

ENGINEERING
TOMORROW

Danfoss

Datasheets

Danfoss scroll compressors **H series**



General Characteristics

Model number (on compressor nameplate)		HLM075T2LP6A
Code number for Singlepack		120U3277
Code number for Industrial pack		
Drawing number		0XR6002B-2
Suction and discharge connections		Brazed
Suction connection		7/8" ODF
Discharge connection		1/2" ODF
Oil sight glass		None
Oil equalization connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume		6.27 in ³ /rev
Displacement @ Nominal speed		631 cfh @ 2900 rpm - 762 cfh @ 3500 rpm
Net weight		82 lbs
Oil charge		53 oz, PVE --
Maximum system test pressure Low Side / High side		- psi / - psi
Maximum differential test pressure		- psi
Maximum number of starts per hour		-
Refrigerant charge limit		12 lbs
Approved refrigerants		R22

Electrical Characteristics

Nominal voltage		208-230V/3/60Hz
Voltage range		188-253 V
Winding resistance between phases 1-2 +/- 7% at 77°F		0.422 Ω
Winding resistance between phases 1-3 +/- 7% at 77°F		0.410 Ω
Winding resistance between phases 2-3 +/- 7% at 77°F		0.420 Ω
Rated Load Amps (RLA)		22.4 A
Maximum Continuous Current (MCC)		35 A
Locked Rotor Amps (LRA)		190 A
Motor protection		Internal overload protector

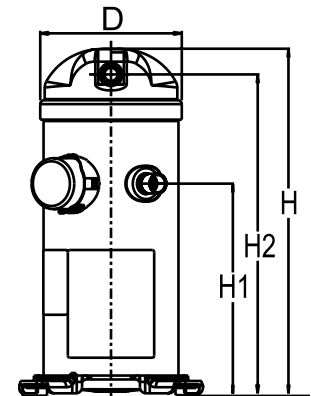
Recommended Installation torques

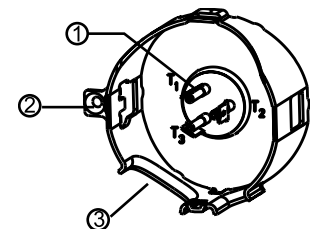
Oil sight glass		39 ft.lbs
Power connections / Earth connection		2 ft.lbs / 1 ft.lbs

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

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

Dimensions

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

Terminal box


IP22

- 1: Spade connectors 1/4"
- 2: Earth connection
- 3: Power cable passage

Rotolock accessories, suction side	Code no.
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side	Code no.
Solder sleeve, P06 (1" Rotolock, 1/2" ODF)	8153007
Angle adapter, C06 (1" Rotolock, 1/2" ODF)	8168007
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-1/4"~7/8"), (1"~1/2")	120Z0127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

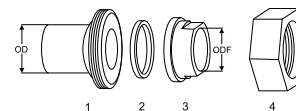
Oil / lubricants	Code no.
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Crankcase heaters	Code no.
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058

Miscellaneous accessories	Code no.
Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0056

Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5064
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5031
No translation for 120Z5015	120Z5015

Solder sleeve adapter set



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

Performance data at 50 Hz, ARI rating conditions
R22

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)							
	-10	0	10	20	30	40	45	50

Cooling capacity in Btu/h

90	24 105	29 225	36 528	45 837	56 977	69 771	76 734	84 044	91 680
100	22 453	27 554	34 694	43 699	54 391	66 596	73 210	80 137	87 353
110	20 251	25 465	32 576	41 409	51 788	63 536	69 869	76 478	83 341
120	-	22 756	29 972	38 766	48 963	60 388	66 506	72 864	79 441
130	-	-	26 677	35 566	45 716	56 950	62 919	69 093	75 451
140	-	-	-	31 608	41 842	53 019	58 906	64 963	71 167
150	-	-	-	-	37 140	48 393	54 264	60 270	66 387

Power input in W

90	3 476	3 493	3 499	3 486	3 446	3 372	3 321	3 258	3 183
100	3 933	3 922	3 912	3 898	3 871	3 825	3 792	3 751	3 702
110	4 463	4 412	4 376	4 349	4 324	4 293	4 273	4 249	4 220
120	-	4 991	4 917	4 866	4 831	4 804	4 792	4 778	4 764
130	-	-	5 563	5 477	5 420	5 386	5 375	5 366	5 360
140	-	-	-	6 208	6 118	6 065	6 049	6 040	6 037
150	-	-	-	-	6 952	6 869	6 843	6 828	6 821

Current consumption in A

90	12.95	13.15	13.28	13.33	13.34	13.31	13.29	13.26	13.24
100	14.21	14.33	14.40	14.42	14.42	14.41	14.40	14.40	14.40
110	15.93	15.96	15.96	15.94	15.92	15.92	15.92	15.94	15.96
120	-	18.05	17.98	17.91	17.87	17.86	17.88	17.91	17.95
130	-	-	20.47	20.35	20.27	20.26	20.28	20.32	20.38
140	-	-	-	23.27	23.16	23.13	23.15	23.20	23.28
150	-	-	-	-	26.54	26.49	26.51	26.56	26.65

Mass flow in lbs/h

90	321	385	474	587	721	872	954	1 039	1 127
100	311	378	469	582	715	865	945	1 028	1 115
110	293	364	459	575	709	859	939	1 022	1 107
120	-	341	442	563	700	852	933	1 016	1 102
130	-	-	415	542	685	842	924	1 009	1 095
140	-	-	-	510	661	824	909	996	1 085
150	-	-	-	-	625	796	885	976	1 068

Energy Efficiency Ratio (E.E.R.)

90	6.94	8.37	10.44	13.15	16.53	20.69	23.11	25.80	28.80
100	5.71	7.03	8.87	11.21	14.05	17.41	19.31	21.36	23.59
110	4.54	5.77	7.44	9.52	11.98	14.80	16.35	18.00	19.75
120	-	4.56	6.10	7.97	10.14	12.57	13.88	15.25	16.68
130	-	-	4.80	6.49	8.43	10.57	11.71	12.88	14.08
140	-	-	-	5.09	6.84	8.74	9.74	10.75	11.79
150	-	-	-	-	5.34	7.05	7.93	8.83	9.73

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

Cooling capacity	62 919	Btu/h	Current consumption	20.28	A
Power input	5 375	W	Mass flow	924	lbs/h
E.E.R.	11.71				

Pressure switch settings

Maximum HP switch setting	421	psi(g)
Minimum LP switch setting	7	psi(g)
LP pump down setting	19	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

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

All performance data +/- 5%

Sound power data

Sound power level	71	dB(A)
With acoustic hood	66	dB(A)

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Performance data at 60 Hz, ARI rating conditions

R22

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)							
	-10	0	10	20	30	40	45	50

Cooling capacity in Btu/h

90	28 909	35 049	43 806	54 971	68 330	83 673	92 022	100 788	109 944
100	26 934	33 050	41 615	52 415	65 241	79 880	87 814	96 121	104 776
110	24 300	30 553	39 083	49 680	62 132	76 227	83 824	91 753	99 987
120	-	27 311	35 968	46 520	58 757	72 468	79 809	87 439	95 332
130	-	-	32 023	42 691	54 873	68 358	75 523	82 935	90 566
140	-	-	-	37 948	50 235	63 655	70 723	77 996	85 445
150	-	-	-	-	44 599	58 112	65 164	72 377	79 725

Power input in W

90	4 169	4 190	4 196	4 180	4 133	4 044	3 982	3 907	3 817
100	4 718	4 704	4 693	4 676	4 644	4 588	4 548	4 500	4 441
110	5 355	5 293	5 250	5 218	5 188	5 151	5 127	5 098	5 063
120	-	5 989	5 901	5 840	5 797	5 765	5 750	5 734	5 716
130	-	-	6 677	6 574	6 506	6 465	6 451	6 441	6 434
140	-	-	-	7 453	7 345	7 281	7 263	7 252	7 248
150	-	-	-	-	8 349	8 248	8 218	8 200	8 192

Current consumption in A

90	13.58	13.79	13.92	13.98	13.99	13.96	13.94	13.91	13.88
100	14.90	15.03	15.10	15.12	15.12	15.11	15.10	15.10	15.10
110	16.70	16.73	16.73	16.72	16.70	16.69	16.70	16.71	16.74
120	-	18.93	18.85	18.78	18.73	18.73	18.74	18.78	18.83
130	-	-	21.46	21.34	21.26	21.24	21.26	21.31	21.37
140	-	-	-	24.40	24.28	24.25	24.28	24.33	24.41
150	-	-	-	-	27.83	27.78	27.80	27.85	27.94

Mass flow in lbs/h

90	385	462	569	704	864	1 046	1 144	1 246	1 352
100	373	453	563	699	858	1 037	1 133	1 233	1 337
110	351	437	551	690	851	1 031	1 126	1 226	1 328
120	-	410	531	676	841	1 023	1 120	1 219	1 322
130	-	-	498	651	823	1 010	1 109	1 211	1 315
140	-	-	-	612	794	989	1 092	1 196	1 303
150	-	-	-	-	750	956	1 063	1 172	1 283

Energy Efficiency Ratio (E.E.R.)

90	6.94	8.37	10.44	13.15	16.53	20.69	23.11	25.80	28.80
100	5.71	7.03	8.87	11.21	14.05	17.41	19.31	21.36	23.59
110	4.54	5.77	7.44	9.52	11.98	14.80	16.35	18.00	19.75
120	-	4.56	6.10	7.97	10.14	12.57	13.88	15.25	16.68
130	-	-	4.80	6.49	8.43	10.57	11.71	12.88	14.08
140	-	-	-	5.09	6.84	8.74	9.74	10.75	11.79
150	-	-	-	-	5.34	7.05	7.93	8.83	9.73

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

Cooling capacity	75 523	Btu/h	Current consumption	21.26	A
Power input	6 451	W	Mass flow	1 109	lbs/h
E.E.R.	11.71				

Pressure switch settings

Maximum HP switch setting	421	psi(g)
Minimum LP switch setting	7	psi(g)
LP pump down setting	19	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

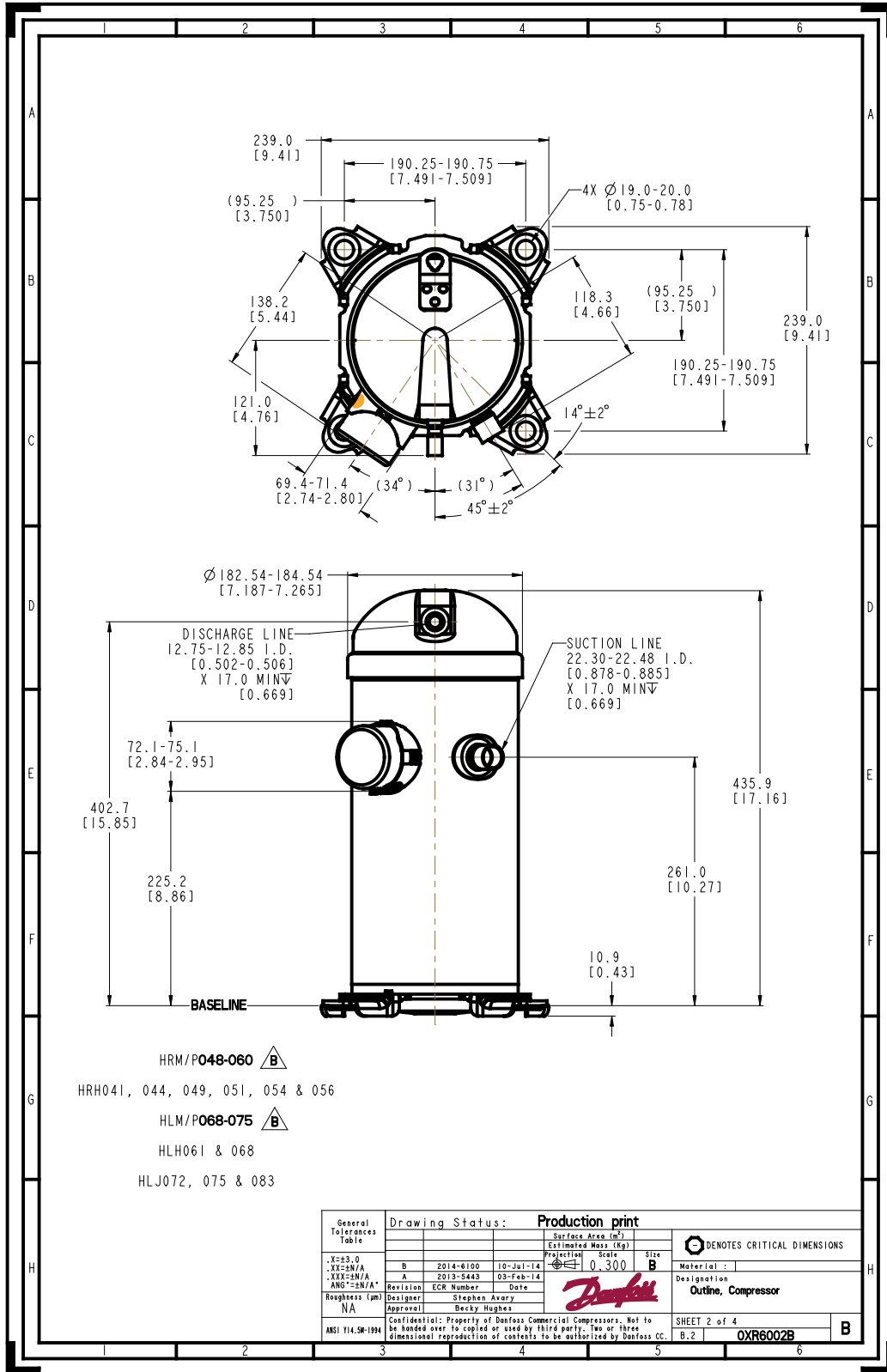
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

All performance data +/- 5%

Sound power data

Sound power level	74	dB(A)
With acoustic hood	69	dB(A)

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