

Datasheets

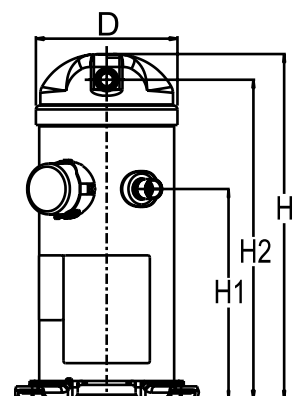
# Danfoss scroll compressors **H series**



### General Characteristics

Model number (on compressor nameplate)		<b>HRP051T4LP6</b>
Code number for Singlepack*		120U1681
Code number for Industrial pack**		120U1678
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		68.83 cm <sup>3</sup> /rev
Displacement @ Nominal speed		12.0 m <sup>3</sup> /h @ 2900 rpm - 14.4 m <sup>3</sup> /h @ 3500 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

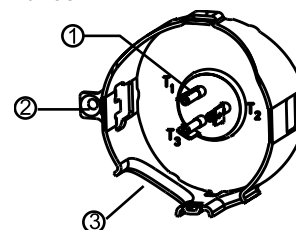
H2=422 mm

H3=- mm

### Electrical Characteristics

Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	2.600 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	2.610 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	2.650 Ω
Rated Load Amps (RLA)	8.3 A
Maximum Continuous Current (MCC)	13 A
Locked Rotor Amps (LRA)	60 A
Motor protection	Internal overload protector

### Terminal box



### 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

IP22

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

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

\*Singlepack: Compressor in cardboard box

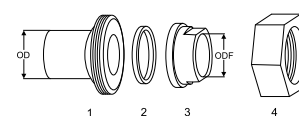
\*\*Industrial pack: 12 or 16 Unboxed compressors on pallet

**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
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058

**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	-	3 731	4 750	5 999	7 503	9 285	11 369	13 780	16 541
35	-	3 472	4 448	5 641	7 075	8 775	10 764	13 067	15 707
40	-	3 219	4 149	5 284	6 646	8 262	10 153	12 345	14 861
45	-	-	3 846	4 919	6 208	7 737	9 528	11 606	13 996
50	-	-	-	4 540	5 753	7 191	8 880	10 842	13 102
55	-	-	-	-	5 271	6 618	8 201	10 044	12 171
60	-	-	-	-	-	6 007	7 482	9 202	11 193
65	-	-	-	-	-	-	6 714	8 308	10 159

**Power input in W**

30	-	1 911	1 974	2 038	2 103	2 172	2 243	2 318	2 397
35	-	2 329	2 356	2 386	2 419	2 455	2 497	2 543	2 596
40	-	2 761	2 756	2 755	2 759	2 768	2 784	2 806	2 836
45	-	-	3 179	3 152	3 131	3 117	3 111	3 113	3 124
50	-	-	-	3 584	3 542	3 509	3 485	3 471	3 468
55	-	-	-	-	3 998	3 950	3 913	3 887	3 873
60	-	-	-	-	-	4 448	4 401	4 367	4 346
65	-	-	-	-	-	-	4 955	4 917	4 894

**Current consumption in A**

30	-	4.44	4.49	4.53	4.57	4.61	4.63	4.64	4.63
35	-	4.70	4.72	4.75	4.78	4.82	4.85	4.87	4.88
40	-	5.06	5.05	5.06	5.08	5.10	5.13	5.16	5.19
45	-	-	5.49	5.46	5.46	5.47	5.50	5.53	5.56
50	-	-	-	5.96	5.93	5.93	5.94	5.96	6.00
55	-	-	-	-	6.50	6.47	6.46	6.48	6.52
60	-	-	-	-	-	7.11	7.08	7.08	7.10
65	-	-	-	-	-	-	7.78	7.76	7.77

**Mass flow in kg/h**

30	-	85	106	131	160	194	234	279	331
35	-	84	105	129	159	193	232	277	329
40	-	82	102	127	156	190	229	275	327
45	-	-	99	124	153	187	226	272	324
50	-	-	-	120	149	183	222	268	320
55	-	-	-	-	143	178	217	263	316
60	-	-	-	-	-	171	211	257	311
65	-	-	-	-	-	-	203	250	303

**Coefficient of performance (C.O.P.)**

30	-	1.95	2.41	2.94	3.57	4.28	5.07	5.95	6.90
35	-	1.49	1.89	2.36	2.93	3.57	4.31	5.14	6.05
40	-	1.17	1.51	1.92	2.41	2.98	3.65	4.40	5.24
45	-	-	1.21	1.56	1.98	2.48	3.06	3.73	4.48
50	-	-	-	1.27	1.62	2.05	2.55	3.12	3.78
55	-	-	-	-	1.32	1.68	2.10	2.58	3.14
60	-	-	-	-	-	1.35	1.70	2.11	2.58
65	-	-	-	-	-	-	1.35	1.69	2.08

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

Cooling capacity	10 842	W
Power input	3 471	W
Current consumption	5.96	A
Mass flow	268	kg/h
C.O.P.	3.12	

**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	69	dB(A)
With accoustic hood	64	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	-	4 007	5 095	6 427	8 029	9 925	12 140	14 700	17 629
35	-	3 747	4 794	6 071	7 606	9 422	11 545	13 999	16 810
40	-	3 495	4 497	5 718	7 183	8 917	10 945	13 291	15 982
45	-	-	4 196	5 358	6 751	8 401	10 331	12 568	15 136
50	-	-	-	4 983	6 302	7 864	9 695	11 820	14 262
55	-	-	-	-	5 826	7 299	9 028	11 038	13 354
60	-	-	-	-	-	6 696	8 322	10 215	12 400
65	-	-	-	-	-	-	7 566	9 340	11 394

**Power input in W**

30	-	1 911	1 974	2 038	2 103	2 172	2 243	2 318	2 397
35	-	2 329	2 356	2 386	2 419	2 455	2 497	2 543	2 596
40	-	2 761	2 756	2 755	2 759	2 768	2 784	2 806	2 836
45	-	-	3 179	3 152	3 131	3 117	3 111	3 113	3 124
50	-	-	-	3 584	3 542	3 509	3 485	3 471	3 468
55	-	-	-	-	3 998	3 950	3 913	3 887	3 873
60	-	-	-	-	-	4 448	4 401	4 367	4 346
65	-	-	-	-	-	-	4 955	4 917	4 894

**Current consumption in A**

30	-	4.44	4.49	4.53	4.57	4.61	4.63	4.64	4.63
35	-	4.70	4.72	4.75	4.78	4.82	4.85	4.87	4.88
40	-	5.06	5.05	5.06	5.08	5.10	5.13	5.16	5.19
45	-	-	5.49	5.46	5.46	5.47	5.50	5.53	5.56
50	-	-	-	5.96	5.93	5.93	5.94	5.96	6.00
55	-	-	-	-	6.50	6.47	6.46	6.48	6.52
60	-	-	-	-	-	7.11	7.08	7.08	7.10
65	-	-	-	-	-	-	7.78	7.76	7.77

**Mass flow in kg/h**

30	-	84	106	130	160	193	233	277	329
35	-	83	104	129	158	191	231	275	327
40	-	81	102	126	155	189	228	273	325
45	-	-	99	123	152	186	225	270	322
50	-	-	-	119	148	182	221	267	319
55	-	-	-	-	142	177	216	262	314
60	-	-	-	-	-	170	210	256	309
65	-	-	-	-	-	-	202	248	302

**Coefficient of performance (C.O.P.)**

30	-	2.10	2.58	3.15	3.82	4.57	5.41	6.34	7.35
35	-	1.61	2.03	2.54	3.14	3.84	4.62	5.50	6.48
40	-	1.27	1.63	2.08	2.60	3.22	3.93	4.74	5.64
45	-	-	1.32	1.70	2.16	2.69	3.32	4.04	4.84
50	-	-	-	1.39	1.78	2.24	2.78	3.41	4.11
55	-	-	-	-	1.46	1.85	2.31	2.84	3.45
60	-	-	-	-	-	1.51	1.89	2.34	2.85
65	-	-	-	-	-	-	1.53	1.90	2.33

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

Cooling capacity	12 120	W
Power input	3 826	W
Current consumption	6.43	A
Mass flow	285	kg/h
C.O.P.	3.17	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

**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	69	dB(A)
With accoustic hood	64	dB(A)

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	-	3 731	4 750	5 999	7 503	9 285	11 369	13 780	16 541
35	-	3 472	4 448	5 641	7 075	8 775	10 764	13 067	15 707
40	-	3 219	4 149	5 284	6 646	8 262	10 153	12 345	14 861
45	-	-	3 846	4 919	6 208	7 737	9 528	11 606	13 996
50	-	-	-	4 540	5 753	7 191	8 880	10 842	13 102
55	-	-	-	-	5 271	6 618	8 201	10 044	12 171
60	-	-	-	-	-	6 007	7 482	9 202	11 193
65	-	-	-	-	-	-	6 714	8 308	10 159

**Power input in W**

30	-	1 911	1 974	2 038	2 103	2 172	2 243	2 318	2 397
35	-	2 329	2 356	2 386	2 419	2 455	2 497	2 543	2 596
40	-	2 761	2 756	2 755	2 759	2 768	2 784	2 806	2 836
45	-	-	3 179	3 152	3 131	3 117	3 111	3 113	3 124
50	-	-	-	3 584	3 542	3 509	3 485	3 471	3 468
55	-	-	-	-	3 998	3 950	3 913	3 887	3 873
60	-	-	-	-	-	4 448	4 401	4 367	4 346
65	-	-	-	-	-	-	4 955	4 917	4 894

**Current consumption in A**

30	-	4.44	4.49	4.53	4.57	4.61	4.63	4.64	4.63
35	-	4.70	4.72	4.75	4.78	4.82	4.85	4.87	4.88
40	-	5.06	5.05	5.06	5.08	5.10	5.13	5.16	5.19
45	-	-	5.49	5.46	5.46	5.47	5.50	5.53	5.56
50	-	-	-	5.96	5.93	5.93	5.94	5.96	6.00
55	-	-	-	-	6.50	6.47	6.46	6.48	6.52
60	-	-	-	-	-	7.11	7.08	7.08	7.10
65	-	-	-	-	-	-	7.78	7.76	7.77

**Mass flow in kg/h**

30	-	85	106	131	160	194	234	279	331
35	-	84	105	129	159	193	232	277	329
40	-	82	102	127	156	190	229	275	327
45	-	-	99	124	153	187	226	272	324
50	-	-	-	120	149	183	222	268	320
55	-	-	-	-	143	178	217	263	316
60	-	-	-	-	-	171	211	257	311
65	-	-	-	-	-	-	203	250	303

**Coefficient of performance (C.O.P.)**

30	-	1.95	2.41	2.94	3.57	4.28	5.07	5.95	6.90
35	-	1.49	1.89	2.36	2.93	3.57	4.31	5.14	6.05
40	-	1.17	1.51	1.92	2.41	2.98	3.65	4.40	5.24
45	-	-	1.21	1.56	1.98	2.48	3.06	3.73	4.48
50	-	-	-	1.27	1.62	2.05	2.55	3.12	3.78
55	-	-	-	-	1.32	1.68	2.10	2.58	3.14
60	-	-	-	-	-	1.35	1.70	2.11	2.58
65	-	-	-	-	-	-	1.35	1.69	2.08

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

Cooling capacity	10 842	W
Power input	3 471	W
Current consumption	5.96	A
Mass flow	268	kg/h
C.O.P.	3.12	

**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	69	dB(A)
With accoustic hood	64	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	-	4 007	5 095	6 427	8 029	9 925	12 140	14 700	17 629
35	-	3 747	4 794	6 071	7 606	9 422	11 545	13 999	16 810
40	-	3 495	4 497	5 718	7 183	8 917	10 945	13 291	15 982
45	-	-	4 196	5 358	6 751	8 401	10 331	12 568	15 136
50	-	-	-	4 983	6 302	7 864	9 695	11 820	14 262
55	-	-	-	-	5 826	7 299	9 028	11 038	13 354
60	-	-	-	-	-	6 696	8 322	10 215	12 400
65	-	-	-	-	-	-	7 566	9 340	11 394

**Power input in W**

30	-	1 911	1 974	2 038	2 103	2 172	2 243	2 318	2 397
35	-	2 329	2 356	2 386	2 419	2 455	2 497	2 543	2 596
40	-	2 761	2 756	2 755	2 759	2 768	2 784	2 806	2 836
45	-	-	3 179	3 152	3 131	3 117	3 111	3 113	3 124
50	-	-	-	3 584	3 542	3 509	3 485	3 471	3 468
55	-	-	-	-	3 998	3 950	3 913	3 887	3 873
60	-	-	-	-	-	4 448	4 401	4 367	4 346
65	-	-	-	-	-	-	4 955	4 917	4 894

**Current consumption in A**

30	-	4.44	4.49	4.53	4.57	4.61	4.63	4.64	4.63
35	-	4.70	4.72	4.75	4.78	4.82	4.85	4.87	4.88
40	-	5.06	5.05	5.06	5.08	5.10	5.13	5.16	5.19
45	-	-	5.49	5.46	5.46	5.47	5.50	5.53	5.56
50	-	-	-	5.96	5.93	5.93	5.94	5.96	6.00
55	-	-	-	-	6.50	6.47	6.46	6.48	6.52
60	-	-	-	-	-	7.11	7.08	7.08	7.10
65	-	-	-	-	-	-	7.78	7.76	7.77

**Mass flow in kg/h**

30	-	84	106	130	160	193	233	277	329
35	-	83	104	129	158	191	231	275	327
40	-	81	102	126	155	189	228	273	325
45	-	-	99	123	152	186	225	270	322
50	-	-	-	119	148	182	221	267	319
55	-	-	-	-	142	177	216	262	314
60	-	-	-	-	-	170	210	256	309
65	-	-	-	-	-	-	202	248	302

**Coefficient of performance (C.O.P.)**

30	-	2.10	2.58	3.15	3.82	4.57	5.41	6.34	7.35
35	-	1.61	2.03	2.54	3.14	3.84	4.62	5.50	6.48
40	-	1.27	1.63	2.08	2.60	3.22	3.93	4.74	5.64
45	-	-	1.32	1.70	2.16	2.69	3.32	4.04	4.84
50	-	-	-	1.39	1.78	2.24	2.78	3.41	4.11
55	-	-	-	-	1.46	1.85	2.31	2.84	3.45
60	-	-	-	-	-	1.51	1.89	2.34	2.85
65	-	-	-	-	-	-	1.53	1.90	2.33

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

Cooling capacity	12 120	W
Power input	3 826	W
Current consumption	6.43	A
Mass flow	285	kg/h
C.O.P.	3.17	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

**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	69	dB(A)
With accoustic hood	64	dB(A)

All performance data +/- 5%

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**Performance data at 60 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	-	4 342	5 572	7 067	8 857	10 970	13 436	16 283	19 542
35	-	4 086	5 253	6 673	8 374	10 385	12 735	15 454	18 569
40	-	3 816	4 921	6 266	7 878	9 787	12 022	14 611	17 584
45	-	-	4 567	5 836	7 360	9 167	11 286	13 745	16 575
50	-	-	-	5 376	6 811	8 516	10 518	12 848	15 534
55	-	-	-	-	6 223	7 824	9 710	11 909	14 450
60	-	-	-	-	-	7 084	8 852	10 919	13 313
65	-	-	-	-	-	-	7 934	9 867	12 112

**Power input in W**

30	-	2 647	2 632	2 623	2 612	2 594	2 563	2 512	2 434
35	-	2 981	2 959	2 944	2 931	2 912	2 882	2 834	2 761
40	-	3 344	3 316	3 298	3 282	3 264	3 235	3 191	3 125
45	-	-	3 711	3 690	3 673	3 655	3 630	3 590	3 531
50	-	-	-	4 126	4 109	4 093	4 071	4 038	3 986
55	-	-	-	-	4 597	4 583	4 566	4 539	4 496
60	-	-	-	-	-	5 132	5 120	5 101	5 068
65	-	-	-	-	-	-	5 740	5 729	5 706

**Current consumption in A**

30	-	4.03	3.96	3.95	3.97	3.99	4.00	3.96	3.85
35	-	4.31	4.24	4.22	4.23	4.25	4.25	4.19	4.07
40	-	4.63	4.55	4.54	4.55	4.56	4.55	4.48	4.35
45	-	-	4.90	4.89	4.90	4.91	4.90	4.83	4.69
50	-	-	-	5.28	5.30	5.31	5.30	5.23	5.09
55	-	-	-	-	5.73	5.75	5.74	5.68	5.54
60	-	-	-	-	-	6.24	6.24	6.18	6.04
65	-	-	-	-	-	-	6.77	6.73	6.60

**Mass flow in kg/h**

30	-	97	123	153	188	229	277	330	391
35	-	96	121	151	187	228	274	328	388
40	-	95	120	150	185	225	272	325	385
45	-	-	118	147	182	223	269	322	382
50	-	-	-	144	179	219	266	319	379
55	-	-	-	-	174	215	261	314	374
60	-	-	-	-	-	209	255	308	368
65	-	-	-	-	-	-	248	301	361

**Coefficient of performance (C.O.P.)**

30	-	1.64	2.12	2.69	3.39	4.23	5.24	6.48	8.03
35	-	1.37	1.78	2.27	2.86	3.57	4.42	5.45	6.72
40	-	1.14	1.48	1.90	2.40	3.00	3.72	4.58	5.63
45	-	-	1.23	1.58	2.00	2.51	3.11	3.83	4.69
50	-	-	-	1.30	1.66	2.08	2.58	3.18	3.90
55	-	-	-	-	1.35	1.71	2.13	2.62	3.21
60	-	-	-	-	-	1.38	1.73	2.14	2.63
65	-	-	-	-	-	-	1.38	1.72	2.12

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

Cooling capacity	12 848	W
Power input	4 038	W
Current consumption	5.23	A
Mass flow	319	kg/h
C.O.P.	3.18	

**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	73	dB(A)
With acoustic hood	66	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 60 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	-	4 663	5 976	7 571	9 478	11 727	14 348	17 371	20 828
35	-	4 409	5 662	7 183	9 002	11 151	13 659	16 557	19 874
40	-	4 142	5 334	6 781	8 514	10 563	12 959	15 731	18 910
45	-	-	4 983	6 357	8 004	9 954	12 237	14 884	17 925
50	-	-	-	5 900	7 461	9 313	11 484	14 006	16 909
55	-	-	-	-	6 877	8 630	10 690	13 088	15 854
60	-	-	-	-	-	7 897	9 846	12 120	14 749
65	-	-	-	-	-	-	8 941	11 092	13 584

**Power input in W**

30	-	2 647	2 632	2 623	2 612	2 594	2 563	2 512	2 434
35	-	2 981	2 959	2 944	2 931	2 912	2 882	2 834	2 761
40	-	3 344	3 316	3 298	3 282	3 264	3 235	3 191	3 125
45	-	-	3 711	3 690	3 673	3 655	3 630	3 590	3 531
50	-	-	-	4 126	4 109	4 093	4 071	4 038	3 986
55	-	-	-	-	4 597	4 583	4 566	4 539	4 496
60	-	-	-	-	-	5 132	5 120	5 101	5 068
65	-	-	-	-	-	-	5 740	5 729	5 706

**Current consumption in A**

30	-	4.03	3.96	3.95	3.97	3.99	4.00	3.96	3.85
35	-	4.31	4.24	4.22	4.23	4.25	4.25	4.19	4.07
40	-	4.63	4.55	4.54	4.55	4.56	4.55	4.48	4.35
45	-	-	4.90	4.89	4.90	4.91	4.90	4.83	4.69
50	-	-	-	5.28	5.30	5.31	5.30	5.23	5.09
55	-	-	-	-	5.73	5.75	5.74	5.68	5.54
60	-	-	-	-	-	6.24	6.24	6.18	6.04
65	-	-	-	-	-	-	6.77	6.73	6.60

**Mass flow in kg/h**

30	-	97	122	152	187	228	275	328	389
35	-	96	121	151	186	226	273	326	386
40	-	95	119	149	184	224	271	323	383
45	-	-	117	147	181	222	268	321	380
50	-	-	-	143	178	218	264	317	376
55	-	-	-	-	174	214	260	312	372
60	-	-	-	-	-	208	254	306	366
65	-	-	-	-	-	-	246	299	358

**Coefficient of performance (C.O.P.)**

30	-	1.76	2.27	2.89	3.63	4.52	5.60	6.92	8.56
35	-	1.48	1.91	2.44	3.07	3.83	4.74	5.84	7.20
40	-	1.24	1.61	2.06	2.59	3.24	4.01	4.93	6.05
45	-	-	1.34	1.72	2.18	2.72	3.37	4.15	5.08
50	-	-	-	1.43	1.82	2.28	2.82	3.47	4.24
55	-	-	-	-	1.50	1.88	2.34	2.88	3.53
60	-	-	-	-	-	1.54	1.92	2.38	2.91
65	-	-	-	-	-	-	1.56	1.94	2.38

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

Cooling capacity	14 378	W
Power input	4 459	W
Current consumption	5.57	A
Mass flow	338	kg/h
C.O.P.	3.22	

**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	73	dB(A)
With acoustic hood	66	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 60 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	-	4 342	5 572	7 067	8 857	10 970	13 436	16 283	19 542
35	-	4 086	5 253	6 673	8 374	10 385	12 735	15 454	18 569
40	-	3 816	4 921	6 266	7 878	9 787	12 022	14 611	17 584
45	-	-	4 567	5 836	7 360	9 167	11 286	13 745	16 575
50	-	-	-	5 376	6 811	8 516	10 518	12 848	15 534
55	-	-	-	-	6 223	7 824	9 710	11 909	14 450
60	-	-	-	-	-	7 084	8 852	10 919	13 313
65	-	-	-	-	-	-	7 934	9 867	12 112

**Power input in W**

30	-	2 647	2 632	2 623	2 612	2 594	2 563	2 512	2 434
35	-	2 981	2 959	2 944	2 931	2 912	2 882	2 834	2 761
40	-	3 344	3 316	3 298	3 282	3 264	3 235	3 191	3 125
45	-	-	3 711	3 690	3 673	3 655	3 630	3 590	3 531
50	-	-	-	4 126	4 109	4 093	4 071	4 038	3 986
55	-	-	-	-	4 597	4 583	4 566	4 539	4 496
60	-	-	-	-	-	5 132	5 120	5 101	5 068
65	-	-	-	-	-	-	5 740	5 729	5 706

**Current consumption in A**

30	-	4.03	3.96	3.95	3.97	3.99	4.00	3.96	3.85
35	-	4.31	4.24	4.22	4.23	4.25	4.25	4.19	4.07
40	-	4.63	4.55	4.54	4.55	4.56	4.55	4.48	4.35
45	-	-	4.90	4.89	4.90	4.91	4.90	4.83	4.69
50	-	-	-	5.28	5.30	5.31	5.30	5.23	5.09
55	-	-	-	-	5.73	5.75	5.74	5.68	5.54
60	-	-	-	-	-	6.24	6.24	6.18	6.04
65	-	-	-	-	-	-	6.77	6.73	6.60

**Mass flow in kg/h**

30	-	97	123	153	188	229	277	330	391
35	-	96	121	151	187	228	274	328	388
40	-	95	120	150	185	225	272	325	385
45	-	-	118	147	182	223	269	322	382
50	-	-	-	144	179	219	266	319	379
55	-	-	-	-	174	215	261	314	374
60	-	-	-	-	-	209	255	308	368
65	-	-	-	-	-	-	248	301	361

**Coefficient of performance (C.O.P.)**

30	-	1.64	2.12	2.69	3.39	4.23	5.24	6.48	8.03
35	-	1.37	1.78	2.27	2.86	3.57	4.42	5.45	6.72
40	-	1.14	1.48	1.90	2.40	3.00	3.72	4.58	5.63
45	-	-	1.23	1.58	2.00	2.51	3.11	3.83	4.69
50	-	-	-	1.30	1.66	2.08	2.58	3.18	3.90
55	-	-	-	-	1.35	1.71	2.13	2.62	3.21
60	-	-	-	-	-	1.38	1.73	2.14	2.63
65	-	-	-	-	-	-	1.38	1.72	2.12

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

Cooling capacity	12 848	W
Power input	4 038	W
Current consumption	5.23	A
Mass flow	319	kg/h
C.O.P.	3.18	

**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	73	dB(A)
With acoustic hood	66	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 60 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	-	4 663	5 976	7 571	9 478	11 727	14 348	17 371	20 828
35	-	4 409	5 662	7 183	9 002	11 151	13 659	16 557	19 874
40	-	4 142	5 334	6 781	8 514	10 563	12 959	15 731	18 910
45	-	-	4 983	6 357	8 004	9 954	12 237	14 884	17 925
50	-	-	-	5 900	7 461	9 313	11 484	14 006	16 909
55	-	-	-	-	6 877	8 630	10 690	13 088	15 854
60	-	-	-	-	-	7 897	9 846	12 120	14 749
65	-	-	-	-	-	-	8 941	11 092	13 584

**Power input in W**

30	-	2 647	2 632	2 623	2 612	2 594	2 563	2 512	2 434
35	-	2 981	2 959	2 944	2 931	2 912	2 882	2 834	2 761
40	-	3 344	3 316	3 298	3 282	3 264	3 235	3 191	3 125
45	-	-	3 711	3 690	3 673	3 655	3 630	3 590	3 531
50	-	-	-	4 126	4 109	4 093	4 071	4 038	3 986
55	-	-	-	-	4 597	4 583	4 566	4 539	4 496
60	-	-	-	-	-	5 132	5 120	5 101	5 068
65	-	-	-	-	-	-	5 740	5 729	5 706

**Current consumption in A**

30	-	4.03	3.96	3.95	3.97	3.99	4.00	3.96	3.85
35	-	4.31	4.24	4.22	4.23	4.25	4.25	4.19	4.07
40	-	4.63	4.55	4.54	4.55	4.56	4.55	4.48	4.35
45	-	-	4.90	4.89	4.90	4.91	4.90	4.83	4.69
50	-	-	-	5.28	5.30	5.31	5.30	5.23	5.09
55	-	-	-	-	5.73	5.75	5.74	5.68	5.54
60	-	-	-	-	-	6.24	6.24	6.18	6.04
65	-	-	-	-	-	-	6.77	6.73	6.60

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30	-	97	122	152	187	228	275	328	389
35	-	96	121	151	186	226	273	326	386
40	-	95	119	149	184	224	271	323	383
45	-	-	117	147	181	222	268	321	380
50	-	-	-	143	178	218	264	317	376
55	-	-	-	-	174	214	260	312	372
60	-	-	-	-	-	208	254	306	366
65	-	-	-	-	-	-	246	299	358

**Coefficient of performance (C.O.P.)**

30	-	1.76	2.27	2.89	3.63	4.52	5.60	6.92	8.56
35	-	1.48	1.91	2.44	3.07	3.83	4.74	5.84	7.20
40	-	1.24	1.61	2.06	2.59	3.24	4.01	4.93	6.05
45	-	-	1.34	1.72	2.18	2.72	3.37	4.15	5.08
50	-	-	-	1.43	1.82	2.28	2.82	3.47	4.24
55	-	-	-	-	1.50	1.88	2.34	2.88	3.53
60	-	-	-	-	-	1.54	1.92	2.38	2.91
65	-	-	-	-	-	-	1.56	1.94	2.38

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

Cooling capacity	14 378	W
Power input	4 459	W
Current consumption	5.57	A
Mass flow	338	kg/h
C.O.P.	3.22	

**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	73	dB(A)
With acoustic hood	66	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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