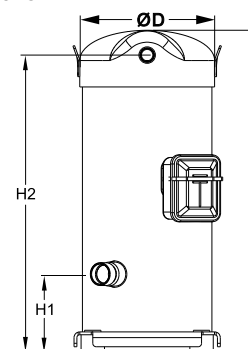


**General Characteristics**

Model number (on compressor nameplate)		<b>CXH140A4ALA</b>
Code number for Singlepack*		120H1102
Code number for Industrial pack**		120H1103
Drawing number		8560065b
Suction and discharge connections		Brazed
Suction connection		1-3/8" ODF
Discharge connection		7/8" ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		132.9 cm <sup>3</sup> /rev
Displacement @ Nominal speed		23.1 m <sup>3</sup> /h @ 2900 rpm - 27.9 m <sup>3</sup> /h @ 3500 rpm
Net weight		71.5 kg
Oil charge		2.5 litre, POE - 160SZ
Maximum system test pressure Low Side / High side		33.3 bar(g) / 45.5 bar(g)
Maximum differential test pressure		37 bar
Maximum number of starts per hour		12
Refrigerant charge limit		7.9 kg
Approved refrigerants		R410A

**Dimensions**

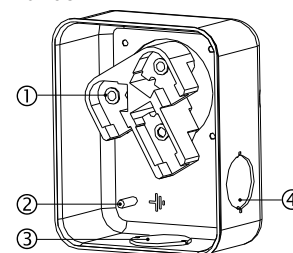


D=236 mm  
H=563 mm  
H1=136 mm  
H2=519 mm  
H3=- mm

**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	0.92 Ω
Rated Load Amps (RLA)	22.5 A
Maximum Continuous Current (MCC)	31.5 A
Locked Rotor Amps (LRA)	147 A
Motor protection	Internal overload protector

**Terminal box**



IP54 (with cable gland)

- 1: Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M4-12
- 3: Knock-out Ø 29 mm (1.14")
- 4: Knock-out Ø 25.5 mm (1.00")

**Recommended Installation torques**

Oil sight glass	0 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	21 Nm

**Parts shipped with compressor**

Mounting kit with grommets, bolts, nuts, sleeves and washers
Initial oil charge
Installation instructions

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

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 8 Unboxed compressors on pallet (order per multiples of 8)

**Rotolock accessories, suction side**

**Code no.**

Solder sleeve, P10 (1-3/4" Rotolock, 1-3/8" ODF)	8153003
Rotolock valve, V10 (1-3/4" Rotolock, 1-3/8" ODF)	8168022
Gasket, 1-3/4"	8156132

**Rotolock accessories, discharge side**

**Code no.**

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132

**Rotolock accessories, sets**

**Code no.**

Solder sleeve adapter set (1-3/4" Rotolock, 1-3/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0405
Valve set, V10 (1-3/4"~1-3/8"), V05 (1-1/4"~7/8")	7703392
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, 2.5 litre can	120Z0571

**Crankcase heaters**

**Code no.**

Surface sump heater, 80 W, 24 V, CE mark, UL	120Z0388
Surface sump heater, 80 W, 230 V, CE mark, UL	120Z0389
Surface sump heater, 80 W, 400 V, CE mark, UL	120Z0390
Surface sump heater, 80 W, 460 V, CE mark, UL	120Z0391

**Miscellaneous accessories**

**Code no.**

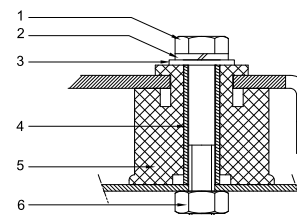
Discharge thermostat kit	7750009
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**Spare parts**

**Code no.**

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	8156138
Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp	8156135
T block connector 52 x 57 mm	8173230

**Mounting kit**

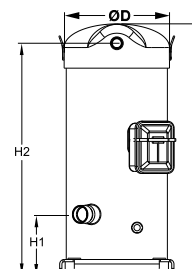


- 1: Bolt (4x)
- 2: Lock washer (4x)
- 3: Flat washer (4x)
- 4: Sleeve (4x)
- 5: Grommet (4x)
- 6: Nut (4x)

**General Characteristics**

Model number (on compressor nameplate)		<b>CXH140A4BLA</b>
Code number for Singlepack*		120H1171
Code number for Industrial pack**		120H1172
Drawing number		8560074a
Suction and discharge connections		Brazed
Suction connection		1-3/8" ODF
Discharge connection		7/8" ODF
Oil sight glass		Threaded
Oil equalisation connection		1-3/4" Rotolock
Oil drain connection		None
LP gauge port		Schrader
IPR valve		None
Swept volume		132.9 cm <sup>3</sup> /rev
Displacement @ Nominal speed		23.1 m <sup>3</sup> /h @ 2900 rpm - 27.9 m <sup>3</sup> /h @ 3500 rpm
Net weight		71.5 kg
Oil charge		2.5 litre, POE - 160SZ
Maximum system test pressure Low Side / High side		33.3 bar(g) / 45.5 bar(g)
Maximum differential test pressure		37 bar
Maximum number of starts per hour		12
Refrigerant charge limit		7.9 kg
Approved refrigerants		R410A

**Dimensions**

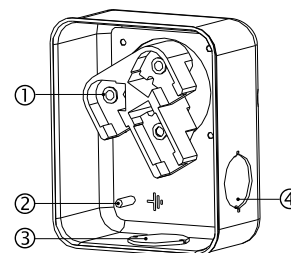


D=236 mm  
H=563 mm  
H1=136 mm  
H2=519 mm  
H3=- mm

**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	0.92 Ω
Rated Load Amps (RLA)	22.5 A
Maximum Continuous Current (MCC)	31.5 A
Locked Rotor Amps (LRA)	147 A
Motor protection	Internal overload protector

**Terminal box**



IP54 (with cable gland)  
1: Power connection, 3 x 4.8 mm (3/16")  
2: Earth M4-12  
3: Knock-out Ø 29 mm (1.14")  
4: Knock-out Ø 25.5 mm (1.00")

**Recommended Installation torques**

Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	21 Nm

**Parts shipped with compressor**

Mounting kit with grommets, bolts, nuts, sleeves and washers
Initial oil charge
Installation instructions

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

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 8 Unboxed compressors on pallet (order per multiples of 8)

**Rotolock accessories, suction side**

**Code no.**

Solder sleeve, P10 (1-3/4" Rotolock, 1-3/8" ODF)	8153003
Rotolock valve, V10 (1-3/4" Rotolock, 1-3/8" ODF)	8168022
Gasket, 1-3/4"	8156132

**Rotolock accessories, discharge side**

**Code no.**

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132

**Rotolock accessories, sets**

**Code no.**

Solder sleeve adapter set (1-3/4" Rotolock, 1-3/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0405
Valve set, V10 (1-3/4"~1-3/8"), V05 (1-1/4"~7/8")	7703392
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, 2.5 litre can	120Z0571

**Crankcase heaters**

**Code no.**

Surface sump heater, 80 W, 24 V, CE mark, UL	120Z0388
Surface sump heater, 80 W, 230 V, CE mark, UL	120Z0389
Surface sump heater, 80 W, 400 V, CE mark, UL	120Z0390
Surface sump heater, 80 W, 460 V, CE mark, UL	120Z0391

**Miscellaneous accessories**

**Code no.**

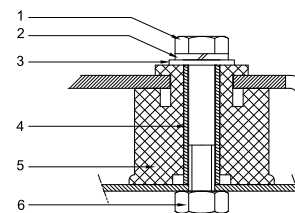
Gasket, 1-3/4"	8156132
Discharge thermostat kit	7750009

**Spare parts**

**Code no.**

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	8156138
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp	8156135
T block connector 52 x 57 mm	8173230

**Mounting kit**



- 1: Bolt (4x)
- 2: Lock washer (4x)
- 3: Flat washer (4x)
- 4: Sleeve (4x)
- 5: Grommet (4x)
- 6: Nut (4x)

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	11 758	14 864	18 501	22 738	27 642	33 281	39 724	47 038	55 293
35	10 928	13 929	17 435	21 515	26 237	31 667	37 874	44 925	52 889
40	-	12 916	16 260	20 152	24 659	29 848	35 786	42 541	50 179
45	-	11 843	14 994	18 665	22 925	27 839	33 474	39 898	47 176
50	-	-	13 651	17 069	21 048	25 653	30 950	37 005	43 885
55	-	-	-	15 373	19 035	23 293	28 213	33 860	40 299
60	-	-	-	-	16 877	20 746	25 242	30 431	36 375
65	-	-	-	-	-	17 946	21 954	26 613	31 985

Power input in W

30	6 081	6 117	6 116	6 096	6 080	6 088	6 140	6 257	6 460
35	6 784	6 841	6 850	6 831	6 805	6 792	6 813	6 889	7 040
40	-	7 640	7 665	7 651	7 620	7 591	7 587	7 626	7 731
45	-	8 525	8 571	8 567	8 535	8 497	8 471	8 479	8 542
50	-	-	9 578	9 589	9 563	9 518	9 477	9 459	9 485
55	-	-	-	10 729	10 712	10 667	10 614	10 575	10 570
60	-	-	-	-	11 994	11 953	11 895	11 839	11 807
65	-	-	-	-	-	13 388	13 329	13 262	13 208

Current consumption in A

30	12.69	12.85	12.96	13.01	13.04	13.04	13.05	13.07	13.11
35	13.61	13.77	13.86	13.90	13.91	13.89	13.87	13.85	13.86
40	-	14.78	14.87	14.90	14.90	14.86	14.82	14.78	14.76
45	-	15.92	16.01	16.04	16.03	15.99	15.93	15.87	15.83
50	-	-	17.31	17.35	17.34	17.29	17.22	17.15	17.09
55	-	-	-	18.84	18.83	18.79	18.72	18.65	18.58
60	-	-	-	-	20.55	20.52	20.46	20.38	20.31
65	-	-	-	-	-	22.50	22.45	22.38	22.31

Mass flow in kg/h

30	245	306	376	456	547	652	771	905	1 057
35	240	302	372	453	546	651	771	907	1 060
40	-	296	367	448	541	648	768	905	1 058
45	-	288	359	441	534	641	762	899	1 053
50	-	-	350	431	524	631	752	889	1 044
55	-	-	-	419	512	618	739	876	1 030
60	-	-	-	-	496	601	722	858	1 012
65	-	-	-	-	-	582	701	837	990

Coefficient of performance (C.O.P.)

30	1.93	2.43	3.03	3.73	4.55	5.47	6.47	7.52	8.56
35	1.61	2.04	2.55	3.15	3.86	4.66	5.56	6.52	7.51
40	-	1.69	2.12	2.63	3.24	3.93	4.72	5.58	6.49
45	-	1.39	1.75	2.18	2.69	3.28	3.95	4.71	5.52
50	-	-	1.43	1.78	2.20	2.70	3.27	3.91	4.63
55	-	-	-	1.43	1.78	2.18	2.66	3.20	3.81
60	-	-	-	-	1.41	1.74	2.12	2.57	3.08
65	-	-	-	-	-	1.34	1.65	2.01	2.42

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

Cooling capacity	30 950	W
Power input	9 477	W
Current consumption	17.22	A
Mass flow	752	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	72.5	dB(A)
With acoustic hood	0	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	12 698	16 035	19 939	24 482	29 735	35 770	42 660	50 476	59 290
35	11 878	15 122	18 907	23 307	28 393	34 237	40 911	48 486	57 035
40	-	14 129	17 765	21 991	26 878	32 499	38 925	46 229	54 482
45	-	13 078	16 533	20 552	25 210	30 576	36 723	43 724	51 649
50	-	-	15 229	19 012	23 408	28 488	34 325	40 991	48 556
55	-	-	-	17 390	21 492	26 255	31 750	38 049	45 225
60	-	-	-	-	19 483	23 897	29 019	34 920	41 673
65	-	-	-	-	-	21 434	26 151	31 623	37 922

Power input in W

30	6 081	6 117	6 116	6 096	6 080	6 088	6 140	6 257	6 460
35	6 784	6 841	6 850	6 831	6 805	6 792	6 813	6 889	7 040
40	-	7 640	7 665	7 651	7 620	7 591	7 587	7 626	7 731
45	-	8 525	8 571	8 567	8 535	8 497	8 471	8 479	8 542
50	-	-	9 578	9 589	9 563	9 518	9 477	9 459	9 485
55	-	-	-	10 729	10 712	10 667	10 614	10 575	10 570
60	-	-	-	-	11 994	11 953	11 895	11 839	11 807
65	-	-	-	-	-	13 388	13 329	13 262	13 208

Current consumption in A

30	12.69	12.85	12.96	13.01	13.04	13.04	13.05	13.07	13.11
35	13.61	13.77	13.86	13.90	13.91	13.89	13.87	13.85	13.86
40	-	14.78	14.87	14.90	14.90	14.86	14.82	14.78	14.76
45	-	15.92	16.01	16.04	16.03	15.99	15.93	15.87	15.83
50	-	-	17.31	17.35	17.34	17.29	17.22	17.15	17.09
55	-	-	-	18.84	18.83	18.79	18.72	18.65	18.58
60	-	-	-	-	20.55	20.52	20.46	20.38	20.31
65	-	-	-	-	-	22.50	22.45	22.38	22.31

Mass flow in kg/h

30	244	304	373	453	544	648	765	899	1 049
35	239	300	370	450	542	647	766	900	1 052
40	-	294	365	445	538	643	763	898	1 050
45	-	287	357	438	531	637	757	892	1 045
50	-	-	348	428	521	627	747	883	1 036
55	-	-	-	416	508	614	734	869	1 022
60	-	-	-	-	493	597	717	852	1 004
65	-	-	-	-	-	578	696	831	982

Coefficient of performance (C.O.P.)

30	2.09	2.62	3.26	4.02	4.89	5.88	6.95	8.07	9.18
35	1.75	2.21	2.76	3.41	4.17	5.04	6.00	7.04	8.10
40	-	1.85	2.32	2.87	3.53	4.28	5.13	6.06	7.05
45	-	1.53	1.93	2.40	2.95	3.60	4.34	5.16	6.05
50	-	-	1.59	1.98	2.45	2.99	3.62	4.33	5.12
55	-	-	-	1.62	2.01	2.46	2.99	3.60	4.28
60	-	-	-	-	1.62	2.00	2.44	2.95	3.53
65	-	-	-	-	-	1.60	1.96	2.38	2.87

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

Cooling capacity	34 756	W
Power input	10 451	W
Current consumption	18.50	A
Mass flow	793	kg/h
C.O.P.	3.33	

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	72.5	dB(A)
With acoustic hood	0	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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