

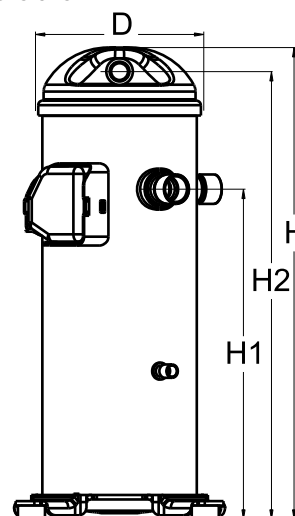
Datasheets

# Danfoss scroll compressors **H series**



**General Characteristics**

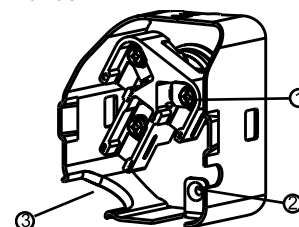
Model number (on compressor nameplate)		<b>HLM072T4LC6</b>
Code number for Singlepack*		120U1751
Code number for Industrial pack**		120U1748
Drawing number		0XR6089B-1
Suction and discharge connections		Brazed
Suction connection		7/8 " ODF
Discharge connection		1/2 " ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume		98,57 cm <sup>3</sup> /rev
Displacement @ Nominal speed		17.1 m <sup>3</sup> /h @ 2900 rpm - 20.7 m <sup>3</sup> /h @ 3500 rpm
Net weight		37,2 kg
Oil charge		1,57 litre, Alkylbenzene - -
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		R22

**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	1.852 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.827 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.867 Ω
Rated Load Amps (RLA)	9.6 A
Maximum Continuous Current (MCC)	15 A
Locked Rotor Amps (LRA)	82 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.**

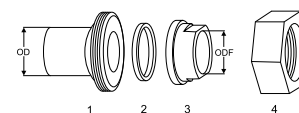
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

**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

**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.**

**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

**Performance data at 50 Hz, EN 12900 rating conditions**
**R22**

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

**Cooling capacity in W**

30	6 432	7 507	9 099	11 174	13 697	16 634	19 949	23 607	-
35	6 021	7 088	8 639	10 637	13 050	15 841	18 976	22 420	-
40	5 484	6 573	8 109	10 059	12 389	15 063	18 046	21 305	-
45	-	5 927	7 477	9 406	11 680	14 264	17 125	20 226	-
50	-	-	6 710	8 645	10 890	13 413	16 177	19 148	-
55	-	-	-	7 744	9 987	12 473	15 168	18 036	-
60	-	-	-	-	8 939	11 414	14 065	16 857	-
65	-	-	-	-	-	10 204	12 835	15 575	-

**Power input in W**

30	3 041	2 953	2 949	3 011	3 122	3 265	3 425	3 583	-
35	3 526	3 406	3 363	3 381	3 441	3 528	3 625	3 714	-
40	3 985	3 857	3 801	3 798	3 833	3 887	3 946	3 991	-
45	-	4 275	4 230	4 231	4 264	4 312	4 356	4 382	-
50	-	-	4 619	4 650	4 706	4 770	4 826	4 856	-
55	-	-	-	5 022	5 125	5 231	5 322	5 382	-
60	-	-	-	-	5 492	5 664	5 815	5 928	-
65	-	-	-	-	-	6 037	6 272	6 464	-

**Current consumption in A**

30	5.81	5.92	6.00	6.04	6.06	6.06	6.04	6.01	-
35	6.26	6.34	6.40	6.42	6.44	6.43	6.42	6.41	-
40	6.89	6.93	6.96	6.97	6.97	6.96	6.96	6.96	-
45	-	7.69	7.69	7.68	7.67	7.66	7.66	7.67	-
50	-	-	8.60	8.56	8.53	8.52	8.52	8.54	-
55	-	-	-	9.63	9.58	9.55	9.55	9.58	-
60	-	-	-	-	10.81	10.77	10.76	10.79	-
65	-	-	-	-	-	12.17	12.16	12.19	-

**Mass flow in kg/h**

30	141	162	193	234	284	340	404	473	-
35	137	159	191	232	281	337	399	465	-
40	130	154	187	228	277	333	394	460	-
45	-	145	180	223	273	329	390	455	-
50	-	-	169	214	266	323	385	450	-
55	-	-	-	203	256	315	378	444	-
60	-	-	-	-	243	304	369	437	-
65	-	-	-	-	-	290	357	427	-

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

30	2.12	2.54	3.09	3.71	4.39	5.09	5.82	6.59	-
35	1.71	2.08	2.57	3.15	3.79	4.49	5.24	6.04	-
40	1.38	1.70	2.13	2.65	3.23	3.87	4.57	5.34	-
45	-	1.39	1.77	2.22	2.74	3.31	3.93	4.62	-
50	-	-	1.45	1.86	2.31	2.81	3.35	3.94	-
55	-	-	-	1.54	1.95	2.38	2.85	3.35	-
60	-	-	-	-	1.63	2.02	2.42	2.84	-
65	-	-	-	-	-	1.69	2.05	2.41	-

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

Cooling capacity	16 177	W
Power input	4 826	W
Current consumption	8.52	A
Mass flow	385	kg/h
C.O.P.	3.35	

**Pressure switch settings**

Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	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

R22

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

Cooling capacity in W

30	6 831	7 966	9 648	11 839	14 502	17 599	21 092	24 944	-
35	6 417	7 549	9 192	11 309	13 862	16 814	20 128	23 764	-
40	5 869	7 027	8 661	10 735	13 209	16 047	19 210	22 661	-
45	-	6 365	8 021	10 081	12 506	15 259	18 303	21 599	-
50	-	-	7 235	9 311	11 717	14 416	17 370	20 541	-
55	-	-	-	8 389	10 806	13 480	16 375	19 451	-
60	-	-	-	-	9 736	12 417	15 282	18 294	-
65	-	-	-	-	-	11 189	14 055	17 032	-

Power input in W

30	3 041	2 953	2 949	3 011	3 122	3 265	3 425	3 583	-
35	3 526	3 406	3 363	3 381	3 441	3 528	3 625	3 714	-
40	3 985	3 857	3 801	3 798	3 833	3 887	3 946	3 991	-
45	-	4 275	4 230	4 231	4 264	4 312	4 356	4 382	-
50	-	-	4 619	4 650	4 706	4 770	4 826	4 856	-
55	-	-	-	5 022	5 125	5 231	5 322	5 382	-
60	-	-	-	-	5 492	5 664	5 815	5 928	-
65	-	-	-	-	-	6 037	6 272	6 464	-

Current consumption in A

30	5.81	5.92	6.00	6.04	6.06	6.06	6.04	6.01	-
35	6.26	6.34	6.40	6.42	6.44	6.43	6.42	6.41	-
40	6.89	6.93	6.96	6.97	6.97	6.96	6.96	6.96	-
45	-	7.69	7.69	7.68	7.67	7.66	7.66	7.67	-
50	-	-	8.60	8.56	8.53	8.52	8.52	8.54	-
55	-	-	-	9.63	9.58	9.55	9.55	9.58	-
60	-	-	-	-	10.81	10.77	10.76	10.79	-
65	-	-	-	-	-	12.17	12.16	12.19	-

Mass flow in kg/h

30	140	161	192	233	282	339	402	470	-
35	136	158	190	231	279	335	396	463	-
40	129	153	186	227	276	331	392	457	-
45	-	144	179	222	271	327	388	452	-
50	-	-	169	213	265	321	383	447	-
55	-	-	-	202	255	313	376	442	-
60	-	-	-	-	242	303	367	434	-
65	-	-	-	-	-	288	355	424	-

Coefficient of performance (C.O.P.)

30	2.25	2.70	3.27	3.93	4.65	5.39	6.16	6.96	-
35	1.82	2.22	2.73	3.35	4.03	4.77	5.55	6.40	-
40	1.47	1.82	2.28	2.83	3.45	4.13	4.87	5.68	-
45	-	1.49	1.90	2.38	2.93	3.54	4.20	4.93	-
50	-	-	1.57	2.00	2.49	3.02	3.60	4.23	-
55	-	-	-	1.67	2.11	2.58	3.08	3.61	-
60	-	-	-	-	1.77	2.19	2.63	3.09	-
65	-	-	-	-	-	1.85	2.24	2.63	-

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

Cooling capacity	17 836	W
Power input	5 291	W
Current consumption	9.43	A
Mass flow	405	kg/h
C.O.P.	3.37	

Pressure switch settings

Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	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

R22

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

Cooling capacity in W

30	7 688	8 972	10 875	13 355	16 371	19 881	23 844	28 216	-
35	7 196	8 472	10 325	12 714	15 598	18 934	22 682	26 798	-
40	6 555	7 856	9 693	12 024	14 808	18 005	21 571	25 466	-
45	-	7 085	8 937	11 243	13 962	17 051	20 470	24 177	-
50	-	-	8 021	10 333	13 018	16 033	19 337	22 889	-
55	-	-	-	9 256	11 938	14 911	18 132	21 561	-
60	-	-	-	-	10 685	13 645	16 814	20 151	-
65	-	-	-	-	-	12 198	15 344	18 619	-

Power input in W

30	3 593	3 488	3 483	3 557	3 690	3 861	4 049	4 235	-
35	4 168	4 025	3 975	3 997	4 070	4 173	4 287	4 391	-
40	4 710	4 560	4 494	4 493	4 535	4 601	4 669	4 720	-
45	-	5 055	5 003	5 008	5 049	5 105	5 158	5 185	-
50	-	-	5 465	5 505	5 574	5 651	5 716	5 749	-
55	-	-	-	5 947	6 073	6 201	6 308	6 376	-
60	-	-	-	-	6 511	6 717	6 897	7 028	-
65	-	-	-	-	-	7 164	7 444	7 670	-

Current consumption in A

30	5.85	5.96	6.04	6.09	6.11	6.10	6.09	6.06	-
35	6.31	6.39	6.44	6.47	6.48	6.48	6.47	6.46	-
40	6.94	6.98	7.01	7.02	7.02	7.02	7.01	7.01	-
45	-	7.75	7.75	7.74	7.72	7.71	7.71	7.73	-
50	-	-	8.66	8.63	8.60	8.58	8.58	8.60	-
55	-	-	-	9.70	9.65	9.62	9.62	9.65	-
60	-	-	-	-	10.89	10.85	10.84	10.87	-
65	-	-	-	-	-	12.26	12.25	12.28	-

Mass flow in kg/h

30	168	193	231	280	339	407	483	565	-
35	164	190	228	277	336	402	476	556	-
40	155	184	223	273	332	398	471	550	-
45	-	173	215	266	326	393	466	544	-
50	-	-	203	256	318	386	460	538	-
55	-	-	-	242	306	377	452	531	-
60	-	-	-	-	291	364	441	522	-
65	-	-	-	-	-	346	427	510	-

Coefficient of performance (C.O.P.)

30	2.14	2.57	3.12	3.75	4.44	5.15	5.89	6.66	-
35	1.73	2.10	2.60	3.18	3.83	4.54	5.29	6.10	-
40	1.39	1.72	2.16	2.68	3.27	3.91	4.62	5.40	-
45	-	1.40	1.79	2.25	2.77	3.34	3.97	4.66	-
50	-	-	1.47	1.88	2.34	2.84	3.38	3.98	-
55	-	-	-	1.56	1.97	2.40	2.87	3.38	-
60	-	-	-	-	1.64	2.03	2.44	2.87	-
65	-	-	-	-	-	1.70	2.06	2.43	-

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

Cooling capacity	19 337	W
Power input	5 716	W
Current consumption	8.58	A
Mass flow	460	kg/h
C.O.P.	3.38	

Pressure switch settings

Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	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

R22

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

Cooling capacity in W

30	8 165	9 521	11 532	14 151	17 334	21 035	25 211	29 814	-
35	7 670	9 022	10 986	13 517	16 569	20 098	24 058	28 404	-
40	7 015	8 399	10 353	12 831	15 789	19 181	22 962	27 087	-
45	-	7 608	9 588	12 050	14 949	18 240	21 878	25 818	-
50	-	-	8 648	11 130	14 006	17 232	20 763	24 554	-
55	-	-	-	10 027	12 917	16 115	19 575	23 252	-
60	-	-	-	-	11 639	14 844	18 269	21 869	-
65	-	-	-	-	-	13 376	16 803	20 362	-

Power input in W

30	3 593	3 488	3 483	3 557	3 690	3 861	4 049	4 235	-
35	4 168	4 025	3 975	3 997	4 070	4 173	4 287	4 391	-
40	4 710	4 560	4 494	4 493	4 535	4 601	4 669	4 720	-
45	-	5 055	5 003	5 008	5 049	5 105	5 158	5 185	-
50	-	-	5 465	5 505	5 574	5 651	5 716	5 749	-
55	-	-	-	5 947	6 073	6 201	6 308	6 376	-
60	-	-	-	-	6 511	6 717	6 897	7 028	-
65	-	-	-	-	-	7 164	7 444	7 670	-

Current consumption in A

30	5.85	5.96	6.04	6.09	6.11	6.10	6.09	6.06	-
35	6.31	6.39	6.44	6.47	6.48	6.48	6.47	6.46	-
40	6.94	6.98	7.01	7.02	7.02	7.02	7.01	7.01	-
45	-	7.75	7.75	7.74	7.72	7.71	7.71	7.73	-
50	-	-	8.66	8.63	8.60	8.58	8.58	8.60	-
55	-	-	-	9.70	9.65	9.62	9.62	9.65	-
60	-	-	-	-	10.89	10.85	10.84	10.87	-
65	-	-	-	-	-	12.26	12.25	12.28	-

Mass flow in kg/h

30	167	192	230	278	337	405	480	562	-
35	163	189	227	276	334	400	474	553	-
40	154	183	222	271	330	396	469	547	-
45	-	172	214	265	324	391	463	541	-
50	-	-	202	255	316	384	457	535	-
55	-	-	-	241	305	375	450	528	-
60	-	-	-	-	289	362	439	519	-
65	-	-	-	-	-	344	425	507	-

Coefficient of performance (C.O.P.)

30	2.27	2.73	3.31	3.98	4.70	5.45	6.23	7.04	-
35	1.84	2.24	2.76	3.38	4.07	4.82	5.61	6.47	-
40	1.49	1.84	2.30	2.86	3.48	4.17	4.92	5.74	-
45	-	1.51	1.92	2.41	2.96	3.57	4.24	4.98	-
50	-	-	1.58	2.02	2.51	3.05	3.63	4.27	-
55	-	-	-	1.69	2.13	2.60	3.10	3.65	-
60	-	-	-	-	1.79	2.21	2.65	3.11	-
65	-	-	-	-	-	1.87	2.26	2.65	-

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

Cooling capacity	21 321	W
Power input	6 270	W
Current consumption	9.50	A
Mass flow	485	kg/h
C.O.P.	3.40	

Pressure switch settings

Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	74	dB(A)
With acoustic hood	69	dB(A)

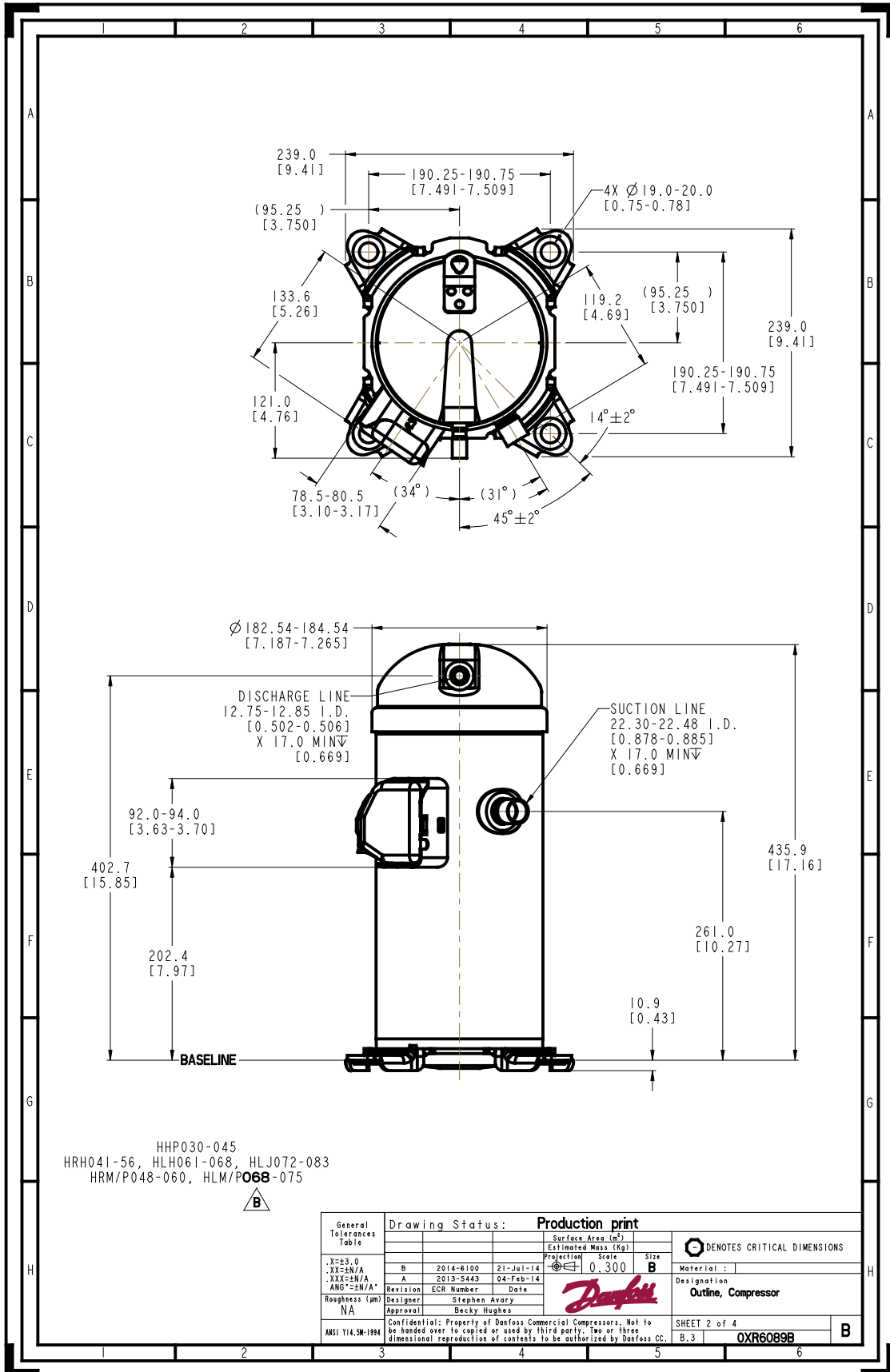
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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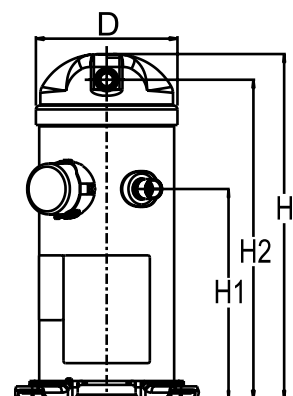


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**General Characteristics**

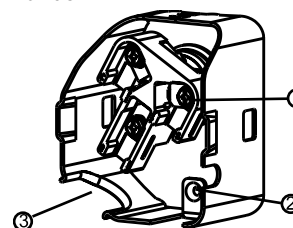
Model number (on compressor nameplate)		<b>HLM072T4LC8</b>
Code number for Singlepack*		120U2067
Code number for Industrial pack**		120U2064
Drawing number		0XR6049B-2
Suction and discharge connections		Brazed
Suction connection		7/8 " ODF
Discharge connection		1/2 " ODF
Oil sight glass		None
Oil equalisation connection		1/2"
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume		98,57 cm <sup>3</sup> /rev
Displacement @ Nominal speed		17.1 m <sup>3</sup> /h @ 2900 rpm - 20.7 m <sup>3</sup> /h @ 3500 rpm
Net weight		37,2 kg
Oil charge		1,57 litre, Alkylbenzene - -
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		R22

**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		1.852 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C		1.827 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C		1.867 Ω
Rated Load Amps (RLA)		9.6 A
Maximum Continuous Current (MCC)		15 A
Locked Rotor Amps (LRA)		82 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.**

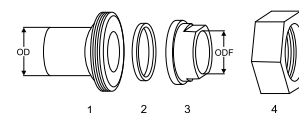
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

**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

**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.**

**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

Performance data at 50 Hz, EN 12900 rating conditions

R22

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

Cooling capacity in W

30	6 435	7 510	9 102	11 178	13 702	16 640	19 956	23 616	-
35	6 023	7 091	8 641	10 640	13 053	15 845	18 981	22 426	-
40	5 487	6 576	8 113	10 064	12 395	15 070	18 055	21 316	-
45	-	5 929	7 479	9 408	11 683	14 268	17 129	20 230	-
50	-	-	6 713	8 649	10 896	13 419	16 184	19 157	-
55	-	-	-	7 748	9 993	12 481	15 177	18 047	-
60	-	-	-	-	8 941	11 417	14 068	16 861	-
65	-	-	-	-	-	10 210	12 843	15 583	-

Power input in W

30	3 041	2 953	2 949	3 011	3 122	3 265	3 425	3 583	-
35	3 526	3 406	3 363	3 381	3 441	3 528	3 625	3 714	-
40	3 985	3 857	3 801	3 798	3 833	3 887	3 946	3 991	-
45	-	4 275	4 230	4 231	4 264	4 312	4 356	4 382	-
50	-	-	4 619	4 650	4 706	4 770	4 826	4 856	-
55	-	-	-	5 022	5 125	5 231	5 322	5 382	-
60	-	-	-	-	5 492	5 664	5 815	5 928	-
65	-	-	-	-	-	6 037	6 272	6 464	-

Current consumption in A

30	5.81	5.92	6.00	6.04	6.06	6.06	6.04	6.01	-
35	6.26	6.34	6.40	6.42	6.44	6.43	6.42	6.41	-
40	6.89	6.93	6.96	6.97	6.97	6.96	6.96	6.96	-
45	-	7.69	7.69	7.68	7.67	7.66	7.66	7.67	-
50	-	-	8.60	8.56	8.53	8.52	8.52	8.54	-
55	-	-	-	9.63	9.58	9.55	9.55	9.58	-
60	-	-	-	-	10.81	10.77	10.76	10.79	-
65	-	-	-	-	-	12.17	12.16	12.19	-

Mass flow in kg/h

30	141	162	193	234	284	340	404	473	-
35	137	159	191	232	281	337	399	465	-
40	130	154	187	228	277	333	394	460	-
45	-	145	180	223	273	329	390	455	-
50	-	-	169	214	266	323	385	450	-
55	-	-	-	203	256	315	378	444	-
60	-	-	-	-	243	304	369	437	-
65	-	-	-	-	-	290	357	427	-

Coefficient of performance (C.O.P.)

30	2.12	2.54	3.09	3.71	4.39	5.10	5.83	6.59	-
35	1.71	2.08	2.57	3.15	3.79	4.49	5.24	6.04	-
40	1.38	1.70	2.13	2.65	3.23	3.88	4.58	5.34	-
45	-	1.39	1.77	2.22	2.74	3.31	3.93	4.62	-
50	-	-	1.45	1.86	2.32	2.81	3.35	3.95	-
55	-	-	-	1.54	1.95	2.39	2.85	3.35	-
60	-	-	-	-	1.63	2.02	2.42	2.84	-
65	-	-	-	-	-	1.69	2.05	2.41	-

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

Cooling capacity	16 184	W
Power input	4 826	W
Current consumption	8.52	A
Mass flow	385	kg/h
C.O.P.	3.35	

Pressure switch settings

Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	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

R22

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

Cooling capacity in W

30	6 833	7 968	9 650	11 842	14 505	17 603	21 096	24 949	-
35	6 419	7 550	9 194	11 311	13 865	16 818	20 132	23 769	-
40	5 871	7 029	8 664	10 737	13 212	16 050	19 214	22 666	-
45	-	6 367	8 023	10 083	12 509	15 263	18 307	21 604	-
50	-	-	7 237	9 313	11 720	14 420	17 374	20 546	-
55	-	-	-	8 391	10 809	13 484	16 380	19 457	-
60	-	-	-	-	9 739	12 421	15 287	18 299	-
65	-	-	-	-	-	11 193	14 060	17 038	-

Power input in W

30	3 041	2 953	2 949	3 011	3 122	3 265	3 425	3 583	-
35	3 526	3 406	3 363	3 381	3 441	3 528	3 625	3 714	-
40	3 985	3 857	3 801	3 798	3 833	3 887	3 946	3 991	-
45	-	4 275	4 230	4 231	4 264	4 312	4 356	4 382	-
50	-	-	4 619	4 650	4 706	4 770	4 826	4 856	-
55	-	-	-	5 022	5 125	5 231	5 322	5 382	-
60	-	-	-	-	5 492	5 664	5 815	5 928	-
65	-	-	-	-	-	6 037	6 272	6 464	-

Current consumption in A

30	5.81	5.92	6.00	6.04	6.06	6.06	6.04	6.01	-
35	6.26	6.34	6.40	6.42	6.44	6.43	6.42	6.41	-
40	6.89	6.93	6.96	6.97	6.97	6.96	6.96	6.96	-
45	-	7.69	7.69	7.68	7.67	7.66	7.66	7.67	-
50	-	-	8.60	8.56	8.53	8.52	8.52	8.54	-
55	-	-	-	9.63	9.58	9.55	9.55	9.58	-
60	-	-	-	-	10.81	10.77	10.76	10.79	-
65	-	-	-	-	-	12.17	12.16	12.19	-

Mass flow in kg/h

30	140	161	192	233	282	339	402	470	-
35	136	158	190	231	279	335	396	463	-
40	129	153	186	227	276	331	392	457	-
45	-	144	179	222	271	327	388	452	-
50	-	-	169	213	265	321	383	447	-
55	-	-	-	202	255	313	376	442	-
60	-	-	-	-	242	303	367	434	-
65	-	-	-	-	-	288	355	424	-

Coefficient of performance (C.O.P.)

30	2.25	2.70	3.27	3.93	4.65	5.39	6.16	6.96	-
35	1.82	2.22	2.73	3.35	4.03	4.77	5.55	6.40	-
40	1.47	1.82	2.28	2.83	3.45	4.13	4.87	5.68	-
45	-	1.49	1.90	2.38	2.93	3.54	4.20	4.93	-
50	-	-	1.57	2.00	2.49	3.02	3.60	4.23	-
55	-	-	-	1.67	2.11	2.58	3.08	3.62	-
60	-	-	-	-	1.77	2.19	2.63	3.09	-
65	-	-	-	-	-	1.85	2.24	2.64	-

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

Cooling capacity	17 841	W
Power input	5 291	W
Current consumption	9.43	A
Mass flow	405	kg/h
C.O.P.	3.37	

Pressure switch settings

Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	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 60 Hz, EN 12900 rating conditions

R22

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

Cooling capacity in W

30	7 691	8 976	10 880	13 361	16 378	19 889	23 853	28 227	-
35	7 198	8 475	10 329	12 718	15 602	18 940	22 688	26 806	-
40	6 559	7 860	9 698	12 030	14 816	18 014	21 582	25 478	-
45	-	7 086	8 939	11 246	13 965	17 055	20 474	24 182	-
50	-	-	8 025	10 339	13 024	16 041	19 346	22 899	-
55	-	-	-	9 262	11 946	14 920	18 143	21 573	-
60	-	-	-	-	10 688	13 648	16 818	20 156	-
65	-	-	-	-	-	12 206	15 353	18 630	-

Power input in W

30	3 593	3 488	3 483	3 557	3 690	3 861	4 049	4 235	-
35	4 168	4 025	3 975	3 997	4 070	4 173	4 287	4 391	-
40	4 710	4 560	4 494	4 493	4 535	4 601	4 669	4 720	-
45	-	5 055	5 003	5 008	5 049	5 105	5 158	5 185	-
50	-	-	5 465	5 505	5 574	5 651	5 716	5 749	-
55	-	-	-	5 947	6 073	6 201	6 308	6 376	-
60	-	-	-	-	6 511	6 717	6 896	7 028	-
65	-	-	-	-	-	7 164	7 444	7 670	-

Current consumption in A

30	5.85	5.96	6.04	6.09	6.11	6.10	6.09	6.06	-
35	6.31	6.39	6.44	6.47	6.48	6.48	6.47	6.46	-
40	6.94	6.98	7.01	7.02	7.02	7.02	7.01	7.01	-
45	-	7.75	7.75	7.74	7.72	7.71	7.71	7.73	-
50	-	-	8.66	8.63	8.60	8.58	8.58	8.60	-
55	-	-	-	9.70	9.65	9.62	9.62	9.65	-
60	-	-	-	-	10.89	10.85	10.84	10.87	-
65	-	-	-	-	-	12.26	12.25	12.28	-

Mass flow in kg/h

30	168	193	231	280	339	407	483	565	-
35	164	190	228	277	336	402	476	556	-
40	155	184	223	273	332	398	471	550	-
45	-	173	215	266	326	393	466	544	-
50	-	-	203	256	318	386	460	538	-
55	-	-	-	242	306	377	452	531	-
60	-	-	-	-	291	364	441	522	-
65	-	-	-	-	-	346	427	510	-

Coefficient of performance (C.O.P.)

30	2.14	2.57	3.12	3.76	4.44	5.15	5.89	6.66	-
35	1.73	2.11	2.60	3.18	3.83	4.54	5.29	6.10	-
40	1.39	1.72	2.16	2.68	3.27	3.92	4.62	5.40	-
45	-	1.40	1.79	2.25	2.77	3.34	3.97	4.66	-
50	-	-	1.47	1.88	2.34	2.84	3.38	3.98	-
55	-	-	-	1.56	1.97	2.41	2.88	3.38	-
60	-	-	-	-	1.64	2.03	2.44	2.87	-
65	-	-	-	-	-	1.70	2.06	2.43	-

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

Cooling capacity	19 346	W
Power input	5 716	W
Current consumption	8.58	A
Mass flow	460	kg/h
C.O.P.	3.38	

Pressure switch settings

Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	73	dB(A)
With acoustic hood	68	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

R22

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

Cooling capacity in W

30	8 167	9 524	11 534	14 154	17 338	21 040	25 216	29 820	-
35	7 672	9 025	10 989	13 520	16 573	20 103	24 063	28 411	-
40	7 017	8 401	10 355	12 834	15 793	19 185	22 967	27 093	-
45	-	7 610	9 590	12 053	14 953	18 244	21 883	25 824	-
50	-	-	8 651	11 133	14 010	17 237	20 769	24 560	-
55	-	-	-	10 030	12 921	16 119	19 580	23 259	-
60	-	-	-	-	11 643	14 848	18 275	21 876	-
65	-	-	-	-	-	13 381	16 808	20 368	-

Power input in W

30	3 593	3 488	3 483	3 557	3 690	3 861	4 049	4 235	-
35	4 168	4 025	3 975	3 997	4 070	4 173	4 287	4 391	-
40	4 710	4 560	4 494	4 493	4 535	4 601	4 669	4 720	-
45	-	5 055	5 003	5 008	5 049	5 105	5 158	5 185	-
50	-	-	5 465	5 505	5 574	5 651	5 716	5 749	-
55	-	-	-	5 947	6 073	6 201	6 308	6 376	-
60	-	-	-	-	6 511	6 717	6 896	7 028	-
65	-	-	-	-	-	7 164	7 444	7 670	-

Current consumption in A

30	5.85	5.96	6.04	6.09	6.11	6.10	6.09	6.06	-
35	6.31	6.39	6.44	6.47	6.48	6.48	6.47	6.46	-
40	6.94	6.98	7.01	7.02	7.02	7.02	7.01	7.01	-
45	-	7.75	7.75	7.74	7.72	7.71	7.71	7.73	-
50	-	-	8.66	8.63	8.60	8.58	8.58	8.60	-
55	-	-	-	9.70	9.65	9.62	9.62	9.65	-
60	-	-	-	-	10.89	10.85	10.84	10.87	-
65	-	-	-	-	-	12.26	12.25	12.28	-

Mass flow in kg/h

30	167	192	230	278	337	405	480	562	-
35	163	189	227	276	334	400	474	553	-
40	154	183	222	271	330	396	469	547	-
45	-	172	214	265	324	391	463	541	-
50	-	-	202	255	316	384	457	535	-
55	-	-	-	241	305	375	449	528	-
60	-	-	-	-	289	362	439	519	-
65	-	-	-	-	-	344	425	507	-

Coefficient of performance (C.O.P.)

30	2.27	2.73	3.31	3.98	4.70	5.45	6.23	7.04	-
35	1.84	2.24	2.76	3.38	4.07	4.82	5.61	6.47	-
40	1.49	1.84	2.30	2.86	3.48	4.17	4.92	5.74	-
45	-	1.51	1.92	2.41	2.96	3.57	4.24	4.98	-
50	-	-	1.58	2.02	2.51	3.05	3.63	4.27	-
55	-	-	-	1.69	2.13	2.60	3.10	3.65	-
60	-	-	-	-	1.79	2.21	2.65	3.11	-
65	-	-	-	-	-	1.87	2.26	2.66	-

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

Cooling capacity	21 327	W
Power input	6 270	W
Current consumption	9.50	A
Mass flow	485	kg/h
C.O.P.	3.40	

Pressure switch settings

Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	73	dB(A)
With acoustic hood	68	dB(A)

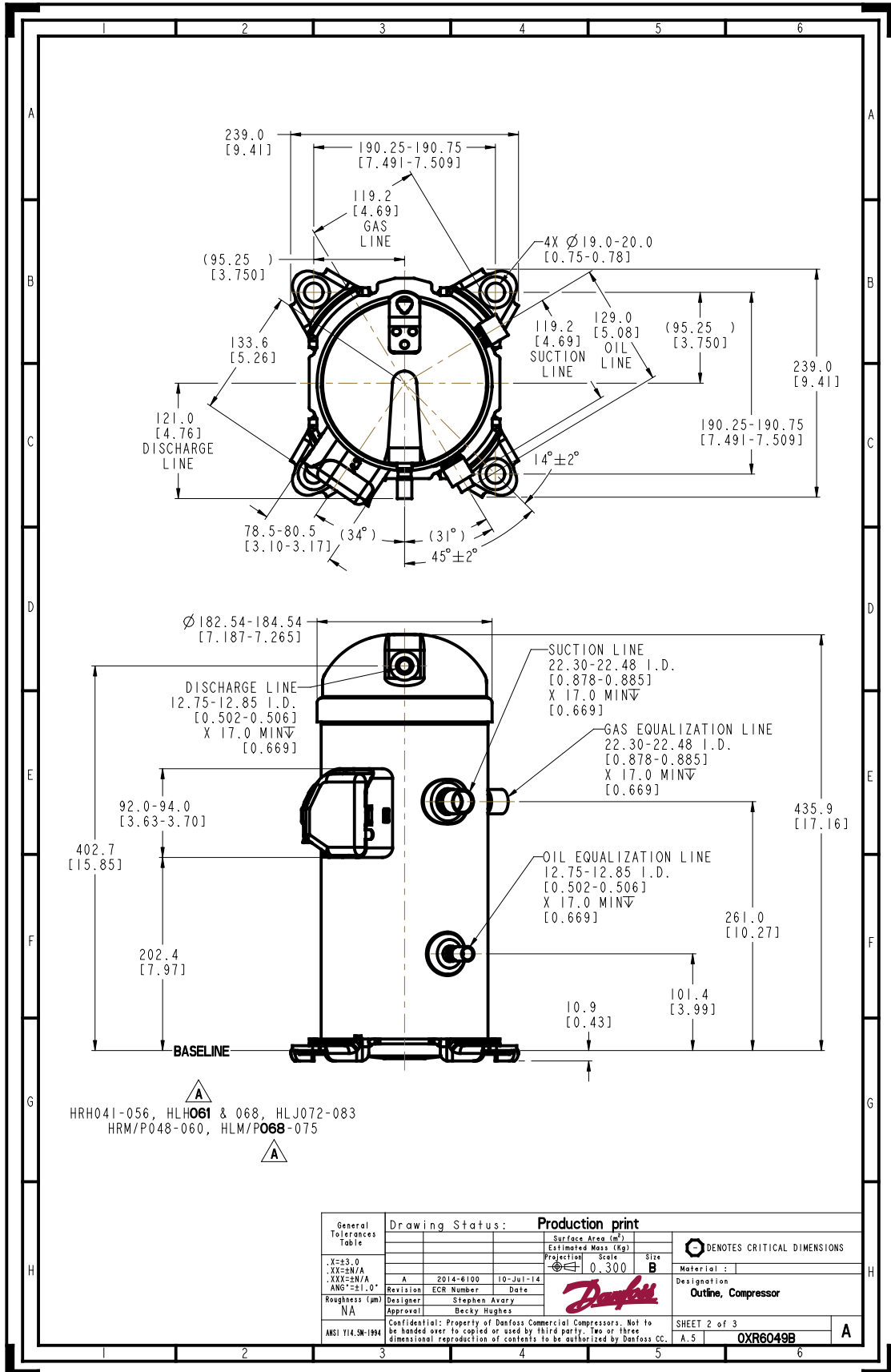
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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HRH041-056, HLH061 & 068, HLJ072-083  
HRM/P048-060, HLM/P068-075

General Tolerances Table	Drawing Status: <b>Production print</b>		Surface Area (m <sup>2</sup> )	DENOTES CRITICAL DIMENSIONS
			Estimated Mass (kg)	
Y=±3.0 XX=±2N/A ANG=±1.0°	Revision	ECR Number	Date	Material:
Roughness (µm) NA	Designer	Stephen Avary	Becky Hughes	Designation <b>Outline, Compressor</b>
ANSI Y14.5M-1994	Confidential: Property of Danfoss Commercial Compressors. Not to be handed over, copied or used by third party. Two or three dimensional reproduction of contents to be authorized by Danfoss CC.			SHEET 2 of 3 A.5 <b>0XR6049B</b> A

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