

ENGINEERING  
TOMORROW

*Danfoss*

Datasheets

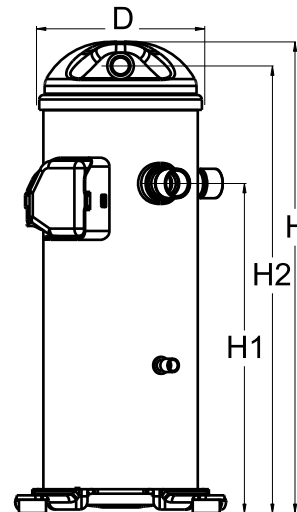
# Danfoss scroll compressors **H series**



**General Characteristics**

Model number (on compressor nameplate)		<b>HLM072T9LC6A</b>
Code number for Singlepack		<b>120U3223</b>
Code number for Industrial pack		
Drawing number		0XR6089B-1
Suction and discharge connections		Brazed
Suction connection		7/8 " ODF
Discharge connection		1/2 " ODF
Oil sight glass		None
Oil equalization connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume	6.01 in3/rev	
Displacement @ Nominal speed	731 cfh @ 3500 rpm	
Net weight		82 lbs
Oil charge		53 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		12 lbs
Approved refrigerants		R22

**Dimensions**

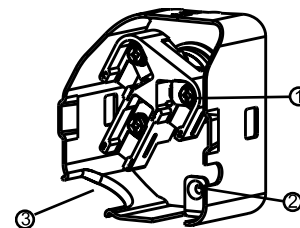


D=7.2 inch, H=17.9 inch,  
H1=11 inch, H2=16.6 inch, H3=- inch

**Electrical Characteristics**

Nominal voltage	380V/3/60Hz
Voltage range	342-418 V
Winding resistance between phases 1-2 +/- 7% at 77°F	1.281 Ω
Winding resistance between phases 1-3 +/- 7% at 77°F	1.253 Ω
Winding resistance between phases 2-3 +/- 7% at 77°F	1.271 Ω
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	39 ft.lbs
Power connections / Earth connection	2 ft.lbs / 1 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.
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
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

Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-1/4"~7/8"), (1"~1/2")	120Z0127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

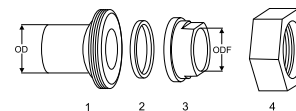
**Oil / lubricants** **Code no.**

Crankcase heaters	Code no.
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058

Miscellaneous accessories	Code no.
Acoustic hood	120Z5084
Discharge thermostat kit	7750009

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

**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 60 Hz, ARI rating conditions**
**R22**

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

**Cooling capacity in Btu/h**

90	28 879	35 037	43 793	54 946	68 299	83 652	92 017	100 808	109 999
100	26 766	32 890	41 424	52 169	64 927	79 500	87 404	95 687	104 325
110	23 970	30 219	38 692	49 190	61 513	75 465	82 989	90 845	99 008
120	-	26 815	35 386	45 796	57 846	71 336	78 560	86 069	93 839
130	-	-	31 296	41 779	53 714	66 904	73 907	81 149	88 606
140	-	-	-	36 927	48 908	61 958	68 820	75 876	83 098
150	-	-	-	-	43 217	56 286	63 089	70 037	77 106

**Power input in W**

90	4 352	4 381	4 389	4 370	4 318	4 229	4 169	4 097	4 012
100	4 849	4 850	4 845	4 827	4 793	4 735	4 696	4 650	4 595
110	5 405	5 364	5 332	5 302	5 271	5 232	5 208	5 181	5 148
120	-	5 954	5 881	5 827	5 786	5 752	5 736	5 720	5 703
130	-	-	6 526	6 433	6 368	6 326	6 311	6 301	6 293
140	-	-	-	7 152	7 050	6 985	6 966	6 953	6 948
150	-	-	-	-	7 862	7 763	7 731	7 710	7 700

**Current consumption in A**

90	7.74	7.86	7.93	7.96	7.97	7.95	7.94	7.92	7.90
100	8.49	8.56	8.60	8.61	8.61	8.60	8.60	8.60	8.60
110	9.51	9.53	9.53	9.52	9.51	9.51	9.51	9.52	9.53
120	-	10.78	10.74	10.70	10.67	10.67	10.68	10.69	10.72
130	-	-	12.22	12.15	12.11	12.10	12.11	12.14	12.17
140	-	-	-	13.90	13.83	13.81	13.83	13.85	13.90
150	-	-	-	-	15.85	15.82	15.83	15.86	15.91

**Mass flow in lbs/h**

90	385	461	569	704	864	1 046	1 144	1 246	1 353
100	371	451	560	695	854	1 032	1 128	1 228	1 331
110	347	433	546	683	843	1 020	1 115	1 213	1 315
120	-	403	522	665	827	1 007	1 102	1 200	1 301
130	-	-	487	637	805	989	1 085	1 185	1 286
140	-	-	-	596	773	963	1 062	1 164	1 267
150	-	-	-	-	726	926	1 029	1 134	1 241

**Energy Efficiency Ratio (E.E.R.)**

90	6.64	8.00	9.98	12.57	15.82	19.78	22.07	24.61	27.41
100	5.52	6.78	8.55	10.81	13.55	16.79	18.61	20.58	22.70
110	4.43	5.63	7.26	9.28	11.67	14.42	15.93	17.54	19.23
120	-	4.50	6.02	7.86	10.00	12.40	13.70	15.05	16.45
130	-	-	4.80	6.49	8.43	10.58	11.71	12.88	14.08
140	-	-	-	5.16	6.94	8.87	9.88	10.91	11.96
150	-	-	-	-	5.50	7.25	8.16	9.08	10.01

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

Cooling capacity	73 907	Btu/h	Current consumption	12.11	A
Power input	6 311	W	Mass flow	1 085	lbs/h
E.E.R.	11.71				

**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

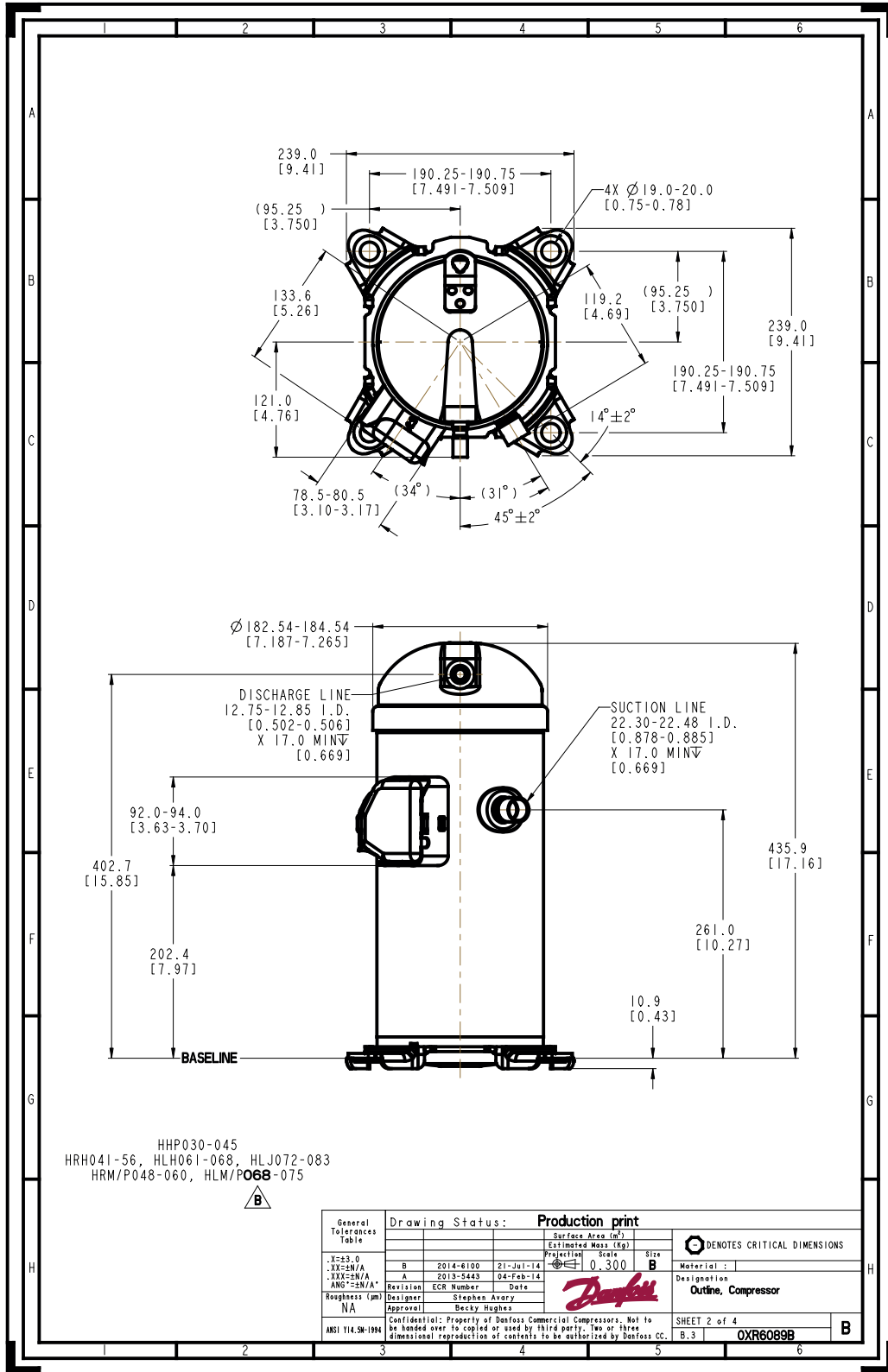
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

All performance data +/- 5%

**Sound power data**

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

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