



Datasheets

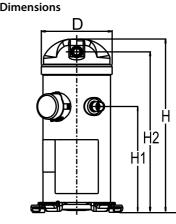
# Danfoss scroll compressors **H series**



#### Datasheet, technical data

# **General Characteristics**

Model number (on compressor nameplate)	HRM058U4L0	28
Code number for Singlepack*	120U1716	
Code number for Industrial pack**	120U1713	
Drawing number	0XR6049B-2	
Suction and discharge connections	Brazed	
Suction connection	7/8 " ODF	
Discharge connection	1/2 " ODF	
Oil sight glass	None	
Oil equalisation connection	1/2"	
Oil drain connection	None	
LP gauge port	None	
IPR valve	Yes	
Swept volume	78.17 cm3/rev	
Displacement @ Nominal speed	13.6 m3/h @ 2900 rpm - 16.4 m3/h @ 3500 rp	m
Net weight	37.19 kg	
Oil charge	1.57 litre, Alkylbenzene	
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)	
Maximum differential test pressure	- bar	
Maximum number of starts per hour	-	
Refrigerant charge limit	5.44 kg	
Approved refrigerants	R22	



Danfoss

D=183.5 mm H=455 mm H1=280 mm H2=422 mm

H3=- mm

380-415V/3/50Hz - 460V/3/60Hz

342-457 V @ 50Hz - 414-506 V @ 60Hz

2.316 Ω

2.330 Ω

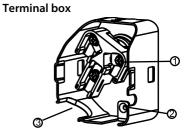
2.360 Ω

9.6 A

15 A

70 A

Internal overload protector



# **Recommended Installation torques**

Maximum Continuous Current (MCC)

Winding resistance between phases 1-2 +/- 7% at 25°C

Winding resistance between phases 1-3 +/- 7% at 25°C

Winding resistance between phases 2-3 +/- 7% at 25°C

**Electrical Characteristics** 

Nominal voltage

Rated Load Amps (RLA)

Locked Rotor Amps (LRA)

Motor protection

Voltage range

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

#### Parts shipped with compressor

Mounting kit with grommets and sleeves	
Initial oil charge	
Installation instructions	

Approvals : CE certified, UL certified (file SA11565), -\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 or 16 Unboxed compressors on pallet

IP22 1:

2:

3:

Screw connectors 10-32 UNF x 9.5

Earth connection

Power cable passage

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Danfoss scroll compressor, HRM058U4



#### Datasheet, accessories and spare parts

No translation for 120Z5018

Danfoss scroll compressor, HRM058U4

Code no.	
8168030	
8156131	
Code no.	
8153007	
8168007	Solder sleeve adapter set
8168031	
8156130	
	op ( ((((()))(())) (( ())) (( ())op ⊢
Code no.	
120Z0127	1 2 3 4
8156009	
Code no.	1: Rotolock adapter (Suc & Dis)
	2: Gasket (Suc & Dis)
Code no.	3: Solder sleeve (Suc & Dis)
<b>Code no.</b> 120Z0057	3: Solder sleeve (Suc & Dis) 4: Rotolock nut (Suc & Dis)
120Z0057	
120Z0057 120Z0058	
120Z0057 120Z0058 Code no.	
120Z0057 120Z0058 Code no. 120Z5044	
120Z0057 120Z0058 Code no. 120Z5044 7750009	. ,
120Z0057 120Z0058 Code no. 120Z5044 7750009 118U0057	
-	8168030           8156131           Code no.           8153007           8168007           8168031           8156130           Code no.           120Z0127           8156009

120Z5018

# Danfoss scroll compressor. HRM058U4

Danfoss

**R22** 

# Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in				Evapora	ting temperature i	n °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity	y in W								
30	5 131	5 990	7 256	8 903	10 906	13 237	15 870	18 780	-
35	4 813	5 663	6 895	8 483	10 401	12 623	15 122	17 873	-
40	-	5 267	6 486	8 036	9 890	12 024	14 410	17 022	-
45	_	_	6.000	7 532	9 344	11 410	13 703	16 100	

40	-	5 267	6 486	8 036	9 890	12 024	14 410	17 022	-
45	-	-	6 000	7 532	9 344	11 410	13 703	16 199	-
50	-	-	-	6 944	8 733	10 752	12 973	15 372	-
55	-	-	-	-	8 030	10 021	12 190	14 512	-
60	-	-	-	-	-	9 189	11 325	13 590	-
65	-	-	-	-	-	-	10 350	12 576	-

#### Power input in W

30	2 464	2 481	2 493	2 493	2 477	2 438	2 372	2 274	-
35	2 794	2 790	2 789	2 785	2 774	2 749	2 705	2 637	-
40	-	3 145	3 124	3 110	3 097	3 079	3 050	3 006	-
45	-	-	3 515	3 484	3 462	3 444	3 424	3 397	-
50	-	-	-	3 921	3 884	3 859	3 842	3 826	-
55	-	-	-	-	4 380	4 342	4 320	4 308	-
60	-	-	-	-	-	4 907	4 874	4 859	-
65	-	-	-	-	-	-	5 520	5 496	-

#### Current consumption in A

30	4.51	4.59	4.65	4.69	4.70	4.70	4.69	4.67	-
35	4.86	4.92	4.96	4.99	4.99	4.99	4.99	4.98	-
40	-	5.38	5.40	5.41	5.41	5.40	5.40	5.40	-
45	-	-	5.97	5.96	5.95	5.94	5.94	5.95	-
50	-	-	-	6.65	6.62	6.61	6.61	6.63	-
55	-	-	-	-	7.43	7.41	7.41	7.43	-
60	-	-	-	-	-	8.36	8.35	8.38	-
65	-	-	-	-	-	-	9.44	9.46	-

#### Mass flow in kg/h

30	111	129	154	187	226	271	322	377	-
35	109	127	152	185	224	268	318	371	-
40	-	123	149	182	221	266	315	368	-
45	-	-	144	178	218	263	312	364	-
50	-	-	-	172	213	259	309	361	-
55	-	-	-	-	206	253	304	358	-
60	-	-	-	-	-	245	297	352	-
65	-	-	-	-	-	-	288	345	-

#### Coefficient of performance (C.O.P.)

30	2.08	2.41	2.91	3.57	4.40	5.43	6.69	8.26	-
35	1.72	2.03	2.47	3.05	3.75	4.59	5.59	6.78	-
40	-	1.68	2.08	2.58	3.19	3.91	4.72	5.66	-
45	-	-	1.71	2.16	2.70	3.31	4.00	4.77	-
50	-	-	-	1.77	2.25	2.79	3.38	4.02	-
55	-	-	-	-	1.83	2.31	2.82	3.37	-
60	-	-	-	-	-	1.87	2.32	2.80	-
65	-	-	-	-	-	-	1.88	2.29	-

Nominal performance at to = 5 °C,	tc = 50 °C	
Cooling capacity	12 973	W
Power input	3 842	W
Current consumption	6.61	Α
Mass flow	309	kg/h
C.O.P.	3.38	

LP pump down setting 1.3 bar(g)	Maximum HP switch setting	29	bar(g)
	Minimum LP switch setting	0.5	bar(g)
	LP pump down setting	1.3	bar(g)
	Sound power data		
Sound power level 70 dB(A)	· · · ·	70	dB(A)

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

Pressure switch settings

# Danfoss

**R22** 

#### Datasheet, performance data

# Danfoss scroll compressor. HRM058U4

# Performance data at 50 Hz, ARI rating conditions

Cond. temp. in				Evapora	ting temperature in	n °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15

#### Cooling capacity in W

30	5 449	6 356	7 694	9 434	11 547	14 005	16 780	19 843	-
35	-	6 031	7 336	9 019	11 049	13 399	16 040	18 944	-
40	-	-	6 928	8 575	10 545	12 809	15 339	18 106	-
45	-	-	6 437	8 072	10 005	12 205	14 646	17 298	-
50	-	-	-	7 479	9 396	11 556	13 930	16 490	-
55	-	-	-	-	8 688	10 830	13 160	15 651	-
60	-	-	-	-	-	9 996	12 305	14 749	-
65	-	-	-	-	-	-	11 334	13 753	-

#### Power input in W

30	2 464	2 481	2 493	2 493	2 477	2 438	2 372	2 274	-
35	-	2 790	2 789	2 785	2 774	2 749	2 705	2 637	-
40	-	-	3 124	3 110	3 097	3 079	3 050	3 006	-
45	-	-	3 515	3 484	3 462	3 444	3 424	3 397	-
50	-	-	-	3 921	3 884	3 859	3 842	3 826	-
55	-	-	-	-	4 380	4 342	4 320	4 308	-
60	-	-	-	-	-	4 907	4 874	4 859	-
65	-	-	-	-	-	-	5 520	5 496	-

#### Current consumption in A

30	4.51	4.59	4.65	4.69	4.70	4.70	4.69	4.67	-
35	-	4.92	4.96	4.99	4.99	4.99	4.99	4.98	-
40	-	-	5.40	5.41	5.41	5.40	5.40	5.40	-
45	-	-	5.97	5.96	5.95	5.94	5.94	5.95	-
50	-	-	-	6.65	6.62	6.61	6.61	6.63	-
55	-	-	-	-	7.43	7.41	7.41	7.43	-
60	-	-	-	-	-	8.36	8.35	8.38	-
65	-	-	-	-	-	-	9.44	9.46	-

#### Mass flow in kg/h

30	111	128	153	186	225	270	320	375	-
35	-	126	152	184	223	267	316	369	-
40	-	-	149	181	220	264	313	365	-
45	-	-	144	178	217	261	310	362	-
50	-	-	-	171	212	258	307	359	-
55	-	-	-	-	205	252	302	356	-
60	-	-	-	-	-	244	296	350	-
65	-	-	-	-	-	-	286	343	-

# Coefficient of performance (C.O.P.)

30	2.21	2.56	3.09	3.78	4.66	5.74	7.07	8.73	-
35	-	2.16	2.63	3.24	3.98	4.87	5.93	7.18	-
40	-	-	2.22	2.76	3.41	4.16	5.03	6.02	-
45	-	-	1.83	2.32	2.89	3.54	4.28	5.09	-
50	-	-	-	1.91	2.42	2.99	3.63	4.31	-
55	-	-	-	-	1.98	2.49	3.05	3.63	-
60	-	-	-	-	-	2.04	2.52	3.04	-
65	-	-	-	-	-	-	2.05	2.50	-

Nominal performance at to = 7.2 °C	, tc = 54.4 °C		
Cooling capacity	14 337	W	
Power input	4 253	W	
Current consumption	7.31	A	
Mass flow	326	kg/h	
COP	3 37		

Pressure switch settings Maximum HP switch setting	29	bar(q)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)
Sound power data		
Sound power level	70	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

# Danfoss scroll compressor. HRM058U4

Danfoss

**R22** 

# Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling canacity	in W								
Cooling capacity 30	<b>in W</b> 6 082	7 101	8 602	10 555	12 929	15 693	18 816	22 268	_
Cooling capacity 30 35		7 101 6 709	8 602 8 170	10 555 10 051	12 929 12 324	15 693 14 956	18 816 17 918	22 268 21 178	-

40	-	6 235	7 679	9 514	11 709	14 235	17 060	20 154	-
45	-	-	7 097	8 910	11 053	13 496	16 209	19 161	-
50	-	-	-	8 206	10 321	12 706	15 331	18 166	-
55	-	-	-	-	9 481	11 831	14 392	17 133	-
60	-	-	-	-	-	10 840	13 359	16 029	-
65	-	-	-	-	-	-	12 199	14 820	-

#### Power input in W

30	2 931	2 952	2 966	2 966	2 946	2 900	2 822	2 706	-
35	3 318	3 315	3 314	3 310	3 296	3 266	3 214	3 134	-
40	-	3 730	3 707	3 690	3 674	3 653	3 619	3 567	-
45	-	-	4 163	4 126	4 101	4 079	4 056	4 024	-
50	-	-	-	4 637	4 593	4 564	4 543	4 524	-
55	-	-	-	-	5 171	5 126	5 100	5 085	-
60	-	-	-	-	-	5 784	5 744	5 727	-
65	-	-	-	-	-	-	6 495	6 467	-

#### Current consumption in A

30	4.68	4.77	4.83	4.87	4.88	4.88	4.87	4.85	-
35	5.05	5.11	5.15	5.18	5.19	5.18	5.18	5.17	-
40	-	5.59	5.61	5.62	5.62	5.61	5.61	5.61	-
45	-	-	6.20	6.19	6.18	6.17	6.17	6.18	-
50	-	-	-	6.90	6.88	6.86	6.86	6.88	-
55	-	-	-	-	7.72	7.70	7.70	7.72	-
60	-	-	-	-	-	8.68	8.67	8.70	-
65	-	-	-	-	-	-	9.80	9.83	-

#### Mass flow in kg/h

30	132	153	183	221	268	321	381	447	-
35	129	150	181	219	265	318	376	440	-
40	-	145	177	216	262	315	373	435	-
45	-	-	171	211	258	311	369	431	-
50	-	-	-	204	252	306	365	427	-
55	-	-	-	-	243	299	359	422	-
60	-	-	-	-	-	289	351	416	-
65	-	-	-	-	-	-	340	406	-

#### Coefficient of performance (C.O.P.)

30	2.08	2.41	2.90	3.56	4.39	5.41	6.67	8.23	-
35	1.72	2.02	2.47	3.04	3.74	4.58	5.57	6.76	-
40	-	1.67	2.07	2.58	3.19	3.90	4.71	5.65	-
45	-	-	1.70	2.16	2.70	3.31	4.00	4.76	-
50	-	-	-	1.77	2.25	2.78	3.37	4.02	-
55	-	-	-	-	1.83	2.31	2.82	3.37	-
60	-	-	-	-	-	1.87	2.33	2.80	-
65	-	-	-	-	-	-	1.88	2.29	-

Nominal performance at to = 5 °C	C, tc = 50 °C	
Cooling capacity	15 331	W
Power input	4 543	W
Current consumption	6.86	А
Mass flow	365	kg/h
C.O.P.	3.37	

Pressure switch settings		
Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)
Sound power data		
Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

# Danfoss scroll compressor. HRM058U4

Danfoss

**R22** 

# Performance data at 60 Hz, ARI rating conditions

Cond. temp. in				Evaporat	ting temperature i	n °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15

#### Cooling capacity in W

30	6 459	7 536	9 122	11 184	13 689	16 604	19 895	23 529	-
35	-	7 145	8 693	10 686	13 091	15 875	19 005	22 447	-
40	-	-	8 202	10 153	12 485	15 165	18 160	21 436	-
45	-	-	7 614	9 549	11 834	14 437	17 324	20 462	-
50	-	-	-	8 838	11 104	13 656	16 462	19 487	-
55	-	-	-	-	10 258	12 787	15 537	18 477	-
60	-	-	-	-	-	11 792	14 515	17 396	-
65	-	-	-	-	-	-	13 359	16 207	-

#### Power input in W

30	2 931	2 952	2 966	2 966	2 946	2 900	2 822	2 706	-
35	-	3 315	3 314	3 310	3 296	3 266	3 214	3 134	-
40	-	-	3 707	3 690	3 674	3 653	3 619	3 567	-
45	-	-	4 163	4 126	4 101	4 079	4 056	4 024	-
50	-	-	-	4 637	4 593	4 564	4 543	4 524	-
55	-	-	-	-	5 171	5 126	5 100	5 085	-
60	-	-	-	-	-	5 784	5 744	5 727	-
65	-	-	-	-	-	-	6 495	6 467	-

#### Current consumption in A

30	4.68	4.77	4.83	4.87	4.88	4.88	4.87	4.85	-
35	-	5.11	5.15	5.18	5.19	5.18	5.18	5.17	-
40	-	-	5.61	5.62	5.62	5.61	5.61	5.61	-
45	-	-	6.20	6.19	6.18	6.17	6.17	6.18	-
50	-	-	-	6.90	6.88	6.86	6.86	6.88	-
55	-	-	-	-	7.72	7.70	7.70	7.72	-
60	-	-	-	-	-	8.68	8.67	8.70	-
65	-	-	-	-	-	-	9.80	9.83	-

#### Mass flow in kg/h

30	131	152	182	220	266	320	379	444	-
35	-	149	180	218	264	316	374	438	-
40	-	-	176	215	261	313	370	433	-
45	-	-	170	210	257	309	367	429	-
50	-	-	-	203	251	304	363	425	-
55	-	-	-	-	242	297	357	420	-
60	-	-	-	-	-	287	349	413	-
65	-	-	-	-	-	-	338	404	-

#### Coefficient of performance (C.O.P.)

30	2.20	2.55	3.08	3.77	4.65	5.73	7.05	8.70	-
35	-	2.16	2.62	3.23	3.97	4.86	5.91	7.16	-
40	-	-	2.21	2.75	3.40	4.15	5.02	6.01	-
45	-	-	1.83	2.31	2.89	3.54	4.27	5.08	-
50	-	-	-	1.91	2.42	2.99	3.62	4.31	-
55	-	-	-	-	1.98	2.49	3.05	3.63	-
60	-	-	-	-	-	2.04	2.53	3.04	-
65	-	-	-	-	-	-	2.06	2.51	-

Nominal performance at to = 7.2 °C,	tc = 54.4 °C		
Cooling capacity	16 928	W	
Power input	5 021	W	
Current consumption	7.60	Α	
Mass flow	385	kg/h	
C.O.P.	3.37		

Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)
Sound power data		
Sound power data	74	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

Pressure switch settings
Maximum HP switch setting

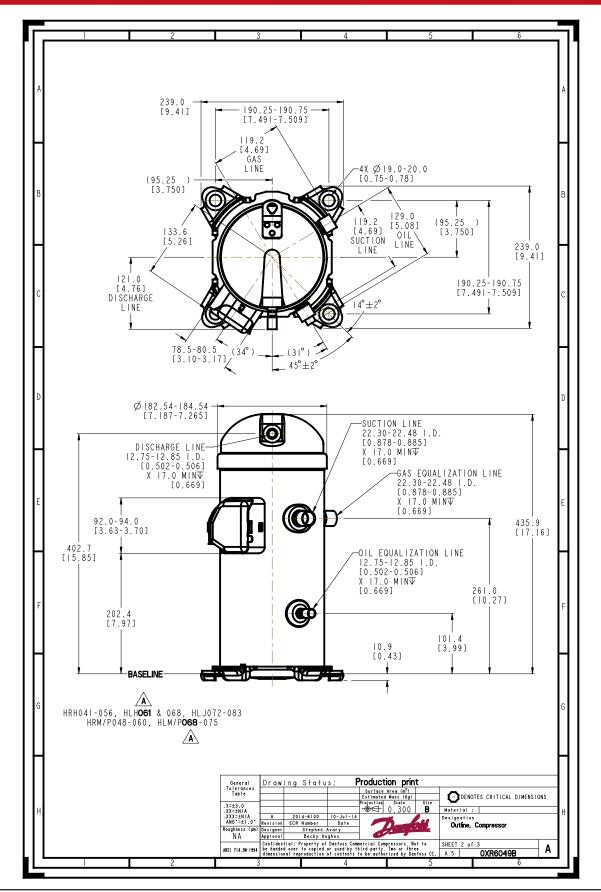
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29

bar(g)



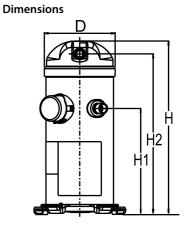
ENGINEERING TOMORROW



#### Datasheet, technical data

# **General Characteristics**

Model number (on compressor nameplate)		HRM058U4LP6
Code number for Singlepack*		120U1711
Code number for Industrial pack**		120U1708
Drawing number		0XR6002B-2
Suction and discharge connections		Brazed
Suction connection		7/8 " ODF
Discharge connection		1/2 " ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume	78.17 c	m3/rev
Displacement @ Nominal speed	13.6 m3/h @ 2900 rpm -	- 16.4 m3/h @ 3500 rpm
Net weight	37.1	9 kg
Oil charge	1.57 litre, Alk	ylbenzene
Maximum system test pressure Low Side / High side	- bar(g) ,	/ - bar(g)
Maximum differential test pressure	- b	bar
Maximum number of starts per hour		
Refrigerant charge limit	5.44	1 kg
Approved refrigerants	R	22



Danfoss scroll compressor, HRM058U4

Dantoss

D=183.5 mm H=455 mm H1=280 mm H2=422 mm H3=- mm

**Terminal box** 

Electrical Characteristics

Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	2.316 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	2.330 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	2.360 Ω
Rated Load Amps (RLA)	9.6 A
Maximum Continuous Current (MCC)	15 A
Locked Rotor Amps (LRA)	70 A
Motor protection	Internal overload protector

#### **Recommended Installation torques**

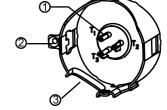
Oil sight glass	52.5 Nm
Power connections / Earth connection	0 Nm / 0 Nm

#### Parts shipped with compressor

Mounting kit with grommets and sleeves Initial oil charge Installation instructions

Approvals : CE certified, UL certified (file SA11565), -\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 or 16 Unboxed compressors on pallet



IP22 1 1:

2:

3:

Spade connectors 1/4"

Earth connection

Power cable passage



#### Datasheet, accessories and spare parts

No translation for 120Z5015

Danfoss scroll compressor, HRM058U4

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	Solder sleeve adapter set
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031	
Gasket, 1"	8156130	
	•	
Rotolock accessories, sets	Code no.	
Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127	1 2 3 4
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	
Oil / lubricants	Code no.	1: Rotolock adapter (Suc & Dis)
	coucino.	2: Gasket (Suc & Dis)
Crankcase heaters	Code no.	3: Solder sleeve (Suc & Dis)
Belt type crankcase heater, 50 W, 230 V, CE mark, UL	120Z0057	4: Rotolock nut (Suc & Dis)
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058	
Miscellaneous accessories	Code no.	
Acoustic hood	120Z5044	
Acoustic hood Discharge thermostat kit	120Z5044 7750009	
Discharge thermostat kit	7750009	
Discharge thermostat kit IP54 upgrade kit	7750009 118U0056	

120Z5015

# Danfoss scroll compressor. HRM058U4

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# Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in				Evapora	ting temperature i	n °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity	y in W								
30	5 131	5 990	7 256	8 903	10 906	13 237	15 870	18 780	-
35	4 813	5 663	6 895	8 483	10 401	12 623	15 122	17 873	-
40	-	5 267	6 486	8 036	9 890	12 024	14 410	17 022	-
45	_	_	6.000	7 532	9 344	11 410	13 703	16 100	

40	-	5 267	6 486	8 036	9 890	12 024	14 410	17 022	-
45	-	-	6 000	7 532	9 344	11 410	13 703	16 199	-
50	-	-	-	6 944	8 733	10 752	12 973	15 372	-
55	-	-	-	-	8 030	10 021	12 190	14 512	-
60	-	-	-	-	-	9 189	11 325	13 590	-
65	-	-	-	-	-	-	10 350	12 576	-

#### Power input in W

30	2 464	2 481	2 493	2 493	2 477	2 438	2 372	2 274	-
35	2 794	2 790	2 789	2 785	2 774	2 749	2 705	2 637	-
40	-	3 145	3 124	3 110	3 097	3 079	3 050	3 006	-
45	-	-	3 515	3 484	3 462	3 444	3 424	3 397	-
50	-	-	-	3 921	3 884	3 859	3 842	3 826	-
55	-	-	-	-	4 380	4 342	4 320	4 308	-
60	-	-	-	-	-	4 907	4 874	4 859	-
65	-	-	-	-	-	-	5 520	5 496	-

#### Current consumption in A

30	4.51	4.59	4.65	4.69	4.70	4.70	4.69	4.67	-
35	4.86	4.92	4.96	4.99	4.99	4.99	4.99	4.98	-
40	-	5.38	5.40	5.41	5.41	5.40	5.40	5.40	-
45	-	-	5.97	5.96	5.95	5.94	5.94	5.95	-
50	-	-	-	6.65	6.62	6.61	6.61	6.63	-
55	-	-	-	-	7.43	7.41	7.41	7.43	-
60	-	-	-	-	-	8.36	8.35	8.38	-
65	-	-	-	-	-	-	9.44	9.46	-

#### Mass flow in kg/h

30	111	129	154	187	226	271	322	377	-
35	109	127	152	185	224	268	318	371	-
40	-	123	149	182	221	266	315	368	-
45	-	-	144	178	218	263	312	364	-
50	-	-	-	172	213	259	309	361	-
55	-	-	-	-	206	253	304	358	-
60	-	-	-	-	-	245	297	352	-
65	-	-	-	-	-	-	288	345	-

#### Coefficient of performance (C.O.P.)

30	2.08	2.41	2.91	3.57	4.40	5.43	6.69	8.26	-
35	1.72	2.03	2.47	3.05	3.75	4.59	5.59	6.78	-
40	-	1.68	2.08	2.58	3.19	3.91	4.72	5.66	-
45	-	-	1.71	2.16	2.70	3.31	4.00	4.77	-
50	-	-	-	1.77	2.25	2.79	3.38	4.02	-
55	-	-	-	-	1.83	2.31	2.82	3.37	-
60	-	-	-	-	-	1.87	2.32	2.80	-
65	-	-	-	-	-	-	1.88	2.29	-

Nominal performance at to = 5 °C,	tc = 50 °C	
Cooling capacity	12 973	W
Power input	3 842	W
Current consumption	6.61	Α
Mass flow	309	kg/h
C.O.P.	3.38	

LP pump down setting 1.3 bar(g)	Maximum HP switch setting	29	bar(g)
	Minimum LP switch setting	0.5	bar(g)
	LP pump down setting	1.3	bar(g)
	Sound power data		
Sound power level 70 dB(A)	· · · ·	70	dB(A)

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

Pressure switch settings

# Danfoss

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#### Datasheet, performance data

# Danfoss scroll compressor. HRM058U4

# Performance data at 50 Hz, ARI rating conditions

Cond. temp. in				Evapora	ting temperature in	n °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15

#### Cooling capacity in W

30	5 449	6 356	7 694	9 434	11 547	14 005	16 780	19 843	-
35	-	6 031	7 336	9 019	11 049	13 399	16 040	18 944	-
40	-	-	6 928	8 575	10 545	12 809	15 339	18 106	-
45	-	-	6 437	8 072	10 005	12 205	14 646	17 298	-
50	-	-	-	7 479	9 396	11 556	13 930	16 490	-
55	-	-	-	-	8 688	10 830	13 160	15 651	-
60	-	-	-	-	-	9 996	12 305	14 749	-
65	-	-	-	-	-	-	11 334	13 753	-

#### Power input in W

30	2 464	2 481	2 493	2 493	2 477	2 438	2 372	2 274	-
35	-	2 790	2 789	2 785	2 774	2 749	2 705	2 637	-
40	-	-	3 124	3 110	3 097	3 079	3 050	3 006	-
45	-	-	3 515	3 484	3 462	3 444	3 424	3 397	-
50	-	-	-	3 921	3 884	3 859	3 842	3 826	-
55	-	-	-	-	4 380	4 342	4 320	4 308	-
60	-	-	-	-	-	4 907	4 874	4 859	-
65	-	-	-	-	-	-	5 520	5 496	-

#### Current consumption in A

30	4.51	4.59	4.65	4.69	4.70	4.70	4.69	4.67	-
35	-	4.92	4.96	4.99	4.99	4.99	4.99	4.98	-
40	-	-	5.40	5.41	5.41	5.40	5.40	5.40	-
45	-	-	5.97	5.96	5.95	5.94	5.94	5.95	-
50	-	-	-	6.65	6.62	6.61	6.61	6.63	-
55	-	-	-	-	7.43	7.41	7.41	7.43	-
60	-	-	-	-	-	8.36	8.35	8.38	-
65	-	-	-	-	-	-	9.44	9.46	-

#### Mass flow in kg/h

30	111	128	153	186	225	270	320	375	-
35	-	126	152	184	223	267	316	369	-
40	-	-	149	181	220	264	313	365	-
45	-	-	144	178	217	261	310	362	-
50	-	-	-	171	212	258	307	359	-
55	-	-	-	-	205	252	302	356	-
60	-	-	-	-	-	244	296	350	-
65	-	-	-	-	-	-	286	343	-

# Coefficient of performance (C.O.P.)

30	2.21	2.56	3.09	3.78	4.66	5.74	7.07	8.73	-
35	-	2.16	2.63	3.24	3.98	4.87	5.93	7.18	-
40	-	-	2.22	2.76	3.41	4.16	5.03	6.02	-
45	-	-	1.83	2.32	2.89	3.54	4.28	5.09	-
50	-	-	-	1.91	2.42	2.99	3.63	4.31	-
55	-	-	-	-	1.98	2.49	3.05	3.63	-
60	-	-	-	-	-	2.04	2.52	3.04	-
65	-	-	-	-	-	-	2.05	2.50	-

Nominal performance at to = 7.2 °C	, tc = 54.4 °C		
Cooling capacity	14 337	W	
Power input	4 253	W	
Current consumption	7.31	A	
Mass flow	326	kg/h	
COP	3 37		

Pressure switch settings Maximum HP switch setting	29	bar(q)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)
Sound power data		
Sound power level	70	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

# Danfoss scroll compressor. HRM058U4

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# Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling canacity	in W								
Cooling capacity 30	<b>in W</b> 6 082	7 101	8 602	10 555	12 929	15 693	18 816	22 268	_
Cooling capacity 30 35		7 101 6 709	8 602 8 170	10 555 10 051	12 929 12 324	15 693 14 956	18 816 17 918	22 268 21 178	-

40	-	6 235	7 679	9 514	11 709	14 235	17 060	20 154	-
45	-	-	7 097	8 910	11 053	13 496	16 209	19 161	-
50	-	-	-	8 206	10 321	12 706	15 331	18 166	-
55	-	-	-	-	9 481	11 831	14 392	17 133	-
60	-	-	-	-	-	10 840	13 359	16 029	-
65	-	-	-	-	-	-	12 199	14 820	-

#### Power input in W

30	2 931	2 952	2 966	2 966	2 946	2 900	2 822	2 706	-
35	3 318	3 315	3 314	3 310	3 296	3 266	3 214	3 134	-
40	-	3 730	3 707	3 690	3 674	3 653	3 619	3 567	-
45	-	-	4 163	4 126	4 101	4 079	4 056	4 024	-
50	-	-	-	4 637	4 593	4 564	4 543	4 524	-
55	-	-	-	-	5 171	5 126	5 100	5 085	-
60	-	-	-	-	-	5 784	5 744	5 727	-
65	-	-	-	-	-	-	6 495	6 467	-

#### Current consumption in A

30	4.68	4.77	4.83	4.87	4.88	4.88	4.87	4.85	-
35	5.05	5.11	5.15	5.18	5.19	5.18	5.18	5.17	-
40	-	5.59	5.61	5.62	5.62	5.61	5.61	5.61	-
45	-	-	6.20	6.19	6.18	6.17	6.17	6.18	-
50	-	-	-	6.90	6.88	6.86	6.86	6.88	-
55	-	-	-	-	7.72	7.70	7.70	7.72	-
60	-	-	-	-	-	8.68	8.67	8.70	-
65	-	-	-	-	-	-	9.80	9.83	-

#### Mass flow in kg/h

30	132	153	183	221	268	321	381	447	-
35	129	150	181	219	265	318	376	440	-
40	-	145	177	216	262	315	373	435	-
45	-	-	171	211	258	311	369	431	-
50	-	-	-	204	252	306	365	427	-
55	-	-	-	-	243	299	359	422	-
60	-	-	-	-	-	289	351	416	-
65	-	-	-	-	-	-	340	406	-

#### Coefficient of performance (C.O.P.)

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

30	2.08	2.41	2.90	3.56	4.39	5.41	6.67	8.23	-
35	1.72	2.02	2.47	3.04	3.74	4.58	5.57	6.76	-
40	-	1.67	2.07	2.58	3.19	3.90	4.71	5.65	-
45	-	-	1.70	2.16	2.70	3.31	4.00	4.76	-
50	-	-	-	1.77	2.25	2.78	3.37	4.02	-
55	-	-	-	-	1.83	2.31	2.82	3.37	-
60	-	-	-	-	-	1.87	2.33	2.80	-
65	-	-	-	-	-	-	1.88	2.29	-

Nominal performance at to = 5 °C	C, tc = 50 °C	
Cooling capacity	15 331	W
Power input	4 543	W
Current consumption	6.86	А
Mass flow	365	kg/h
C.O.P.	3.37	

Pressure switch settings		
Maximum HP switch setting	29	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)
Sound power data		
Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

All performance data +/- 5%

# Danfoss scroll compressor. HRM058U4

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# Performance data at 60 Hz, ARI rating conditions

Cond. temp. in				Evaporat	ting temperature i	n °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15

#### Cooling capacity in W

<b>_</b>									
30	6 459	7 536	9 122	11 184	13 689	16 604	19 895	23 529	-
35	-	7 145	8 693	10 686	13 091	15 875	19 005	22 447	-
40	-	-	8 202	10 153	12 485	15 165	18 160	21 436	-
45	-	-	7 614	9 549	11 834	14 437	17 324	20 462	-
50	-	-	-	8 838	11 104	13 656	16 462	19 487	-
55	-	-	-	-	10 258	12 787	15 537	18 477	-
60	-	-	-	-	-	11 792	14 515	17 396	-
65	-	-	-	-	-	-	13 359	16 207	-

#### Power input in W

30	2 931	2 952	2 966	2 966	2 946	2 900	2 822	2 706	-
35	-	3 315	3 314	3 310	3 296	3 266	3 214	3 134	-
40	-	-	3 707	3 690	3 674	3 653	3 619	3 567	-
45	-	-	4 163	4 126	4 101	4 079	4 056	4 024	-
50	-	-	-	4 637	4 593	4 564	4 543	4 524	-
55	-	-	-	-	5 171	5 126	5 100	5 085	-
60	-	-	-	-	-	5 784	5 744	5 727	-
65	-	-	-	-	-	-	6 495	6 467	-

#### Current consumption in A

30	4.68	4.77	4.83	4.87	4.88	4.88	4.87	4.85	-
35	-	5.11	5.15	5.18	5.19	5.18	5.18	5.17	-
40	-	-	5.61	5.62	5.62	5.61	5.61	5.61	-
45	-	-	6.20	6.19	6.18	6.17	6.17	6.18	-
50	-	-	-	6.90	6.88	6.86	6.86	6.88	-
55	-	-	-	-	7.72	7.70	7.70	7.72	-
60	-	-	-	-	-	8.68	8.67	8.70	-
65	-	-	-	-	-	-	9.80	9.83	-

#### Mass flow in kg/h

30	131	152	182	220	266	320	379	444	-
35	-	149	180	218	264	316	374	438	-
40	-	-	176	215	261	313	370	433	-
45	-	-	170	210	257	309	367	429	-
50	-	-	-	203	251	304	363	425	-
55	-	-	-	-	242	297	357	420	-
60	-	-	-	-	-	287	349	413	-
65	-	-	-	-	-	-	338	404	-

#### Coefficient of performance (C.O.P.)

30	2.20	2.55	3.08	3.77	4.65	5.73	7.05	8.70	-
35	-	2.16	2.62	3.23	3.97	4.86	5.91	7.16	-
40	-	-	2.21	2.75	3.40	4.15	5.02	6.01	-
45	-	-	1.83	2.31	2.89	3.54	4.27	5.08	-
50	-	-	-	1.91	2.42	2.99	3.62	4.31	-
55	-	-	-	-	1.98	2.49	3.05	3.63	-
60	-	-	-	-	-	2.04	2.53	3.04	-
65	-	-	-	-	-	-	2.06	2.51	-

Nominal performance at to = 7.2 °C,	tc = 54.4 °C		
Cooling capacity	16 928	W	
Power input	5 021	W	
Current consumption	7.60	Α	
Mass flow	385	kg/h	
C.O.P.	3.37		

Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)
Sound power data		
Sound power data	74	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

Pressure switch settings
Maximum HP switch setting

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