ENGINEERING TOMORROW



Datasheets

Danfoss scroll compressors **H series**





Datasheet, technical data

Danfoss scroll compressor, HLH061T5

General Characteristics

Model number (on compressor nameplate)	HLH061	T5LP6		
Code number for Singlepack*	120U2	2047		
Code number for Industrial pack**	120U2	2044		
Drawing number	0XR600)2B-2		
Suction and discharge connections	Braz	ed		
Suction connection	7/8 " (ODF		
Discharge connection	1/2 " (ODF		
Oil sight glass	Nor	ne		
Oil equalisation connection	Nor	ne		
Oil drain connection	Nor	ne		
LP gauge port	Nor	ne		
IPR valve	Yes	S		
Swept volume	57,79 cm3/rev			
Displacement @ Nominal speed	10.1 m3/h @ 2900 rpm			
Net weight	37,2 kg			
Oil charge	1,57 litre, PVE			
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)			
Maximum differential test pressure	- bar			
Maximum number of starts per hour	-			
Refrigerant charge limit	Refrigerant charge limit 5,44 kg			
Approved refrigerants	R410A			

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)	26.9 A						
Maximum Continuous Current (MCC)	42 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

Parts shipped with compressor

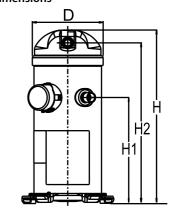
Mounting kit with grommets and sleeves	
Initial oil charge	
Installation instructions	

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

*Singlepack: Compressor in cardboard box

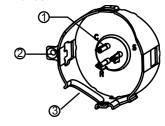
**Industrial pack: 12 or 16 Unboxed compressors on pallet

Dimensions



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

Terminal box



IP22 1:

2:

3:

Spade connectors 1/4" Earth connection

Power cable passage

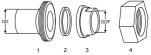


Datasheet, accessories and spare parts

Danfoss scroll compressor, HLH061T5

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	
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.	
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034	
Crankcase heaters	Code no.	
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	

Solder sleeve adapter set



1: Rotolock adapter (Suc & Dis)

: Gasket (Suc & Dis)

: Solder sleeve (Suc & Dis)

: Rotolock nut (Suc & Dis)



Datasheet, performance data

Danfoss scroll compressor. HLH061T5

Performance data at 50 Hz, EN 12900 rating conditions

R410A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity	v in W								
30	4 504	6 258	8 094	10 085	12 305	14 826	17 724	21 072	_
35	3 911	5 646	7 441	9 370	11 505	13 920	16 688	19 884	
40	3 326	5 035	6 785	8 647	10 694	12 997	15 632	18 669	
45		4 404	6 103	7 893	9 845	12 033	14 528	17 402	
50	-	-	5 371	7 093	8 936	11 001	13 350	16 055	
55		-	-	6 193	7 938	9 873	12 069	14 595	
60		-	_	-	6 824	8 617	10 647	12 982	
65		-	_		0 024	7 188	9 030	11 149	
03	<u>-</u>	_		_	_	7 100	9 030	11 149	
ower input in V	V								
30	3 133	3 190	3 201	3 175	3 116	3 032	2 929	2 813	-
35	3 400	3 471	3 498	3 489	3 449	3 385	3 303	3 211	-
40	3 738	3 816	3 851	3 852	3 822	3 771	3 704	3 627	-
45	-	4 233	4 269	4 271	4 246	4 199	4 138	4 069	-
50	-	-	4 760	4 756	4 727	4 677	4 615	4 546	-
55	-	-	-	5 316	5 274	5 214	5 143	5 067	-
60	-	-	-	-	5 897	5 819	5 731	5 640	-
65	-	-	-	-	-	6 500	6 388	6 274	-
Current consum	ption in A	T		T	T	T	1	1 1	
30	17.06	16.99	16.88	16.72	16.50	16.21	15.83	15.36	-
35	19.14	19.00	18.85	18.66	18.44	18.17	17.84	17.44	-
40	21.52	21.29	21.07	20.85	20.61	20.35	20.05	19.69	-
45	-	23.94	23.64	23.36	23.09	22.81	22.52	22.19	-
50	-	-	26.63	26.28	25.95	25.64	25.34	25.03	-
55	-	-	-	29.67	29.28	28.92	28.58	28.27	-
60	-	-	-	-	33.15	32.72	32.34	32.01	-
65	-	-	-	-	-	37.13	36.69	36.31	-
/lass flow in kg/	/h								
30	94	129	164	202	244	290	344	405	_
35	86	122	159	197	239	286	339	401	_
40	78	115	153	192	235	282	335	396	_
45	-	107	146	186	229	277	330	391	
50		-	137	178	222	270	323	383	
55	-	_	-	168	212	260	313	374	
60	-	-	-	-	199	247	301	361	
65				-	199	230	284	344	
00						200	207	J 7 7	
coefficient of pe	erformance (C.C	D.P.)						,	
30	1.44	1.96	2.53	3.18	3.95	4.89	6.05	7.49	-
35	1.15	1.63	2.13	2.69	3.34	4.11	5.05	6.19	-
40	0.89	1.32	1.76	2.25	2.80	3.45	4.22	5.15	-
45	-	1.04	1.43	1.85	2.32	2.87	3.51	4.28	-
50	-	-	1.13	1.49	1.89	2.35	2.89	3.53	-
55	-	-	-	1.16	1.51	1.89	2.35	2.88	-
60	-	-	-	-	1.16	1.48	1.86	2.30	-
65	_	-	_	_	_	1.11	1.41	1.78	-

Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	13 350	W
Power input	4 615	W
Current consumption	25.34	Α
Mass flow	323	kg/h
C.O.P.	2.89	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	70	dB(A)
With accoustic hood	65	dB(A)

All performance data +/- 5%

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tc: Condensing temperature at dew point



Datasheet, performance data

Danfoss scroll compressor. HLH061T5

Performance data at 50 Hz, ARI rating conditions

R410A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
aalina aanaait	· im M								
30	4 864	6 751	8 723	10 859	13 236	15 935	19 034	22 612	_
35	4 251	6 129	8 069	10 150	12 451	15 050	18 026	21 459	
40	3 643	5 509	7 413	9 436	11 656	14 152	17 003	20 288	-
45		4 863	6 729	8 691	10 827	13 216	15 938	19 071	
50	-	-	5 992	7 889	9 937	12 217	14 806	17 784	-
55	-	-	-	7 005	8 963	11 129	13 582	16 401	
60	-	-	-	-	7 878	9 927	12 240 10 756	14 897	-
65	-	-	-	-	-	8 585	10 756	13 247	-
ower input in W	ı								
30	3 133	3 190	3 201	3 175	3 116	3 032	2 929	2 813	-
35	3 400	3 471	3 498	3 489	3 449	3 385	3 303	3 211	-
40	3 738	3 816	3 851	3 852	3 822	3 771	3 704	3 627	_
45	-	4 233	4 269	4 271	4 246	4 199	4 138	4 069	-
50	_	-	4 760	4 756	4 727	4 677	4 615	4 546	-
55	_	_	-	5 316	5 274	5 214	5 143	5 067	_
60	-	_	_	-	5 897	5 819	5 731	5 640	_
65	_	-	-	_	-	6 500	6 388	6 274	_
00		1	I	I.	I.	0 000	0 000	02/1	
urrent consum	ption in A								
30	17.06	16.99	16.88	16.72	16.50	16.21	15.83	15.36	-
35	19.14	19.00	18.85	18.66	18.44	18.17	17.84	17.44	•
40	21.52	21.29	21.07	20.85	20.61	20.35	20.05	19.69	-
45	-	23.94	23.64	23.36	23.09	22.81	22.52	22.19	-
50	-	-	26.63	26.28	25.95	25.64	25.34	25.03	-
55	-	-	-	29.67	29.28	28.92	28.58	28.27	-
60	-	-	-	-	33.15	32.72	32.34	32.01	-
65	-	-	-	-	-	37.13	36.69	36.31	-
				•	•				
lass flow in kg/l	h	1	1			1	1		
30	94	128	163	201	242	288	341	402	-
35	86	122	158	196	238	284	337	398	-
40	78	115	152	191	233	280	333	393	-
45	-	107	145	185	228	275	328	388	-
50	-	-	136	177	220	268	321	381	-
55	-	-	-	167	211	258	311	371	-
60	-	-	-	-	197	245	298	358	-
65	-	-	-	-	-	228	282	341	-
30	1.55	2.12	2.72	3.42	4.25	5.26	6.50	8.04	_
35	1.25	1.77	2.72	2.91	3.61	4.45	5.46	6.68	
40	0.97	1.77	1.92	2.45	3.05	3.75	4.59	5.59	-
45		1.44	1	2.45	2.55			4.69	
	-		1.58			3.15	3.85		-
50	-	-	1.26	1.66	2.10	2.61	3.21	3.91	-
55	-	-	-	1.32	1.70	2.13	2.64	3.24	-
60	-	-	-	-	1.34	1.71	2.14	2.64	-
65	-	-	-	-	_	1.32	1.68	2.11	-
Iominal perform	nance at to = 7	2 °C, tc = 54.4 °C				Pressure switch	settings		
Cooling capacity	at to = 7.	14 93	R W	_		Maximum HP swit		45	har(n)

Cooling capacity	14 933	W
Power input	5 044	W
Current consumption	28.03	Α
Mass flow	338	kg/h
C.O.P.	2.96	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

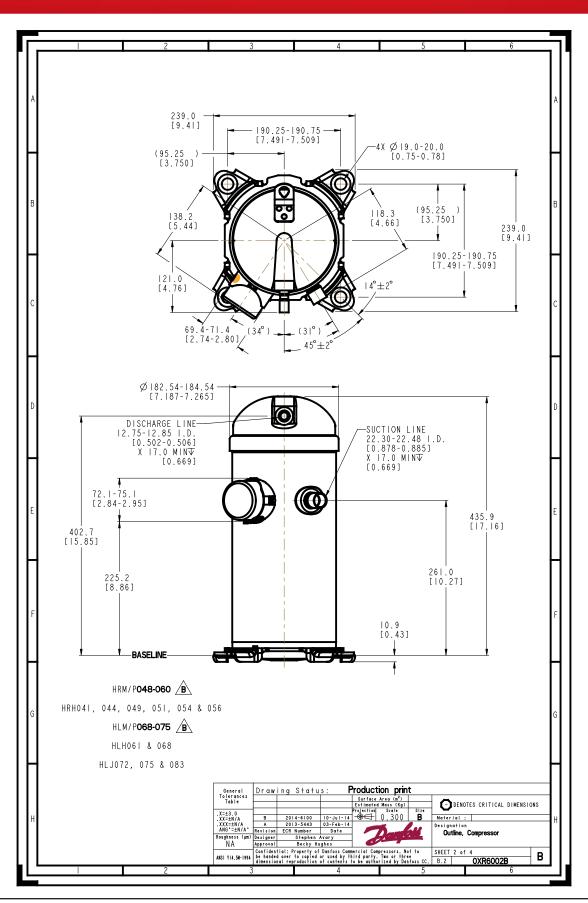
ſ	Sound power level	70	dB(A)
	With accoustic hood	65	dB(A)

All performance data +/- 5%

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tc: Condensing temperature at dew point





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