

ENGINEERING
TOMORROW

Danfoss

Datasheets

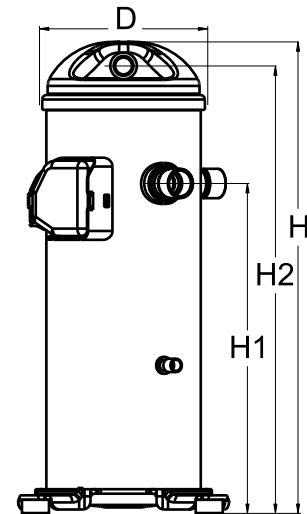
Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HLM081T9LC6A
Code number for Singlepack		120U3224
Code number for Industrial pack		
Drawing number		0XR6089B-2
Suction and discharge connections		Brazed
Suction connection		7/8 " ODF
Discharge connection		3/4 " ODF
Oil sight glass		None
Oil equalization connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume		6.77 in ³ /rev
Displacement @ Nominal speed		823 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

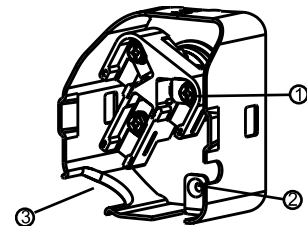


D=7.2 inch, H=17.9 inch,
H1=11 inch, H2=16.6 inch, H3=- inch

Electrical Characteristics

Nominal voltage		380V/3/60Hz
Voltage range		342-418 V
Winding resistance between phases 1-2 +/- 7% at 77°F		1.095 Ω
Winding resistance between phases 1-3 +/- 7% at 77°F		1.080 Ω
Winding resistance between phases 2-3 +/- 7% at 77°F		1.134 Ω
Rated Load Amps (RLA)		12.2 A
Maximum Continuous Current (MCC)		19 A
Locked Rotor Amps (LRA)		110 A
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, 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, sets	Code no.
Solder sleeve adapter set (1-1/4"~7/8"), (1-1/4"~3/4")	120Z0128
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

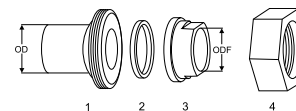
Oil / lubricants **Code no.**

Crankcase heaters	Code no.
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040

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	55

Cooling capacity in Btu/h

90	31 925	38 735	48 414	60 744	75 506	92 480	101 729	111 449	121 613
100	29 581	36 351	45 784	57 660	71 761	87 867	96 604	105 760	115 308
110	26 480	33 388	42 751	54 351	67 967	83 382	91 696	100 377	109 397
120	-	29 614	39 085	50 585	63 895	78 795	86 774	95 068	103 650
130	-	-	34 554	46 132	59 311	73 875	81 607	89 603	97 835
140	-	-	-	40 761	53 988	68 391	75 965	83 752	91 722
150	-	-	-	-	47 693	62 113	69 618	77 283	85 081

Power input in W

90	4 690	4 719	4 727	4 707	4 653	4 555	4 488	4 408	4 313
100	5 257	5 251	5 243	5 224	5 187	5 125	5 082	5 030	4 968
110	5 899	5 845	5 805	5 772	5 738	5 697	5 670	5 639	5 603
120	-	6 536	6 449	6 387	6 341	6 305	6 288	6 271	6 252
130	-	-	7 210	7 104	7 031	6 986	6 970	6 959	6 950
140	-	-	-	7 958	7 844	7 773	7 752	7 739	7 734
150	-	-	-	-	8 813	8 703	8 669	8 647	8 637

Current consumption in A

90	9.80	9.96	10.05	10.09	10.10	10.08	10.06	10.04	10.02
100	10.76	10.85	10.90	10.92	10.91	10.90	10.90	10.90	10.90
110	12.06	12.08	12.08	12.07	12.05	12.05	12.05	12.06	12.08
120	-	13.66	13.61	13.56	13.52	13.52	13.53	13.55	13.59
130	-	-	15.49	15.40	15.34	15.33	15.35	15.38	15.43
140	-	-	-	17.62	17.53	17.51	17.52	17.56	17.62
150	-	-	-	-	20.09	20.05	20.07	20.11	20.17

Mass flow in lbs/h

90	425	510	629	778	955	1 156	1 265	1 378	1 495
100	410	499	619	768	943	1 141	1 247	1 357	1 471
110	383	478	603	755	931	1 127	1 232	1 341	1 453
120	-	445	577	735	914	1 112	1 217	1 326	1 437
130	-	-	538	703	889	1 092	1 199	1 308	1 420
140	-	-	-	658	853	1 063	1 173	1 285	1 399
150	-	-	-	-	802	1 022	1 136	1 252	1 369

Energy Efficiency Ratio (E.E.R.)

90	6.81	8.21	10.24	12.90	16.23	20.30	22.67	25.28	28.19
100	5.63	6.92	8.73	11.04	13.83	17.14	19.01	21.02	23.21
110	4.49	5.71	7.36	9.42	11.84	14.64	16.17	17.80	19.53
120	-	4.53	6.06	7.92	10.08	12.50	13.80	15.16	16.58
130	-	-	4.79	6.49	8.44	10.58	11.71	12.88	14.08
140	-	-	-	5.12	6.88	8.80	9.80	10.82	11.86
150	-	-	-	-	5.41	7.14	8.03	8.94	9.85

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

Cooling capacity	81 607	Btu/h	Current consumption	15.35	A
Power input	6 970	W	Mass flow	1 199	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

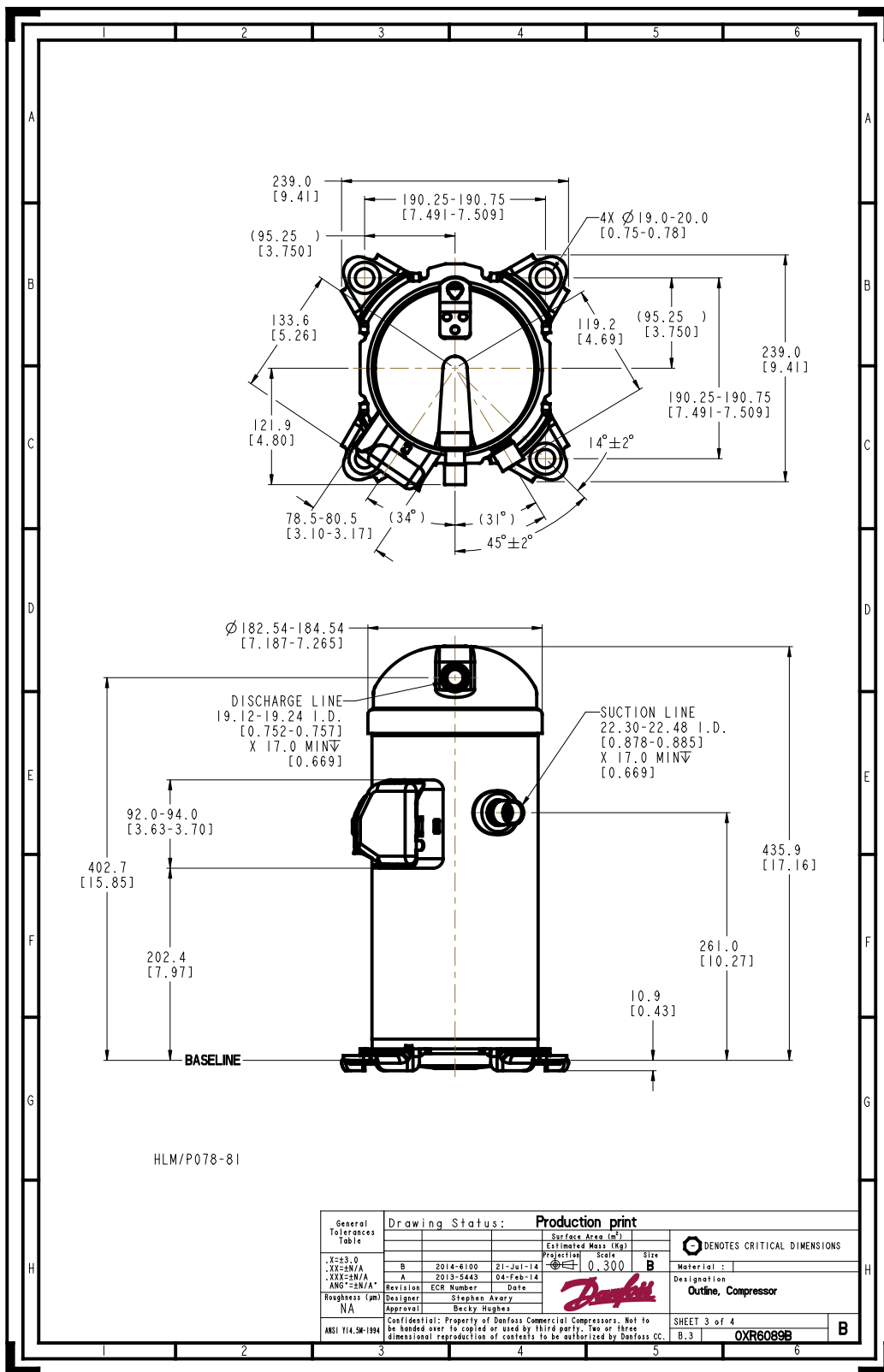
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

All performance data +/- 5%

Sound power data

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

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