

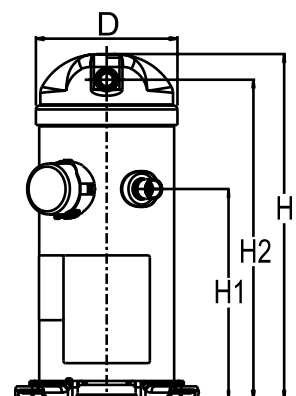
Datasheets

Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HRP058T5LP6
Code number for Singlepack*		120U1596
Code number for Industrial pack**		120U1593
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		78.17 cm ³ /rev
Displacement @ Nominal speed		13.6 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

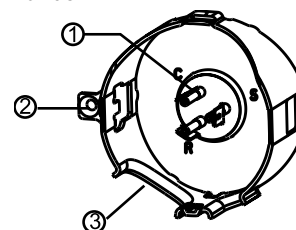
H1=280 mm

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)	26.9 A
Maximum Continuous Current (MCC)	42 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

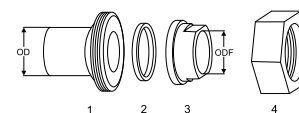
**Industrial pack: 12 or 16 Unboxed compressors on pallet

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	-	3 894	5 143	6 593	8 287	10 268	12 579	15 262	18 362
35	-	3 617	4 822	6 217	7 847	9 753	11 979	14 568	17 563
40	-	3 347	4 498	5 831	7 388	9 212	11 345	13 830	16 711
45	-	-	4 166	5 429	6 905	8 638	10 670	13 044	15 802
50	-	-	-	5 005	6 393	8 026	9 949	12 202	14 829
55	-	-	-	-	5 846	7 372	9 177	11 301	13 788
60	-	-	-	-	-	6 670	8 348	10 334	12 671
65	-	-	-	-	-	-	7 457	9 295	11 473

Power input in W

30	-	2 568	2 515	2 483	2 461	2 437	2 399	2 338	2 240
35	-	2 892	2 834	2 800	2 778	2 758	2 727	2 676	2 592
40	-	3 263	3 195	3 154	3 128	3 107	3 079	3 032	2 956
45	-	-	3 621	3 568	3 533	3 506	3 475	3 428	3 356
50	-	-	-	4 063	4 015	3 977	3 938	3 887	3 813
55	-	-	-	-	4 595	4 542	4 490	4 430	4 349
60	-	-	-	-	-	5 223	5 154	5 079	4 987
65	-	-	-	-	-	-	5 951	5 857	5 749

Current consumption in A

30	-	11.37	11.45	11.46	11.40	11.25	11.01	10.68	10.24
35	-	12.73	12.77	12.75	12.69	12.57	12.38	12.11	11.76
40	-	14.27	14.24	14.18	14.10	13.98	13.82	13.60	13.33
45	-	-	15.96	15.84	15.72	15.58	15.43	15.24	15.02
50	-	-	-	17.83	17.65	17.48	17.30	17.13	16.94
55	-	-	-	-	19.98	19.75	19.54	19.36	19.18
60	-	-	-	-	-	22.49	22.24	22.02	21.84
65	-	-	-	-	-	-	25.48	25.22	25.01

Mass flow in kg/h

30	-	87	113	143	176	215	259	309	367
35	-	85	112	141	175	214	258	309	367
40	-	84	110	139	173	212	257	308	366
45	-	-	108	137	171	210	255	306	365
50	-	-	-	134	168	207	251	303	361
55	-	-	-	-	164	202	247	298	357
60	-	-	-	-	-	197	241	292	350
65	-	-	-	-	-	-	233	283	341

Coefficient of performance (C.O.P.)

30	-	1.52	2.04	2.65	3.37	4.21	5.24	6.53	8.20
35	-	1.25	1.70	2.22	2.82	3.54	4.39	5.44	6.78
40	-	1.03	1.41	1.85	2.36	2.96	3.69	4.56	5.65
45	-	-	1.15	1.52	1.95	2.46	3.07	3.80	4.71
50	-	-	-	1.23	1.59	2.02	2.53	3.14	3.89
55	-	-	-	-	1.27	1.62	2.04	2.55	3.17
60	-	-	-	-	-	1.28	1.62	2.03	2.54
65	-	-	-	-	-	-	1.25	1.59	2.00

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

Cooling capacity	12 202	W
Power input	3 887	W
Current consumption	17.13	A
Mass flow	303	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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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	-	4 181	5 516	7 063	8 868	10 976	13 432	16 282	19 570
35	-	3 904	5 197	6 692	8 436	10 473	12 848	15 608	18 797
40	-	3 633	4 875	6 311	7 985	9 942	12 229	14 891	17 972
45	-	-	4 545	5 912	7 509	9 379	11 569	14 124	17 089
50	-	-	-	5 492	7 003	8 778	10 862	13 302	16 143
55	-	-	-	-	6 460	8 131	10 103	12 420	15 128
60	-	-	-	-	-	7 435	9 285	11 471	14 038
65	-	-	-	-	-	-	8 403	10 449	12 867

Power input in W

30	-	2 568	2 515	2 483	2 461	2 437	2 399	2 338	2 240
35	-	2 892	2 834	2 800	2 778	2 758	2 727	2 676	2 592
40	-	3 263	3 195	3 154	3 128	3 107	3 079	3 032	2 956
45	-	-	3 621	3 568	3 533	3 506	3 475	3 428	3 356
50	-	-	-	4 063	4 015	3 977	3 938	3 887	3 813
55	-	-	-	-	4 595	4 542	4 490	4 430	4 349
60	-	-	-	-	-	5 223	5 154	5 079	4 987
65	-	-	-	-	-	-	5 951	5 857	5 749

Current consumption in A

30	-	11.37	11.45	11.46	11.40	11.25	11.01	10.68	10.24
35	-	12.73	12.77	12.75	12.69	12.57	12.38	12.11	11.76
40	-	14.27	14.24	14.18	14.10	13.98	13.82	13.60	13.33
45	-	-	15.96	15.84	15.72	15.58	15.43	15.24	15.02
50	-	-	-	17.83	17.65	17.48	17.30	17.13	16.94
55	-	-	-	-	19.98	19.75	19.54	19.36	19.18
60	-	-	-	-	-	22.49	22.24	22.02	21.84
65	-	-	-	-	-	-	25.48	25.22	25.01

Mass flow in kg/h

30	-	87	113	142	175	214	257	308	365
35	-	85	111	140	174	212	257	307	365
40	-	83	109	139	172	211	255	306	364
45	-	-	107	136	170	209	253	304	362
50	-	-	-	134	167	206	250	301	359
55	-	-	-	-	163	201	245	296	355
60	-	-	-	-	-	195	239	290	348
65	-	-	-	-	-	-	231	282	339

Coefficient of performance (C.O.P.)

30	-	1.63	2.19	2.84	3.60	4.50	5.60	6.97	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	5.09
50	-	-	-	1.35	1.74	2.21	2.76	3.42	4.23
55	-	-	-	-	1.41	1.79	2.25	2.80	3.48
60	-	-	-	-	-	1.42	1.80	2.26	2.81
65	-	-	-	-	-	-	1.41	1.78	2.24

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

Cooling capacity	13 677	W
Power input	4 328	W
Current consumption	18.99	A
Mass flow	322	kg/h
C.O.P.	3.16	

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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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	-	3 894	5 143	6 593	8 287	10 268	12 579	15 262	18 362
35	-	3 617	4 822	6 217	7 847	9 753	11 979	14 568	17 563
40	-	3 347	4 498	5 831	7 388	9 212	11 345	13 830	16 711
45	-	-	4 166	5 429	6 905	8 638	10 670	13 044	15 802
50	-	-	-	5 005	6 393	8 026	9 949	12 202	14 829
55	-	-	-	-	5 846	7 372	9 177	11 301	13 788
60	-	-	-	-	-	6 670	8 348	10 334	12 671
65	-	-	-	-	-	-	7 457	9 295	11 473

Power input in W

30	-	2 568	2 515	2 483	2 461	2 437	2 399	2 338	2 240
35	-	2 892	2 834	2 800	2 778	2 758	2 727	2 676	2 592
40	-	3 263	3 195	3 154	3 128	3 107	3 079	3 032	2 956
45	-	-	3 621	3 568	3 533	3 506	3 475	3 428	3 356
50	-	-	-	4 063	4 015	3 977	3 938	3 887	3 813
55	-	-	-	-	4 595	4 542	4 490	4 430	4 349
60	-	-	-	-	-	5 223	5 154	5 079	4 987
65	-	-	-	-	-	-	5 951	5 857	5 749

Current consumption in A

30	-	11.37	11.45	11.46	11.40	11.25	11.01	10.68	10.24
35	-	12.73	12.77	12.75	12.69	12.57	12.38	12.11	11.76
40	-	14.27	14.24	14.18	14.10	13.98	13.82	13.60	13.33
45	-	-	15.96	15.84	15.72	15.58	15.43	15.24	15.02
50	-	-	-	17.83	17.65	17.48	17.30	17.13	16.94
55	-	-	-	-	19.98	19.75	19.54	19.36	19.18
60	-	-	-	-	-	22.49	22.24	22.02	21.84
65	-	-	-	-	-	-	25.48	25.22	25.01

Mass flow in kg/h

30	-	87	113	143	176	215	259	309	367
35	-	85	112	141	175	214	258	309	367
40	-	84	110	139	173	212	257	308	366
45	-	-	108	137	171	210	255	306	365
50	-	-	-	134	168	207	251	303	361
55	-	-	-	-	164	202	247	298	357
60	-	-	-	-	-	197	241	292	350
65	-	-	-	-	-	-	233	283	341

Coefficient of performance (C.O.P.)

30	-	1.52	2.04	2.65	3.37	4.21	5.24	6.53	8.20
35	-	1.25	1.70	2.22	2.82	3.54	4.39	5.44	6.78
40	-	1.03	1.41	1.85	2.36	2.96	3.69	4.56	5.65
45	-	-	1.15	1.52	1.95	2.46	3.07	3.80	4.71
50	-	-	-	1.23	1.59	2.02	2.53	3.14	3.89
55	-	-	-	-	1.27	1.62	2.04	2.55	3.17
60	-	-	-	-	-	1.28	1.62	2.03	2.54
65	-	-	-	-	-	-	1.25	1.59	2.00

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

Cooling capacity	12 202	W
Power input	3 887	W
Current consumption	17.13	A
Mass flow	303	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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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	-	4 181	5 516	7 063	8 868	10 976	13 432	16 282	19 570
35	-	3 904	5 197	6 692	8 436	10 473	12 848	15 608	18 797
40	-	3 633	4 875	6 311	7 985	9 942	12 229	14 891	17 972
45	-	-	4 545	5 912	7 509	9 379	11 569	14 124	17 089
50	-	-	-	5 492	7 003	8 778	10 862	13 302	16 143
55	-	-	-	-	6 460	8 131	10 103	12 420	15 128
60	-	-	-	-	-	7 435	9 285	11 471	14 038
65	-	-	-	-	-	-	8 403	10 449	12 867

Power input in W

30	-	2 568	2 515	2 483	2 461	2 437	2 399	2 338	2 240
35	-	2 892	2 834	2 800	2 778	2 758	2 727	2 676	2 592
40	-	3 263	3 195	3 154	3 128	3 107	3 079	3 032	2 956
45	-	-	3 621	3 568	3 533	3 506	3 475	3 428	3 356
50	-	-	-	4 063	4 015	3 977	3 938	3 887	3 813
55	-	-	-	-	4 595	4 542	4 490	4 430	4 349
60	-	-	-	-	-	5 223	5 154	5 079	4 987
65	-	-	-	-	-	-	5 951	5 857	5 749

Current consumption in A

30	-	11.37	11.45	11.46	11.40	11.25	11.01	10.68	10.24
35	-	12.73	12.77	12.75	12.69	12.57	12.38	12.11	11.76
40	-	14.27	14.24	14.18	14.10	13.98	13.82	13.60	13.33
45	-	-	15.96	15.84	15.72	15.58	15.43	15.24	15.02
50	-	-	-	17.83	17.65	17.48	17.30	17.13	16.94
55	-	-	-	-	19.98	19.75	19.54	19.36	19.18
60	-	-	-	-	-	22.49	22.24	22.02	21.84
65	-	-	-	-	-	-	25.48	25.22	25.01

Mass flow in kg/h

30	-	87	113	142	175	214	257	308	365
35	-	85	111	140	174	212	257	307	365
40	-	83	109	139	172	211	255	306	364
45	-	-	107	136	170	209	253	304	362
50	-	-	-	134	167	206	250	301	359
55	-	-	-	-	163	201	245	296	355
60	-	-	-	-	-	195	239	290	348
65	-	-	-	-	-	-	231	282	339

Coefficient of performance (C.O.P.)

30	-	1.63	2.19	2.84	3.60	4.50	5.60	6.97	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	5.09
50	-	-	-	1.35	1.74	2.21	2.76	3.42	4.23
55	-	-	-	-	1.41	1.79	2.25	2.80	3.48
60	-	-	-	-	-	1.42	1.80	2.26	2.81
65	-	-	-	-	-	-	1.41	1.78	2.24

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

Cooling capacity	13 677	W
Power input	4 328	W
Current consumption	18.99	A
Mass flow	322	kg/h
C.O.P.	3.16	

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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