

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	105N4730 (with PFC)
Approvals: EN 60335-2-34 with Annex AA, CCC, UL 60335-2-34 with Annex AA	
Compressors on pallet	80
Remarks: PFC = power factor correction according to EN 61000-3-2:2014	

Application

Application		LBP/MBP	
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	50		60	
Application		LBP	MBP	HBP	
32°C		F ₂	F ₂	-	F ₂ F ₂ -
38°C		F ₂	F ₂	-	F ₂ F ₂ -
43°C		F ₂	F ₂	-	F ₂ F ₂ -

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

Dimensions

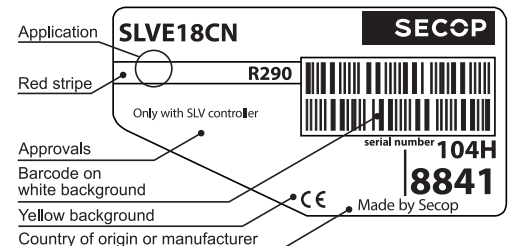
Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm angle	C	10.2 37°
	material comment		Copper Rubber plug
Process connector	location/I.D. mm angle	D	6.2 37°
	material comment		Copper Rubber plug
Discharge connector	location/I.D. mm angle	E	6.2 37°
	material comment		Copper Rubber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

Accessories

Cover	Code number
	103N2008

Mounting accessories

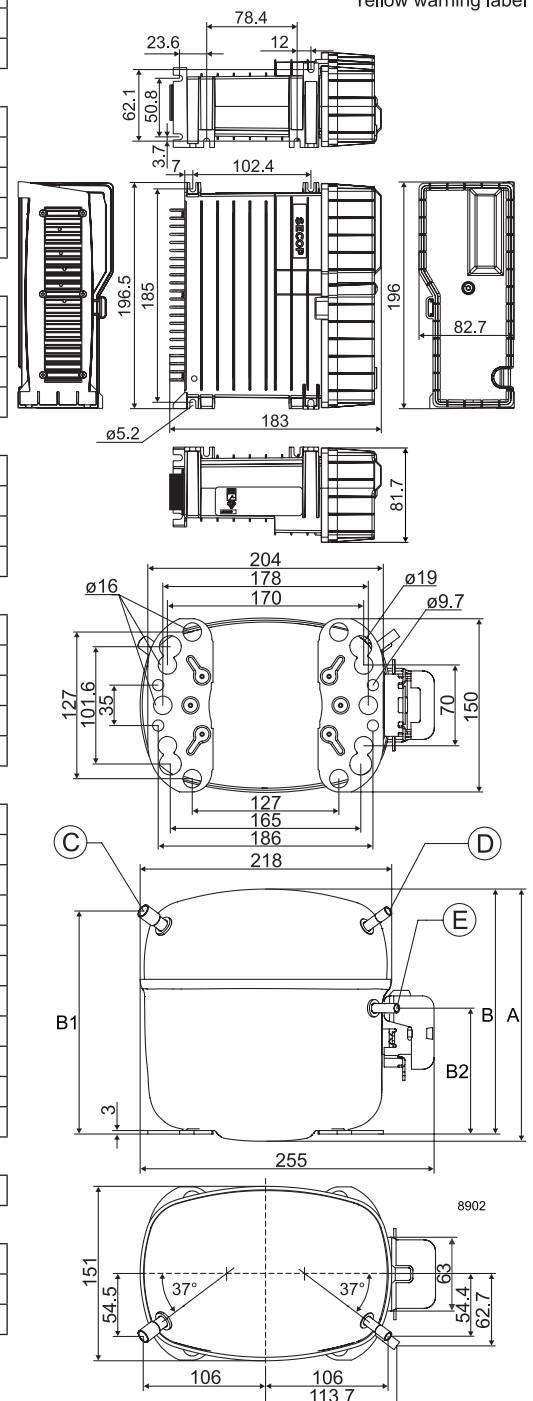
Bolt joint for one compressor	Ø: 16 mm	118-1958
Bolt joint in quantities	Ø: 16 mm	118-1961
Snap-on in quantities	Ø: 16 mm	118-1962



- S = Static cooling normally sufficient
O = Oil cooling
F₁ = Fan cooling 1.5 m/s (compressor compartment temp. equal to ambient temperature)
F₂ = Fan cooling 3.0 m/s necessary
SG = Suction gas cooling normally sufficient
- = not applicable in this area



Yellow warning label



LBP: ASHRAE 230V, 50/60Hz, fan cooling F₂

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 F₂

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 F₂

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 F₂

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 F₂

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 F₂

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 F₂

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

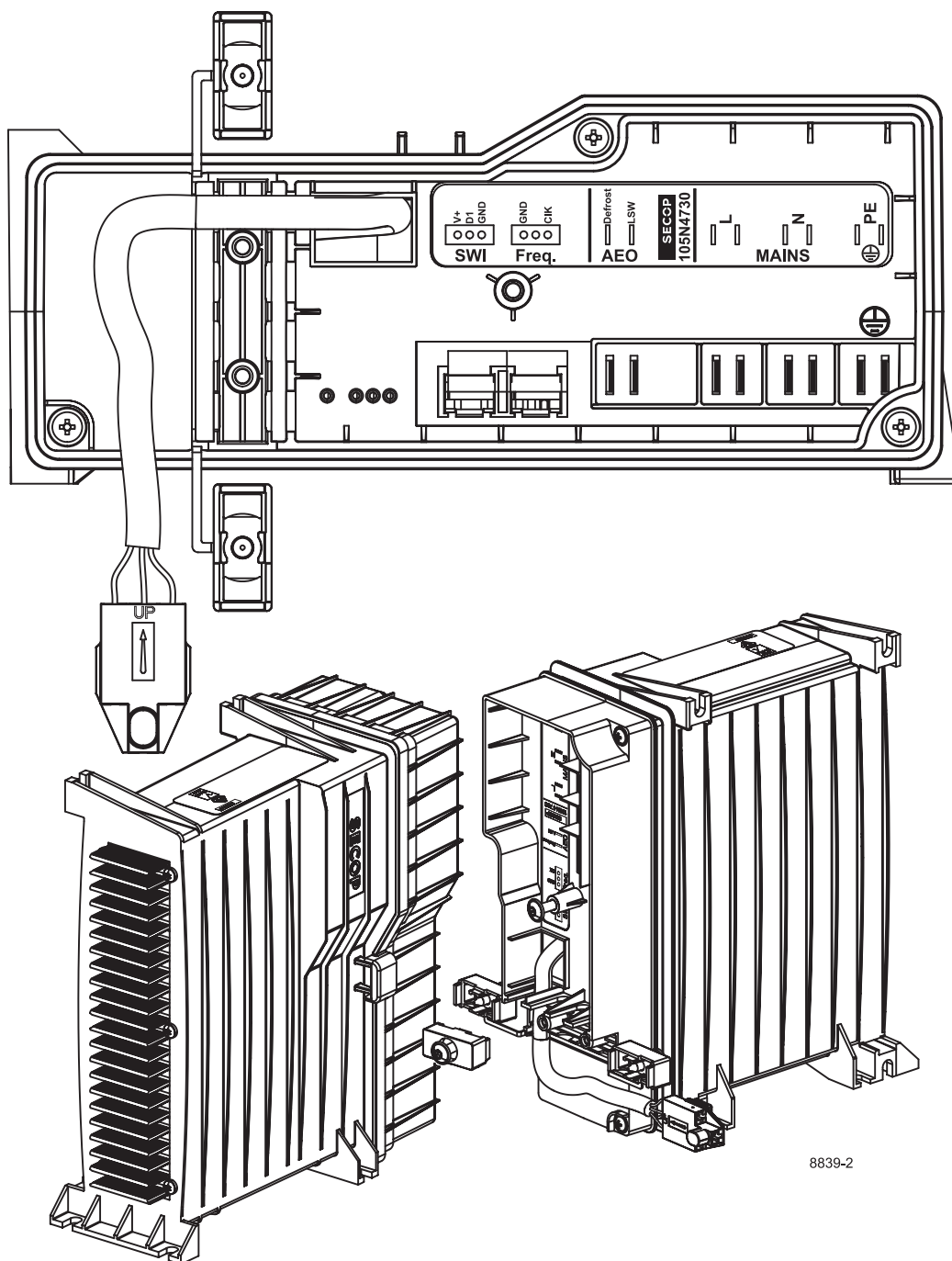
Evaporation pressure	-10°C	14°F
Condensing pressure	45°C	113°F
Liquid temperature	45°C	113°F
Return gas temperature	32°C	90°F

Optimization Point 230V, 50/60Hz, fan cooling F₂

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

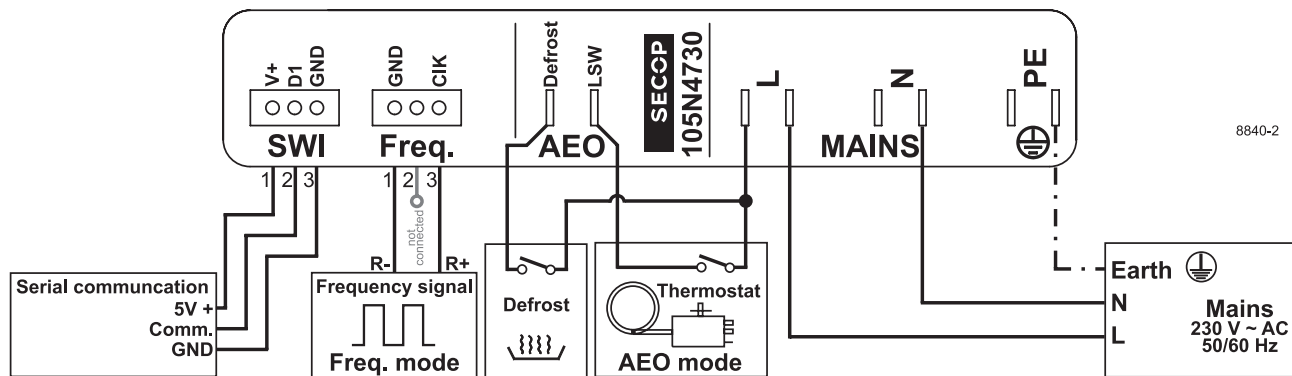


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RAST 2.5

Spade connectors 6.3 x 0.8



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