Single
Packs

Single Pack SLVE18CN 100-240V 50/60Hz PM

Single pack code number: **195B4819**

Position	Title	Code	Amount
1	Compressor SLVE18CN	104H8846	1
2	Electronic unit SLVE	105N4933	1
3	Cover	103N2008	1
4	Bolt joint for one compressor | M6 | ø16mm	118-1958	1

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Model
SLVE18CN

Sales code:
104H8846

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**550g / 19.40oz**
Weight	**14.20 kg / 31.31lbs**
Displacement	**17.69 cm3 / 1.08cu.in**
Compressors on pallet	**80**

General – Configurations With SLVE18CN and Controller

–	**Conf. 1**
Sales code single pack:	105N4932
Power supply (nominal)	100-240 V,50/60 Hz
Number of phases	1~AC
Approvals	VDE, UL, CCC
Starting torque	HST
Refrigerant	R290
Application	L+MBP
Hot gas defrost	OK
Long interval pull down	OK
Protection	Mechanic

Application Notes

- See operation limits for controller
- Operation possible until tilted up to 3 degrees
- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
SLVE18CN

Sales code:
104H8846

Compressor Design

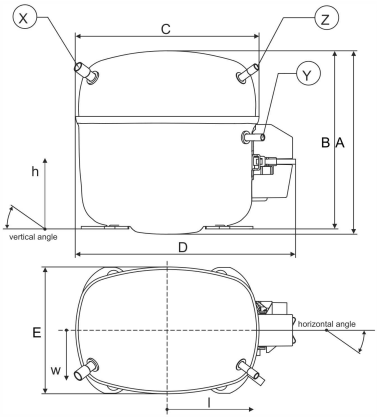
Oil type	**POE**	Motor protection	**internal**
Oil viscosity	**32cSt**	Winding resistance main	**3.850 Ohm**
Oil quantity	**555 / 18.77fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**130°C / 266°F**

Compressor Dimensions

Housing

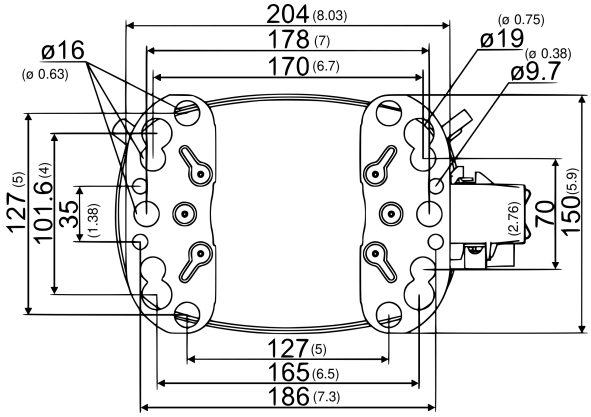
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



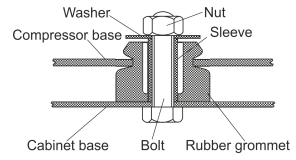
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	37°
Vertical angle ±2°	30°	0°	30°
Position l/h/w [mm]	-106/193/56.7 / -4.17/7.60/2.23in	113.7/110/81 / 4.48/4.33/3.19in	106/94.3/72 / 4.17/3.71/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

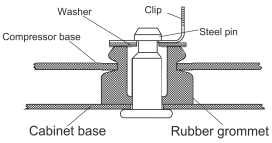


Dimensions in mm [in]

Bolt joint



Snap-on



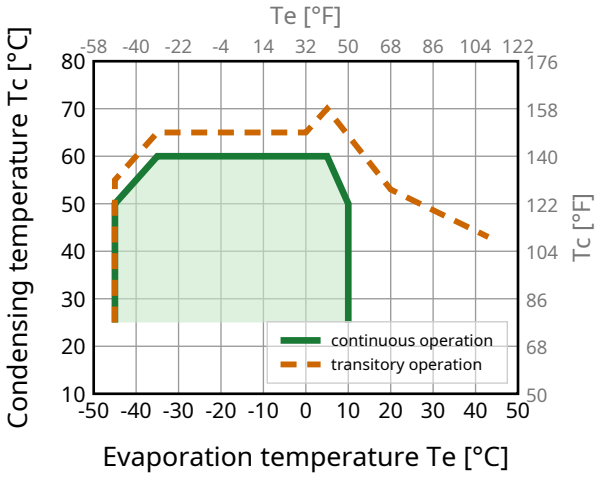
	one comp.	multi pack
Bolt joint | M6 | ø16mm	118-1958	118-1961
Snap-on | ø7,3 | ø16mm	–	118-1962

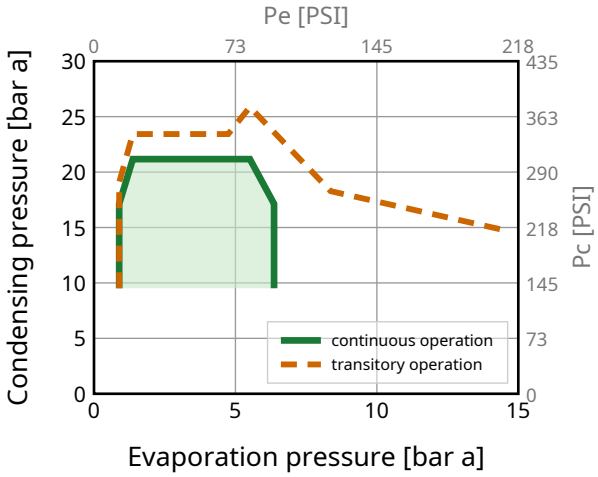
Model
SLVE18CN System Design

Sales code:
104H8846

System Design

Operation Pressure Range R290



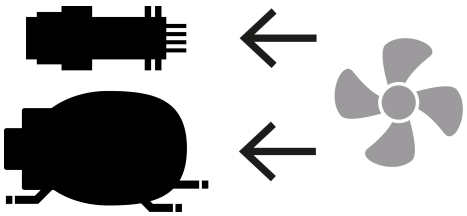


System Cooling

Compressor and Controller Cooling: fan 3m/s

Ensure proper airflow of 3 m/s at both compressor and electronic units.

The airflow for the electronics must be directed to the heat sink.



Accessories (Compressor + Controller)

103N2008	plastic cover	1 pcs

Operation Limits

U:100-240 V LBP; 208-240 V MBP; 50/60 Hz

Model Sales code:

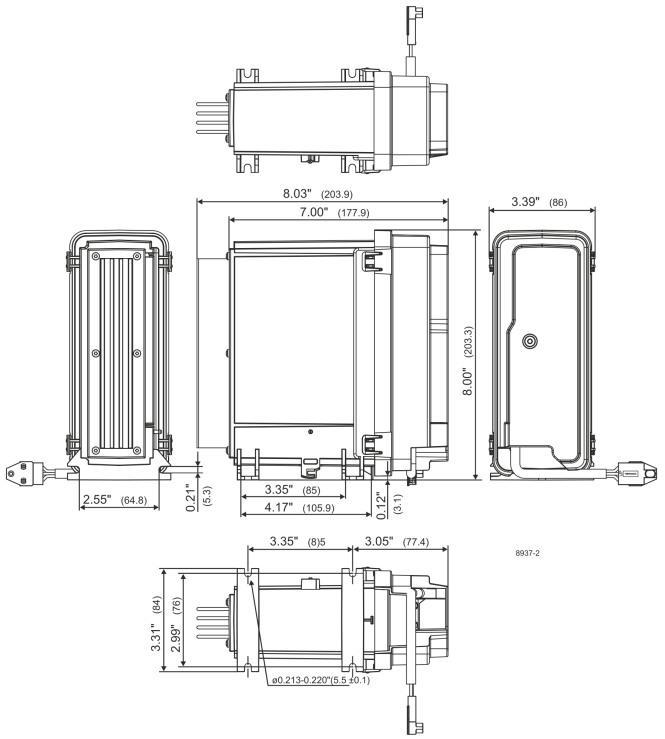
SLVE18CN Controller Overview **104H8846**

Controller Overview

–	**Conf. 1**
Sales code single pack:	105N4932
Sales code industry pack:	105N4933 (8)
Voltage nom.:	100-240 V,50/60 Hz
Voltage range	90–150/180–270 V
Max output power	1100 W
Compressor speed range:	2200-4500 rpm
Cable length:	915 mm
Protection class:	IP54
LRA (Locked Rotor Amperage):	2,9 A
AEO and Defrost pin	Yes
Frequency input	Yes
Modbus input	SWI
Controller Wiring	» Controller Wiring

Controller Dimensions

Conf. 1



Operating Instructions

For proper installation and operation of variable-speed compressors and controllers, please refer to the Operating Instructions. The document covers electrical installation, speed control, and technical data for the controller.
» Download Operating Instructions

Model
SLVE18CN

Sales code:
104H8846

Standard Conditions — 2200 rpm

R290, 220 V/50 Hz, fan 3m/s

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	**668**	2281	575	**1.74**	5.93	385	2.09	6.79	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**496**	1694	427	**1.34**	4.58	370	2.01	6.22	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**362**	1233	311	**1.39**	4.74	260	1.42	4.15	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1200**	4095	1032	**2.21**	7.55	542	2.95	13.74	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**954**	3255	820	**1.85**	6.31	516	2.81	12.13	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1045**	3566	899	**2.26**	7.70	463	2.52	12.86	**EN12900 MBP**

Performance Tables — 2200 rpm

R290, 220 V/50 Hz, fan 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]
-45	-49	**179**	612	154	**0.86**	2.95	208	1.13	2.01
-40	-40	**256**	872	220	**1.09**	3.72	234	1.27	2.87
-30	-22	**453**	1544	389	**1.48**	5.05	306	1.66	5.11
-20	-4	**724**	2470	622	**1.87**	6.37	388	2.11	8.23
-10	14	**1086**	3707	934	**2.35**	8.00	463	2.52	12.48
0	32	**1558**	5317	1340	**3.02**	10.31	515	2.80	18.12
10	50	**2156**	7358	1855	**4.09**	13.95	528	2.87	25.50

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

-45	-49	**127**	434	109	**0.58**	1.98	219	1.19	1.58
-40	-40	**200**	683	172	**0.81**	2.78	246	1.34	2.49
-30	-22	**383**	1306	329	**1.18**	4.04	323	1.76	4.78
-20	-4	**628**	2143	540	**1.50**	5.11	419	2.28	7.91
-10	14	**954**	3255	820	**1.85**	6.31	516	2.81	12.13
0	32	**1378**	4700	1185	**2.30**	7.85	598	3.25	17.76
10	50	**1916**	6538	1648	**2.95**	10.08	649	3.52	25.18

Model
SLVE18CN

Sales code:
104H8846

Standard Conditions — 4500 rpm

R290, 220 V/50 Hz, fan 3m/s

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	**1197**	4083	1029	**1.68**	5.72	714	3.88	12.15	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**889**	3033	764	**1.29**	4.41	687	3.73	11.14	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**647**	2208	557	**1.33**	4.56	485	2.63	7.43	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**2148**	7330	1848	**2.14**	7.30	1004	5.46	24.60	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1708**	5826	1469	**1.78**	6.09	957	5.20	21.72	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1871**	6384	1609	**2.18**	7.43	859	4.67	23.02	**EN12900 MBP**

Performance Tables — 4500 rpm

R290, 220 V/50 Hz, fan 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]
-45	-49	**321**	1095	276	**0.83**	2.85	385	2.09	3.60
-40	-40	**458**	1561	393	**1.05**	3.59	435	2.36	5.14
-30	-22	**810**	2765	697	**1.43**	4.87	568	3.08	9.15
-20	-4	**1296**	4421	1114	**1.80**	6.15	719	3.91	14.74
-10	14	**1945**	6636	1673	**2.27**	7.73	859	4.67	22.33
0	32	**2790**	9518	2399	**2.92**	9.96	956	5.20	32.44
10	50	**3860**	13171	3320	**3.94**	13.45	979	5.32	45.65

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

-45	-49	**228**	777	196	**0.56**	1.90	409	2.23	2.82
-40	-40	**358**	1223	308	**0.78**	2.67	459	2.49	4.46
-30	-22	**685**	2338	589	**1.14**	3.89	601	3.27	8.56
-20	-4	**1124**	3837	967	**1.45**	4.93	778	4.23	14.15
-10	14	**1708**	5826	1469	**1.78**	6.09	957	5.20	21.72
0	32	**2466**	8413	2121	**2.23**	7.60	1107	6.02	31.80
10	50	**3430**	11704	2950	**2.86**	9.76	1199	6.52	45.08

Model
SLVE18CN

Sales code:
104H8846

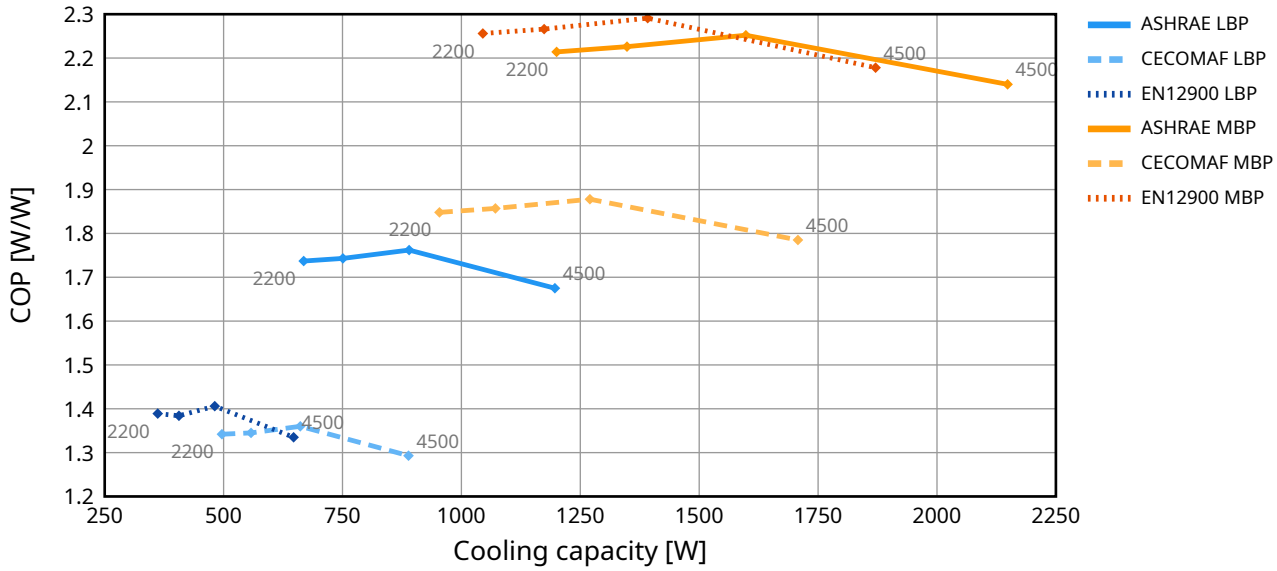
Optimal Performance

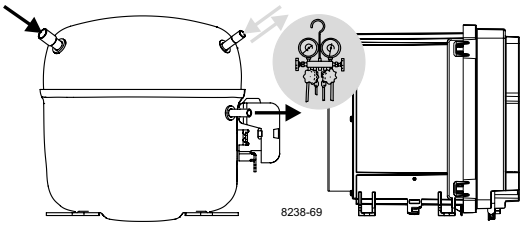
R290, 220 V/50 Hz, fan 3m/s
Shows the speed (RPM) that achieves the highest COP at each standard condition.

pe	pc	RGT	Tliq	Cooling capacity			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	**890**	3037	765	**1.76**	6.01	505	**3000**	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**661**	2256	569	**1.36**	4.64	486	**3000**	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**481**	1643	414	**1.41**	4.80	342	**3000**	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1598**	5453	1374	**2.25**	7.68	710	**3000**	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1270**	4334	1092	**1.88**	6.41	676	**3000**	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1392**	4748	1197	**2.29**	7.82	607	**3000**	**EN12900 MBP**

Cooling Capacity vs. COP

R290, 220 V/50 Hz, fan 3m/s



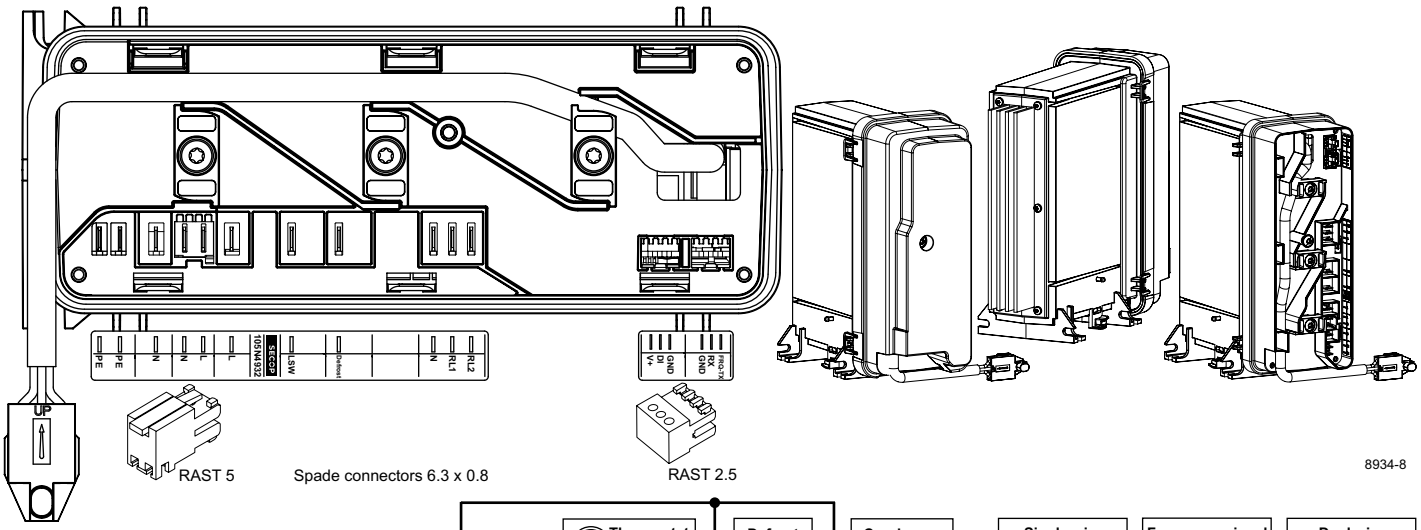


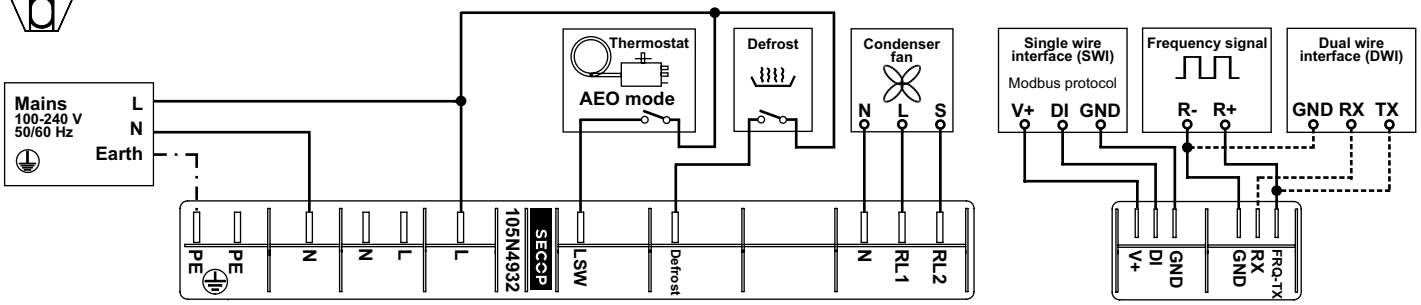
Instructions

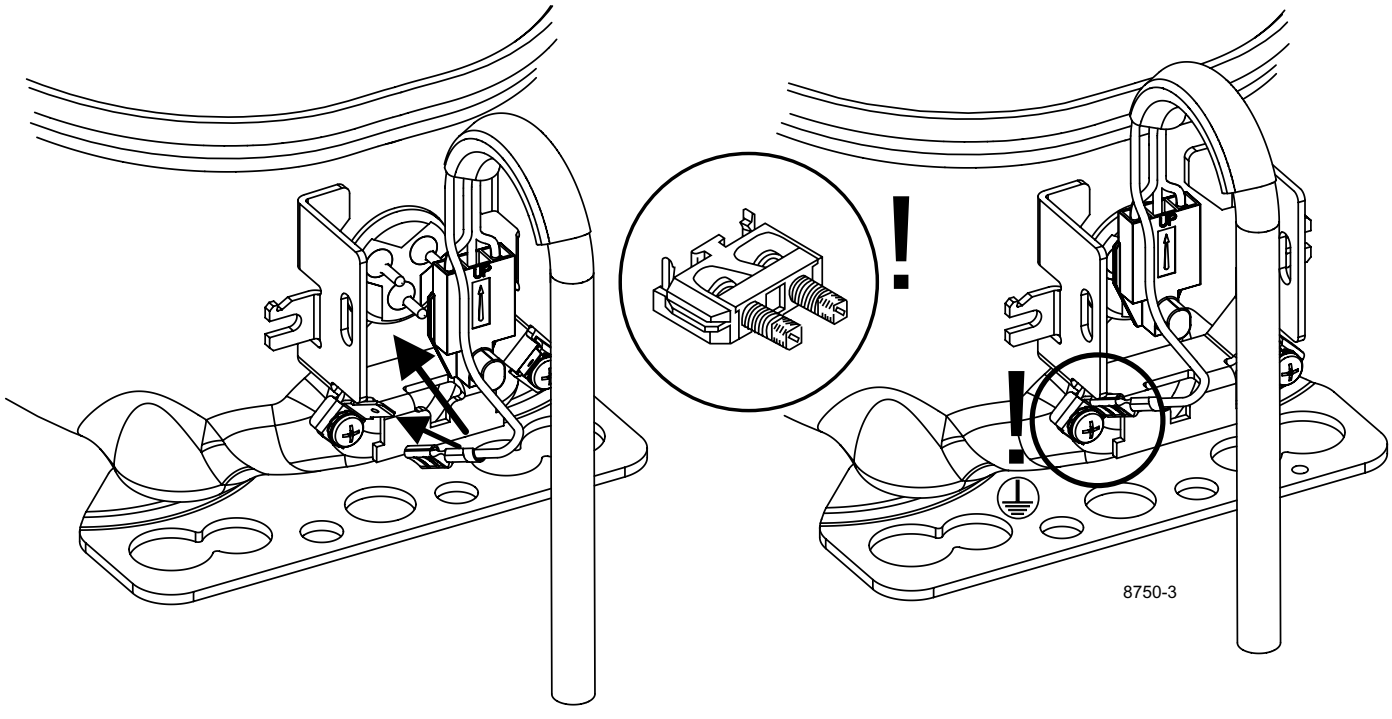
SLVE/MS-UV Compressors
100-240 V, 50/60 Hz
105N4932 Controllers

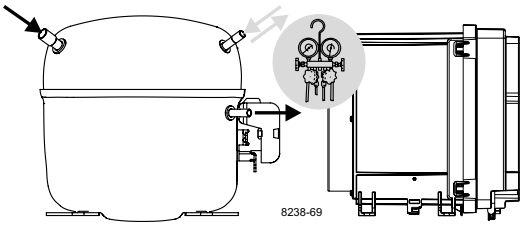
SECOP

Keep electrical equipment clear from oil, chemicals, and water









Instructions

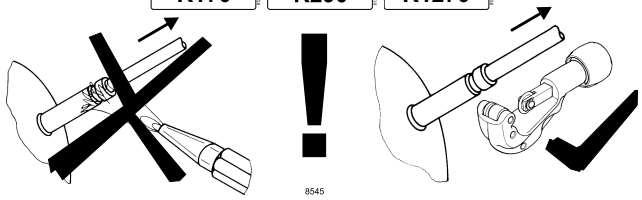
SLVE/MS-UV Compressors
100-240 V, 50/60 Hz
105N4932 Controllers

SECOP

Keep electrical equipment clear from oil, chemicals, and water

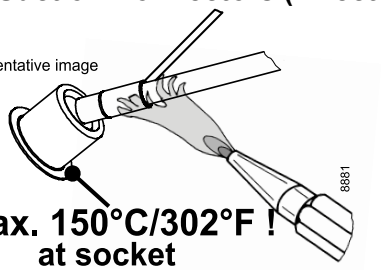
Service/Repair – R170, R290, R1270

(applies to all flammable refrigerants)



Brazing on Suction Connectors (Direct Intake)

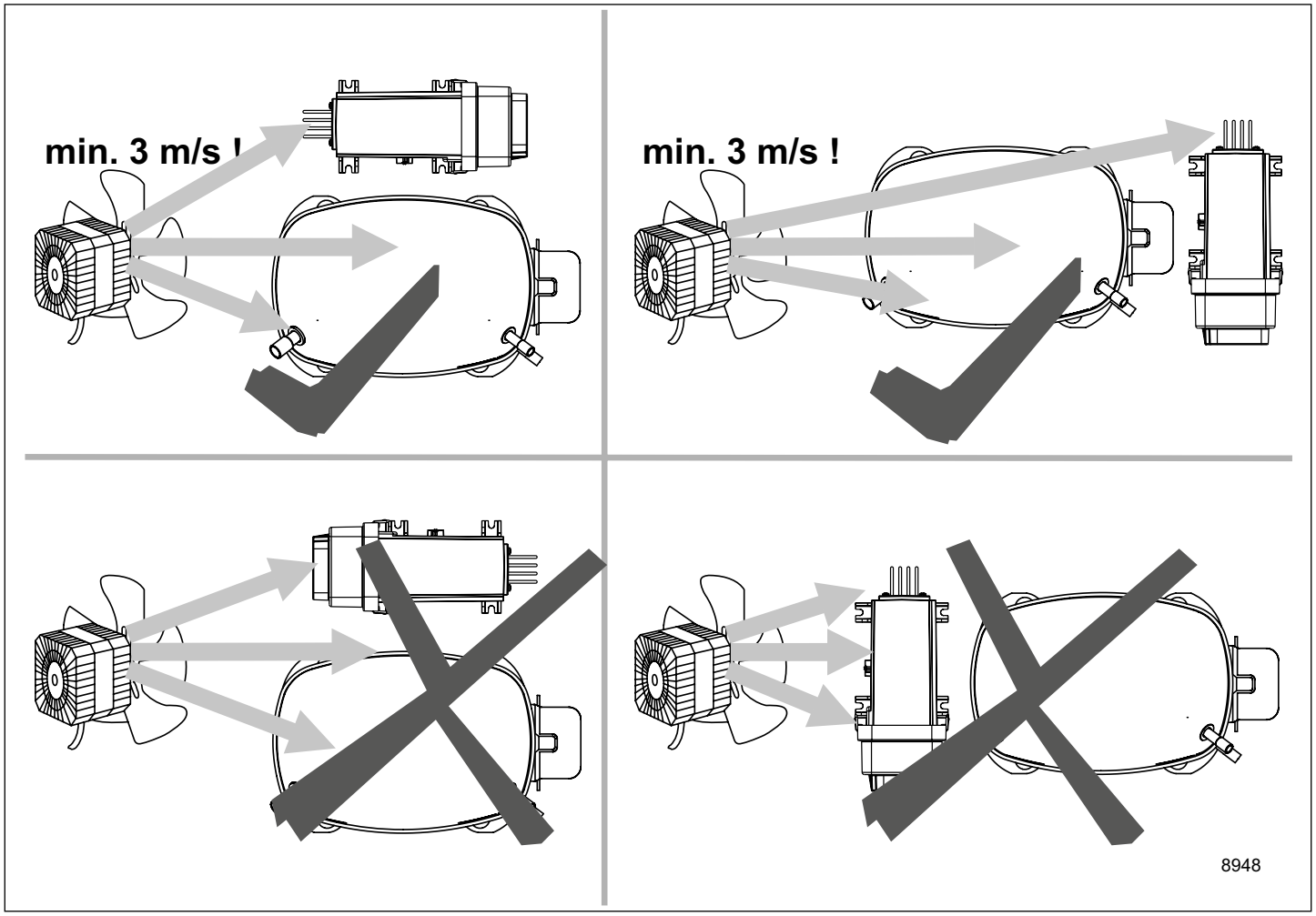
representative image



! 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)**



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**