Model
SLVE18CN

Sales code:
104H8845

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

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Compressor Design

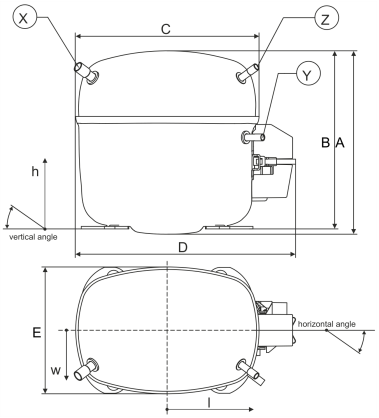
Oil type	**POE**	Motor protection	**internal**
Oil viscosity	**32cSt**	Winding resistance main	**3.850 Ohm**
Oil quantity	**555 / 18.77fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**130°C / 266°F**

Compressor Dimensions

Housing

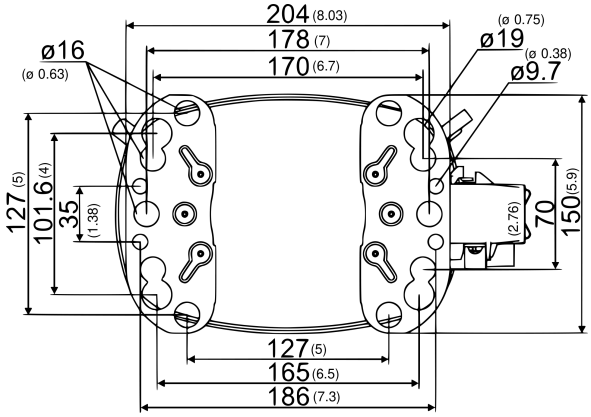
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



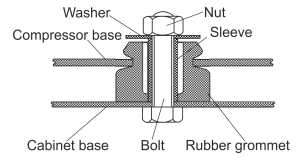
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 9.54–9.72 / 0.38–0.38in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	37°
Vertical angle ±2°	30°	0°	30°
Position l/h/w [mm]	-106/193/56.7 / -4.17/7.60/2.23in	113.7/110/81 / 4.48/4.33/3.19in	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

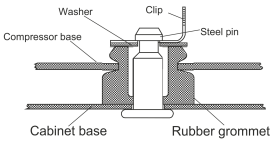


Dimensions in mm [in]

Bolt joint



Snap-on



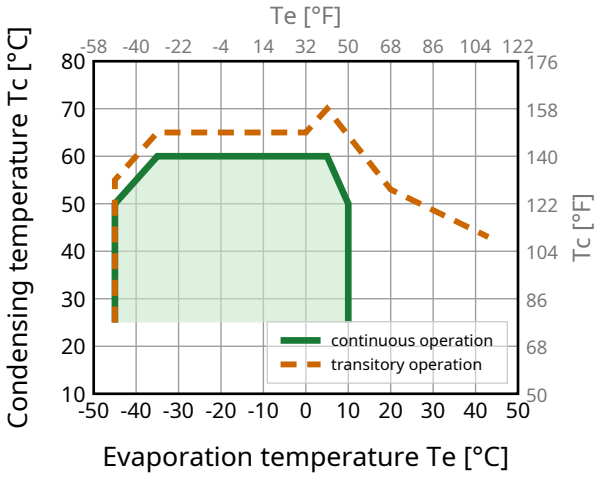
	one comp.	multi pack
Bolt joint | M6 | ø16mm	118-1958	118-1961
Snap-on | ø7,3 | ø16mm	–	118-1962

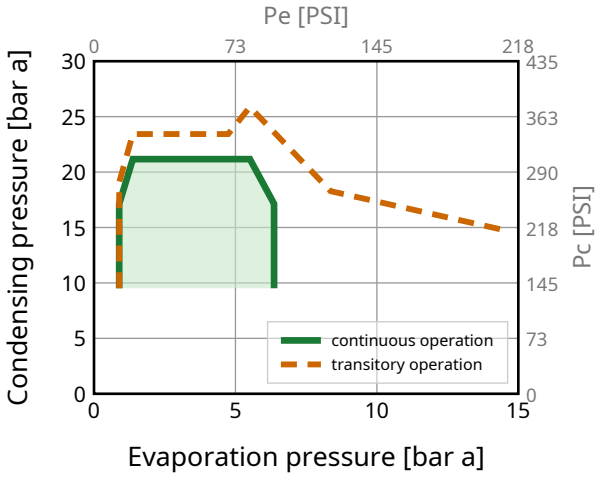
Model
SLVE18CN System Design

Sales code:
104H8845

System Design

Operation Pressure Range R290



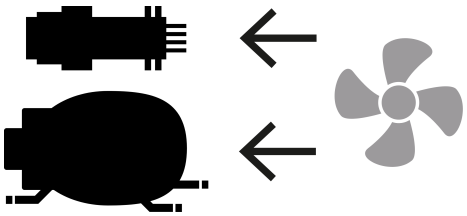


System Cooling

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:

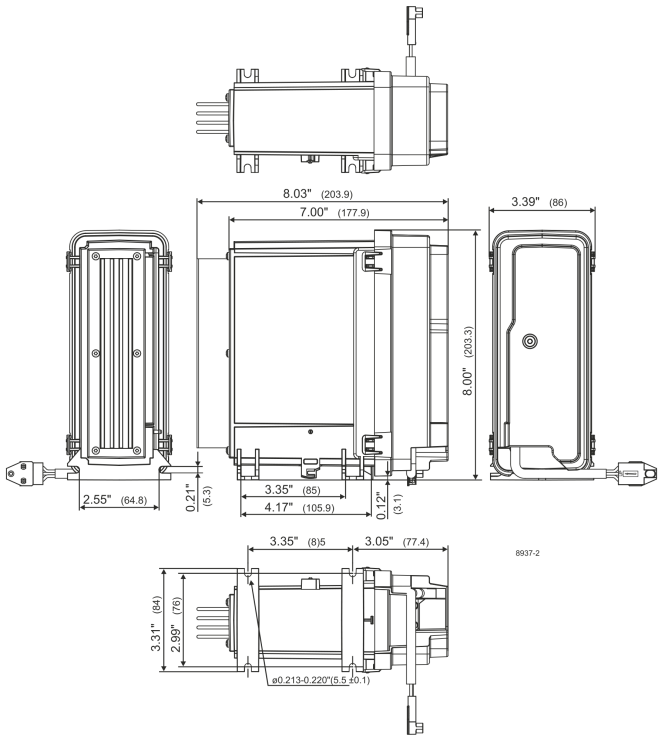
SLVE18CN Controller Overview **104H8845**

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:
104H8845

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:
104H8845

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

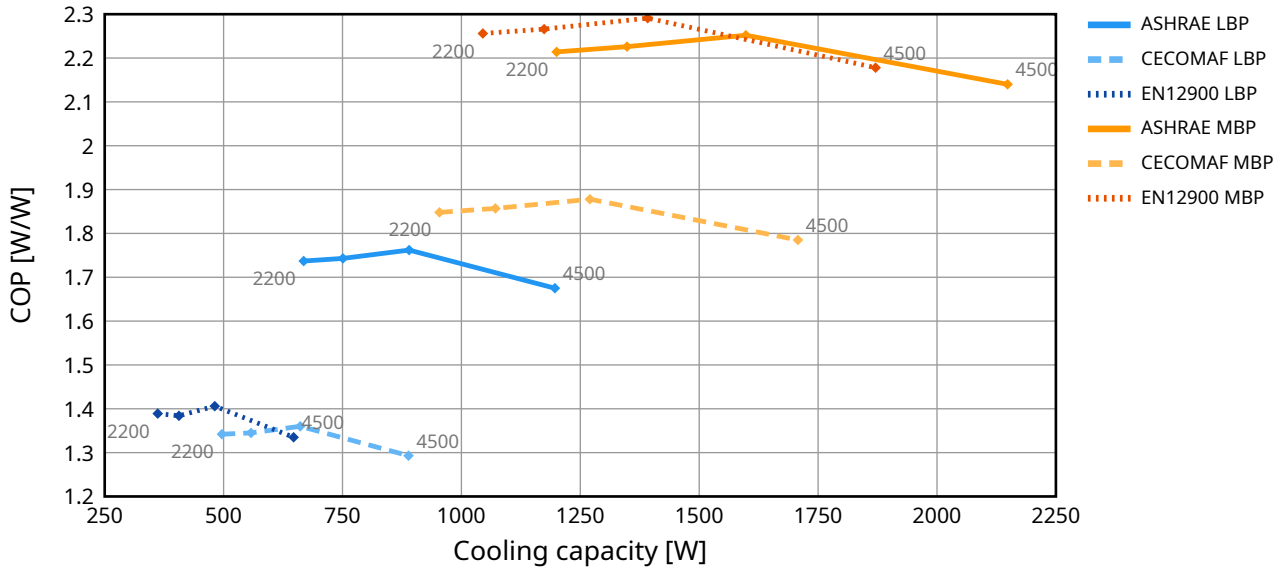
Model
SLVE18CN

Sales code:
104H8845

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