

### General Characteristics

Model number (on compressor nameplate)		<b>LLZ018T9LQ9A</b>
Code number for Singlepack*		121L9559
Code number for Industrial pack**		121L9558
Drawing number		05R7510D-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Economizer connection		1 " Rotolock
Discharge connection		1 " Rotolock
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume	97.6 cm <sup>3</sup> /rev	
Displacement @ Nominal speed	20.5 m <sup>3</sup> /h @ 3500 rpm	
Net weight	43 kg	
Oil charge	1.62 litre, POE --	
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)	
Maximum differential test pressure	- bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	4.54 kg	
Approved refrigerants	R404A, R507, R452A, R448A, R449A	

### Electrical Characteristics

Nominal voltage	380V/3/60Hz
Voltage range	342-418 V
Rated Load Amps (RLA)	12.8 A
Maximum Continuous Current (MCC)	20 A
Locked Rotor Amps (LRA)	106 A
Motor protection	Internal overload protector

### Recommended Installation torques

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

### Parts shipped with compressor

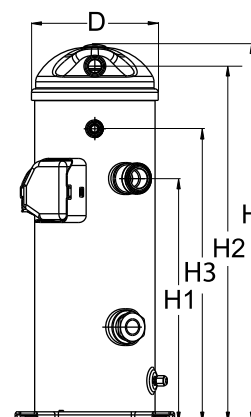
Mounting kit with grommets and sleeves
Rotolock connection kit for Suction, Economizer and Discharge fittings with seals, nuts and sleeves.
Initial oil charge
Installation instructions

**Approvals :** CE certified, -, -

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 Unboxed compressors on pallet (order per multiples of 12)

### Dimensions



D=184 mm

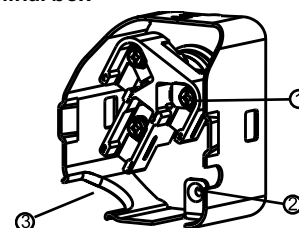
H=485.4 mm

H1=309.4 mm

H2=458.2 mm

H3=381.7 mm

### Terminal box



IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

3: Power cable passage

Rotolock accessories, suction side	Code no.
------------------------------------	----------

Rotolock accessories, discharge side	Code no.
--------------------------------------	----------

Rotolock accessories, sets	Code no.
----------------------------	----------

Oil / lubricants	Code no.
------------------	----------

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
---	----------

Crankcase heaters	Code no.
-------------------	----------

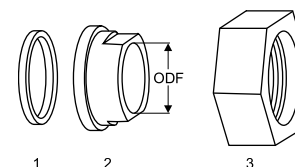
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater, 70 W, 400/460V, CE mark, UL	120Z5041
Belt type crankcase heater, 70 W, 575V, CE mark, UL	120Z5042
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060

Miscellaneous accessories	Code no.
---------------------------	----------

Acoustic hood	120Z5052
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057
Magnetic discharge non return valve	120Z5046

Spare parts	Code no.
-------------	----------

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers, rotolock connection kit for suction, discharge and economizer fitting for 1 scroll compressor including 3 Teflon seal, 2 nuts, 3 sleeves	120Z5067
Terminal box cover	120Z5018

**Gaskets, sleeves and nuts**


- 1: Gasket  
2: Solder sleeve  
3: Rotolock nut

### General Characteristics

Model number (on compressor nameplate)		<b>LLZ018T9LQ9</b>
Code number for Singlepack*		121L9527
Code number for Industrial pack**		121L9526
Drawing number		05R7510D-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Economizer connection		1 " Rotolock
Discharge connection		1 " Rotolock
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume	97.6 cm <sup>3</sup> /rev	
Displacement @ Nominal speed	20.5 m <sup>3</sup> /h @ 3500 rpm	
Net weight	43 kg	
Oil charge	1.62 litre, PVE - -	
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)	
Maximum differential test pressure	- bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	4.54 kg	
Approved refrigerants	R404A, R507	

### Electrical Characteristics

Nominal voltage	380V/3/60Hz
Voltage range	342-418 V
Rated Load Amps (RLA)	12.8 A
Maximum Continuous Current (MCC)	20 A
Locked Rotor Amps (LRA)	106 A
Motor protection	Internal overload protector

### Recommended Installation torques

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

### Parts shipped with compressor

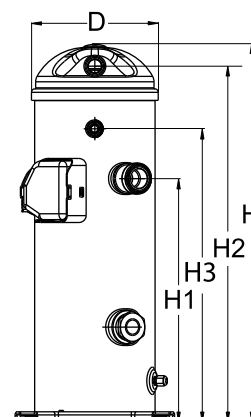
Mounting kit with grommets and sleeves
Rotolock connection kit for Suction, Economizer and Discharge fittings with seals, nuts and sleeves.
Initial oil charge
Installation instructions

**Approvals** : CE certified, UL certified (file SA11565), -

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 Unboxed compressors on pallet (order per multiples of 12)

### Dimensions



D=184 mm

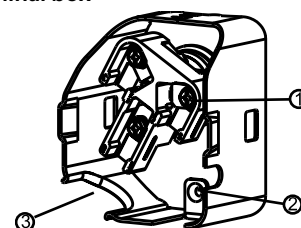
H=485.4 mm

H1=309.4 mm

H2=458.2 mm

H3=381.7 mm

### Terminal box



IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

3: Power cable passage

Rotolock accessories, suction side	Code no.
------------------------------------	----------

Rotolock accessories, discharge side	Code no.
--------------------------------------	----------

Rotolock accessories, sets	Code no.
----------------------------	----------

Oil / lubricants	Code no.
------------------	----------

PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034
--	----------

Crankcase heaters	Code no.
-------------------	----------

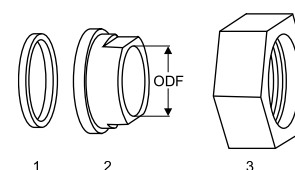
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater, 70 W, 400/460V, CE mark, UL	120Z5041
Belt type crankcase heater, 70 W, 575V, CE mark, UL	120Z5042
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060

Miscellaneous accessories	Code no.
---------------------------	----------

Acoustic hood	120Z5052
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057
Magnetic discharge non return valve	120Z5046

Spare parts	Code no.
-------------	----------

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers, rotolock connection kit for suction, discharge and economizer fitting for 1 scroll compressor including 3 Teflon seal, 2 nuts, 3 sleeves	120Z5067
Terminal box cover	120Z5018

**Gaskets, sleeves and nuts**


- 1: Gasket  
2: Solder sleeve  
3: Rotolock nut

**Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R404A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

**Cooling capacity in W**

5	-	5 406	6 845	8 664	10 899	13 586	16 760	20 453	-
10	-	5 078	6 455	8 188	10 313	12 866	15 884	19 400	-
15	-	4 766	6 080	7 725	9 738	12 156	15 016	18 353	-
20	-	4 465	5 714	7 268	9 168	11 449	14 149	17 306	-
30	-	3 873	4 985	6 355	8 022	10 025	12 402	15 192	-
40	-	3 261	4 228	5 407	6 836	8 553	10 600	13 018	-
50	-	-	3 404	4 383	5 566	6 991	8 701	10 739	-
60	-	-	-	-	-	-	6 652	8 301	-

**Power input in W**

5	-	2 455	2 619	2 751	2 823	2 805	2 668	2 382	-
10	-	2 611	2 802	2 974	3 099	3 145	3 085	2 888	-
15	-	2 755	2 969	3 177	3 349	3 455	3 468	3 356	-
20	-	2 896	3 128	3 367	3 581	3 743	3 823	3 791	-
30	-	3 203	3 457	3 742	4 028	4 287	4 487	4 601	-
40	-	3 596	3 853	4 166	4 505	4 840	5 143	5 384	-
50	-	-	4 382	4 703	5 076	5 470	5 857	6 206	-
60	-	-	-	-	-	-	6 693	7 131	-

**Current consumption in A**

5	-	5.93	6.09	6.20	6.22	6.11	5.82	5.33	-
10	-	6.51	6.73	6.92	7.04	7.06	6.92	6.59	-
15	-	6.91	7.18	7.44	7.65	7.77	7.76	7.59	-
20	-	7.18	7.48	7.79	8.08	8.30	8.40	8.37	-
30	-	7.55	7.87	8.24	8.62	8.98	9.27	9.46	-
40	-	8.01	8.28	8.65	9.07	9.50	9.92	10.27	-
50	-	-	9.10	9.40	9.80	10.25	10.72	11.17	-
60	-	-	-	-	-	-	12.08	12.56	-

**Mass flow in kg/h**

5	-	158	181	214	257	310	374	448	-
10	-	150	174	209	253	308	372	446	-
15	-	143	170	205	251	306	370	444	-
20	-	138	166	203	249	304	368	442	-
30	-	131	161	199	246	301	365	437	-
40	-	128	159	198	244	298	360	430	-
50	-	-	159	197	242	294	353	420	-
60	-	-	-	-	-	-	343	405	-

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

5	-	2.20	2.61	3.15	3.86	4.84	6.28	8.59	-
10	-	1.95	2.30	2.75	3.33	4.09	5.15	6.72	-
15	-	1.73	2.05	2.43	2.91	3.52	4.33	5.47	-
20	-	1.54	1.83	2.16	2.56	3.06	3.70	4.56	-
30	-	1.21	1.44	1.70	1.99	2.34	2.76	3.30	-
40	-	0.91	1.10	1.30	1.52	1.77	2.06	2.42	-
50	-	-	0.78	0.93	1.10	1.28	1.49	1.73	-
60	-	-	-	-	-	-	0.99	1.16	-

**Nominal performance at to = -35 °C, tc = 40 °C**

Cooling capacity	4 228	W
Power input	3 853	W
Current consumption	8.28	A
Mass flow	159	kg/h
C.O.P.	1.10	

**Pressure switch settings**

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	0.15	bar(g)

**Sound power data**

Sound power level	84	dB(A)
With accoustic hood	74	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

**Performance data at 60 Hz, Suction temp. = 18.3 °C**
**R404A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

**Cooling capacity in W**

5	-	5 633	7 089	8 920	11 156	13 829	16 972	20 614	-
10	-	5 351	6 754	8 505	10 638	13 183	16 172	19 637	-
15	-	5 086	6 432	8 103	10 130	12 545	15 380	18 666	-
20	-	4 832	6 121	7 709	9 629	11 912	14 590	17 695	-
30	-	4 339	5 506	6 924	8 625	10 639	12 999	15 736	-
40	-	-	-	6 109	7 583	9 321	11 356	13 718	-
50	-	-	-	-	-	7 917	9 620	11 601	-
60	-	-	-	-	-	-	7 750	9 342	-

**Power input in W**

5	-	2 455	2 619	2 751	2 823	2 805	2 668	2 382	-
10	-	2 611	2 802	2 974	3 099	3 145	3 085	2 888	-
15	-	2 755	2 969	3 177	3 349	3 455	3 468	3 356	-
20	-	2 896	3 128	3 367	3 581	3 743	3 823	3 791	-
30	-	3 203	3 457	3 742	4 028	4 287	4 487	4 601	-
40	-	-	-	4 166	4 505	4 840	5 143	5 384	-
50	-	-	-	-	-	5 470	5 857	6 206	-
60	-	-	-	-	-	-	6 693	7 131	-

**Current consumption in A**

5	-	5.93	6.09	6.20	6.22	6.11	5.82	5.33	-
10	-	6.51	6.73	6.92	7.04	7.06	6.92	6.59	-
15	-	6.91	7.18	7.44	7.65	7.77	7.76	7.59	-
20	-	7.18	7.48	7.79	8.08	8.30	8.40	8.37	-
30	-	7.55	7.87	8.24	8.62	8.98	9.27	9.46	-
40	-	-	-	8.65	9.07	9.50	9.92	10.27	-
50	-	-	-	-	-	10.25	10.72	11.17	-
60	-	-	-	-	-	-	12.08	12.56	-

**Mass flow in kg/h**

5	-	129	150	180	221	272	335	409	-
10	-	122	145	177	218	270	333	407	-
15	-	117	141	174	216	268	331	405	-
20	-	112	138	171	214	267	329	403	-
30	-	107	134	169	212	264	326	399	-
40	-	-	-	167	210	262	322	392	-
50	-	-	-	-	-	258	316	383	-
60	-	-	-	-	-	-	307	370	-

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

5	-	2.29	2.71	3.24	3.95	4.93	6.36	8.66	-
10	-	2.05	2.41	2.86	3.43	4.19	5.24	6.80	-
15	-	1.85	2.17	2.55	3.03	3.63	4.44	5.56	-
20	-	1.67	1.96	2.29	2.69	3.18	3.82	4.67	-
30	-	1.35	1.59	1.85	2.14	2.48	2.90	3.42	-
40	-	-	-	1.47	1.68	1.93	2.21	2.55	-
50	-	-	-	-	-	1.45	1.64	1.87	-
60	-	-	-	-	-	-	1.16	1.31	-

**Nominal performance at to = -31.7 °C, tc = 40.6 °C**

Cooling capacity	5 616	W
Power input	4 083	W
Current consumption	8.54	A
Mass flow	154	kg/h
C.O.P.	1.38	

**Pressure switch settings**

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	0.15	bar(g)

**Sound power data**

Sound power level	84	dB(A)
With accoustic hood	74	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 18.3 °C , Subcooling = 0 K

Tolerance according EN12900

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

**Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R448A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

**Cooling capacity in W**

5	-	3 908	5 098	6 638	8 574	10 954	13 818	17 206	-
10	-	3 792	4 930	6 393	8 228	10 483	13 200	16 419	-
15	-	3 677	4 766	6 155	7 891	10 024	12 596	15 650	-
20	-	3 558	4 600	5 918	7 559	9 572	12 003	14 894	-
30	-	3 291	4 248	5 431	6 890	8 672	10 827	13 400	-
40	-	-	3 838	4 897	6 183	7 746	9 636	11 901	-
50	-	-	-	-	5 401	6 755	8 390	10 358	-
60	-	-	-	-	-	-	7 046	8 723	-

**Power input in W**

5	-	1 624	1 696	1 790	1 911	2 064	2 255	2 488	-
10	-	1 965	2 062	2 180	2 325	2 501	2 715	2 970	-
15	-	2 245	2 364	2 505	2 671	2 868	3 102	3 376	-
20	-	2 484	2 624	2 784	2 969	3 185	3 436	3 728	-
30	-	2 919	3 093	3 287	3 504	3 750	4 030	4 349	-
40	-	-	3 633	3 850	4 090	4 357	4 657	4 995	-
50	-	-	-	-	4 889	5 169	5 479	5 826	-
60	-	-	-	-	-	-	6 659	7 006	-

**Current consumption in A**

5	-	5.78	5.85	5.95	6.04	6.09	6.04	5.86	-
10	-	6.38	6.50	6.65	6.82	6.94	6.97	6.89	-
15	-	6.81	6.96	7.17	7.38	7.57	7.68	7.68	-
20	-	7.11	7.29	7.54	7.80	8.04	8.22	8.29	-
30	-	7.55	7.75	8.03	8.35	8.67	8.95	9.14	-
40	-	-	8.23	8.51	8.85	9.20	9.54	9.80	-
50	-	-	-	-	9.67	10.02	10.37	10.66	-
60	-	-	-	-	-	-	11.82	12.10	-

**Mass flow in kg/h**

5	-	75	96	123	156	197	245	302	-
10	-	75	97	123	156	195	243	298	-
15	-	76	97	123	155	194	241	295	-
20	-	77	98	124	155	193	239	292	-
30	-	79	100	125	155	192	236	287	-
40	-	-	101	126	155	191	233	282	-
50	-	-	-	-	154	189	229	277	-
60	-	-	-	-	-	-	225	271	-

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

5	-	2.41	3.01	3.71	4.49	5.31	6.13	6.92	-
10	-	1.93	2.39	2.93	3.54	4.19	4.86	5.53	-
15	-	1.64	2.02	2.46	2.95	3.49	4.06	4.64	-
20	-	1.43	1.75	2.13	2.55	3.01	3.49	3.99	-
30	-	1.13	1.37	1.65	1.97	2.31	2.69	3.08	-
40	-	-	1.06	1.27	1.51	1.78	2.07	2.38	-
50	-	-	-	-	1.10	1.31	1.53	1.78	-
60	-	-	-	-	-	-	1.06	1.24	-

**Nominal performance at to = -35 °C, tc = 40 °C**

Cooling capacity	3 838	W
Power input	3 633	W
Current consumption	8.23	A
Mass flow	101	kg/h
C.O.P.	1.06	

**Pressure switch settings**

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	1.015	bar(g)

**Sound power data**

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

**Performance data at 60 Hz, Suction temp. = 18.3 °C**
**R448A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

**Cooling capacity in W**

5	-	3 869	5 048	6 573	8 491	10 848	13 689	17 055	-
10	-	3 780	4 912	6 365	8 187	10 424	13 120	16 319	-
15	-	3 692	4 780	6 164	7 893	10 012	12 566	15 600	-
20	-	-	4 648	5 966	7 604	9 607	12 023	14 893	-
30	-	-	-	-	7 023	8 804	10 948	13 501	-
40	-	-	-	-	-	7 978	9 861	12 105	-
50	-	-	-	-	-	-	-	10 668	-
60	-	-	-	-	-	-	-	-	-

**Power input in W**

5	-	1 624	1 696	1 790	1 911	2 064	2 255	2 488	-
10	-	1 965	2 062	2 180	2 325	2 501	2 715	2 970	-
15	-	2 245	2 364	2 505	2 671	2 868	3 102	3 376	-
20	-	-	2 624	2 784	2 969	3 185	3 436	3 728	-
30	-	-	-	-	3 504	3 750	4 030	4 349	-
40	-	-	-	-	-	4 357	4 657	4 995	-
50	-	-	-	-	-	-	-	5 826	-
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

5	-	5.78	5.85	5.95	6.04	6.09	6.04	5.86	-
10	-	6.38	6.50	6.65	6.82	6.94	6.97	6.89	-
15	-	6.81	6.96	7.17	7.38	7.57	7.68	7.68	-
20	-	-	7.29	7.54	7.80	8.04	8.22	8.29	-
30	-	-	-	-	8.35	8.67	8.95	9.14	-
40	-	-	-	-	-	9.20	9.54	9.80	-
50	-	-	-	-	-	-	-	10.66	-
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

5	-	61	80	105	136	174	221	278	-
10	-	62	81	105	135	172	218	274	-
15	-	62	81	105	135	171	216	271	-
20	-	-	82	105	135	171	215	268	-
30	-	-	-	-	135	169	212	263	-
40	-	-	-	-	-	168	209	259	-
50	-	-	-	-	-	-	-	254	-
60	-	-	-	-	-	-	-	-	-

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

5	-	2.38	2.98	3.67	4.44	5.26	6.07	6.85	-
10	-	1.92	2.38	2.92	3.52	4.17	4.83	5.50	-
15	-	1.64	2.02	2.46	2.96	3.49	4.05	4.62	-
20	-	-	1.77	2.14	2.56	3.02	3.50	3.99	-
30	-	-	-	-	2.00	2.35	2.72	3.10	-
40	-	-	-	-	-	1.83	2.12	2.42	-
50	-	-	-	-	-	-	-	1.83	-
60	-	-	-	-	-	-	-	-	-

**Nominal performance at to = -31.7 °C, tc = 40.6 °C**

Cooling capacity	-	W
Power input	-	W
Current consumption	-	A
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 18.3 °C , Subcooling = 0 K

**Pressure switch settings**

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	1.015	bar(g)

**Sound power data**

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

Tolerance according EN12900

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.



**Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R449A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

**Cooling capacity in W**

5	-	3 898	5 087	6 626	8 562	10 941	13 805	17 194	-
10	-	3 782	4 919	6 381	8 215	10 469	13 186	16 407	-
15	-	3 666	4 754	6 142	7 878	10 010	12 582	15 637	-
20	-	3 547	4 588	5 904	7 545	9 557	11 988	14 880	-
30	-	3 279	4 235	5 417	6 874	8 656	10 812	13 386	-
40	-	-	3 823	4 881	6 166	7 729	9 619	11 886	-
50	-	-	-	-	5 384	6 738	8 374	10 343	-
60	-	-	-	-	-	-	7 030	8 709	-

**Power input in W**

5	-	1 624	1 696	1 790	1 911	2 064	2 255	2 488	-
10	-	1 965	2 062	2 180	2 325	2 501	2 715	2 970	-
15	-	2 245	2 364	2 505	2 671	2 868	3 102	3 376	-
20	-	2 484	2 624	2 784	2 969	3 185	3 436	3 728	-
30	-	2 919	3 093	3 287	3 504	3 750	4 030	4 349	-
40	-	-	3 633	3 850	4 090	4 357	4 657	4 995	-
50	-	-	-	-	4 889	5 169	5 479	5 826	-
60	-	-	-	-	-	-	6 659	7 006	-

**Current consumption in A**

5	-	9.99	10.10	10.28	10.44	10.52	10.43	10.12	-
10	-	11.02	11.22	11.50	11.78	11.98	12.05	11.90	-
15	-	11.76	12.03	12.38	12.76	13.08	13.28	13.28	-
20	-	12.29	12.60	13.02	13.47	13.89	14.20	14.33	-
30	-	13.04	13.38	13.87	14.43	14.98	15.46	15.79	-
40	-	-	14.23	14.71	15.29	15.90	16.48	16.94	-
50	-	-	-	-	16.72	17.32	17.91	18.43	-
60	-	-	-	-	-	-	20.42	20.91	-

**Mass flow in kg/h**

5	-	77	99	126	160	202	252	311	-
10	-	77	99	126	159	200	248	306	-
15	-	78	99	126	158	198	245	301	-
20	-	78	100	126	158	197	243	298	-
30	-	80	102	127	158	195	240	292	-
40	-	-	103	128	158	194	237	287	-
50	-	-	-	-	158	193	234	283	-
60	-	-	-	-	-	-	230	277	-

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

5	-	2.40	3.00	3.70	4.48	5.30	6.12	6.91	-
10	-	1.92	2.39	2.93	3.53	4.19	4.86	5.53	-
15	-	1.63	2.01	2.45	2.95	3.49	4.06	4.63	-
20	-	1.43	1.75	2.12	2.54	3.00	3.49	3.99	-
30	-	1.12	1.37	1.65	1.96	2.31	2.68	3.08	-
40	-	-	1.05	1.27	1.51	1.77	2.07	2.38	-
50	-	-	-	-	1.10	1.30	1.53	1.78	-
60	-	-	-	-	-	-	1.06	1.24	-

**Nominal performance at to = -35 °C, tc = 40 °C**

Cooling capacity	3 823	W
Power input	3 633	W
Current consumption	14.23	A
Mass flow	103	kg/h
C.O.P.	1.05	

**Pressure switch settings**

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	1.015	bar(g)

**Sound power data**

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

**Performance data at 60 Hz, Suction temp. = 18.3 °C**
**R449A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

**Cooling capacity in W**

5	-	3 870	5 049	6 574	8 493	10 850	13 690	17 057	-
10	-	3 780	4 913	6 367	8 189	10 426	13 122	16 321	-
15	-	3 693	4 781	6 166	7 894	10 013	12 568	15 602	-
20	-	-	4 650	5 968	7 605	9 609	12 025	14 896	-
30	-	-	-	-	7 025	8 806	10 950	13 503	-
40	-	-	-	-	-	7 980	9 864	12 108	-
50	-	-	-	-	-	-	-	10 672	-
60	-	-	-	-	-	-	-	-	-

**Power input in W**

5	-	1 624	1 696	1 790	1 911	2 064	2 255	2 488	-
10	-	1 965	2 062	2 180	2 325	2 501	2 715	2 970	-
15	-	2 245	2 364	2 505	2 671	2 868	3 102	3 376	-
20	-	-	2 624	2 784	2 969	3 185	3 436	3 728	-
30	-	-	-	-	3 504	3 750	4 030	4 349	-
40	-	-	-	-	-	4 357	4 657	4 995	-
50	-	-	-	-	-	-	-	5 826	-
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

5	-	9.99	10.10	10.28	10.44	10.52	10.43	10.12	-
10	-	11.02	11.22	11.50	11.78	11.98	12.05	11.90	-
15	-	11.76	12.03	12.38	12.76	13.08	13.28	13.28	-
20	-	-	12.60	13.02	13.47	13.89	14.20	14.33	-
30	-	-	-	-	14.43	14.98	15.46	15.79	-
40	-	-	-	-	-	15.90	16.48	16.94	-
50	-	-	-	-	-	-	-	18.43	-
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

5	-	63	82	107	139	178	227	285	-
10	-	63	82	107	138	176	223	281	-
15	-	64	83	107	137	175	221	277	-
20	-	-	83	107	137	174	219	273	-
30	-	-	-	-	137	172	216	268	-
40	-	-	-	-	-	172	213	264	-
50	-	-	-	-	-	-	-	259	-
60	-	-	-	-	-	-	-	-	-

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

5	-	2.38	2.98	3.67	4.45	5.26	6.07	6.86	-
10	-	1.92	2.38	2.92	3.52	4.17	4.83	5.50	-
15	-	1.65	2.02	2.46	2.96	3.49	4.05	4.62	-
20	-	-	1.77	2.14	2.56	3.02	3.50	4.00	-
30	-	-	-	-	2.01	2.35	2.72	3.10	-
40	-	-	-	-	-	1.83	2.12	2.42	-
50	-	-	-	-	-	-	-	1.83	-
60	-	-	-	-	-	-	-	-	-

**Nominal performance at to = -31.7 °C, tc = 40.6 °C**

Cooling capacity	-	W
Power input	-	W
Current consumption	-	A
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 18.3 °C , Subcooling = 0 K

**Pressure switch settings**

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	1.015	bar(g)

**Sound power data**

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

Tolerance according EN12900

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

**Performance data at 60 Hz, EN 12900 rating conditions, Suction temp. = 20 °C**
**R452A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-45	-40	-35	-30	-25	-20	-15	-10

**Cooling capacity in W**

30	-	3 861	4 932	6 226	7 779	9 627	11 805	14 348	-
35	-	-	4 656	5 879	7 341	9 079	11 129	13 526	-
40	-	-	-	5 522	6 892	8 518	10 438	12 688	-
45	-	-	-	-	6 429	7 942	9 731	11 832	-
50	-	-	-	-	-	7 348	9 005	10 957	-
55	-	-	-	-	-	6 734	8 258	10 060	-
60	-	-	-	-	-	-	7 491	9 145	-

**Power input in W**

30	-	2 956	3 214	3 507	3 811	4 103	4 360	4 559	-
35	-	-	3 447	3 747	4 070	4 393	4 692	4 945	-
40	-	-	-	4 018	4 353	4 701	5 036	5 337	-
45	-	-	-	-	4 669	5 034	5 400	5 742	-
50	-	-	-	-	-	5 402	5 791	6 170	-
55	-	-	-	-	-	5 811	6 218	6 626	-
60	-	-	-	-	-	-	6 689	7 120	-

**Current consumption in A**

30	-	7.59	7.85	8.14	8.46	8.79	9.12	9.42	-
35	-	-	8.08	8.41	8.76	9.13	9.50	9.86	-
40	-	-	-	8.72	9.11	9.51	9.92	10.33	-
45	-	-	-	-	9.50	9.94	10.38	10.83	-
50	-	-	-	-	-	10.41	10.89	11.38	-
55	-	-	-	-	-	10.94	11.46	11.98	-
60	-	-	-	-	-	-	12.08	12.63	-

**Mass flow in kg/h**

30	-	93	119	150	188	234	289	354	-
35	-	-	118	149	187	232	287	352	-
40	-	-	-	148	186	231	285	350	-
45	-	-	-	-	184	229	284	348	-
50	-	-	-	-	-	228	282	346	-
55	-	-	-	-	-	226	280	344	-
60	-	-	-	-	-	-	278	342	-

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

30	-	1.31	1.53	1.78	2.04	2.35	2.71	3.15	-
35	-	-	1.35	1.57	1.80	2.07	2.37	2.74	-
40	-	-	-	1.37	1.58	1.81	2.07	2.38	-
45	-	-	-	-	1.38	1.58	1.80	2.06	-
50	-	-	-	-	-	1.36	1.55	1.78	-
55	-	-	-	-	-	1.16	1.33	1.52	-
60	-	-	-	-	-	-	1.12	1.28	-

**Nominal performance at to = -35 °C, tc = 40 °C**

Cooling capacity	-	W
Power input	-	W
Current consumption	-	A
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

**Pressure switch settings**

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	0.15	bar(g)

**Sound power data**

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

Tolerance according EN12900

**Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R452A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-45	-40	-35	-30	-25	-20	-15	-10

**Cooling capacity in W**

30	-	3 490	4 513	5 766	7 288	9 122	11 308	13 888	-
35	-	3 225	4 189	5 363	6 789	8 507	10 562	12 995	-
40	-	2 953	3 856	4 951	6 277	7 880	9 801	12 085	-
45	-	2 672	3 512	4 525	5 752	7 236	9 022	11 157	-
50	-	-	3 154	4 083	5 207	6 571	8 221	10 205	-
55	-	-	-	3 620	4 641	5 883	7 395	9 226	-
60	-	-	-	-	-	5 164	6 536	8 216	-

**Power input in W**

30	-	2 956	3 214	3 507	3 811	4 103	4 360	4 559	-
35	-	3 194	3 447	3 747	4 070	4 393	4 692	4 945	-
40	-	3 475	3 717	4 018	4 353	4 701	5 036	5 337	-
45	-	3 806	4 031	4 327	4 669	5 034	5 400	5 742	-
50	-	-	4 398	4 682	5 024	5 402	5 791	6 170	-
55	-	-	-	5 090	5 427	5 811	6 218	6 626	-
60	-	-	-	-	-	6 269	6 689	7 120	-

**Current consumption in A**

30	-	7.59	7.85	8.14	8.46	8.79	9.12	9.42	-
35	-	7.80	8.08	8.41	8.76	9.13	9.50	9.86	-
40	-	8.06	8.36	8.72	9.11	9.51	9.92	10.33	-
45	-	8.38	8.70	9.08	9.50	9.94	10.38	10.83	-
50	-	-	9.10	9.50	9.94	10.41	10.89	11.38	-
55	-	-	-	9.98	10.45	10.94	11.46	11.98	-
60	-	-	-	-	-	11.54	12.08	12.63	-

**Mass flow in kg/h**

30	-	114	143	178	219	268	324	390	-
35	-	113	142	177	218	266	322	387	-
40	-	112	141	176	216	264	320	385	-
45	-	111	140	174	215	262	318	383	-
50	-	-	139	173	213	261	316	380	-
55	-	-	-	172	212	259	314	378	-
60	-	-	-	-	-	257	312	376	-

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

30	-	1.18	1.40	1.64	1.91	2.22	2.59	3.05	-
35	-	1.01	1.22	1.43	1.67	1.94	2.25	2.63	-
40	-	0.85	1.04	1.23	1.44	1.68	1.95	2.26	-
45	-	0.70	0.87	1.05	1.23	1.44	1.67	1.94	-
50	-	-	0.72	0.87	1.04	1.22	1.42	1.65	-
55	-	-	-	0.71	0.86	1.01	1.19	1.39	-
60	-	-	-	-	-	0.82	0.98	1.15	-

**Nominal performance at to = -35 °C, tc = 40 °C**

Cooling capacity	3 856	W
Power input	3 717	W
Current consumption	8.36	A
Mass flow	141	kg/h
C.O.P.	1.04	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

**Pressure switch settings**

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	0.15	bar(g)

**Sound power data**

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

Tolerance according EN12900

# Datasheet, performance data

# Scroll compressor. LLZ018T9-Eco.

## Performance data at 60 Hz, with Economizer cycle, Superheat = 10 K, Subcooling = 5 K

## R404A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

### Cooling capacity in W

5	-	7 587	8 680	-	-	-	-	-
10	-	7 115	8 258	9 801	11 728	-	-	-
15	-	6 727	7 910	9 469	11 390	13 659	-	-
20	-	6 411	7 625	9 191	11 095	13 326	15 872	18 718
30	-	5 958	7 202	8 752	10 594	12 719	15 116	17 777
40	-	5 670	6 904	8 399	10 141	12 122	14 332	16 764
50	-	-	6 648	8 048	9 652	11 450	13 435	15 600
60	-	-	-	-	-	-	12 342	14 202

### Power input in W

5	-	2 134	2 508	-	-	-	-	-
10	-	2 752	2 986	3 227	3 440	-	-	-
15	-	2 981	3 187	3 408	3 610	3 759	-	-
20	-	3 240	3 425	3 636	3 837	3 993	4 069	4 030
30	-	3 851	4 025	4 244	4 470	4 670	4 808	4 849
40	-	4 607	4 809	5 074	5 364	5 645	5 881	6 039
50	-	-	5 801	6 151	6 543	6 943	7 315	7 625
60	-	-	-	-	-	-	9 143	9 643

### Current consumption in A

5	-	7.44	7.84	-	-	-	-	-
10	-	7.76	8.13	8.41	8.60	-	-	-
15	-	8.05	8.41	8.69	8.89	9.00	-	-
20	-	8.33	8.68	8.97	9.19	9.34	9.42	9.43
30	-	8.95	9.30	9.62	9.91	10.16	10.37	10.53
40	-	9.76	10.15	10.53	10.91	11.29	11.65	12.00
50	-	-	11.36	11.84	12.34	12.87	13.42	13.98
60	-	-	-	-	-	-	15.82	16.62

### Mass flow in kg/h

5	-	158	181	-	-	-	-	-
10	-	150	174	209	253	-	-	-
15	-	143	170	205	251	306	-	-
20	-	138	166	203	249	304	368	442
30	-	131	161	199	246	301	365	437
40	-	128	159	198	244	298	360	430
50	-	-	159	197	242	294	353	420
60	-	-	-	-	-	-	343	405

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

5	-	3.56	3.46	-	-	-	-	-
10	-	2.59	2.77	3.04	3.41	-	-	-
15	-	2.26	2.48	2.78	3.15	3.63	-	-
20	-	1.98	2.23	2.53	2.89	3.34	3.90	4.64
30	-	1.55	1.79	2.06	2.37	2.72	3.14	3.67
40	-	1.23	1.44	1.66	1.89	2.15	2.44	2.78
50	-	-	1.15	1.31	1.48	1.65	1.84	2.05
60	-	-	-	-	-	-	1.35	1.47

### Nominal performance at to = -35 °C, tc = 40 °C

Cooling capacity	6 904	W
Power input	4 809	W
Current consumption	10.15	A
Mass flow	159	kg/h
C.O.P.	1.44	

### Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	0.15	bar(g)

### Sound power data

Sound power level	84	dB(A)
With accoustic hood	74	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Danfoss reserves the right to change the data without notice. Danfoss products are designed to meet the requirements of the applicable standards and regulations. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

# Datasheet, performance data

# Scroll compressor. LLZ018T9-Eco.

Performance data at 60 Hz, with Economizer cycle, Suction temp. = 18.3 °C, Subcooling = 5 K

# R404A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

## Cooling capacity in W

5	-	7 677	8 805	-	-	-	-	-
10	-	7 220	8 403	9 984	11 943	-	-	-
15	-	6 844	8 072	9 676	11 636	13 932	-	-
20	-	6 542	7 804	9 419	11 370	13 635	16 193	19 019
30	-	6 117	7 416	9 026	10 925	13 096	15 518	18 170
40	-	5 868	7 164	8 725	10 533	12 568	14 809	17 238
50	-	-	6 968	8 441	10 116	11 973	13 993	16 155
60	-	-	-	-	-	-	12 990	14 845

## Power input in W

5	-	2 461	2 742	-	-	-	-	-
10	-	2 721	2 968	3 221	3 445	-	-	-
15	-	2 938	3 159	3 394	3 609	3 768	-	-
20	-	3 180	3 384	3 612	3 829	3 997	4 082	4 047
30	-	3 751	3 951	4 192	4 440	4 657	4 810	4 860
40	-	4 454	4 688	4 981	5 298	5 603	5 861	6 036
50	-	-	5 616	6 000	6 425	6 857	7 259	7 595
60	-	-	-	-	-	-	9 028	9 566

## Current consumption in A

5	-	7.44	7.84	-	-	-	-	-
10	-	7.76	8.13	8.41	8.60	-	-	-
15	-	8.05	8.41	8.69	8.89	9.00	-	-
20	-	8.33	8.68	8.97	9.19	9.34	9.42	9.43
30	-	8.95	9.30	9.62	9.91	10.16	10.37	10.53
40	-	9.76	10.15	10.53	10.91	11.29	11.65	12.00
50	-	-	11.36	11.84	12.34	12.87	13.42	13.98
60	-	-	-	-	-	-	15.82	16.62

## Mass flow in kg/h

5	-	129	150	-	-	-	-	-
10	-	122	145	177	218	-	-	-
15	-	117	141	174	216	268	-	-
20	-	112	138	171	214	267	329	403
30	-	107	134	169	212	264	326	399
40	-	104	132	167	210	262	322	392
50	-	-	132	167	208	258	316	383
60	-	-	-	-	-	-	307	370

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

5	-	3.12	3.21	-	-	-	-	-
10	-	2.65	2.83	3.10	3.47	-	-	-
15	-	2.33	2.56	2.85	3.22	3.70	-	-
20	-	2.06	2.31	2.61	2.97	3.41	3.97	4.70
30	-	1.63	1.88	2.15	2.46	2.81	3.23	3.74
40	-	1.32	1.53	1.75	1.99	2.24	2.53	2.86
50	-	-	1.24	1.41	1.57	1.75	1.93	2.13
60	-	-	-	-	-	-	1.44	1.55

## Nominal performance at to = -31.7 °C, tc = 40.6 °C

Cooling capacity	8 151	W
Power input	4 930	W
Current consumption	10.46	A
Mass flow	154	kg/h
C.O.P.	1.65	

## Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	0.15	bar(g)

## Sound power data

Sound power level	84	dB(A)
With accoustic hood	74	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Danfoss and the Danfoss logo are registered trademarks of Danfoss A/S. Danfoss and other printed material. Danfoss tolerances according to EN12900. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

# Datasheet, performance data

Scroll compressor. LLZ018T9-LI.

Performance data at 60 Hz, with Liquid Injection, Superheat = 10 K, Subcooling = 5 K

# R404A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

## Cooling capacity in W

5	-	5 357	6 899	8 790	11 069	13 778	16 957	20 648	-
10	-	5 074	6 564	8 388	10 585	13 197	16 264	19 827	-
15	-	4 786	6 217	7 968	10 078	12 586	15 534	18 963	-
20	-	4 496	5 862	7 533	9 549	11 947	14 770	18 057	-
30	-	3 911	5 130	6 623	8 431	10 591	13 144	16 130	-
40	-	3 331	4 378	5 670	7 245	9 142	11 400	14 057	-
50	-	2 763	3 616	4 683	6 002	7 611	9 548	11 851	-
60	-	2 210	-	-	4 707	6 003	7 592	9 513	-

## Power input in W

5	-	2 243	2 400	2 544	2 666	2 754	2 800	2 792	-
10	-	2 392	2 566	2 731	2 878	2 996	3 075	3 106	-
15	-	2 547	2 736	2 921	3 091	3 237	3 348	3 415	-
20	-	2 713	2 915	3 118	3 310	3 482	3 623	3 725	-
30	-	3 093	3 317	3 550	3 781	4 001	4 198	4 364	-
40	-	3 569	3 809	4 065	4 329	4 589	4 836	5 059	-
50	-	4 178	4 426	4 700	4 988	5 283	5 572	5 847	-
60	-	4 954	-	-	5 796	6 118	6 443	6 762	-

## Current consumption in A

5	-	6.22	6.47	6.68	6.83	6.91	6.90	6.77	-
10	-	6.38	6.64	6.87	7.05	7.18	7.23	7.18	-
15	-	6.57	6.82	7.07	7.29	7.46	7.57	7.60	-
20	-	6.77	7.03	7.29	7.54	7.76	7.93	8.03	-
30	-	7.26	7.52	7.82	8.12	8.43	8.71	8.96	-
40	-	7.90	8.16	8.48	8.84	9.23	9.62	10.00	-
50	-	8.73	8.98	9.32	9.73	10.20	10.70	11.21	-
60	-	9.78	-	-	10.83	11.37	11.97	12.62	-

## Mass flow in kg/h

5	-	127	160	200	247	302	365	436	-
10	-	126	160	200	247	302	365	438	-
15	-	125	159	199	247	302	365	438	-
20	-	124	158	198	246	301	365	437	-
30	-	122	156	196	243	298	361	434	-
40	-	120	153	192	239	293	356	429	-
50	-	119	151	189	234	287	349	421	-
60	-	120	-	-	229	280	341	411	-

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

5	-	2.39	2.87	3.45	4.15	5.00	6.06	7.40	-
10	-	2.12	2.56	3.07	3.68	4.41	5.29	6.38	-
15	-	1.88	2.27	2.73	3.26	3.89	4.64	5.55	-
20	-	1.66	2.01	2.42	2.89	3.43	4.08	4.85	-
30	-	1.26	1.55	1.87	2.23	2.65	3.13	3.70	-
40	-	0.93	1.15	1.39	1.67	1.99	2.36	2.78	-
50	-	0.66	0.82	1.00	1.20	1.44	1.71	2.03	-
60	-	0.45	-	-	0.81	0.98	1.18	1.41	-

## Nominal performance at to = -35 °C, tc = 40 °C

Cooling capacity	4 378	W
Power input	3 809	W
Current consumption	8.16	A
Mass flow	153	kg/h
C.O.P.	1.15	

## Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	1.015	bar(g)

## Sound power data

Sound power level	84	dB(A)
With acoustic hood	74	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Danfoss reserves the right to change specifications, data, dimensions, drawings, brochures and other printed material. Danfoss products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

# Datasheet, performance data

Scroll compressor. LLZ018T9-LI.

Performance data at 60 Hz, with Liquid Injection, Suction temp. = 18.3 °C,  
Subcooling = 5 K

# R404A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

## Cooling capacity in W

5	-	5 526	7 082	8 978	11 253	13 942	17 087	20 731	-
10	-	5 287	6 799	8 636	10 836	13 434	16 469	19 984	-
15	-	5 044	6 505	8 277	10 396	12 896	15 816	19 195	-
20	-	4 797	6 202	7 903	9 934	12 331	15 128	18 365	-
30	-	4 301	5 574	7 114	8 953	11 123	13 658	16 593	-
40	-	3 812	4 929	6 282	7 903	9 822	12 070	14 677	-
50	-	-	4 278	5 418	6 796	8 439	10 375	12 630	-
60	-	-	-	-	-	-	8 584	10 459	-

## Power input in W

5	-	2 243	2 400	2 544	2 666	2 754	2 800	2 792	-
10	-	2 392	2 566	2 731	2 878	2 996	3 075	3 106	-
15	-	2 547	2 736	2 921	3 091	3 237	3 348	3 415	-
20	-	2 713	2 915	3 118	3 310	3 482	3 623	3 725	-
30	-	3 093	3 317	3 550	3 781	4 001	4 198	4 364	-
40	-	3 569	3 809	4 065	4 329	4 589	4 836	5 059	-
50	-	-	4 426	4 700	4 988	5 283	5 572	5 847	-
60	-	-	-	-	-	-	6 443	6 762	-

## Current consumption in A

5	-	6.22	6.47	6.68	6.83	6.91	6.90	6.77	-
10	-	6.38	6.64	6.87	7.05	7.18	7.23	7.18	-
15	-	6.57	6.82	7.07	7.29	7.46	7.57	7.60	-
20	-	6.77	7.03	7.29	7.54	7.76	7.93	8.03	-
30	-	7.26	7.52	7.82	8.12	8.43	8.71	8.96	-
40	-	7.90	8.16	8.48	8.84	9.23	9.62	10.00	-
50	-	-	8.98	9.32	9.73	10.20	10.70	11.21	-
60	-	-	-	-	-	-	11.97	12.62	-

## Mass flow in kg/h

5	-	103	133	169	213	265	326	398	-
10	-	103	133	169	213	265	327	399	-
15	-	102	132	169	212	265	327	400	-
20	-	101	131	168	212	264	326	399	-
30	-	99	129	165	209	261	323	397	-
40	-	98	127	162	205	257	319	391	-
50	-	-	125	159	201	252	312	384	-
60	-	-	-	-	-	-	305	375	-

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

5	-	2.46	2.95	3.53	4.22	5.06	6.10	7.42	-
10	-	2.21	2.65	3.16	3.77	4.48	5.36	6.43	-
15	-	1.98	2.38	2.83	3.36	3.98	4.72	5.62	-
20	-	1.77	2.13	2.53	3.00	3.54	4.18	4.93	-
30	-	1.39	1.68	2.00	2.37	2.78	3.25	3.80	-
40	-	1.07	1.29	1.55	1.83	2.14	2.50	2.90	-
50	-	-	0.97	1.15	1.36	1.60	1.86	2.16	-
60	-	-	-	-	-	-	1.33	1.55	-

## Nominal performance at to = -31.7 °C, tc = 40.6 °C

Cooling capacity	5 746	W
Power input	4 011	W
Current consumption	8.41	A
Mass flow	149	kg/h
C.O.P.	1.43	

## Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	1.015	bar(g)

## Sound power data

Sound power level	84	dB(A)
With accoustic hood	74	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Danfoss and the Danfoss logo are registered trademarks of Danfoss A/S. All rights reserved. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.



# Datasheet, performance data

Scroll compressor. LLZ018T9-LI.

Performance data at 60 Hz, with Liquid Injection, Superheat = 10 K, Subcooling = 5 K

# R448A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

## Cooling capacity in W

5	-	4 053	5 284	6 877	8 878	11 336	14 294	17 790	-
10	-	3 940	5 120	6 635	8 535	10 868	13 677	17 005	-
15	-	3 829	4 960	6 401	8 202	10 412	13 077	16 238	-
20	-	3 714	4 799	6 169	7 875	9 965	12 487	15 486	-
30	-	3 457	4 458	5 694	7 217	9 077	11 323	14 004	-
40	-	3 133	4 060	5 174	6 525	8 166	10 149	12 523	-
50	-	2 708	3 570	4 571	5 763	7 197	8 927	11 006	-
60	-	-	-	-	-	-	7 620	9 416	-

## Power input in W

5	-	1 624	1 696	1 790	1 911	2 064	2 255	2 488	-
10	-	1 965	2 062	2 180	2 325	2 501	2 715	2 970	-
15	-	2 245	2 364	2 505	2 671	2 868	3 102	3 376	-
20	-	2 484	2 624	2 784	2 969	3 185	3 436	3 728	-
30	-	2 919	3 093	3 287	3 504	3 750	4 030	4 349	-
40	-	3 434	3 633	3 850	4 090	4 357	4 657	4 995	-
50	-	4 190	4 405	4 636	4 889	5 169	5 479	5 826	-
60	-	-	-	-	-	-	6 659	7 006	-

## Current consumption in A

5	-	5.78	5.85	5.95	6.04	6.09	6.04	5.86	-
10	-	6.38	6.50	6.65	6.82	6.94	6.97	6.89	-
15	-	6.81	6.96	7.17	7.38	7.57	7.68	7.68	-
20	-	7.11	7.29	7.54	7.80	8.04	8.22	8.29	-
30	-	7.55	7.75	8.03	8.35	8.67	8.95	9.14	-
40	-	8.06	8.23	8.51	8.85	9.20	9.54	9.80	-
50	-	9.02	9.13	9.36	9.67	10.02	10.37	10.66	-
60	-	-	-	-	-	-	11.82	12.10	-

## Mass flow in kg/h

5	-	75	96	123	156	197	245	302	-
10	-	75	97	123	156	195	243	298	-
15	-	76	97	123	155	194	241	295	-
20	-	77	98	124	155	193	239	292	-
30	-	79	100	125	155	192	236	287	-
40	-	79	101	126	155	191	233	282	-
50	-	78	100	125	154	189	229	277	-
60	-	-	-	-	-	-	225	271	-

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

5	-	2.50	3.12	3.84	4.65	5.49	6.34	7.15	-
10	-	2.00	2.48	3.04	3.67	4.34	5.04	5.73	-
15	-	1.71	2.10	2.56	3.07	3.63	4.22	4.81	-
20	-	1.50	1.83	2.22	2.65	3.13	3.63	4.15	-
30	-	1.18	1.44	1.73	2.06	2.42	2.81	3.22	-
40	-	0.91	1.12	1.34	1.60	1.87	2.18	2.51	-
50	-	0.65	0.81	0.99	1.18	1.39	1.63	1.89	-
60	-	-	-	-	-	-	1.14	1.34	-

## Nominal performance at to = -35 °C, tc = 40 °C

Cooling capacity	4 060	W
Power input	3 633	W
Current consumption	8.23	A
Mass flow	101	kg/h
C.O.P.	1.12	

## Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	1.015	bar(g)

## Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Danfoss reserves the right to change the data without notice. Danfoss products are designed to meet the requirements of the applicable standards, brochures and other printed material. Danfoss reserves the right to change the data without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

# Datasheet, performance data

Scroll compressor. LLZ018T9-LI.

Performance data at 60 Hz, with Liquid Injection, Suction temp. = 18.3 °C,  
Subcooling = 5 K

# R448A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

## Cooling capacity in W

5	-	3 988	5 204	6 776	8 755	11 186	14 117	17 591	-
10	-	3 901	5 070	6 571	8 453	10 764	13 550	16 856	-
15	-	3 817	4 942	6 374	8 162	10 355	12 999	16 140	-
20	-	3 731	4 814	6 180	7 877	9 954	12 459	15 437	-
30	-	3 534	4 543	5 784	7 307	9 161	11 395	14 055	-
40	-	3 273	4 219	5 347	6 707	8 349	10 322	12 675	-
50	-	-	-	-	-	7 481	9 205	11 262	-
60	-	-	-	-	-	-	-	-	-

## Power input in W

5	-	1 624	1 696	1 790	1 911	2 064	2 255	2 488	-
10	-	1 965	2 062	2 180	2 325	2 501	2 715	2 970	-
15	-	2 245	2 364	2 505	2 671	2 868	3 102	3 376	-
20	-	2 484	2 624	2 784	2 969	3 185	3 436	3 728	-
30	-	2 919	3 093	3 287	3 504	3 750	4 030	4 349	-
40	-	3 434	3 633	3 850	4 090	4 357	4 657	4 995	-
50	-	-	-	-	-	5 169	5 479	5 826	-
60	-	-	-	-	-	-	-	-	-

## Current consumption in A

5	-	5.78	5.85	5.95	6.04	6.09	6.04	5.86	-
10	-	6.38	6.50	6.65	6.82	6.94	6.97	6.89	-
15	-	6.81	6.96	7.17	7.38	7.57	7.68	7.68	-
20	-	7.11	7.29	7.54	7.80	8.04	8.22	8.29	-
30	-	7.55	7.75	8.03	8.35	8.67	8.95	9.14	-
40	-	8.06	8.23	8.51	8.85	9.20	9.54	9.80	-
50	-	-	-	-	-	10.02	10.37	10.66	-
60	-	-	-	-	-	-	-	-	-

## Mass flow in kg/h

5	-	61	80	105	136	174	221	278	-
10	-	62	81	105	135	172	218	274	-
15	-	62	81	105	135	171	216	271	-
20	-	63	82	105	135	171	215	268	-
30	-	64	83	106	135	169	212	263	-
40	-	65	84	107	134	168	209	259	-
50	-	-	-	-	-	167	206	254	-
60	-	-	-	-	-	-	-	-	-

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

5	-	2.45	3.07	3.79	4.58	5.42	6.26	7.07	-
10	-	1.99	2.46	3.01	3.64	4.30	4.99	5.68	-
15	-	1.70	2.09	2.54	3.06	3.61	4.19	4.78	-
20	-	1.50	1.84	2.22	2.65	3.13	3.63	4.14	-
30	-	1.21	1.47	1.76	2.09	2.44	2.83	3.23	-
40	-	0.95	1.16	1.39	1.64	1.92	2.22	2.54	-
50	-	-	-	-	-	1.45	1.68	1.93	-
60	-	-	-	-	-	-	-	-	-

## Nominal performance at to = -31.7 °C, tc = 40.6 °C

Cooling capacity	4 914	W
Power input	3 813	W
Current consumption	8.45	A
Mass flow	99	kg/h
C.O.P.	1.29	

## Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	1.015	bar(g)

## Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Danfoss and the Danfoss logo are registered trademarks of Danfoss A/S. All rights reserved. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

# Datasheet, performance data

Scroll compressor. LLZ018T9-LI.

Performance data at 60 Hz, with Liquid Injection, Superheat = 10 K, Subcooling = 5 K

# R449A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
		-40	-35	-30	-25	-20	-15	-10

## Cooling capacity in W

5	-	4 046	5 276	6 868	8 870	11 329	14 288	17 787	-
10	-	3 933	5 112	6 626	8 527	10 860	13 671	17 002	-
15	-	3 821	4 951	6 392	8 193	10 404	13 070	16 235	-
20	-	3 706	4 790	6 160	7 865	9 956	12 480	15 482	-
30	-	3 448	4 448	5 684	7 207	9 068	11 316	14 000	-
40	-	3 122	4 049	5 162	6 514	8 156	10 141	12 518	-
50	-	2 697	3 558	4 559	5 751	7 186	8 918	11 001	-
60	-	-	-	-	-	-	7 611	9 411	-

## Power input in W

5	-	1 624	1 696	1 790	1 911	2 064	2 255	2 488	-
10	-	1 965	2 062	2 180	2 325	2 501	2 715	2 970	-
15	-	2 245	2 364	2 505	2 671	2 868	3 102	3 376	-
20	-	2 484	2 624	2 784	2 969	3 185	3 436	3 728	-
30	-	2 919	3 093	3 287	3 504	3 750	4 030	4 349	-
40	-	3 434	3 633	3 850	4 090	4 357	4 657	4 995	-
50	-	4 190	4 405	4 636	4 889	5 169	5 479	5 826	-
60	-	-	-	-	-	-	6 659	7 006	-

## Current consumption in A

5	-	9.99	10.10	10.28	10.44	10.52	10.43	10.12	-
10	-	11.02	11.22	11.50	11.78	11.98	12.05	11.90	-
15	-	11.76	12.03	12.38	12.76	13.08	13.28	13.28	-
20	-	12.29	12.60	13.02	13.47	13.89	14.20	14.33	-
30	-	13.04	13.38	13.87	14.43	14.98	15.46	15.79	-
40	-	13.92	14.23	14.71	15.29	15.90	16.48	16.94	-
50	-	15.59	15.78	16.18	16.72	17.32	17.91	18.43	-
60	-	-	-	-	-	-	20.42	20.91	-

## Mass flow in kg/h

5	-	77	99	126	160	202	252	311	-
10	-	77	99	126	159	200	248	306	-
15	-	78	99	126	158	198	245	301	-
20	-	78	100	126	158	197	243	298	-
30	-	80	102	127	158	195	240	292	-
40	-	81	103	128	158	194	237	287	-
50	-	79	102	128	158	193	234	283	-
60	-	-	-	-	-	-	230	277	-

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

5	-	2.49	3.11	3.84	4.64	5.49	6.34	7.15	-
10	-	2.00	2.48	3.04	3.67	4.34	5.04	5.73	-
15	-	1.70	2.09	2.55	3.07	3.63	4.21	4.81	-
20	-	1.49	1.83	2.21	2.65	3.13	3.63	4.15	-
30	-	1.18	1.44	1.73	2.06	2.42	2.81	3.22	-
40	-	0.91	1.11	1.34	1.59	1.87	2.18	2.51	-
50	-	0.64	0.81	0.98	1.18	1.39	1.63	1.89	-
60	-	-	-	-	-	-	1.14	1.34	-

## Nominal performance at to = -35 °C, tc = 40 °C

Cooling capacity	4 049	W
Power input	3 633	W
Current consumption	14.23	A
Mass flow	103	kg/h
C.O.P.	1.11	

## Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	0.15	bar(g)
LP pump down setting	1.015	bar(g)

## Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Danfoss reserves the right to change specifications, figures, brochures and other printed material. Danfoss products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

