

Datasheets

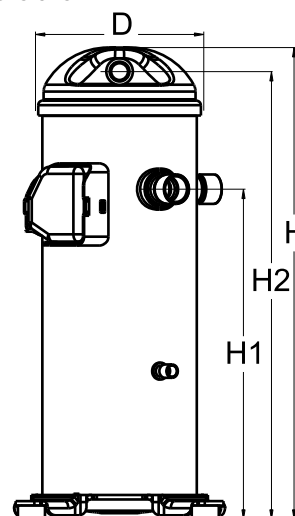
# Danfoss scroll compressors **H series**



**General Characteristics**

Model number (on compressor nameplate)		<b>HLP078T4LC6</b>
Code number for Singlepack*		120U2454
Code number for Industrial pack**		120U2451
Drawing number		0XR6089B-1
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		107,48 cm <sup>3</sup> /rev
Displacement @ Nominal speed		18.7 m <sup>3</sup> /h @ 2900 rpm - 22.6 m <sup>3</sup> /h @ 3500 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		5,44 kg
Approved refrigerants		R407C

**Dimensions**

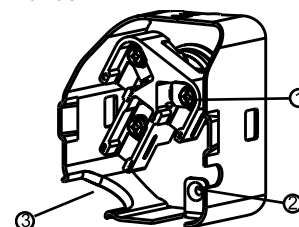


D=183,5 mm  
H=455 mm  
H1=280 mm  
H2=422 mm  
H3=- mm

**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	1.716 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.694 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.666 Ω
Rated Load Amps (RLA)	10.3 A
Maximum Continuous Current (MCC)	16 A
Locked Rotor Amps (LRA)	87 A
Motor protection	Internal overload protector

**Terminal box**



IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

**Recommended Installation torques**

Oil sight glass	52,5 Nm
Power connections / Earth connection	3 Nm / 2 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
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058

**Miscellaneous accessories**

**Code no.**

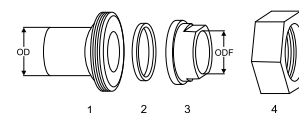
Acoustic hood	120Z5044
Discharge thermostat kit	7750009

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

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

Cooling capacity in W

30	-	5 913	7 528	9 508	11 890	14 713	18 016	21 836	26 213
35	-	5 501	7 047	8 937	11 209	13 902	17 053	20 701	24 884
40	-	5 100	6 572	8 369	10 527	13 084	16 080	19 552	23 538
45	-	-	6 091	7 790	9 830	12 249	15 085	18 376	22 160
50	-	-	-	7 189	9 107	11 382	14 054	17 160	20 737
55	-	-	-	-	8 344	10 472	12 975	15 890	19 256
60	-	-	-	-	-	9 505	11 834	14 554	17 702
65	-	-	-	-	-	-	10 618	13 136	16 060

Power input in W

30	-	2 783	2 867	2 960	3 059	3 164	3 273	3 383	3 493
35	-	3 421	3 455	3 499	3 551	3 609	3 672	3 738	3 806
40	-	4 077	4 069	4 072	4 084	4 104	4 130	4 160	4 193
45	-	-	4 719	4 689	4 670	4 660	4 657	4 659	4 665
50	-	-	-	5 362	5 319	5 287	5 263	5 246	5 233
55	-	-	-	-	6 043	5 997	5 960	5 931	5 908
60	-	-	-	-	-	6 800	6 759	6 726	6 701
65	-	-	-	-	-	-	7 670	7 642	7 623

Current consumption in A

30	-	6.66	6.56	6.69	6.96	7.28	7.57	7.74	7.70
35	-	8.40	8.13	8.10	8.23	8.43	8.61	8.70	8.59
40	-	9.61	9.20	9.04	9.06	9.18	9.29	9.32	9.18
45	-	-	9.99	9.74	9.69	9.74	9.82	9.82	9.68
50	-	-	-	10.40	10.31	10.34	10.40	10.42	10.30
55	-	-	-	-	11.15	11.18	11.27	11.33	11.27
60	-	-	-	-	-	12.50	12.64	12.78	12.81
65	-	-	-	-	-	-	14.73	14.96	15.12

Mass flow in kg/h

30	-	134	168	208	254	308	371	442	524
35	-	132	166	205	251	305	367	439	521
40	-	129	162	201	247	301	363	435	517
45	-	-	157	196	242	296	358	430	513
50	-	-	-	189	236	289	352	424	507
55	-	-	-	-	227	281	344	417	500
60	-	-	-	-	-	270	334	407	491
65	-	-	-	-	-	-	321	395	480

Coefficient of performance (C.O.P.)

30	-	2.12	2.63	3.21	3.89	4.65	5.51	6.46	7.50
35	-	1.61	2.04	2.55	3.16	3.85	4.64	5.54	6.54
40	-	1.25	1.62	2.06	2.58	3.19	3.89	4.70	5.61
45	-	-	1.29	1.66	2.10	2.63	3.24	3.94	4.75
50	-	-	-	1.34	1.71	2.15	2.67	3.27	3.96
55	-	-	-	-	1.38	1.75	2.18	2.68	3.26
60	-	-	-	-	-	1.40	1.75	2.16	2.64
65	-	-	-	-	-	-	1.38	1.72	2.11

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

Cooling capacity	17 160	W
Power input	5 246	W
Current consumption	10.42	A
Mass flow	424	kg/h
C.O.P.	3.27	

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	71	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 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	-	6 350	8 074	10 186	12 724	15 728	19 238	23 295	27 937
35	-	5 937	7 595	9 619	12 050	14 927	18 290	22 179	26 633
40	-	5 536	7 123	9 057	11 377	14 122	17 334	21 051	25 313
45	-	-	6 646	8 485	10 690	13 300	16 356	19 898	23 965
50	-	-	-	7 889	9 976	12 447	15 344	18 707	22 574
55	-	-	-	-	9 221	11 550	14 284	17 463	21 127
60	-	-	-	-	-	10 595	13 162	16 154	19 611
65	-	-	-	-	-	-	11 965	14 766	18 012

Power input in W

30	-	2 783	2 867	2 960	3 059	3 164	3 273	3 383	3 493
35	-	3 421	3 455	3 499	3 551	3 609	3 672	3 738	3 806
40	-	4 077	4 069	4 072	4 084	4 104	4 130	4 160	4 193
45	-	-	4 719	4 689	4 670	4 660	4 657	4 659	4 665
50	-	-	-	5 362	5 319	5 287	5 263	5 246	5 233
55	-	-	-	-	6 043	5 997	5 960	5 931	5 908
60	-	-	-	-	-	6 800	6 759	6 726	6 701
65	-	-	-	-	-	-	7 670	7 642	7 623

Current consumption in A

30	-	6.66	6.56	6.69	6.96	7.28	7.57	7.74	7.70
35	-	8.40	8.13	8.10	8.23	8.43	8.61	8.70	8.59
40	-	9.61	9.20	9.04	9.06	9.18	9.29	9.32	9.18
45	-	-	9.99	9.74	9.69	9.74	9.82	9.82	9.68
50	-	-	-	10.40	10.31	10.34	10.40	10.42	10.30
55	-	-	-	-	11.15	11.18	11.27	11.33	11.27
60	-	-	-	-	-	12.50	12.64	12.78	12.81
65	-	-	-	-	-	-	14.73	14.96	15.12

Mass flow in kg/h

30	-	134	167	207	253	307	369	440	521
35	-	132	165	204	250	303	365	436	518
40	-	129	161	200	246	299	361	433	514
45	-	-	157	195	241	294	356	428	510
50	-	-	-	188	234	288	350	422	504
55	-	-	-	-	226	279	342	414	497
60	-	-	-	-	-	269	332	405	488
65	-	-	-	-	-	-	319	393	477

Coefficient of performance (C.O.P.)

30	-	2.28	2.82	3.44	4.16	4.97	5.88	6.89	8.00
35	-	1.74	2.20	2.75	3.39	4.14	4.98	5.93	7.00
40	-	1.36	1.75	2.22	2.79	3.44	4.20	5.06	6.04
45	-	-	1.41	1.81	2.29	2.85	3.51	4.27	5.14
50	-	-	-	1.47	1.88	2.35	2.92	3.57	4.31
55	-	-	-	-	1.53	1.93	2.40	2.94	3.58
60	-	-	-	-	-	1.56	1.95	2.40	2.93
65	-	-	-	-	-	-	1.56	1.93	2.36

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

Cooling capacity	19 176	W
Power input	5 833	W
Current consumption	11.19	A
Mass flow	450	kg/h
C.O.P.	3.29	

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	71	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 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	-	5 913	7 528	9 508	11 890	14 713	18 016	21 836	26 213
35	-	5 501	7 047	8 937	11 209	13 902	17 053	20 701	24 884
40	-	5 100	6 572	8 369	10 527	13 084	16 080	19 552	23 538
45	-	-	6 091	7 790	9 830	12 249	15 085	18 376	22 160
50	-	-	-	7 189	9 107	11 382	14 054	17 160	20 737
55	-	-	-	-	8 344	10 472	12 975	15 890	19 256
60	-	-	-	-	-	9 505	11 834	14 554	17 702
65	-	-	-	-	-	-	10 618	13 136	16 060

Power input in W

30	-	2 783	2 867	2 960	3 059	3 164	3 273	3 383	3 493
35	-	3 421	3 455	3 499	3 551	3 609	3 672	3 738	3 806
40	-	4 077	4 069	4 072	4 084	4 104	4 130	4 160	4 193
45	-	-	4 719	4 689	4 670	4 660	4 657	4 659	4 665
50	-	-	-	5 362	5 319	5 287	5 263	5 246	5 233
55	-	-	-	-	6 043	5 997	5 960	5 931	5 908
60	-	-	-	-	-	6 800	6 759	6 726	6 701
65	-	-	-	-	-	-	7 670	7 642	7 623

Current consumption in A

30	-	6.66	6.56	6.69	6.96	7.28	7.57	7.74	7.70
35	-	8.40	8.13	8.10	8.23	8.43	8.61	8.70	8.59
40	-	9.61	9.20	9.04	9.06	9.18	9.29	9.32	9.18
45	-	-	9.99	9.74	9.69	9.74	9.82	9.82	9.68
50	-	-	-	10.40	10.31	10.34	10.40	10.42	10.30
55	-	-	-	-	11.15	11.18	11.27	11.33	11.27
60	-	-	-	-	-	12.50	12.64	12.78	12.81
65	-	-	-	-	-	-	14.73	14.96	15.12

Mass flow in kg/h

30	-	134	168	208	254	308	371	442	524
35	-	132	166	205	251	305	367	439	521
40	-	129	162	201	247	301	363	435	517
45	-	-	157	196	242	296	358	430	513
50	-	-	-	189	236	289	352	424	507
55	-	-	-	-	227	281	344	417	500
60	-	-	-	-	-	270	334	407	491
65	-	-	-	-	-	-	321	395	480

Coefficient of performance (C.O.P.)

30	-	2.12	2.63	3.21	3.89	4.65	5.51	6.46	7.50
35	-	1.61	2.04	2.55	3.16	3.85	4.64	5.54	6.54
40	-	1.25	1.62	2.06	2.58	3.19	3.89	4.70	5.61
45	-	-	1.29	1.66	2.10	2.63	3.24	3.94	4.75
50	-	-	-	1.34	1.71	2.15	2.67	3.27	3.96
55	-	-	-	-	1.38	1.75	2.18	2.68	3.26
60	-	-	-	-	-	1.40	1.75	2.16	2.64
65	-	-	-	-	-	-	1.38	1.72	2.11

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

Cooling capacity	17 160	W
Power input	5 246	W
Current consumption	10.42	A
Mass flow	424	kg/h
C.O.P.	3.27	

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	71	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 50 Hz, ARI rating conditions

R407C

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

Cooling capacity in W

30	-	6 350	8 074	10 186	12 724	15 728	19 238	23 295	27 937
35	-	5 937	7 595	9 619	12 050	14 927	18 290	22 179	26 633
40	-	5 536	7 123	9 057	11 377	14 122	17 334	21 051	25 313
45	-	-	6 646	8 485	10 690	13 300	16 356	19 898	23 965
50	-	-	-	7 889	9 976	12 447	15 344	18 707	22 574
55	-	-	-	-	9 221	11 550	14 284	17 463	21 127
60	-	-	-	-	-	10 595	13 162	16 154	19 611
65	-	-	-	-	-	-	11 965	14 766	18 012

Power input in W

30	-	2 783	2 867	2 960	3 059	3 164	3 273	3 383	3 493
35	-	3 421	3 455	3 499	3 551	3 609	3 672	3 738	3 806
40	-	4 077	4 069	4 072	4 084	4 104	4 130	4 160	4 193
45	-	-	4 719	4 689	4 670	4 660	4 657	4 659	4 665
50	-	-	-	5 362	5 319	5 287	5 263	5 246	5 233
55	-	-	-	-	6 043	5 997	5 960	5 931	5 908
60	-	-	-	-	-	6 800	6 759	6 726	6 701
65	-	-	-	-	-	-	7 670	7 642	7 623

Current consumption in A

30	-	6.66	6.56	6.69	6.96	7.28	7.57	7.74	7.70
35	-	8.40	8.13	8.10	8.23	8.43	8.61	8.70	8.59
40	-	9.61	9.20	9.04	9.06	9.18	9.29	9.32	9.18
45	-	-	9.99	9.74	9.69	9.74	9.82	9.82	9.68
50	-	-	-	10.40	10.31	10.34	10.40	10.42	10.30
55	-	-	-	-	11.15	11.18	11.27	11.33	11.27
60	-	-	-	-	-	12.50	12.64	12.78	12.81
65	-	-	-	-	-	-	14.73	14.96	15.12

Mass flow in kg/h

30	-	134	167	207	253	307	369	440	521
35	-	132	165	204	250	303	365	436	518
40	-	129	161	200	246	299	361	433	514
45	-	-	157	195	241	294	356	428	510
50	-	-	-	188	234	288	350	422	504
55	-	-	-	-	226	279	342	414	497
60	-	-	-	-	-	269	332	405	488
65	-	-	-	-	-	-	319	393	477

Coefficient of performance (C.O.P.)

30	-	2.28	2.82	3.44	4.16	4.97	5.88	6.89	8.00
35	-	1.74	2.20	2.75	3.39	4.14	4.98	5.93	7.00
40	-	1.36	1.75	2.22	2.79	3.44	4.20	5.06	6.04
45	-	-	1.41	1.81	2.29	2.85	3.51	4.27	5.14
50	-	-	-	1.47	1.88	2.35	2.92	3.57	4.31
55	-	-	-	-	1.53	1.93	2.40	2.94	3.58
60	-	-	-	-	-	1.56	1.95	2.40	2.93
65	-	-	-	-	-	-	1.56	1.93	2.36

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

Cooling capacity	19 176	W
Power input	5 833	W
Current consumption	11.19	A
Mass flow	450	kg/h
C.O.P.	3.29	

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	71	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	-	7 094	9 031	11 406	14 264	17 651	21 613	26 197	31 447
35	-	6 600	8 455	10 722	13 449	16 679	20 460	24 837	29 856
40	-	6 119	7 886	10 042	12 631	15 701	19 295	23 461	28 244
45	-	-	7 309	9 348	11 797	14 700	18 104	22 053	26 594
50	-	-	-	8 627	10 929	13 662	16 869	20 596	24 890
55	-	-	-	-	10 014	12 570	15 575	19 076	23 116
60	-	-	-	-	-	11 410	14 207	17 474	21 254
65	-	-	-	-	-	-	12 748	15 773	19 285

Power input in W

30	-	3 560	3 683	3 802	3 922	4 045	4 174	4 313	4 465
35	-	4 320	4 374	4 429	4 487	4 552	4 627	4 715	4 819
40	-	5 105	5 097	5 092	5 095	5 108	5 135	5 178	5 241
45	-	-	5 862	5 805	5 759	5 726	5 710	5 714	5 742
50	-	-	-	6 578	6 489	6 416	6 364	6 336	6 334
55	-	-	-	-	7 297	7 191	7 109	7 054	7 029
60	-	-	-	-	-	8 063	7 957	7 881	7 840
65	-	-	-	-	-	-	8 919	8 829	8 776

Current consumption in A

30	-	6.30	6.21	6.33	6.58	6.89	7.16	7.32	7.29
35	-	7.95	7.69	7.66	7.79	7.98	8.15	8.23	8.13
40	-	9.10	8.70	8.56	8.58	8.68	8.79	8.82	8.69
45	-	-	9.45	9.22	9.17	9.22	9.29	9.30	9.16
50	-	-	-	9.85	9.76	9.78	9.85	9.86	9.75
55	-	-	-	-	10.55	10.58	10.67	10.73	10.67
60	-	-	-	-	-	11.83	11.97	12.09	12.12
65	-	-	-	-	-	-	13.94	14.16	14.31

Mass flow in kg/h

30	-	161	202	249	305	370	445	531	629
35	-	159	199	246	301	366	441	527	625
40	-	155	195	242	297	361	436	522	621
45	-	-	189	236	291	355	430	517	615
50	-	-	-	227	283	347	423	509	609
55	-	-	-	-	272	337	413	500	600
60	-	-	-	-	-	324	401	489	590
65	-	-	-	-	-	-	385	474	576

Coefficient of performance (C.O.P.)

30	-	1.99	2.45	3.00	3.64	4.36	5.18	6.07	7.04
35	-	1.53	1.93	2.42	3.00	3.66	4.42	5.27	6.20
40	-	1.20	1.55	1.97	2.48	3.07	3.76	4.53	5.39
45	-	-	1.25	1.61	2.05	2.57	3.17	3.86	4.63
50	-	-	-	1.31	1.68	2.13	2.65	3.25	3.93
55	-	-	-	-	1.37	1.75	2.19	2.70	3.29
60	-	-	-	-	-	1.42	1.79	2.22	2.71
65	-	-	-	-	-	-	1.43	1.79	2.20

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

Cooling capacity	20 596	W
Power input	6 336	W
Current consumption	9.86	A
Mass flow	509	kg/h
C.O.P.	3.25	

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	74	dB(A)
With acoustic hood	69	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

**Cooling capacity in W**

30	-	7 617	9 686	12 219	15 264	18 868	23 080	27 946	33 515
35	-	7 123	9 112	11 541	14 458	17 910	21 944	26 610	31 954
40	-	6 642	8 547	10 867	13 651	16 946	20 800	25 260	30 374
45	-	-	7 974	10 182	12 828	15 962	19 630	23 880	28 760
50	-	-	-	9 468	11 973	14 940	18 418	22 453	27 094
55	-	-	-	-	11 067	13 864	17 147	20 964	25 362
60	-	-	-	-	-	12 718	15 802	19 395	23 546
65	-	-	-	-	-	-	14 366	17 731	21 629

**Power input in W**

30	-	3 560	3 683	3 802	3 922	4 045	4 174	4 313	4 465
35	-	4 320	4 374	4 429	4 487	4 552	4 627	4 715	4 819
40	-	5 105	5 097	5 092	5 095	5 108	5 135	5 178	5 241
45	-	-	5 862	5 805	5 759	5 726	5 710	5 714	5 742
50	-	-	-	6 578	6 489	6 416	6 364	6 336	6 334
55	-	-	-	-	7 297	7 191	7 109	7 054	7 029
60	-	-	-	-	-	8 063	7 957	7 881	7 840
65	-	-	-	-	-	-	8 919	8 829	8 776

**Current consumption in A**

30	-	6.30	6.21	6.33	6.58	6.89	7.16	7.32	7.29
35	-	7.95	7.69	7.66	7.79	7.98	8.15	8.23	8.13
40	-	9.10	8.70	8.56	8.58	8.68	8.79	8.82	8.69
45	-	-	9.45	9.22	9.17	9.22	9.29	9.30	9.16
50	-	-	-	9.85	9.76	9.78	9.85	9.86	9.75
55	-	-	-	-	10.55	10.58	10.67	10.73	10.67
60	-	-	-	-	-	11.83	11.97	12.09	12.12
65	-	-	-	-	-	-	13.94	14.16	14.31

**Mass flow in kg/h**

30	-	160	201	248	303	368	442	528	625
35	-	158	198	245	300	364	438	524	621
40	-	154	194	240	295	359	434	519	617
45	-	-	188	234	289	353	428	514	612
50	-	-	-	226	281	346	420	507	605
55	-	-	-	-	271	335	411	497	597
60	-	-	-	-	-	323	398	486	586
65	-	-	-	-	-	-	383	472	573

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

30	-	2.14	2.63	3.21	3.89	4.66	5.53	6.48	7.51
35	-	1.65	2.08	2.61	3.22	3.93	4.74	5.64	6.63
40	-	1.30	1.68	2.13	2.68	3.32	4.05	4.88	5.80
45	-	-	1.36	1.75	2.23	2.79	3.44	4.18	5.01
50	-	-	-	1.44	1.85	2.33	2.89	3.54	4.28
55	-	-	-	-	1.52	1.93	2.41	2.97	3.61
60	-	-	-	-	-	1.58	1.99	2.46	3.00
65	-	-	-	-	-	-	1.61	2.01	2.46

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

Cooling capacity	23 020	W
Power input	6 949	W
Current consumption	10.59	A
Mass flow	541	kg/h
C.O.P.	3.31	

**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	74	dB(A)
With acoustic hood	69	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	-	7 094	9 031	11 406	14 264	17 651	21 613	26 197	31 447
35	-	6 600	8 455	10 722	13 449	16 679	20 460	24 837	29 856
40	-	6 119	7 886	10 042	12 631	15 701	19 295	23 461	28 244
45	-	-	7 309	9 348	11 797	14 700	18 104	22 053	26 594
50	-	-	-	8 627	10 929	13 662	16 869	20 596	24 890
55	-	-	-	-	10 014	12 570	15 575	19 076	23 116
60	-	-	-	-	-	11 410	14 207	17 474	21 254
65	-	-	-	-	-	-	12 748	15 773	19 285

Power input in W

30	-	3 560	3 683	3 802	3 922	4 045	4 174	4 313	4 465
35	-	4 320	4 374	4 429	4 487	4 552	4 627	4 715	4 819
40	-	5 105	5 097	5 092	5 095	5 108	5 135	5 178	5 241
45	-	-	5 862	5 805	5 759	5 726	5 710	5 714	5 742
50	-	-	-	6 578	6 489	6 416	6 364	6 336	6 334
55	-	-	-	-	7 297	7 191	7 109	7 054	7 029
60	-	-	-	-	-	8 063	7 957	7 881	7 840
65	-	-	-	-	-	-	8 919	8 829	8 776

Current consumption in A

30	-	6.30	6.21	6.33	6.58	6.89	7.16	7.32	7.29
35	-	7.95	7.69	7.66	7.79	7.98	8.15	8.23	8.13
40	-	9.10	8.70	8.56	8.58	8.68	8.79	8.82	8.69
45	-	-	9.45	9.22	9.17	9.22	9.29	9.30	9.16
50	-	-	-	9.85	9.76	9.78	9.85	9.86	9.75
55	-	-	-	-	10.55	10.58	10.67	10.73	10.67
60	-	-	-	-	-	11.83	11.97	12.09	12.12
65	-	-	-	-	-	-	13.94	14.16	14.31

Mass flow in kg/h

30	-	161	202	249	305	370	445	531	629
35	-	159	199	246	301	366	441	527	625
40	-	155	195	242	297	361	436	522	621
45	-	-	189	236	291	355	430	517	615
50	-	-	-	227	283	347	423	509	609
55	-	-	-	-	272	337	413	500	600
60	-	-	-	-	-	324	401	489	590
65	-	-	-	-	-	-	385	474	576

Coefficient of performance (C.O.P.)

30	-	1.99	2.45	3.00	3.64	4.36	5.18	6.07	7.04
35	-	1.53	1.93	2.42	3.00	3.66	4.42	5.27	6.20
40	-	1.20	1.55	1.97	2.48	3.07	3.76	4.53	5.39
45	-	-	1.25	1.61	2.05	2.57	3.17	3.86	4.63
50	-	-	-	1.31	1.68	2.13	2.65	3.25	3.93
55	-	-	-	-	1.37	1.75	2.19	2.70	3.29
60	-	-	-	-	-	1.42	1.79	2.22	2.71
65	-	-	-	-	-	-	1.43	1.79	2.20

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

Cooling capacity	20 596	W
Power input	6 336	W
Current consumption	9.86	A
Mass flow	509	kg/h
C.O.P.	3.25	

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	74	dB(A)
With acoustic hood	69	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

**Cooling capacity in W**

30	-	7 617	9 686	12 219	15 264	18 868	23 080	27 946	33 515
35	-	7 123	9 112	11 541	14 458	17 910	21 944	26 610	31 954
40	-	6 642	8 547	10 867	13 651	16 946	20 800	25 260	30 374
45	-	-	7 974	10 182	12 828	15 962	19 630	23 880	28 760
50	-	-	-	9 468	11 973	14 940	18 418	22 453	27 094
55	-	-	-	-	11 067	13 864	17 147	20 964	25 362
60	-	-	-	-	-	12 718	15 802	19 395	23 546
65	-	-	-	-	-	-	14 366	17 731	21 629

**Power input in W**

30	-	3 560	3 683	3 802	3 922	4 045	4 174	4 313	4 465
35	-	4 320	4 374	4 429	4 487	4 552	4 627	4 715	4 819
40	-	5 105	5 097	5 092	5 095	5 108	5 135	5 178	5 241
45	-	-	5 862	5 805	5 759	5 726	5 710	5 714	5 742
50	-	-	-	6 578	6 489	6 416	6 364	6 336	6 334
55	-	-	-	-	7 297	7 191	7 109	7 054	7 029
60	-	-	-	-	-	8 063	7 957	7 881	7 840
65	-	-	-	-	-	-	8 919	8 829	8 776

**Current consumption in A**

30	-	6.30	6.21	6.33	6.58	6.89	7.16	7.32	7.29
35	-	7.95	7.69	7.66	7.79	7.98	8.15	8.23	8.13
40	-	9.10	8.70	8.56	8.58	8.68	8.79	8.82	8.69
45	-	-	9.45	9.22	9.17	9.22	9.29	9.30	9.16
50	-	-	-	9.85	9.76	9.78	9.85	9.86	9.75
55	-	-	-	-	10.55	10.58	10.67	10.73	10.67
60	-	-	-	-	-	11.83	11.97	12.09	12.12
65	-	-	-	-	-	-	13.94	14.16	14.31

**Mass flow in kg/h**

30	-	160	201	248	303	368	442	528	625
35	-	158	198	245	300	364	438	524	621
40	-	154	194	240	295	359	434	519	617
45	-	-	188	234	289	353	428	514	612
50	-	-	-	226	281	346	420	507	605
55	-	-	-	-	271	335	411	497	597
60	-	-	-	-	-	323	398	486	586
65	-	-	-	-	-	-	383	472	573

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

30	-	2.14	2.63	3.21	3.89	4.66	5.53	6.48	7.51
35	-	1.65	2.08	2.61	3.22	3.93	4.74	5.64	6.63
40	-	1.30	1.68	2.13	2.68	3.32	4.05	4.88	5.80
45	-	-	1.36	1.75	2.23	2.79	3.44	4.18	5.01
50	-	-	-	1.44	1.85	2.33	2.89	3.54	4.28
55	-	-	-	-	1.52	1.93	2.41	2.97	3.61
60	-	-	-	-	-	1.58	1.99	2.46	3.00
65	-	-	-	-	-	-	1.61	2.01	2.46

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

Cooling capacity	23 020	W
Power input	6 949	W
Current consumption	10.59	A
Mass flow	541	kg/h
C.O.P.	3.31	

**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	74	dB(A)
With acoustic hood	69	dB(A)

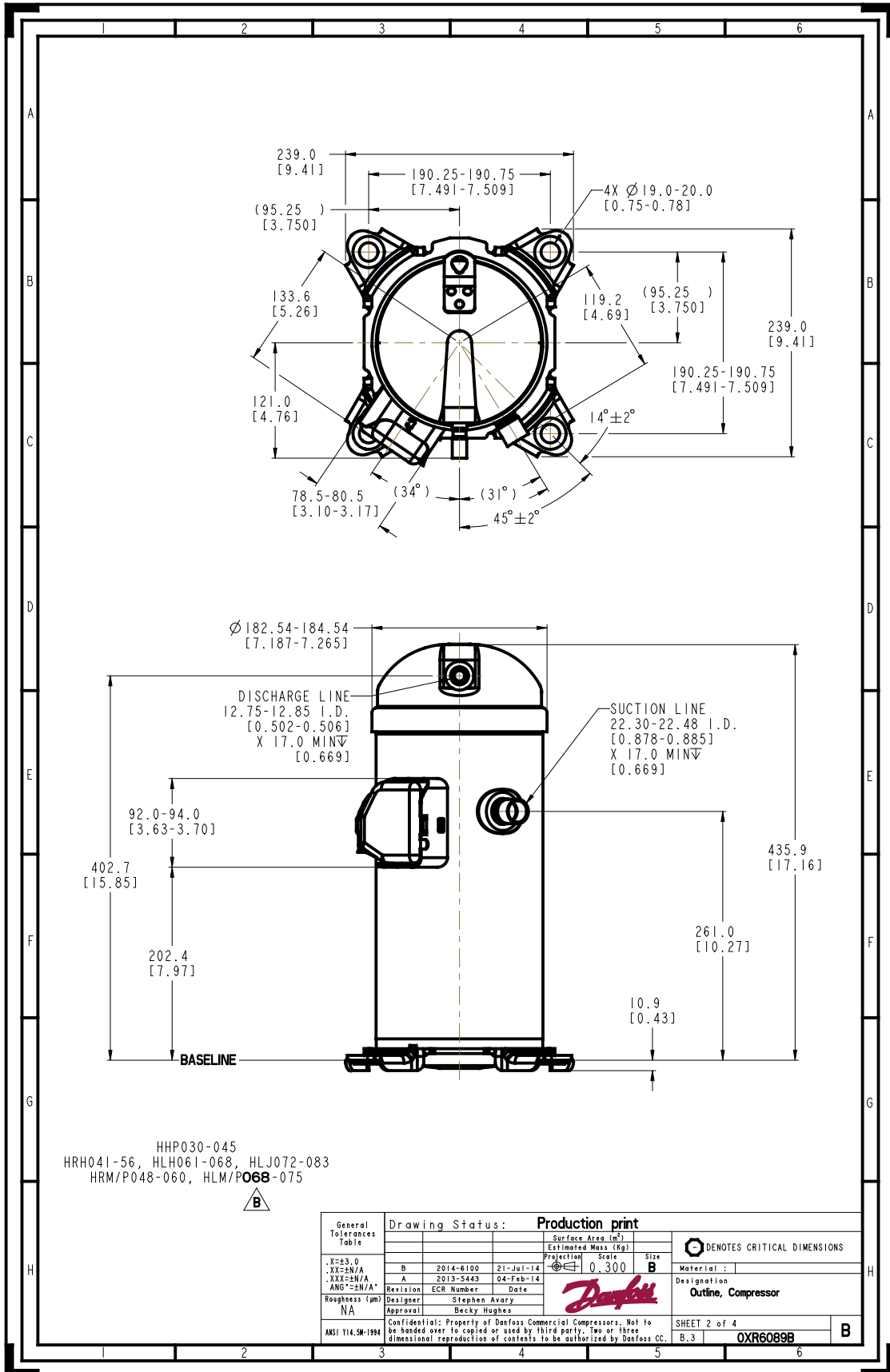
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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