

Datasheets

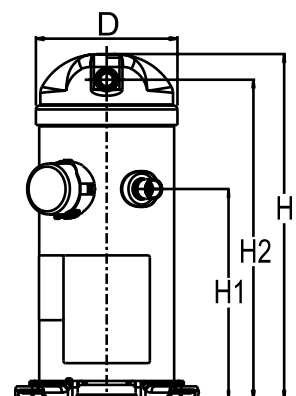
Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HRP060T5LP6
Code number for Singlepack*		120U1606
Code number for Industrial pack**		120U1603
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	80.95 cm ³ /rev	
Displacement @ Nominal speed	14.1 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	R407C	

Dimensions



D=183.5 mm

H=455 mm

H1=280 mm

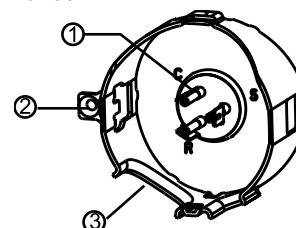
H2=422 mm

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

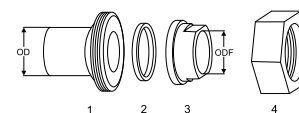
**Industrial pack: 12 or 16 Unboxed compressors on pallet

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

Solder sleeve adapter set


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

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

Performance data at 50 Hz, EN 12900 rating conditions
R407C

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	4 044	5 342	6 849	8 609	10 666	13 068	15 858	19 082
35	-	3 752	5 004	6 453	8 144	10 122	12 432	15 119	18 229
40	-	3 463	4 660	6 044	7 658	9 548	11 759	14 335	17 322
45	-	-	4 307	5 617	7 147	8 941	11 044	13 500	16 356
50	-	-	-	5 169	6 606	8 295	10 282	12 611	15 326
55	-	-	-	-	6 031	7 608	9 470	11 662	14 227
60	-	-	-	-	-	6 874	8 603	10 648	13 055
65	-	-	-	-	-	-	7 675	9 566	11 804

Power input in W

30	-	2 669	2 615	2 582	2 558	2 532	2 494	2 430	2 330
35	-	3 001	2 942	2 907	2 884	2 863	2 831	2 777	2 691
40	-	3 379	3 310	3 268	3 242	3 220	3 190	3 142	3 063
45	-	-	3 743	3 689	3 654	3 626	3 594	3 546	3 471
50	-	-	-	4 192	4 143	4 104	4 064	4 012	3 935
55	-	-	-	-	4 732	4 678	4 625	4 563	4 479
60	-	-	-	-	-	5 368	5 298	5 221	5 125
65	-	-	-	-	-	-	6 106	6 009	5 897

Current consumption in A

30	-	11.90	11.99	12.00	11.93	11.78	11.53	11.18	10.72
35	-	13.33	13.36	13.35	13.29	13.16	12.96	12.68	12.32
40	-	14.94	14.90	14.85	14.76	14.64	14.46	14.24	13.95
45	-	-	16.71	16.59	16.46	16.32	16.15	15.96	15.72
50	-	-	-	18.67	18.48	18.29	18.12	17.93	17.73
55	-	-	-	-	20.91	20.67	20.46	20.26	20.08
60	-	-	-	-	-	23.55	23.28	23.05	22.86
65	-	-	-	-	-	-	26.68	26.40	26.18

Mass flow in kg/h

30	-	91	118	148	183	223	269	321	381
35	-	89	116	146	182	222	268	321	381
40	-	87	114	144	180	220	266	319	380
45	-	-	111	142	177	217	264	317	377
50	-	-	-	139	174	214	260	313	374
55	-	-	-	-	169	209	255	308	368
60	-	-	-	-	-	203	248	301	361
65	-	-	-	-	-	-	240	292	351

Coefficient of performance (C.O.P.)

30	-	1.52	2.04	2.65	3.37	4.21	5.24	6.53	8.19
35	-	1.25	1.70	2.22	2.82	3.54	4.39	5.44	6.77
40	-	1.02	1.41	1.85	2.36	2.97	3.69	4.56	5.65
45	-	-	1.15	1.52	1.96	2.47	3.07	3.81	4.71
50	-	-	-	1.23	1.59	2.02	2.53	3.14	3.89
55	-	-	-	-	1.27	1.63	2.05	2.56	3.18
60	-	-	-	-	-	1.28	1.62	2.04	2.55
65	-	-	-	-	-	-	1.26	1.59	2.00

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

Cooling capacity	12 611	W
Power input	4 012	W
Current consumption	17.93	A
Mass flow	313	kg/h
C.O.P.	3.14	

Pressure switch settings

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	65	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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Datasheet, performance data

Danfoss scroll compressor. HRP060T5

Performance data at 50 Hz, ARI rating conditions

R407C

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	4 342	5 730	7 337	9 212	11 402	13 954	16 917	20 338
35	-	4 049	5 393	6 946	8 755	10 869	13 334	16 199	19 510
40	-	3 759	5 051	6 541	8 277	10 306	12 676	15 434	18 629
45	-	-	4 699	6 118	7 772	9 708	11 975	14 619	17 688
50	-	-	-	5 672	7 236	9 072	11 226	13 748	16 683
55	-	-	-	-	6 665	8 391	10 426	12 816	15 610
60	-	-	-	-	-	7 662	9 568	11 820	14 463
65	-	-	-	-	-	-	8 649	10 753	13 239

Power input in W

30	-	2 669	2 615	2 582	2 558	2 532	2 494	2 430	2 330
35	-	3 001	2 942	2 907	2 884	2 863	2 831	2 777	2 691
40	-	3 379	3 310	3 268	3 242	3 220	3 190	3 142	3 063
45	-	-	3 743	3 689	3 654	3 626	3 594	3 546	3 471
50	-	-	-	4 192	4 143	4 104	4 064	4 012	3 935
55	-	-	-	-	4 732	4 678	4 625	4 563	4 479
60	-	-	-	-	-	5 368	5 298	5 221	5 125
65	-	-	-	-	-	-	6 106	6 009	5 897

Current consumption in A

30	-	11.90	11.99	12.00	11.93	11.78	11.53	11.18	10.72
35	-	13.33	13.36	13.35	13.29	13.16	12.96	12.68	12.32
40	-	14.94	14.90	14.85	14.76	14.64	14.46	14.24	13.95
45	-	-	16.71	16.59	16.46	16.32	16.15	15.96	15.72
50	-	-	-	18.67	18.48	18.29	18.12	17.93	17.73
55	-	-	-	-	20.91	20.67	20.46	20.26	20.08
60	-	-	-	-	-	23.55	23.28	23.05	22.86
65	-	-	-	-	-	-	26.68	26.40	26.18

Mass flow in kg/h

30	-	90	117	147	182	222	267	320	379
35	-	88	115	146	181	221	266	319	379
40	-	86	113	144	179	219	265	317	377
45	-	-	111	141	176	216	262	315	375
50	-	-	-	138	173	213	258	311	371
55	-	-	-	-	168	208	253	306	366
60	-	-	-	-	-	201	247	299	359
65	-	-	-	-	-	-	238	290	349

Coefficient of performance (C.O.P.)

30	-	1.63	2.19	2.84	3.60	4.50	5.60	6.96	8.73
35	-	1.35	1.83	2.39	3.04	3.80	4.71	5.83	7.25
40	-	1.11	1.53	2.00	2.55	3.20	3.97	4.91	6.08
45	-	-	1.26	1.66	2.13	2.68	3.33	4.12	5.10
50	-	-	-	1.35	1.75	2.21	2.76	3.43	4.24
55	-	-	-	-	1.41	1.79	2.25	2.81	3.49
60	-	-	-	-	-	1.43	1.81	2.26	2.82
65	-	-	-	-	-	-	1.42	1.79	2.24

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

Cooling capacity	14 116	W
Power input	4 458	W
Current consumption	19.88	A
Mass flow	332	kg/h
C.O.P.	3.17	

Pressure switch settings

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level	70	dB(A)
With accoustic hood	65	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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Performance data at 50 Hz, EN 12900 rating conditions
R407C

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	4 044	5 342	6 849	8 609	10 666	13 068	15 858	19 082
35	-	3 752	5 004	6 453	8 144	10 122	12 432	15 119	18 229
40	-	3 463	4 660	6 044	7 658	9 548	11 759	14 335	17 322
45	-	-	4 307	5 617	7 147	8 941	11 044	13 500	16 356
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Power input in W

30	-	2 669	2 615	2 582	2 558	2 532	2 494	2 430	2 330
35	-	3 001	2 942	2 907	2 884	2 863	2 831	2 777	2 691
40	-	3 379	3 310	3 268	3 242	3 220	3 190	3 142	3 063
45	-	-	3 743	3 689	3 654	3 626	3 594	3 546	3 471
50	-	-	-	4 192	4 143	4 104	4 064	4 012	3 935
55	-	-	-	-	4 732	4 678	4 625	4 563	4 479
60	-	-	-	-	-	5 368	5 298	5 221	5 125
65	-	-	-	-	-	-	6 106	6 009	5 897

Current consumption in A

30	-	11.90	11.99	12.00	11.93	11.78	11.53	11.18	10.72
35	-	13.33	13.36	13.35	13.29	13.16	12.96	12.68	12.32
40	-	14.94	14.90	14.85	14.76	14.64	14.46	14.24	13.95
45	-	-	16.71	16.59	16.46	16.32	16.15	15.96	15.72
50	-	-	-	18.67	18.48	18.29	18.12	17.93	17.73
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Mass flow in kg/h

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55	-	-	-	-	169	209	255	308	368
60	-	-	-	-	-	203	248	301	361
65	-	-	-	-	-	-	240	292	351

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30	-	1.52	2.04	2.65	3.37	4.21	5.24	6.53	8.19
35	-	1.25	1.70	2.22	2.82	3.54	4.39	5.44	6.77
40	-	1.02	1.41	1.85	2.36	2.97	3.69	4.56	5.65
45	-	-	1.15	1.52	1.96	2.47	3.07	3.81	4.71
50	-	-	-	1.23	1.59	2.02	2.53	3.14	3.89
55	-	-	-	-	1.27	1.63	2.05	2.56	3.18
60	-	-	-	-	-	1.28	1.62	2.04	2.55
65	-	-	-	-	-	-	1.26	1.59	2.00

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C.O.P.	3.14	

Pressure switch settings

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	65	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
R407C

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40	-	3 759	5 051	6 541	8 277	10 306	12 676	15 434	18 629
45	-	-	4 699	6 118	7 772	9 708	11 975	14 619	17 688
50	-	-	-	5 672	7 236	9 072	11 226	13 748	16 683
55	-	-	-	-	6 665	8 391	10 426	12 816	15 610
60	-	-	-	-	-	7 662	9 568	11 820	14 463
65	-	-	-	-	-	-	8 649	10 753	13 239

Power input in W

30	-	2 669	2 615	2 582	2 558	2 532	2 494	2 430	2 330
35	-	3 001	2 942	2 907	2 884	2 863	2 831	2 777	2 691
40	-	3 379	3 310	3 268	3 242	3 220	3 190	3 142	3 063
45	-	-	3 743	3 689	3 654	3 626	3 594	3 546	3 471
50	-	-	-	4 192	4 143	4 104	4 064	4 012	3 935
55	-	-	-	-	4 732	4 678	4 625	4 563	4 479
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40	-	14.94	14.90	14.85	14.76	14.64	14.46	14.24	13.95
45	-	-	16.71	16.59	16.46	16.32	16.15	15.96	15.72
50	-	-	-	18.67	18.48	18.29	18.12	17.93	17.73
55	-	-	-	-	20.91	20.67	20.46	20.26	20.08
60	-	-	-	-	-	23.55	23.28	23.05	22.86
65	-	-	-	-	-	-	26.68	26.40	26.18

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45	-	-	111	141	176	216	262	315	375
50	-	-	-	138	173	213	258	311	371
55	-	-	-	-	168	208	253	306	366
60	-	-	-	-	-	201	247	299	359
65	-	-	-	-	-	-	238	290	349

Coefficient of performance (C.O.P.)

30	-	1.63	2.19	2.84	3.60	4.50	5.60	6.96	8.73
35	-	1.35	1.83	2.39	3.04	3.80	4.71	5.83	7.25
40	-	1.11	1.53	2.00	2.55	3.20	3.97	4.91	6.08
45	-	-	1.26	1.66	2.13	2.68	3.33	4.12	5.10
50	-	-	-	1.35	1.75	2.21	2.76	3.43	4.24
55	-	-	-	-	1.41	1.79	2.25	2.81	3.49
60	-	-	-	-	-	1.43	1.81	2.26	2.82
65	-	-	-	-	-	-	1.42	1.79	2.24

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

Cooling capacity	14 116	W
Power input	4 458	W
Current consumption	19.88	A
Mass flow	332	kg/h
C.O.P.	3.17	

Pressure switch settings

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

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