

Single Pack NLVE13CN 115-127V 50/60Hz

Single pack code number: **195B4831**

Position	Title	Code	Amount
1	Compressor NLVE13CN	105H7374	1
2	Electronic unit NLVE	105N4101	1
3	Cover	103N2008	1
4	Bolt joint for one compressor M6 ø16mm	118-1917	1

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Model

Designation	NLVE13CN	Sales code:	105H7374
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	12,55cm³ / 0,77cu.in
Oil quantity	300cm³ / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	300g / 10,6oz		
Free gas volume comp.	2360cm³ / 79,8fl.oz		
Weight	10,8kg / 23,8lbs		
Motor protection	2# internal		
Winding resist. ph. to ph.	3,55Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations and Applications with NLVE13CN and Controller

Conf. 1

Sales code single pack:	105N4100
Sales code industry pack:	105N4101
Power supply (nominal)	115–127V,50/60Hz
Approvals	UL
Refrigerant	R290
Number of phases	1~AC
Application	L+MBP
Starting torque	HST
Hot gas defrost	OK
Long interval pull down	OK
System cooling	Fan cooling 3m/s
Note	- / -

Controller functions

Conf. 1

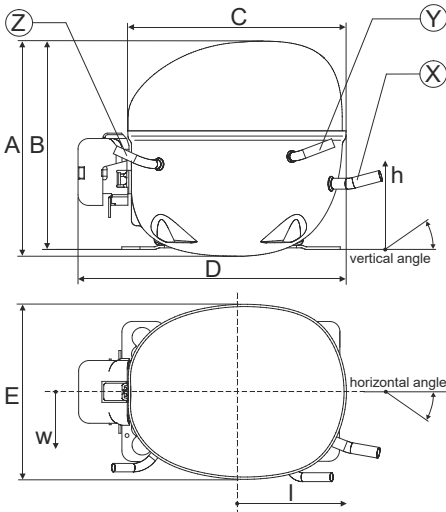
Protection	Mechanic
Max output power	1000W
No of relays	0
Hot gas defrost	yes
AEO speed setting	yes
Serial com, (Modbus)	-
DWI / Frequency input	yes
Note	

Model			
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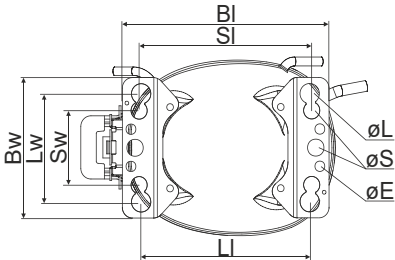
Compressor dimensions

Housing	A Height	203mm / 7,99in	
	B Height	197mm / 7,76in	
	C Length shell	205mm / 8,07in	
	D Length w. cover	252mm / 9,92in	
	E Width	166mm / 6,54in	

Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle	±2° 0°	0°	0°
Vertical angle	±2° 15°	21°	155°
Position l/h/w [mm]	132/69/57	94/102/81	-109/94/72
	[in] 5,2/2,7/2,2	3,7/4/3,2	-4,3/3,7/2,8
Straight tube l. [mm]	12	12	12
	[in] 0,5	0,5	0,5

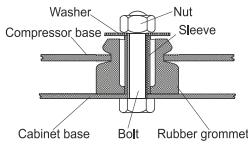


Compressor fixation

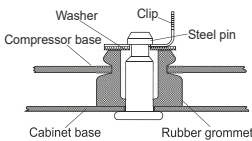


Baseplate	[mm]	[inch]
BI	204	8.03
BW	132	5.2
øE	ø 9.7	ø 0.38
Large holes		
LI	165	6.5
LW	101.6	4
øL	ø 19	ø 0.75
Small holes		
SI	170	6.7
SW	70	2.76
øS	ø 16	ø 0.63

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
Semi suction intake without telescope

QR Code and Hyperlink leads to the

[Operating Instructions.](#)



Model

Designation **NLVE13CN** **115-127V,50/60Hz** **Conf. 1** Sales code: **105H7374**

Controller **NLV Core Function 115V** **105N4100**

Sales code single pack: 105N4100 (1 units)

Sales code industry pack: 105N4101 (8 units)

Adaption to compressor: detached

Protection class: IP31

Weight: 1kg/2,2lbs

Voltage nom.: 115-127V,50/60Hz

Voltage range: 100-140V

Max. current: 8 A

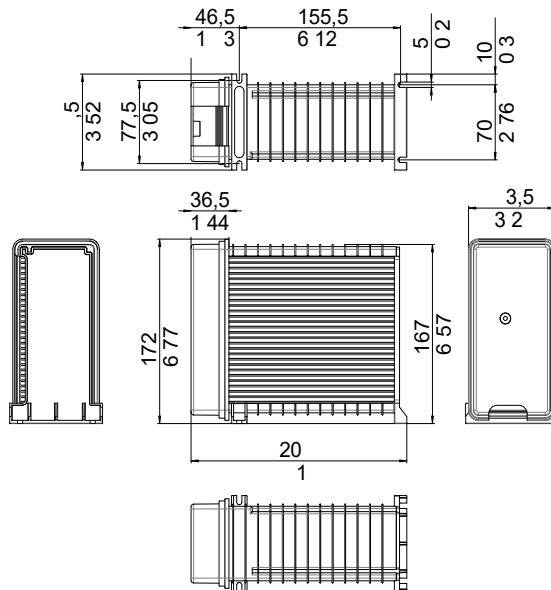
LRA (Locked Rotor Amperage): 1,3A

Cable length: 680mm

Compressor speed range: 2000-4500rpm

Housing plastic: UL94-5VA

Controller dimensions:



Operation Limits

System cooling

Ambient/ machineroom temperatures minimum /maximum

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

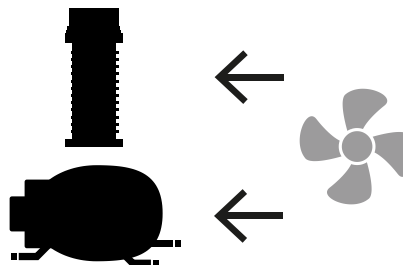
Machine room temperature range compressor: 10 - 48°C / 50 - 119°F

Machine room temperature range controller: 10 - 50°C / 50 - 122°F

Compressor and Controller Cooling: Fan cooling 3m/s

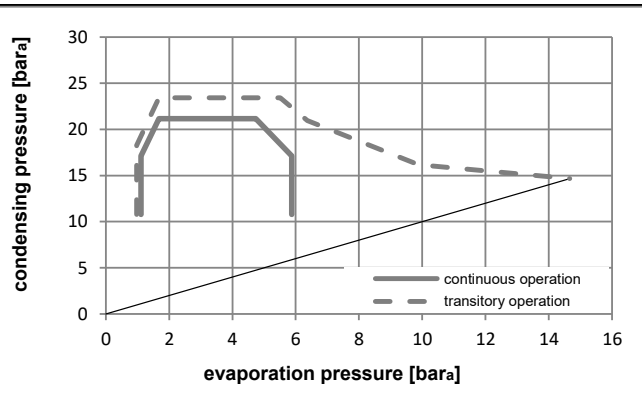
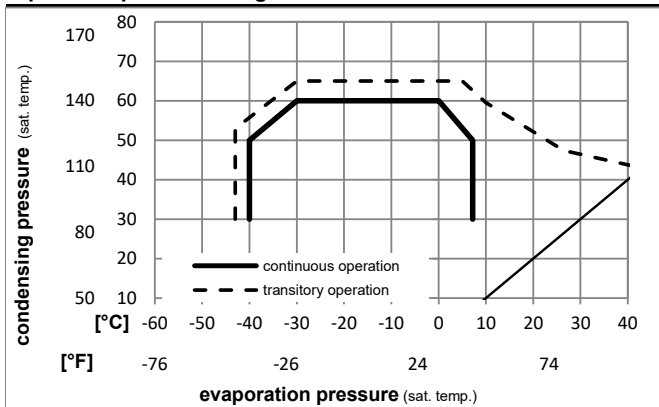
Ensure proper airflow of 3 m/s at both compressor and electronic units.

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

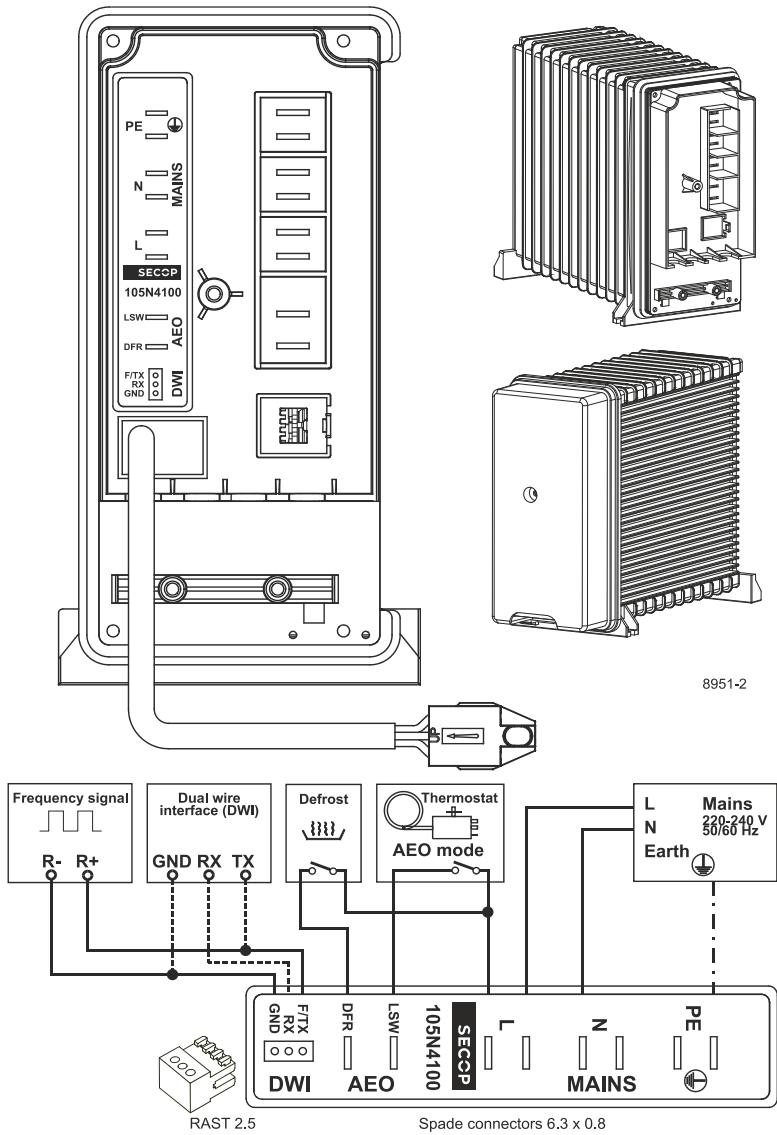


Operation pressure range

R290



Model				
Designation	NLVE13CN	115–127V,50/60Hz	Conf. 1	Sales code: 105H7374
Controller	NLV Core Function 115V			105N4100
<u>Controller connections</u>				



Accessories (Compressor + Controller) - check operation manual for details

103N2008	plastic cover	1 pcs
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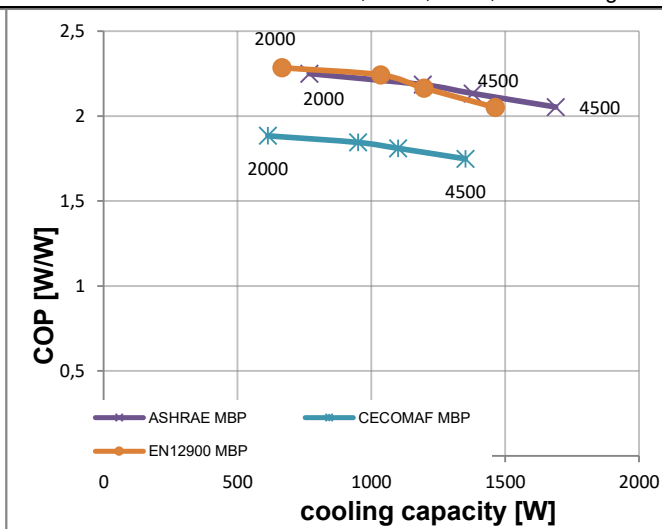
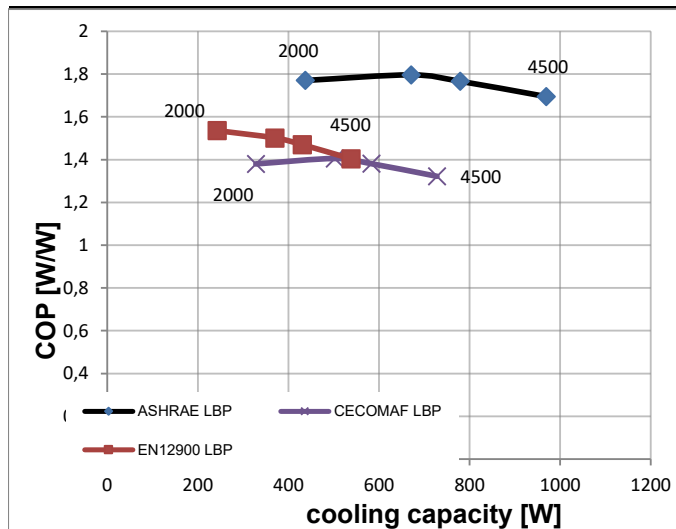
Optimization + standard conditions

R290, 115V, 60Hz, Rpm_N 4500, Fan cooling 3m/s

	Evaporating pressure (saturation temperature)										Power consumption			
	Condensing pressure (saturation temperature)											Current consumption		
	Return gas temp.											Ref. mass flow		
	Liquid temp.				Cooling capacity			COP	EER		P1	I	m	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-23	54	32	32										
[°F]	-10	130	90	90	969,5	3311	834,4	1,69	5,79	1,46	572,1	7,86	9,82	ASHRAE LBP
[°C]	-25	55	32	55										
[°F]	-13	131	90	131	728,0	2486	626,5	1,32	4,52	1,14	550,6	7,59	9,06	CECOMAF LBP
[°C]	-35	40	20	40										
[°F]	-31	104	68	104	538,0	1837	463,0	1,40	4,80	1,21	383,1	5,44	6,15	EN12900 LBP
[°C]	-7	54	35	46										
[°F]	20	130	95	115	1688,6	5767	1453,2	2,05	7,01	1,77	822,3	11,08	19,26	ASHRAE MBP
[°C]	-10	55	32	55										
[°F]	14	131	90	131	1351,2	4615	1162,9	1,75	5,97	1,50	772,7	10,44	17,09	CECOMAF MBP
[°C]	-10	45	20	45										
[°F]	14	113	68	113	1462,3	4994	1258,5	2,05	7,01	1,77	712,9	9,67	17,95	EN12900 MBP

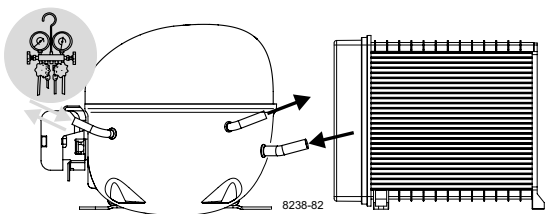
Standard conditions with different RPM

R290, 115V, 60Hz, Fan cooling 3m/s



Test conditions:	pe [°C]	pc [°C]	Tliq [°C]	Tsuc [°C]
ASHRAE LBP	-23	54,44	32,22	32,22
CECOMAF LBP	-25	55	55	32
EN12900 LBP	-35	40	40	20

	pe [°C]	pc [°C]	Tliq [°C]	Tsuc [°C]
ASHRAE MBP	-6,66	54,44	46,11	35
CECOMAF MBP	-10	55	55	32
EN12900 MBP	-10	45	45	20

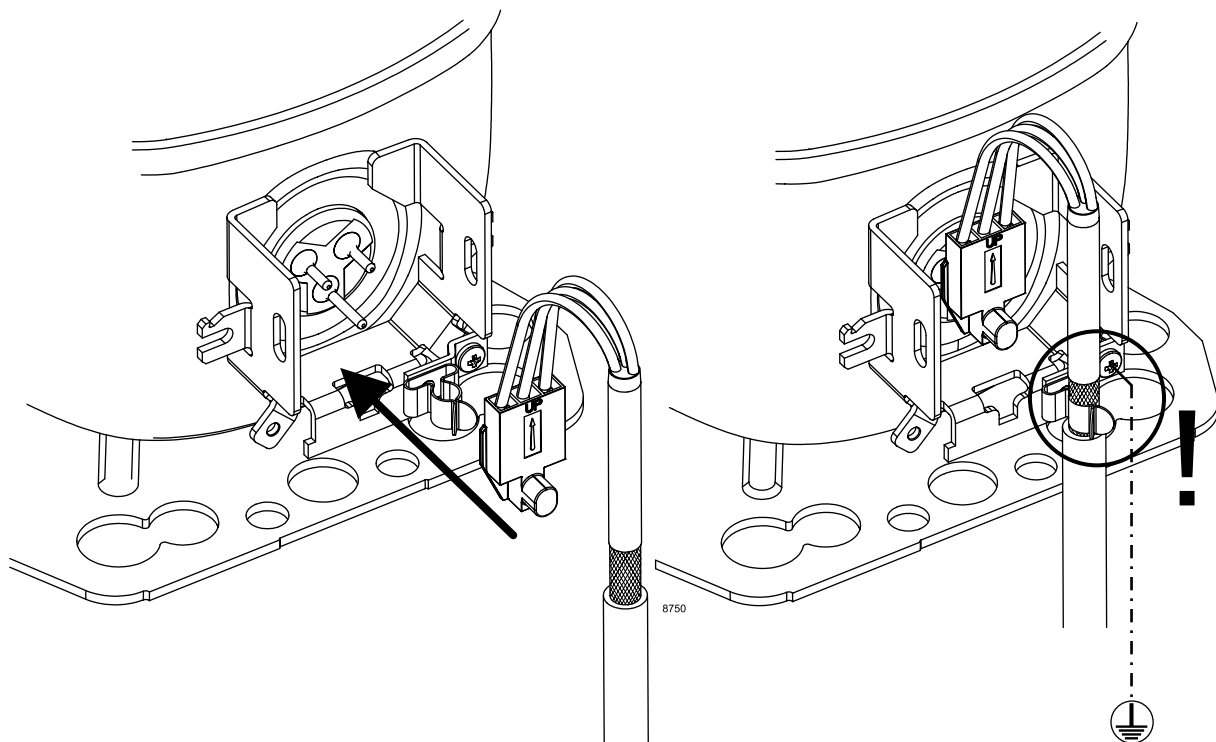
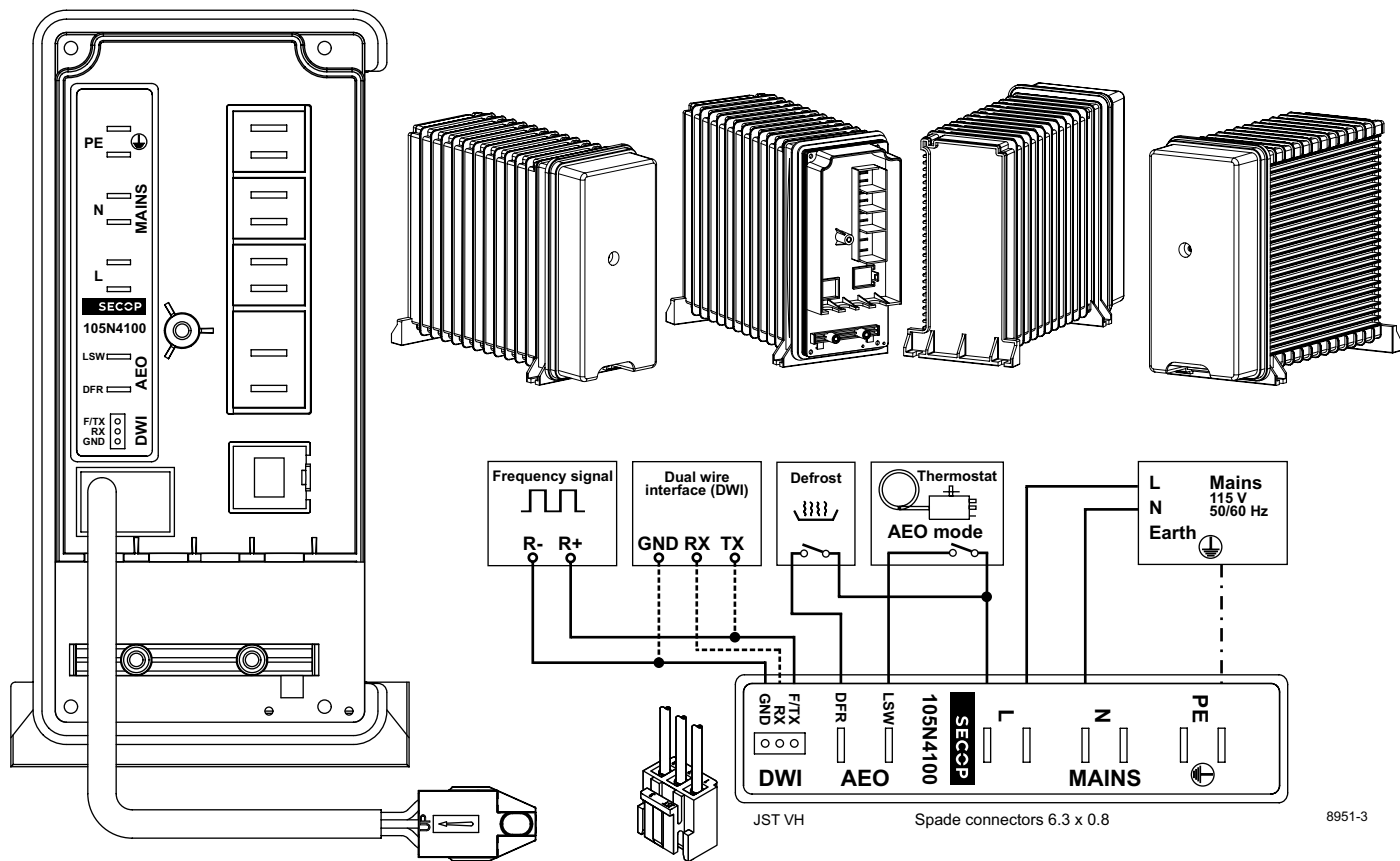


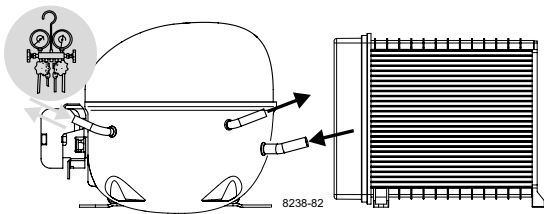
Instructions

NLVE Compressors
115-127 V, 50/60 Hz
105N4100 Controllers

SECCP

Keep electrical equipment
clear from oil, chemicals,
and water





Instructions

NLVE Compressors
115-127 V, 50/60 Hz
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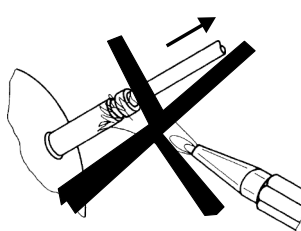
SECCP

Keep electrical equipment
clear from oil, chemicals,
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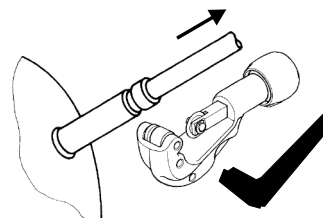


Service/Repair – R170, R290, R1270

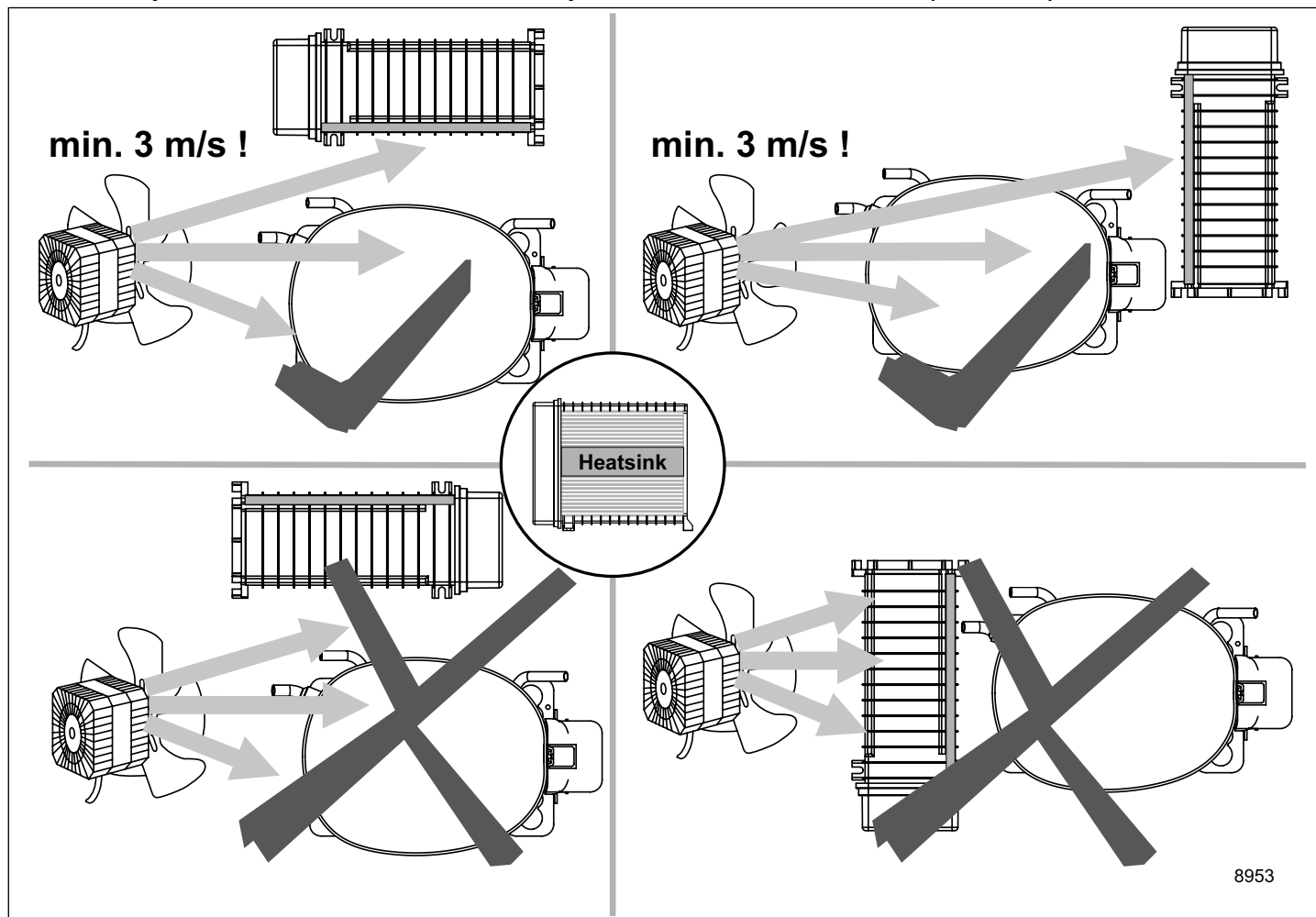
(applies to all flammable refrigerants)



8545



Ensure Proper Airflow of 3 m/s at Both Compressor and Electronic Unit (Heatsink)



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	115-127 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.seccp.com**