



Datasheets

Danfoss scroll compressors **H series**



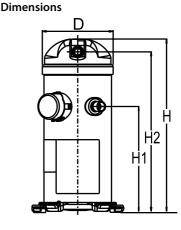
Datasheet, technical data

Danfoss scroll compressor, HLH068T5

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General Characteristics

Code number for Singlepack*		
		120U1341
Code number for Industrial pack**		120U1338
Drawing number		0XR6002B-2
Suction and discharge connections		Brazed
Suction connection		7/8 " ODF
Discharge connection		1/2 " ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume	64,4 cr	n3/rev
Displacement @ Nominal speed	11.2 m3/h @	ຼຸ 2900 rpm
Net weight	37,2	2 kg
Oil charge	1,57 litre	e, PVE
Maximum system test pressure Low Side / High side	- bar(g) /	′ - bar(g)
Maximum differential test pressure	- b	ar
Maximum number of starts per hour	-	
Refrigerant charge limit	5,44	l kg
Approved refrigerants	R41	0A



D=183,5 mm H=455 mm H1=280 mm H2=422 mm H3=- mm

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Electrical Characteristics

Nominal voltage	230V/1/50Hz
Voltage range	207-253 V
Winding resistance (main / start) at 25°C	0,39 Ω / 1,019 Ω
Run capacitors A + C	55 μF + - μF
Start capacitor B	88-108 μF
Start relay	3ARR3*25AS*
Rated Load Amps (RLA)	29 A
Maximum Continuous Current (MCC)	45 A
Locked Rotor Amps (LRA)	130 A
Motor protection	Internal overload protector

Recommended Installation torques

Oil sight glass	52,5 Nm	
Power connections / Earth connection	0 Nm / 0 Nm	
		IP2

Parts shipped with compressor

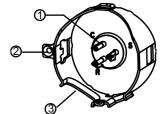
Mounting kit with grommets and sleeves Initial oil charge Installation instructions

Approvals : CE certified, UL certified (file SA11565), -

*Singlepack: Compressor in cardboard box

**Industrial pack: 12 or 16 Unboxed compressors on pallet

Terminal box



IP22 1:

2:

3:

Spade connectors 1/4"

Earth connection

Power cable passage



Datasheet, accessories and spare parts

Danfoss scroll compressor, HLH068T5

Rotolock accessories, suction side	Code no.	
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030	
Gasket, 1-1/4"	8156131	
Rotolock accessories, discharge side	Code no.	
Solder sleeve, P06 (1" Rotolock, 1/2" ODF)	8153007	
Angle adapter, C06 (1" Rotolock, 1/2" ODF)	8168007	Solder sleeve adapter set
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031	
Gasket, 1"	8156130	
Rotolock accessories, sets	Code no.	
Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127	
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	
Oil / lubricants	Code no.	1: Rotolock adapter (Suc & Dis)
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034	2: Gasket (Suc & Dis)
		3: Solder sleeve (Suc & Dis)
Crankcase heaters	Code no.	4: Rotolock nut (Suc & Dis)
Belt type crankcase heater, 50 W, 230 V, CE mark, UL	120Z0057	
Miscellaneous accessories	Code no.	
Acoustic hood	120Z5044	
Discharge thermostat kit	7750009	
Spare parts	Code no.	
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005	
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031	

Datasheet, performance data

Danfoss scroll compressor. HLH068T5

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Performance data at 50 Hz, EN 12900 rating conditions

Performance	e data at 50	0 Hz, EN 129	00 rating co	nditions					R410A
Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
cooling capacity	in W								
30	6 082	7 673	9 449	11 509	13 952	16 879	20 389	24 584	-
35	5 379	7 053	8 825	10 793	13 055	15 712	18 862	22 605	-
40	4 420	6 238	8 067	10 006	12 152	14 604	17 459	20 818	-
45	-	5 177	7 124	9 095	11 187	13 497	16 123	19 161	-
50	-	-	5 946	8 007	10 104	12 334	14 791	17 573	-
55	-	-	-	6 693	8 849	11 054	13 401	15 985	-
60	-	-	-	-	7 368	9 594	11 880	14 318	-
65	-	-	-	-	-	7 882	10 138	12 464	-
ower input in W	,								
30	3 281	3 324	3 352	3 360	3 345	3 302	3 229	3 122	-
35	3 614	3 668	3 708	3 730	3 730	3 706	3 654	3 569	-
40	4 000	4 059	4 107	4 139	4 152	4 142	4 106	4 039	-
45		4 507	4 558	4 597	4 618	4 618	4 594	4 542	
50	-	-	5 070	5 110	5 136	5 142	5 126	5 084	
55	-	-	-	5 689	5 714	5 723	5 711	5 675	-
60	_	-	-		6 361	6 368	6 357	6 323	
65	-	-	-	-	-	7 086	7 071	7 036	
30	otion in A 19.22	19.27	19.48	19.68	19.69	19.34	18.46	16.87	-
35	20.20	20.39	20.77	21.17	21.41	21.32	20.72	19.45	-
40	21.56	21.80	22.26	22.76	23.13	23.20	22.79	21.74	-
45	-	23.70	24.13	24.64	25.04	25.17	24.86	23.93	-
50	-	-	26.57	26.99	27.33	27.43	27.12	26.21	-
55	-	-	-	30.01	30.19	30.16	29.75	28.77	-
60	-	-	-	-	33.81	33.55	32.94	31.79	-
65	-	-	-	-	-	37.79	36.88	35.47	-
lass flow in kg/l	ı								
30	127	158	192	230	276	331	397	477	-
35	119	153	188	227	272	323	384	457	-
40	103	143	182	222	267	317	374	441	-
45	-	126	170	214	260	310	366	430	-
50	-	-	152	201	251	302	358	420	-
55	-	-	-	182	236	291	348	410	-
60	-	-	-	-	216	275	335	399	-
65	-	-	-	-	-	253	318	384	-
Coefficient of a second	formores (C.C.								·
30	1.85	2.31	2.82	3.43	4.17	5.11	6.31	7.87	-
35	1.49	1.92	2.38	2.89	3.50	4.24	5.16	6.33	-
40	1.11	1.54	1.96	2.42	2.93	3.53	4.25	5.15	-
45	-	1.15	1.56	1.98	2.42	2.92	3.51	4.22	-

35	1.49	1.92	2.38	2.89	3.50	4.24	5.16	6.33	-
40	1.11	1.54	1.96	2.42	2.93	3.53	4.25	5.15	-
45	-	1.15	1.56	1.98	2.42	2.92	3.51	4.22	-
50	-	-	1.17	1.57	1.97	2.40	2.89	3.46	-
55	-	-	-	1.18	1.55	1.93	2.35	2.82	-
60	-	-	-	-	1.16	1.51	1.87	2.26	-
65	-	-	-	-	-	1.11	1.43	1.77	-

Nominal performance at to = 5 °C, tc = 50 °C										
Cooling capacity	14 791	W								
Power input	5 126	W								
Current consumption	27.12	А								
Mass flow	358	kg/h								
COP	2 89									

45	bar(g)
1.5	bar(g)
2.3	bar(g)
71	dB(A)
66	dB(A)
	1.5 2.3

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

Datasheet, performance data

Danfoss scroll compressor. HLH068T5

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R410A

Performance data at 50 Hz, ARI rating conditions

Cond. temp. in				Evapor	ating temperature i	n °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15					
Cooling capacity	in W													
30	6 568	8 278	10 183	12 391	15 008	18 141	21 896	26 380	-					
35	5 847	7 658	9 570	11 692	14 128	16 987	20 374	24 397	-					
40	4 842	6 824	8 814	10 919	13 246	15 901	18 991	22 623	-					
45	-	5 717	7 855	10 015	12 302	14 824	17 688	20 999	-					
50	-	-	6 634	8 919	11 237	13 697	16 404	19 465	-					
55	-	-	-	7 571	9 992	12 459	15 081	17 962	-					
60	-	-	-	-	8 505	11 052	13 658	16 431	-					

Power input in W

65

30	3 281	3 324	3 352	3 360	3 345	3 302	3 229	3 122	-
35	3 614	3 668	3 708	3 730	3 730	3 706	3 654	3 569	-
40	4 000	4 059	4 107	4 139	4 152	4 142	4 106	4 039	-
45	-	4 507	4 558	4 597	4 618	4 618	4 594	4 542	-
50	-	-	5 070	5 110	5 136	5 142	5 126	5 084	-
55	-	-	-	5 689	5 714	5 723	5 711	5 675	-
60	-	-	-	-	6 361	6 368	6 357	6 323	-
65	-	-	-	-	-	7 086	7 071	7 036	-

9 4 1 4

12 076

Current consumption in A

30	19.22	19.27	19.48	19.68	19.69	19.34	18.46	16.87	-
35	20.20	20.39	20.77	21.17	21.41	21.32	20.72	19.45	-
40	21.56	21.80	22.26	22.76	23.13	23.20	22.79	21.74	-
45	-	23.70	24.13	24.64	25.04	25.17	24.86	23.93	-
50	-	-	26.57	26.99	27.33	27.43	27.12	26.21	-
55	-	-	-	30.01	30.19	30.16	29.75	28.77	-
60	-	-	-	-	33.81	33.55	32.94	31.79	-
65	-	-	-	-	-	37.79	36.88	35.47	-

Mass flow in kg/h

30	126	157	190	229	275	329	395	473	-
35	118	152	187	226	270	321	382	453	-
40	103	142	181	221	265	315	372	438	-
45	-	125	169	213	259	308	363	427	-
50	-	-	151	200	249	300	355	417	-
55	-	-	-	181	235	289	346	407	-
60	-	-	-	-	214	273	333	396	-
65	-	-	-	-	-	252	316	382	-

Coefficient of performance (C.O.P.)

30	2.00	2.49	3.04	3.69	4.49	5.49	6.78	8.45	-
35	1.62	2.09	2.58	3.13	3.79	4.58	5.58	6.84	-
40	1.21	1.68	2.15	2.64	3.19	3.84	4.63	5.60	-
45	-	1.27	1.72	2.18	2.66	3.21	3.85	4.62	-
50	-	-	1.31	1.75	2.19	2.66	3.20	3.83	-
55	-	-	-	1.33	1.75	2.18	2.64	3.16	-
60	-	-	-	-	1.34	1.74	2.15	2.60	-
65	-	-	-	-	-	1.33	1.71	2.10	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C				
Cooling capacity	16 479	W		
Power input	5 625	W		
Current consumption	29.06	Α		
Mass flow	373	kg/h		
COP	2 93			

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)
Sound nower data		
Sound power data		
Sound power data Sound power level	71	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%



