

ENGINEERING
TOMORROW

Danfoss

Datasheets

Danfoss scroll compressors **H series**



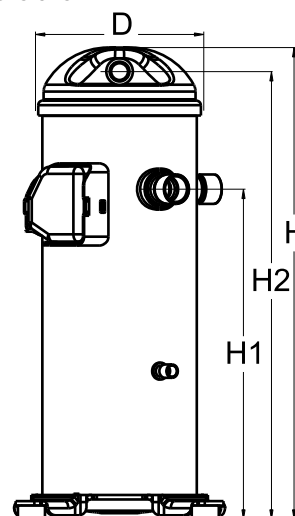
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www.danfoss.com/odsg

General Characteristics

Model number (on compressor nameplate)		HRH049U4LC8
Code number for Singlepack*		120U2474
Code number for Industrial pack**		120U2471
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		47.36 cm ³ /rev
Displacement @ Nominal speed		8.2 m ³ /h @ 2900 rpm - 9.9 m ³ /h @ 3500 rpm
Net weight		37.19 kg
Oil charge		1.57 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		-
Refrigerant charge limit		5.44 kg
Approved refrigerants		R410A

Dimensions

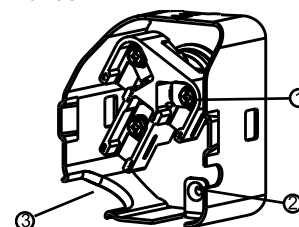


D=183.5 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

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	2.594 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	2.550 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	2.540 Ω
Rated Load Amps (RLA)	8.6 A
Maximum Continuous Current (MCC)	13.5 A
Locked Rotor Amps (LRA)	60 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	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

Rotolock accessories, suction side

Code no.

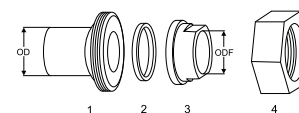
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



- 1: Rotolock adapter (Suc & Dis)
- 2: Gasket (Suc & Dis)
- 3: Solder sleeve (Suc & Dis)
- 4: Rotolock nut (Suc & Dis)

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

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

Code no.

Belt type crankcase heater, 50 W, 230 V, CE mark, UL	120Z0057
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058

Miscellaneous accessories

Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5064
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031
Terminal box cover	120Z5018

Performance data at 50 Hz, EN 12900 rating conditions
R410A

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

Cooling capacity in W

30	4 237	5 338	6 572	8 005	9 706	11 740	14 176	17 080	-
35	3 785	4 947	6 184	7 564	9 152	11 015	13 220	15 835	-
40	-	4 428	5 713	7 083	8 604	10 341	12 363	14 733	-
45	-	-	5 112	6 515	8 012	9 668	11 550	13 723	-
50	-	-	-	5 812	7 327	8 945	10 730	12 748	-
55	-	-	-	-	6 501	8 118	9 847	11 751	-
60	-	-	-	-	-	7 135	8 841	10 666	-
65	-	-	-	-	-	-	7 634	9 401	-

Power input in W

30	2 187	2 213	2 231	2 237	2 228	2 200	2 149	2 073	-
35	2 444	2 474	2 498	2 513	2 514	2 498	2 462	2 401	-
40	-	2 784	2 812	2 832	2 841	2 834	2 809	2 762	-
45	-	-	3 177	3 200	3 213	3 214	3 197	3 161	-
50	-	-	-	3 621	3 637	3 641	3 631	3 602	-
55	-	-	-	-	4 117	4 123	4 116	4 092	-
60	-	-	-	-	-	4 665	4 658	4 637	-
65	-	-	-	-	-	-	5 263	5 241	-

Current consumption in A

30	3.77	3.78	3.82	3.86	3.86	3.79	3.62	3.31	-
35	3.96	4.00	4.07	4.15	4.20	4.18	4.06	3.81	-
40	-	4.27	4.36	4.46	4.53	4.55	4.47	4.26	-
45	-	-	4.73	4.83	4.91	4.93	4.87	4.69	-
50	-	-	-	5.29	5.36	5.38	5.31	5.14	-
55	-	-	-	-	5.92	5.91	5.83	5.64	-
60	-	-	-	-	-	6.58	6.46	6.23	-
65	-	-	-	-	-	-	7.23	6.95	-

Mass flow in kg/h

30	89	110	133	160	192	230	276	331	-
35	83	107	132	159	190	227	269	320	-
40	-	101	129	158	189	224	265	312	-
45	-	-	122	154	186	222	262	308	-
50	-	-	-	146	182	219	260	304	-
55	-	-	-	-	174	214	256	301	-
60	-	-	-	-	-	205	250	297	-
65	-	-	-	-	-	-	240	290	-

Coefficient of performance (C.O.P.)

30	1.94	2.41	2.95	3.58	4.36	5.34	6.60	8.24	-
35	1.55	2.00	2.48	3.01	3.64	4.41	5.37	6.59	-
40	-	1.59	2.03	2.50	3.03	3.65	4.40	5.33	-
45	-	-	1.61	2.04	2.49	3.01	3.61	4.34	-
50	-	-	-	1.61	2.01	2.46	2.96	3.54	-
55	-	-	-	-	1.58	1.97	2.39	2.87	-
60	-	-	-	-	-	1.53	1.90	2.30	-
65	-	-	-	-	-	-	1.45	1.79	-

Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	10 730	W
Power input	3 631	W
Current consumption	5.31	A
Mass flow	260	kg/h
C.O.P.	2.96	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	62	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%

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Performance data at 50 Hz, ARI rating conditions
R410A

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

Cooling capacity in W

30	4 576	5 758	7 082	8 619	10 441	12 618	15 224	18 328	-
35	-	5 370	6 706	8 193	9 904	11 909	14 280	17 090	-
40	-	-	6 242	7 729	9 378	11 260	13 447	16 011	-
45	-	-	5 636	7 173	8 810	10 619	12 671	15 039	-
50	-	-	-	6 474	8 148	9 933	11 900	14 121	-
55	-	-	-	-	7 340	9 151	11 082	13 205	-
60	-	-	-	-	-	8 219	10 164	12 239	-
65	-	-	-	-	-	-	9 093	11 171	-

Power input in W

30	2 187	2 213	2 231	2 237	2 228	2 200	2 149	2 073	-
35	-	2 474	2 498	2 513	2 514	2 498	2 462	2 401	-
40	-	-	2 812	2 832	2 841	2 834	2 809	2 762	-
45	-	-	3 177	3 200	3 213	3 214	3 197	3 161	-
50	-	-	-	3 621	3 637	3 641	3 631	3 602	-
55	-	-	-	-	4 117	4 123	4 116	4 092	-
60	-	-	-	-	-	4 665	4 658	4 637	-
65	-	-	-	-	-	-	5 263	5 241	-

Current consumption in A

30	3.77	3.78	3.82	3.86	3.86	3.79	3.62	3.31	-
35	-	4.00	4.07	4.15	4.20	4.18	4.06	3.81	-
40	-	-	4.36	4.46	4.53	4.55	4.47	4.26	-
45	-	-	4.73	4.83	4.91	4.93	4.87	4.69	-
50	-	-	-	5.29	5.36	5.38	5.31	5.14	-
55	-	-	-	-	5.92	5.91	5.83	5.64	-
60	-	-	-	-	-	6.58	6.46	6.23	-
65	-	-	-	-	-	-	7.23	6.95	-

Mass flow in kg/h

30	88	109	132	159	191	229	274	329	-
35	-	107	131	158	189	225	267	318	-
40	-	-	128	157	188	223	263	310	-
45	-	-	121	153	185	221	260	306	-
50	-	-	-	145	181	218	258	302	-
55	-	-	-	-	172	212	254	299	-
60	-	-	-	-	-	203	248	295	-
65	-	-	-	-	-	-	238	288	-

Coefficient of performance (C.O.P.)

30	2.09	2.60	3.18	3.85	4.69	5.74	7.08	8.84	-
35	-	2.17	2.68	3.26	3.94	4.77	5.80	7.12	-
40	-	-	2.22	2.73	3.30	3.97	4.79	5.80	-
45	-	-	1.77	2.24	2.74	3.30	3.96	4.76	-
50	-	-	-	1.79	2.24	2.73	3.28	3.92	-
55	-	-	-	-	1.78	2.22	2.69	3.23	-
60	-	-	-	-	-	1.76	2.18	2.64	-
65	-	-	-	-	-	-	1.73	2.13	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	12 094	W
Power input	4 047	W
Current consumption	5.70	A
Mass flow	274	kg/h
C.O.P.	2.99	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	62	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%

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Performance data at 60 Hz, EN 12900 rating conditions

R410A

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

Cooling capacity in W

30	5 037	6 346	7 813	9 517	11 538	13 957	16 853	20 306	-
35	4 498	5 879	7 350	8 989	10 876	13 091	15 712	18 819	-
40	-	5 260	6 787	8 414	10 221	12 286	14 687	17 504	-
45	-	-	6 070	7 736	9 514	11 481	13 716	16 296	-
50	-	-	-	6 899	8 697	10 617	12 736	15 131	-
55	-	-	-	-	7 713	9 632	11 683	13 941	-
60	-	-	-	-	-	8 461	10 484	12 647	-
65	-	-	-	-	-	-	9 049	11 143	-

Power input in W

30	2 624	2 658	2 679	2 686	2 675	2 641	2 582	2 493	-
35	2 910	2 950	2 981	2 998	2 999	2 980	2 937	2 867	-
40	-	3 290	3 326	3 351	3 362	3 354	3 324	3 270	-
45	-	-	3 723	3 752	3 768	3 769	3 749	3 706	-
50	-	-	-	4 206	4 226	4 231	4 218	4 184	-
55	-	-	-	-	4 741	4 748	4 739	4 710	-
60	-	-	-	-	-	5 325	5 316	5 290	-
65	-	-	-	-	-	-	5 959	5 932	-

Current consumption in A

30	3.77	3.80	3.83	3.86	3.89	3.94	3.99	4.07	-
35	3.97	4.00	4.04	4.07	4.10	4.14	4.18	4.24	-
40	-	4.23	4.27	4.31	4.34	4.38	4.42	4.46	-
45	-	-	4.54	4.59	4.63	4.66	4.70	4.74	-
50	-	-	-	4.90	4.95	5.00	5.04	5.07	-
55	-	-	-	-	5.33	5.38	5.43	5.47	-
60	-	-	-	-	-	5.82	5.88	5.93	-
65	-	-	-	-	-	-	6.40	6.46	-

Mass flow in kg/h

30	105	130	158	191	228	274	328	394	-
35	99	127	157	189	226	269	320	380	-
40	-	120	153	187	224	266	315	371	-
45	-	-	145	182	221	264	311	365	-
50	-	-	-	173	216	260	308	361	-
55	-	-	-	-	206	254	303	357	-
60	-	-	-	-	-	243	296	352	-
65	-	-	-	-	-	-	284	344	-

Coefficient of performance (C.O.P.)

30	1.92	2.39	2.92	3.54	4.31	5.28	6.53	8.15	-
35	1.55	1.99	2.47	3.00	3.63	4.39	5.35	6.56	-
40	-	1.60	2.04	2.51	3.04	3.66	4.42	5.35	-
45	-	-	1.63	2.06	2.52	3.05	3.66	4.40	-
50	-	-	-	1.64	2.06	2.51	3.02	3.62	-
55	-	-	-	-	1.63	2.03	2.47	2.96	-
60	-	-	-	-	-	1.59	1.97	2.39	-
65	-	-	-	-	-	-	1.52	1.88	-

Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	12 736	W
Power input	4 218	W
Current consumption	5.04	A
Mass flow	308	kg/h
C.O.P.	3.02	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	65	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%

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Performance data at 60 Hz, ARI rating conditions

R410A

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

Cooling capacity in W

30	5 439	6 846	8 420	10 247	12 412	15 001	18 098	21 790	-
35	-	6 382	7 970	9 738	11 770	14 153	16 972	20 311	-
40	-	-	7 415	9 182	11 141	13 377	15 975	19 021	-
45	-	-	6 693	8 518	10 462	12 610	15 047	17 858	-
50	-	-	-	7 684	9 672	11 790	14 125	16 760	-
55	-	-	-	-	8 708	10 856	13 147	15 666	-
60	-	-	-	-	-	9 746	12 052	14 513	-
65	-	-	-	-	-	-	10 778	13 240	-

Power input in W

30	2 624	2 658	2 679	2 686	2 675	2 641	2 582	2 493	-
35	-	2 950	2 981	2 998	2 999	2 980	2 937	2 867	-
40	-	-	3 326	3 351	3 362	3 354	3 324	3 270	-
45	-	-	3 723	3 752	3 768	3 769	3 749	3 706	-
50	-	-	-	4 206	4 226	4 231	4 218	4 184	-
55	-	-	-	-	4 741	4 748	4 739	4 710	-
60	-	-	-	-	-	5 325	5 316	5 290	-
65	-	-	-	-	-	-	5 959	5 932	-

Current consumption in A

30	3.77	3.80	3.83	3.86	3.89	3.94	3.99	4.07	-
35	-	4.00	4.04	4.07	4.10	4.14	4.18	4.24	-
40	-	-	4.27	4.31	4.34	4.38	4.42	4.46	-
45	-	-	4.54	4.59	4.63	4.66	4.70	4.74	-
50	-	-	-	4.90	4.95	5.00	5.04	5.07	-
55	-	-	-	-	5.33	5.38	5.43	5.47	-
60	-	-	-	-	-	5.82	5.88	5.93	-
65	-	-	-	-	-	-	6.40	6.46	-

Mass flow in kg/h

30	105	130	157	189	227	272	326	391	-
35	-	127	156	188	225	267	318	377	-
40	-	-	152	186	223	265	313	369	-
45	-	-	144	181	220	262	309	363	-
50	-	-	-	172	214	258	306	359	-
55	-	-	-	-	205	252	301	355	-
60	-	-	-	-	-	241	294	349	-
65	-	-	-	-	-	-	282	341	-

Coefficient of performance (C.O.P.)

30	2.07	2.58	3.14	3.81	4.64	5.68	7.01	8.74	-
35	-	2.16	2.67	3.25	3.92	4.75	5.78	7.08	-
40	-	-	2.23	2.74	3.31	3.99	4.81	5.82	-
45	-	-	1.80	2.27	2.78	3.35	4.01	4.82	-
50	-	-	-	1.83	2.29	2.79	3.35	4.01	-
55	-	-	-	-	1.84	2.29	2.77	3.33	-
60	-	-	-	-	-	1.83	2.27	2.74	-
65	-	-	-	-	-	-	1.81	2.23	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	14 348	W
Power input	4 663	W
Current consumption	5.40	A
Mass flow	325	kg/h
C.O.P.	3.08	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	65	dB(A)

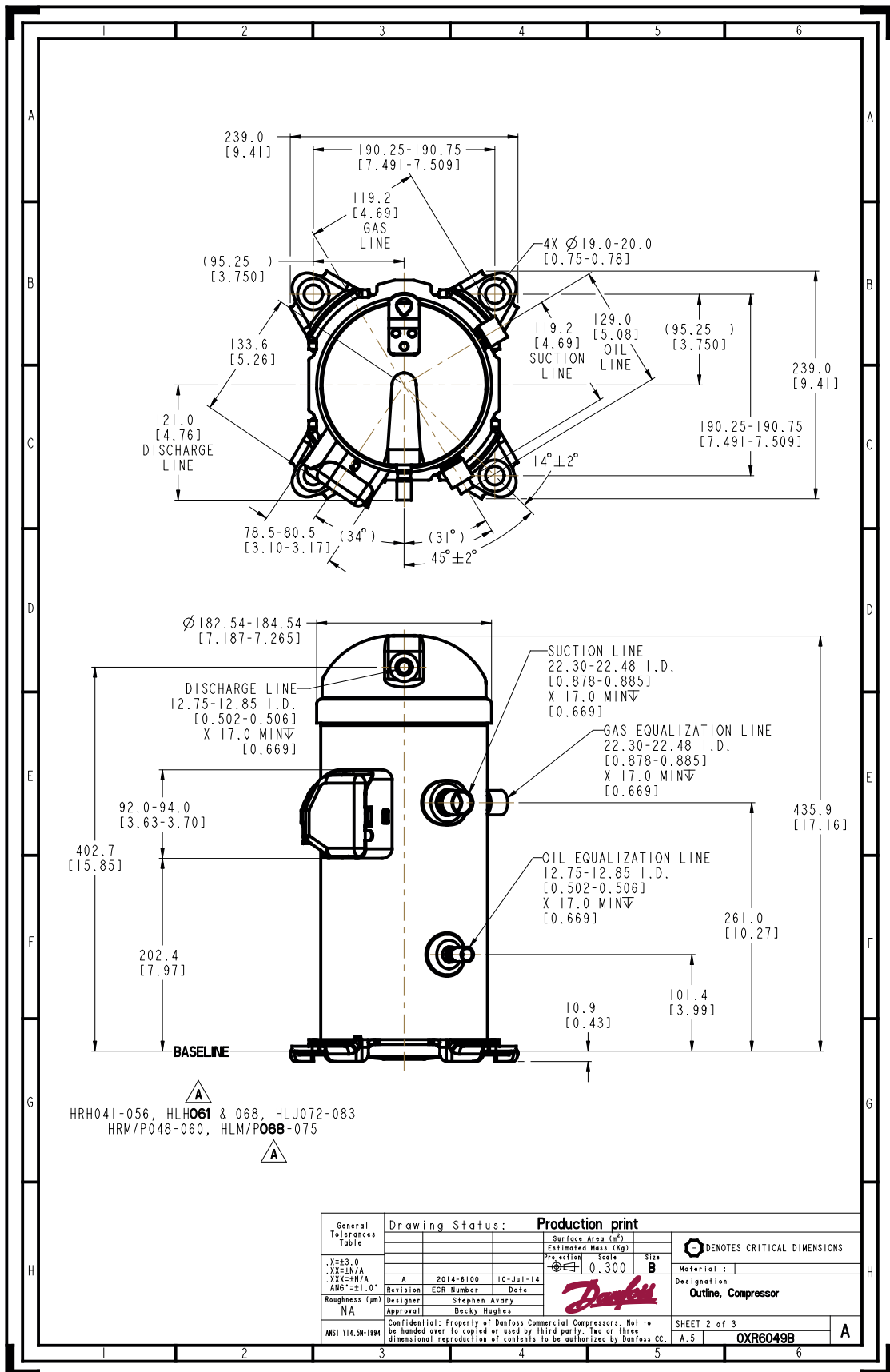
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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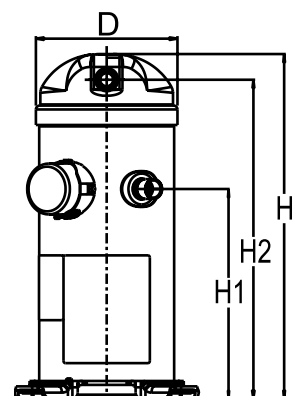
General Tolerances Table	Drawing Status: Production print			Surface Area (m ²)	Estimated Mass (kg)	Projection Scale	Size B	Material:
	Y=±3.0	XX=±0.1	XX=±0.05					
XX=±0.05	Revision	ECR Number	Date	DENOTES CRITICAL DIMENSIONS Designation Outline, Compressor				
ANG=±1.0°	A	2014-6100	10-Jul-14					
Roughness (µm)	Designer	Approval		SHEET 2 of 3 A.5 OXR6049B A				
NA	Stephen Avary	Becky Hughes						
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General Characteristics

Model number (on compressor nameplate)		HRH049U4LP6
Code number for Singlepack*		120U1366
Code number for Industrial pack**		120U1363
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		47.36 cm ³ /rev
Displacement @ Nominal speed		8.2 m ³ /h @ 2900 rpm - 9.9 m ³ /h @ 3500 rpm
Net weight		37.19 kg
Oil charge		1.57 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		-
Refrigerant charge limit		5.44 kg
Approved refrigerants		R410A

Dimensions

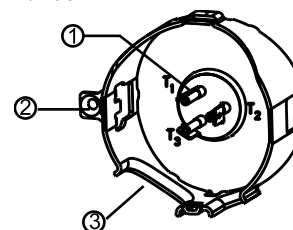


D=183.5 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

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	2.594 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	2.550 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	2.540 Ω
Rated Load Amps (RLA)	8.6 A
Maximum Continuous Current (MCC)	13.5 A
Locked Rotor Amps (LRA)	60 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	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

Rotolock accessories, suction side

Code no.

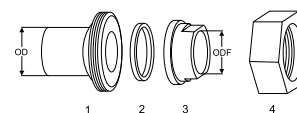
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



- 1: Rotolock adapter (Suc & Dis)
- 2: Gasket (Suc & Dis)
- 3: Solder sleeve (Suc & Dis)
- 4: Rotolock nut (Suc & Dis)

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

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

Code no.

Belt type crankcase heater, 50 W, 230 V, CE mark, UL	120Z0057
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058

Miscellaneous accessories

Code no.

Acoustic hood	120Z5044
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	120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031
No translation for 120Z5015	120Z5015

Performance data at 50 Hz, EN 12900 rating conditions
R410A

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

Cooling capacity in W

30	4 237	5 338	6 572	8 005	9 706	11 740	14 176	17 080	-
35	3 785	4 947	6 184	7 564	9 152	11 015	13 220	15 835	-
40	-	4 428	5 713	7 083	8 604	10 341	12 363	14 733	-
45	-	-	5 112	6 515	8 012	9 668	11 550	13 723	-
50	-	-	-	5 812	7 327	8 945	10 730	12 748	-
55	-	-	-	-	6 501	8 118	9 847	11 751	-
60	-	-	-	-	-	7 135	8 841	10 666	-
65	-	-	-	-	-	-	7 634	9 401	-

Power input in W

30	2 187	2 213	2 231	2 237	2 228	2 200	2 149	2 073	-
35	2 444	2 474	2 498	2 513	2 514	2 498	2 462	2 401	-
40	-	2 784	2 812	2 832	2 841	2 834	2 809	2 762	-
45	-	-	3 177	3 200	3 213	3 214	3 197	3 161	-
50	-	-	-	3 621	3 637	3 641	3 631	3 602	-
55	-	-	-	-	4 117	4 123	4 116	4 092	-
60	-	-	-	-	-	4 665	4 658	4 637	-
65	-	-	-	-	-	-	5 263	5 241	-

Current consumption in A

30	3.77	3.78	3.82	3.86	3.86	3.79	3.62	3.31	-
35	3.96	4.00	4.07	4.15	4.20	4.18	4.06	3.81	-
40	-	4.27	4.36	4.46	4.53	4.55	4.47	4.26	-
45	-	-	4.73	4.83	4.91	4.93	4.87	4.69	-
50	-	-	-	5.29	5.36	5.38	5.31	5.14	-
55	-	-	-	-	5.92	5.91	5.83	5.64	-
60	-	-	-	-	-	6.58	6.46	6.23	-
65	-	-	-	-	-	-	7.23	6.95	-

Mass flow in kg/h

30	89	110	133	160	192	230	276	331	-
35	83	107	132	159	190	227	269	320	-
40	-	101	129	158	189	224	265	312	-
45	-	-	122	154	186	222	262	308	-
50	-	-	-	146	182	219	260	304	-
55	-	-	-	-	174	214	256	301	-
60	-	-	-	-	-	205	250	297	-
65	-	-	-	-	-	-	240	290	-

Coefficient of performance (C.O.P.)

30	1.94	2.41	2.95	3.58	4.36	5.34	6.60	8.24	-
35	1.55	2.00	2.48	3.01	3.64	4.41	5.37	6.59	-
40	-	1.59	2.03	2.50	3.03	3.65	4.40	5.33	-
45	-	-	1.61	2.04	2.49	3.01	3.61	4.34	-
50	-	-	-	1.61	2.01	2.46	2.96	3.54	-
55	-	-	-	-	1.58	1.97	2.39	2.87	-
60	-	-	-	-	-	1.53	1.90	2.30	-
65	-	-	-	-	-	-	1.45	1.79	-

Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	10 730	W
Power input	3 631	W
Current consumption	5.31	A
Mass flow	260	kg/h
C.O.P.	2.96	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	62	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%

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Performance data at 50 Hz, ARI rating conditions

R410A

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

Cooling capacity in W

30	4 576	5 758	7 082	8 619	10 441	12 618	15 224	18 328	-
35	-	5 370	6 706	8 193	9 904	11 909	14 280	17 090	-
40	-	-	6 242	7 729	9 378	11 260	13 447	16 011	-
45	-	-	5 636	7 173	8 810	10 619	12 671	15 039	-
50	-	-	-	6 474	8 148	9 933	11 900	14 121	-
55	-	-	-	-	7 340	9 151	11 082	13 205	-
60	-	-	-	-	-	8 219	10 164	12 239	-
65	-	-	-	-	-	-	9 093	11 171	-

Power input in W

30	2 187	2 213	2 231	2 237	2 228	2 200	2 149	2 073	-
35	-	2 474	2 498	2 513	2 514	2 498	2 462	2 401	-
40	-	-	2 812	2 832	2 841	2 834	2 809	2 762	-
45	-	-	3 177	3 200	3 213	3 214	3 197	3 161	-
50	-	-	-	3 621	3 637	3 641	3 631	3 602	-
55	-	-	-	-	4 117	4 123	4 116	4 092	-
60	-	-	-	-	-	4 665	4 658	4 637	-
65	-	-	-	-	-	-	5 263	5 241	-

Current consumption in A

30	3.77	3.78	3.82	3.86	3.86	3.79	3.62	3.31	-
35	-	4.00	4.07	4.15	4.20	4.18	4.06	3.81	-
40	-	-	4.36	4.46	4.53	4.55	4.47	4.26	-
45	-	-	4.73	4.83	4.91	4.93	4.87	4.69	-
50	-	-	-	5.29	5.36	5.38	5.31	5.14	-
55	-	-	-	-	5.92	5.91	5.83	5.64	-
60	-	-	-	-	-	6.58	6.46	6.23	-
65	-	-	-	-	-	-	7.23	6.95	-

Mass flow in kg/h

30	88	109	132	159	191	229	274	329	-
35	-	107	131	158	189	225	267	318	-
40	-	-	128	157	188	223	263	310	-
45	-	-	121	153	185	221	260	306	-
50	-	-	-	145	181	218	258	302	-
55	-	-	-	-	172	212	254	299	-
60	-	-	-	-	-	203	248	295	-
65	-	-	-	-	-	-	238	288	-

Coefficient of performance (C.O.P.)

30	2.09	2.60	3.18	3.85	4.69	5.74	7.08	8.84	-
35	-	2.17	2.68	3.26	3.94	4.77	5.80	7.12	-
40	-	-	2.22	2.73	3.30	3.97	4.79	5.80	-
45	-	-	1.77	2.24	2.74	3.30	3.96	4.76	-
50	-	-	-	1.79	2.24	2.73	3.28	3.92	-
55	-	-	-	-	1.78	2.22	2.69	3.23	-
60	-	-	-	-	-	1.76	2.18	2.64	-
65	-	-	-	-	-	-	1.73	2.13	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	12 094	W
Power input	4 047	W
Current consumption	5.70	A
Mass flow	274	kg/h
C.O.P.	2.99	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	62	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%

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Performance data at 60 Hz, EN 12900 rating conditions

R410A

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

Cooling capacity in W

30	5 037	6 346	7 813	9 517	11 538	13 957	16 853	20 306	-
35	4 498	5 879	7 350	8 989	10 876	13 091	15 712	18 819	-
40	-	5 260	6 787	8 414	10 221	12 286	14 687	17 504	-
45	-	-	6 070	7 736	9 514	11 481	13 716	16 296	-
50	-	-	-	6 899	8 697	10 617	12 736	15 131	-
55	-	-	-	-	7 713	9 632	11 683	13 941	-
60	-	-	-	-	-	8 461	10 484	12 647	-
65	-	-	-	-	-	-	9 049	11 143	-

Power input in W

30	2 624	2 658	2 679	2 686	2 675	2 641	2 582	2 493	-
35	2 910	2 950	2 981	2 998	2 999	2 980	2 937	2 867	-
40	-	3 290	3 326	3 351	3 362	3 354	3 324	3 270	-
45	-	-	3 723	3 752	3 768	3 769	3 749	3 706	-
50	-	-	-	4 206	4 226	4 231	4 218	4 184	-
55	-	-	-	-	4 741	4 748	4 739	4 710	-
60	-	-	-	-	-	5 325	5 316	5 290	-
65	-	-	-	-	-	-	5 959	5 932	-

Current consumption in A

30	3.77	3.80	3.83	3.86	3.89	3.94	3.99	4.07	-
35	3.97	4.00	4.04	4.07	4.10	4.14	4.18	4.24	-
40	-	4.23	4.27	4.31	4.34	4.38	4.42	4.46	-
45	-	-	4.54	4.59	4.63	4.66	4.70	4.74	-
50	-	-	-	4.90	4.95	5.00	5.04	5.07	-
55	-	-	-	-	5.33	5.38	5.43	5.47	-
60	-	-	-	-	-	5.82	5.88	5.93	-
65	-	-	-	-	-	-	6.40	6.46	-

Mass flow in kg/h

30	105	130	158	191	228	274	328	394	-
35	99	127	157	189	226	269	320	380	-
40	-	120	153	187	224	266	315	371	-
45	-	-	145	182	221	264	311	365	-
50	-	-	-	173	216	260	308	361	-
55	-	-	-	-	206	254	303	357	-
60	-	-	-	-	-	243	296	352	-
65	-	-	-	-	-	-	284	344	-

Coefficient of performance (C.O.P.)

30	1.92	2.39	2.92	3.54	4.31	5.28	6.53	8.15	-
35	1.55	1.99	2.47	3.00	3.63	4.39	5.35	6.56	-
40	-	1.60	2.04	2.51	3.04	3.66	4.42	5.35	-
45	-	-	1.63	2.06	2.52	3.05	3.66	4.40	-
50	-	-	-	1.64	2.06	2.51	3.02	3.62	-
55	-	-	-	-	1.63	2.03	2.47	2.96	-
60	-	-	-	-	-	1.59	1.97	2.39	-
65	-	-	-	-	-	-	1.52	1.88	-

Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	12 736	W
Power input	4 218	W
Current consumption	5.04	A
Mass flow	308	kg/h
C.O.P.	3.02	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	65	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%

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Performance data at 60 Hz, ARI rating conditions

R410A

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

Cooling capacity in W

30	5 439	6 846	8 420	10 247	12 412	15 001	18 098	21 790	-
35	-	6 382	7 970	9 738	11 770	14 153	16 972	20 311	-
40	-	-	7 415	9 182	11 141	13 377	15 975	19 021	-
45	-	-	6 693	8 518	10 462	12 610	15 047	17 858	-
50	-	-	-	7 684	9 672	11 790	14 125	16 760	-
55	-	-	-	-	8 708	10 856	13 147	15 666	-
60	-	-	-	-	-	9 746	12 052	14 513	-
65	-	-	-	-	-	-	10 778	13 240	-

Power input in W

30	2 624	2 658	2 679	2 686	2 675	2 641	2 582	2 493	-
35	-	2 950	2 981	2 998	2 999	2 980	2 937	2 867	-
40	-	-	3 326	3 351	3 362	3 354	3 324	3 270	-
45	-	-	3 723	3 752	3 768	3 769	3 749	3 706	-
50	-	-	-	4 206	4 226	4 231	4 218	4 184	-
55	-	-	-	-	4 741	4 748	4 739	4 710	-
60	-	-	-	-	-	5 325	5 316	5 290	-
65	-	-	-	-	-	-	5 959	5 932	-

Current consumption in A

30	3.77	3.80	3.83	3.86	3.89	3.94	3.99	4.07	-
35	-	4.00	4.04	4.07	4.10	4.14	4.18	4.24	-
40	-	-	4.27	4.31	4.34	4.38	4.42	4.46	-
45	-	-	4.54	4.59	4.63	4.66	4.70	4.74	-
50	-	-	-	4.90	4.95	5.00	5.04	5.07	-
55	-	-	-	-	5.33	5.38	5.43	5.47	-
60	-	-	-	-	-	5.82	5.88	5.93	-
65	-	-	-	-	-	-	6.40	6.46	-

Mass flow in kg/h

30	105	130	157	189	227	272	326	391	-
35	-	127	156	188	225	267	318	377	-
40	-	-	152	186	223	265	313	369	-
45	-	-	144	181	220	262	309	363	-
50	-	-	-	172	214	258	306	359	-
55	-	-	-	-	205	252	301	355	-
60	-	-	-	-	-	241	294	349	-
65	-	-	-	-	-	-	282	341	-

Coefficient of performance (C.O.P.)

30	2.07	2.58	3.14	3.81	4.64	5.68	7.01	8.74	-
35	-	2.16	2.67	3.25	3.92	4.75	5.78	7.08	-
40	-	-	2.23	2.74	3.31	3.99	4.81	5.82	-
45	-	-	1.80	2.27	2.78	3.35	4.01	4.82	-
50	-	-	-	1.83	2.29	2.79	3.35	4.01	-
55	-	-	-	-	1.84	2.29	2.77	3.33	-
60	-	-	-	-	-	1.83	2.27	2.74	-
65	-	-	-	-	-	-	1.81	2.23	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	14 348	W
Power input	4 663	W
Current consumption	5.40	A
Mass flow	325	kg/h
C.O.P.	3.08	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	65	dB(A)

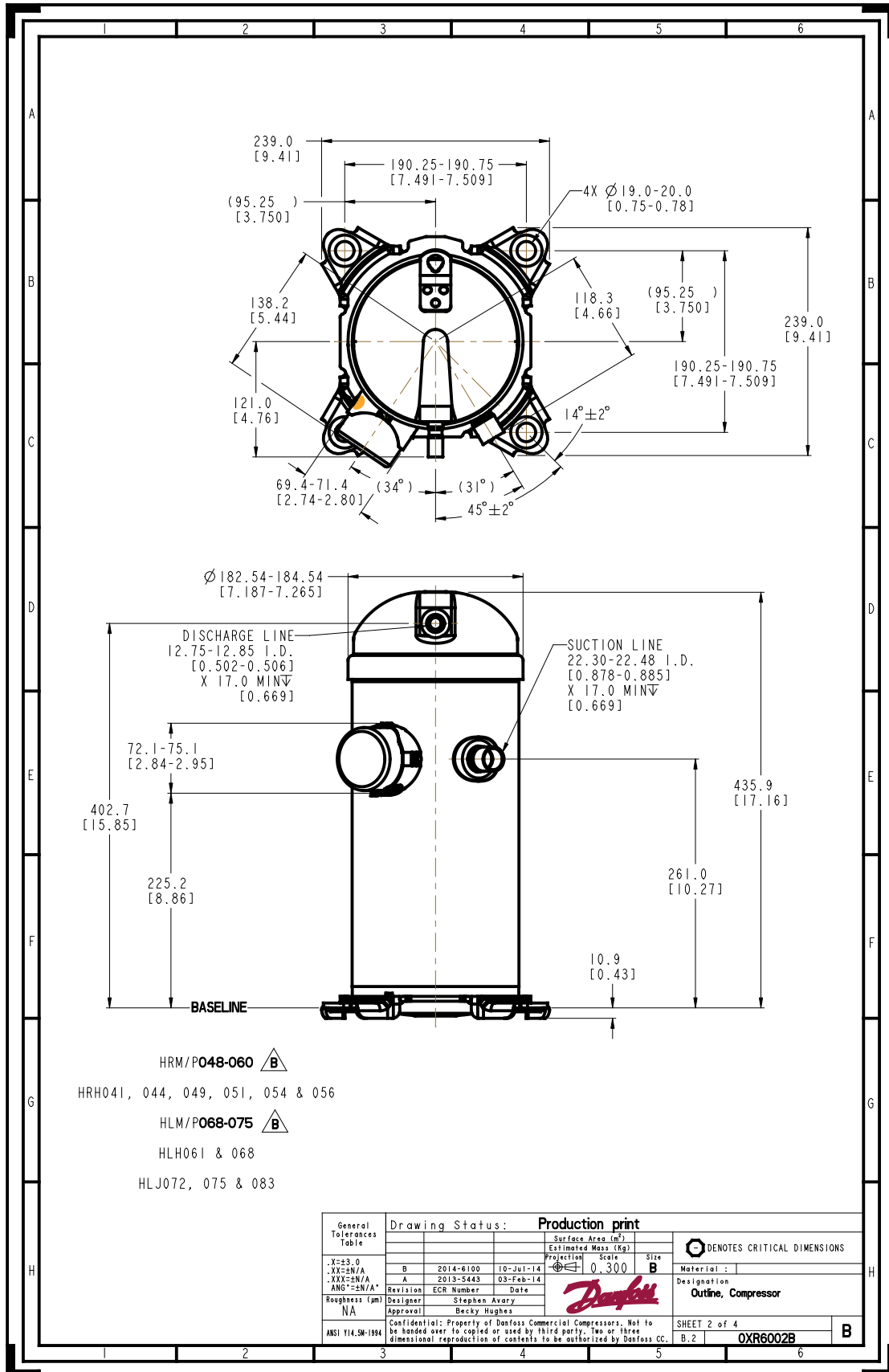
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

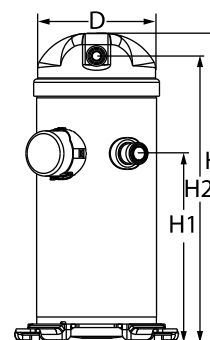
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General Characteristics

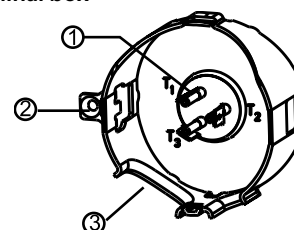
Model number (on compressor nameplate)		HRH049U4LT6
Code number for Singlepack*		121U3115
Code number for Industrial pack**		121U3114
Drawing number		0XR6002B-4
Suction and discharge connections		Rotolock
Suction connection		3/4 " Rotolock
Discharge connection		1/2 " Rotolock
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume		47.36 cm ³ /rev
Displacement @ Nominal speed		8.2 m ³ /h @ 2900 rpm - 9.9 m ³ /h @ 3500 rpm
Net weight		37.19 kg
Oil charge		1.57 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		-
Refrigerant charge limit		5.44 kg
Approved refrigerants		R410A

Dimensions


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

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	2.594 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	2.550 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	2.540 Ω
Rated Load Amps (RLA)	8.6 A
Maximum Continuous Current (MCC)	13.5 A
Locked Rotor Amps (LRA)	60 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	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

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
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Crankcase heaters **Code no.**

Belt type crankcase heater, 50 W, 230 V, CE mark, UL	120Z0057
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058

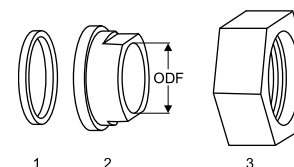
Miscellaneous accessories **Code no.**

Acoustic hood	120Z5044
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	120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031
No translation for 120Z5015	120Z5015

Gaskets, sleeves and nuts



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

Performance data at 50 Hz, EN 12900 rating conditions

R410A

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

Cooling capacity in W

30	4 237	5 338	6 572	8 005	9 706	11 740	14 176	17 080	-
35	3 785	4 947	6 184	7 564	9 152	11 015	13 220	15 835	-
40	-	4 428	5 713	7 083	8 604	10 341	12 363	14 733	-
45	-	-	5 112	6 515	8 012	9 668	11 550	13 723	-
50	-	-	-	5 812	7 327	8 945	10 730	12 748	-
55	-	-	-	-	6 501	8 118	9 847	11 751	-
60	-	-	-	-	-	7 135	8 841	10 666	-
65	-	-	-	-	-	-	7 634	9 401	-

Power input in W

30	2 187	2 213	2 231	2 237	2 228	2 200	2 149	2 073	-
35	2 444	2 474	2 498	2 513	2 514	2 498	2 462	2 401	-
40	-	2 784	2 812	2 832	2 841	2 834	2 809	2 762	-
45	-	-	3 177	3 200	3 213	3 214	3 197	3 161	-
50	-	-	-	3 621	3 637	3 641	3 631	3 602	-
55	-	-	-	-	4 117	4 123	4 116	4 092	-
60	-	-	-	-	-	4 665	4 658	4 637	-
65	-	-	-	-	-	-	5 263	5 241	-

Current consumption in A

30	3.77	3.78	3.82	3.86	3.86	3.79	3.62	3.31	-
35	3.96	4.00	4.07	4.15	4.20	4.18	4.06	3.81	-
40	-	4.27	4.36	4.46	4.53	4.55	4.47	4.26	-
45	-	-	4.73	4.83	4.91	4.93	4.87	4.69	-
50	-	-	-	5.29	5.36	5.38	5.31	5.14	-
55	-	-	-	-	5.92	5.91	5.83	5.64	-
60	-	-	-	-	-	6.58	6.46	6.23	-
65	-	-	-	-	-	-	7.23	6.95	-

Mass flow in kg/h

30	89	110	133	160	192	230	276	331	-
35	83	107	132	159	190	227	269	320	-
40	-	101	129	158	189	224	265	312	-
45	-	-	122	154	186	222	262	308	-
50	-	-	-	146	182	219	260	304	-
55	-	-	-	-	174	214	256	301	-
60	-	-	-	-	-	205	250	297	-
65	-	-	-	-	-	-	240	290	-

Coefficient of performance (C.O.P.)

30	1.94	2.41	2.95	3.58	4.36	5.34	6.60	8.24	-
35	1.55	2.00	2.48	3.01	3.64	4.41	5.37	6.59	-
40	-	1.59	2.03	2.50	3.03	3.65	4.40	5.33	-
45	-	-	1.61	2.04	2.49	3.01	3.61	4.34	-
50	-	-	-	1.61	2.01	2.46	2.96	3.54	-
55	-	-	-	-	1.58	1.97	2.39	2.87	-
60	-	-	-	-	-	1.53	1.90	2.30	-
65	-	-	-	-	-	-	1.45	1.79	-

Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	10 730	W
Power input	3 631	W
Current consumption	5.31	A
Mass flow	260	kg/h
C.O.P.	2.96	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	62	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%

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Performance data at 50 Hz, ARI rating conditions

R410A

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

Cooling capacity in W

30	4 576	5 758	7 082	8 619	10 441	12 618	15 224	18 328	-
35	-	5 370	6 706	8 193	9 904	11 909	14 280	17 090	-
40	-	-	6 242	7 729	9 378	11 260	13 447	16 011	-
45	-	-	5 636	7 173	8 810	10 619	12 671	15 039	-
50	-	-	-	6 474	8 148	9 933	11 900	14 121	-
55	-	-	-	-	7 340	9 151	11 082	13 205	-
60	-	-	-	-	-	8 219	10 164	12 239	-
65	-	-	-	-	-	-	9 093	11 171	-

Power input in W

30	2 187	2 213	2 231	2 237	2 228	2 200	2 149	2 073	-
35	-	2 474	2 498	2 513	2 514	2 498	2 462	2 401	-
40	-	-	2 812	2 832	2 841	2 834	2 809	2 762	-
45	-	-	3 177	3 200	3 213	3 214	3 197	3 161	-
50	-	-	-	3 621	3 637	3 641	3 631	3 602	-
55	-	-	-	-	4 117	4 123	4 116	4 092	-
60	-	-	-	-	-	4 665	4 658	4 637	-
65	-	-	-	-	-	-	5 263	5 241	-

Current consumption in A

30	3.77	3.78	3.82	3.86	3.86	3.79	3.62	3.31	-
35	-	4.00	4.07	4.15	4.20	4.18	4.06	3.81	-
40	-	-	4.36	4.46	4.53	4.55	4.47	4.26	-
45	-	-	4.73	4.83	4.91	4.93	4.87	4.69	-
50	-	-	-	5.29	5.36	5.38	5.31	5.14	-
55	-	-	-	-	5.92	5.91	5.83	5.64	-
60	-	-	-	-	-	6.58	6.46	6.23	-
65	-	-	-	-	-	-	7.23	6.95	-

Mass flow in kg/h

30	88	109	132	159	191	229	274	329	-
35	-	107	131	158	189	225	267	318	-
40	-	-	128	157	188	223	263	310	-
45	-	-	121	153	185	221	260	306	-
50	-	-	-	145	181	218	258	302	-
55	-	-	-	-	172	212	254	299	-
60	-	-	-	-	-	203	248	295	-
65	-	-	-	-	-	-	238	288	-

Coefficient of performance (C.O.P.)

30	2.09	2.60	3.18	3.85	4.69	5.74	7.08	8.84	-
35	-	2.17	2.68	3.26	3.94	4.77	5.80	7.12	-
40	-	-	2.22	2.73	3.30	3.97	4.79	5.80	-
45	-	-	1.77	2.24	2.74	3.30	3.96	4.76	-
50	-	-	-	1.79	2.24	2.73	3.28	3.92	-
55	-	-	-	-	1.78	2.22	2.69	3.23	-
60	-	-	-	-	-	1.76	2.18	2.64	-
65	-	-	-	-	-	-	1.73	2.13	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	12 094	W
Power input	4 047	W
Current consumption	5.70	A
Mass flow	274	kg/h
C.O.P.	2.99	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	62	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%

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Performance data at 60 Hz, EN 12900 rating conditions

R410A

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

Cooling capacity in W

30	5 037	6 346	7 813	9 517	11 538	13 957	16 853	20 306	-
35	4 498	5 879	7 350	8 989	10 876	13 091	15 712	18 819	-
40	-	5 260	6 787	8 414	10 221	12 286	14 687	17 504	-
45	-	-	6 070	7 736	9 514	11 481	13 716	16 296	-
50	-	-	-	6 899	8 697	10 617	12 736	15 131	-
55	-	-	-	-	7 713	9 632	11 683	13 941	-
60	-	-	-	-	-	8 461	10 484	12 647	-
65	-	-	-	-	-	-	9 049	11 143	-

Power input in W

30	2 624	2 658	2 679	2 686	2 675	2 641	2 582	2 493	-
35	2 910	2 950	2 981	2 998	2 999	2 980	2 937	2 867	-
40	-	3 290	3 326	3 351	3 362	3 354	3 324	3 270	-
45	-	-	3 723	3 752	3 768	3 769	3 749	3 706	-
50	-	-	-	4 206	4 226	4 231	4 218	4 184	-
55	-	-	-	-	4 741	4 748	4 739	4 710	-
60	-	-	-	-	-	5 325	5 316	5 290	-
65	-	-	-	-	-	-	5 959	5 932	-

Current consumption in A

30	3.77	3.80	3.83	3.86	3.89	3.94	3.99	4.07	-
35	3.97	4.00	4.04	4.07	4.10	4.14	4.18	4.24	-
40	-	4.23	4.27	4.31	4.34	4.38	4.42	4.46	-
45	-	-	4.54	4.59	4.63	4.66	4.70	4.74	-
50	-	-	-	4.90	4.95	5.00	5.04	5.07	-
55	-	-	-	-	5.33	5.38	5.43	5.47	-
60	-	-	-	-	-	5.82	5.88	5.93	-
65	-	-	-	-	-	-	6.40	6.46	-

Mass flow in kg/h

30	105	130	158	191	228	274	328	394	-
35	99	127	157	189	226	269	320	380	-
40	-	120	153	187	224	266	315	371	-
45	-	-	145	182	221	264	311	365	-
50	-	-	-	173	216	260	308	361	-
55	-	-	-	-	206	254	303	357	-
60	-	-	-	-	-	243	296	352	-
65	-	-	-	-	-	-	284	344	-

Coefficient of performance (C.O.P.)

30	1.92	2.39	2.92	3.54	4.31	5.28	6.53	8.15	-
35	1.55	1.99	2.47	3.00	3.63	4.39	5.35	6.56	-
40	-	1.60	2.04	2.51	3.04	3.66	4.42	5.35	-
45	-	-	1.63	2.06	2.52	3.05	3.66	4.40	-
50	-	-	-	1.64	2.06	2.51	3.02	3.62	-
55	-	-	-	-	1.63	2.03	2.47	2.96	-
60	-	-	-	-	-	1.59	1.97	2.39	-
65	-	-	-	-	-	-	1.52	1.88	-

Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	12 736	W
Power input	4 218	W
Current consumption	5.04	A
Mass flow	308	kg/h
C.O.P.	3.02	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	65	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%

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Performance data at 60 Hz, ARI rating conditions

R410A

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

Cooling capacity in W

30	5 439	6 846	8 420	10 247	12 412	15 001	18 098	21 790	-
35	-	6 382	7 970	9 738	11 770	14 153	16 972	20 311	-
40	-	-	7 415	9 182	11 141	13 377	15 975	19 021	-
45	-	-	6 693	8 518	10 462	12 610	15 047	17 858	-
50	-	-	-	7 684	9 672	11 790	14 125	16 760	-
55	-	-	-	-	8 708	10 856	13 147	15 666	-
60	-	-	-	-	-	9 746	12 052	14 513	-
65	-	-	-	-	-	-	10 778	13 240	-

Power input in W

30	2 624	2 658	2 679	2 686	2 675	2 641	2 582	2 493	-
35	-	2 950	2 981	2 998	2 999	2 980	2 937	2 867	-
40	-	-	3 326	3 351	3 362	3 354	3 324	3 270	-
45	-	-	3 723	3 752	3 768	3 769	3 749	3 706	-
50	-	-	-	4 206	4 226	4 231	4 218	4 184	-
55	-	-	-	-	4 741	4 748	4 739	4 710	-
60	-	-	-	-	-	5 325	5 316	5 290	-
65	-	-	-	-	-	-	5 959	5 932	-

Current consumption in A

30	3.77	3.80	3.83	3.86	3.89	3.94	3.99	4.07	-
35	-	4.00	4.04	4.07	4.10	4.14	4.18	4.24	-
40	-	-	4.27	4.31	4.34	4.38	4.42	4.46	-
45	-	-	4.54	4.59	4.63	4.66	4.70	4.74	-
50	-	-	-	4.90	4.95	5.00	5.04	5.07	-
55	-	-	-	-	5.33	5.38	5.43	5.47	-
60	-	-	-	-	-	5.82	5.88	5.93	-
65	-	-	-	-	-	-	6.40	6.46	-

Mass flow in kg/h

30	105	130	157	189	227	272	326	391	-
35	-	127	156	188	225	267	318	377	-
40	-	-	152	186	223	265	313	369	-
45	-	-	144	181	220	262	309	363	-
50	-	-	-	172	214	258	306	359	-
55	-	-	-	-	205	252	301	355	-
60	-	-	-	-	-	241	294	349	-
65	-	-	-	-	-	-	282	341	-

Coefficient of performance (C.O.P.)

30	2.07	2.58	3.14	3.81	4.64	5.68	7.01	8.74	-
35	-	2.16	2.67	3.25	3.92	4.75	5.78	7.08	-
40	-	-	2.23	2.74	3.31	3.99	4.81	5.82	-
45	-	-	1.80	2.27	2.78	3.35	4.01	4.82	-
50	-	-	-	1.83	2.29	2.79	3.35	4.01	-
55	-	-	-	-	1.84	2.29	2.77	3.33	-
60	-	-	-	-	-	1.83	2.27	2.74	-
65	-	-	-	-	-	-	1.81	2.23	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	14 348	W
Power input	4 663	W
Current consumption	5.40	A
Mass flow	325	kg/h
C.O.P.	3.08	

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	65	dB(A)

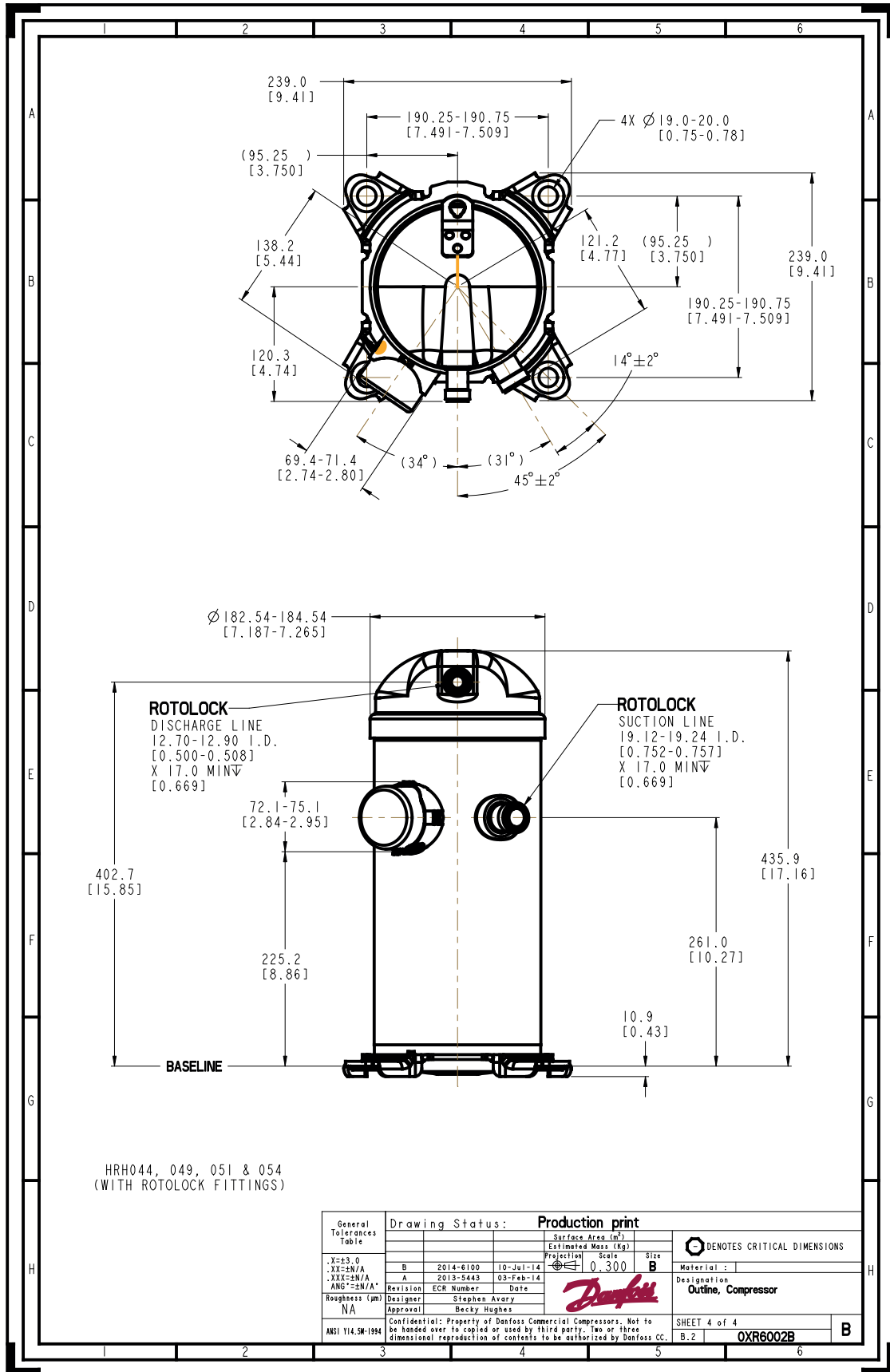
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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