

ENGINEERING
TOMORROW

Danfoss

Datasheets

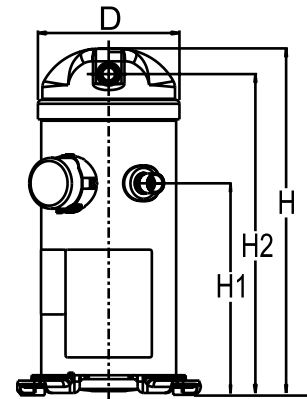
Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HRM047U1LP6A
Code number for single pack without wiring harness		120U3199
Code number for single pack with wiring harness		120U3311
Drawing number		0XC6301B-3
Suction and discharge connections		Brazed
Suction connection		" ODF
Oil sight glass		None
Oil equalization connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume		3.91 in3/rev
Displacement @ Nominal speed		475 cfh @ 3500 rpm
Net weight		68 lbs
Oil charge		45 oz, PVE - -
Maximum system test pressure Low Side / High side		- psi / - psi
Maximum differential test pressure		- psi
Maximum number of starts per hour		-
Refrigerant charge limit		8 lbs
Approved refrigerants		R22

Dimensions

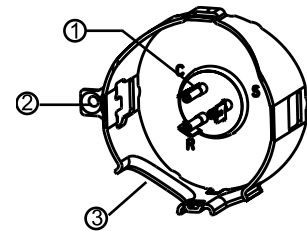


D=6.5 inch, H=17.3 inch,
H1=10.8 inch, H2=15.9 inch, H3=- inch

Electrical Characteristics

Nominal voltage		208-230V/1/60Hz
Voltage range		187-253 V
Winding resistance (main / start) at 25°C		0.52 Ω / 1.324 Ω
Run capacitors A + C		60 uF + - uF
Start capacitor B		88-108 uF
Start relay		3ARR3*3L*
Rated Load Amps (RLA)		24.4 A
Maximum Continuous Current (MCC)		38 A
Locked Rotor Amps (LRA)		120 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		39 ft.lbs
Power connections / Earth connection		0 ft.lbs / 0 ft.lbs

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA11565), -

Rotolock accessories, suction side	Code no.
No translation for	
No translation for	
No translation for	
No translation for	
No translation for	
No translation for	

Rotolock accessories, discharge side	Code no.
No translation for	
No translation for	
No translation for	
No translation for	
No translation for	
No translation for	

Rotolock accessories, sets	Code no.
No translation for	
No translation for	
No translation for	
No translation for	

Oil / lubricants	Code no.
-------------------------	-----------------

Crankcase heaters	Code no.
Belt type crankcase heater, 40 W, 230 V, CE mark, UL	120Z0055

Miscellaneous accessories	Code no.
Acoustic hood	120Z5083
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	120Z5064
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5031
No translation for 120Z5015	120Z5015

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype and Performer are trademarks of Danfoss A/S. All rights reserved.

Performance data at 60 Hz, ARI rating conditions

R22

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	50	55

Cooling capacity in Btu/h

90	18 412	22 332	27 912	35 023	43 534	53 316	58 643	64 239	70 088
100	-	21 001	26 447	33 309	41 457	50 761	55 806	61 091	66 600
110	-	-	24 757	31 472	39 359	48 286	53 100	58 125	63 345
120	-	-	-	29 369	37 095	45 748	50 382	55 198	60 181
130	-	-	-	-	34 525	43 005	47 509	52 168	56 964
140	-	-	-	-	31 505	39 914	44 340	48 891	53 552
150	-	-	-	-	-	36 333	40 731	45 226	49 802

Power input in W

90	2 663	2 635	2 619	2 600	2 562	2 490	2 436	2 369	2 285
100	-	3 022	2 976	2 947	2 919	2 878	2 847	2 807	2 756
110	-	-	3 406	3 348	3 312	3 282	3 265	3 243	3 216
120	-	-	-	3 828	3 765	3 728	3 715	3 703	3 689
130	-	-	-	-	4 303	4 241	4 222	4 210	4 201
140	-	-	-	-	4 950	4 844	4 811	4 789	4 776
150	-	-	-	-	-	5 563	5 507	5 466	5 439

Current consumption in A

90	11.87	12.06	12.17	12.22	12.23	12.20	12.18	12.16	12.13
100	-	13.14	13.20	13.22	13.22	13.21	13.20	13.20	13.20
110	-	-	14.63	14.61	14.59	14.59	14.60	14.61	14.63
120	-	-	-	16.42	16.38	16.37	16.39	16.41	16.46
130	-	-	-	-	18.58	18.57	18.59	18.63	18.69
140	-	-	-	-	21.23	21.20	21.22	21.27	21.34
150	-	-	-	-	-	24.28	24.30	24.35	24.43

Mass flow in lbs/h

90	245	294	363	449	551	666	729	794	862
100	-	288	358	444	545	659	720	784	850
110	-	-	349	437	539	653	713	776	841
120	-	-	-	426	531	646	707	770	835
130	-	-	-	-	518	636	698	762	827
140	-	-	-	-	498	620	684	750	817
150	-	-	-	-	-	598	664	732	801

Energy Efficiency Ratio (E.E.R.)

90	6.91	8.47	10.66	13.47	16.99	21.42	24.07	27.12	30.67
100	-	6.95	8.89	11.30	14.20	17.64	19.60	21.76	24.16
110	-	-	7.27	9.40	11.88	14.71	16.26	17.92	19.70
120	-	-	-	7.67	9.85	12.27	13.56	14.91	16.31
130	-	-	-	-	8.02	10.14	11.25	12.39	13.56
140	-	-	-	-	6.36	8.24	9.22	10.21	11.21
150	-	-	-	-	-	6.53	7.40	8.27	9.16

Nominal performance at to = 45 °F, tc = 130 °F

Cooling capacity	47 509	Btu/h	Current consumption	18.59	A
Power input	4 222	W	Mass flow	698	lbs/h
E.E.R.	11.25				

Pressure switch settings

Maximum HP switch setting	421	psi(g)
Minimum LP switch setting	7	psi(g)
LP pump down setting	19	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

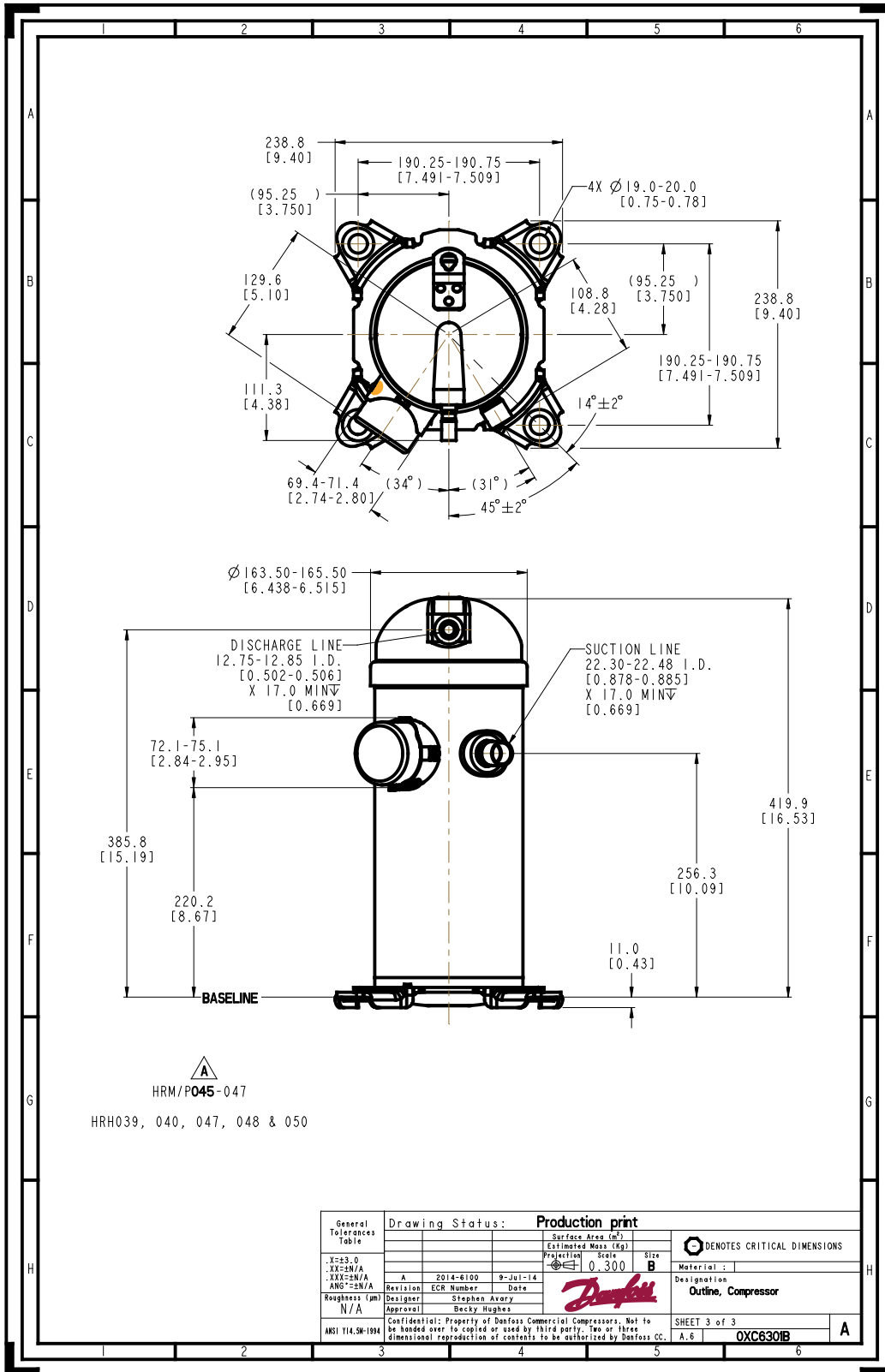
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

All performance data +/- 5%

Sound power data

Sound power level	71	dB(A)
With acoustic hood	66	dB(A)

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype and Performer are trademarks of Danfoss A/S. All rights reserved.



Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without consequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.