

Datasheets

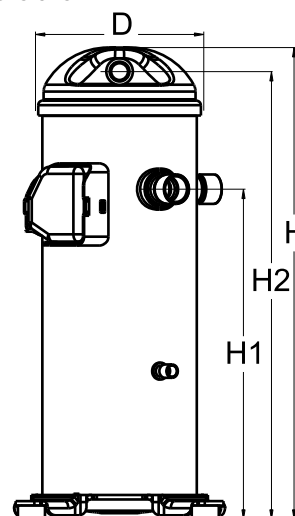
Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HLM075T4LC6
Code number for Singlepack*		120U1761
Code number for Industrial pack**		120U1758
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		102,75 cm ³ /rev
Displacement @ Nominal speed		17.9 m ³ /h @ 2900 rpm - 21.6 m ³ /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

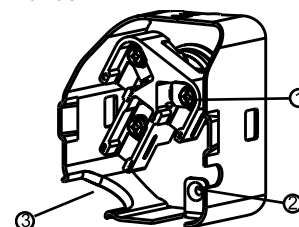


D=183,5 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

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	1.630 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.600 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.620 Ω
Rated Load Amps (RLA)	10.3 A
Maximum Continuous Current (MCC)	16 A
Locked Rotor Amps (LRA)	100 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.

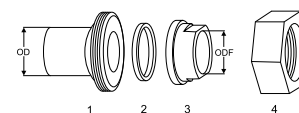
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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	6 501	7 585	9 187	11 274	13 809	16 760	20 090	23 766	-
35	6 114	7 187	8 749	10 765	13 200	16 020	19 190	22 676	-
40	5 618	6 707	8 255	10 226	12 587	15 303	18 340	21 662	-
45	-	6 106	7 664	9 617	11 930	14 568	17 497	20 682	-
50	-	-	6 939	8 899	11 188	13 774	16 621	19 695	-
55	-	-	-	8 032	10 323	12 881	15 671	18 659	-
60	-	-	-	-	9 296	11 849	14 607	17 533	-
65	-	-	-	-	-	10 642	13 389	16 277	-

Power input in W

30	3 297	3 325	3 340	3 339	3 315	3 263	3 179	3 055	-
35	3 696	3 700	3 702	3 698	3 682	3 648	3 591	3 506	-
40	4 145	4 118	4 099	4 083	4 066	4 041	4 004	3 948	-
45	-	4 598	4 550	4 515	4 488	4 464	4 437	4 403	-
50	-	-	5 075	5 011	4 967	4 935	4 912	4 890	-
55	-	-	-	5 594	5 523	5 476	5 446	5 430	-
60	-	-	-	-	6 176	6 105	6 061	6 040	-
65	-	-	-	-	-	6 842	6 776	6 743	-

Current consumption in A

30	6.59	6.71	6.80	6.85	6.87	6.87	6.85	6.82	-
35	7.11	7.20	7.25	7.29	7.30	7.30	7.29	7.27	-
40	7.81	7.86	7.89	7.90	7.90	7.90	7.89	7.90	-
45	-	8.73	8.72	8.71	8.69	8.68	8.68	8.70	-
50	-	-	9.75	9.71	9.68	9.66	9.66	9.69	-
55	-	-	-	10.92	10.87	10.84	10.83	10.86	-
60	-	-	-	-	12.26	12.22	12.21	12.24	-
65	-	-	-	-	-	13.81	13.79	13.83	-

Mass flow in kg/h

30	141	163	195	236	286	343	407	477	-
35	138	161	193	235	284	340	403	471	-
40	132	156	190	232	282	338	400	468	-
45	-	149	184	228	279	336	398	465	-
50	-	-	175	221	273	332	395	463	-
55	-	-	-	210	265	326	391	460	-
60	-	-	-	-	253	316	384	455	-
65	-	-	-	-	-	302	373	446	-

Coefficient of performance (C.O.P.)

30	1.97	2.28	2.75	3.38	4.17	5.14	6.32	7.78	-
35	1.65	1.94	2.36	2.91	3.59	4.39	5.34	6.47	-
40	1.36	1.63	2.01	2.50	3.10	3.79	4.58	5.49	-
45	-	1.33	1.68	2.13	2.66	3.26	3.94	4.70	-
50	-	-	1.37	1.78	2.25	2.79	3.38	4.03	-
55	-	-	-	1.44	1.87	2.35	2.88	3.44	-
60	-	-	-	-	1.51	1.94	2.41	2.90	-
65	-	-	-	-	-	1.56	1.98	2.41	-

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

Cooling capacity	16 621	W
Power input	4 912	W
Current consumption	9.66	A
Mass flow	395	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	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	6 905	8 049	9 742	11 945	14 621	17 733	21 242	25 111	-
35	6 516	7 654	9 309	11 444	14 022	17 005	20 355	24 035	-
40	6 012	7 171	8 817	10 913	13 420	16 303	19 522	23 041	-
45	-	6 557	8 222	10 307	12 773	15 584	18 700	22 086	-
50	-	-	7 482	9 584	12 037	14 804	17 847	21 128	-
55	-	-	-	8 701	11 169	13 921	16 918	20 123	-
60	-	-	-	-	10 125	12 890	15 870	19 028	-
65	-	-	-	-	-	11 670	14 661	17 800	-

Power input in W

30	3 297	3 325	3 340	3 339	3 315	3 263	3 179	3 055	-
35	3 696	3 700	3 702	3 698	3 682	3 648	3 591	3 506	-
40	4 145	4 118	4 099	4 083	4 066	4 041	4 004	3 948	-
45	-	4 598	4 550	4 515	4 488	4 464	4 437	4 403	-
50	-	-	5 075	5 011	4 967	4 935	4 912	4 890	-
55	-	-	-	5 594	5 523	5 476	5 446	5 430	-
60	-	-	-	-	6 176	6 105	6 061	6 040	-
65	-	-	-	-	-	6 842	6 776	6 743	-

Current consumption in A

30	6.59	6.71	6.80	6.85	6.87	6.87	6.85	6.82	-
35	7.11	7.20	7.25	7.29	7.30	7.30	7.29	7.27	-
40	7.81	7.86	7.89	7.90	7.90	7.90	7.89	7.90	-
45	-	8.73	8.72	8.71	8.69	8.68	8.68	8.70	-
50	-	-	9.75	9.71	9.68	9.66	9.66	9.69	-
55	-	-	-	10.92	10.87	10.84	10.83	10.86	-
60	-	-	-	-	12.26	12.22	12.21	12.24	-
65	-	-	-	-	-	13.81	13.79	13.83	-

Mass flow in kg/h

30	141	162	194	235	285	341	405	474	-
35	137	160	192	233	282	339	401	469	-
40	131	156	189	231	280	336	398	465	-
45	-	148	183	227	277	334	396	463	-
50	-	-	174	220	272	330	393	460	-
55	-	-	-	209	264	324	389	457	-
60	-	-	-	-	251	314	381	452	-
65	-	-	-	-	-	300	371	444	-

Coefficient of performance (C.O.P.)

30	2.09	2.42	2.92	3.58	4.41	5.43	6.68	8.22	-
35	1.76	2.07	2.51	3.09	3.81	4.66	5.67	6.86	-
40	1.45	1.74	2.15	2.67	3.30	4.03	4.88	5.84	-
45	-	1.43	1.81	2.28	2.85	3.49	4.21	5.02	-
50	-	-	1.47	1.91	2.42	3.00	3.63	4.32	-
55	-	-	-	1.56	2.02	2.54	3.11	3.71	-
60	-	-	-	-	1.64	2.11	2.62	3.15	-
65	-	-	-	-	-	1.71	2.16	2.64	-

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

Cooling capacity	18 425	W
Power input	5 370	W
Current consumption	10.69	A
Mass flow	419	kg/h
C.O.P.	3.43	

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	7 796	9 096	11 017	13 519	16 560	20 098	24 092	28 498	-
35	7 333	8 620	10 493	12 911	15 831	19 214	23 016	27 196	-
40	6 740	8 046	9 902	12 267	15 099	18 357	22 000	25 985	-
45	-	7 326	9 196	11 539	14 314	17 479	20 993	24 815	-
50	-	-	8 328	10 679	13 427	16 530	19 947	23 636	-
55	-	-	-	9 641	12 391	15 461	18 811	22 398	-
60	-	-	-	-	11 160	14 226	17 537	21 051	-
65	-	-	-	-	-	12 779	16 077	19 546	-

Power input in W

30	3 954	3 987	4 006	4 004	3 975	3 913	3 812	3 664	-
35	4 433	4 438	4 441	4 435	4 416	4 375	4 307	4 205	-
40	4 973	4 940	4 917	4 898	4 877	4 848	4 803	4 736	-
45	-	5 518	5 459	5 417	5 384	5 356	5 324	5 283	-
50	-	-	6 090	6 014	5 961	5 923	5 894	5 869	-
55	-	-	-	6 715	6 630	6 573	6 537	6 517	-
60	-	-	-	-	7 416	7 329	7 277	7 252	-
65	-	-	-	-	-	8 217	8 137	8 098	-

Current consumption in A

30	6.59	6.71	6.80	6.85	6.87	6.87	6.85	6.82	-
35	7.11	7.20	7.25	7.29	7.30	7.30	7.29	7.27	-
40	7.81	7.86	7.89	7.90	7.90	7.90	7.89	7.90	-
45	-	8.73	8.72	8.71	8.69	8.68	8.68	8.70	-
50	-	-	9.75	9.71	9.68	9.66	9.66	9.69	-
55	-	-	-	10.92	10.87	10.84	10.83	10.86	-
60	-	-	-	-	12.26	12.22	12.21	12.24	-
65	-	-	-	-	-	13.81	13.79	13.83	-

Mass flow in kg/h

30	169	196	234	284	343	412	488	572	-
35	166	193	232	281	341	408	483	565	-
40	158	188	228	278	338	406	480	561	-
45	-	179	221	273	334	403	478	558	-
50	-	-	210	265	328	398	474	556	-
55	-	-	-	252	318	391	469	552	-
60	-	-	-	-	303	379	460	546	-
65	-	-	-	-	-	363	448	536	-

Coefficient of performance (C.O.P.)

30	1.97	2.28	2.75	3.38	4.17	5.14	6.32	7.78	-
35	1.65	1.94	2.36	2.91	3.59	4.39	5.34	6.47	-
40	1.36	1.63	2.01	2.50	3.10	3.79	4.58	5.49	-
45	-	1.33	1.68	2.13	2.66	3.26	3.94	4.70	-
50	-	-	1.37	1.78	2.25	2.79	3.38	4.03	-
55	-	-	-	1.44	1.87	2.35	2.88	3.44	-
60	-	-	-	-	1.50	1.94	2.41	2.90	-
65	-	-	-	-	-	1.56	1.98	2.41	-

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

Cooling capacity	19 947	W
Power input	5 894	W
Current consumption	9.66	A
Mass flow	474	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	8 280	9 653	11 682	14 324	17 534	21 265	25 473	30 112	-
35	7 816	9 180	11 165	13 726	16 817	20 395	24 413	28 826	-
40	7 213	8 602	10 577	13 090	16 099	19 556	23 418	27 639	-
45	-	7 868	9 866	12 367	15 326	18 698	22 437	26 500	-
50	-	-	8 980	11 502	14 446	17 766	21 418	25 356	-
55	-	-	-	10 444	13 407	16 710	20 307	24 155	-
60	-	-	-	-	12 156	15 476	19 054	22 846	-
65	-	-	-	-	-	14 013	17 605	21 375	-

Power input in W

30	3 954	3 987	4 006	4 004	3 975	3 913	3 812	3 664	-
35	4 433	4 438	4 441	4 435	4 416	4 375	4 307	4 205	-
40	4 973	4 940	4 917	4 898	4 877	4 848	4 803	4 736	-
45	-	5 518	5 459	5 417	5 384	5 356	5 324	5 283	-
50	-	-	6 090	6 014	5 961	5 923	5 894	5 869	-
55	-	-	-	6 715	6 630	6 573	6 537	6 517	-
60	-	-	-	-	7 416	7 329	7 277	7 252	-
65	-	-	-	-	-	8 217	8 137	8 098	-

Current consumption in A

30	6.59	6.71	6.80	6.85	6.87	6.87	6.85	6.82	-
35	7.11	7.20	7.25	7.29	7.30	7.30	7.29	7.27	-
40	7.81	7.86	7.89	7.90	7.90	7.90	7.89	7.90	-
45	-	8.73	8.72	8.71	8.69	8.68	8.68	8.70	-
50	-	-	9.75	9.71	9.68	9.66	9.66	9.69	-
55	-	-	-	10.92	10.87	10.84	10.83	10.86	-
60	-	-	-	-	12.26	12.22	12.21	12.24	-
65	-	-	-	-	-	13.81	13.79	13.83	-

Mass flow in kg/h

30	169	195	233	282	341	409	486	569	-
35	165	192	231	280	339	406	481	562	-
40	158	187	227	277	336	404	478	558	-
45	-	178	220	272	333	401	475	555	-
50	-	-	209	264	326	396	472	552	-
55	-	-	-	251	316	389	466	549	-
60	-	-	-	-	302	377	458	543	-
65	-	-	-	-	-	361	445	533	-

Coefficient of performance (C.O.P.)

30	2.09	2.42	2.92	3.58	4.41	5.43	6.68	8.22	-
35	1.76	2.07	2.51	3.09	3.81	4.66	5.67	6.86	-
40	1.45	1.74	2.15	2.67	3.30	4.03	4.88	5.84	-
45	-	1.43	1.81	2.28	2.85	3.49	4.21	5.02	-
50	-	-	1.47	1.91	2.42	3.00	3.63	4.32	-
55	-	-	-	1.56	2.02	2.54	3.11	3.71	-
60	-	-	-	-	1.64	2.11	2.62	3.15	-
65	-	-	-	-	-	1.71	2.16	2.64	-

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

Cooling capacity	22 116	W
Power input	6 445	W
Current consumption	10.69	A
Mass flow	503	kg/h
C.O.P.	3.43	

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)

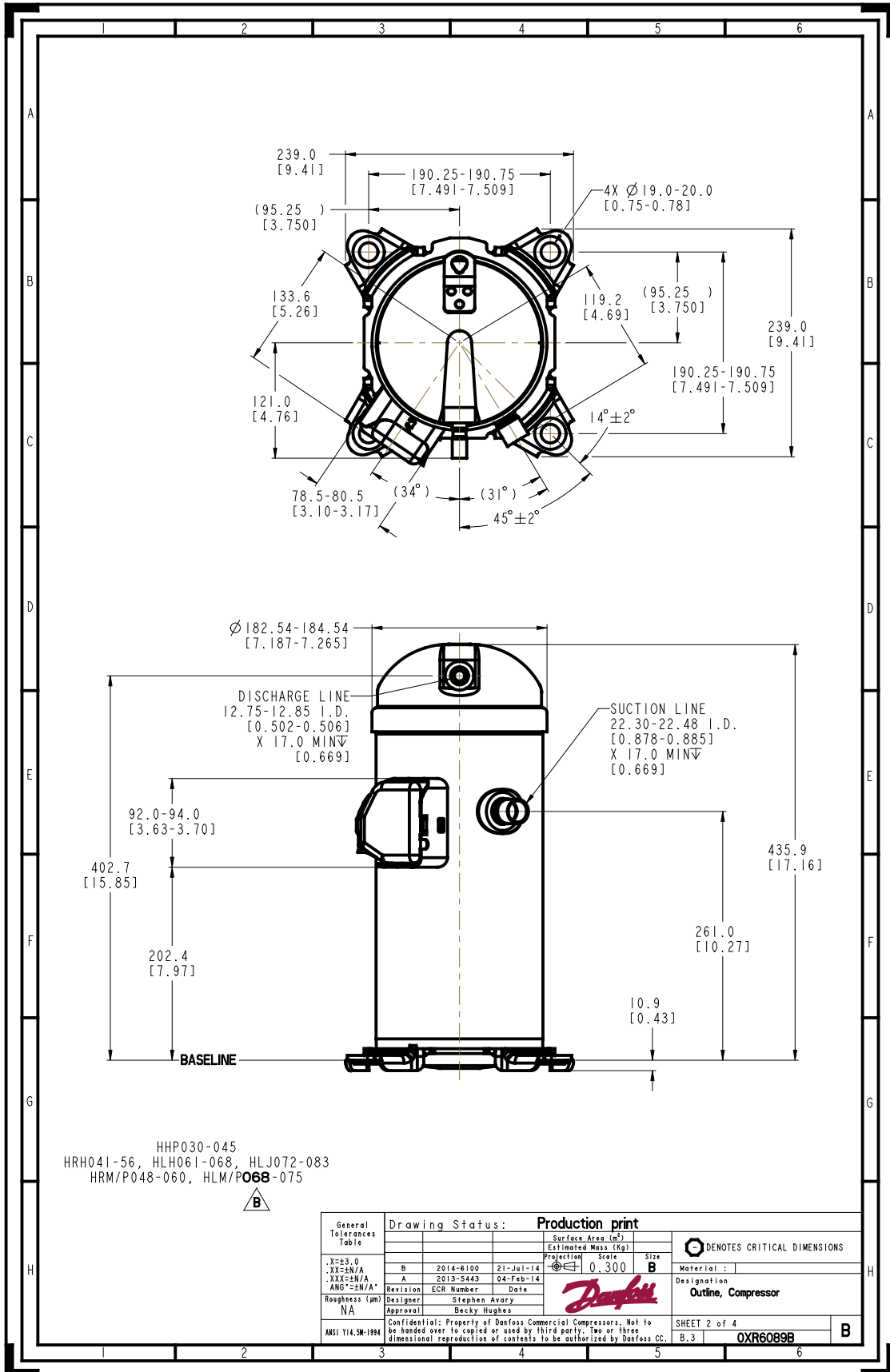
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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