

ENGINEERING
TOMORROW

Danfoss

Datasheets

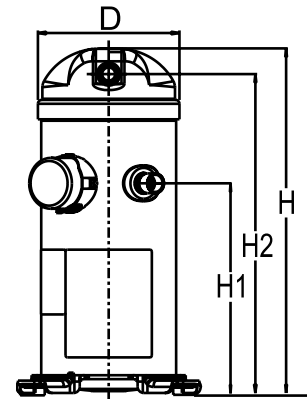
Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HRM038T9LP6A
Code number for Singlepack		120U3273
Code number for Industrial pack		
Drawing number		0XC6301B-2
Suction and discharge connections		Brazed
Suction connection		3/4 " 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		3.15 in ³ /rev
Displacement @ Nominal speed		383 cfh @ 3500 rpm
Net weight		68 lbs
Oil charge		36 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

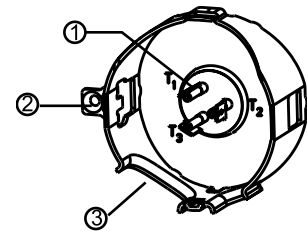


D=6.5 inch, H=16.3 inch,
H1=9.8 inch, H2=14.9 inch, H3=- inch

Electrical Characteristics

Nominal voltage	380V/3/60Hz
Voltage range	342-418 V
Winding resistance between phases 1-2 +/- 7% at 77°F	3.01 Ω
Winding resistance between phases 1-3 +/- 7% at 77°F	2.20 Ω
Winding resistance between phases 2-3 +/- 7% at 77°F	3.01 Ω
Rated Load Amps (RLA)	7.7 A
Maximum Continuous Current (MCC)	12.0 A
Locked Rotor Amps (LRA)	52.0 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.
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

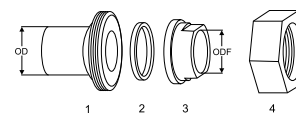
Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-1/4"~3/4"), (1"~1/2")	120Z0126
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

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

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

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	14 627	17 752	22 187	27 837	34 601	42 383	46 625	51 085	55 750
100	13 527	16 631	20 949	26 382	32 832	40 202	44 201	48 393	52 766
110	12 075	15 241	19 521	24 819	31 037	38 075	41 871	45 837	49 958
120	-	13 480	17 805	23 050	29 115	35 903	39 538	43 317	47 228
130	-	-	15 702	20 973	26 968	33 588	37 101	40 735	44 475
140	-	-	-	18 491	24 496	31 029	34 462	37 990	41 601
150	-	-	-	-	21 601	28 127	31 520	34 984	38 506

Power input in W

90	2 202	2 184	2 171	2 153	2 121	2 064	2 023	1 971	1 908
100	2 520	2 465	2 431	2 407	2 384	2 350	2 326	2 295	2 257
110	2 905	2 800	2 731	2 687	2 658	2 633	2 619	2 603	2 582
120	-	3 208	3 090	3 011	2 963	2 933	2 922	2 912	2 902
130	-	-	3 526	3 399	3 316	3 268	3 253	3 243	3 236
140	-	-	-	3 868	3 738	3 656	3 630	3 612	3 602
150	-	-	-	-	4 245	4 116	4 072	4 040	4 019

Current consumption in A

90	4.76	4.52	4.49	4.55	4.59	4.49	4.35	4.13	3.81
100	5.37	4.96	4.82	4.83	4.86	4.80	4.70	4.53	4.28
110	6.11	5.53	5.25	5.18	5.18	5.15	5.08	4.96	4.76
120	-	6.23	5.81	5.63	5.59	5.56	5.51	5.42	5.27
130	-	-	6.50	6.21	6.10	6.05	6.01	5.95	5.84
140	-	-	-	6.93	6.73	6.65	6.61	6.56	6.48
150	-	-	-	-	7.52	7.38	7.33	7.28	7.22

Mass flow in lbs/h

90	195	234	288	357	438	530	580	632	686
100	188	228	283	352	432	522	570	621	673
110	175	218	275	345	425	515	563	612	664
120	-	202	263	335	416	507	555	604	655
130	-	-	244	320	404	496	545	595	646
140	-	-	-	298	387	482	532	583	635
150	-	-	-	-	363	463	514	567	620

Energy Efficiency Ratio (E.E.R.)

90	6.64	8.13	10.22	12.93	16.31	20.54	23.05	25.92	29.22
100	5.37	6.75	8.62	10.96	13.77	17.11	19.01	21.09	23.38
110	4.16	5.44	7.15	9.24	11.68	14.46	15.99	17.61	19.35
120	-	4.20	5.76	7.65	9.83	12.24	13.53	14.87	16.27
130	-	-	4.45	6.17	8.13	10.28	11.41	12.56	13.74
140	-	-	-	4.78	6.55	8.49	9.49	10.52	11.55
150	-	-	-	-	5.09	6.83	7.74	8.66	9.58

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

Cooling capacity	37 101	Btu/h	Current consumption	6.01	A
Power input	3 253	W	Mass flow	545	lbs/h
E.E.R.	11.41				

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)

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