

ENGINEERING  
TOMORROW

*Danfoss*

Datasheets

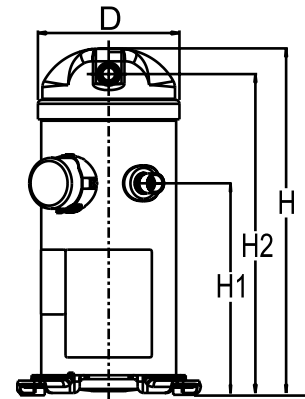
# Danfoss scroll compressors **H series**



**General Characteristics**

Model number (on compressor nameplate)		<b>HRM054T9LP6A</b>
Code number for Singlepack		<b>120U3221</b>
Code number for Industrial pack		
Drawing number		0XR6002B-2
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	4.44 in <sup>3</sup> /rev	
Displacement @ Nominal speed	540 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**

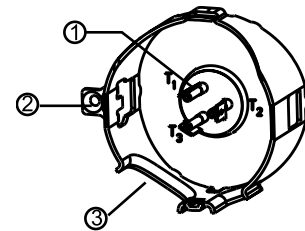


D=7.2 inch, H=17.9 inch,  
H1=11 inch, H2=16.6 inch, H3=- inch

**Electrical Characteristics**

Nominal voltage	380V/3/60Hz
Voltage range	342-418 V
Winding resistance between phases 1-2 +/- 7% at 77°F	1.48 Ω
Winding resistance between phases 1-3 +/- 7% at 77°F	1.46 Ω
Winding resistance between phases 2-3 +/- 7% at 77°F	1.49 Ω
Rated Load Amps (RLA)	10.6 A
Maximum Continuous Current (MCC)	16.5 A
Locked Rotor Amps (LRA)	81.0 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.
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

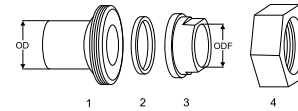
Oil / lubricants	Code no.
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Crankcase heaters	Code no.
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058

Miscellaneous accessories	Code no.
Acoustic hood	120Z5084
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	21 005	25 482	31 849	39 961	49 672	60 837	66 919	73 309	79 990
100	19 482	23 935	30 144	37 964	47 249	57 853	63 604	69 630	75 913
110	17 464	22 009	28 177	35 821	44 796	54 956	60 434	66 155	72 099
120	-	19 549	25 791	33 376	42 157	51 990	57 254	62 727	68 390
130	-	-	22 831	30 473	39 177	48 798	53 907	59 190	64 630
140	-	-	-	26 955	35 698	45 224	50 236	55 388	60 663
150	-	-	-	-	31 565	41 113	46 084	51 163	56 332

**Power input in W**

90	3 058	3 077	3 082	3 069	3 033	2 970	2 927	2 874	2 813
100	3 424	3 421	3 416	3 403	3 379	3 339	3 311	3 277	3 237
110	3 838	3 804	3 779	3 757	3 735	3 708	3 691	3 671	3 647
120	-	4 248	4 193	4 153	4 123	4 099	4 088	4 077	4 065
130	-	-	4 682	4 613	4 567	4 537	4 527	4 519	4 514
140	-	-	-	5 162	5 088	5 042	5 028	5 020	5 016
150	-	-	-	-	5 710	5 639	5 616	5 602	5 595

**Current consumption in A**

90	4.95	5.02	5.07	5.09	5.10	5.08	5.08	5.07	5.06
100	5.43	5.47	5.50	5.51	5.51	5.50	5.50	5.50	5.50
110	6.08	6.09	6.09	6.09	6.08	6.08	6.08	6.09	6.10
120	-	6.89	6.87	6.84	6.82	6.82	6.83	6.84	6.86
130	-	-	7.82	7.77	7.74	7.74	7.75	7.76	7.79
140	-	-	-	8.89	8.85	8.83	8.84	8.86	8.89
150	-	-	-	-	10.14	10.12	10.12	10.14	10.18

**Mass flow in lbs/h**

90	280	336	414	512	628	760	832	906	984
100	270	328	408	506	621	751	821	893	969
110	253	315	397	498	614	743	812	884	958
120	-	293	381	485	603	734	803	875	948
130	-	-	355	465	587	721	792	864	938
140	-	-	-	435	564	703	775	850	925
150	-	-	-	-	531	676	752	829	907

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

90	6.87	8.28	10.33	13.02	16.38	20.48	22.87	25.50	28.43
100	5.69	7.00	8.82	11.15	13.98	17.33	19.21	21.25	23.45
110	4.55	5.79	7.46	9.53	11.99	14.82	16.37	18.02	19.77
120	-	4.60	6.15	8.04	10.22	12.68	14.00	15.39	16.82
130	-	-	4.88	6.61	8.58	10.76	11.91	13.10	14.32
140	-	-	-	5.22	7.02	8.97	9.99	11.03	12.09
150	-	-	-	-	5.53	7.29	8.21	9.13	10.07

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

Cooling capacity	53 907	Btu/h	Current consumption	7.75	A
Power input	4 527	W	Mass flow	792	lbs/h
E.E.R.	11.91				

**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

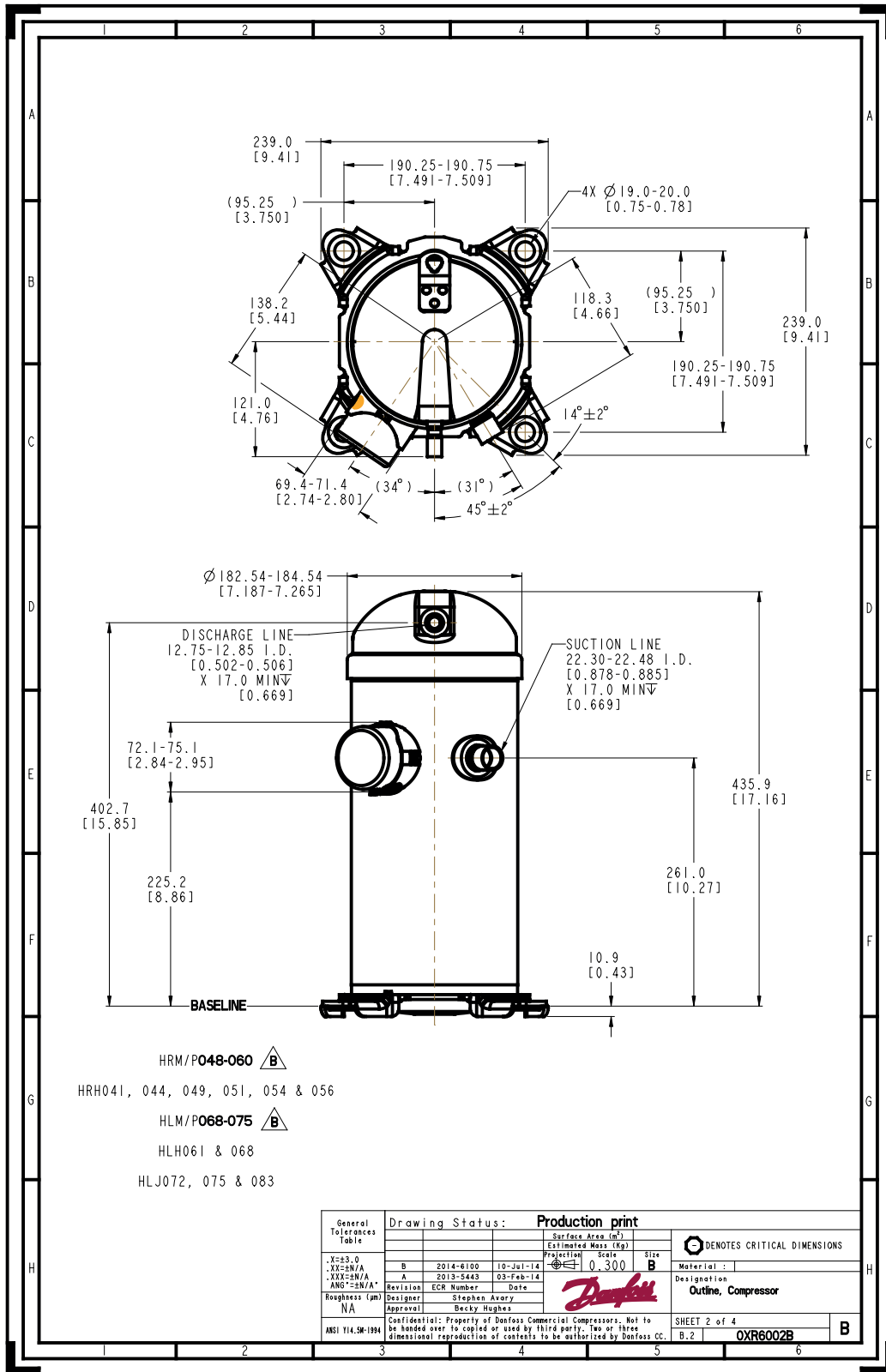
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

All performance data +/- 5%

**Sound power data**

Sound power level	73	dB(A)
With acoustic hood	66	dB(A)

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