

Datasheets

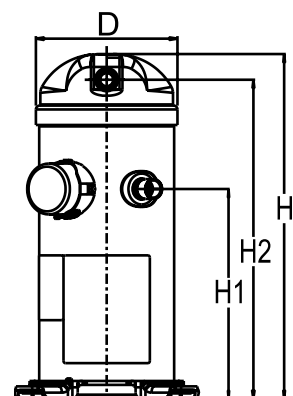
Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HRM032T4LP6
Code number for Singlepack*		120U2748
Code number for Industrial pack**		120U2745
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		43.43 cm ³ /rev
Displacement @ Nominal speed		7.6 m ³ /h @ 2900 rpm - 9.1 m ³ /h @ 3500 rpm
Net weight		30.8 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

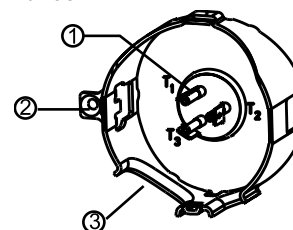


D=164.5 mm
H=413 mm
H1=250 mm
H2=379 mm
H3=- mm

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.

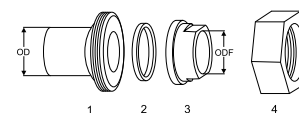
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008
Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029
Gasket, 1-1/4"	8156131

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	15

Cooling capacity in W

30	2 794	3 256	3 950	4 856	5 959	7 241	8 685	10 273	-
35	2 619	3 081	3 758	4 634	5 690	6 909	8 275	9 769	-
40	-	2 860	3 535	4 392	5 414	6 584	7 885	9 299	-
45	-	-	3 263	4 115	5 117	6 251	7 500	8 847	-
50	-	-	-	3 788	4 782	5 893	7 103	8 397	-
55	-	-	-	-	4 394	5 494	6 679	7 931	-
60	-	-	-	-	-	5 040	6 211	7 435	-
65	-	-	-	-	-	-	5 685	6 892	-

Power input in W

30	1 294	1 249	1 247	1 279	1 335	1 402	1 472	1 533	-
35	1 508	1 452	1 436	1 450	1 484	1 525	1 565	1 592	-
40	-	1 653	1 634	1 642	1 665	1 692	1 714	1 720	-
45	-	-	1 828	1 841	1 866	1 891	1 907	1 902	-
50	-	-	-	2 034	2 072	2 108	2 129	2 126	-
55	-	-	-	-	2 272	2 329	2 368	2 380	-
60	-	-	-	-	-	2 542	2 611	2 648	-
65	-	-	-	-	-	-	2 844	2 919	-

Current consumption in A

30	3.61	3.63	3.66	3.69	3.71	3.74	3.75	3.75	-
35	3.82	3.82	3.84	3.86	3.90	3.93	3.96	3.98	-
40	-	4.06	4.06	4.08	4.10	4.14	4.18	4.22	-
45	-	-	4.34	4.34	4.36	4.39	4.44	4.49	-
50	-	-	-	4.67	4.67	4.70	4.75	4.81	-
55	-	-	-	-	5.07	5.08	5.12	5.18	-
60	-	-	-	-	-	5.55	5.58	5.64	-
65	-	-	-	-	-	-	6.14	6.18	-

Mass flow in kg/h

30	61	70	84	102	123	148	176	206	-
35	59	69	83	101	122	147	174	203	-
40	-	67	81	100	121	146	172	201	-
45	-	-	78	97	119	144	171	199	-
50	-	-	-	94	117	142	169	197	-
55	-	-	-	-	113	139	166	195	-
60	-	-	-	-	-	134	163	193	-
65	-	-	-	-	-	-	158	189	-

Coefficient of performance (C.O.P.)

30	2.16	2.61	3.17	3.80	4.46	5.16	5.90	6.70	-
35	1.74	2.12	2.62	3.19	3.84	4.53	5.29	6.14	-
40	-	1.73	2.16	2.67	3.25	3.89	4.60	5.41	-
45	-	-	1.79	2.24	2.74	3.31	3.93	4.65	-
50	-	-	-	1.86	2.31	2.80	3.34	3.95	-
55	-	-	-	-	1.93	2.36	2.82	3.33	-
60	-	-	-	-	-	1.98	2.38	2.81	-
65	-	-	-	-	-	-	2.00	2.36	-

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

Cooling capacity	7 103	W
Power input	2 129	W
Current consumption	4.75	A
Mass flow	169	kg/h
C.O.P.	3.34	

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		dB(A)
With acoustic hood		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	2 967	3 456	4 188	5 145	6 310	7 662	9 183	10 855	-
35	-	3 281	3 999	4 926	6 044	7 334	8 777	10 355	-
40	-	-	3 776	4 687	5 773	7 015	8 394	9 891	-
45	-	-	3 501	4 411	5 479	6 687	8 016	9 448	-
50	-	-	-	4 080	5 145	6 333	7 627	9 008	-
55	-	-	-	-	4 755	5 938	7 210	8 554	-
60	-	-	-	-	-	5 483	6 749	8 069	-
65	-	-	-	-	-	-	6 225	7 537	-

Power input in W

30	1 294	1 249	1 247	1 279	1 335	1 402	1 472	1 533	-
35	-	1 452	1 436	1 450	1 484	1 525	1 565	1 592	-
40	-	-	1 634	1 642	1 665	1 692	1 714	1 720	-
45	-	-	1 828	1 841	1 866	1 891	1 907	1 902	-
50	-	-	-	2 034	2 072	2 108	2 129	2 126	-
55	-	-	-	-	2 272	2 329	2 368	2 380	-
60	-	-	-	-	-	2 542	2 611	2 648	-
65	-	-	-	-	-	-	2 844	2 919	-

Current consumption in A

30	3.61	3.63	3.66	3.69	3.71	3.74	3.75	3.75	-
35	-	3.82	3.84	3.86	3.90	3.93	3.96	3.98	-
40	-	-	4.06	4.08	4.10	4.14	4.18	4.22	-
45	-	-	4.34	4.34	4.36	4.39	4.44	4.49	-
50	-	-	-	4.67	4.67	4.70	4.75	4.81	-
55	-	-	-	-	5.07	5.08	5.12	5.18	-
60	-	-	-	-	-	5.55	5.58	5.64	-
65	-	-	-	-	-	-	6.14	6.18	-

Mass flow in kg/h

30	61	70	83	101	123	147	175	205	-
35	-	69	83	100	122	146	173	202	-
40	-	-	81	99	121	145	171	200	-
45	-	-	78	97	119	143	170	198	-
50	-	-	-	93	116	141	168	196	-
55	-	-	-	-	112	138	166	194	-
60	-	-	-	-	-	134	162	192	-
65	-	-	-	-	-	-	157	188	-

Coefficient of performance (C.O.P.)

30	2.29	2.77	3.36	4.02	4.73	5.46	6.24	7.08	-
35	-	2.26	2.78	3.40	4.07	4.81	5.61	6.50	-
40	-	-	2.31	2.85	3.47	4.14	4.90	5.75	-
45	-	-	1.92	2.40	2.94	3.54	4.20	4.97	-
50	-	-	-	2.01	2.48	3.01	3.58	4.24	-
55	-	-	-	-	2.09	2.55	3.04	3.59	-
60	-	-	-	-	-	2.16	2.58	3.05	-
65	-	-	-	-	-	-	2.19	2.58	-

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

Cooling capacity	7 847	W
Power input	2 347	W
Current consumption	5.10	A
Mass flow	178	kg/h
C.O.P.	3.34	

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		dB(A)
With acoustic hood		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	3 324	3 876	4 700	5 776	7 084	8 606	10 321	12 211	-
35	3 113	3 664	4 468	5 505	6 757	8 204	9 827	11 605	-
40	-	3 400	4 199	5 213	6 424	7 811	9 356	11 039	-
45	-	-	3 874	4 880	6 064	7 407	8 890	10 493	-
50	-	-	-	4 489	5 662	6 975	8 410	9 947	-
55	-	-	-	-	5 198	6 496	7 898	9 385	-
60	-	-	-	-	-	5 953	7 336	8 786	-
65	-	-	-	-	-	-	6 706	8 132	-

Power input in W

30	1 590	1 543	1 541	1 574	1 633	1 709	1 792	1 874	-
35	1 844	1 781	1 759	1 769	1 801	1 847	1 898	1 943	-
40	-	2 018	1 989	1 989	2 008	2 037	2 067	2 089	-
45	-	-	2 215	2 217	2 236	2 261	2 284	2 295	-
50	-	-	-	2 438	2 469	2 503	2 532	2 546	-
55	-	-	-	-	2 691	2 748	2 795	2 825	-
60	-	-	-	-	-	2 977	3 057	3 115	-
65	-	-	-	-	-	-	3 301	3 400	-

Current consumption in A

30	3.39	3.42	3.44	3.47	3.50	3.52	3.53	3.53	-
35	3.59	3.60	3.61	3.64	3.67	3.70	3.73	3.75	-
40	-	3.82	3.82	3.84	3.86	3.90	3.94	3.98	-
45	-	-	4.09	4.08	4.10	4.13	4.18	4.23	-
50	-	-	-	4.40	4.40	4.42	4.47	4.53	-
55	-	-	-	-	4.77	4.78	4.82	4.88	-
60	-	-	-	-	-	5.23	5.25	5.30	-
65	-	-	-	-	-	-	5.78	5.82	-

Mass flow in kg/h

30	73	83	100	121	147	176	209	244	-
35	71	82	99	120	145	174	206	241	-
40	-	79	97	118	144	173	204	238	-
45	-	-	93	116	142	171	202	236	-
50	-	-	-	111	138	168	200	234	-
55	-	-	-	-	133	164	197	231	-
60	-	-	-	-	-	159	193	228	-
65	-	-	-	-	-	-	187	223	-

Coefficient of performance (C.O.P.)

30	2.09	2.51	3.05	3.67	4.34	5.04	5.76	6.52	-
35	1.69	2.06	2.54	3.11	3.75	4.44	5.18	5.97	-
40	-	1.68	2.11	2.62	3.20	3.83	4.53	5.28	-
45	-	-	1.75	2.20	2.71	3.28	3.89	4.57	-
50	-	-	-	1.84	2.29	2.79	3.32	3.91	-
55	-	-	-	-	1.93	2.36	2.83	3.32	-
60	-	-	-	-	-	2.00	2.40	2.82	-
65	-	-	-	-	-	-	2.03	2.39	-

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

Cooling capacity	8 410	W
Power input	2 532	W
Current consumption	4.47	A
Mass flow	200	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		dB(A)
With acoustic hood		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	3 530	4 113	4 983	6 120	7 501	9 105	10 913	12 902	-
35	-	3 902	4 754	5 853	7 178	8 709	10 423	12 301	-
40	-	-	4 485	5 563	6 849	8 321	9 959	11 742	-
45	-	-	4 156	5 230	6 493	7 924	9 501	11 205	-
50	-	-	-	4 835	6 091	7 497	9 030	10 671	-
55	-	-	-	-	5 624	7 021	8 527	10 121	-
60	-	-	-	-	-	6 476	7 970	9 535	-
65	-	-	-	-	-	-	7 343	8 893	-

Power input in W

30	1 590	1 543	1 541	1 574	1 633	1 709	1 792	1 874	-
35	-	1 781	1 759	1 769	1 801	1 847	1 898	1 943	-
40	-	-	1 989	1 989	2 008	2 037	2 067	2 089	-
45	-	-	2 215	2 217	2 236	2 261	2 284	2 295	-
50	-	-	-	2 438	2 469	2 503	2 532	2 546	-
55	-	-	-	-	2 691	2 748	2 795	2 825	-
60	-	-	-	-	-	2 977	3 057	3 115	-
65	-	-	-	-	-	-	3 301	3 400	-

Current consumption in A

30	3.39	3.42	3.44	3.47	3.50	3.52	3.53	3.53	-
35	-	3.60	3.61	3.64	3.67	3.70	3.73	3.75	-
40	-	-	3.82	3.84	3.86	3.90	3.94	3.98	-
45	-	-	4.09	4.08	4.10	4.13	4.18	4.23	-
50	-	-	-	4.40	4.40	4.42	4.47	4.53	-
55	-	-	-	-	4.77	4.78	4.82	4.88	-
60	-	-	-	-	-	5.23	5.25	5.30	-
65	-	-	-	-	-	-	5.78	5.82	-

Mass flow in kg/h

30	72	83	99	120	146	175	208	243	-
35	-	82	98	119	145	173	205	240	-
40	-	-	96	118	143	172	203	237	-
45	-	-	93	115	141	170	201	235	-
50	-	-	-	111	138	167	199	232	-
55	-	-	-	-	133	163	196	230	-
60	-	-	-	-	-	158	191	226	-
65	-	-	-	-	-	-	186	222	-

Coefficient of performance (C.O.P.)

30	2.22	2.67	3.23	3.89	4.59	5.33	6.09	6.88	-
35	-	2.19	2.70	3.31	3.98	4.71	5.49	6.33	-
40	-	-	2.25	2.80	3.41	4.09	4.82	5.62	-
45	-	-	1.88	2.36	2.90	3.50	4.16	4.88	-
50	-	-	-	1.98	2.47	2.99	3.57	4.19	-
55	-	-	-	-	2.09	2.56	3.05	3.58	-
60	-	-	-	-	-	2.18	2.61	3.06	-
65	-	-	-	-	-	-	2.22	2.62	-

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

Cooling capacity	9 283	W
Power input	2 778	W
Current consumption	4.80	A
Mass flow	211	kg/h
C.O.P.	3.34	

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		dB(A)
With acoustic hood		dB(A)

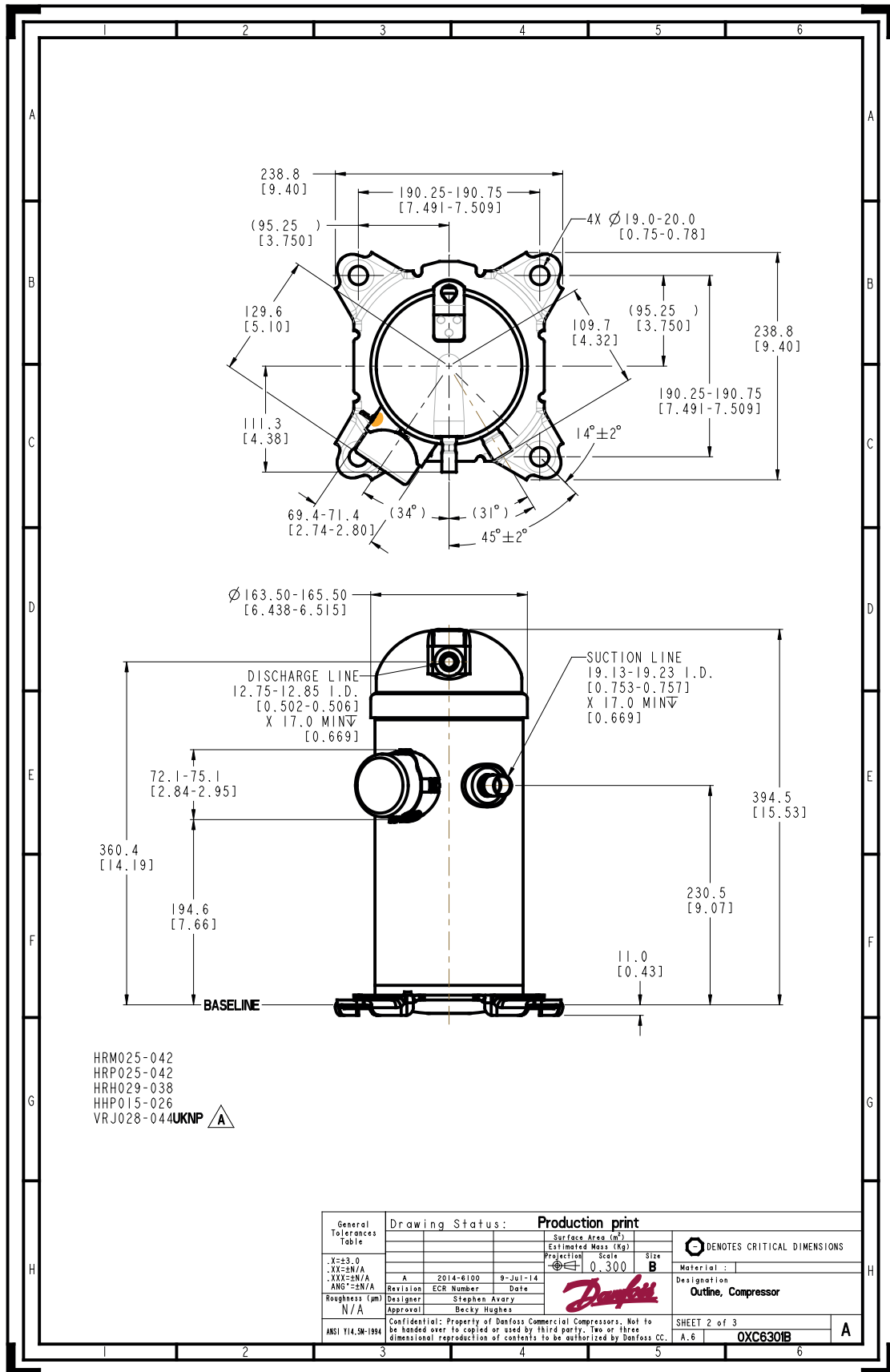
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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