

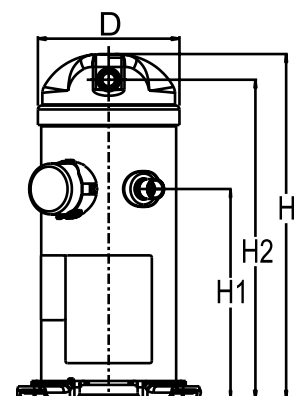
Datasheets

Danfoss scroll compressors **H series**



General Characteristics

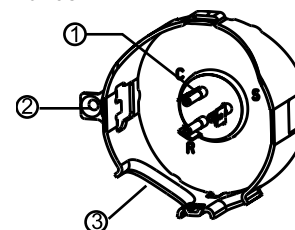
Model number (on compressor nameplate)		HRH056U5LP6
Code number for Singlepack*		120U1336
Code number for Industrial pack**		120U1333
Drawing number		0XR6002B-2
Suction and discharge connections		Brazed
Suction connection		7/8" ODF
Discharge connection		1/2" ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume		54.08 cm ³ /rev
Displacement @ Nominal speed		9.4 m ³ /h @ 2900 rpm
Net weight		37.19 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		5.44 kg
Approved refrigerants		R410A

Dimensions


D=183.5 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

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)	25.6 A
Maximum Continuous Current (MCC)	40 A
Locked Rotor Amps (LRA)	130 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Spade connectors 1/4"
- 2: Earth connection
- 3: Power cable passage

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

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
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Crankcase heaters

Code no.

Belt type crankcase heater, 50 W, 230 V, CE mark, UL	120Z0057
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Miscellaneous accessories

Code no.

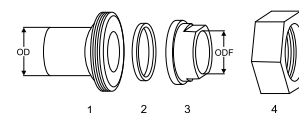
Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0056

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
No translation for 120Z5015	120Z5015

Solder sleeve adapter set



- 1: Rotolock adapter (Suc & Dis)
- 2: Gasket (Suc & Dis)
- 3: Solder sleeve (Suc & Dis)
- 4: Rotolock nut (Suc & Dis)

Performance data at 50 Hz, EN 12900 rating conditions

R410A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	4 133	5 745	7 431	9 259	11 297	13 614	16 280	19 362	-
35	3 578	5 171	6 817	8 584	10 539	12 751	15 289	18 220	-
40	-	4 595	6 197	7 899	9 768	11 871	14 277	17 053	-
45	-	-	5 552	7 184	8 962	10 953	13 223	15 841	-
50	-	-	-	6 422	8 104	9 977	12 107	14 560	-
55	-	-	-	-	7 172	8 921	10 904	13 185	-
60	-	-	-	-	-	7 759	9 584	11 683	-
65	-	-	-	-	-	-	8 100	9 996	-

Power input in W

30	2 884	2 934	2 944	2 920	2 867	2 789	2 693	2 583	-
35	3 154	3 215	3 239	3 230	3 193	3 134	3 058	2 971	-
40	-	3 568	3 598	3 596	3 569	3 521	3 458	3 385	-
45	-	-	4 028	4 027	4 002	3 958	3 901	3 836	-
50	-	-	-	4 531	4 501	4 454	4 395	4 330	-
55	-	-	-	-	5 074	5 017	4 949	4 877	-
60	-	-	-	-	-	5 655	5 571	5 484	-
65	-	-	-	-	-	-	6 269	6 161	-

Current consumption in A

30	15.90	15.84	15.73	15.59	15.38	15.11	14.76	14.32	-
35	17.84	17.71	17.57	17.40	17.19	16.94	16.64	16.26	-
40	-	19.85	19.65	19.44	19.22	18.97	18.69	18.36	-
45	-	-	22.04	21.78	21.53	21.27	20.99	20.69	-
50	-	-	-	24.50	24.19	23.90	23.62	23.33	-
55	-	-	-	-	27.29	26.96	26.65	26.36	-
60	-	-	-	-	-	30.50	30.15	29.84	-
65	-	-	-	-	-	-	34.21	33.86	-

Mass flow in kg/h

30	86	118	151	185	224	266	316	372	-
35	79	112	145	181	219	262	311	367	-
40	-	105	140	176	214	257	306	362	-
45	-	-	133	169	209	252	300	356	-
50	-	-	-	162	201	244	293	348	-
55	-	-	-	-	191	235	283	338	-
60	-	-	-	-	-	222	271	325	-
65	-	-	-	-	-	-	254	308	-

Coefficient of performance (C.O.P.)

30	1.43	1.96	2.52	3.17	3.94	4.88	6.05	7.50	-
35	1.13	1.61	2.10	2.66	3.30	4.07	5.00	6.13	-
40	-	1.29	1.72	2.20	2.74	3.37	4.13	5.04	-
45	-	-	1.38	1.78	2.24	2.77	3.39	4.13	-
50	-	-	-	1.42	1.80	2.24	2.75	3.36	-
55	-	-	-	-	1.41	1.78	2.20	2.70	-
60	-	-	-	-	-	1.37	1.72	2.13	-
65	-	-	-	-	-	-	1.29	1.62	-

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

Cooling capacity	12 107	W
Power input	4 395	W
Current consumption	23.62	A
Mass flow	293	kg/h
C.O.P.	2.75	

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	67	dB(A)
With acoustic hood	62	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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Performance data at 50 Hz, ARI rating conditions

R410A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	4 463	6 198	8 008	9 969	12 152	14 632	17 483	20 777	-
35	-	5 614	7 393	9 299	11 406	13 786	16 515	19 664	-
40	-	-	6 771	8 620	10 647	12 925	15 529	18 532	-
45	-	-	6 121	7 911	9 856	12 030	14 507	17 360	-
50	-	-	-	7 152	9 013	11 080	13 427	16 128	-
55	-	-	-	-	8 098	10 056	12 271	14 817	-
60	-	-	-	-	-	8 937	11 018	13 407	-
65	-	-	-	-	-	-	9 648	11 877	-

Power input in W

30	2 884	2 934	2 944	2 920	2 867	2 789	2 693	2 583	-
35	-	3 215	3 239	3 230	3 193	3 134	3 058	2 971	-
40	-	-	3 598	3 596	3 569	3 521	3 458	3 385	-
45	-	-	4 028	4 027	4 002	3 958	3 901	3 836	-
50	-	-	-	4 531	4 501	4 454	4 395	4 330	-
55	-	-	-	-	5 074	5 017	4 949	4 877	-
60	-	-	-	-	-	5 655	5 571	5 484	-
65	-	-	-	-	-	-	6 269	6 161	-

Current consumption in A

30	15.90	15.84	15.73	15.59	15.38	15.11	14.76	14.32	-
35	-	17.71	17.57	17.40	17.19	16.94	16.64	16.26	-
40	-	-	19.65	19.44	19.22	18.97	18.69	18.36	-
45	-	-	22.04	21.78	21.53	21.27	20.99	20.69	-
50	-	-	-	24.50	24.19	23.90	23.62	23.33	-
55	-	-	-	-	27.29	26.96	26.65	26.36	-
60	-	-	-	-	-	30.50	30.15	29.84	-
65	-	-	-	-	-	-	34.21	33.86	-

Mass flow in kg/h

30	86	118	150	184	222	265	313	370	-
35	-	111	145	180	218	260	309	365	-
40	-	-	139	174	213	256	304	359	-
45	-	-	132	168	207	250	298	353	-
50	-	-	-	161	200	243	291	345	-
55	-	-	-	-	190	233	281	335	-
60	-	-	-	-	-	221	269	322	-
65	-	-	-	-	-	-	253	306	-

Coefficient of performance (C.O.P.)

30	1.55	2.11	2.72	3.41	4.24	5.25	6.49	8.04	-
35	-	1.75	2.28	2.88	3.57	4.40	5.40	6.62	-
40	-	-	1.88	2.40	2.98	3.67	4.49	5.47	-
45	-	-	1.52	1.96	2.46	3.04	3.72	4.53	-
50	-	-	-	1.58	2.00	2.49	3.05	3.72	-
55	-	-	-	-	1.60	2.00	2.48	3.04	-
60	-	-	-	-	-	1.58	1.98	2.44	-
65	-	-	-	-	-	-	1.54	1.93	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	13 497	W
Power input	4 848	W
Current consumption	26.13	A
Mass flow	305	kg/h
C.O.P.	2.78	

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	67	dB(A)
With acoustic hood	62	dB(A)

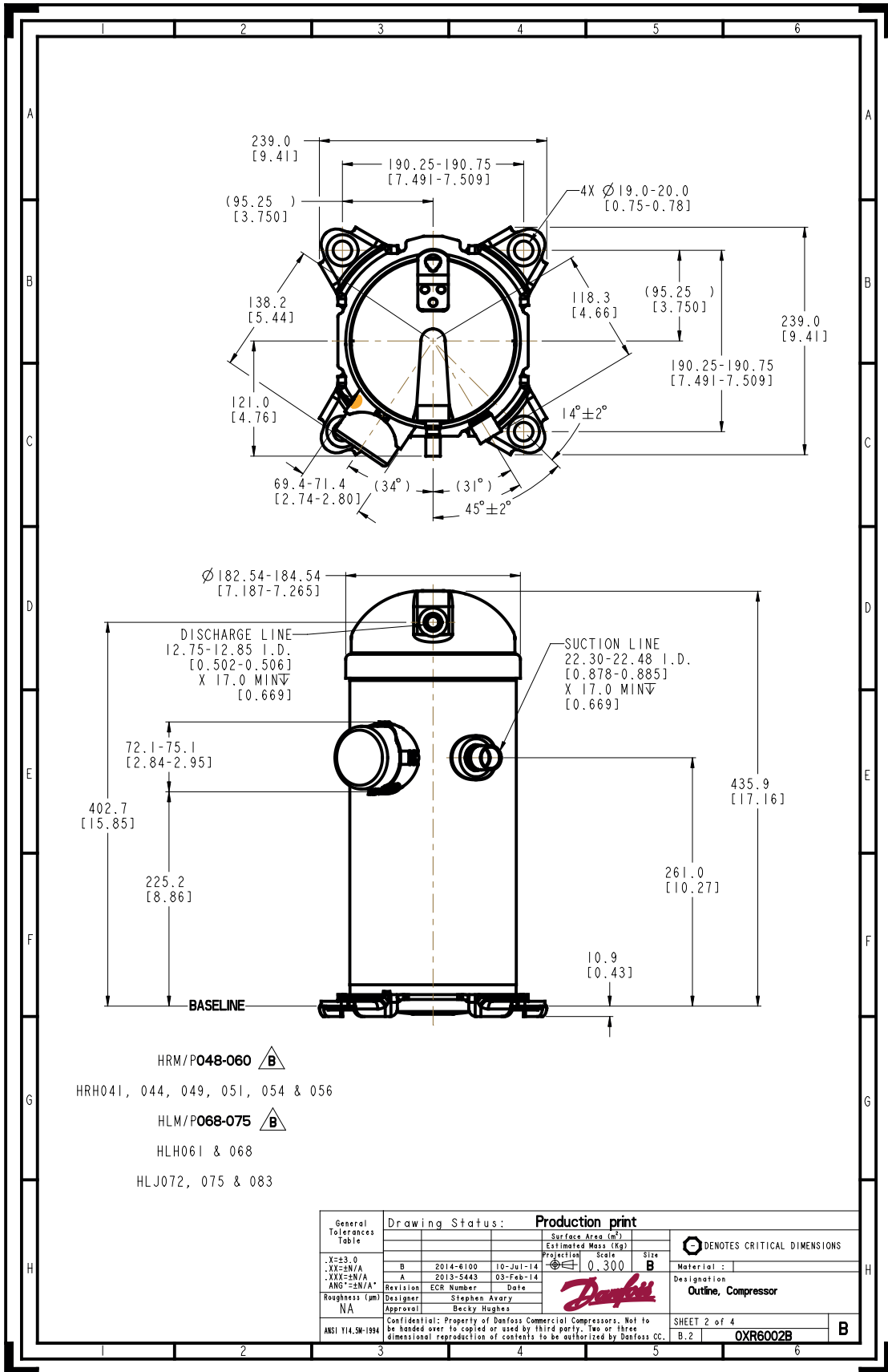
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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