

60 Hz



## SH Scroll compressors 60 Hz - R410A

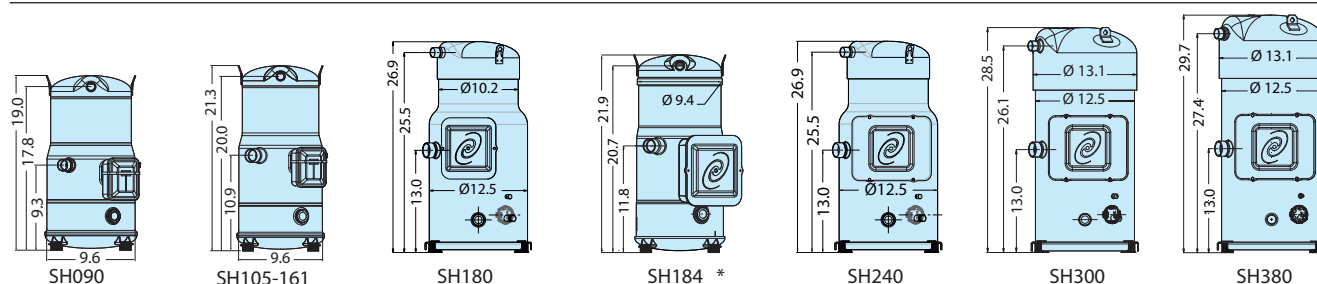
## CODE NUMBERS



Compressor model	Connections	Mounting feet	Motor protection	Code no. for Industrial pack				Code no. for Single pack				
				Nbr	3	4	7	9	3	4	7	9
					200-230/3/60	460/3/60 380-400/3/50	575/3/60 500/3/50	380/3/60	200-230/3/60	460/3/60 380-400/3/50	575/3/60 500/3/50	380/3/60
SH090	Brazed	flexible	Internal	8	120H0002	120H0004	120H0008	120H0010	120H0001	120H0003	120H0007	120H0009
SH105	Brazed	flexible	Internal	8	120H0210	120H0212	120H0216	120H0218	120H0209	120H0211	120H0215	120H0217
SH120	Brazed	flexible	Internal	8	120H0012	120H0014	120H0018	120H0020	120H0011	120H0013	120H0017	120H0019
SH140	Brazed	flexible	Internal	8	120H0200	120H0202	120H0206	120H0208	120H0199	120H0201	120H0205	120H0207
SH180 ①	Brazed	flexible	Internal	8	120H0022	120H0024	120H0028	120H0030	120H0021	120H0023	120H0027	120H0029
	Brazed	flexible	Module 24 V	6	120H0032	120H0040	120H0048	120H0056	120H0031	120H0039	120H0047	120H0055
	Brazed	flexible	Module 230 V	6	120H0034	120H0042	120H0050	120H0058	120H0033	120H0041	120H0049	120H0057
	Brazed	flexible	Module 115V	6	120H0224	120H0226	120H0228	120H0230	120H0225	120H0227	120H0229	120H0231
	Brazed	rigid	Module 24V	6	120H0266	120H0268	120H0270	120H0272	120H0265	120H0267	120H0269	120H0271
	Brazed	rigid	Module 230V	6	120H0274	120H0276	120H0278	120H0280	120H0273	120H0275	120H0277	120H0279
SH184 *	Brazed	rigid	Module 115V	6	120H0282	120H0284	120H0286	120H0288	120H0281	120H0283	120H0285	120H0287
	Brazed	flexible	Internal	8	120H0360	120H0362	120H0366	120H0368	120H0359	120H0361	120H0365	120H0367
SH240 ①	Brazed	flexible	Module 24 V	6	120H0064	120H0075	120H0086	120H0097	120H0063	120H0074	120H0085	120H0096
	Brazed	flexible	Module 115 - 230 V	6	120H0066	120H0077	120H0088	120H0099	120H0065	120H0076	120H0087	120H0098
	Brazed	rigid	Module 24V	6	120H0290	120H0292	120H0294	120H0296	120H0289	120H0291	120H0293	120H0295
	Brazed	rigid	Module 115-230V	6	120H0298	120H0300	120H0302	120H0304	120H0297	120H0299	120H0301	120H0303
SH300 ①	Brazed	flexible	Module 24 V	4	120H0108	120H0119	120H0130	120H0141	120H0107	120H0118	120H0129	120H0140
	Brazed	flexible	Module 115 - 230 V	4	120H0110	120H0121	120H0132	120H0143	120H0109	120H0120	120H0131	120H0142
	Brazed	rigid	Module 24V	4	120H0234	120H0238	120H0242	120H0246	120H0233	120H0237	120H0241	120H0245
	Brazed	rigid	Module 115-230V	4	120H0236	120H0240	120H0244	120H0248	120H0235	120H0239	120H0243	120H0247
SH380 ①	Brazed	flexible	Module 24 V	4	120H0152	120H0160	120H0168	120H0176	120H0151	120H0159	120H0167	120H0175
	Brazed	flexible	Module 115 - 230 V	4	120H0154	120H0162	120H0170	120H0178	120H0153	120H0161	120H0169	120H0177
	Brazed	rigid	Module 24V	4	120H0250	120H0254	120H0258	120H0262	120H0249	120H0253	120H0257	120H0261
	Brazed	rigid	Module 115-230V	4	120H0252	120H0256	120H0260	120H0264	120H0251	120H0255	120H0259	120H0263

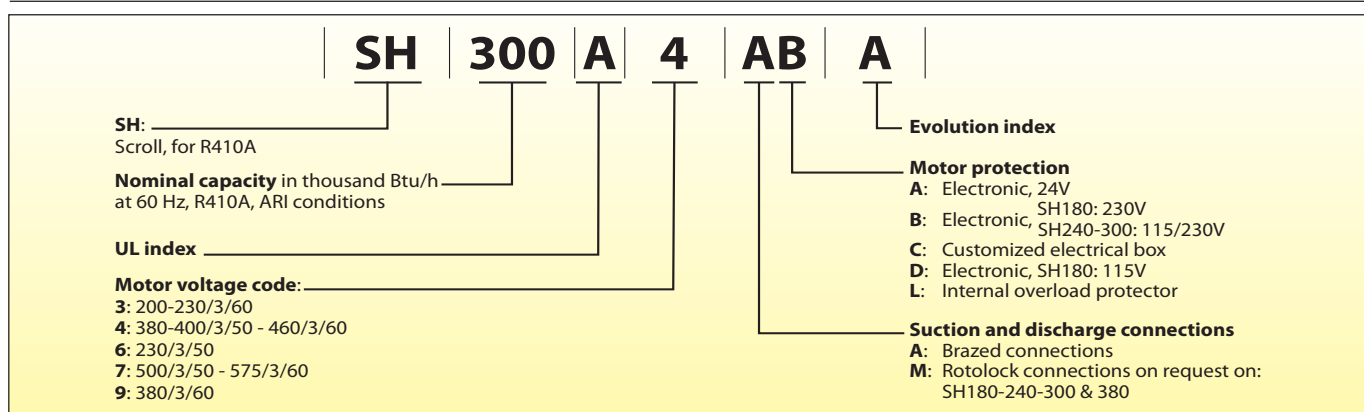
① models with rigid mounting feet are for parallel mounting only. For single mounting, use models with flexible mounting feet or use flexible grommet kit ref 8156138

## DIMENSIONS



\* SH184: preliminary data - SH184 available end 2008

## NAMEPLATE REFERENCE



## PERFORMANCE DATA

Model	To	-10		0		10		20		30		40		45		50	
	Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe
SH090-4	100	32 000	5.80	42 000	5.90	53 800	5.90	67 700	6.00	84 100	6.00	103 100	6.10	113 700	6.10	125 100	6.20
	110	-	-	38 900	6.60	50 200	6.60	63 400	6.70	79 000	6.70	97 100	6.80	107 200	6.80	118 100	6.90
	130	-	-	-	-	-	-	53 800	8.50	67 500	8.50	83 500	8.60	92 500	8.60	102 200	8.60
SH105-4	100	40 300	6.80	51 600	6.90	65 000	7.00	80 700	7.10	99 200	7.20	120 700	7.31	132 700	7.36	145 600	7.40
	110	-	-	48 200	7.70	61 000	7.70	76 000	7.80	93 700	7.90	114 200	8.07	125 700	8.13	138 000	8.19
	130	-	-	-	-	-	-	65 300	9.70	81 000	9.80	99 300	9.90	109 600	10.00	120 600	10.00
SH120-4	100	45 100	7.50	58 400	7.60	74 100	7.70	92 600	7.90	114 300	8.00	139 500	8.21	153 500	8.32	168 600	8.44
	110	-	-	54 300	8.50	69 400	8.60	87 000	8.80	107 500	8.90	131 400	9.06	144 800	9.16	159 100	9.28
	130	-	-	-	-	-	-	74 200	11.00	92 400	11.10	113 600	11.20	125 400	11.30	138 100	11.30
SH140-4	100	54 600	8.70	69 300	8.80	86 700	8.90	107 400	9.10	131 600	9.30	159 900	9.44	175 600	9.52	192 600	9.61
	110	-	-	64 800	9.80	81 400	9.90	101 000	10.10	124 100	10.30	151 000	10.44	166 100	10.53	182 300	10.62
	130	-	-	-	-	-	-	86 800	12.60	107 100	12.70	131 000	12.90	144 400	13.00	158 800	13.00
SH161-4	100	60 900	9.70	77 600	9.80	97 400	9.90	120 700	10.10	148 100	10.20	180 000	10.40	197 700	10.49	216 800	10.59
	110	-	-	72 200	11.00	91 000	11.10	113 200	11.30	139 200	11.40	169 500	11.53	186 400	11.61	204 600	11.70
	130	-	-	-	-	-	-	96 400	14.20	119 200	14.30	145 900	14.40	160 900	14.40	177 100	14.50
SH180-4	100	67 100	11.40	86 600	11.50	109 500	11.60	136 400	11.60	168 100	11.60	205 000	11.65	225 700	11.65	247 900	11.66
	110	-	-	79 200	13.10	101 200	13.10	126 900	13.10	157 100	13.10	192 400	13.10	212 100	13.11	233 300	13.13
	130	-	-	-	-	-	-	107 200	16.60	134 300	16.50	165 800	16.50	183 400	16.50	202 500	16.50
SH184-4 *	100	69 900	10.90	88 800	11.10	111 200	11.40	137 600	11.60	168 400	11.90	204 300	12.08	224 300	12.18	245 700	12.27
	110	-	-	83 000	12.40	104 300	12.60	129 400	12.80	158 700	13.10	192 900	13.34	211 900	13.46	232 400	13.57
	130	-	-	-	-	-	-	111 100	15.90	137 000	16.10	167 300	16.30	184 300	16.50	202 500	16.60
SH240-4	100	93 800	15.30	120 000	15.40	150 900	15.50	187 300	15.60	230 100	15.60	279 900	15.71	307 600	15.77	337 400	15.86
	110	-	-	111 700	17.30	141 100	17.50	175 700	17.50	216 200	17.60	263 400	17.66	289 800	17.71	318 100	17.76
	130	-	-	-	-	-	-	150 300	22.30	185 900	22.40	227 500	22.50	250 700	22.50	275 800	22.50
SH300-4	100	116 600	20.00	150 000	20.30	189 600	20.40	236 200	20.50	290 900	20.60	354 600	20.73	390 100	20.79	428 300	20.87
	110	-	-	139 500	22.50	177 100	22.80	221 400	22.90	273 400	23.00	333 900	23.05	367 700	23.10	404 000	23.15
	130	-	-	-	-	-	-	188 700	28.60	234 300	28.70	287 600	28.70	317 500	28.70	349 700	28.70
SH380-4	100	139 100	23.70	178 000	23.90	224 200	24.10	279 000	24.20	343 400	24.40	418 800	24.60	460 900	24.80	506 200	25.00
	110	-	-	165 600	26.70	209 400	26.80	261 300	27.00	322 500	27.10	394 000	27.30	434 100	27.40	477 200	27.60
	130	-	-	-	-	-	-	222 200	33.70	275 700	33.80	338 600	33.90	374 000	34.00	412 300	34.10

To: Evaporating temperature in °F  
Tc: Condensing temperature in °F

Qo: Cooling capacity in Btu/h  
Pe: Power input in kW

Superheat = 20°F  
Subcooling = 15°F

Voltage: 460 V / 3 / 60 Hz

## TECHNICAL SPECIFICATIONS

Model	Nominal tons 60 Hz	Nominal cooling capacity ①		Power input ①	Max. oper. current ②	COP ①	E.E.R. ①	Sound power	Swept volume	Displacement ③	Oil charge	Net weight ④
	TR	W	Btu/h	kW	A ②	W/W	Btu/h/W	dB(A)	in <sup>3</sup> /rev	cfh	Oz	lbs
SH090	7.5	27 100	92 500	8.60	16.9	3.16	10.79	72	5.39	656	101	128
SH105	9	32 100	109 600	10.00	19.4	3.22	11.00	74	6.32	768	112	142
SH120	10	36 800	125 400	11.30	21.5	3.27	11.15	75	7.13	867	112	142
SH140	12	42 300	144 400	13.00	24.6	3.27	11.15	76	8.11	986	112	148
SH161	13	47 200	160 900	14.40	27.1	3.27	11.15	77	9.26	1125	112	152
SH180	15	53 800	183 400	16.50	32.2	3.27	11.15	85	10.39	1262	227	234
SH184 *	15	54 000	184 300	16.50	31.5	3.28	11.20	-	10.40	1264	122	157
SH240	20	73 500	250 700	22.50	43.1	3.27	11.15	86	13.89	1688	227	238
SH300	25	93 000	317 400	28.70	54.5	3.24	11.05	86	17.42	2117	227	337
SH380	30	109 600	374 000	34.00	64.0	3.22	11.00	87	21.05	2558	243	362

① At ARI standard rating conditions: 45°F evaporating temperature, 130°F condensing temperature, 15°F subcooling, 20°F superheat  
② for 59°F evap. temp; 155°F cond. temp under nominal voltage 460V / 3 / 60 Hz,

③ displacement at nominal speed: 3500 rpm at 60 Hz,  
④ net weight with oil charge

\* SH184: preliminary data - SH184 available end 2008

## FURTHER REFERENCE



**Online Datasheet Generator** - User-friendly access to datasheets with full technical data, performance tables, spareparts & accessories and outlines drawings. [www.danfoss.com/odsg](http://www.danfoss.com/odsg)

**Selection and application guidelines for Performer scroll compressors, Single - SH090 to SH380, 50 Hz - 60 Hz, R410A,**  
Literature: FRCC.PC.007.

**Selection & application guidelines for Performer scroll compressors in parallel installations, SH R410A,**  
Literature: FRCC.PC.008.

**RS+3**, For precise compressor selection and performance calculation at user defined conditions.



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