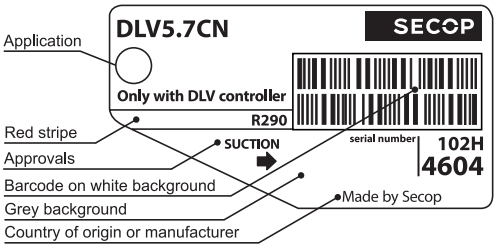
DLV5.7CN
Variable Speed Drive Compressor
R290, 100-127V 50/60Hz
- with 105N4460 Controller

TOOL4COOL®



Yellow warning label

S = Static cooling normally sufficient
O = Oil cooling
F_1 = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
F_2 = Fan cooling 3.0 m/s necessary
– = not applicable in this area

General

Code number	102H4604
Electronic unit Approvals: UL 60335-2-34 with Annex AA, CCC	105N4460
Compressors on pallet	100

Application

Application		LBP/MBP	
Frequency	Hz	50	60
Evaporating temperature	°F	-31 to 45	-31 to 45
Voltage range	V	90 - 140	90 - 140
Max. condensing temperature continuous (short)	°F	140 (149)	140 (149)
Max. winding temperature continuous (short)	°F	257 (275)	257 (275)

Cooling requirements

Frequency	Hz	50			60		
Application		LBP	MBP	HBP	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	–
Remarks on application:							

Features

Speed range	rpm	2000 - 4500
Speed control		AEO, frequency, serial com.
Thermostat		integrated, electronic
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	6.5
Resistance, all 3 windings (25°C)	Ω	1.2

Design

Displacement	cu.in	0.35
Oil quantity (type)	fl.oz.	7.8 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	49.5
Weight - Compressor/Electronic unit	lbs.	17.2 / 1.15

Dimensions

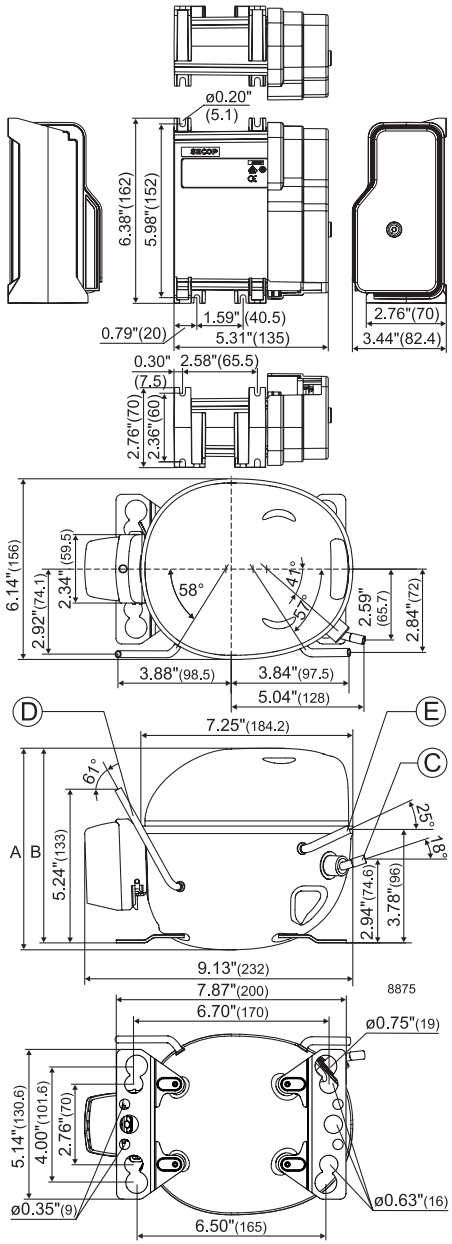
Height	inch	A	6.89
		B	6.65
Suction connector	location/I.D. mm | angle	C	0.320-0.327 | 18°
	material | comment		Copper | Rubber plug
Process connector	location/O.D. mm | angle	D	0.252-0.259 | 61°
	material | comment		Copper | Rubber plug
Discharge connector	location/O.D. mm | angle	E	0.252-0.259 | 25°
	material | comment		Copper | Rubber plug

Accessories

		Code number
Cover		103N0492
Cord relief		103N1010
Motor cable	35.4 in. cable length	105B4477

Mounting accessories

		Code number
Bolt joint for one compressor	Ø: 3/4 in.	118-1949
Bolt joint in quantities	Ø: 5/8 in.	118-1946
Snap-on in quantities	Ø: 5/8 in.	118-1947



LBP: ASHRAE 115V, 50/60Hz, fan cooling F_2

Speed (rpm)	2000	2250	2500	2750	3000	3500	4000	4500
Capacity [BTU/h]	664	748	833	917	1002	1170	1339	1523
Power cons. [W]	115	130	144	160	176	207	239	277
Current cons. [A]	1.55	1.72	1.89	2.08	2.27	2.64	3.01	3.44
EER [BTU/Wh]	5.76	5.78	5.79	5.75	5.71	5.65	5.61	5.50

Test conditions

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

LBP: CECOMAF 115V, 50/60Hz, fan cooling F_2

Speed (rpm)	2000	2250	2500	2750	3000	3500	4000	4500
Capacity [BTU/h]	497	561	624	687	750	877	1003	1141
Power cons. [W]	111	125	139	154	169	200	230	267
Current cons. [A]	1.49	1.66	1.83	2.01	2.19	2.54	2.90	3.32
EER [BTU/Wh]	4.48	4.49	4.50	4.47	4.44	4.39	4.36	4.28

Test conditions

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

LBP: EN12900 115V, 50/60Hz, fan cooling F_2

Speed (rpm)	2000	2250	2500	2750	3000	3500	4000	4500
Capacity [BTU/h]	388	438	487	537	586	685	784	892
Power cons. [W]	85	96	106	118	130	153	176	205
Current cons. [A]	1.12	1.24	1.37	1.50	1.64	1.91	2.18	2.49
EER [BTU/Wh]	4.57	4.58	4.59	4.55	4.52	4.48	4.45	4.36

Test conditions

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

MBP: ASHRAE 115V, 50/60Hz, fan cooling F_2

Speed (rpm)	2000	2250	2500	2750	3000	3500	4000	4500
Capacity [BTU/h]	1176	1326	1477	1626	1776	2075	2375	2700
Power cons. [W]	157	177	196	218	239	283	326	378
Current cons. [A]	2.11	235	2.58	2.84	3.04	3.60	4.11	4.70
EER [BTU/Wh]	7.49	7.51	7.52	7.47	7.42	7.34	7.29	7.15

Test conditions

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

MBP: CECOMAF 115V, 50/60Hz, fan cooling F_2

Speed (rpm)	2000	2250	2500	2750	3000	3500	4000	4500
Capacity [BTU/h]	939	1059	1179	1298	1418	1656	1895	2155
Power cons. [W]	152	171	190	211	231	273	315	365
Current cons. [A]	2.02	2.25	2.47	2.71	2.96	3.44	3.93	4.49
EER [BTU/Wh]	6.19	6.20	6.22	6.17	6.13	6.07	6.02	5.91

Test conditions

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

MBP: EN12900 115V, 50/60Hz, fan cooling F_2

Speed (rpm)	2000	2250	2500	2750	3000	3500	4000	4500
Capacity [BTU/h]	1060	1195	1331	1466	1600	1870	2140	2434
Power cons. [W]	143	161	179	199	219	258	297	345
Current cons. [A]	1.84	2.05	2.25	2.47	2.69	3.14	3.58	4.09
EER [BTU/Wh]	7.39	7.41	7.43	7.37	7.32	7.25	7.20	7.06

Test conditions

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

Optimization Point 115V, 50/60Hz, fan cooling F_2

Speed (rpm)	2000	2250	2500	2750	3000	3500	4000	4500
Capacity [BTU/h]	661	745	829	913	997	1166	1334	1517
Power cons. [W]	97	109	121	134	148	174	201	233
Current cons. [A]	1.31	1.46	1.61	1.76	1.92	2.24	2.55	2.92
EER [BTU/Wh]	6.83	6.84	6.86	6.81	6.76	6.69	6.65	6.52

Test conditions

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

Optimization Point 115V, 50/60Hz, fan cooling F_2

Speed (rpm)	2000	2250	2500	2750	3000	3500	4000	4500
Capacity [BTU/h]	1083	1221	1360	1497	1635	1911	2187	2487
Power cons. [W]	137	154	171	189	208	246	283	328
Current cons. [A]	1.84	2.05	2.25	2.47	2.69	3.14	3.58	4.09
EER [BTU/Wh]	7.93	7.96	7.97	7.91	7.86	7.78	7.72	7.57

Test conditions

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

Optimization Point 115V, 50/60Hz, fan cooling F_2

Speed (rpm)	2000	2250	2500	2750	3000	3500	4000	4500
Capacity [BTU/h]	1857	2094	2331	2567	2803	3275	3748	4262
Power cons. [W]	158	177	197	219	240	284	327	379
Current cons. [A]	3.45	3.46	3.47	3.44	3.42	3.58	3.36	3.30
EER [BTU/Wh]	11.78	11.81	11.83	11.74	11.67	11.55	11.47	11.24

Test conditions

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