

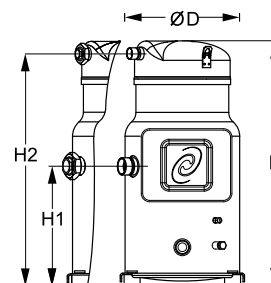


Performer Scroll compressors

General Characteristics

Model number (on compressor nameplate)	SH240A4MAB	SH240A4AAB
Code number for Singlepack*	120H0397	120H0291
Code number for Industrial pack**	120H0398	120H0292
Drawing number	8551144e	8551101f
Suction and discharge connections	Rotolock	Brazed
Suction connection	2-1/4 " Rotolock	1-5/8 " ODF
Discharge connection	1-3/4 " Rotolock	1-1/8 " ODF
Suction connection with supplied sleeve	1-5/8 " ODF	
Discharge connection with supplied sleeve	1-1/8 " ODF	
Oil sight glass	Threaded	Threaded
Oil equalisation connection	2-1/4" Rotolock	2-1/4" Rotolock
Oil drain connection	1/4" NPT	1/4" NPT
LP gauge port	Schrader	Schrader
IPR valve	None	None
Reverse rotation protection	Electronic module	Electronic module
Swept volume	227.6 cm ³ /rev	
Displacement @ Nominal speed	39.6 m ³ /h @ 2900 rpm - 47.8 m ³ /h @ 3500 rpm	
Net weight	108 kg	
Oil charge	6.7 litre, POE - 160SZ	
Maximum system test pressure Low Side / High side	30 bar(g) / 45 bar(g)	
Maximum differential test pressure	37 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	13.5 kg	
Approved refrigerants	R410A	

Dimensions

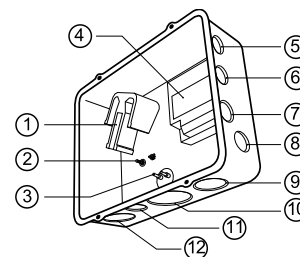


D=317.8 mm
H=682 mm
H1=330.5 mm
H2=646.5 mm

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	0.547 Ω
Rated Load Amps (RLA)	36.4 A
Maximum Continuous Current (MCC)	51 A
Locked Rotor Amps (LRA)	215 A
Motor protection	Electronic protection module, 24 V ac

Terminal box



Recommended Installation torques

Suction Rotolock nut or valve	130 Nm
Discharge Rotolock nut or valve	110 Nm
Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	21 Nm

Parts shipped with compressor

Mounting kit with rigid grommets, bolts, nuts, sleeves and washers
Electronic protection module mounted in terminal box
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA6873), -

*Singlepack: Compressor in cardboard box

**Industrial pack: 6 Unboxed compressors on pallet (order per multiples of 6)

IP54 (with cable gland)

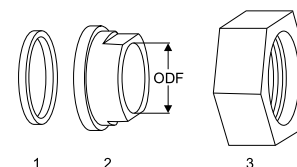
- 1: Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M5, torque 2 Nm (17 in.lb)
- 3: Thermostat connector
- 4: Electronic protection module
- 5: Knock-out Ø 20.5 mm (0.81")
- 6: Knock-out Ø 20.5 mm (0.81")
- 7: Double knock-out Ø 22 mm (7/8") & Ø 16.5 mm (0.65")
- 8: Double knock-out Ø 22 mm (7/8") & Ø 16.5 mm (0.65")
- 9: Double knock-out Ø 43.7 mm (1-23/32") & Ø 34.5 mm (1-23/64")
- 10: Knock-out Ø 50 mm (1-31/32")
- 11: Knock-out Ø 25.2 mm (0.99")
- 12: Double knock-out Ø 40.5 mm (1.59") & Ø 32.2 mm (1.27")

Rotolock accessories, suction side
Code no.

Solder sleeve, P03 (2-1/4" Rotolock, 1-5/8" ODF)	8153006
Rotolock valve, V03 (2-1/4" Rotolock, 1-5/8" ODF)	8168026
Gasket, 2-1/4"	8156133

Gaskets, sleeves and nuts
Rotolock accessories, discharge side
Code no.

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132



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

Rotolock accessories, sets
Code no.

Valve set, V03 (2-1/4"~1-5/8"), V02 (1-3/4"~1-1/8")	7703383
Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black & white	8156013

Oil / lubricants
Code no.

POE lubricant, 160SZ, 1 litre can	7754023
POE lubricant, 160SZ, 2 litre can	7754024
POE lubricant, 160SZ, 1 gallon can	7754027

Crankcase heaters
Code no.

Surface sump heater + bottom insulation, 56 W, 24 V, CE mark, UL	12020360
Surface sump heater + bottom insulation, 56 W, 230 V, CE mark, UL	12020376
Surface sump heater + bottom insulation, 56 W, 400 V, CE mark, UL	12020377
Belt type crankcase heater, 75 W, 480 V, UL	7773015

Miscellaneous accessories
Code no.

Electronic soft start kit, MCI 50 CM	7705009
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	8156138
Acoustic hood for scroll compressor SH180-SH380	12020022
Discharge thermostat kit	7750009

Spare parts
Code no.

Electronic motor protection module, 24 V ac	8169015
Mounting kit for 1 scroll compressor including 4 rigid grommets, 4 sleeves, 4 bolts, 4 washers	7777045
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Terminal box 258 x 208 mm, incl cover	8156142
T block connector 60 x 75 mm	8173021

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	15

Cooling capacity in W

30	26 055	32 414	39 872	48 581	58 691	70 355	83 725	98 954	116 193
35	24 284	30 420	37 584	45 927	55 599	66 750	79 533	94 098	110 597
40	-	28 366	35 197	43 133	52 324	62 921	75 074	88 932	104 647
45	-	26 245	32 699	40 187	48 855	58 854	70 332	83 437	98 320
50	-	-	30 078	37 073	45 174	54 528	65 282	77 585	91 582
55	-	-	-	33 764	41 246	49 902	59 878	71 318	84 368
60	-	-	-	-	37 003	44 895	54 021	64 522	76 541
65	-	-	-	-	-	39 313	47 479	56 920	67 772

Power input in W

30	12 900	13 006	13 073	13 125	13 184	13 273	13 415	13 634	13 952
35	14 334	14 478	14 568	14 626	14 675	14 740	14 842	15 005	15 252
40	-	16 091	16 214	16 290	16 341	16 392	16 466	16 585	16 772
45	-	17 868	18 035	18 140	18 205	18 254	18 310	18 396	18 535
50	-	-	20 054	20 199	20 289	20 347	20 397	20 461	20 562
55	-	-	-	22 490	22 616	22 695	22 750	22 803	22 878
60	-	-	-	-	25 210	25 320	25 391	25 445	25 506
65	-	-	-	-	-	28 245	28 344	28 410	28 467

Current consumption in A

30	21.87	22.17	22.36	22.48	22.56	22.62	22.70	22.82	23.02
35	23.37	23.69	23.90	24.02	24.09	24.14	24.19	24.28	24.43
40	-	25.44	25.67	25.81	25.89	25.93	25.97	26.03	26.15
45	-	27.43	27.71	27.87	27.97	28.02	28.05	28.11	28.20
50	-	-	30.04	30.25	30.37	30.44	30.48	30.53	30.62
55	-	-	-	32.96	33.12	33.22	33.28	33.35	33.44
60	-	-	-	-	36.25	36.39	36.49	36.58	36.68
65	-	-	-	-	-	39.99	40.14	40.25	40.38

Mass flow in kg/h

30	541	667	810	975	1 164	1 380	1 626	1 904	2 219
35	533	659	803	968	1 158	1 374	1 620	1 899	2 214
40	-	650	794	960	1 149	1 365	1 612	1 891	2 206
45	-	639	784	949	1 138	1 354	1 600	1 878	2 193
50	-	-	771	936	1 124	1 340	1 585	1 863	2 176
55	-	-	-	921	1 108	1 323	1 567	1 844	2 156
60	-	-	-	-	1 090	1 303	1 545	1 821	2 132
65	-	-	-	-	-	1 280	1 521	1 795	2 104

Coefficient of performance (C.O.P.)

30	2.02	2.49	3.05	3.70	4.45	5.30	6.24	7.26	8.33
35	1.69	2.10	2.58	3.14	3.79	4.53	5.36	6.27	7.25
40	-	1.76	2.17	2.65	3.20	3.84	4.56	5.36	6.24
45	-	1.47	1.81	2.22	2.68	3.22	3.84	4.54	5.30
50	-	-	1.50	1.84	2.23	2.68	3.20	3.79	4.45
55	-	-	-	1.50	1.82	2.20	2.63	3.13	3.69
60	-	-	-	-	1.47	1.77	2.13	2.54	3.00
65	-	-	-	-	-	1.39	1.68	2.00	2.38

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

Cooling capacity	65 282	W
Power input	20 397	W
Current consumption	30.48	A
Mass flow	1 585	kg/h
C.O.P.	3.20	

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	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	86	dB(A)
With acoustic hood	82	dB(A)

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	28 138	34 968	42 971	52 306	63 134	75 617	89 913	106 183	124 589
35	26 395	33 026	40 758	49 752	60 168	72 167	85 909	101 555	119 266
40	-	31 032	38 454	47 067	57 033	68 510	81 659	96 641	113 617
45	-	28 981	36 055	44 249	53 724	64 640	77 158	91 437	107 640
50	-	-	33 557	41 293	50 238	60 554	72 401	85 939	101 329
55	-	-	-	38 193	46 570	56 247	67 384	80 142	94 680
60	-	-	-	-	42 716	51 715	62 103	74 041	87 689
65	-	-	-	-	-	46 954	56 554	67 633	80 351

Power input in W

30	12 900	13 006	13 073	13 125	13 184	13 273	13 415	13 634	13 952
35	14 334	14 478	14 568	14 626	14 675	14 740	14 842	15 005	15 252
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Current consumption in A

30	21.87	22.17	22.36	22.48	22.56	22.62	22.70	22.82	23.02
35	23.37	23.69	23.90	24.02	24.09	24.14	24.19	24.28	24.43
40	-	25.44	25.67	25.81	25.89	25.93	25.97	26.03	26.15
45	-	27.43	27.71	27.87	27.97	28.02	28.05	28.11	28.20
50	-	-	30.04	30.25	30.37	30.44	30.48	30.53	30.62
55	-	-	-	32.96	33.12	33.22	33.28	33.35	33.44
60	-	-	-	-	36.25	36.39	36.49	36.58	36.68
65	-	-	-	-	-	39.99	40.14	40.25	40.38

Mass flow in kg/h

30	538	663	805	969	1 156	1 371	1 614	1 891	2 202
35	530	655	798	962	1 150	1 365	1 609	1 886	2 198
40	-	646	789	954	1 142	1 356	1 600	1 877	2 189
45	-	636	779	943	1 131	1 345	1 589	1 865	2 176
50	-	-	766	930	1 117	1 331	1 574	1 849	2 160
55	-	-	-	915	1 101	1 314	1 556	1 830	2 140
60	-	-	-	-	1 083	1 294	1 535	1 808	2 116
65	-	-	-	-	-	1 272	1 511	1 782	2 088

Coefficient of performance (C.O.P.)

30	2.18	2.69	3.29	3.99	4.79	5.70	6.70	7.79	8.93
35	1.84	2.28	2.80	3.40	4.10	4.90	5.79	6.77	7.82
40	-	1.93	2.37	2.89	3.49	4.18	4.96	5.83	6.77
45	-	1.62	2.00	2.44	2.95	3.54	4.21	4.97	5.81
50	-	-	1.67	2.04	2.48	2.98	3.55	4.20	4.93
55	-	-	-	1.70	2.06	2.48	2.96	3.51	4.14
60	-	-	-	-	1.69	2.04	2.45	2.91	3.44
65	-	-	-	-	-	1.66	2.00	2.38	2.82

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

Cooling capacity	73 445	W
Power input	22 475	W
Current consumption	32.95	A
Mass flow	1 675	kg/h
C.O.P.	3.27	

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	86	dB(A)
With acoustic hood	82	dB(A)

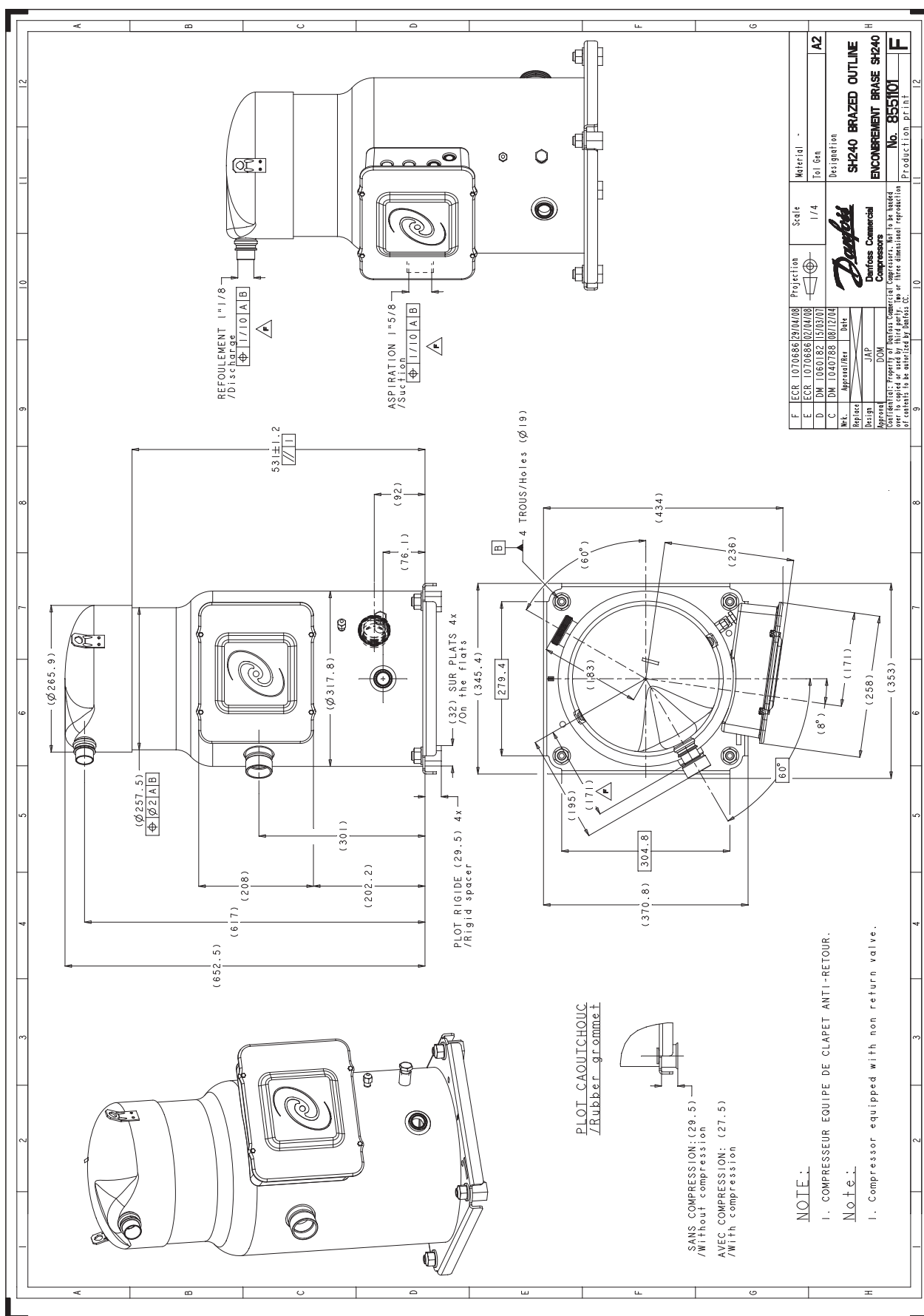
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

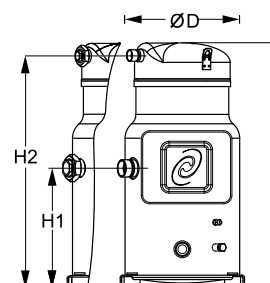
All performance data +/- 5%

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General Characteristics

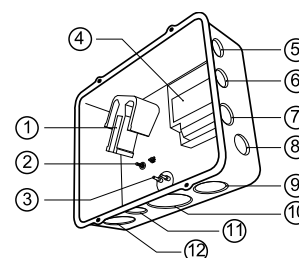
Model number (on compressor nameplate)	SH240A4MBB	SH240A4ABB
Code number for Singlepack*	120H0399	120H0299
Code number for Industrial pack**	120H0400	120H0300
Drawing number	8551144e	8551101f
Suction and discharge connections	Rotolock	Brazed
Suction connection	2-1/4 " Rotolock	1-5/8 " ODF
Discharge connection	1-3/4 " Rotolock	1-1/8 " ODF
Suction connection with supplied sleeve	1-5/8 " ODF	
Discharge connection with supplied sleeve	1-1/8 " ODF	
Oil sight glass	Threaded	Threaded
Oil equalisation connection	2-1/4" Rotolock	2-1/4" Rotolock
Oil drain connection	1/4" NPT	1/4" NPT
LP gauge port	Schrader	Schrader
IPR valve	None	None
Reverse rotation protection	Electronic module	Electronic module
Swept volume	227.6 cm ³ /rev	
Displacement @ Nominal speed	39.6 m ³ /h @ 2900 rpm - 47.8 m ³ /h @ 3500 rpm	
Net weight	108 kg	
Oil charge	6.7 litre, POE - 160SZ	
Maximum system test pressure Low Side / High side	30 bar(g) / 45 bar(g)	
Maximum differential test pressure	37 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	13.5 kg	
Approved refrigerants	R410A	

Dimensions


D=317.8 mm
 H=682 mm
 H1=330.5 mm
 H2=646.5 mm

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	0.547 Ω
Rated Load Amps (RLA)	36.4 A
Maximum Continuous Current (MCC)	51 A
Locked Rotor Amps (LRA)	215 A
Motor protection	Electronic protection module, 115/230 V

Terminal box

Recommended Installation torques

Suction Rotolock nut or valve	130 Nm
Discharge Rotolock nut or valve	110 Nm
Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	21 Nm

Parts shipped with compressor

Mounting kit with rigid grommets, bolts, nuts, sleeves and washers
Electronic protection module mounted in terminal box
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA6873), -

*Singlepack: Compressor in cardboard box

**Industrial pack: 6 Unboxed compressors on pallet (order per multiples of 6)

IP54 (with cable gland)

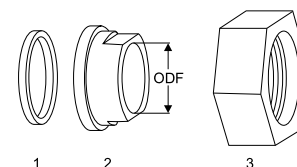
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- 5: Knock-out Ø 20.5 mm (0.81")
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- 8: Double knock-out Ø 22 mm (7/8") & Ø 16.5 mm (0.65")
- 9: Double knock-out Ø 43.7 mm (1-23/32") & Ø 34.5 mm (1-23/64")
- 10: Knock-out Ø 50 mm (1-31/32")
- 11: Knock-out Ø 25.2 mm (0.99")
- 12: Double knock-out Ø 40.5 mm (1.59") & Ø 32.2 mm (1.27")

Rotolock accessories, suction side
Code no.

Solder sleeve, P03 (2-1/4" Rotolock, 1-5/8" ODF)	8153006
Rotolock valve, V03 (2-1/4" Rotolock, 1-5/8" ODF)	8168026
Gasket, 2-1/4"	8156133

Gaskets, sleeves and nuts
Rotolock accessories, discharge side
Code no.

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132



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

Rotolock accessories, sets
Code no.

Valve set, V03 (2-1/4"~1-5/8"), V02 (1-3/4"~1-1/8")	7703383
Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black & white	8156013

Oil / lubricants
Code no.

POE lubricant, 160SZ, 1 litre can	7754023
POE lubricant, 160SZ, 2 litre can	7754024
POE lubricant, 160SZ, 1 gallon can	7754027

Crankcase heaters
Code no.

Surface sump heater + bottom insulation, 56 W, 24 V, CE mark, UL	12020360
Surface sump heater + bottom insulation, 56 W, 230 V, CE mark, UL	12020376
Surface sump heater + bottom insulation, 56 W, 400 V, CE mark, UL	12020377
Belt type crankcase heater, 75 W, 480 V, UL	7773015

Miscellaneous accessories
Code no.

Electronic soft start kit, MCI 50 CM	7705009
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	8156138
Acoustic hood for scroll compressor SH180-SH380	12020022
Discharge thermostat kit	7750009

Spare parts
Code no.

Electronic motor protection module, 115/230 V	8169016
Mounting kit for 1 scroll compressor including 4 rigid grommets, 4 sleeves, 4 bolts, 4 washers	7777045
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Terminal box 258 x 208 mm, incl cover	8156142
T block connector 60 x 75 mm	8173021

Datasheet, performance data

Performer scroll compressor. SH240-4

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	15

Cooling capacity in W

30	26 055	32 414	39 872	48 581	58 691	70 355	83 725	98 954	116 193
35	24 284	30 420	37 584	45 927	55 599	66 750	79 533	94 098	110 597
40	-	28 366	35 197	43 133	52 324	62 921	75 074	88 932	104 647
45	-	26 245	32 699	40 187	48 855	58 854	70 332	83 437	98 320
50	-	-	30 078	37 073	45 174	54 528	65 282	77 585	91 582
55	-	-	-	33 764	41 246	49 902	59 878	71 318	84 368
60	-	-	-	-	37 003	44 895	54 021	64 522	76 541
65	-	-	-	-	-	39 313	47 479	56 920	67 772

Power input in W

30	12 900	13 006	13 073	13 125	13 184	13 273	13 415	13 634	13 952
35	14 334	14 478	14 568	14 626	14 675	14 740	14 842	15 005	15 252
40	-	16 091	16 214	16 290	16 341	16 392	16 466	16 585	16 772
45	-	17 868	18 035	18 140	18 205	18 254	18 310	18 396	18 535
50	-	-	20 054	20 199	20 289	20 347	20 397	20 461	20 562
55	-	-	-	22 490	22 616	22 695	22 750	22 803	22 878
60	-	-	-	-	25 210	25 320	25 391	25 445	25 506
65	-	-	-	-	-	28 245	28 344	28 410	28 467

Current consumption in A

30	21.87	22.17	22.36	22.48	22.56	22.62	22.70	22.82	23.02
35	23.37	23.69	23.90	24.02	24.09	24.14	24.19	24.28	24.43
40	-	25.44	25.67	25.81	25.89	25.93	25.97	26.03	26.15
45	-	27.43	27.71	27.87	27.97	28.02	28.05	28.11	28.20
50	-	-	30.04	30.25	30.37	30.44	30.48	30.53	30.62
55	-	-	-	32.96	33.12	33.22	33.28	33.35	33.44
60	-	-	-	-	36.25	36.39	36.49	36.58	36.68
65	-	-	-	-	-	39.99	40.14	40.25	40.38

Mass flow in kg/h

30	541	667	810	975	1 164	1 380	1 626	1 904	2 219
35	533	659	803	968	1 158	1 374	1 620	1 899	2 214
40	-	650	794	960	1 149	1 365	1 612	1 891	2 206
45	-	639	784	949	1 138	1 354	1 600	1 878	2 193
50	-	-	771	936	1 124	1 340	1 585	1 863	2 176
55	-	-	-	921	1 108	1 323	1 567	1 844	2 156
60	-	-	-	-	1 090	1 303	1 545	1 821	2 132
65	-	-	-	-	-	1 280	1 521	1 795	2 104

Coefficient of performance (C.O.P.)

30	2.02	2.49	3.05	3.70	4.45	5.30	6.24	7.26	8.33
35	1.69	2.10	2.58	3.14	3.79	4.53	5.36	6.27	7.25
40	-	1.76	2.17	2.65	3.20	3.84	4.56	5.36	6.24
45	-	1.47	1.81	2.22	2.68	3.22	3.84	4.54	5.30
50	-	-	1.50	1.84	2.23	2.68	3.20	3.79	4.45
55	-	-	-	1.50	1.82	2.20	2.63	3.13	3.69
60	-	-	-	-	1.47	1.77	2.13	2.54	3.00
65	-	-	-	-	-	1.39	1.68	2.00	2.38

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

Cooling capacity	65 282	W
Power input	20 397	W
Current consumption	30.48	A
Mass flow	1 585	kg/h
C.O.P.	3.20	

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	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	86	dB(A)
With acoustic hood	82	dB(A)

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	15

Cooling capacity in W

30	28 138	34 968	42 971	52 306	63 134	75 617	89 913	106 183	124 589
35	26 395	33 026	40 758	49 752	60 168	72 167	85 909	101 555	119 266
40	-	31 032	38 454	47 067	57 033	68 510	81 659	96 641	113 617
45	-	28 981	36 055	44 249	53 724	64 640	77 158	91 437	107 640
50	-	-	33 557	41 293	50 238	60 554	72 401	85 939	101 329
55	-	-	-	38 193	46 570	56 247	67 384	80 142	94 680
60	-	-	-	-	42 716	51 715	62 103	74 041	87 689
65	-	-	-	-	-	46 954	56 554	67 633	80 351

Power input in W

30	12 900	13 006	13 073	13 125	13 184	13 273	13 415	13 634	13 952
35	14 334	14 478	14 568	14 626	14 675	14 740	14 842	15 005	15 252
40	-	16 091	16 214	16 290	16 341	16 392	16 466	16 585	16 772
45	-	17 868	18 035	18 140	18 205	18 254	18 310	18 396	18 535
50	-	-	20 054	20 199	20 289	20 347	20 397	20 461	20 562
55	-	-	-	22 490	22 616	22 695	22 750	22 803	22 878
60	-	-	-	-	25 210	25 320	25 391	25 445	25 506
65	-	-	-	-	-	28 245	28 344	28 410	28 467

Current consumption in A

30	21.87	22.17	22.36	22.48	22.56	22.62	22.70	22.82	23.02
35	23.37	23.69	23.90	24.02	24.09	24.14	24.19	24.28	24.43
40	-	25.44	25.67	25.81	25.89	25.93	25.97	26.03	26.15
45	-	27.43	27.71	27.87	27.97	28.02	28.05	28.11	28.20
50	-	-	30.04	30.25	30.37	30.44	30.48	30.53	30.62
55	-	-	-	32.96	33.12	33.22	33.28	33.35	33.44
60	-	-	-	-	36.25	36.39	36.49	36.58	36.68
65	-	-	-	-	-	39.99	40.14	40.25	40.38

Mass flow in kg/h

30	538	663	805	969	1 156	1 371	1 614	1 891	2 202
35	530	655	798	962	1 150	1 365	1 609	1 886	2 198
40	-	646	789	954	1 142	1 356	1 600	1 877	2 189
45	-	636	779	943	1 131	1 345	1 589	1 865	2 176
50	-	-	766	930	1 117	1 331	1 574	1 849	2 160
55	-	-	-	915	1 101	1 314	1 556	1 830	2 140
60	-	-	-	-	1 083	1 294	1 535	1 808	2 116
65	-	-	-	-	-	1 272	1 511	1 782	2 088

Coefficient of performance (C.O.P.)

30	2.18	2.69	3.29	3.99	4.79	5.70	6.70	7.79	8.93
35	1.84	2.28	2.80	3.40	4.10	4.90	5.79	6.77	7.82
40	-	1.93	2.37	2.89	3.49	4.18	4.96	5.83	6.77
45	-	1.62	2.00	2.44	2.95	3.54	4.21	4.97	5.81
50	-	-	1.67	2.04	2.48	2.98	3.55	4.20	4.93
55	-	-	-	1.70	2.06	2.48	2.96	3.51	4.14
60	-	-	-	-	1.69	2.04	2.45	2.91	3.44
65	-	-	-	-	-	1.66	2.00	2.38	2.82

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

Cooling capacity	73 445	W
Power input	22 475	W
Current consumption	32.95	A
Mass flow	1 675	kg/h
C.O.P.	3.27	

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	86	dB(A)
With acoustic hood	82	dB(A)

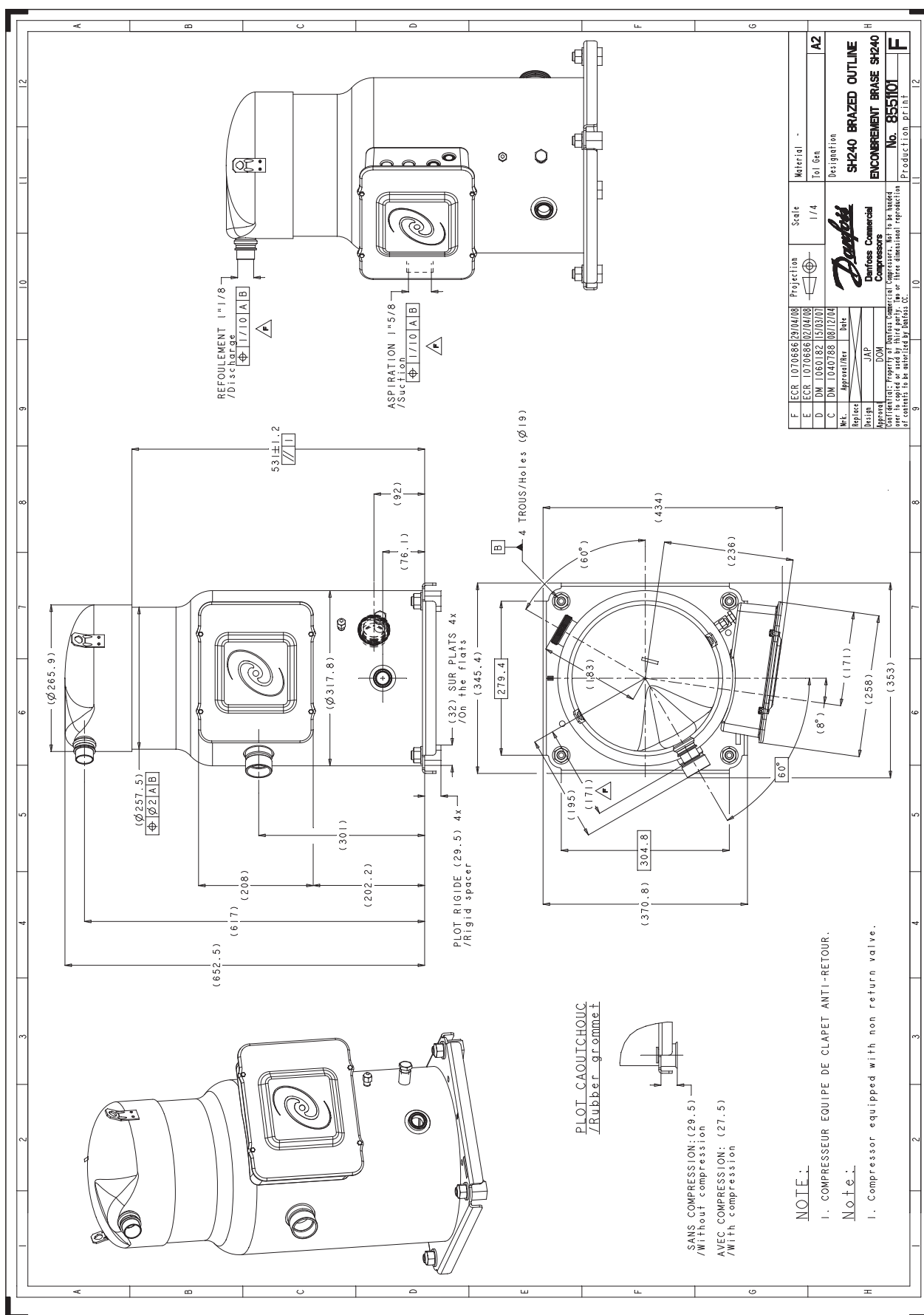
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

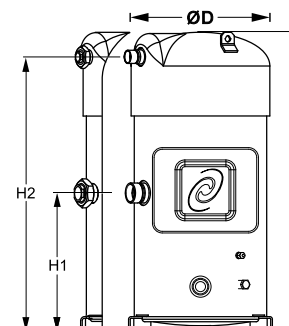
All performance data +/- 5%

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General Characteristics

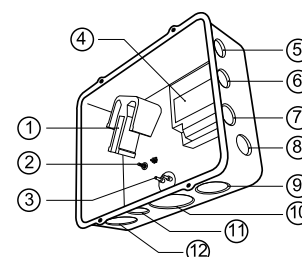
Model number (on compressor nameplate)	SH300A4MAB	SH300A4AAB
Code number for Singlepack*	120H0413	120H0237
Code number for Industrial pack**	120H0414	120H0238
Drawing number	8556012d	8556011d
Suction and discharge connections	Rotolock	Brazed
Suction connection	2-1/4" Rotolock	1-5/8" ODF
Discharge connection	1-3/4" Rotolock	1-1/8" ODF
Suction connection with supplied sleeve	1-5/8" ODF	
Discharge connection with supplied sleeve	1-1/8" ODF	
Oil sight glass	Threaded	Threaded
Oil equalisation connection	2-1/4" Rotolock	2-1/4" Rotolock
Oil drain connection	1/4" NPT	1/4" NPT
LP gauge port	Schrader	Schrader
IPR valve	None	None
Reverse rotation protection	Electronic module	Electronic module
Swept volume	285.5 cm ³ /rev	
Displacement @ Nominal speed	49.7 m ³ /h @ 2900 rpm - 60.0 m ³ /h @ 3500 rpm	
Net weight	153 kg	
Oil charge	6.7 litre, POE - 160SZ	
Maximum system test pressure Low Side / High side	30 bar(g) / 45 bar(g)	
Maximum differential test pressure	37 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	13.5 kg	
Approved refrigerants	R410A	

Dimensions


D=333.2 mm
H=722.5 mm
H1=330.5 mm
H2=663.5 mm

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	0.426 Ω
Rated Load Amps (RLA)	46.4 A
Maximum Continuous Current (MCC)	65 A
Locked Rotor Amps (LRA)	260 A
Motor protection	Electronic protection module, 24 V ac

Terminal box


IP54 (with cable gland)

- 1: Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M5, torque 2 Nm (17 in.lb)
- 3: Thermostat connector
- 4: Electronic protection module
- 5: Knock-out Ø 20.5 mm (0.81")
- 6: Knock-out Ø 20.5 mm (0.81")
- 7: Double knock-out Ø 22 mm (7/8") & Ø 16.5 mm (0.65")
- 8: Double knock-out Ø 22 mm (7/8") & Ø 16.5 mm (0.65")
- 9: Double knock-out Ø 43.7 mm (1-23/32") & Ø 34.5 mm (1-23/64")
- 10: Knock-out Ø 50 mm (1-31/32")
- 11: Knock-out Ø 25.2 mm (0.99")
- 12: Double knock-out Ø 40.5 mm (1.59") & Ø 32.2 mm (1.27")

Recommended Installation torques

Suction Rotolock nut or valve	130 Nm
Discharge Rotolock nut or valve	110 Nm
Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	21 Nm

Parts shipped with compressor

Mounting kit with rigid grommets, bolts, nuts, sleeves and washers
Electronic protection module mounted in terminal box
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA6873), -

*Singlepack: Compressor in cardboard box

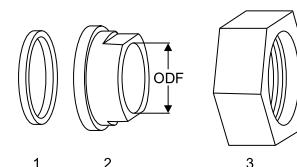
**Industrial pack: 4 Unboxed compressors on pallet (order per multiples of 4)

Rotolock accessories, suction side
Code no.

Solder sleeve, P03 (2-1/4" Rotolock, 1-5/8" ODF)	8153006
Rotolock valve, V03 (2-1/4" Rotolock, 1-5/8" ODF)	8168026
Gasket, 2-1/4"	8156133

Gaskets, sleeves and nuts
Rotolock accessories, discharge side
Code no.

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132



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

Rotolock accessories, sets
Code no.

Valve set, V03 (2-1/4"~1-5/8"), V02 (1-3/4"~1-1/8")	7703383
Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black & white	8156013

Oil / lubricants
Code no.

POE lubricant, 160SZ, 1 litre can	7754023
POE lubricant, 160SZ, 2 litre can	7754024
POE lubricant, 160SZ, 1 gallon can	7754027

Crankcase heaters
Code no.

Surface sump heater + bottom insulation, 56 W, 24 V, CE mark, UL	12020360
Surface sump heater + bottom insulation, 56 W, 230 V, CE mark, UL	12020376
Surface sump heater + bottom insulation, 56 W, 400 V, CE mark, UL	12020377
Belt type crankcase heater, 75 W, 480 V, UL	7773015

Miscellaneous accessories
Code no.

Electronic soft start kit, MCI 50 CM	7705009
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	8156138
Acoustic hood for scroll compressor SH180-SH380	12020022
Discharge thermostat kit	7750009

Spare parts
Code no.

Electronic motor protection module, 24 V ac	8169015
Mounting kit for 1 scroll compressor including 4 rigid grommets, 4 sleeves, 4 bolts, 4 washers	7777045
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Terminal box 258 x 208 mm, incl cover	8156142
T block connector 60 x 75 mm	8173021

Datasheet, performance data

Performer scroll compressor. SH300-4

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	15

Cooling capacity in W

30	32 356	40 447	49 945	61 045	73 937	88 816	105 876	125 309	147 311
35	30 139	37 968	47 117	57 777	70 138	84 395	100 739	119 363	140 460
40	-	35 373	44 110	54 267	66 034	79 605	95 168	112 916	133 039
45	-	32 664	40 925	50 515	61 624	74 441	89 156	105 957	125 036
50	-	-	37 560	46 517	56 898	68 892	82 685	98 466	116 422
55	-	-	-	42 249	51 829	62 922	75 713	90 387	107 129
60	-	-	-	-	46 346	56 443	68 131	81 590	97 001
65	-	-	-	-	-	49 231	59 666	71 745	85 642

Power input in W

30	17 190	17 372	17 500	17 596	17 682	17 780	17 912	18 098	18 362
35	18 885	19 117	19 281	19 397	19 488	19 575	19 681	19 827	20 036
40	-	21 033	21 234	21 373	21 472	21 552	21 635	21 744	21 900
45	-	23 162	23 405	23 570	23 679	23 755	23 819	23 894	24 000
50	-	-	25 838	26 032	26 156	26 230	26 278	26 321	26 380
55	-	-	-	28 806	28 946	29 022	29 057	29 071	29 087
60	-	-	-	-	32 095	32 176	32 200	32 189	32 164
65	-	-	-	-	-	35 737	35 753	35 720	35 657

Current consumption in A

30	29.72	30.02	30.21	30.32	30.37	30.41	30.47	30.58	30.78
35	31.50	31.86	32.10	32.25	32.34	32.40	32.48	32.60	32.79
40	-	33.93	34.21	34.39	34.50	34.58	34.66	34.78	34.97
45	-	36.31	36.62	36.82	36.95	37.03	37.11	37.22	37.39
50	-	-	39.43	39.64	39.77	39.86	39.92	40.01	40.15
55	-	-	-	42.95	43.07	43.14	43.19	43.24	43.34
60	-	-	-	-	46.94	46.98	47.00	47.01	47.06
65	-	-	-	-	-	51.47	51.45	51.41	51.41

Mass flow in kg/h

30	672	832	1 015	1 225	1 466	1 742	2 056	2 412	2 813
35	661	822	1 007	1 218	1 460	1 737	2 052	2 409	2 812
40	-	810	995	1 207	1 450	1 727	2 043	2 401	2 804
45	-	796	981	1 193	1 435	1 713	2 028	2 385	2 789
50	-	-	963	1 174	1 416	1 693	2 007	2 364	2 767
55	-	-	-	1 152	1 393	1 668	1 981	2 336	2 738
60	-	-	-	-	1 365	1 638	1 949	2 302	2 702
65	-	-	-	-	-	1 603	1 912	2 262	2 659

Coefficient of performance (C.O.P.)

30	1.88	2.33	2.85	3.47	4.18	5.00	5.91	6.92	8.02
35	1.60	1.99	2.44	2.98	3.60	4.31	5.12	6.02	7.01
40	-	1.68	2.08	2.54	3.08	3.69	4.40	5.19	6.07
45	-	1.41	1.75	2.14	2.60	3.13	3.74	4.43	5.21
50	-	-	1.45	1.79	2.18	2.63	3.15	3.74	4.41
55	-	-	-	1.47	1.79	2.17	2.61	3.11	3.68
60	-	-	-	-	1.44	1.75	2.12	2.53	3.02
65	-	-	-	-	-	1.38	1.67	2.01	2.40

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

Cooling capacity	82 685	W
Power input	26 278	W
Current consumption	39.92	A
Mass flow	2 007	kg/h
C.O.P.	3.15	

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	86	dB(A)
With acoustic hood	82	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	15

Cooling capacity in W

30	34 943	43 634	53 826	65 725	79 534	95 458	113 700	134 465	157 957
35	32 760	41 221	51 095	62 588	75 902	91 244	108 816	128 823	151 469
40	-	38 697	48 192	59 217	71 977	86 675	103 516	122 704	144 443
45	-	36 071	45 125	55 622	67 765	81 759	97 808	116 117	136 888
50	-	-	41 903	51 811	63 277	76 506	91 702	109 069	128 811
55	-	-	-	47 792	58 520	70 923	85 204	101 569	120 222
60	-	-	-	-	53 502	65 018	78 325	93 627	111 128
65	-	-	-	-	-	58 800	71 071	85 249	101 538

Power input in W

30	17 190	17 372	17 500	17 596	17 682	17 780	17 912	18 098	18 362
35	18 885	19 117	19 281	19 397	19 488	19 575	19 681	19 827	20 036
40	-	21 033	21 234	21 373	21 472	21 552	21 635	21 744	21 900
45	-	23 162	23 405	23 570	23 679	23 755	23 819	23 894	24 000
50	-	-	25 838	26 032	26 156	26 230	26 278	26 321	26 380
55	-	-	-	28 806	28 946	29 022	29 057	29 071	29 087
60	-	-	-	-	32 095	32 176	32 200	32 189	32 164
65	-	-	-	-	-	35 737	35 753	35 720	35 657

Current consumption in A

30	29.72	30.02	30.21	30.32	30.37	30.41	30.47	30.58	30.78
35	31.50	31.86	32.10	32.25	32.34	32.40	32.48	32.60	32.79
40	-	33.93	34.21	34.39	34.50	34.58	34.66	34.78	34.97
45	-	36.31	36.62	36.82	36.95	37.03	37.11	37.22	37.39
50	-	-	39.43	39.64	39.77	39.86	39.92	40.01	40.15
55	-	-	-	42.95	43.07	43.14	43.19	43.24	43.34
60	-	-	-	-	46.94	46.98	47.00	47.01	47.06
65	-	-	-	-	-	51.47	51.45	51.41	51.41

Mass flow in kg/h

30	668	827	1 009	1 218	1 457	1 730	2 041	2 394	2 792
35	658	818	1 001	1 211	1 451	1 726	2 038	2 392	2 791
40	-	806	989	1 200	1 441	1 716	2 029	2 383	2 783
45	-	791	975	1 185	1 426	1 701	2 014	2 368	2 768
50	-	-	957	1 167	1 407	1 681	1 993	2 347	2 746
55	-	-	-	1 145	1 384	1 657	1 967	2 319	2 717
60	-	-	-	-	1 356	1 627	1 936	2 286	2 681
65	-	-	-	-	-	1 592	1 898	2 246	2 639

Coefficient of performance (C.O.P.)

30	2.03	2.51	3.08	3.74	4.50	5.37	6.35	7.43	8.60
35	1.73	2.16	2.65	3.23	3.89	4.66	5.53	6.50	7.56
40	-	1.84	2.27	2.77	3.35	4.02	4.78	5.64	6.60
45	-	1.56	1.93	2.36	2.86	3.44	4.11	4.86	5.70
50	-	-	1.62	1.99	2.42	2.92	3.49	4.14	4.88
55	-	-	-	1.66	2.02	2.44	2.93	3.49	4.13
60	-	-	-	-	1.67	2.02	2.43	2.91	3.46
65	-	-	-	-	-	1.65	1.99	2.39	2.85

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

Cooling capacity	92 989	W
Power input	28 713	W
Current consumption	42.79	A
Mass flow	2 120	kg/h
C.O.P.	3.24	

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	86	dB(A)
With acoustic hood	82	dB(A)

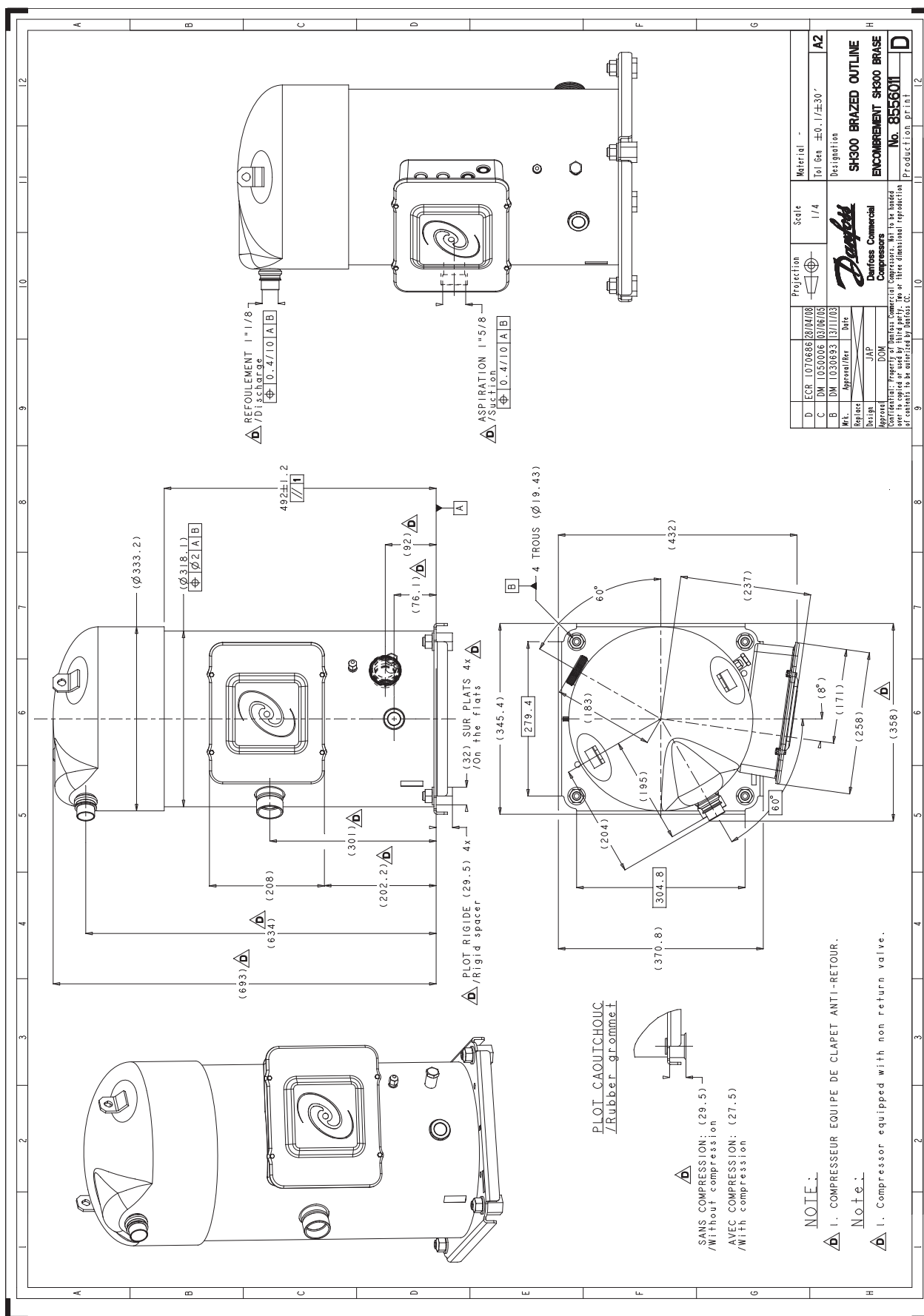
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

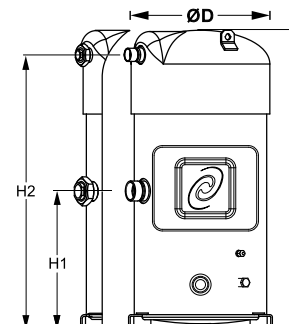
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General Characteristics

Model number (on compressor nameplate)	SH300A4MBB	SH300A4ABB
Code number for Singlepack*	120H0415	120H0239
Code number for Industrial pack**	120H0416	120H0240
Drawing number	8556012d	8556011d
Suction and discharge connections	Rotolock	Brazed
Suction connection	2-1/4" Rotolock	1-5/8" ODF
Discharge connection	1-3/4" Rotolock	1-1/8" ODF
Suction connection with supplied sleeve	1-5/8" ODF	
Discharge connection with supplied sleeve	1-1/8" ODF	
Oil sight glass	Threaded	Threaded
Oil equalisation connection	2-1/4" Rotolock	2-1/4" Rotolock
Oil drain connection	1/4" NPT	1/4" NPT
LP gauge port	Schrader	Schrader
IPR valve	None	None
Reverse rotation protection	Electronic module	Electronic module
Swept volume	285.5 cm ³ /rev	
Displacement @ Nominal speed	49.7 m ³ /h @ 2900 rpm - 60.0 m ³ /h @ 3500 rpm	
Net weight	153 kg	
Oil charge	6.7 litre, POE - 160SZ	
Maximum system test pressure Low Side / High side	30 bar(g) / 45 bar(g)	
Maximum differential test pressure	37 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	13.5 kg	
Approved refrigerants	R410A	

Dimensions

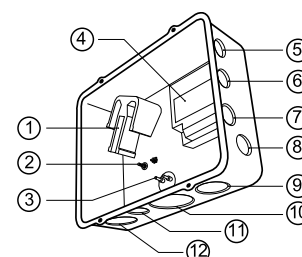


D=333.2 mm
H=722.5 mm
H1=330.5 mm
H2=663.5 mm

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	0.426 Ω
Rated Load Amps (RLA)	46.4 A
Maximum Continuous Current (MCC)	65 A
Locked Rotor Amps (LRA)	260 A
Motor protection	Electronic protection module, 115/230 V

Terminal box



IP54 (with cable gland)

- 1: Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M5, torque 2 Nm (17 in.lb)
- 3: Thermostat connector
- 4: Electronic protection module
- 5: Knock-out Ø 20.5 mm (0.81")
- 6: Knock-out Ø 20.5 mm (0.81")
- 7: Double knock-out Ø 22 mm (7/8") & Ø 16.5 mm (0.65")
- 8: Double knock-out Ø 22 mm (7/8") & Ø 16.5 mm (0.65")
- 9: Double knock-out Ø 43.7 mm (1-23/32") & Ø 34.5 mm (1-23/64")
- 10: Knock-out Ø 50 mm (1-31/32")
- 11: Knock-out Ø 25.2 mm (0.99")
- 12: Double knock-out Ø 40.5 mm (1.59") & Ø 32.2 mm (1.27")

Recommended Installation torques

Suction Rotolock nut or valve	130 Nm
Discharge Rotolock nut or valve	110 Nm
Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	21 Nm

Parts shipped with compressor

Mounting kit with rigid grommets, bolts, nuts, sleeves and washers
Electronic protection module mounted in terminal box
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA6873), -

*Singlepack: Compressor in cardboard box

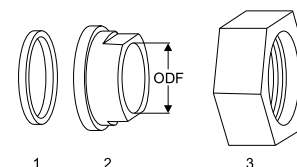
**Industrial pack: 4 Unboxed compressors on pallet (order per multiples of 4)

Rotolock accessories, suction side
Code no.

Solder sleeve, P03 (2-1/4" Rotolock, 1-5/8" ODF)	8153006
Rotolock valve, V03 (2-1/4" Rotolock, 1-5/8" ODF)	8168026
Gasket, 2-1/4"	8156133

Gaskets, sleeves and nuts
Rotolock accessories, discharge side
Code no.

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132



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

Rotolock accessories, sets
Code no.

Valve set, V03 (2-1/4"~1-5/8"), V02 (1-3/4"~1-1/8")	7703383
Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black & white	8156013

Oil / lubricants
Code no.

POE lubricant, 160SZ, 1 litre can	7754023
POE lubricant, 160SZ, 2 litre can	7754024
POE lubricant, 160SZ, 1 gallon can	7754027

Crankcase heaters
Code no.

Surface sump heater + bottom insulation, 56 W, 24 V, CE mark, UL	12020360
Surface sump heater + bottom insulation, 56 W, 230 V, CE mark, UL	12020376
Surface sump heater + bottom insulation, 56 W, 400 V, CE mark, UL	12020377
Belt type crankcase heater, 75 W, 480 V, UL	7773015

Miscellaneous accessories
Code no.

Electronic soft start kit, MCI 50 CM	7705009
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	8156138
Acoustic hood for scroll compressor SH180-SH380	12020022
Discharge thermostat kit	7750009

Spare parts
Code no.

Electronic motor protection module, 115/230 V	8169016
Mounting kit for 1 scroll compressor including 4 rigid grommets, 4 sleeves, 4 bolts, 4 washers	7777045
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Terminal box 258 x 208 mm, incl cover	8156142
T block connector 60 x 75 mm	8173021

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	15

Cooling capacity in W

30	32 356	40 447	49 945	61 045	73 937	88 816	105 876	125 309	147 311
35	30 139	37 968	47 117	57 777	70 138	84 395	100 739	119 363	140 460
40	-	35 373	44 110	54 267	66 034	79 605	95 168	112 916	133 039
45	-	32 664	40 925	50 515	61 624	74 441	89 156	105 957	125 036
50	-	-	37 560	46 517	56 898	68 892	82 685	98 466	116 422
55	-	-	-	42 249	51 829	62 922	75 713	90 387	107 129
60	-	-	-	-	46 346	56 443	68 131	81 590	97 001
65	-	-	-	-	-	49 231	59 666	71 745	85 642

Power input in W

30	17 190	17 372	17 500	17 596	17 682	17 780	17 912	18 098	18 362
35	18 885	19 117	19 281	19 397	19 488	19 575	19 681	19 827	20 036
40	-	21 033	21 234	21 373	21 472	21 552	21 635	21 744	21 900
45	-	23 162	23 405	23 570	23 679	23 755	23 819	23 894	24 000
50	-	-	25 838	26 032	26 156	26 230	26 278	26 321	26 380
55	-	-	-	28 806	28 946	29 022	29 057	29 071	29 087
60	-	-	-	-	32 095	32 176	32 200	32 189	32 164
65	-	-	-	-	-	35 737	35 753	35 720	35 657

Current consumption in A

30	29.72	30.02	30.21	30.32	30.37	30.41	30.47	30.58	30.78
35	31.50	31.86	32.10	32.25	32.34	32.40	32.48	32.60	32.79
40	-	33.93	34.21	34.39	34.50	34.58	34.66	34.78	34.97
45	-	36.31	36.62	36.82	36.95	37.03	37.11	37.22	37.39
50	-	-	39.43	39.64	39.77	39.86	39.92	40.01	40.15
55	-	-	-	42.95	43.07	43.14	43.19	43.24	43.34
60	-	-	-	-	46.94	46.98	47.00	47.01	47.06
65	-	-	-	-	-	51.47	51.45	51.41	51.41

Mass flow in kg/h

30	672	832	1 015	1 225	1 466	1 742	2 056	2 412	2 813
35	661	822	1 007	1 218	1 460	1 737	2 052	2 409	2 812
40	-	810	995	1 207	1 450	1 727	2 043	2 401	2 804
45	-	796	981	1 193	1 435	1 713	2 028	2 385	2 789
50	-	-	963	1 174	1 416	1 693	2 007	2 364	2 767
55	-	-	-	1 152	1 393	1 668	1 981	2 336	2 738
60	-	-	-	-	1 365	1 638	1 949	2 302	2 702
65	-	-	-	-	-	1 603	1 912	2 262	2 659

Coefficient of performance (C.O.P.)

30	1.88	2.33	2.85	3.47	4.18	5.00	5.91	6.92	8.02
35	1.60	1.99	2.44	2.98	3.60	4.31	5.12	6.02	7.01
40	-	1.68	2.08	2.54	3.08	3.69	4.40	5.19	6.07
45	-	1.41	1.75	2.14	2.60	3.13	3.74	4.43	5.21
50	-	-	1.45	1.79	2.18	2.63	3.15	3.74	4.41
55	-	-	-	1.47	1.79	2.17	2.61	3.11	3.68
60	-	-	-	-	1.44	1.75	2.12	2.53	3.02
65	-	-	-	-	-	1.38	1.67	2.01	2.40

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

Cooling capacity	82 685	W
Power input	26 278	W
Current consumption	39.92	A
Mass flow	2 007	kg/h
C.O.P.	3.15	

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	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	86	dB(A)
With acoustic hood	82	dB(A)

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	15

Cooling capacity in W

30	34 943	43 634	53 826	65 725	79 534	95 458	113 700	134 465	157 957
35	32 760	41 221	51 095	62 588	75 902	91 244	108 816	128 823	151 469
40	-	38 697	48 192	59 217	71 977	86 675	103 516	122 704	144 443
45	-	36 071	45 125	55 622	67 765	81 759	97 808	116 117	136 888
50	-	-	41 903	51 811	63 277	76 506	91 702	109 069	128 811
55	-	-	-	47 792	58 520	70 923	85 204	101 569	120 222
60	-	-	-	-	53 502	65 018	78 325	93 627	111 128
65	-	-	-	-	-	58 800	71 071	85 249	101 538

Power input in W

30	17 190	17 372	17 500	17 596	17 682	17 780	17 912	18 098	18 362
35	18 885	19 117	19 281	19 397	19 488	19 575	19 681	19 827	20 036
40	-	21 033	21 234	21 373	21 472	21 552	21 635	21 744	21 900
45	-	23 162	23 405	23 570	23 679	23 755	23 819	23 894	24 000
50	-	-	25 838	26 032	26 156	26 230	26 278	26 321	26 380
55	-	-	-	28 806	28 946	29 022	29 057	29 071	29 087
60	-	-	-	-	32 095	32 176	32 200	32 189	32 164
65	-	-	-	-	-	35 737	35 753	35 720	35 657

Current consumption in A

30	29.72	30.02	30.21	30.32	30.37	30.41	30.47	30.58	30.78
35	31.50	31.86	32.10	32.25	32.34	32.40	32.48	32.60	32.79
40	-	33.93	34.21	34.39	34.50	34.58	34.66	34.78	34.97
45	-	36.31	36.62	36.82	36.95	37.03	37.11	37.22	37.39
50	-	-	39.43	39.64	39.77	39.86	39.92	40.01	40.15
55	-	-	-	42.95	43.07	43.14	43.19	43.24	43.34
60	-	-	-	-	46.94	46.98	47.00	47.01	47.06
65	-	-	-	-	-	51.47	51.45	51.41	51.41

Mass flow in kg/h

30	668	827	1 009	1 218	1 457	1 730	2 041	2 394	2 792
35	658	818	1 001	1 211	1 451	1 726	2 038	2 392	2 791
40	-	806	989	1 200	1 441	1 716	2 029	2 383	2 783
45	-	791	975	1 185	1 426	1 701	2 014	2 368	2 768
50	-	-	957	1 167	1 407	1 681	1 993	2 347	2 746
55	-	-	-	1 145	1 384	1 657	1 967	2 319	2 717
60	-	-	-	-	1 356	1 627	1 936	2 286	2 681
65	-	-	-	-	-	1 592	1 898	2 246	2 639

Coefficient of performance (C.O.P.)

30	2.03	2.51	3.08	3.74	4.50	5.37	6.35	7.43	8.60
35	1.73	2.16	2.65	3.23	3.89	4.66	5.53	6.50	7.56
40	-	1.84	2.27	2.77	3.35	4.02	4.78	5.64	6.60
45	-	1.56	1.93	2.36	2.86	3.44	4.11	4.86	5.70
50	-	-	1.62	1.99	2.42	2.92	3.49	4.14	4.88
55	-	-	-	1.66	2.02	2.44	2.93	3.49	4.13
60	-	-	-	-	1.67	2.02	2.43	2.91	3.46
65	-	-	-	-	-	1.65	1.99	2.39	2.85

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

Cooling capacity	92 989	W
Power input	28 713	W
Current consumption	42.79	A
Mass flow	2 120	kg/h
C.O.P.	3.24	

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	86	dB(A)
With acoustic hood	82	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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