

## Single Pack SLVE18CN 220-240V 50Hz / 208-230V 60Hz PM

Single pack code number: **195B4413**

Position	Title	Code	Amount
1	Compressor SLVE18CN	104H8841	1
2	Electronic unit	105N4731	1
3	Cover	103N2008	1
4	Bolt joint for one compressor   M6   ø16mm	118-1917	1

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## SLVE18CN Variable Speed Drive Compressor R290, 208-240V 50/60Hz - with 105N473x Series Controllers



### General

Code number (without electronic unit)	104H8841
Electronic unit - Standard, 700±20 mm cable length	
Approvals: EN 60335-2-34 with Annex AA, CCC, UL 60335-2-34 with Annex AA	105N4730 (with PFC)
Compressors on pallet	80
Remarks: PFC = power factor correction according to EN 61000-3-2:2014	

### Application

Application	Hz	LBP/MBP	
		50	60
Frequency	Hz	50	60
Evaporating temperature	°C	-45 to 10	-45 to 10
Voltage range / frequency	V/Hz	180 - 270	180 - 270
Max. condensing temperature continuous (short)	°C	60 (65)	60 (65)
Max. winding temperature continuous (short)	°C	125 (135)	125 (135)

### Cooling requirements

Frequency	Hz	Cooling requirements					
		50			60		
Application		LBP	MBP	HBP	LBP	MBP	HBP
32°C		F <sub>2</sub>	F <sub>2</sub>	-	F <sub>2</sub>	F <sub>2</sub>	-
38°C		F <sub>2</sub>	F <sub>2</sub>	-	F <sub>2</sub>	F <sub>2</sub>	-
43°C		F <sub>2</sub>	F <sub>2</sub>	-	F <sub>2</sub>	F <sub>2</sub>	-

### Features

Speed range	rpm	2200 - 4500
Speed control		AEO, frequency, serial com.
Protections		current, speed, temperature
Protection class (electronic unit)		IP54

### Motor

Motor type		permanent magnet
LRA (rated after 4 sec. UL984)	A	electronic cut off
Maximum current	A	7.0
Resistance, all 3 windings (25°C)	Ω	3.9

### Design

Displacement	cm <sup>3</sup>	17.70
Oil quantity (type)	cm <sup>3</sup>	550 (polyolester)
Maximum refrigerant charge (tech. limit)	g	550
Free gas volume in compressor	cm <sup>3</sup>	1460
Weight - Compressor/Electronic unit	kg	14.2 / 1.2

### Dimensions

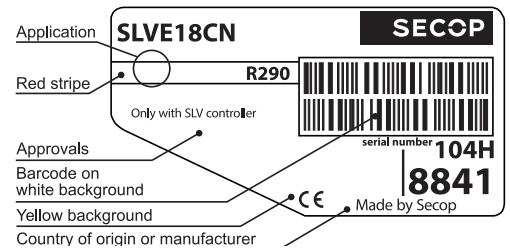
Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm   angle	C	10.2   37°
	material   comment		Copper   Rubber plug
Process connector	location/I.D. mm   angle	D	6.2   37°
	material   comment		Copper   Rubber plug
Discharge connector	location/I.D. mm   angle	E	6.2   37°
	material   comment		Copper   Rubber plug
Connector tolerance	I.D. mm		±0.09

### Accessories

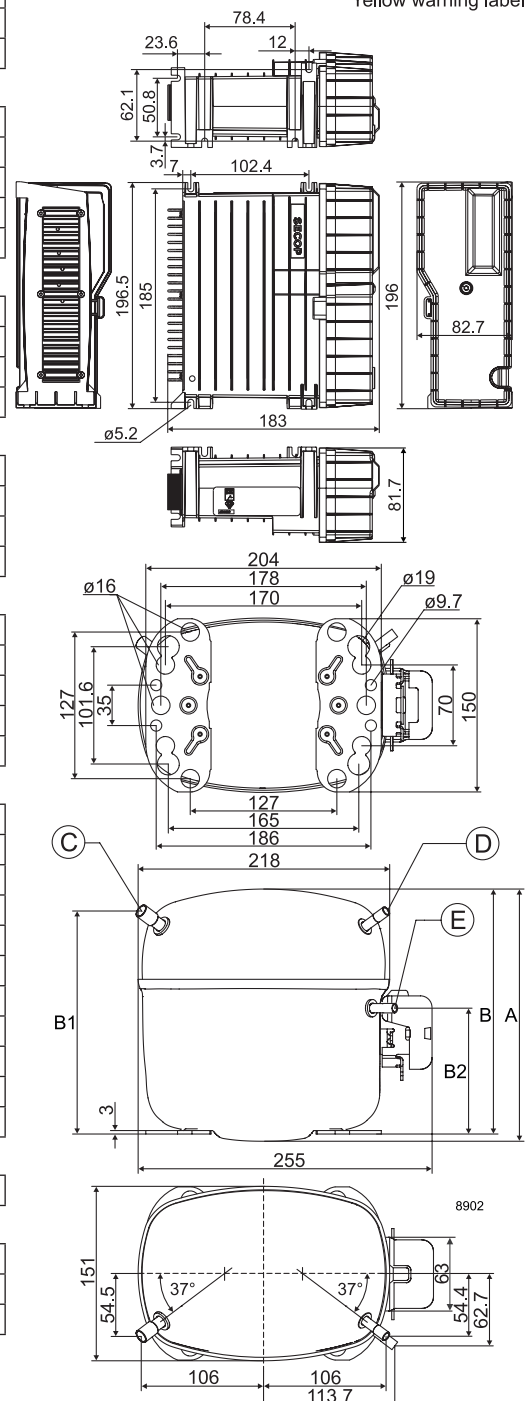
Cover	Code number	103N2008
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### Mounting accessories

Bolt joint for one compressor	Ø: 16 mm	118-1958
Bolt joint in quantities	Ø: 16 mm	118-1961
Snap-on in quantities	Ø: 16 mm	118-1962



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temp. equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



**LBP: ASHRAE** 230V, 50/60Hz, fan cooling F<sub>2</sub>

Speed (rpm)	2200	2400	2600	2800	3000	3500	4000	4500
Capacity [W]	666	721	776	832	887	989	1091	1192
Capacity [BTU/h]	2275	2462	2650	2840	3029	3377	3725	4072
Power cons. [W]	386	416	446	476	505	575	645	714
Current cons. [A]	1.79	1.98	2.13	2.26	2.38	2.67	2.95	3.23
COP [W/W]	1.73	1.73	1.74	1.75	1.76	1.72	1.69	1.67
EER [BTU/Wh]	5.90	5.92	5.94	5.97	6.00	5.87	5.78	5.70

**Test conditions**

Evaporation pressure	-23.3°C	-10°F
Condensing pressure	54.4°C	130°F
Liquid temperature	32.2°C	90°F
Return gas temperature	32.2°C	90°F

**LBP: CECOMAF** 230V, 50/60Hz, fan cooling F<sub>2</sub>

Speed (rpm)	2200	2400	2600	2800	3000	3500	4000	4500
Capacity [W]	497	537	578	620	661	737	813	889
Capacity [BTU/h]	1696	1835	1975	2117	2258	2517	2776	3035
Power cons. [W]	371	400	429	458	486	553	620	688
Current cons. [A]	1.73	1.91	2.06	2.18	2.31	2.58	2.84	3.11
COP [W/W]	1.34	1.34	1.35	1.36	1.36	1.33	1.31	1.29
EER [BTU/Wh]	4.57	4.59	4.6	4.63	4.64	4.55	4.48	4.42

**Test conditions**

Evaporation pressure	-25°C	-13°F
Condensing pressure	55°C	131°F
Liquid temperature	55°C	131°F
Return gas temperature	32°C	90°F

**LBP: EN12900**

Speed (rpm)	2200	2400	2600	2800	3000	3500	4000	4500
Capacity [W]	361	391	421	451	481	536	592	
Capacity [BTU/h]	1234	1336	1438	1541	1643	1832	2021	
Power cons. [W]	262	283	303	323	343	391	438	
Current cons. [A]	1.24	1.39	1.52	1.63	1.74	1.90	2.06	
COP [W/W]	1.38	1.38	1.39	1.40	1.40	1.37	1.35	
EER [BTU/Wh]	4.71	4.73	4.75	4.77	4.79	4.69	4.61	

**Test conditions**

Evaporation pressure	-35°C	-31°F
Condensing pressure	40°C	104°F
Liquid temperature	40°C	104°F
Return gas temperature	20°C	68°F

**MBP: ASHRAE** 230V, 50/60Hz, fan cooling F<sub>2</sub>

Speed (rpm)	2200	2400	2600	2800	3000	3500	4000	4500
Capacity [W]	1199	1298	1397	1497	1597	1780	1963	2146
Capacity [BTU/h]	4095	4431	4770	5111	5452	6078	6704	7330
Power cons. [W]	542	584	626	668	710	808	906	1004
Current cons. [A]	2.49	2.72	2.91	3.06	3.20	3.64	4.07	4.50
COP [W/W]	2.21	2.22	2.23	2.24	2.25	2.20	2.17	2.14
EER [BTU/Wh]	7.56	7.59	7.62	7.65	7.68	7.53	7.40	7.30

**Test conditions**

Evaporation pressure	-6.7°C	20°F
Condensing pressure	54.4°C	130°F
Liquid temperature	46.1°C	115°F
Return gas temperature	35°C	95°F

**MBP: CECOMAF** 230V, 50/60Hz, fan cooling F<sub>2</sub>

Speed (rpm)	2200	2400	2600	2800	3000	3500	4000	4500
Capacity [W]	954	1032	1111	1191	1270	1416	1562	1708
Capacity [BTU/h]	3258	3526	3795	4067	4338	4836	5334	5832
Power cons. [W]	516	557	597	637	676	770	863	956
Current cons. [A]	2.38	2.60	2.78	2.93	3.07	3.48	3.89	4.30
COP [W/W]	1.85	1.86	1.86	1.87	1.88	1.84	1.81	1.79
EER [BTU/Wh]	6.31	6.33	6.36	6.39	6.41	6.28	6.18	6.10

**Test conditions**

Evaporation pressure	-10°C	14°F
Condensing pressure	55°C	131°F
Liquid temperature	55°C	131°F
Return gas temperature	32°C	90°F

**MBP: EN12900** 230V, 50/60Hz, fan cooling F<sub>2</sub>

Speed (rpm)	2200	2400	2600	2800	3000	3500	4000	4500
Capacity [W]	1044	1130	1216	1303	1390	1549	1709	1868
Capacity [BTU/h]	3564	3857	4152	4449	4746	5291	5836	6381
Power cons. [W]	463	500	536	572	607	692	775	859
Current cons. [A]	2.14	2.35	2.52	2.66	2.79	3.15	3.51	3.87
COP [W/W]	2.25	2.26	2.27	2.28	2.29	2.24	2.21	2.18
EER [BTU/Wh]	7.69	7.72	7.75	7.78	7.82	7.66	7.53	7.43

**Test conditions**

Evaporation pressure	-10°C	14°F
Condensing pressure	45°C	113°F
Liquid temperature	45°C	113°F
Return gas temperature	20°C	68°F

**Optimization Point** 230V, 50/60Hz, fan cooling F<sub>2</sub>

Speed (rpm)	2200	2400	2600	2800	3000	3500	4000	4500
Capacity [W]	651	705	759	813	867	967	1066	1166
Capacity [BTU/h]	2224	2407	2591	2777	2962	3302	3642	3982
Power cons. [W]	320	345	370	395	419	477	535	593
Current cons. [A]	1.50	1.66	1.81	1.92	2.04	2.26	2.48	2.70
COP [W/W]	2.04	2.04	2.05	2.06	2.07	2.03	1.99	1.97
EER [BTU/Wh]	6.95	6.97	7.00	7.03	7.06	6.92	6.80	6.71

**Test conditions**

Evaporation pressure	-25°C	-13°F
Condensing pressure	35°C	95°F
Liquid temperature	35°C	95°F
Return gas temperature	32°C	90°F

**Optimization Point** 230V, 50/60Hz, fan cooling F<sub>2</sub>

Speed (rpm)	2200	2400	2600	2800	3000	3500	4000	4500
Capacity [W]	1087	1176	1266	1356	1447	1613	1779	1945
Capacity [BTU/h]	3711	4016	4323	4632	4941	5508	6075	6643
Power cons. [W]	463	500	536	572	607	691	775	859
Current cons. [A]	2.14	2.35	2.52	2.66	2.79	3.15	3.51	3.87
COP [W/W]	2.35	2.35	2.36	2.37	2.38	2.33	2.30	2.27
EER [BTU/Wh]	8.01	8.03	8.07	8.10	8.14	7.97	7.84	7.73

**Test conditions**

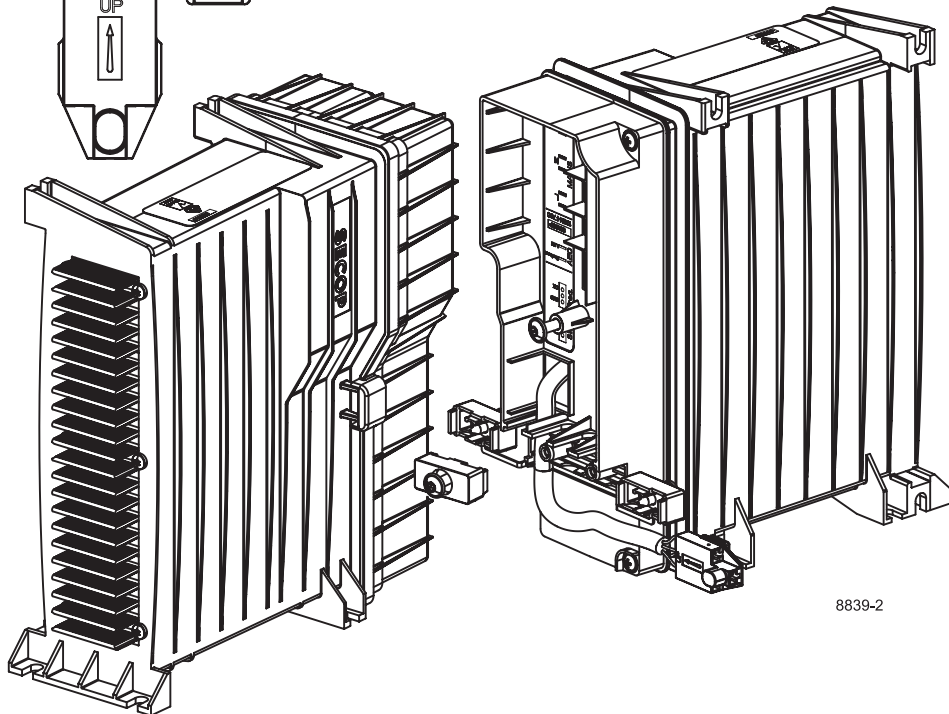
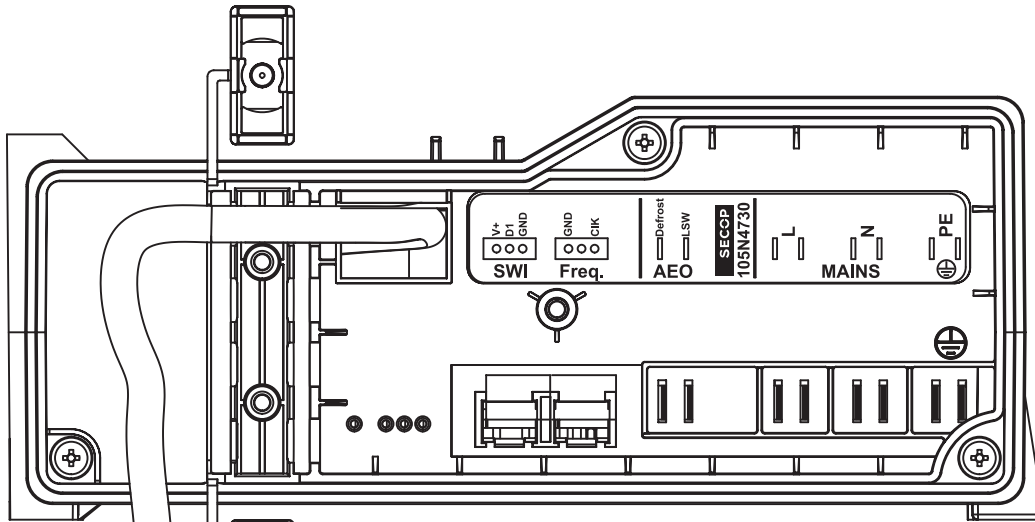
Evaporation pressure	-10°C	14°F
Condensing pressure	45°C	113°F
Liquid temperature	45°C	113°F
Return gas temperature	32°C	90°F

**Optimization Point** 230V, 50/60Hz, fan cooling F<sub>2</sub>

Speed (rpm)	2200	2400	2600	2800	3000	3500	4000	4500
Capacity [W]		1992	2144	2297	2451	2732	3013	3295
Capacity [BTU/h]		6802	7322	7846	8370	9330	10291	11252
Power cons. [W]		570	611	651	692	787	883	979
Current cons. [A]		2.66	2.84	2.99	3.13	3.55	3.97	4.39
COP [W/W]		3.50	3.51	3.53	3.54	3.47	3.41	3.37
EER [BTU/Wh]		11.94	11.99	12.05	12.10	11.85	11.65	11.50

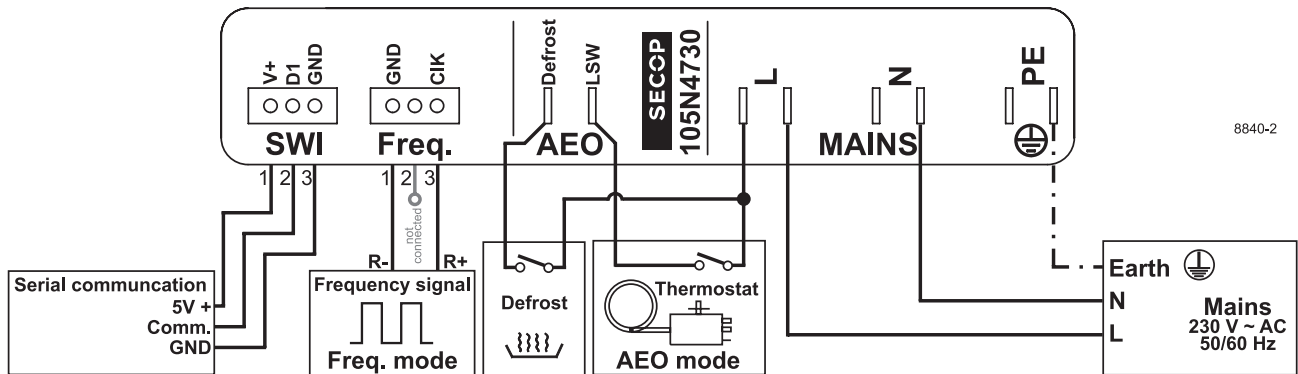
**Test conditions**

Evaporation pressure	5°C	41°F
Condensing pressure	45°C	113°F
Liquid temperature	45°C	113°F
Return gas temperature	32°C	90°F



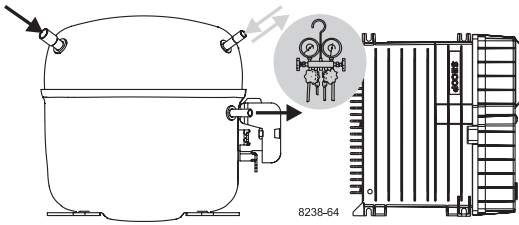
RAST 2.5

Spade connectors 6.3 x 0.8



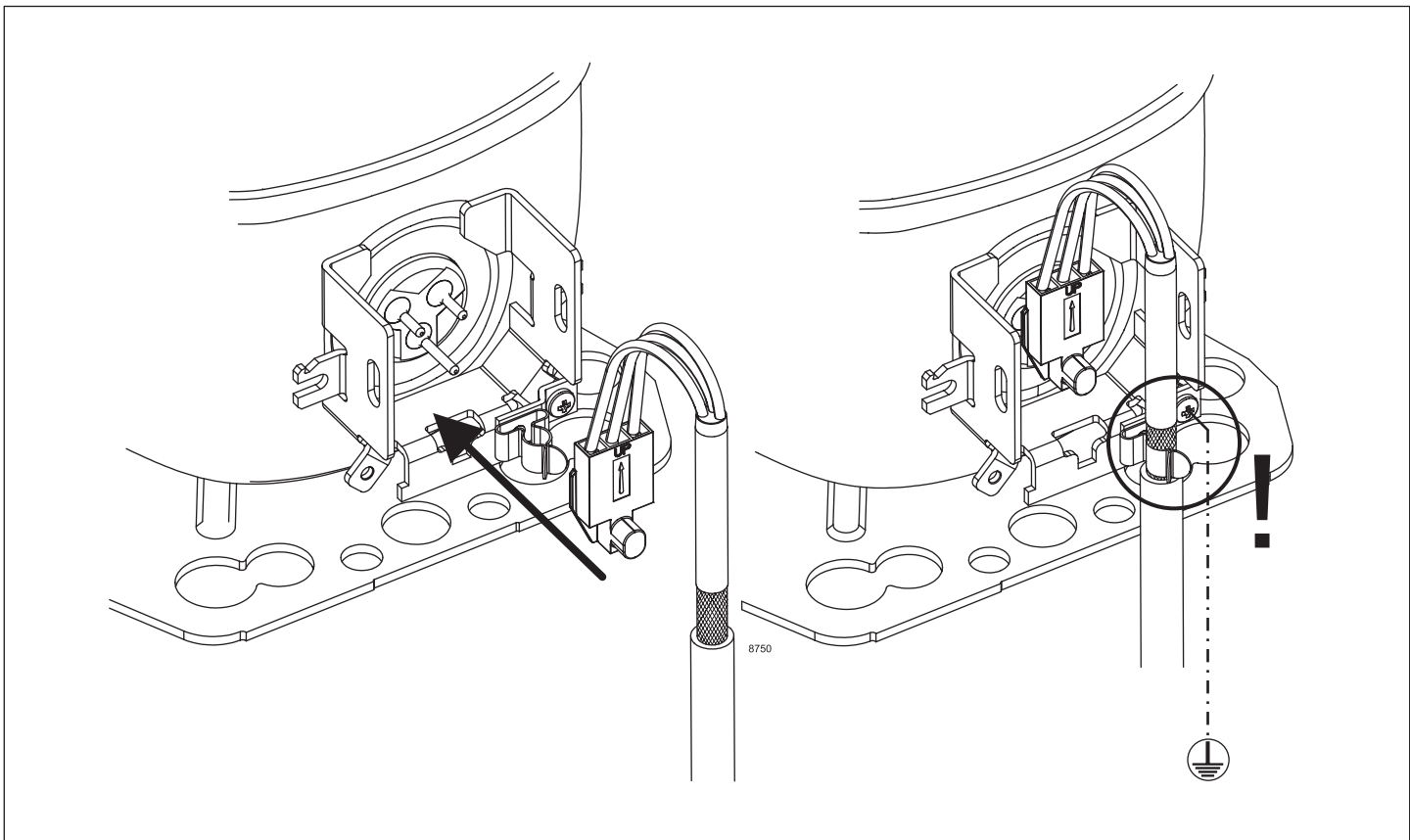
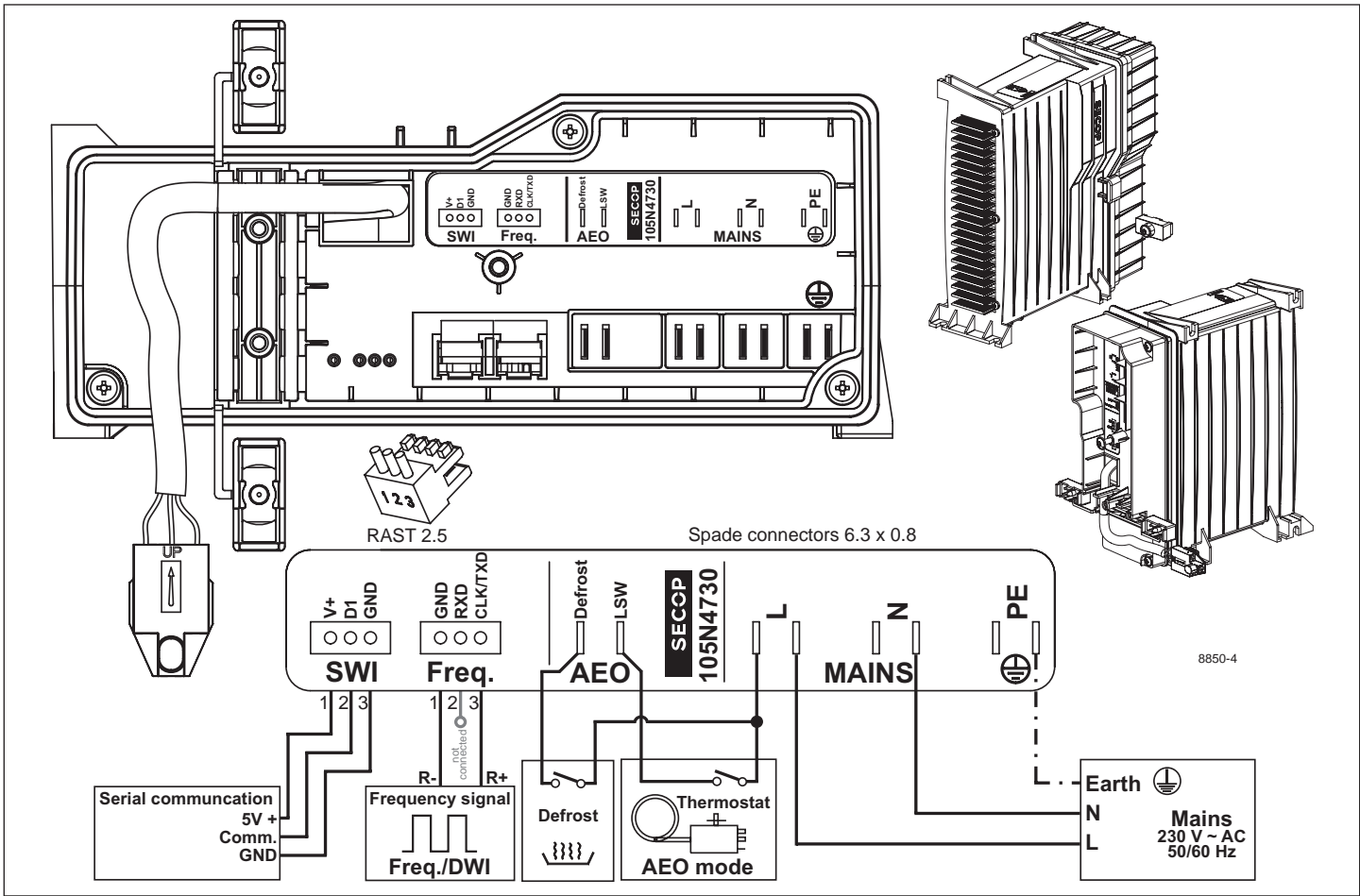
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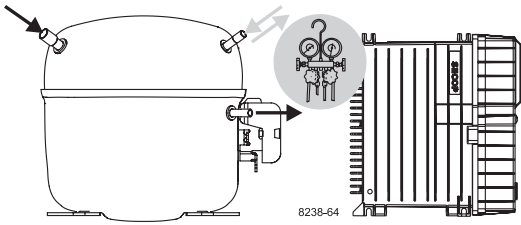
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# Instructions

SLVE Compressors  
208-240V 50/60Hz  
105N473x  
Series Controllers





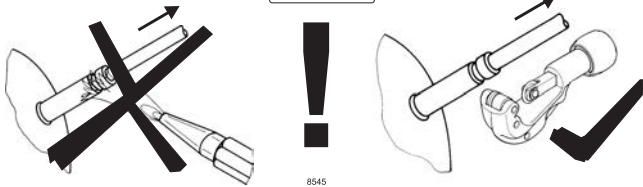
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208-240V 50/60Hz  
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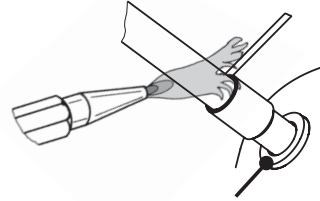
# SECCP



## Service/Repair R290



## Brazing on Suction Connectors (Direct Intake)

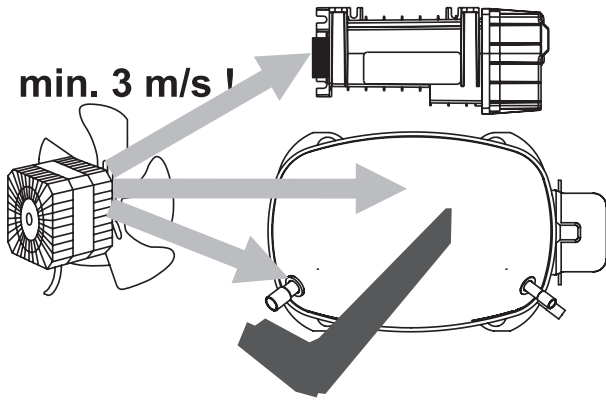


**! max. 350°C/662°F !  
at socket**

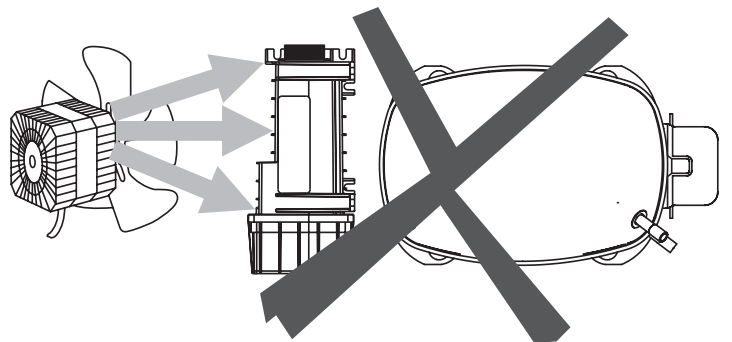
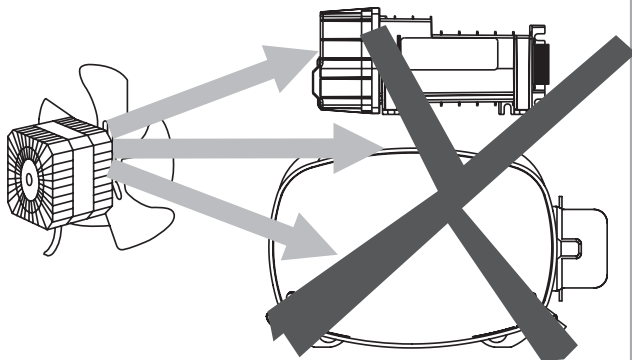
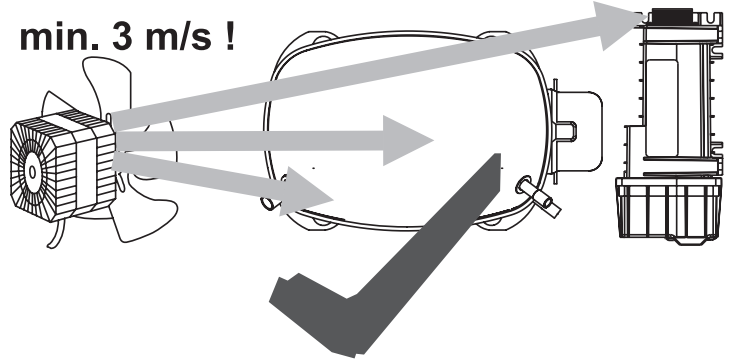
brazing solder: phosphor (LP7) or silver

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

**min. 3 m/s !**



**min. 3 m/s !**



8903

<b>Airflow</b>	3 m/s
<b>Operating conditions</b>	+ 5 °C to 43 °C - humidity < 90 % rH non condensing
<b>Storage conditions</b>	-25 °C to 70 °C - humidity < 90 % rH non condensing
<b>Supply voltage</b>	208-240 V (±10%)
<b>Frequency</b>	50/60 Hz
<b>Input power rating</b>	1400 W at 230 V (+15 % / - 20 %)

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