

Datasheets

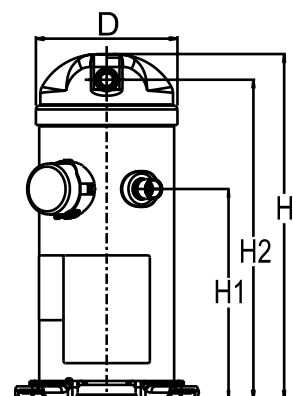
Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HRP040T5LP6
Code number for Singlepack*		120U1929
Code number for Industrial pack**		120U1926
Drawing number		0XC6301B-2
Suction and discharge connections		Brazed
Suction connection		3/4 " 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	54.4 cm3/rev	
Displacement @ Nominal speed	9.5 m3/h @ 2900 rpm	
Net weight	30.84 kg	
Oil charge	1.06 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	3.63 kg	
Approved refrigerants	R407C	

Dimensions

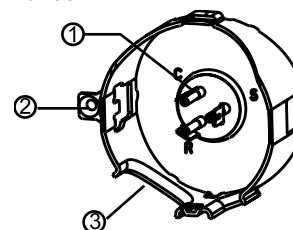


D=164.5 mm
H=413 mm
H1=250 mm
H2=379 mm
H3=- mm

Electrical Characteristics

Nominal voltage	230V/1/50Hz
Voltage range	207-253 V
Winding resistance (main / start) at 25°C	0.689 Ω / 1.509 Ω
Run capacitors A + C	70 μF + - μF
Start capacitor B	145-175 μF
Start relay	3ARR3*3AL*
Rated Load Amps (RLA)	16 A
Maximum Continuous Current (MCC)	25 A
Locked Rotor Amps (LRA)	97 A
Motor protection	Internal overload protector

Terminal box



IP22
1: Spade connectors 1/4"
2: Earth connection
3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	0 Nm / 0 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

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.

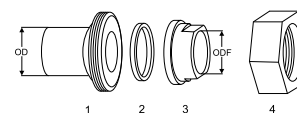
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008
Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029
Gasket, 1-1/4"	8156131

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, 3/4" ODF), (1" Rotolock, 1/2" ODF)	120Z0126
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, 40 W, 230 V, CE mark, UL	120Z0055
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Miscellaneous accessories

Code no.

Acoustic hood	120Z5043
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0056

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031
No translation for 120Z5015	120Z5015

Performance data at 50 Hz, EN 12900 rating conditions
R407C

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

Cooling capacity in W

30	-	2 726	3 603	4 619	5 805	7 193	8 814	10 699	12 879
35	-	2 522	3 368	4 344	5 482	6 813	8 368	10 178	12 274
40	-	2 318	3 127	4 058	5 143	6 412	7 896	9 626	11 633
45	-	-	2 878	3 760	4 786	5 988	7 396	9 040	10 953
50	-	-	-	3 447	4 410	5 539	6 866	8 420	10 233
55	-	-	-	-	4 013	5 065	6 305	7 763	9 471
60	-	-	-	-	-	4 563	5 711	7 068	8 664
65	-	-	-	-	-	-	5 084	6 333	7 812

Power input in W

30	-	1 905	1 867	1 843	1 826	1 807	1 779	1 734	1 664
35	-	2 136	2 095	2 071	2 055	2 040	2 017	1 979	1 918
40	-	2 399	2 352	2 323	2 304	2 289	2 268	2 233	2 178
45	-	-	2 652	2 615	2 590	2 571	2 548	2 514	2 461
50	-	-	-	2 963	2 929	2 902	2 873	2 836	2 782
55	-	-	-	-	3 335	3 297	3 260	3 216	3 157
60	-	-	-	-	-	3 774	3 724	3 669	3 602
65	-	-	-	-	-	-	4 281	4 212	4 133

Current consumption in A

30	-	8.70	8.77	8.77	8.73	8.61	8.43	8.18	7.84
35	-	9.75	9.77	9.77	9.72	9.62	9.48	9.27	9.01
40	-	10.92	10.90	10.86	10.80	10.70	10.58	10.41	10.20
45	-	-	12.22	12.13	12.04	11.93	11.81	11.67	11.50
50	-	-	-	13.65	13.51	13.38	13.25	13.11	12.97
55	-	-	-	-	15.29	15.12	14.96	14.82	14.69
60	-	-	-	-	-	17.22	17.03	16.86	16.72
65	-	-	-	-	-	-	19.51	19.31	19.15

Mass flow in kg/h

30	-	61	79	100	123	150	181	217	257
35	-	60	78	99	122	149	180	216	257
40	-	58	76	97	121	148	179	214	255
45	-	-	74	95	119	146	177	212	253
50	-	-	-	93	116	143	173	209	249
55	-	-	-	-	112	139	170	205	245
60	-	-	-	-	-	134	165	199	239
65	-	-	-	-	-	-	159	193	233

Coefficient of performance (C.O.P.)

30	-	1.43	1.93	2.51	3.18	3.98	4.95	6.17	7.74
35	-	1.18	1.61	2.10	2.67	3.34	4.15	5.14	6.40
40	-	0.97	1.33	1.75	2.23	2.80	3.48	4.31	5.34
45	-	-	1.09	1.44	1.85	2.33	2.90	3.60	4.45
50	-	-	-	1.16	1.51	1.91	2.39	2.97	3.68
55	-	-	-	-	1.20	1.54	1.93	2.41	3.00
60	-	-	-	-	-	1.21	1.53	1.93	2.41
65	-	-	-	-	-	-	1.19	1.50	1.89

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

Cooling capacity	8 420	W
Power input	2 836	W
Current consumption	13.11	A
Mass flow	209	kg/h
C.O.P.	2.97	

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	67	dB(A)
With acoustic hood	62	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	-	2 927	3 864	4 948	6 212	7 689	9 412	11 413	13 726
35	-	2 722	3 630	4 676	5 894	7 316	8 975	10 905	13 137
40	-	2 516	3 389	4 392	5 558	6 921	8 512	10 364	12 511
45	-	-	3 140	4 095	5 205	6 502	8 019	9 789	11 845
50	-	-	-	3 783	4 831	6 058	7 496	9 179	11 139
55	-	-	-	-	4 435	5 586	6 941	8 532	10 391
60	-	-	-	-	-	5 087	6 353	7 846	9 599
65	-	-	-	-	-	-	5 729	7 119	8 761

Power input in W

30	-	1 905	1 867	1 843	1 826	1 807	1 779	1 734	1 664
35	-	2 136	2 095	2 071	2 055	2 040	2 017	1 979	1 918
40	-	2 399	2 352	2 323	2 304	2 289	2 268	2 233	2 178
45	-	-	2 652	2 615	2 590	2 571	2 548	2 514	2 461
50	-	-	-	2 963	2 929	2 902	2 873	2 836	2 782
55	-	-	-	-	3 335	3 297	3 260	3 216	3 157
60	-	-	-	-	-	3 774	3 724	3 669	3 602
65	-	-	-	-	-	-	4 281	4 212	4 133

Current consumption in A

30	-	8.70	8.77	8.77	8.73	8.61	8.43	8.18	7.84
35	-	9.75	9.77	9.77	9.72	9.62	9.48	9.27	9.01
40	-	10.92	10.90	10.86	10.80	10.70	10.58	10.41	10.20
45	-	-	12.22	12.13	12.04	11.93	11.81	11.67	11.50
50	-	-	-	13.65	13.51	13.38	13.25	13.11	12.97
55	-	-	-	-	15.29	15.12	14.96	14.82	14.69
60	-	-	-	-	-	17.22	17.03	16.86	16.72
65	-	-	-	-	-	-	19.51	19.31	19.15

Mass flow in kg/h

30	-	61	79	99	123	150	180	216	256
35	-	59	77	98	122	148	179	215	255
40	-	58	76	96	120	147	178	213	254
45	-	-	74	95	118	145	176	211	251
50	-	-	-	92	115	142	173	208	248
55	-	-	-	-	112	138	169	204	244
60	-	-	-	-	-	134	164	198	238
65	-	-	-	-	-	-	158	192	231

Coefficient of performance (C.O.P.)

30	-	1.54	2.07	2.68	3.40	4.25	5.29	6.58	8.25
35	-	1.27	1.73	2.26	2.87	3.59	4.45	5.51	6.85
40	-	1.05	1.44	1.89	2.41	3.02	3.75	4.64	5.74
45	-	-	1.18	1.57	2.01	2.53	3.15	3.89	4.81
50	-	-	-	1.28	1.65	2.09	2.61	3.24	4.00
55	-	-	-	-	1.33	1.69	2.13	2.65	3.29
60	-	-	-	-	-	1.35	1.71	2.14	2.66
65	-	-	-	-	-	-	1.34	1.69	2.12

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

Cooling capacity	9 400	W
Power input	3 143	W
Current consumption	14.54	A
Mass flow	221	kg/h
C.O.P.	2.99	

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	67	dB(A)
With acoustic hood	62	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	-	2 726	3 603	4 619	5 805	7 193	8 814	10 699	12 879
35	-	2 522	3 368	4 344	5 482	6 813	8 368	10 178	12 274
40	-	2 318	3 127	4 058	5 143	6 412	7 896	9 626	11 633
45	-	-	2 878	3 760	4 786	5 988	7 396	9 040	10 953
50	-	-	-	3 447	4 410	5 539	6 866	8 420	10 233
55	-	-	-	-	4 013	5 065	6 305	7 763	9 471
60	-	-	-	-	-	4 563	5 711	7 068	8 664
65	-	-	-	-	-	-	5 084	6 333	7 812

Power input in W

30	-	1 905	1 867	1 843	1 826	1 807	1 779	1 734	1 664
35	-	2 136	2 095	2 071	2 055	2 040	2 017	1 979	1 918
40	-	2 399	2 352	2 323	2 304	2 289	2 268	2 233	2 178
45	-	-	2 652	2 615	2 590	2 571	2 548	2 514	2 461
50	-	-	-	2 963	2 929	2 902	2 873	2 836	2 782
55	-	-	-	-	3 335	3 297	3 260	3 216	3 157
60	-	-	-	-	-	3 774	3 724	3 669	3 602
65	-	-	-	-	-	-	4 281	4 212	4 133

Current consumption in A

30	-	8.70	8.77	8.77	8.73	8.61	8.43	8.18	7.84
35	-	9.75	9.77	9.77	9.72	9.62	9.48	9.27	9.01
40	-	10.92	10.90	10.86	10.80	10.70	10.58	10.41	10.20
45	-	-	12.22	12.13	12.04	11.93	11.81	11.67	11.50
50	-	-	-	13.65	13.51	13.38	13.25	13.11	12.97
55	-	-	-	-	15.29	15.12	14.96	14.82	14.69
60	-	-	-	-	-	17.22	17.03	16.86	16.72
65	-	-	-	-	-	-	19.51	19.31	19.15

Mass flow in kg/h

30	-	61	79	100	123	150	181	217	257
35	-	60	78	99	122	149	180	216	257
40	-	58	76	97	121	148	179	214	255
45	-	-	74	95	119	146	177	212	253
50	-	-	-	93	116	143	173	209	249
55	-	-	-	-	112	139	170	205	245
60	-	-	-	-	-	134	165	199	239
65	-	-	-	-	-	-	159	193	233

Coefficient of performance (C.O.P.)

30	-	1.43	1.93	2.51	3.18	3.98	4.95	6.17	7.74
35	-	1.18	1.61	2.10	2.67	3.34	4.15	5.14	6.40
40	-	0.97	1.33	1.75	2.23	2.80	3.48	4.31	5.34
45	-	-	1.09	1.44	1.85	2.33	2.90	3.60	4.45
50	-	-	-	1.16	1.51	1.91	2.39	2.97	3.68
55	-	-	-	-	1.20	1.54	1.93	2.41	3.00
60	-	-	-	-	-	1.21	1.53	1.93	2.41
65	-	-	-	-	-	-	1.19	1.50	1.89

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

Cooling capacity	8 420	W
Power input	2 836	W
Current consumption	13.11	A
Mass flow	209	kg/h
C.O.P.	2.97	

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	67	dB(A)
With acoustic hood	62	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	-	2 927	3 864	4 948	6 212	7 689	9 412	11 413	13 726
35	-	2 722	3 630	4 676	5 894	7 316	8 975	10 905	13 137
40	-	2 516	3 389	4 392	5 558	6 921	8 512	10 364	12 511
45	-	-	3 140	4 095	5 205	6 502	8 019	9 789	11 845
50	-	-	-	3 783	4 831	6 058	7 496	9 179	11 139
55	-	-	-	-	4 435	5 586	6 941	8 532	10 391
60	-	-	-	-	-	5 087	6 353	7 846	9 599
65	-	-	-	-	-	-	5 729	7 119	8 761

Power input in W

30	-	1 905	1 867	1 843	1 826	1 807	1 779	1 734	1 664
35	-	2 136	2 095	2 071	2 055	2 040	2 017	1 979	1 918
40	-	2 399	2 352	2 323	2 304	2 289	2 268	2 233	2 178
45	-	-	2 652	2 615	2 590	2 571	2 548	2 514	2 461
50	-	-	-	2 963	2 929	2 902	2 873	2 836	2 782
55	-	-	-	-	3 335	3 297	3 260	3 216	3 157
60	-	-	-	-	-	3 774	3 724	3 669	3 602
65	-	-	-	-	-	-	4 281	4 212	4 133

Current consumption in A

30	-	8.70	8.77	8.77	8.73	8.61	8.43	8.18	7.84
35	-	9.75	9.77	9.77	9.72	9.62	9.48	9.27	9.01
40	-	10.92	10.90	10.86	10.80	10.70	10.58	10.41	10.20
45	-	-	12.22	12.13	12.04	11.93	11.81	11.67	11.50
50	-	-	-	13.65	13.51	13.38	13.25	13.11	12.97
55	-	-	-	-	15.29	15.12	14.96	14.82	14.69
60	-	-	-	-	-	17.22	17.03	16.86	16.72
65	-	-	-	-	-	-	19.51	19.31	19.15

Mass flow in kg/h

30	-	61	79	99	123	150	180	216	256
35	-	59	77	98	122	148	179	215	255
40	-	58	76	96	120	147	178	213	254
45	-	-	74	95	118	145	176	211	251
50	-	-	-	92	115	142	173	208	248
55	-	-	-	-	112	138	169	204	244
60	-	-	-	-	-	134	164	198	238
65	-	-	-	-	-	-	158	192	231

Coefficient of performance (C.O.P.)

30	-	1.54	2.07	2.68	3.40	4.25	5.29	6.58	8.25
35	-	1.27	1.73	2.26	2.87	3.59	4.45	5.51	6.85
40	-	1.05	1.44	1.89	2.41	3.02	3.75	4.64	5.74
45	-	-	1.18	1.57	2.01	2.53	3.15	3.89	4.81
50	-	-	-	1.28	1.65	2.09	2.61	3.24	4.00
55	-	-	-	-	1.33	1.69	2.13	2.65	3.29
60	-	-	-	-	-	1.35	1.71	2.14	2.66
65	-	-	-	-	-	-	1.34	1.69	2.12

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

Cooling capacity	9 400	W
Power input	3 143	W
Current consumption	14.54	A
Mass flow	221	kg/h
C.O.P.	2.99	

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	67	dB(A)
With acoustic hood	62	dB(A)

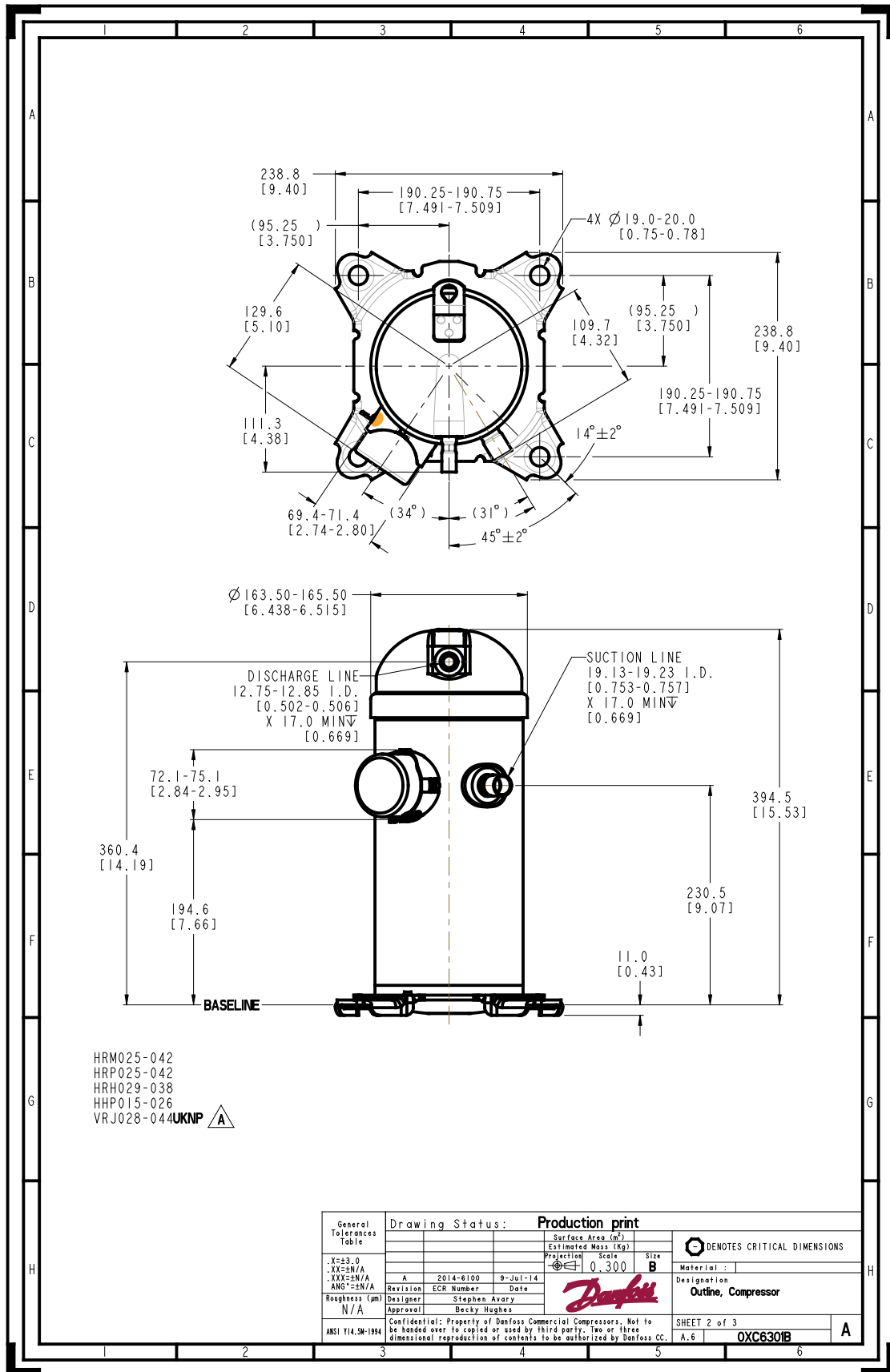
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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