

Datasheets

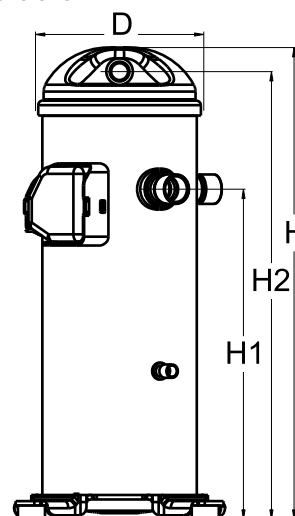
Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HCM120T4LC6
Code number for Singlepack*		120U0391
Code number for Industrial pack**		120U0388
Drawing number		0SR4103B-2
Suction and discharge connections		Brazed
Suction connection		1-1/8" ODF
Discharge connection		7/8" ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		162,4 cm ³ /rev
Displacement @ Nominal speed		28.3 m ³ /h @ 2900 rpm - 34.1 m ³ /h @ 3500 rpm
Net weight		45,2 kg
Oil charge		2,66 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		7,26 kg
Approved refrigerants		R22

Dimensions

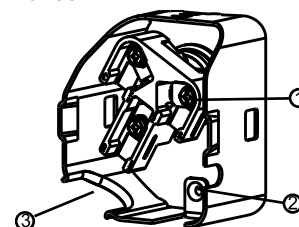


D=184 mm
H=545 mm
H1=369 mm
H2=519 mm
H3=- mm

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	1.125 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.110 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.100 Ω
Rated Load Amps (RLA)	19.2 A
Maximum Continuous Current (MCC)	25 A
Locked Rotor Amps (LRA)	140 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.

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, discharge side

Code no.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
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, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040

Miscellaneous accessories

Code no.

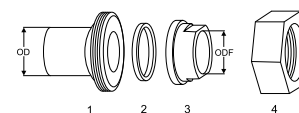
Acoustic hood	120Z5045
Discharge thermostat kit	7750009

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

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	9 187	11 678	14 721	18 274	22 296	26 745	31 580	36 759	-
35	8 427	10 849	13 826	17 318	21 283	25 681	30 469	35 606	-
40	7 748	10 060	12 932	16 323	20 192	24 498	29 199	34 253	-
45	-	9 345	12 073	15 323	19 055	23 229	27 802	32 734	-
50	-	-	11 278	14 349	17 905	21 907	26 312	31 081	-
55	-	-	-	13 431	16 773	20 563	24 761	29 326	-
60	-	-	-	-	15 688	19 227	23 178	27 500	-
65	-	-	-	-	-	17 929	21 593	25 631	-

Power input in W

30	4 984	5 153	5 256	5 304	5 312	5 291	5 254	5 215	-
35	5 606	5 710	5 783	5 836	5 882	5 934	6 005	6 107	-
40	6 419	6 412	6 407	6 417	6 455	6 533	6 664	6 861	-
45	-	7 339	7 209	7 129	7 111	7 168	7 312	7 556	-
50	-	-	8 270	8 052	7 931	7 919	8 029	8 273	-
55	-	-	-	9 266	8 995	8 868	8 896	9 094	-
60	-	-	-	-	10 384	10 094	9 994	10 097	-
65	-	-	-	-	-	11 677	11 402	11 364	-

Current consumption in A

30	14.99	15.02	15.08	15.17	15.29	15.42	15.58	15.75	-
35	15.61	15.65	15.71	15.79	15.88	15.98	16.09	16.20	-
40	16.27	16.35	16.43	16.52	16.60	16.69	16.77	16.83	-
45	-	17.08	17.20	17.32	17.42	17.51	17.59	17.64	-
50	-	-	18.00	18.17	18.32	18.44	18.52	18.58	-
55	-	-	-	19.05	19.26	19.43	19.55	19.63	-
60	-	-	-	-	20.22	20.46	20.65	20.77	-
65	-	-	-	-	-	21.52	21.78	21.98	-

Mass flow in kg/h

30	201	251	312	383	462	548	640	737	-
35	191	243	305	377	458	546	640	740	-
40	183	235	298	370	452	542	638	739	-
45	-	228	290	363	445	536	633	736	-
50	-	-	284	356	438	528	626	730	-
55	-	-	-	350	431	521	618	721	-
60	-	-	-	-	425	513	609	712	-
65	-	-	-	-	-	506	601	703	-

Coefficient of performance (C.O.P.)

30	1.84	2.27	2.80	3.45	4.20	5.05	6.01	7.05	-
35	1.50	1.90	2.39	2.97	3.62	4.33	5.07	5.83	-
40	1.21	1.57	2.02	2.54	3.13	3.75	4.38	4.99	-
45	-	1.27	1.67	2.15	2.68	3.24	3.80	4.33	-
50	-	-	1.36	1.78	2.26	2.77	3.28	3.76	-
55	-	-	-	1.45	1.86	2.32	2.78	3.22	-
60	-	-	-	-	1.51	1.90	2.32	2.72	-
65	-	-	-	-	-	1.54	1.89	2.26	-

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

Cooling capacity	26 312	W
Power input	8 029	W
Current consumption	18.52	A
Mass flow	626	kg/h
C.O.P.	3.28	

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 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	9 757	12 393	15 609	19 362	23 606	28 297	33 390	38 840	-
35	8 982	11 553	14 711	18 411	22 609	27 259	32 318	37 740	-
40	8 292	10 756	13 813	17 419	21 529	26 098	31 081	36 434	-
45	-	10 036	12 952	16 422	20 403	24 848	29 714	34 956	-
50	-	-	12 160	15 454	19 264	23 545	28 253	33 342	-
55	-	-	-	14 550	18 148	22 223	26 731	31 627	-
60	-	-	-	-	17 089	20 916	25 183	29 844	-
65	-	-	-	-	-	19 661	23 645	28 029	-

Power input in W

30	4 984	5 153	5 256	5 304	5 312	5 291	5 254	5 215	-
35	5 606	5 710	5 783	5 836	5 882	5 934	6 005	6 107	-
40	6 419	6 412	6 407	6 417	6 455	6 533	6 664	6 861	-
45	-	7 339	7 209	7 129	7 111	7 168	7 312	7 556	-
50	-	-	8 270	8 052	7 931	7 919	8 029	8 273	-
55	-	-	-	9 266	8 995	8 868	8 896	9 094	-
60	-	-	-	-	10 384	10 094	9 994	10 097	-
65	-	-	-	-	-	11 677	11 402	11 364	-

Current consumption in A

30	14.99	15.02	15.08	15.17	15.29	15.42	15.58	15.75	-
35	15.61	15.65	15.71	15.79	15.88	15.98	16.09	16.20	-
40	16.27	16.35	16.43	16.52	16.60	16.69	16.77	16.83	-
45	-	17.08	17.20	17.32	17.42	17.51	17.59	17.64	-
50	-	-	18.00	18.17	18.32	18.44	18.52	18.58	-
55	-	-	-	19.05	19.26	19.43	19.55	19.63	-
60	-	-	-	-	20.22	20.46	20.65	20.77	-
65	-	-	-	-	-	21.52	21.78	21.98	-

Mass flow in kg/h

30	200	250	311	381	459	545	636	732	-
35	190	242	304	375	455	543	637	736	-
40	182	234	296	369	450	539	634	735	-
45	-	226	289	361	443	533	629	732	-
50	-	-	282	354	436	525	622	725	-
55	-	-	-	348	429	518	614	717	-
60	-	-	-	-	423	510	606	708	-
65	-	-	-	-	-	504	598	699	-

Coefficient of performance (C.O.P.)

30	1.96	2.40	2.97	3.65	4.44	5.35	6.35	7.45	-
35	1.60	2.02	2.54	3.15	3.84	4.59	5.38	6.18	-
40	1.29	1.68	2.16	2.71	3.34	3.99	4.66	5.31	-
45	-	1.37	1.80	2.30	2.87	3.47	4.06	4.63	-
50	-	-	1.47	1.92	2.43	2.97	3.52	4.03	-
55	-	-	-	1.57	2.02	2.51	3.00	3.48	-
60	-	-	-	-	1.65	2.07	2.52	2.96	-
65	-	-	-	-	-	1.68	2.07	2.47	-

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

Cooling capacity	29 036	W
Power input	8 851	W
Current consumption	19.46	A
Mass flow	660	kg/h
C.O.P.	3.28	

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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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	12 409	14 482	17 542	21 524	26 366	32 000	38 363	45 388	-
35	11 656	13 708	16 688	20 533	25 177	30 555	36 603	43 256	-
40	10 691	12 773	15 724	19 480	23 977	29 150	34 935	41 265	-
45	-	11 605	14 576	18 293	22 692	27 710	33 281	39 340	-
50	-	-	13 172	16 898	21 249	26 160	31 566	37 404	-
55	-	-	-	15 227	19 575	24 426	29 716	35 380	-
60	-	-	-	-	17 601	22 438	27 657	33 194	-
65	-	-	-	-	-	20 126	25 318	30 771	-

Power input in W

30	6 756	6 823	6 856	6 848	6 794	6 688	6 523	6 294	-
35	7 467	7 499	7 514	7 506	7 470	7 399	7 287	7 128	-
40	8 237	8 217	8 198	8 175	8 140	8 088	8 013	7 909	-
45	-	9 015	8 946	8 890	8 841	8 793	8 739	8 673	-
50	-	-	9 795	9 691	9 612	9 551	9 502	9 459	-
55	-	-	-	10 614	10 489	10 399	10 339	10 303	-
60	-	-	-	-	11 509	11 375	11 289	11 243	-
65	-	-	-	-	-	12 516	12 387	12 317	-

Current consumption in A

30	12.22	12.46	12.62	12.71	12.75	12.75	12.71	12.65	-
35	13.18	13.35	13.46	13.52	13.54	13.54	13.52	13.49	-
40	14.50	14.59	14.64	14.66	14.66	14.65	14.65	14.65	-
45	-	16.19	16.18	16.16	16.13	16.11	16.11	16.14	-
50	-	-	18.09	18.02	17.96	17.92	17.92	17.97	-
55	-	-	-	20.26	20.16	20.10	20.10	20.16	-
60	-	-	-	-	22.75	22.66	22.65	22.72	-
65	-	-	-	-	-	25.62	25.59	25.66	-

Mass flow in kg/h

30	270	312	373	452	546	655	777	911	-
35	263	307	369	448	542	649	769	899	-
40	251	298	362	442	537	644	763	891	-
45	-	283	351	433	530	638	757	885	-
50	-	-	332	419	519	630	751	879	-
55	-	-	-	398	503	617	741	872	-
60	-	-	-	-	478	598	726	861	-
65	-	-	-	-	-	571	705	844	-

Coefficient of performance (C.O.P.)

30	1.84	2.12	2.56	3.14	3.88	4.78	5.88	7.21	-
35	1.56	1.83	2.22	2.74	3.37	4.13	5.02	6.07	-
40	1.30	1.55	1.92	2.38	2.95	3.60	4.36	5.22	-
45	-	1.29	1.63	2.06	2.57	3.15	3.81	4.54	-
50	-	-	1.34	1.74	2.21	2.74	3.32	3.95	-
55	-	-	-	1.43	1.87	2.35	2.87	3.43	-
60	-	-	-	-	1.53	1.97	2.45	2.95	-
65	-	-	-	-	-	1.61	2.04	2.50	-

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

Cooling capacity	31 566	W
Power input	9 502	W
Current consumption	17.92	A
Mass flow	751	kg/h
C.O.P.	3.32	

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	77	dB(A)
With acoustic hood	72	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	13 179	15 368	18 600	22 807	27 916	33 858	40 562	47 958	-
35	12 423	14 598	17 757	21 829	26 745	32 433	38 825	45 848	-
40	11 442	13 656	16 795	20 788	25 565	31 055	37 187	43 892	-
45	-	12 463	15 637	19 605	24 297	29 642	35 570	42 011	-
50	-	-	14 203	18 200	22 861	28 116	33 894	40 125	-
55	-	-	-	16 495	21 180	26 398	32 081	38 156	-
60	-	-	-	-	19 172	24 409	30 050	36 024	-
65	-	-	-	-	-	22 070	27 724	33 651	-

Power input in W

30	6 756	6 823	6 856	6 848	6 794	6 688	6 523	6 294	-
35	7 467	7 499	7 514	7 506	7 470	7 399	7 287	7 128	-
40	8 237	8 217	8 198	8 175	8 140	8 088	8 013	7 909	-
45	-	9 015	8 946	8 890	8 841	8 793	8 739	8 673	-
50	-	-	9 795	9 691	9 612	9 551	9 502	9 459	-
55	-	-	-	10 614	10 489	10 399	10 339	10 303	-
60	-	-	-	-	11 509	11 375	11 289	11 243	-
65	-	-	-	-	-	12 516	12 387	12 317	-

Current consumption in A

30	12.22	12.46	12.62	12.71	12.75	12.75	12.71	12.65	-
35	13.18	13.35	13.46	13.52	13.54	13.54	13.52	13.49	-
40	14.50	14.59	14.64	14.66	14.66	14.65	14.65	14.65	-
45	-	16.19	16.18	16.16	16.13	16.11	16.11	16.14	-
50	-	-	18.09	18.02	17.96	17.92	17.92	17.97	-
55	-	-	-	20.26	20.16	20.10	20.10	20.16	-
60	-	-	-	-	22.75	22.66	22.65	22.72	-
65	-	-	-	-	-	25.62	25.59	25.66	-

Mass flow in kg/h

30	268	310	371	449	543	652	773	905	-
35	262	305	367	445	539	646	765	894	-
40	250	296	360	440	534	641	759	886	-
45	-	281	349	431	527	635	753	880	-
50	-	-	331	417	516	627	747	874	-
55	-	-	-	396	500	614	737	867	-
60	-	-	-	-	476	595	722	856	-
65	-	-	-	-	-	568	701	839	-

Coefficient of performance (C.O.P.)

30	1.95	2.25	2.71	3.33	4.11	5.06	6.22	7.62	-
35	1.66	1.95	2.36	2.91	3.58	4.38	5.33	6.43	-
40	1.39	1.66	2.05	2.54	3.14	3.84	4.64	5.55	-
45	-	1.38	1.75	2.21	2.75	3.37	4.07	4.84	-
50	-	-	1.45	1.88	2.38	2.94	3.57	4.24	-
55	-	-	-	1.55	2.02	2.54	3.10	3.70	-
60	-	-	-	-	1.67	2.15	2.66	3.20	-
65	-	-	-	-	-	1.76	2.24	2.73	-

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

Cooling capacity	34 943	W
Power input	10 216	W
Current consumption	19.83	A
Mass flow	794	kg/h
C.O.P.	3.42	

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	77	dB(A)
With acoustic hood	72	dB(A)

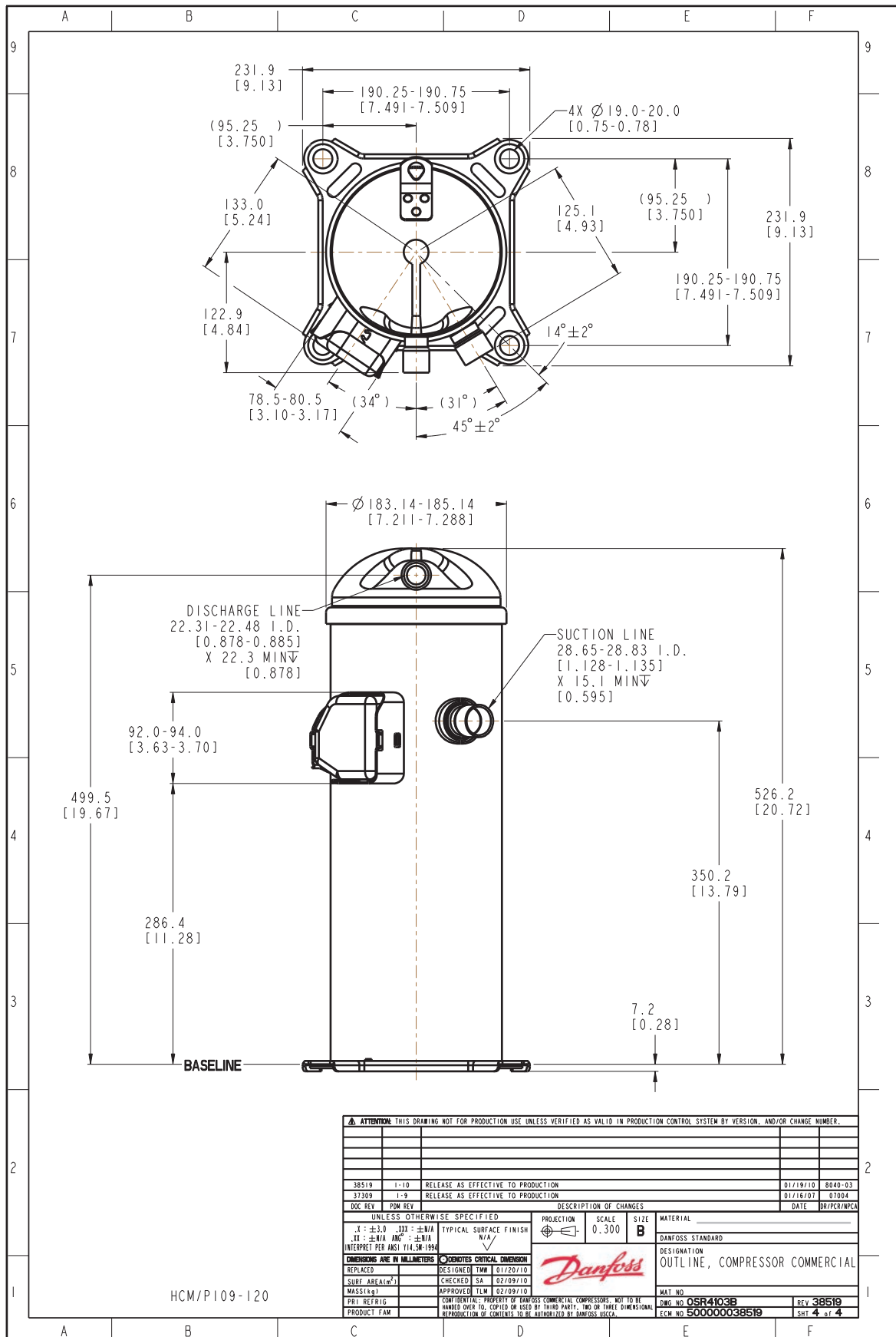
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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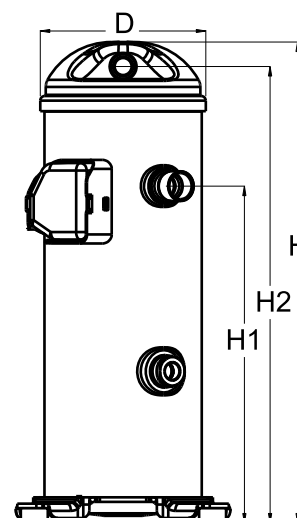


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General Characteristics

Model number (on compressor nameplate)		HCM120T4LC7
Code number for Singlepack*		120U0396
Code number for Industrial pack**		120U0393
Drawing number		0SR6169B-2
Suction and discharge connections		Brazed
Suction connection		1-1/8" ODF
Discharge connection		7/8" ODF
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		162,4 cm ³ /rev
Displacement @ Nominal speed		28.3 m ³ /h @ 2900 rpm - 34.1 m ³ /h @ 3500 rpm
Net weight		45,2 kg
Oil charge		2,66 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		7,26 kg
Approved refrigerants		R22

Dimensions

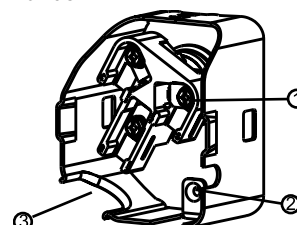


D=184 mm
H=545 mm
H1=369 mm
H2=519 mm
H3=- mm

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	1.125 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.110 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.100 Ω
Rated Load Amps (RLA)	19.2 A
Maximum Continuous Current (MCC)	25 A
Locked Rotor Amps (LRA)	140 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.

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, discharge side

Code no.

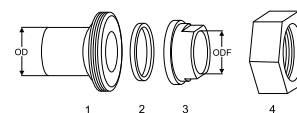
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Solder sleeve adapter set



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

Oil / lubricants

Code no.

Crankcase heaters

Code no.

Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040

Miscellaneous accessories

Code no.

Acoustic hood	120Z5045
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	9 187	11 678	14 721	18 274	22 296	26 745	31 580	36 759	-
35	8 427	10 849	13 826	17 318	21 283	25 681	30 469	35 606	-
40	7 748	10 060	12 932	16 323	20 192	24 498	29 199	34 253	-
45	-	9 345	12 073	15 323	19 055	23 229	27 802	32 734	-
50	-	-	11 278	14 349	17 905	21 907	26 312	31 081	-
55	-	-	-	13 431	16 773	20 563	24 761	29 326	-
60	-	-	-	-	15 688	19 227	23 178	27 500	-
65	-	-	-	-	-	17 929	21 593	25 631	-

Power input in W

30	4 984	5 153	5 256	5 304	5 312	5 291	5 254	5 215	-
35	5 606	5 710	5 783	5 836	5 882	5 934	6 005	6 107	-
40	6 419	6 412	6 407	6 417	6 455	6 533	6 664	6 861	-
45	-	7 339	7 209	7 129	7 111	7 168	7 312	7 556	-
50	-	-	8 270	8 052	7 931	7 919	8 029	8 273	-
55	-	-	-	9 266	8 995	8 868	8 896	9 094	-
60	-	-	-	-	10 384	10 094	9 994	10 097	-
65	-	-	-	-	-	11 677	11 402	11 364	-

Current consumption in A

30	14.99	15.02	15.08	15.17	15.29	15.42	15.58	15.75	-
35	15.61	15.65	15.71	15.79	15.88	15.98	16.09	16.20	-
40	16.27	16.35	16.43	16.52	16.60	16.69	16.77	16.83	-
45	-	17.08	17.20	17.32	17.42	17.51	17.59	17.64	-
50	-	-	18.00	18.17	18.32	18.44	18.52	18.58	-
55	-	-	-	19.05	19.26	19.43	19.55	19.63	-
60	-	-	-	-	20.22	20.46	20.65	20.77	-
65	-	-	-	-	-	21.52	21.78	21.98	-

Mass flow in kg/h

30	201	251	312	383	462	548	640	737	-
35	191	243	305	377	458	546	640	740	-
40	183	235	298	370	452	542	638	739	-
45	-	228	290	363	445	536	633	736	-
50	-	-	284	356	438	528	626	730	-
55	-	-	-	350	431	521	618	721	-
60	-	-	-	-	425	513	609	712	-
65	-	-	-	-	-	506	601	703	-

Coefficient of performance (C.O.P.)

30	1.84	2.27	2.80	3.45	4.20	5.05	6.01	7.05	-
35	1.50	1.90	2.39	2.97	3.62	4.33	5.07	5.83	-
40	1.21	1.57	2.02	2.54	3.13	3.75	4.38	4.99	-
45	-	1.27	1.67	2.15	2.68	3.24	3.80	4.33	-
50	-	-	1.36	1.78	2.26	2.77	3.28	3.76	-
55	-	-	-	1.45	1.86	2.32	2.78	3.22	-
60	-	-	-	-	1.51	1.90	2.32	2.72	-
65	-	-	-	-	-	1.54	1.89	2.26	-

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

Cooling capacity	26 312	W
Power input	8 029	W
Current consumption	18.52	A
Mass flow	626	kg/h
C.O.P.	3.28	

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 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	9 757	12 393	15 609	19 362	23 606	28 297	33 390	38 840	-
35	8 982	11 553	14 711	18 411	22 609	27 259	32 318	37 740	-
40	8 292	10 756	13 813	17 419	21 529	26 098	31 081	36 434	-
45	-	10 036	12 952	16 422	20 403	24 848	29 714	34 956	-
50	-	-	12 160	15 454	19 264	23 545	28 253	33 342	-
55	-	-	-	14 550	18 148	22 223	26 731	31 627	-
60	-	-	-	-	17 089	20 916	25 183	29 844	-
65	-	-	-	-	-	19 661	23 645	28 029	-

Power input in W

30	4 984	5 153	5 256	5 304	5 312	5 291	5 254	5 215	-
35	5 606	5 710	5 783	5 836	5 882	5 934	6 005	6 107	-
40	6 419	6 412	6 407	6 417	6 455	6 533	6 664	6 861	-
45	-	7 339	7 209	7 129	7 111	7 168	7 312	7 556	-
50	-	-	8 270	8 052	7 931	7 919	8 029	8 273	-
55	-	-	-	9 266	8 995	8 868	8 896	9 094	-
60	-	-	-	-	10 384	10 094	9 994	10 097	-
65	-	-	-	-	-	11 677	11 402	11 364	-

Current consumption in A

30	14.99	15.02	15.08	15.17	15.29	15.42	15.58	15.75	-
35	15.61	15.65	15.71	15.79	15.88	15.98	16.09	16.20	-
40	16.27	16.35	16.43	16.52	16.60	16.69	16.77	16.83	-
45	-	17.08	17.20	17.32	17.42	17.51	17.59	17.64	-
50	-	-	18.00	18.17	18.32	18.44	18.52	18.58	-
55	-	-	-	19.05	19.26	19.43	19.55	19.63	-
60	-	-	-	-	20.22	20.46	20.65	20.77	-
65	-	-	-	-	-	21.52	21.78	21.98	-

Mass flow in kg/h

30	200	250	311	381	459	545	636	732	-
35	190	242	304	375	455	543	637	736	-
40	182	234	296	369	450	539	634	735	-
45	-	226	289	361	443	533	629	732	-
50	-	-	282	354	436	525	622	725	-
55	-	-	-	348	429	518	614	717	-
60	-	-	-	-	423	510	606	708	-
65	-	-	-	-	-	504	598	699	-

Coefficient of performance (C.O.P.)

30	1.96	2.40	2.97	3.65	4.44	5.35	6.35	7.45	-
35	1.60	2.02	2.54	3.15	3.84	4.59	5.38	6.18	-
40	1.29	1.68	2.16	2.71	3.34	3.99	4.66	5.31	-
45	-	1.37	1.80	2.30	2.87	3.47	4.06	4.63	-
50	-	-	1.47	1.92	2.43	2.97	3.52	4.03	-
55	-	-	-	1.57	2.02	2.51	3.00	3.48	-
60	-	-	-	-	1.65	2.07	2.52	2.96	-
65	-	-	-	-	-	1.68	2.07	2.47	-

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

Cooling capacity	29 036	W
Power input	8 851	W
Current consumption	19.46	A
Mass flow	660	kg/h
C.O.P.	3.28	

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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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	12 409	14 482	17 542	21 524	26 366	32 000	38 363	45 388	-
35	11 656	13 708	16 688	20 533	25 177	30 555	36 603	43 256	-
40	10 691	12 773	15 724	19 480	23 977	29 150	34 935	41 265	-
45	-	11 605	14 576	18 293	22 692	27 710	33 281	39 340	-
50	-	-	13 172	16 898	21 249	26 160	31 566	37 404	-
55	-	-	-	15 227	19 575	24 426	29 716	35 380	-
60	-	-	-	-	17 601	22 438	27 657	33 194	-
65	-	-	-	-	-	20 126	25 318	30 771	-

Power input in W

30	6 756	6 823	6 856	6 848	6 794	6 688	6 523	6 294	-
35	7 467	7 499	7 514	7 506	7 470	7 399	7 287	7 128	-
40	8 237	8 217	8 198	8 175	8 140	8 088	8 013	7 909	-
45	-	9 015	8 946	8 890	8 841	8 793	8 739	8 673	-
50	-	-	9 795	9 691	9 612	9 551	9 502	9 459	-
55	-	-	-	10 614	10 489	10 399	10 339	10 303	-
60	-	-	-	-	11 509	11 375	11 289	11 243	-
65	-	-	-	-	-	12 516	12 387	12 317	-

Current consumption in A

30	12.22	12.46	12.62	12.71	12.75	12.75	12.71	12.65	-
35	13.18	13.35	13.46	13.52	13.54	13.54	13.52	13.49	-
40	14.50	14.59	14.64	14.66	14.66	14.65	14.65	14.65	-
45	-	16.19	16.18	16.16	16.13	16.11	16.11	16.14	-
50	-	-	18.09	18.02	17.96	17.92	17.92	17.97	-
55	-	-	-	20.26	20.16	20.10	20.10	20.16	-
60	-	-	-	-	22.75	22.66	22.65	22.72	-
65	-	-	-	-	-	25.62	25.59	25.66	-

Mass flow in kg/h

30	270	312	373	452	546	655	777	911	-
35	263	307	369	448	542	649	769	899	-
40	251	298	362	442	537	644	763	891	-
45	-	283	351	433	530	638	757	885	-
50	-	-	332	419	519	630	751	879	-
55	-	-	-	398	503	617	741	872	-
60	-	-	-	-	478	598	726	861	-
65	-	-	-	-	-	571	705	844	-

Coefficient of performance (C.O.P.)

30	1.84	2.12	2.56	3.14	3.88	4.78	5.88	7.21	-
35	1.56	1.83	2.22	2.74	3.37	4.13	5.02	6.07	-
40	1.30	1.55	1.92	2.38	2.95	3.60	4.36	5.22	-
45	-	1.29	1.63	2.06	2.57	3.15	3.81	4.54	-
50	-	-	1.34	1.74	2.21	2.74	3.32	3.95	-
55	-	-	-	1.43	1.87	2.35	2.87	3.43	-
60	-	-	-	-	1.53	1.97	2.45	2.95	-
65	-	-	-	-	-	1.61	2.04	2.50	-

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

Cooling capacity	31 566	W
Power input	9 502	W
Current consumption	17.92	A
Mass flow	751	kg/h
C.O.P.	3.32	

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	77	dB(A)
With acoustic hood	72	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	13 179	15 368	18 600	22 807	27 916	33 858	40 562	47 958	-
35	12 423	14 598	17 757	21 829	26 745	32 433	38 825	45 848	-
40	11 442	13 656	16 795	20 788	25 565	31 055	37 187	43 892	-
45	-	12 463	15 637	19 605	24 297	29 642	35 570	42 011	-
50	-	-	14 203	18 200	22 861	28 116	33 894	40 125	-
55	-	-	-	16 495	21 180	26 398	32 081	38 156	-
60	-	-	-	-	19 172	24 409	30 050	36 024	-
65	-	-	-	-	-	22 070	27 724	33 651	-

Power input in W

30	6 756	6 823	6 856	6 848	6 794	6 688	6 523	6 294	-
35	7 467	7 499	7 514	7 506	7 470	7 399	7 287	7 128	-
40	8 237	8 217	8 198	8 175	8 140	8 088	8 013	7 909	-
45	-	9 015	8 946	8 890	8 841	8 793	8 739	8 673	-
50	-	-	9 795	9 691	9 612	9 551	9 502	9 459	-
55	-	-	-	10 614	10 489	10 399	10 339	10 303	-
60	-	-	-	-	11 509	11 375	11 289	11 243	-
65	-	-	-	-	-	12 516	12 387	12 317	-

Current consumption in A

30	12.22	12.46	12.62	12.71	12.75	12.75	12.71	12.65	-
35	13.18	13.35	13.46	13.52	13.54	13.54	13.52	13.49	-
40	14.50	14.59	14.64	14.66	14.66	14.65	14.65	14.65	-
45	-	16.19	16.18	16.16	16.13	16.11	16.11	16.14	-
50	-	-	18.09	18.02	17.96	17.92	17.92	17.97	-
55	-	-	-	20.26	20.16	20.10	20.10	20.16	-
60	-	-	-	-	22.75	22.66	22.65	22.72	-
65	-	-	-	-	-	25.62	25.59	25.66	-

Mass flow in kg/h

30	268	310	371	449	543	652	773	905	-
35	262	305	367	445	539	646	765	894	-
40	250	296	360	440	534	641	759	886	-
45	-	281	349	431	527	635	753	880	-
50	-	-	331	417	516	627	747	874	-
55	-	-	-	396	500	614	737	867	-
60	-	-	-	-	476	595	722	856	-
65	-	-	-	-	-	568	701	839	-

Coefficient of performance (C.O.P.)

30	1.95	2.25	2.71	3.33	4.11	5.06	6.22	7.62	-
35	1.66	1.95	2.36	2.91	3.58	4.38	5.33	6.43	-
40	1.39	1.66	2.05	2.54	3.14	3.84	4.64	5.55	-
45	-	1.38	1.75	2.21	2.75	3.37	4.07	4.84	-
50	-	-	1.45	1.88	2.38	2.94	3.57	4.24	-
55	-	-	-	1.55	2.02	2.54	3.10	3.70	-
60	-	-	-	-	1.67	2.15	2.66	3.20	-
65	-	-	-	-	-	1.76	2.24	2.73	-

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

Cooling capacity	34 943	W
Power input	10 216	W
Current consumption	19.83	A
Mass flow	794	kg/h
C.O.P.	3.42	

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	77	dB(A)
With acoustic hood	72	dB(A)

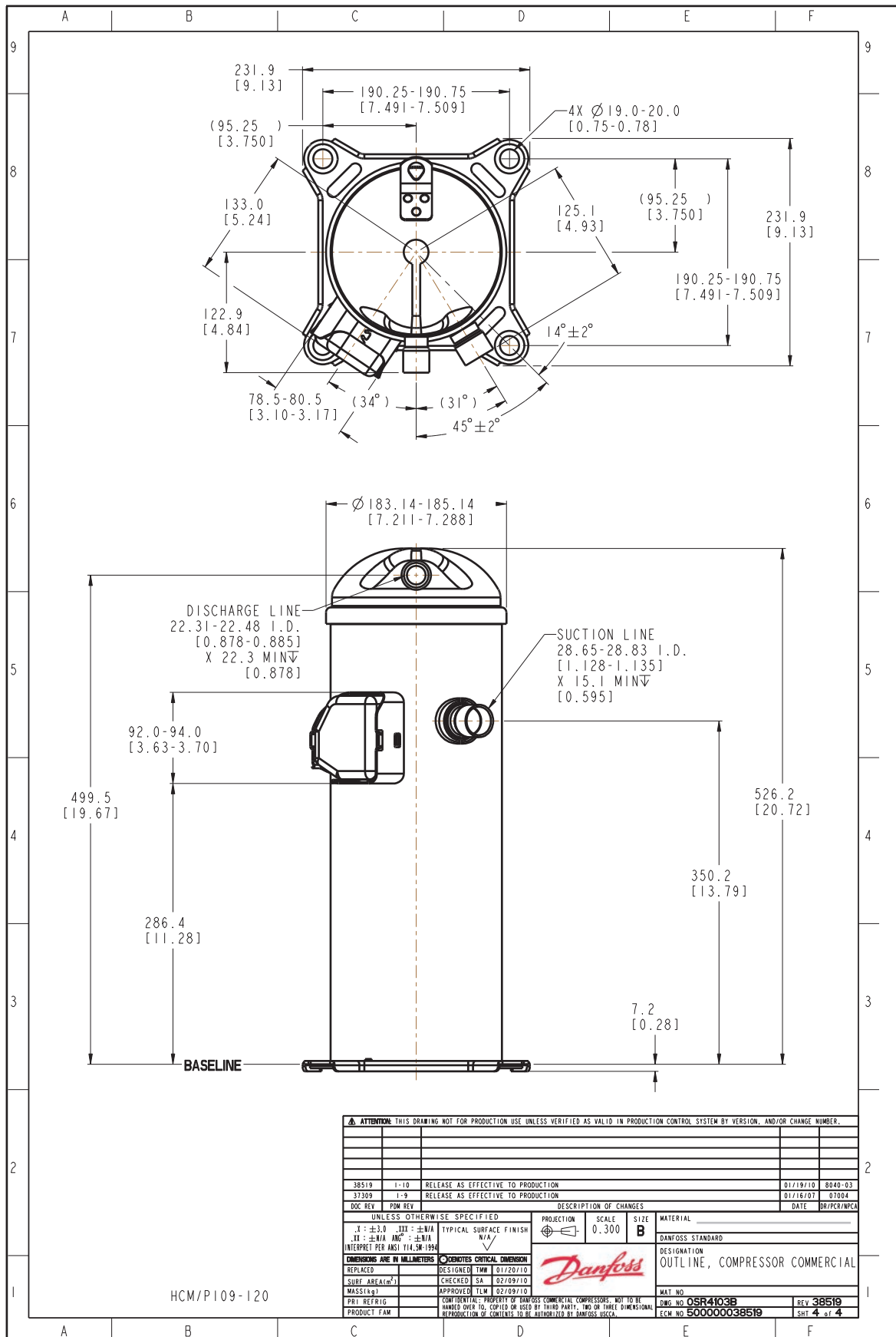
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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38519	1-10	RELEASE AS EFFECTIVE TO PRODUCTION	01/19/10 8040-03
37309	1-9	RELEASE AS EFFECTIVE TO PRODUCTION	01/16/07 07004
DOC REV	POW REV	DESCRIPTION OF CHANGES	DATE DR/PCR/NRCA
UNLESS OTHERWISE SPECIFIED		PROJECTION	SCALE
∅ : ± 0.0	∅ : ± 0.0	1st ANGLE	0.300
TYPICAL SURFACE FINISH		SIZE	MATERIAL
∅ : ± 0.0		B	DANFOSS STANDARD
∅ : ± 0.0		DESIGNATION	
∅ : ± 0.0		OUTLINE, COMPRESSOR COMMERCIAL	
DIMENSIONS ARE IN MILLIMETERS		MAT NO	
∅ : ± 0.0		OSR4103B	
∅ : ± 0.0		REV 38519	
∅ : ± 0.0		ECM NO 500000038519	
∅ : ± 0.0		SHT 4 of 4	

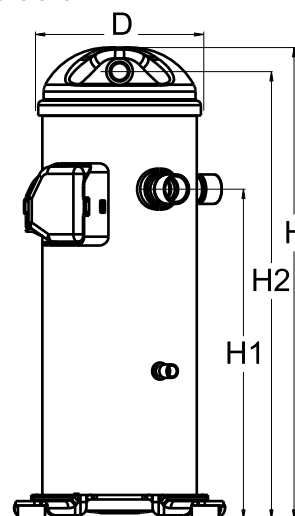
HCM/PI09-120

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General Characteristics

Model number (on compressor nameplate)		HCM120T4LC8
Code number for Singlepack*		120U2207
Code number for Industrial pack**		120U2204
Drawing number		0SR4103B-2
Suction and discharge connections		Brazed
Suction connection		1-1/8" ODF
Discharge connection		7/8" ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		162,4 cm ³ /rev
Displacement @ Nominal speed		28.3 m ³ /h @ 2900 rpm - 34.1 m ³ /h @ 3500 rpm
Net weight		45,2 kg
Oil charge		2,66 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		7,26 kg
Approved refrigerants		R22

Dimensions

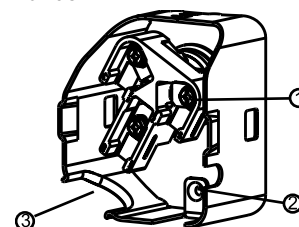


D=184 mm
H=545 mm
H1=369 mm
H2=519 mm
H3=- mm

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	1.125 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.110 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.100 Ω
Rated Load Amps (RLA)	19.2 A
Maximum Continuous Current (MCC)	25 A
Locked Rotor Amps (LRA)	140 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.

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, discharge side

Code no.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
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, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040

Miscellaneous accessories

Code no.

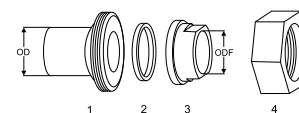
Acoustic hood	120Z5045
Discharge thermostat kit	7750009

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

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	9 187	11 678	14 721	18 274	22 296	26 745	31 580	36 759	-
35	8 427	10 849	13 826	17 318	21 283	25 681	30 469	35 606	-
40	7 748	10 060	12 932	16 323	20 192	24 498	29 199	34 253	-
45	-	9 345	12 073	15 323	19 055	23 229	27 802	32 734	-
50	-	-	11 278	14 349	17 905	21 907	26 312	31 081	-
55	-	-	-	13 431	16 773	20 563	24 761	29 326	-
60	-	-	-	-	15 688	19 227	23 178	27 500	-
65	-	-	-	-	-	17 929	21 593	25 631	-

Power input in W

30	4 984	5 153	5 256	5 304	5 312	5 291	5 254	5 215	-
35	5 606	5 710	5 783	5 836	5 882	5 934	6 005	6 107	-
40	6 419	6 412	6 407	6 417	6 455	6 533	6 664	6 861	-
45	-	7 339	7 209	7 129	7 111	7 168	7 312	7 556	-
50	-	-	8 270	8 052	7 931	7 919	8 029	8 273	-
55	-	-	-	9 266	8 995	8 868	8 896	9 094	-
60	-	-	-	-	10 384	10 094	9 994	10 097	-
65	-	-	-	-	-	11 677	11 402	11 364	-

Current consumption in A

30	14.99	15.02	15.08	15.17	15.29	15.42	15.58	15.75	-
35	15.61	15.65	15.71	15.79	15.88	15.98	16.09	16.20	-
40	16.27	16.35	16.43	16.52	16.60	16.69	16.77	16.83	-
45	-	17.08	17.20	17.32	17.42	17.51	17.59	17.64	-
50	-	-	18.00	18.17	18.32	18.44	18.52	18.58	-
55	-	-	-	19.05	19.26	19.43	19.55	19.63	-
60	-	-	-	-	20.22	20.46	20.65	20.77	-
65	-	-	-	-	-	21.52	21.78	21.98	-

Mass flow in kg/h

30	201	251	312	383	462	548	640	737	-
35	191	243	305	377	458	546	640	740	-
40	183	235	298	370	452	542	638	739	-
45	-	228	290	363	445	536	633	736	-
50	-	-	284	356	438	528	626	730	-
55	-	-	-	350	431	521	618	721	-
60	-	-	-	-	425	513	609	712	-
65	-	-	-	-	-	506	601	703	-

Coefficient of performance (C.O.P.)

30	1.84	2.27	2.80	3.45	4.20	5.05	6.01	7.05	-
35	1.50	1.90	2.39	2.97	3.62	4.33	5.07	5.83	-
40	1.21	1.57	2.02	2.54	3.13	3.75	4.38	4.99	-
45	-	1.27	1.67	2.15	2.68	3.24	3.80	4.33	-
50	-	-	1.36	1.78	2.26	2.77	3.28	3.76	-
55	-	-	-	1.45	1.86	2.32	2.78	3.22	-
60	-	-	-	-	1.51	1.90	2.32	2.72	-
65	-	-	-	-	-	1.54	1.89	2.26	-

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

Cooling capacity	26 312	W
Power input	8 029	W
Current consumption	18.52	A
Mass flow	626	kg/h
C.O.P.	3.28	

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 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	9 757	12 393	15 609	19 362	23 606	28 297	33 390	38 840	-
35	8 982	11 553	14 711	18 411	22 609	27 259	32 318	37 740	-
40	8 292	10 756	13 813	17 419	21 529	26 098	31 081	36 434	-
45	-	10 036	12 952	16 422	20 403	24 848	29 714	34 956	-
50	-	-	12 160	15 454	19 264	23 545	28 253	33 342	-
55	-	-	-	14 550	18 148	22 223	26 731	31 627	-
60	-	-	-	-	17 089	20 916	25 183	29 844	-
65	-	-	-	-	-	19 661	23 645	28 029	-

Power input in W

30	4 984	5 153	5 256	5 304	5 312	5 291	5 254	5 215	-
35	5 606	5 710	5 783	5 836	5 882	5 934	6 005	6 107	-
40	6 419	6 412	6 407	6 417	6 455	6 533	6 664	6 861	-
45	-	7 339	7 209	7 129	7 111	7 168	7 312	7 556	-
50	-	-	8 270	8 052	7 931	7 919	8 029	8 273	-
55	-	-	-	9 266	8 995	8 868	8 896	9 094	-
60	-	-	-	-	10 384	10 094	9 994	10 097	-
65	-	-	-	-	-	11 677	11 402	11 364	-

Current consumption in A

30	14.99	15.02	15.08	15.17	15.29	15.42	15.58	15.75	-
35	15.61	15.65	15.71	15.79	15.88	15.98	16.09	16.20	-
40	16.27	16.35	16.43	16.52	16.60	16.69	16.77	16.83	-
45	-	17.08	17.20	17.32	17.42	17.51	17.59	17.64	-
50	-	-	18.00	18.17	18.32	18.44	18.52	18.58	-
55	-	-	-	19.05	19.26	19.43	19.55	19.63	-
60	-	-	-	-	20.22	20.46	20.65	20.77	-
65	-	-	-	-	-	21.52	21.78	21.98	-

Mass flow in kg/h

30	200	250	311	381	459	545	636	732	-
35	190	242	304	375	455	543	637	736	-
40	182	234	296	369	450	539	634	735	-
45	-	226	289	361	443	533	629	732	-
50	-	-	282	354	436	525	622	725	-
55	-	-	-	348	429	518	614	717	-
60	-	-	-	-	423	510	606	708	-
65	-	-	-	-	-	504	598	699	-

Coefficient of performance (C.O.P.)

30	1.96	2.40	2.97	3.65	4.44	5.35	6.35	7.45	-
35	1.60	2.02	2.54	3.15	3.84	4.59	5.38	6.18	-
40	1.29	1.68	2.16	2.71	3.34	3.99	4.66	5.31	-
45	-	1.37	1.80	2.30	2.87	3.47	4.06	4.63	-
50	-	-	1.47	1.92	2.43	2.97	3.52	4.03	-
55	-	-	-	1.57	2.02	2.51	3.00	3.48	-
60	-	-	-	-	1.65	2.07	2.52	2.96	-
65	-	-	-	-	-	1.68	2.07	2.47	-

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

Cooling capacity	29 036	W
Power input	8 851	W
Current consumption	19.46	A
Mass flow	660	kg/h
C.O.P.	3.28	

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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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	12 409	14 482	17 542	21 524	26 366	32 000	38 363	45 388	-
35	11 656	13 708	16 688	20 533	25 177	30 555	36 603	43 256	-
40	10 691	12 773	15 724	19 480	23 977	29 150	34 935	41 265	-
45	-	11 605	14 576	18 293	22 692	27 710	33 281	39 340	-
50	-	-	13 172	16 898	21 249	26 160	31 566	37 404	-
55	-	-	-	15 227	19 575	24 426	29 716	35 380	-
60	-	-	-	-	17 601	22 438	27 657	33 194	-
65	-	-	-	-	-	20 126	25 318	30 771	-

Power input in W

30	6 756	6 823	6 856	6 848	6 794	6 688	6 523	6 294	-
35	7 467	7 499	7 514	7 506	7 470	7 399	7 287	7 128	-
40	8 237	8 217	8 198	8 175	8 140	8 088	8 013	7 909	-
45	-	9 015	8 946	8 890	8 841	8 793	8 739	8 673	-
50	-	-	9 795	9 691	9 612	9 551	9 502	9 459	-
55	-	-	-	10 614	10 489	10 399	10 339	10 303	-
60	-	-	-	-	11 509	11 375	11 289	11 243	-
65	-	-	-	-	-	12 516	12 387	12 317	-

Current consumption in A

30	12.22	12.46	12.62	12.71	12.75	12.75	12.71	12.65	-
35	13.18	13.35	13.46	13.52	13.54	13.54	13.52	13.49	-
40	14.50	14.59	14.64	14.66	14.66	14.65	14.65	14.65	-
45	-	16.19	16.18	16.16	16.13	16.11	16.11	16.14	-
50	-	-	18.09	18.02	17.96	17.92	17.92	17.97	-
55	-	-	-	20.26	20.16	20.10	20.10	20.16	-
60	-	-	-	-	22.75	22.66	22.65	22.72	-
65	-	-	-	-	-	25.62	25.59	25.66	-

Mass flow in kg/h

30	270	312	373	452	546	655	777	911	-
35	263	307	369	448	542	649	769	899	-
40	251	298	362	442	537	644	763	891	-
45	-	283	351	433	530	638	757	885	-
50	-	-	332	419	519	630	751	879	-
55	-	-	-	398	503	617	741	872	-
60	-	-	-	-	478	598	726	861	-
65	-	-	-	-	-	571	705	844	-

Coefficient of performance (C.O.P.)

30	1.84	2.12	2.56	3.14	3.88	4.78	5.88	7.21	-
35	1.56	1.83	2.22	2.74	3.37	4.13	5.02	6.07	-
40	1.30	1.55	1.92	2.38	2.95	3.60	4.36	5.22	-
45	-	1.29	1.63	2.06	2.57	3.15	3.81	4.54	-
50	-	-	1.34	1.74	2.21	2.74	3.32	3.95	-
55	-	-	-	1.43	1.87	2.35	2.87	3.43	-
60	-	-	-	-	1.53	1.97	2.45	2.95	-
65	-	-	-	-	-	1.61	2.04	2.50	-

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

Cooling capacity	31 566	W
Power input	9 502	W
Current consumption	17.92	A
Mass flow	751	kg/h
C.O.P.	3.32	

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	77	dB(A)
With acoustic hood	72	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	13 179	15 368	18 600	22 807	27 916	33 858	40 562	47 958	-
35	12 423	14 598	17 757	21 829	26 745	32 433	38 825	45 848	-
40	11 442	13 656	16 795	20 788	25 565	31 055	37 187	43 892	-
45	-	12 463	15 637	19 605	24 297	29 642	35 570	42 011	-
50	-	-	14 203	18 200	22 861	28 116	33 894	40 125	-
55	-	-	-	16 495	21 180	26 398	32 081	38 156	-
60	-	-	-	-	19 172	24 409	30 050	36 024	-
65	-	-	-	-	-	22 070	27 724	33 651	-

Power input in W

30	6 756	6 823	6 856	6 848	6 794	6 688	6 523	6 294	-
35	7 467	7 499	7 514	7 506	7 470	7 399	7 287	7 128	-
40	8 237	8 217	8 198	8 175	8 140	8 088	8 013	7 909	-
45	-	9 015	8 946	8 890	8 841	8 793	8 739	8 673	-
50	-	-	9 795	9 691	9 612	9 551	9 502	9 459	-
55	-	-	-	10 614	10 489	10 399	10 339	10 303	-
60	-	-	-	-	11 509	11 375	11 289	11 243	-
65	-	-	-	-	-	12 516	12 387	12 317	-

Current consumption in A

30	12.22	12.46	12.62	12.71	12.75	12.75	12.71	12.65	-
35	13.18	13.35	13.46	13.52	13.54	13.54	13.52	13.49	-
40	14.50	14.59	14.64	14.66	14.66	14.65	14.65	14.65	-
45	-	16.19	16.18	16.16	16.13	16.11	16.11	16.14	-
50	-	-	18.09	18.02	17.96	17.92	17.92	17.97	-
55	-	-	-	20.26	20.16	20.10	20.10	20.16	-
60	-	-	-	-	22.75	22.66	22.65	22.72	-
65	-	-	-	-	-	25.62	25.59	25.66	-

Mass flow in kg/h

30	268	310	371	449	543	652	773	905	-
35	262	305	367	445	539	646	765	894	-
40	250	296	360	440	534	641	759	886	-
45	-	281	349	431	527	635	753	880	-
50	-	-	331	417	516	627	747	874	-
55	-	-	-	396	500	614	737	867	-
60	-	-	-	-	476	595	722	856	-
65	-	-	-	-	-	568	701	839	-

Coefficient of performance (C.O.P.)

30	1.95	2.25	2.71	3.33	4.11	5.06	6.22	7.62	-
35	1.66	1.95	2.36	2.91	3.58	4.38	5.33	6.43	-
40	1.39	1.66	2.05	2.54	3.14	3.84	4.64	5.55	-
45	-	1.38	1.75	2.21	2.75	3.37	4.07	4.84	-
50	-	-	1.45	1.88	2.38	2.94	3.57	4.24	-
55	-	-	-	1.55	2.02	2.54	3.10	3.70	-
60	-	-	-	-	1.67	2.15	2.66	3.20	-
65	-	-	-	-	-	1.76	2.24	2.73	-

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

Cooling capacity	34 943	W
Power input	10 216	W
Current consumption	19.83	A
Mass flow	794	kg/h
C.O.P.	3.42	

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	77	dB(A)
With acoustic hood	72	dB(A)

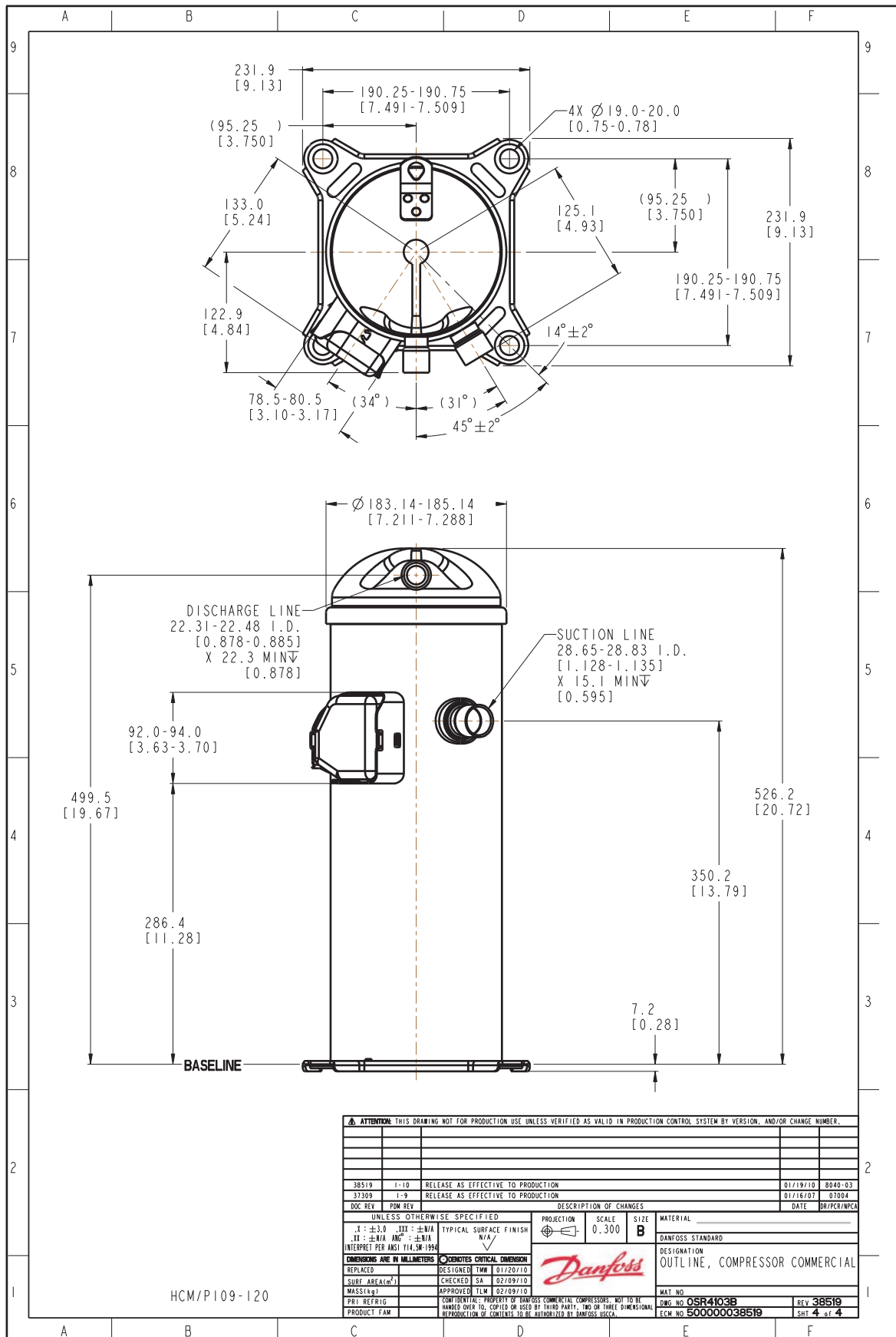
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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