

Datasheets

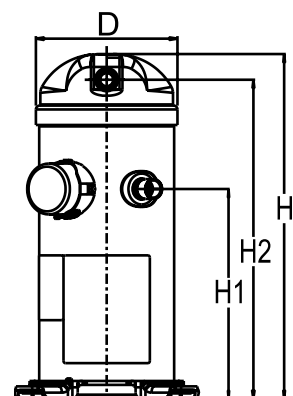
Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HRM032U4LP6
Code number for Singlepack*		120U0996
Code number for Industrial pack**		120U0993
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		43.59 cm ³ /rev
Displacement @ Nominal speed		7.6 m ³ /h @ 2900 rpm - 9.2 m ³ /h @ 3500 rpm
Net weight		30.84 kg
Oil charge		1.06 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		3.63 kg
Approved refrigerants		R22

Dimensions

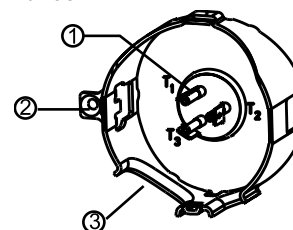


D=164.5 mm
H=413 mm
H1=250 mm
H2=379 mm
H3=- mm

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	4.664 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	3.422 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	4.664 Ω
Rated Load Amps (RLA)	6.1 A
Maximum Continuous Current (MCC)	9.5 A
Locked Rotor Amps (LRA)	45 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.

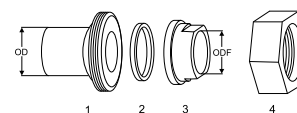
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008
Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029
Gasket, 1-1/4"	8156131

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.

Crankcase heaters

Code no.

Belt type crankcase heater, 40 W, 230 V, CE mark, UL	120Z0055
Belt type crankcase heater, 40 W, 400 V, CE mark, UL	120Z0056

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

R22

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

Cooling capacity in W

30	2 839	3 316	4 017	4 929	6 037	7 328	8 787	10 401	-
35	2 658	3 129	3 811	4 689	5 748	6 976	8 358	9 880	-
40	-	2 904	3 577	4 432	5 455	6 631	7 947	9 388	-
45	-	-	3 300	4 144	5 141	6 277	7 539	8 912	-
50	-	-	-	3 810	4 793	5 900	7 119	8 435	-
55	-	-	-	-	4 395	5 485	6 672	7 942	-
60	-	-	-	-	-	5 018	6 183	7 418	-
65	-	-	-	-	-	-	5 638	6 848	-

Power input in W

30	1 500	1 490	1 485	1 479	1 464	1 433	1 381	1 299	-
35	1 725	1 691	1 672	1 659	1 647	1 628	1 596	1 544	-
40	-	1 937	1 894	1 867	1 849	1 834	1 814	1 783	-
45	-	-	2 163	2 113	2 082	2 061	2 046	2 028	-
50	-	-	-	2 409	2 356	2 323	2 303	2 289	-
55	-	-	-	-	2 682	2 628	2 596	2 579	-
60	-	-	-	-	-	2 988	2 936	2 907	-
65	-	-	-	-	-	-	3 334	3 285	-

Current consumption in A

30	3.97	3.76	3.71	3.75	3.81	3.82	3.70	3.37	-
35	4.44	4.10	3.97	3.96	4.00	4.01	3.93	3.68	-
40	-	4.53	4.30	4.22	4.23	4.24	4.19	4.00	-
45	-	-	4.71	4.55	4.51	4.51	4.47	4.33	-
50	-	-	-	4.96	4.86	4.83	4.80	4.70	-
55	-	-	-	-	5.30	5.23	5.19	5.11	-
60	-	-	-	-	-	5.71	5.65	5.58	-
65	-	-	-	-	-	-	6.20	6.13	-

Mass flow in kg/h

30	62	71	85	103	125	150	178	209	-
35	60	70	84	102	124	148	176	205	-
40	-	68	82	101	122	147	174	203	-
45	-	-	79	98	120	145	172	200	-
50	-	-	-	95	117	142	169	198	-
55	-	-	-	-	113	139	166	196	-
60	-	-	-	-	-	134	162	192	-
65	-	-	-	-	-	-	157	188	-

Coefficient of performance (C.O.P.)

30	1.89	2.23	2.70	3.33	4.12	5.11	6.36	8.00	-
35	1.54	1.85	2.28	2.83	3.49	4.29	5.24	6.40	-
40	-	1.50	1.89	2.37	2.95	3.62	4.38	5.27	-
45	-	-	1.53	1.96	2.47	3.05	3.69	4.40	-
50	-	-	-	1.58	2.03	2.54	3.09	3.68	-
55	-	-	-	-	1.64	2.09	2.57	3.08	-
60	-	-	-	-	-	1.68	2.11	2.55	-
65	-	-	-	-	-	-	1.69	2.08	-

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

Cooling capacity	7 119	W
Power input	2 303	W
Current consumption	4.80	A
Mass flow	169	kg/h
C.O.P.	3.09	

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	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

R22

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

Cooling capacity in W

30	3 015	3 519	4 259	5 222	6 392	7 753	9 291	10 990	-
35	-	3 333	4 055	4 985	6 106	7 405	8 865	10 472	-
40	-	-	3 821	4 730	5 816	7 064	8 459	9 986	-
45	-	-	3 541	4 441	5 504	6 715	8 058	9 517	-
50	-	-	-	4 104	5 156	6 342	7 644	9 049	-
55	-	-	-	-	4 756	5 928	7 203	8 565	-
60	-	-	-	-	-	5 458	6 718	8 050	-
65	-	-	-	-	-	-	6 174	7 489	-

Power input in W

30	1 500	1 490	1 485	1 479	1 464	1 433	1 381	1 299	-
35	-	1 691	1 672	1 659	1 647	1 628	1 596	1 544	-
40	-	-	1 894	1 867	1 849	1 834	1 814	1 783	-
45	-	-	2 163	2 113	2 082	2 061	2 046	2 028	-
50	-	-	-	2 409	2 356	2 323	2 303	2 289	-
55	-	-	-	-	2 682	2 628	2 596	2 579	-
60	-	-	-	-	-	2 988	2 936	2 907	-
65	-	-	-	-	-	-	3 334	3 285	-

Current consumption in A

30	3.97	3.76	3.71	3.75	3.81	3.82	3.70	3.37	-
35	-	4.10	3.97	3.96	4.00	4.01	3.93	3.68	-
40	-	-	4.30	4.22	4.23	4.24	4.19	4.00	-
45	-	-	4.71	4.55	4.51	4.51	4.47	4.33	-
50	-	-	-	4.96	4.86	4.83	4.80	4.70	-
55	-	-	-	-	5.30	5.23	5.19	5.11	-
60	-	-	-	-	-	5.71	5.65	5.58	-
65	-	-	-	-	-	-	6.20	6.13	-

Mass flow in kg/h

30	61	71	85	103	124	149	177	207	-
35	-	70	84	102	123	147	175	204	-
40	-	-	82	100	121	146	173	202	-
45	-	-	79	98	119	144	171	199	-
50	-	-	-	94	116	141	168	197	-
55	-	-	-	-	112	138	165	195	-
60	-	-	-	-	-	133	161	191	-
65	-	-	-	-	-	-	156	187	-

Coefficient of performance (C.O.P.)

30	2.01	2.36	2.87	3.53	4.37	5.41	6.73	8.46	-
35	-	1.97	2.43	3.00	3.71	4.55	5.56	6.78	-
40	-	-	2.02	2.53	3.15	3.85	4.66	5.60	-
45	-	-	1.64	2.10	2.64	3.26	3.94	4.69	-
50	-	-	-	1.70	2.19	2.73	3.32	3.95	-
55	-	-	-	-	1.77	2.26	2.77	3.32	-
60	-	-	-	-	-	1.83	2.29	2.77	-
65	-	-	-	-	-	-	1.85	2.28	-

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

Cooling capacity	7 849	W
Power input	2 550	W
Current consumption	5.11	A
Mass flow	178	kg/h
C.O.P.	3.08	

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	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 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	3 342	3 902	4 727	5 800	7 105	8 624	10 340	12 236	-
35	3 134	3 688	4 490	5 524	6 773	8 220	9 848	11 640	-
40	-	3 428	4 222	5 230	6 437	7 826	9 379	11 080	-
45	-	-	3 903	4 899	6 078	7 422	8 914	10 537	-
50	-	-	-	4 514	5 677	6 989	8 433	9 992	-
55	-	-	-	-	5 216	6 510	7 919	9 427	-
60	-	-	-	-	-	5 966	7 352	8 822	-
65	-	-	-	-	-	-	6 715	8 159	-

Power input in W

30	1 744	1 733	1 727	1 720	1 702	1 667	1 606	1 512	-
35	2 003	1 964	1 942	1 927	1 913	1 891	1 854	1 793	-
40	-	2 246	2 196	2 165	2 144	2 126	2 103	2 068	-
45	-	-	2 503	2 446	2 410	2 387	2 368	2 347	-
50	-	-	-	2 784	2 722	2 684	2 661	2 645	-
55	-	-	-	-	3 094	3 031	2 994	2 974	-
60	-	-	-	-	-	3 440	3 380	3 347	-
65	-	-	-	-	-	-	3 831	3 775	-

Current consumption in A

30	4.27	4.04	3.99	4.03	4.10	4.10	3.97	3.63	-
35	4.77	4.41	4.27	4.26	4.30	4.31	4.23	3.96	-
40	-	4.87	4.62	4.54	4.54	4.56	4.50	4.30	-
45	-	-	5.06	4.89	4.85	4.84	4.81	4.66	-
50	-	-	-	5.33	5.23	5.19	5.16	5.05	-
55	-	-	-	-	5.70	5.62	5.58	5.49	-
60	-	-	-	-	-	6.14	6.08	6.00	-
65	-	-	-	-	-	-	6.67	6.59	-

Mass flow in kg/h

30	73	84	100	122	147	177	210	245	-
35	71	83	99	120	146	175	207	242	-
40	-	80	97	119	144	173	205	239	-
45	-	-	94	116	142	171	203	237	-
50	-	-	-	112	139	168	201	235	-
55	-	-	-	-	134	165	197	232	-
60	-	-	-	-	-	159	193	229	-
65	-	-	-	-	-	-	187	224	-

Coefficient of performance (C.O.P.)

30	1.92	2.25	2.74	3.37	4.17	5.17	6.44	8.09	-
35	1.56	1.88	2.31	2.87	3.54	4.35	5.31	6.49	-
40	-	1.53	1.92	2.42	3.00	3.68	4.46	5.36	-
45	-	-	1.56	2.00	2.52	3.11	3.76	4.49	-
50	-	-	-	1.62	2.09	2.60	3.17	3.78	-
55	-	-	-	-	1.69	2.15	2.65	3.17	-
60	-	-	-	-	-	1.73	2.18	2.64	-
65	-	-	-	-	-	-	1.75	2.16	-

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

Cooling capacity	8 433	W
Power input	2 661	W
Current consumption	5.16	A
Mass flow	201	kg/h
C.O.P.	3.17	

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 60 Hz, ARI 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	3 550	4 141	5 013	6 146	7 523	9 124	10 933	12 929	-
35	-	3 927	4 778	5 873	7 195	8 726	10 446	12 337	-
40	-	-	4 509	5 581	6 864	8 337	9 984	11 785	-
45	-	-	4 187	5 251	6 508	7 939	9 527	11 252	-
50	-	-	-	4 862	6 108	7 512	9 055	10 719	-
55	-	-	-	-	5 644	7 035	8 549	10 166	-
60	-	-	-	-	-	6 490	7 988	9 574	-
65	-	-	-	-	-	-	7 353	8 922	-

Power input in W

30	1 744	1 733	1 727	1 720	1 702	1 667	1 606	1 512	-
35	-	1 964	1 942	1 927	1 913	1 891	1 854	1 793	-
40	-	-	2 196	2 165	2 144	2 126	2 103	2 068	-
45	-	-	2 503	2 446	2 410	2 387	2 368	2 347	-
50	-	-	-	2 784	2 722	2 684	2 661	2 645	-
55	-	-	-	-	3 094	3 031	2 994	2 974	-
60	-	-	-	-	-	3 440	3 380	3 347	-
65	-	-	-	-	-	-	3 831	3 775	-

Current consumption in A

30	4.27	4.04	3.99	4.03	4.10	4.10	3.97	3.63	-
35	-	4.41	4.27	4.26	4.30	4.31	4.23	3.96	-
40	-	-	4.62	4.54	4.54	4.56	4.50	4.30	-
45	-	-	5.06	4.89	4.85	4.84	4.81	4.66	-
50	-	-	-	5.33	5.23	5.19	5.16	5.05	-
55	-	-	-	-	5.70	5.62	5.58	5.49	-
60	-	-	-	-	-	6.14	6.08	6.00	-
65	-	-	-	-	-	-	6.67	6.59	-

Mass flow in kg/h

30	72	84	100	121	146	176	208	244	-
35	-	82	99	120	145	174	206	241	-
40	-	-	97	118	143	172	204	238	-
45	-	-	93	115	141	170	202	236	-
50	-	-	-	111	138	167	199	234	-
55	-	-	-	-	133	164	196	231	-
60	-	-	-	-	-	158	192	227	-
65	-	-	-	-	-	-	186	223	-

Coefficient of performance (C.O.P.)

30	2.04	2.39	2.90	3.57	4.42	5.47	6.81	8.55	-
35	-	2.00	2.46	3.05	3.76	4.62	5.64	6.88	-
40	-	-	2.05	2.58	3.20	3.92	4.75	5.70	-
45	-	-	1.67	2.15	2.70	3.33	4.02	4.79	-
50	-	-	-	1.75	2.24	2.80	3.40	4.05	-
55	-	-	-	-	1.82	2.32	2.86	3.42	-
60	-	-	-	-	-	1.89	2.36	2.86	-
65	-	-	-	-	-	-	1.92	2.36	-

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

Cooling capacity	9 314	W
Power input	2 941	W
Current consumption	5.50	A
Mass flow	212	kg/h
C.O.P.	3.17	

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)

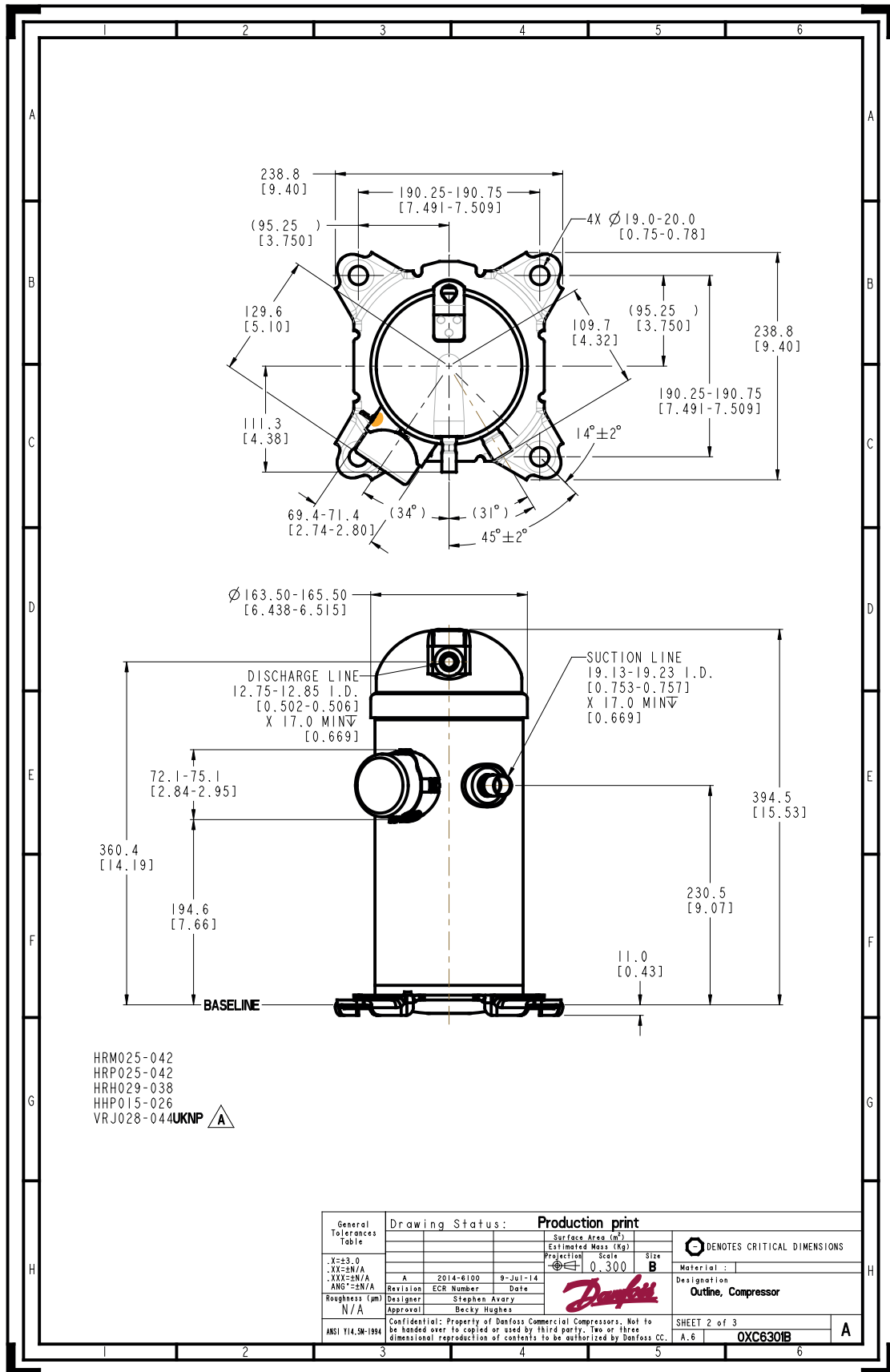
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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