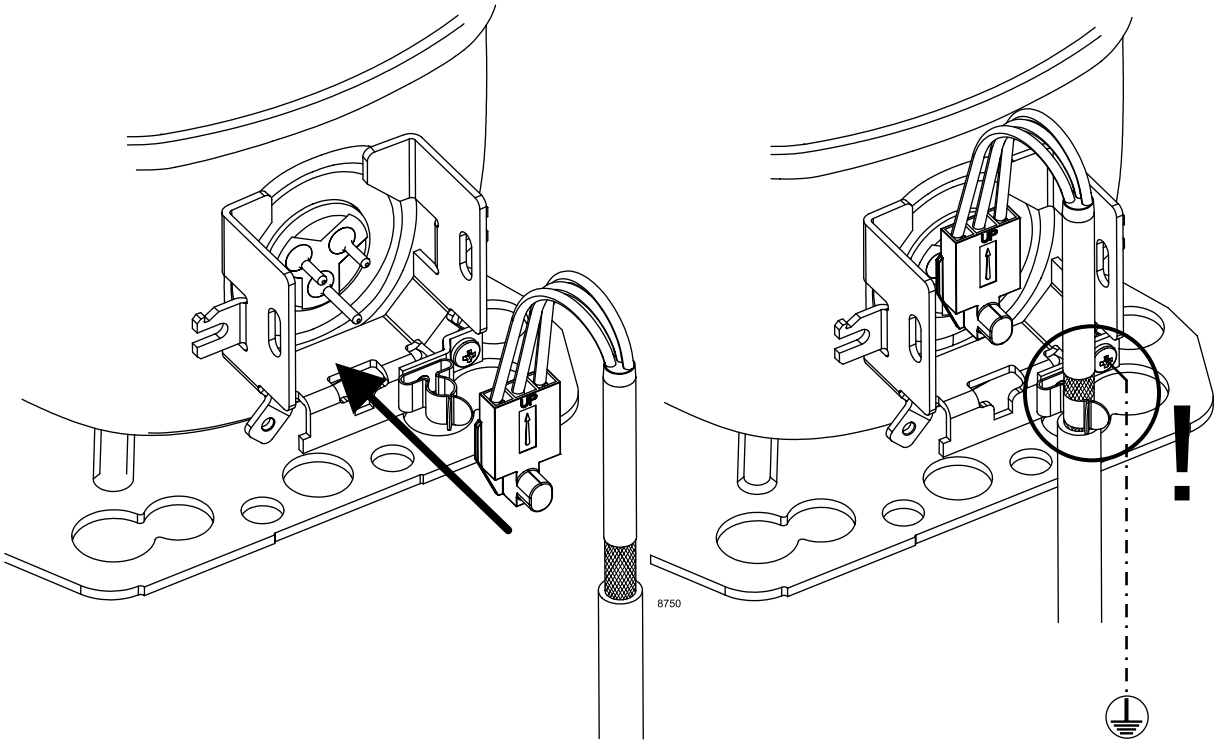
SECOP

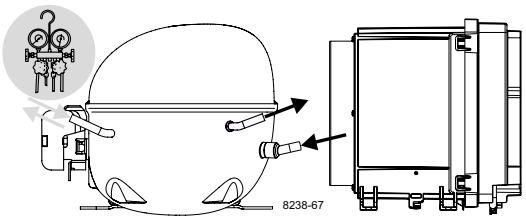
Keep electrical equipment clear from oil, chemicals, and water











Instructions

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

SECOP

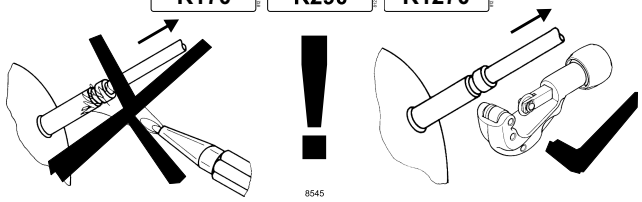
Keep electrical equipment clear from oil, chemicals, and water



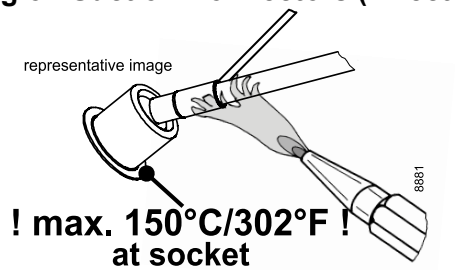
Service/Repair – R170, R290, R1270

(applies to all flammable refrigerants)





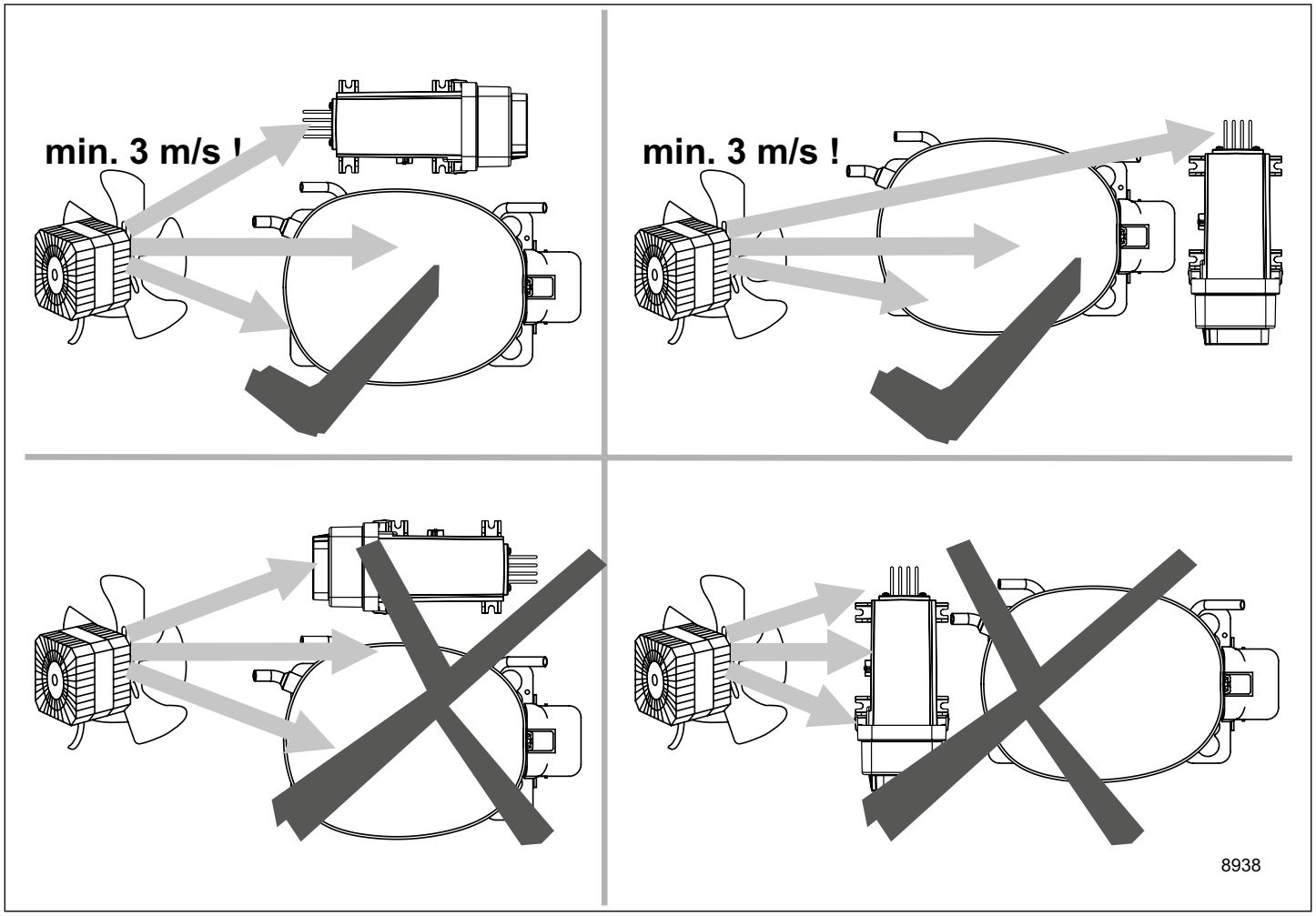
Brazing on Suction Connectors (Direct Intake)



! max. 150°C/302°F ! at socket

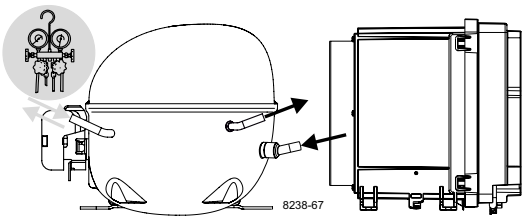
brazing solder: phosphor (LP7) or silver

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**



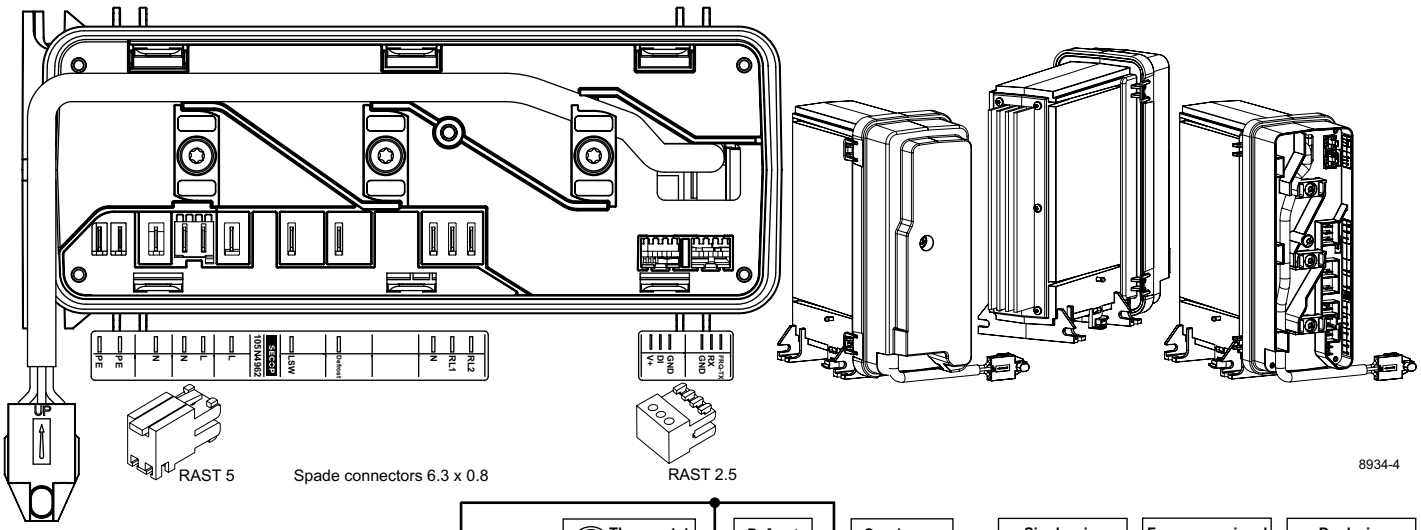
Instructions

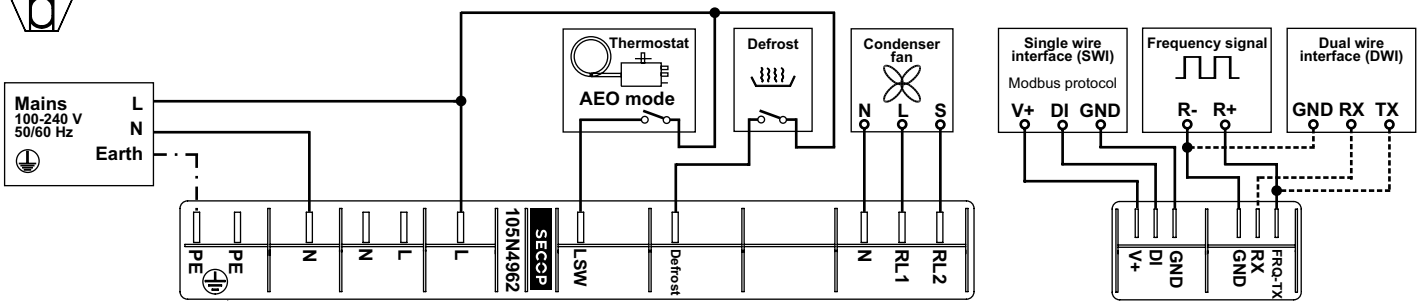
NLV/MN-UV Compressors
100-240 V, 50/60 Hz
105N4962/105N4966/
105N4972 Controllers

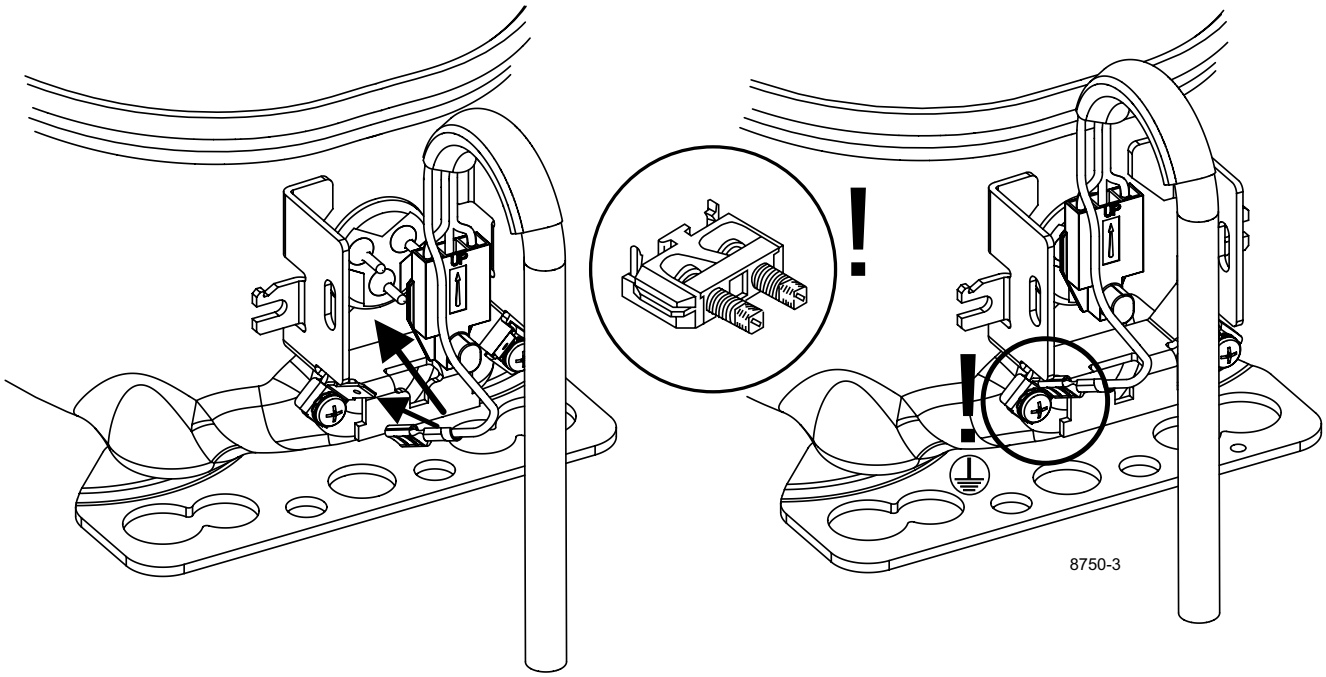
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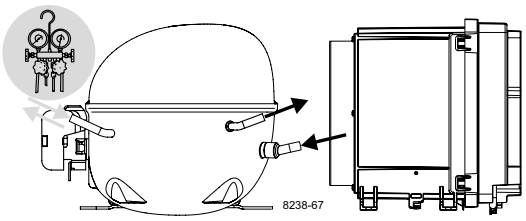
Keep electrical equipment clear from oil, chemicals, and water











Instructions

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

SECOP

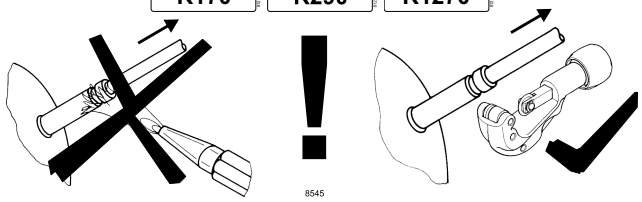
Keep electrical equipment clear from oil, chemicals, and water



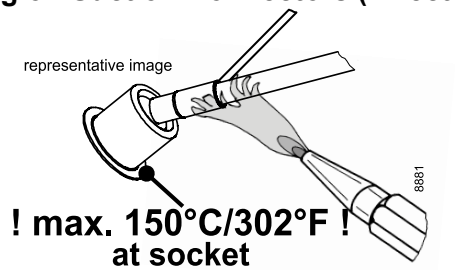
Service/Repair – R170, R290, R1270

(applies to all flammable refrigerants)





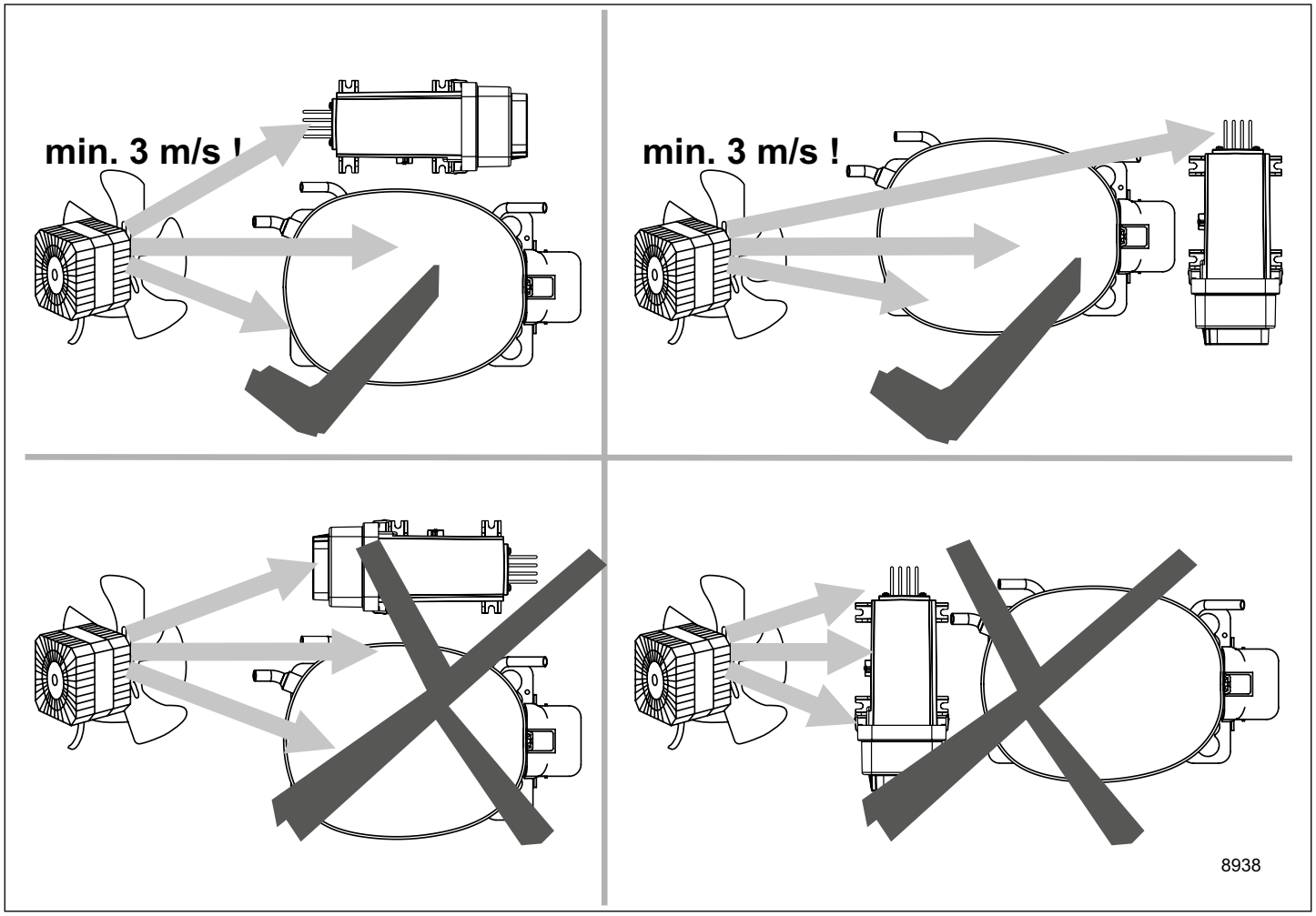
Brazing on Suction Connectors (Direct Intake)



! max. 150°C/302°F ! at socket

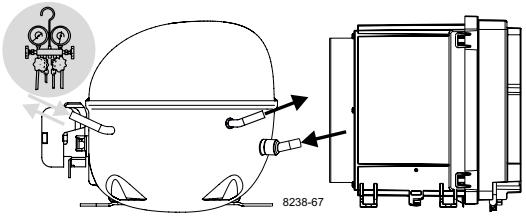
brazing solder: phosphor (LP7) or silver

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**



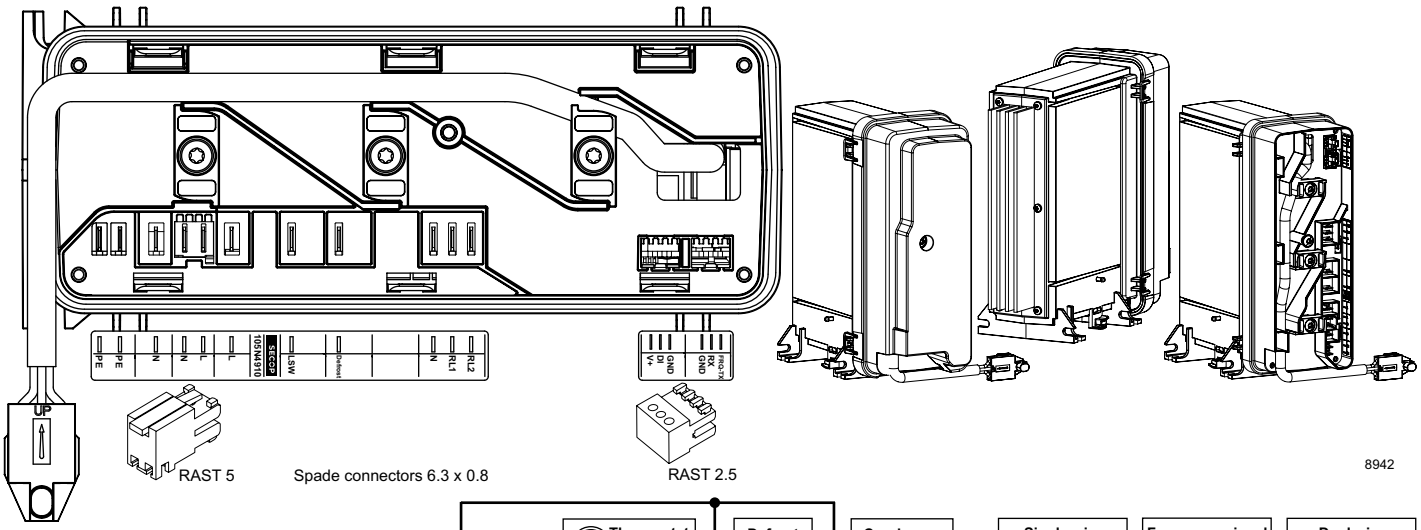
Instructions

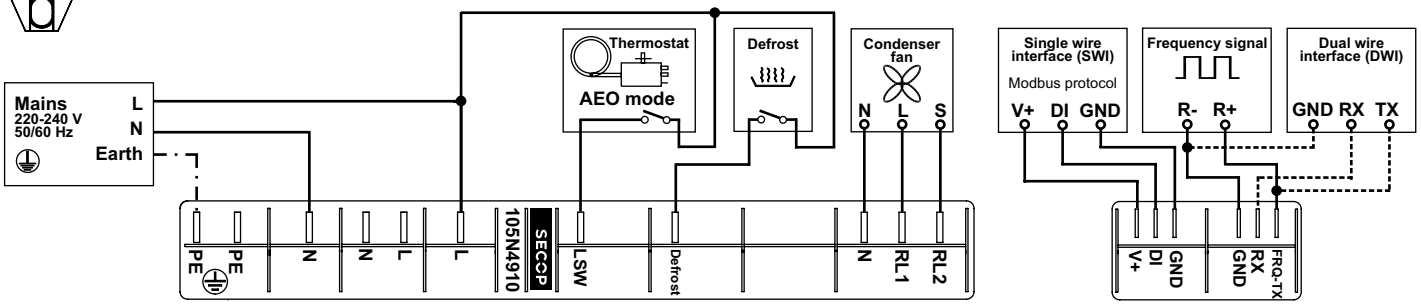
NLV/MN-UV Compressors
220-240 V, 50/60 Hz
105N491x Series
Controllers

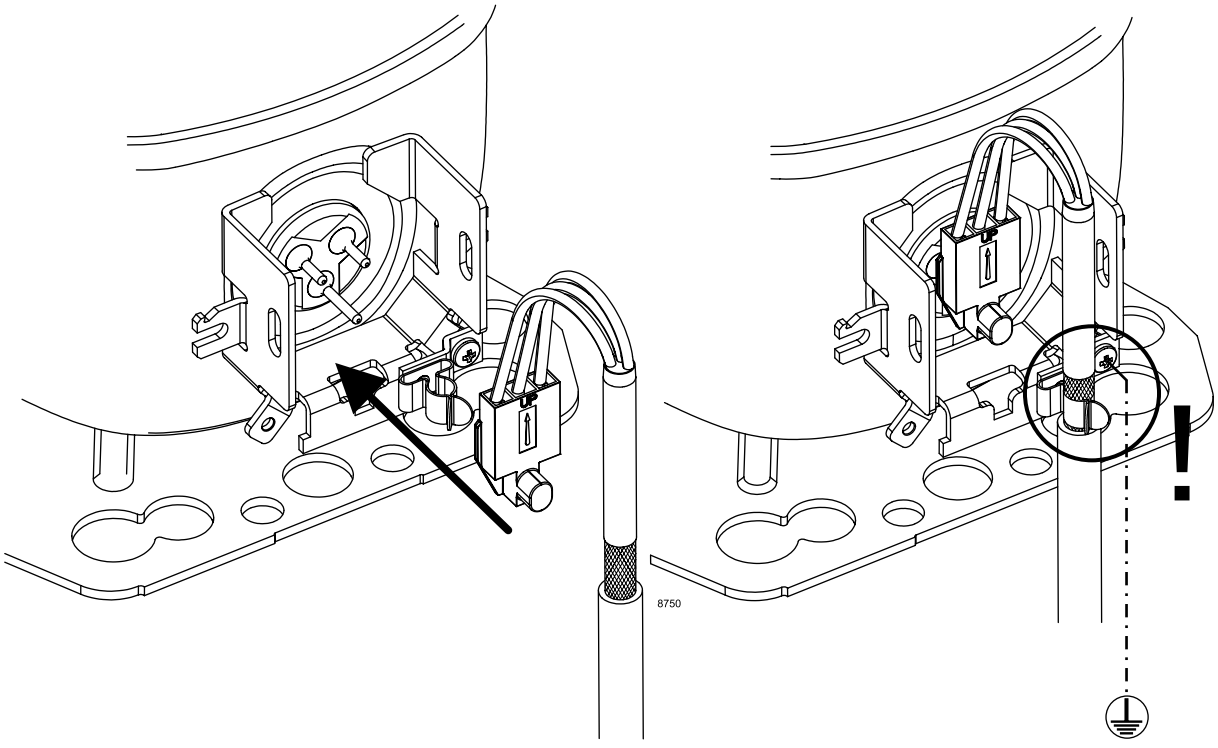
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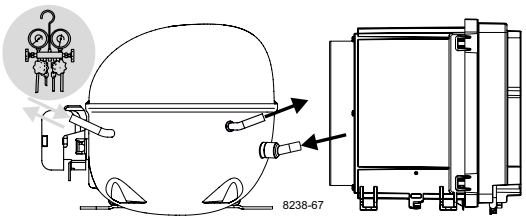
Keep electrical equipment clear from oil, chemicals, and water











Instructions

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

SECOP

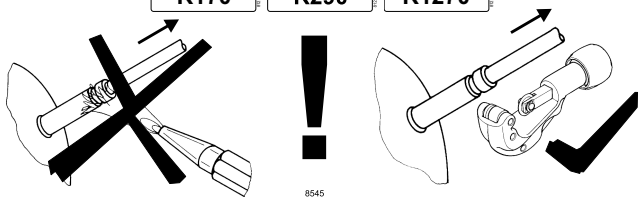
Keep electrical equipment clear from oil, chemicals, and water



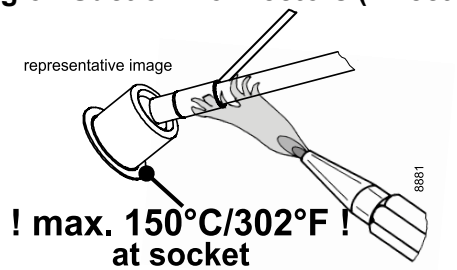
Service/Repair – R170, R290, R1270

(applies to all flammable refrigerants)





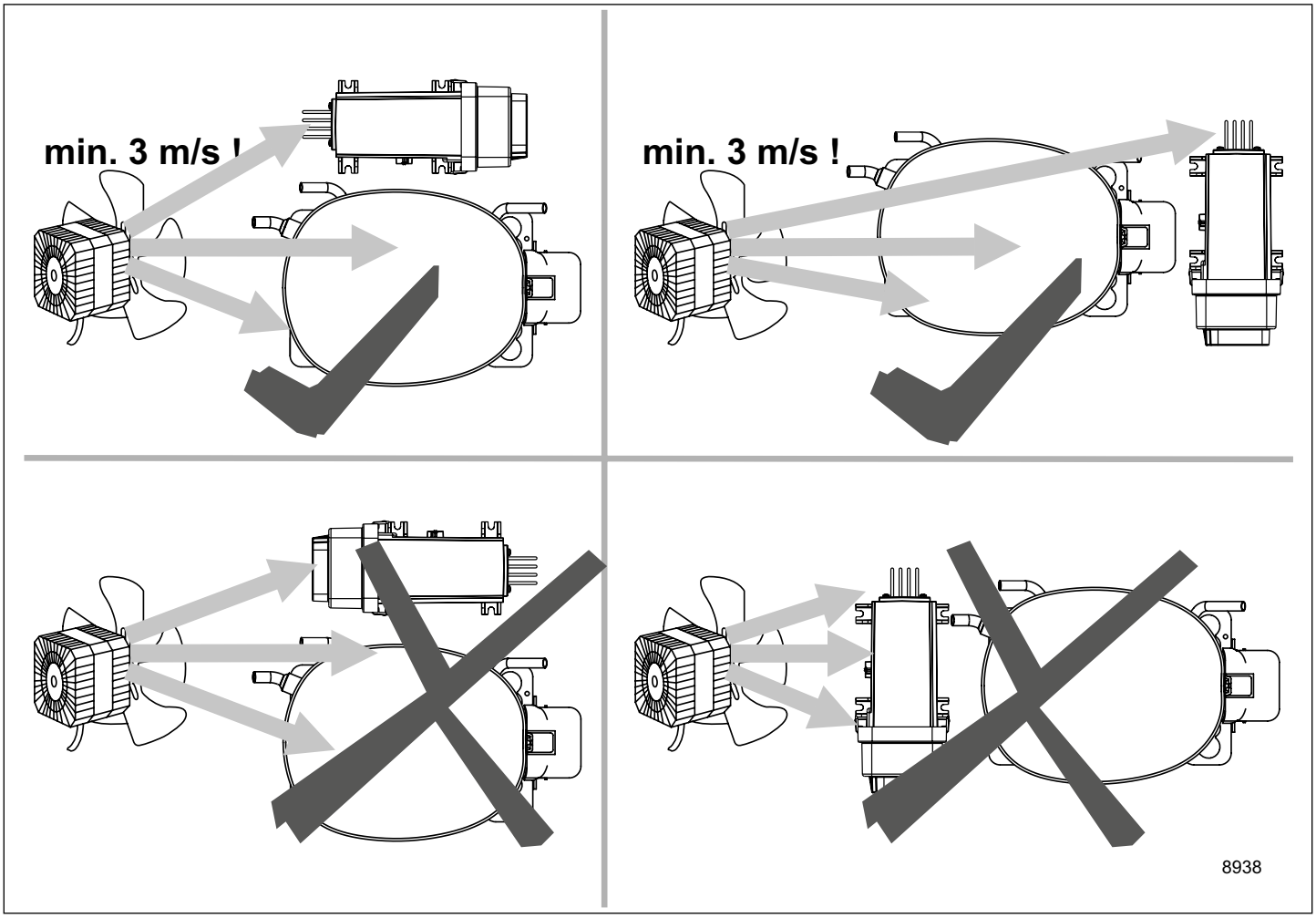
Brazing on Suction Connectors (Direct Intake)



! max. 150°C/302°F ! at socket

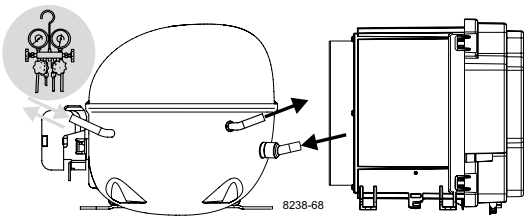
brazing solder: phosphor (LP7) or silver

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



Airflow	3 m/s
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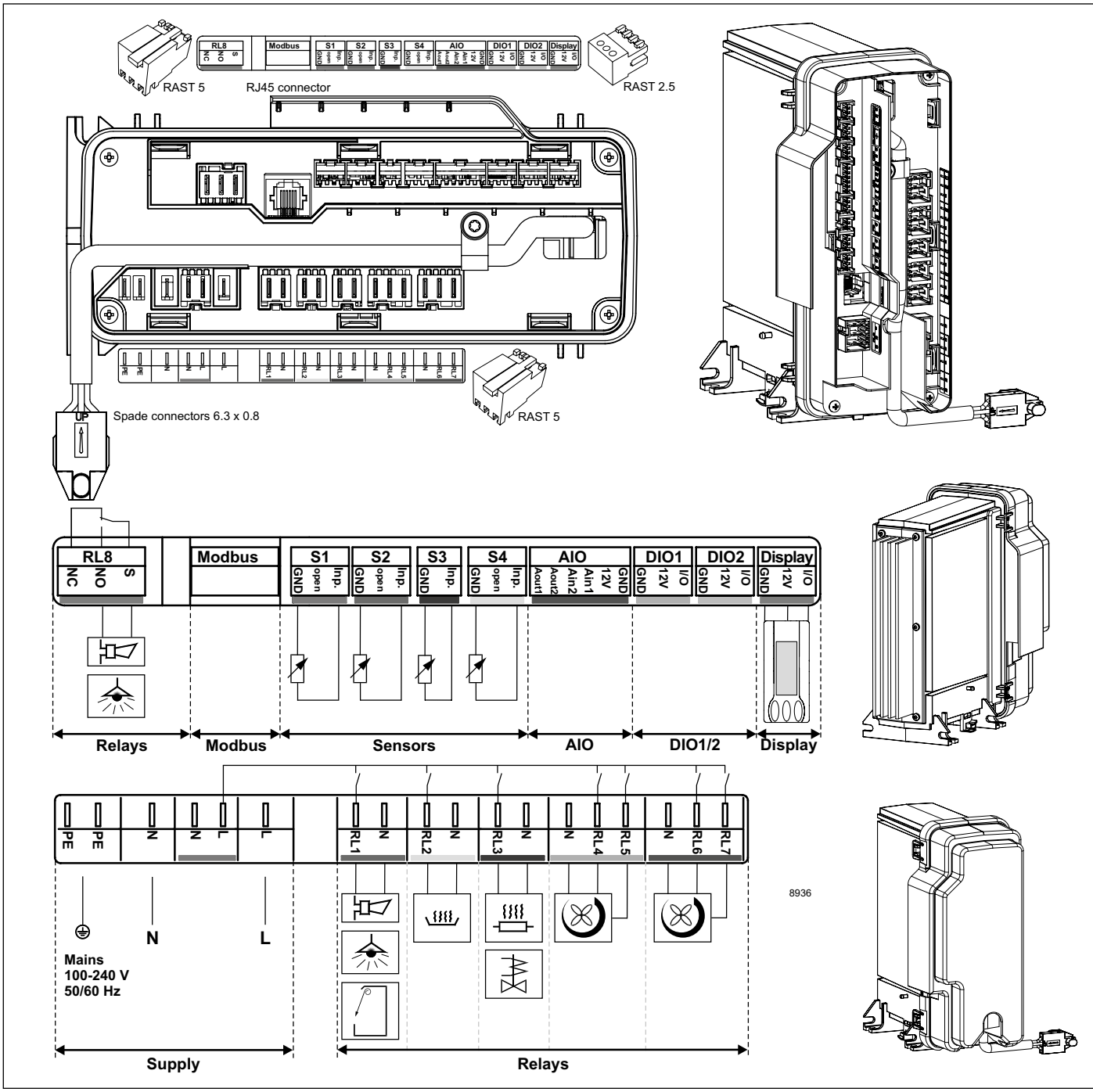
Instructions

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

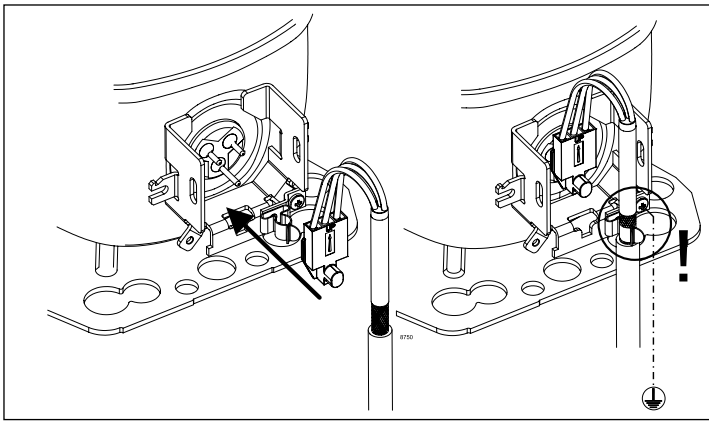
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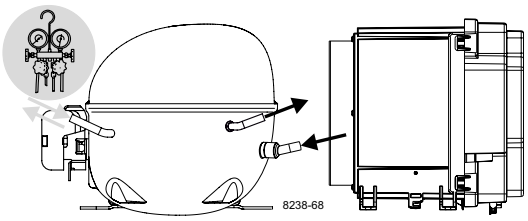
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Mains	red	**S1**	red
RL 1	blue	**S2**	blue
RL 2	yellow	**S3**	black
RL 3	black	**S4**	yellow
RL 4, 5	grey	**AIO**	brown
RL 6, 7	brown	**DIO1**	grey
RL 8	green	**DIO2**	pink
		Display	green





Instructions

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

SECOP

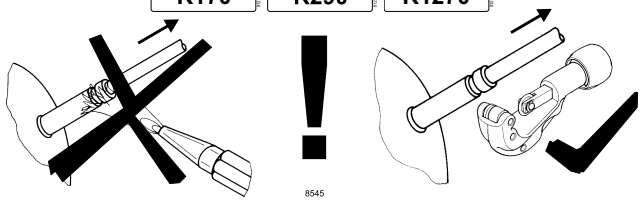
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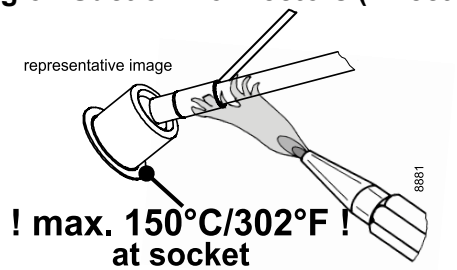
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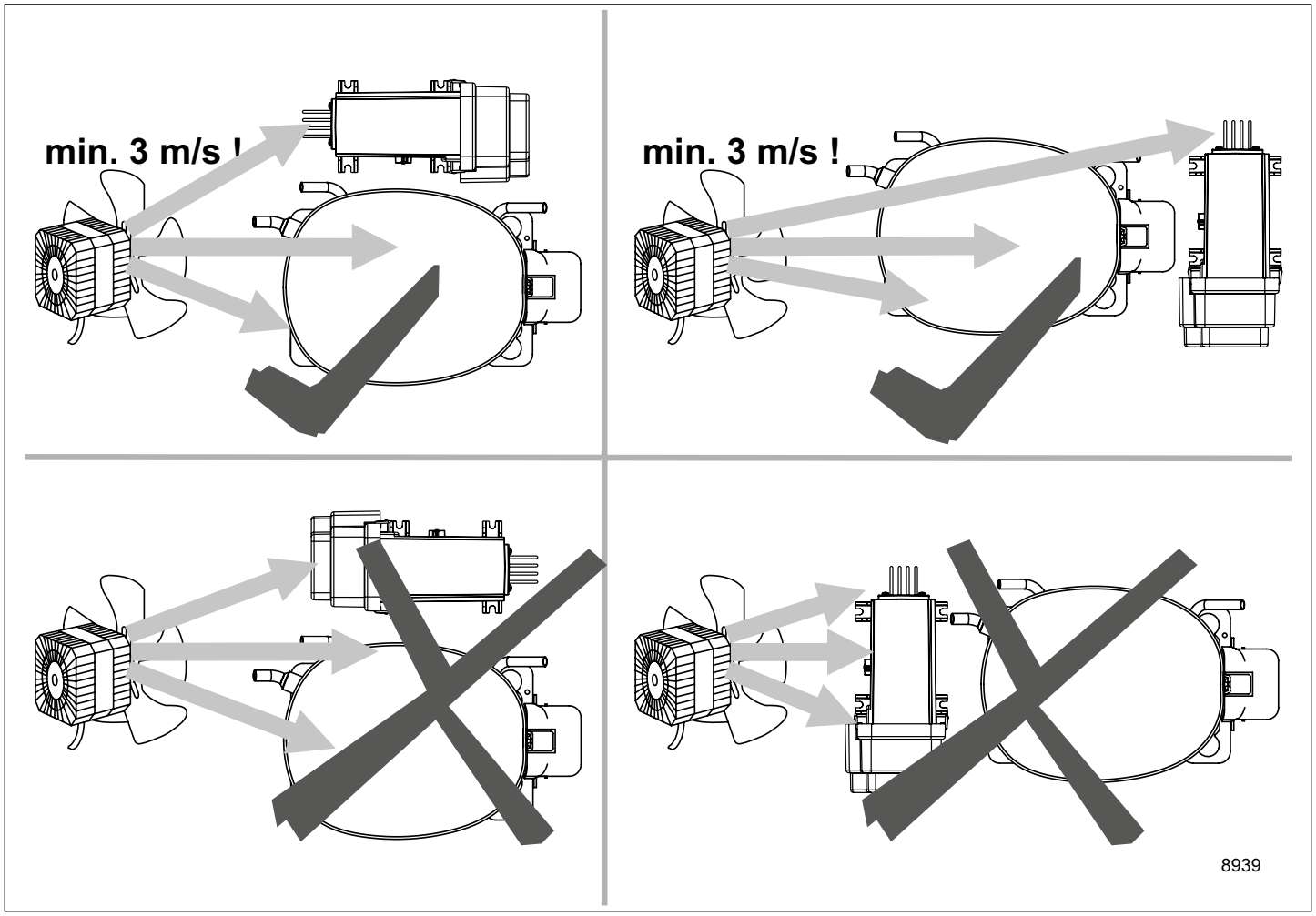
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