

*SNOWMAN CO., LTD.*

## SW SERIES

Screw Compressors for Refrigeration  
30-240Hp, 118-700m<sup>3</sup>/h



**RefComp**

# MODEL DESIGNATION

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SW

COMPRESSOR		S	W	1	H	4000
COMPRESSOR TYPE						
S	Semi-hermetic					
SERIES						
W	Screw compressor					
VERSION						
1	Without internal oil separator					
O	With internal oil separator					
MOTOR SIZE						
H	Full size electrical motor					
L	Small size electrical motor					
NOMINAL MOTOR POWER						
4000	Hp x 100					

# INTRODUCTION

Great changes have been made during the last decade in the industrial and commercial refrigeration field.

Together with compressor reliability and availability, attention towards other factors such as efficiency, noiselessness, compactness, and the simplicity of installation and maintenance have also grown progressively.

In the air conditioning field, such needs have been satisfied by compact screw compressors that, as a result, have spread progressively to all markets.

On the basis of the experience and business success of its compact series, RefComp has developed a full range of semi-hermetic screw compressors specifically designed for refrigeration applications.

The full range has the capacity control with slide valve.



# TECHNICAL DATA

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SW

		SW1H							
Compressor model		4000	5000	6000	7500	9000	10500	11500	12500
Nominal motor power	Hp/kW	40/30	50/37	60/45	75/55	90/67	105/78	115/89	125/89
Displacement at 50/60 Hz	m <sup>3</sup> /h	118/142	150/180	175/210	205/246	237/284	286/343	318/382	341/409
Weight	Kg	245	255	265	410	420	535	540	545
Discharge line, internal Ø	mm /inches	42 / 1 5/8"	42 / 1 5/8"	42 / 1 5/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"
Suction line, internal Ø	mm/inches	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	67 / 2 5/8"	67 / 2 5/8"	80 / 3 1/8"	80 / 3 1/8"	80 / 3 1/8"
Oil circuit connection	mm/inches	Ø 16mm / 5/8" SAE							
Capacity control		Step:100,75,50,min%(Stepless:100...50%or100...min% on request)							
Protection device		INT 69 RCY							
Standard motor <sup>(1)</sup>		400V/3/50Hz - 460/3/60Hz							
Star/Delta Starting current Star/DOL <sup>(2)</sup>	A	131/398	134/406	182/547	139/459	193/580	338/1015	318/953	318/953
Max running current <sup>(2)</sup>	A	75	90	105	124	140	180	182	196

		SW1L							
Compressor model		3000	4000	5000	6500	8000	9500	10500	11500
Nominal motor power	Hp/kW	30/22	40/30	50/37	65/48	80/60	95/71	105/78	115/89
Displacement at 50/60 Hz	m <sup>3</sup> /h	118/142	150/180	175/210	205/246	237/284	286/343	318/382	341/409
Weight	Kg	245	255	265	410	420	520	525	530
Discharge line, internal Ø	mm/inches	42 / 1 5/8"	42 / 1 5/8"	42 / 1 5/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"
Suction line, internal Ø	mm/inches	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	67 / 2 5/8"	67 / 2 5/8"	80 / 3 1/8"	80 / 3 1/8"	80 / 3 1/8"
Oil circuit connection	mm/inches	Ø 16mm / 5/8" SAE							
Capacity control		Step:100,75,50,min%(Stepless:100...50%or100...min% on request)							
Protection device		INT 69 RCY							
Standard motor <sup>(1)</sup>		400V/3/50Hz - 460/3/60Hz							
Star/Delta Starting current Star/DOL <sup>(2)</sup>	A	110/331	131/398	134/406	139/422	139/459	223/670	318/953	318/953
Max running current <sup>(2)</sup>	A	65	80	88	103	117	139	154	163

(1) Voltage tolerance ± 10%

(2) Based on Leonardo 1.7.3

# TECHNICAL DATA

		SW1H					
Compressor model		14000	16000	19000	21000	24000	25000
Nominal motor power	Hp/kW	150 / 112	170 / 127	200 / 149	220 / 164	240 / 179	240 / 179
Displacement at 50/60 Hz	m <sup>3</sup> /h	402 / 482	445 / 534	510 / 612	562 / 674	600 / 720	700 / 840
Weight	Kg	665	675	710	1030	1050	980
Discharge line, internal Ø	mm/inches	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")
Suction line, internal Ø	mm/inches	92 / (3-5/8")	92 / (3-5/8")	92 / (3-5/8")	104,8 / (4-1/8")	104,8 / (4-1/8")	104,8 / (4-1/8")
Oil circuit connection	mm/inches	Ø 16mm / 5/8" SAE					
Capacity control		Step:100,75,50,min%(Stepless:100...50%or100...min% on request)					
Protection device		INT69RCY					
Standard motor		Y / Δ- 400V/3/50Hz - 460/3/60Hz					
Star/Delta Starting current (Y / Δ)	A	354 / 1155	374 / 1155	453 / 1333	543 / 1645	595 / 1802	595 / 1802
Max running current	A	249	270	305	335	360	410

		SW1L					
Compressor model		13000	15000	17000	20000	22000	23000
Nominal motor power	Hp/kW	120 / 89	150 / 112	170 / 127	200 / 149	220 / 164	220 / 164
Displacement at 50/60 Hz	m <sup>3</sup> /h	402 / 482	445 / 534	510 / 612	562 / 674	600 / 720	700 / 840
Weight	Kg	665	675	710	1030	1050	980
Discharge line, internal Ø	mm/inches	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")
Suction line, internal Ø	mm/inches	92 / (3-5/8")	92 / (3-5/8")	92 / (3-5/8")	104,8 / (4-1/8")	104,8 / (4-1/8")	104,8 / (4-1/8")
Oil circuit connection	mm/inches	Ø 16mm / 5/8" SAE					
Capacity control		Step:100,75,50,min%(Stepless:100...50%or100...min% on request)					
Protection device		INT69RCY					
Standard motor		Y / Δ- 400V/3/50Hz - 460/3/60Hz					
Star/Delta Starting current (Y / Δ)	A	276 / 876	354 / 1155	374 / 1155	453 / 1333	543 / 1645	543 / 1645
Max running current	A	196	210	236	259	270	310

# TECHNICAL DATA

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SW

		SWOH							
Compressor model		4000	5000	6000	7500	9000	10500	11500	12500
Nominal motor power	Hp/kW	40/30	50/37	60/45	75/55	90/67	105/78	115/89	125/89
Displacement at 50/60 Hz	m <sup>3</sup> /h	118/142	150/180	175/210	205/246	237/284	286/343	318/382	341/409
Weight	Kg	325	330	335	510	515	615	590	625
Discharge line, internal Ø	mm /inches	42 / 1 5/8"	42 / 1 5/8"	42 / 1 5/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"
Suction line, internal Ø	mm/inches	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	67 / 2 5/8"	67 / 2 5/8"	80 / 3 1/8"	80 / 3 1/8"	80 / 3 1/8"
Oil charge	L	6	6	6	7	7	10	10	10
Capacity control		Step:100,75,50,min%(Stepless:100...50%or100...min% on request)							
Protection device		INT 69 RCY							
Standard motor <sup>(1)</sup>		400V/3/50Hz - 460/3/60Hz							
Star/Delta Starting current Star/DOL	A	131/398	134/406	182/547	139/459	193/580	338/1015	318/953	318/953
Max running current	A	75	90	105	124	140	180	182	196

		SWOL							
Compressor model		3000	4000	5000	6500	8000	9500	10500	11500
Nominal motor power	Hp/kW	30/22	40/30	50/37	65/48	80/60	95/71	105/78	115/89
Displacement at 50/60 Hz	m <sup>3</sup> /h	118/142	150/180	175/210	205/246	237/284	286/343	318/382	341/409
Weight	Kg	325	330	335	510	515	615	590	625
Discharge line, internal Ø	mm/inches	42 / 1 5/8"	42 / 1 5/8"	42 / 1 5/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"
Suction line, internal Ø	mm/inches	54 / 2 1/8"	54 / 2 1/8"	54 / 2 1/8"	67 / 2 5/8"	67 / 2 5/8"	80 / 3 1/8"	80 / 3 1/8"	80 / 3 1/8"
Oil charge	L	6	6	6	7	7	10	10	10
Capacity control		Step:100,75,50,min%(Stepless:100...50%or100...min% on request)							
Protection device		INT 69 RCY							
Standard motor <sup>(1)</sup>		400V/3/50Hz - 460/3/60Hz							
Star/Delta Starting current Star/DOL <sup>(2)</sup>	A	110/331	131/398	134/406	139/422	139/459	223/670	318/953	318/953
Max running current <sup>(2)</sup>	A	65	80	88	103	117	139	154	163

(1) Voltage tolerance ± 10%

(2) Based on Leonado 1.7.3

# TECHNICAL DATA

		SWOH					
Compressor model		14000	16000	19000	21000	24000	25000
Nominal motor power	Hp/kW	150 / 112	170 / 127	200 / 149	220 / 164	240 / 179	240 / 179
Displacement at 50/60 Hz	m <sup>3</sup> /h	402 / 482	445 / 534	510 / 612	562 / 674	600 / 720	700 / 840
Weight	Kg	730	740	775	1010	1030	1020
Discharge line, internal Ø	mm/inches	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")
Suction line, internal Ø	mm/inches	92 / (3-5/8")	92 / (3-5/8")	92 / (3-5/8")	104,8 / (4-1/8")	104,8 / (4-1/8")	104,8 / (4-1/8")
Oil charge	L	14	14	16	19	19	20
Capacity control		Step: 100,75,50,min%(Stepless :100...50%or100...min% on request)					
Protection device		INT69RCY					
Standard motor		Y / Δ- 400V/3/50Hz - 460/3/60Hz					
Star/Delta Starting current (Y / Δ)	A	354 / 1155	374 / 1155	453 / 1333	543 / 1645	595 / 1802	595 / 1802
Max running current	A	249	270	305	335	360	410

		SWOL					
Compressor model		13000	15000	17000	20000	22000	23000
Nominal motor power	Hp/kW	120 / 89	150 / 112	170 / 127	200 / 149	220 / 164	220 / 164
Displacement at 50/60 Hz	m <sup>3</sup> /h	402 / 482	445 / 534	510 / 612	562 / 674	600 / 720	700 / 840
Weight	Kg	730	740	775	1010	1030	1020
Discharge line, internal Ø	mm/inches	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")	80 / (3-1/8")
Suction line, internal Ø	mm/inches	92 / (3-5/8")	92 / (3-5/8")	92 / (3-5/8")	104,8 / (4-1/8")	104,8 / (4-1/8")	104,8 / (4-1/8")
Oil charge	L	14	14	16	19	19	20
Capacity control		Step: 100,75,50,min%(Stepless :100...50%or100...min% on request)					
Protection device		INT69RCY					
Standard motor		Y / Δ- 400V/3/50Hz - 460/3/60Hz					
Star/Delta Starting current (Y / Δ)	A	276 / 876	354 / 1155	374 / 1155	453 / 1333	543 / 1645	543 / 1645
Max running current	A	196	210	236	259	270	310

# BENEFITS

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SW

## VERSATILITY

Available in two versions, to suit a multitude of possible applications in a better way: the SW1L models, characterised by “small size” electric motor, are optimised for applications at low evaporating temperatures (up to  $-50$  [°C]); the SW1H and models, characterised by “full size” electric motor, are excellent for medium/high evaporating temperatures (up to  $+12$  [°C] with R22)

## EFFICIENCY

Performance and energy efficiency can be further increased with the ECONomizer circuit, in particular for medium and high compression ratios.

## SILENCE AND LACK OF VIBRATION

## COMPACTNESS AND INSTALLATION SIMPLICITY

## RELIABILITY AND OPERATING SAFETY

## OPTIMUM LUBRIFICATION

## EASY MAINTENANCE

## SOFTWARE, DOCUMENTS AND REFCOMP SUPPORT

Refcomp may proceed directly with the selection of components needed in refrigeration machines:

- Oil separator
- Oil cooler
- Economizer



# DELIVERY

## COMPONENT

The standard delivery consists of: Y/D motor (400 [V] / 3 / 50 [Hz] - 460 [V] / 3 / 60 [Hz]); suction solder connection; discharge shut-off valve; integrated check valve; integrated safety relief valve; connection for oil injection; capacity control (SW: 4 steps - 100, 75, 50, min% - or stepless 100 or 50...min%), motor with 6 PTC sensors embedded, PTC discharge temperature sensor, electronic protection device, electrical box with IP54 enclosure class, nitrogen protective charge, rubber anti-vibration dampers. Oil return line kit provided with: solenoid valve, replaceable cartridge type filter, flow-switch, sight glass, electronic control module INT 69 VS and electrolytic condenser.

## ACCESSORIES

On request the following accessories are available: special motors, suction shut-off valve, conversion kit from stepless to step (or vice versa) capacity control for SW models, connection for liquid injection, ECO connection with shut-off valve, links for direct starting. The Standard and/or electrical accessories (solenoid valves, INT 69 VS motor protection device) are suitable for 230 [V] -1-50 / 60 [Hz] power supply. REFCOMP protection module is suitable for 230 / 115 [V] -1-50 / 60 [Hz]. However special voltages are also available upon request.

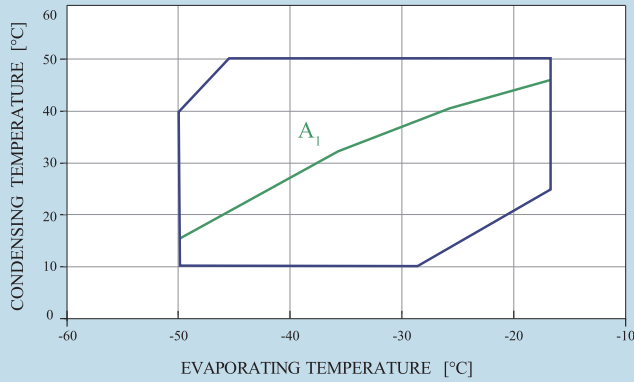
# ENVELOPE

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SW

R404A / R507

SWIL/SWOL



Limits refer to full load 50 [Hz] operation.

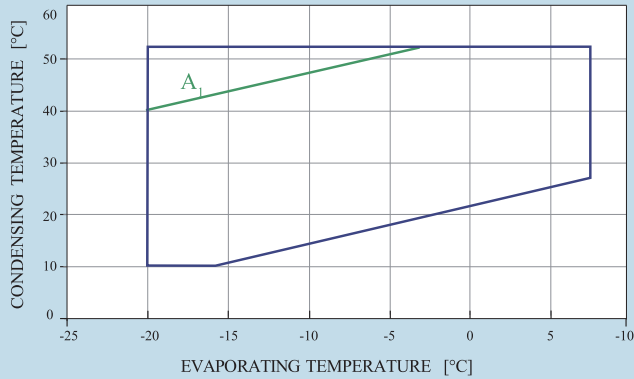
10 [K] suction gas superheat.

110 [°C] max. discharge temperature.

A<sub>1</sub> Oil cooling

R404A / R507

SWIH/SWOH



Limits refer to full load 50 [Hz] operation.

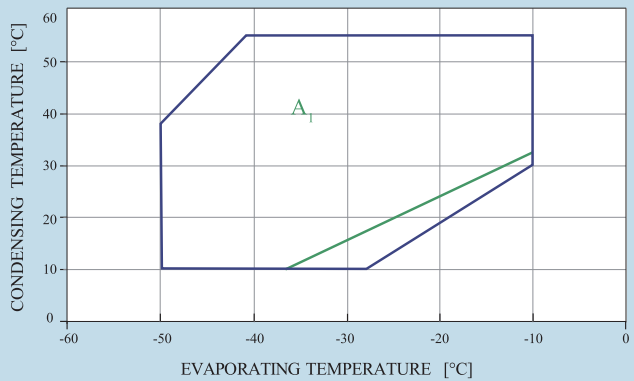
10 [K] suction gas superheat.

110 [°C] max. discharge temperature.

A<sub>1</sub> Oil cooling

R22

SWIL/SWOL



Limits refer to full load 50 [Hz] operation.

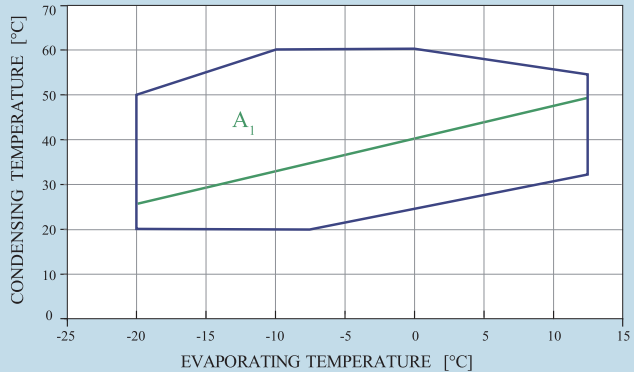
10 [K] suction gas superheat.

110 [°C] max. discharge temperature.

A<sub>1</sub> Oil cooling

R22

SWIH/SWOH



Limits refer to full load 50 [Hz] operation.

10 [K] suction gas superheat.

110 [°C] max. discharge temperature.

A<sub>1</sub> Oil cooling

# PERFORMANCES

## SW1H, Refrigerant R22

SW-1-H4000(R22)																		
Tc	30			35			40			45			50			60		
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	53.4	18.4	50.4	20.6	47	22.9	43.1	25.5	38.8	28.3	—	—	—	—	—	—	—	—
-15	65.7	18.9	61.9	21	57.7	23.4	53.1	26	48.1	28.9	—	—	—	—	—	—	—	—
-10	79.9	19.5	75.4	21.6	70.5	23.9	65.3	26.6	59.8	29.5	48	36.2	—	—	—	—	—	—
-5	96	20.2	90.9	22.2	85.5	24.5	79.8	27.2	73.9	30.1	61.3	37	—	—	—	—	—	—
0	114.1	21	108.5	22.9	102.6	25.2	96.6	27.8	90.3	30.8	77.3	37.9	—	—	—	—	—	—
5	134	21.8	128	23.7	121.9	25.9	115.6	28.5	109.1	31.5	—	—	—	—	—	—	—	—
10	—	—	149.6	24.5	143.2	26.7	136.8	29.3	130.2	32.3	—	—	—	—	—	—	—	—

SW-1-H5000(R22)																		
Tc	30			35			40			45			50			60		
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	67.9	23.4	64.1	26.2	59.7	29.2	54.8	32.4	49.3	35.9	—	—	—	—	—	—	—	—
-15	83.5	24.1	78.7	26.8	73.3	29.8	67.5	33.1	61.1	36.7	—	—	—	—	—	—	—	—
-10	101.5	24.8	95.8	27.4	89.7	30.4	83	33.8	76	37.5	61	46	—	—	—	—	—	—
-5	122.1	25.7	115.6	28.2	108.7	31.2	101.5	34.5	93.9	38.3	78	47.1	—	—	—	—	—	—
0	145	26.6	137.9	29.1	130.5	32	122.8	35.4	114.8	39.2	98.3	48.2	—	—	—	—	—	—
5	170.3	27.7	162.8	30.1	154.9	32.8	146.9	36.2	138.7	40.1	—	—	—	—	—	—	—	—
10	—	—	190.2	31.2	182.1	33.9	173.8	37.2	165.5	41	—	—	—	—	—	—	—	—

SW-1-H6000(R22)																		
Tc	30			35			40			45			50			60		
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	79.2	27.3	74.8	30.5	69.7	34	63.9	37.8	57.5	41.9	—	—	—	—	—	—	—	—
-15	97.4	28.1	91.8	31.2	85.8	34.7	78.7	38.6	71.3	42.8	—	—	—	—	—	—	—	—
-10	118.5	28.9	111.8	32	104.6	35.5	96.9	39.4	88.7	43.7	71.1	53.6	—	—	—	—	—	—
-5	142.4	29.9	134.9	32.9	126.8	36.4	118.4	40.3	109.6	44.7	91	54.9	—	—	—	—	—	—
0	169.2	31.1	160.9	33.9	152.2	37.3	143.2	41.3	133.9	45.7	114.6	56.2	—	—	—	—	—	—
5	198.7	32.4	189.9	35.1	180.8	38.4	171.4	42.3	161.8	46.8	—	—	—	—	—	—	—	—
10	—	—	221.8	36.4	212.4	39.5	202.8	43.4	193.1	47.9	—	—	—	—	—	—	—	—

SW-1-H7500(R22)																		
Tc	30			35			40			45			50			60		
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	92.8	32	87.6	35.8	81.6	39.9	74.9	44.3	67.4	49.1	—	—	—	—	—	—	—	—
-15	114.1	32.9	107.5	36.6	100.2	40.7	92.2	45.2	83.6	50.1	—	—	—	—	—	—	—	—
-10	138.8	33.9	131	37.5	122.5	41.6	113.5	46.2	103.9	51.2	83.3	62.8	—	—	—	—	—	—
-5	166.8	35.1	158	38.6	148.6	42.6	138.7	47.2	128.3	52.4	106.5	64.3	—	—	—	—	—	—
0	198.1	36.4	188.5	39.8	178.3	43.7	167.8	48.3	156.9	53.5	134.3	65.8	—	—	—	—	—	—
5	232.8	37.9	222.4	41.1	211.7	45	200.7	49.5	189.5	54.8	—	—	—	—	—	—	—	—
10	—	—	259.9	42.6	248.8	46.3	237.6	50.8	226.2	56.1	—	—	—	—	—	—	—	—

SW-1-H9000(R22)																		
Tc	30			35			40			45			50			60		
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	107.2	37	101.3	41.4	94.4	46.1	86.6	51.2	77.9	56.8	—	—	—	—	—	—	—	—
-15	131.9	38	124.3	42.3	115.9	47	106.6	52.3	96.6	58	—	—	—	—	—	—	—	—
-10	160.4	39.2	151.4	43.4	141.7	48.1	131.2	53.4	120.1	59.2	96.3	72.6	—	—	—	—	—	—
-5	192.9	40.5	182.6	44.6	171.8	49.3	160.3	54.6	148.4	60.5	123.2	74.4	—	—	—	—	—	—
0	229.1	42.1	217.9	46	206.2	50.6	194	55.9	181.4	61.9	155.3	76.1	—	—	—	—	—	—
5	269.1	43.8	257.2	47.5	244.8	52	232.1	57.3	219.1	63.3	—	—	—	—	—	—	—	—
10	—	—	300.5	49.2	287.7	53.6	274.7	58.7	261.5	64.8	—	—	—	—	—	—	—	—

SW-1-H10500(R22)																		
Tc	30			35			40			45			50			60		
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	129.4	44.7	122.3	49.9	113.9	55.6	104.5	61.8	94	68.5	—	—	—	—	—	—	—	—
-15	159.2	45.9	150	51	139.8	56.8	128.6	63.1	116.6	70	—	—	—	—	—	—	—	—
-10	193.6	47.3	182.7	52.3	170.9	58	158.3	64.4	144.9	71.5	116.2	87.6	—	—	—	—	—	—
-5	232.7	48.9	220.4	53.8	207.3	59.4	193.5	65.9	179.1	73.1	148.7	89.7	—	—	—	—	—	—
0	276.5	50.8	262.9	55.5	248.8	61	234.1	67.4	218.9	74.7	187.3	91.7	—	—	—	—	—	—
5	324.8	52.9	310.3	57.3	295.4	62.7	280.1	69.1	264.4	76.4	—	—	—	—	—	—	—	—
10	—	—	362.6	59.4	347.2	64.6	331.5	70.9	315.6	78.2	—	—	—	—	—	—	—	—

SW-1-H11500(R22)																		
Tc	30			35			40			45			50			60		
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	143.9	49.7	135.9	55.5	126.7	61.8	116.2	68.7	104.5	76.2	—	—	—	—	—	—	—	—
-15	177	51	166.8	56.7	155.5	63.1	143	70.1	129.6	77.8	—	—	—	—	—	—	—	—
-10	215.3	52.6	203.2	58.2	190.1	64.5	176	71.6	161.2	79.5	129.2	97.4	—	—	—	—	—	—
-5	258.8	54.4	245.1	59.8	230.5	66.1	215.1	73.2	199.1	81.2	165.3	99.8	—	—	—	—	—	—
0	307.4	56.5	292.4	61.7	276.6	67.8	260.3	75	243.4	83.1	208.3	102.1	—	—	—	—	—	—
5	361.1	58.8	345.1	63.8	328.5	69.8	311.4	76.8	294	85	—	—	—	—	—	—	—	—
10	—	—	403.1	66.1	386	71.9	368.6	78.8	350.9	87	—	—	—	—	—	—	—	—

SW-1-H12500(R22)																		
Tc	30			35			40			45			50			60		
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	154.3	53.3	145.8	59.5	135.8	66.3	124.6	73.7	112.1	81.7	—	—	—	—	—	—	—	—
-15	189.8	54.7	178.9	60.8	166.7	67.7	153.4	75.2	139	83.4	—	—	—	—	—	—	—	—
-10	230.9	56.4	217.9	62.4	203.8	69.2	188.8	76.8	172.8	85.2	138.6	104.5	—	—	—	—	—	—
-5	277.5	58.3	262.8	64.1	247.1	70.9	230.7	78.5	213.5	87.1	177.2	107	—	—	—	—	—	—
0	329.6	60.5	313.5	66.1	296.6	72.8	279.1	80.4	261	89.1	223.4	109.5	—	—	—	—	—	—
5	387.2	63.1	370	68.4	352.3	74.8	334	82.4	315.3	91.1	—	—	—	—	—	—	—	—
10	—	—	432.3	70.8	413.9	77.1	395.2	84.5	376.2	93.2	—	—	—	—	—	—	—	—

# PERFORMANCES

12

SW

SW-1-H14000(R22)																	
Tc	30			35			40			45			50			60	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	166.7	53.7	154.9	60.7	141.4	68.2	125.2	76.4	105.5	85.5	—	—	—	—	—	—	
-15	206.8	54.7	193.8	61.6	178.9	69.1	161.3	77.6	140	87.3	—	—	—	—	—	—	
-10	249.6	56.2	236.5	62.8	221.4	70.3	203.5	79	181.7	89	123.1	114.4	—	—	—	—	
-5	293.3	58.2	281.3	64.4	267.2	71.7	250.1	80.5	229.1	90.9	171.7	117.7	—	—	—	—	
0	336.3	60.8	326.5	66.5	314.5	73.6	299.5	82.3	280.4	93	226.4	120.9	—	—	—	—	
5	376.7	64.1	370.4	69.1	361.8	75.8	349.9	84.5	333.9	95.2	—	—	—	—	—	—	
10	—	—	411.3	72.4	407.2	78.6	399.7	87	387.9	97.8	—	—	—	—	—	—	

SW-1-H16000(R22)																	
Tc	30			35			40			45			50			60	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	184.5	61.2	172.2	69.1	156.5	77.8	137.9	87.3	116.8	97.5	—	—	—	—	—	—	
-15	228.9	62.4	215.3	70	198.1	78.9	177.8	88.7	154.9	99.5	—	—	—	—	—	—	
-10	276.3	64.1	262.5	71.4	245.1	80.2	224.5	90.2	201.2	101.5	148.2	127.3	—	—	—	—	
-5	324.7	66.4	312.1	73.2	295.8	81.8	276.1	92	253.6	103.7	201.9	131.1	—	—	—	—	
0	372.2	69.4	362.2	75.6	348.2	83.9	330.8	94.1	310.4	106	262.5	134.8	—	—	—	—	
5	417	73.1	410.8	78.7	400.5	86.5	386.6	96.5	369.6	108.6	—	—	—	—	—	—	
10	—	—	456.1	82.4	450.7	89.7	441.7	99.4	429.4	111.5	—	—	—	—	—	—	

SW-1-H19000(R22)																	
Tc	30			35			40			45			50			60	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	211.5	70.1	197	79.6	179.4	89.2	158.3	99.7	133.8	111.8	—	—	—	—	—	—	
-15	262.4	71.5	246.4	80.7	227	90.4	204.1	101.2	177.6	114	—	—	—	—	—	—	
-10	316.6	73.5	300.5	82.3	280.9	91.9	257.6	103	230.6	116.4	164.6	153.1	—	—	—	—	
-5	372.1	76.1	357.4	84.4	339	93.8	316.8	105	290.7	118.8	226.1	157.4	—	—	—	—	
0	426.6	79.5	414.7	87.1	399.1	96.2	379.4	107.4	355.8	121.5	295.6	161.7	—	—	—	—	
5	478	83.8	470.4	90.6	459	99.1	443.4	110.2	423.6	124.5	—	—	—	—	—	—	
10	—	—	522.4	94.9	516.6	102.8	506.6	113.5	492.2	127.8	—	—	—	—	—	—	


SW-1-H21000(R22)																	
Tc	30			35			40			45			50			60	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	233	76.5	216.7	86.3	197.6	97.3	174.9	109.2	147.5	121.9	—	—	—	—	—	—	
-15	289.1	78	271	87.5	250.1	98.6	225.4	111	195.7	124.4	—	—	—	—	—	—	
-10	348.9	80.1	330.7	89.2	309.5	100.2	284.4	112.9	254.1	127	174	158.7	—	—	—	—	
-5	410	83	393.3	91.5	373.5	102.3	349.6	115.1	320.3	129.6	241.8	163.4	—	—	—	—	
0	470.1	86.7	456.5	94.5	439.7	104.9	418.6	117.6	392	132.5	318.4	168	—	—	—	—	
5	526.7	91.4	518	98.3	505.8	108.1	489.1	120.7	466.8	135.8	—	—	—	—	—	—	
10	—	—	575.2	103	569.3	112.1	558.7	124.3	542.3	139.4	—	—	—	—	—	—	


SW-1-H24000(R22)																	
Tc	30			35			40			45			50			60	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	243.9	82.5	227.8	92.9	206.9	104.9	182.1	118	154.4	131.5	—	—	—	—	—	—	
-15	302.6	84.1	284.7	94.2	261.8	106.3	234.9	119.9	204.8	134.2	—	—	—	—	—	—	
-10	365.2	86.4	347.2	96	324	108.1	296.6	121.9	265.9	136.9	198.6	167.7	—	—	—	—	
-5	429.2	89.5	412.7	98.5	391	110.3	364.8	124.3	335.3	139.8	269.6	172.7	—	—	—	—	
0	492	93.5	478.9	101.7	460.3	113.1	437.1	127.1	410.3	142.9	349.7	177.7	—	—	—	—	
5	551.3	98.6	543.2	105.8	529.4	116.6	510.9	130.4	488.6	146.4	—	—	—	—	—	—	
10	—	—	603.1	110.8	595.8	120.9	583.7	134.3	567.7	150.4	—	—	—	—	—	—	

SW-1-H25000(R22)																	
Tc	30			35			40			45			50			60	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	290.3	96.3	270.7	109.1	246.2	122.4	217	136.9	183.7	153.4	—	—	—	—	—	—	
-15	360.1	98.1	338.4	110.6	311.5	124	279.8	139.1	243.7	156.5	—	—	—	—	—	—	
-10	434.6	100.8	412.8	112.8	385.6	126.1	353.3	141.5	316.5	159.7	230.5	207.8	—	—	—	—	
-5	510.7	104.4	490.8	115.7	465.3	128.7	434.5	144.3	399	163.1	314.9	213.7	—	—	—	—	
0	585.5	109.1	569.5	119.4	547.7	132	520.5	147.5	488.3	166.8	410.3	219.5	—	—	—	—	
5	656	115	646	124.2	630	136.1	608.3	151.4	581.5	170.8	—	—	—	—	—	—	
10	—	—	717.3	130	709	141.1	695	155.9	675.5	175.4	—	—	—	—	—	—	

KEY

- Pf = Cooling Capacity (kW)
- Pa = Input Power (kW)
- Te = Evaporating temperature (°C)
- Tc = Condensing temperature (°C)
- 50 Hz frequency
- Liquid subcooling 5K
- Suction gas superheat 10K

 Working conditions which need not oil cooling

 Working conditions which require the additional cooling (see application limits)

# PERFORMANCES

## SW1L(Available with economizer) Refrigerant R22

SW-1-L3000(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	12.6	12	11	14.8	—	—	—	—	—	—	—	—
-40	22.5	13.4	20.2	16.1	17.5	19.4	16	21.3	14.4	23.5	12.6	25.8
-35	28.9	14.2	26.1	16.9	22.9	20.2	21.1	22.1	19.2	24.2	17.2	26.5
-30	36.6	15.1	33.2	17.8	29.3	21	27.2	22.9	25	24.9	22.6	27.3
-25	45.6	16.3	41.5	18.9	37	22	34.5	23.8	31.8	25.8	29.1	28.1
-20	56.1	17.7	51.3	20.1	45.9	23.1	43	24.9	39.9	26.9	36.7	29.1
-10	—	—	—	—	—	—	—	—	—	—	56.3	31.8

SW-1-L3000(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	16.4	13.8	15.2	17.9	—	—	—	—	—	—	—	—
-40	27.6	14.5	26.4	18.4	24.5	23.5	23.3	26.6	21.9	30.3	20.1	34.6
-35	34.6	15	33.2	18.8	31.2	23.7	29.8	26.7	28.3	30.3	26.4	34.4
-30	42.6	15.6	41	19.3	38.8	24.1	37.3	27	35.6	30.4	33.6	34.3
-25	51.7	16.4	49.9	20	47.4	24.5	45.8	27.4	43.9	30.6	41.8	34.4
-20	62	17.3	60	20.8	57.2	25.2	55.5	27.9	53.5	31.1	51.1	34.7
-10	—	—	—	—	—	—	—	—	—	—	73.6	35.9

SW-1-L4000(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	15.8	16	13.8	19.7	—	—	—	—	—	—	—	—
-40	28.3	17.2	25.3	21	21.9	25.3	20	27.6	17.9	30.1	15.5	32.8
-35	36.4	18.1	32.8	21.8	28.7	26.1	26.5	28.5	24	31.1	21.3	33.9
-30	46.1	19.2	41.7	22.8	36.9	27	34.2	29.5	31.3	32.1	28.2	35
-25	57.5	20.5	52.2	23.9	46.5	28.1	43.4	30.6	40.1	33.2	36.5	36.1
-20	70.9	22.2	64.6	25.3	57.8	29.4	54.2	31.8	50.4	34.4	46.3	37.4
-10	—	—	—	—	—	—	—	—	—	—	71.4	40.3

SW-1-L4000(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	20.2	18	18.9	23.2	—	—	—	—	—	—	—	—
-40	34.2	18.3	32.6	23.4	30.2	29.7	28.6	33.4	26.6	37.7	24.2	42.6
-35	42.9	18.7	41	23.6	38.3	29.9	36.6	33.6	34.6	37.8	32	42.6
-30	52.8	19.3	50.6	24.1	47.7	30.1	45.9	33.8	43.7	37.9	41	42.6
-25	64.1	20.1	61.7	24.6	58.5	30.5	56.4	34.1	54.1	38.1	51.3	42.8
-20	76.9	21.2	74.2	25.4	70.6	31.1	68.4	34.5	65.9	38.5	63	43
-10	—	—	—	—	—	—	—	—	—	—	91	43.9

SW-1-L5000(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	18.5	18.2	16.1	22.4	—	—	—	—	—	—	—	—
-40	33	19.6	29.5	23.9	25.6	28.7	23.3	31.4	20.8	34.2	18.1	37.3
-35	42.5	20.6	38.3	24.8	33.5	29.7	30.9	32.4	28	35.3	24.9	38.5
-30	53.8	21.8	48.6	25.9	43	30.7	39.9	33.5	36.6	36.5	32.9	39.8
-25	67.1	23.3	60.9	27.2	54.2	32	50.6	34.7	46.7	37.8	42.6	41.1
-20	82.7	25.2	75.3	28.8	67.5	33.4	63.2	36.2	58.8	39.2	54.1	42.5
-10	—	—	—	—	—	—	—	—	—	—	83.3	45.8

SW-1-L5000(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	23.4	20.1	21.8	26	—	—	—	—	—	—	—	—
-40	39.5	20.5	37.5	26.2	34.7	33.1	32.9	37.3	30.6	42	27.8	47.4
-35	49.5	21	47.2	26.4	44.1	33.3	42.1	37.4	39.7	42.1	36.8	47.4
-30	60.9	21.6	58.3	26.9	54.9	33.6	52.7	37.6	50.2	42.2	47.1	47.4
-25	73.9	22.6	71	27.6	67.2	34.1	64.9	38	62.1	42.5	58.9	47.6
-20	88.6	23.8	85.4	28.5	81.2	34.7	78.7	38.5	75.7	42.9	72.3	47.8
-10	—	—	—	—	—	—	—	—	—	—	104	48.8

SW-1-L6500(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	22.2	21	19.4	25.8	—	—	—	—	—	—	—	—
-40	39.3	23.2	35.3	28	30.7	33.7	28.1	37	25.4	40.7	22.4	44.9
-35	50.5	24.5	45.6	29.2	40.1	34.9	37.1	38.2	33.8	41.9	30.3	46.1
-30	63.8	26.2	57.9	30.8	51.3	36.3	47.7	39.6	43.9	43.2	39.7	47.4
-25	79.5	28.3	72.4	32.6	64.6	38	60.3	41.2	55.8	44.8	51	48.8
-20	97.9	30.8	89.5	34.9	80.2	40	75.2	43.1	69.9	46.6	64.3	50.6
-10	—	—	—	—	—	—	—	—	—	—	98.4	55.1

SW-1-L6500(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	28.2	23.4	26.1	30	—	—	—	—	—	—	—	—
-40	47.4	24.6	45	31	41.7	39.1	39.5	44	37	49.7	34	56.4
-35	59.5	25.5	56.7	31.7	52.9	39.6	50.5	44.4	47.7	49.9	44.5	56.3
-30	73.3	26.6	70.2	32.7	65.9	40.3	63.2	44.9	60.1	50.3	56.5	56.5
-25	89.2	28.1	85.6	33.9	80.8	41.2	77.8	45.7	74.4	50.9	70.4	57
-20	107	29.9	103	35.4	97.8	42.5	94.4	46.8	90.6	51.9	86.2	57.7
-10	—	—	—	—	—	—	—	—	—	—	125	60.1

# PERFORMANCES

14

SW

SW-1-L8000(R22)														
Tc	20		30		40		45		50		55			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa		
-50	25.6	23.5	22.4	29	—	—	—	—	—	—	—	—		
-40	45.4	26	40.8	31.4	35.5	37.8	32.5	41.6	29.3	45.7	25.9	50.4		
-35	58.3	27.6	52.7	32.9	46.4	39.2	42.9	42.9	39.1	47.1	35	51.8		
-30	73.7	29.5	67	34.6	59.4	40.8	55.2	44.4	50.7	48.6	45.9	53.2		
-25	91.9	31.8	83.8	36.7	74.7	42.7	69.8	46.2	64.5	50.3	59	54.9		
-20	113.2	34.6	103.5	39.2	92.8	44.9	87	48.4	80.8	52.3	74.4	56.8		
-10	—	—	—	—	—	—	—	—	—	—	113.8	61.9		

SW-1-L8000(R22) with ECO														
Tc	20		30		40		45		50		55			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa		
-50	32.2	25.9	29.9	33.2	—	—	—	—	—	—	—	—		
-40	54.2	27.2	51.4	34.2	47.5	43.1	45.1	48.5	42.2	54.7	38.8	62.1		
-35	67.9	28.2	64.7	35	60.4	43.6	57.6	48.9	54.4	54.9	50.6	62		
-30	83.7	29.4	80.1	36	75.1	44.4	72	49.5	68.5	55.4	64.3	62.2		
-25	101.7	31	97.6	37.3	92	45.4	88.6	50.3	84.6	56	80.1	62.6		
-20	122.2	33	117.5	39	111.3	46.7	107.4	51.5	103.1	57	98	63.4		
-10	—	—	—	—	—	—	—	—	—	—	—	—	14.15	65.9

SW-1-L9500(R22)														
Tc	20		30		40		45		50		55			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa		
-50	30.9	28	27	34.5	—	—	—	—	—	—	—	—		
-40	54.8	31	49.2	37.4	42.8	45	39.3	49.5	35.4	54.5	31.2	60		
-35	70.4	32.8	63.6	39.1	56	46.7	51.7	51.1	47.2	56.1	42.2	61.6		
-30	89	35.1	80.8	41.2	71.6	48.6	66.6	52.9	61.2	57.8	55.4	63.4		
-25	110.9	37.8	101.1	43.6	90.1	50.8	84.2	55.1	77.9	59.9	71.1	65.3		
-20	136.6	41.2	124.9	46.6	111.9	53.5	104.9	57.6	97.6	62.3	89.8	67.7		
-10	—	—	—	—	—	—	—	—	—	—	137.3	73.7		

SW-1-L9500(R22) with ECO														
Tc	20		30		40		45		50		55			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa		
-50	39.1	31	36.4	40	—	—	—	—	—	—	—	—		
-40	65.6	32.5	62.5	41.1	58.1	51.9	55.2	58.6	51.7	66.5	47.7	75.8		
-35	82.1	33.6	78.6	41.9	73.6	52.5	70.4	59	66.7	66.5	62.3	75.4		
-30	101.1	35	97.1	43	91.5	53.2	88	59.5	83.8	66.8	79	75.4		
-25	122.7	36.8	118.1	44.4	111.9	54.3	108	60.4	103.4	67.4	98.1	75.7		
-20	147.1	39.1	142	46.3	135	55.7	130.7	61.6	125.7	68.4	119.9	76.3		
-10	—	—	—	—	—	—	—	—	—	—	—	—	172.3	78.9

SW-1-L10500(R22)														
Tc	20		30		40		45		50		55			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa		
-50	34.4	31.4	30	38.6	—	—	—	—	—	—	—	—		
-40	60.9	34.7	54.7	41.8	47.6	50.4	43.6	55.3	39.3	60.9	34.7	67.1		
-35	78.3	36.7	70.8	43.8	62.2	52.2	57.5	57.2	52.4	62.7	47	68.9		
-30	98.9	39.3	89.8	46.1	79.6	54.3	74	59.2	68	64.7	61.6	70.9		
-25	123.3	42.3	112.4	48.8	100.2	56.8	93.6	61.6	86.6	67	79.1	73.1		
-20	151.9	46.1	138.8	52.2	124.5	59.8	116.7	64.4	108.5	69.7	99.8	75.7		
-10	—	—	—	—	—	—	—	—	—	—	152.6	82.5		

SW-1-L10500(R22) with ECO														
Tc	20		30		40		45		50		55			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa		
-50	43.1	34.2	40.1	44.1	—	—	—	—	—	—	—	—		
-40	72.1	35.8	68.7	45.2	68.8	57.1	60.6	64.5	56.9	73.1	52.4	83.3		
-35	90.2	36.9	86.3	46	80.9	57.6	77.4	64.8	73.2	73.1	68.4	82.8		
-30	110.9	38.5	106.5	47.2	100.4	58.4	88.5	65.3	92	73.3	86.6	82.7		
-25	134.5	40.5	129.5	48.8	122.6	59.5	118.3	66.2	113.3	73.9	107.5	82.9		
-20	161.1	43.1	155.4	50.8	147.8	61.1	143.1	67.4	137.6	74.9	131.3	83.5		
-10	—	—	—	—	—	—	—	—	—	—	—	—	188.2	86.2

SW-1-L11500(R22)														
Tc	20		30		40		45		50		55			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa		
-50	36.9	33.6	32.2	41.3	—	—	—	—	—	—	—	—		
-40	65.3	37.1	58.7	44.8	51.1	53.9	46.8	59.3	42.2	65.2	37.2	71.9		
-35	83.9	39.3	75.9	46.9	66.7	55.9	61.7	61.2	56.2	67.1	50.4	73.8		
-30	106.1	42	96.3	49.3	85.4	58.2	79.4	63.4	73	69.3	66.1	75.9		
-25	132.2	45.3	120.5	52.3	107.5	60.8	100.4	65.9	92.8	71.7	84.8	78.2		
-20	162.9	49.3	148.9	55.8	133.5	64	125.1	69	116.3	74.6	107	81		
-10	—	—	—	—	—	—	—	—	—	—	163.7	88.3		

SW-1-L11500(R22) with ECO														
Tc	20		30		40		45		50		55			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa		
-50	45.9	36.3	42.7	46.7	—	—	—	—	—	—	—	—		
-40	76.7	37.9	73.1	47.8	67.9	60.5	64.5	68.3	60.5	77.4	55.7	88.2		
-35	95.9	39.1	91.8	48.7	86	61	82.3	68.5	77.9	77.3	72.7	87.6		
-30	117.8	40.8	113.2	49.9	106.7	61.8	102.6	69.1	97.7	77.5	92.1	87.5		
-25	142.8	42.9	137.5	51.6	130.2	62.9	125.7	69.9	120.4	78.1	114.2	87.6		
-20	171	45.7	165	53.8	156.9	64.6	151.8	71.3	146	79.1	139.3	88.2		
-10	—	—	—	—	—	—	—	—	—	—	—	—	199.4	90.9

# PERFORMANCES

SW-1-L13000(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	40.9	37.5	36	46.1	—	—	—	—	—	—	—	—
-40	71.5	41.4	64.7	50.5	56.9	60.5	52.5	66.1	47.7	72.2	42.6	79.1
-35	91.7	43.6	83.4	52.7	74.1	63	68.9	68.9	63.4	75.3	57.4	82.4
-30	115.7	46	105.7	55.2	94.5	65.7	88.4	71.7	81.9	78.4	75	85.8
-25	144.1	48.8	132	58	118.7	68.6	111.5	74.7	104	81.6	95.9	89.2
-20	177.4	52.2	162.9	61.2	147.2	71.9	138.7	78.1	129.9	85.1	120.6	92.9
-10	—	—	—	—	—	—	—	—	—	—	183.3	101.6

SW-1-L13000(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	52.9	42.7	49.9	55.4	—	—	—	—	—	—	—	—
-40	87.4	44.4	84.4	57.2	79.7	72.8	76.6	82.2	72.7	93.2	68.1	106.1
-35	108.9	45.4	105.6	58	100.6	73.6	97.3	83.1	93.3	94.1	88.5	107
-30	133.5	46.6	129.8	59	124.5	74.5	120.9	84	116.7	94.9	111.6	107.8
-25	161.6	48.1	157.7	60.2	151.6	75.6	147.7	85	143.2	95.9	137.9	108.6
-20	193.3	50.2	188.6	61.9	182.2	76.9	178	86.2	173.2	97	167.6	109.6
-10	—	—	—	—	—	—	—	—	—	—	238.1	112.7

SW-1-L15000(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	45.8	41.6	40.3	51	—	—	—	—	—	—	—	—
-40	80	45.9	72.4	55.9	63.6	66.9	58.7	73.1	53.4	80	47.7	87.5
-35	102.5	48.2	93.3	58.4	82.8	69.8	77.1	76.2	70.9	83.3	64.2	91.3
-30	129.4	50.9	118.2	61.1	105.7	72.7	98.9	79.4	91.6	86.7	83.9	95
-25	161.1	54	147.6	64.2	132.8	75.9	124.7	82.7	116.3	90.3	107.3	98.8
-20	198.4	57.8	182.2	67.8	164.6	79.6	155.2	86.4	145.3	94.2	134.9	102.9
-10	—	—	—	—	—	—	—	—	—	—	205	112.5

SW-1-L15000(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	59	47	55.5	60.8	—	—	—	—	—	—	—	—
-40	97.3	48.9	93.9	62.9	88.6	79.9	85.1	90.2	80.8	102.1	75.6	116.2
-35	121.2	50	117.5	63.8	111.8	80.8	108.1	91.1	103.6	103.1	98.2	117.1
-30	148.7	51.3	144.5	64.9	138.4	81.8	134.4	92.1	129.6	104.1	123.9	118
-25	180	53	175.2	66.3	168.5	83	164.2	93.3	159.1	105.1	153.1	119
-20	215.3	55.3	209.9	68.1	202.5	84.5	197.9	94.7	192.4	106.4	186.1	120.2
-10	—	—	—	—	—	—	—	—	—	—	264.4	123.6

SW-1-L17000(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	53	47.6	46.6	58.5	—	—	—	—	—	—	—	—
-40	92.6	52.6	83.8	64.1	73.6	76.7	67.9	83.8	61.8	91.6	55.2	100.3
-35	118.7	55.3	108	66.9	95.9	80	89.2	87.3	82.1	95.5	74.4	104.6
-30	149.8	58.3	136.8	70	122.4	83.3	114.5	90.9	106.1	99.4	97.2	108.8
-25	186.6	61.9	170.9	73.5	153.7	87	144.4	94.8	134.6	103.5	124.2	113.2
-20	229.6	66.3	210.9	77.7	190.6	91.2	179.7	99.1	168.2	107.9	156.2	117.9
-10	—	—	—	—	—	—	—	—	—	—	237.4	128.9

SW-1-L17000(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	67.9	53.3	64.1	69.2	—	—	—	—	—	—	—	—
-40	111.7	55.2	108.1	71.1	102.4	90.7	98.5	102.7	93.7	116.7	87.8	133.4
-35	138.8	56.2	134.9	71.9	129	91.5	125	103.5	120	117.5	114	134
-30	169.8	57.6	165.6	73	159.2	92.3	154.9	104.2	149.8	118.1	143.6	134.5
-25	205	59.9	200.3	74.4	193.4	93.4	188.8	105.1	183.4	118.9	177	135
-20	244.5	62	239.2	76.3	231.7	94.8	226.9	106.4	221.2	119.9	214.5	135.8
-10	—	—	—	—	—	—	—	—	—	—	302.8	138.5

SW-1-L20000(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	39.9	52.5	52.7	64.4	—	—	—	—	—	—	—	—
-40	104.7	57.9	94.6	70.6	83.2	84.5	76.8	92.4	69.8	101	62.4	110.5
-35	134.1	60.9	122	73.7	108.3	88.1	100.8	96.3	92.7	105.3	84	115.3
-30	169.2	64.3	154.6	77.1	138.2	91.8	129.3	100.2	119.9	109.5	109.8	119.9
-25	210.8	68.2	193.1	81	173.7	95.9	163.2	104.5	152.1	114	140.3	124.8
-20	259.4	73	238.3	85.6	215.3	100.5	203	109.2	190	118.9	176.4	129.9
-10	—	—	—	—	—	—	—	—	—	—	268.2	142

SW-1-L20000(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	76.5	58.5	72.2	75.9	—	—	—	—	—	—	—	—
-40	125.8	60.5	121.6	77.9	115.2	99.3	110.8	112.4	105.3	127.7	98.7	145.7
-35	156.3	61.7	151.9	78.9	145.1	100.2	140.5	113.3	134.9	128.5	128.1	146.4
-30	191.2	63.3	186.3	80	179	101.2	174.2	114.1	168.3	129.2	161.3	147
-25	230.9	65.3	225.4	81.6	217.5	102.3	212.3	115.1	206.1	130.1	198.8	147.6
-20	275.3	68.2	269.2	83.8	260.6	104	255.1	116.5	248.6	131.2	240.9	148.5
-10	—	—	—	—	—	—	—	—	—	—	340.1	151.7

# PERFORMANCES

SW-1-L22000(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	64.2	56	56.5	68.8	—	—	—	—	—	—	—	—
-40	112.3	61.9	101.5	75.4	89.2	90.3	82.4	98.6	74.9	107.8	66.9	118
-35	143.9	65	130.9	78.7	116.2	94.1	108.1	102.8	99.5	112.4	90.2	123
-30	181.6	68.6	165.8	82.4	148.3	98	138.8	107	128.6	116.9	117.8	128
-25	226.1	72.9	207.2	86.5	186.3	102.4	175	111.5	163.2	121.7	150.6	133.2
-20	278.4	78	255.7	91.4	231	107.3	217.8	116.6	203.9	127	189.3	138.7
-10	—	—	—	—	—	—	—	—	—	—	287.7	151.6


SW-1-L22000(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	81.3	61.6	76.7	79.9	—	—	—	—	—	—	—	—
-40	133.5	63.7	129.1	81.9	122.3	104.3	117.6	118	111.8	134	104.8	152.9
-35	165.8	65	161.1	82.9	153.9	105.2	149	118.8	143.1	134.8	135.9	153.5
-30	202.7	66.6	197.5	84.1	189.8	106.1	184.6	119.6	178.4	135.4	171	154
-25	244.4	68.8	238.6	85.7	230.2	107.3	224.8	120.7	218.3	136.2	210.5	154.5
-20	291.1	71.9	284.7	88	275.6	109	269.8	122.1	262.9	137.3	254.8	155.3
-10	—	—	—	—	—	—	—	—	—	—	358.8	158.5


SW-1-L22000(R22)												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	75.3	65.4	66.3	80.2	—	—	—	—	—	—	—	—
-40	131.6	72.2	119	88	104.6	105.3	96.6	115	87.9	125.8	78.4	137.7
-35	168.7	75.8	153.5	91.8	136.3	109.7	126.8	119.9	116.6	131.1	105.7	143.6
-30	212.9	80	194.4	96.1	173.9	114.4	162.7	124.8	150.8	136.4	138.1	149.4
-25	265.1	85	242.9	100.9	218.4	119.4	205.2	130.1	191.3	142	176.5	155.4
-20	326.3	91	299.7	106.6	270.8	125.1	255.3	136	239	148.1	221.9	161.8
-10	—	—	—	—	—	—	—	—	—	—	337.3	176.9

SW-1-L23000(R22) with ECO												
Tc	20		30		40		45		50		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	94.9	71.6	89.5	92.6	—	—	—	—	—	—	—	—
-40	155.9	74	150.7	95.1	142.6	120.8	137	136.6	130.3	154.9	122	176.6
-35	193.6	75.5	188	96.2	179.4	121.9	173.6	137.6	166.6	155.8	158.2	177.3
-30	236.7	77.4	230.5	97.6	221.2	123	215.1	138.8	207.8	156.7	199	178
-25	285.5	80.1	278.5	99.6	268.5	124.5	262	139.8	254.2	157.7	245	178.7
-20	340.2	83.7	332.4	102.3	321.4	126.5	314.5	141.5	306.3	159.1	296.6	179.7
-10	—	—	—	—	—	—	—	—	—	—	417.8	183.6

KEY

- Pf = Cooling Capacity (kW)
- Pa = Input Power (kW)
- Te = Evaporating temperature (°C)
- Tc = Condensing temperature (°C)
- 50 Hz frequency
- Liquid subcooling 5K
- Suction gas superheat 10K

 Working conditions which need not oil cooling

 Working conditions which require the additional cooling (see application limits)



# PERFORMANCES

## SW1H, Refrigerant R404A/R507

SW-1-H4000(R404A)																			
Tc	20			30			35			40			45			50			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	63.9	16.7	57.3	22.5	52.6	24.9	47	26.8	40.5	28.5	33.2	29.8							
-15	79.2	17.3	70.3	23	64.5	25.5	57.9	27.7	50.6	29.7	42.5	31.5							
-10	96.9	17.2	85.6	23	78.8	25.7	71.2	28.2	63	30.6	54.2	33							
-5	117	16.4	103	22.4	95.3	25.4	86.8	28.3	77.7	31.2	68.1	34.2							
0	—	—	123	21.4	114	24.7	105	28	94.7	31.5	84.3	35.1							
5	—	—	145	19.8	135	23.5	125	27.4	114	31.5	103	35.8							

SW-1-H5000(R404A)																			
Tc	20			30			35			40			45			50			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	81.2	21.3	72.9	28.6	66.9	31.6	59.7	34.1	51.5	36.2	42.2	37.9							
-15	101	22	89.3	29.3	82	32.4	73.7	35.2	64.3	37.8	54.1	40.1							
-10	123	21.8	109	29.2	100	32.6	90.5	35.9	80.1	38.9	68.9	41.9							
-5	149	20.9	131	28.5	121	32.3	110	36	98.8	39.7	86.6	43.5							
0	—	—	157	27.2	145	31.3	133	35.6	120	40.1	107	44.7							
5	—	—	185	25.1	172	29.8	159	34.8	145	40	131	45.5							

SW-1-H6000(R404A)																			
Tc	20			30			35			40			45			50			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	94.8	24.8	85	33.4	78	36.9	69.7	39.8	60.1	42.2	49.2	44.2							
-15	118	25.6	104	34.1	95.7	37.8	85.9	41.1	75.1	44.1	63.1	46.7							
-10	144	25.5	127	34.1	117	38.1	106	41.8	93.5	45.4	80.4	48.9							
-5	174	24.4	153	33.3	141	37.7	129	42	115	46.3	101	50.7							
0	—	—	183	31.7	169	36.6	155	41.6	140	46.7	125	52.1							
5	—	—	216	29.3	201	34.8	185	40.6	169	46.7	152	53.1							

SW-1-H7500(R404A)																			
Tc	20			30			35			40			45			50			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	111	29.1	99.6	39.1	91.4	43.2	81.6	46.6	70.3	49.5	57.6	51.8							
-15	138	30	122	40	112	44.3	101	48.1	87.9	51.6	73.9	54.8							
-10	168	29.8	149	39.9	137	44.6	124	49	110	53.2	94.1	57.3							
-5	203	28.5	179	39	166	44.1	151	49.2	135	54.3	118	59.4							
0	—	—	214	37.1	198	42.8	182	48.7	165	54.8	146	61.1							
5	—	—	253	34.4	235	40.8	217	47.5	198	54.7	178	62.2							

SW-1-H9000(R404A)																			
Tc	20			30			35			40			45			50			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	128	33.6	115	45.3	106	49.8	94.4	53.9	81.3	57.2	66.6	59.9							
-15	159	34.7	141	46.2	130	51.2	116	55.7	102	59.7	85.4	63.3							
-10	195	34.5	172	46.2	158	51.5	143	56.7	127	61.5	109	66.2							
-5	235	33	207	45.1	191	51	174	56.9	156	62.8	137	68.7							
0	—	—	247	42.9	229	49.5	210	56.3	190	63.3	169	70.6							
5	—	—	292	39.7	272	47.1	251	54.9	229	63.2	206	71.9							

SW-1-H10500(R404A)																			
Tc	20			30			35			40			45			50			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	155	40.6	139	54.6	128	60.3	114	65.1	98.2	69.1	80.4	72.3							
-15	192	41.9	170	55.8	156	61.8	141	67.2	123	72	103	79.9							
-10	235	41.6	207	55.7	191	62.2	173	68.4	153	74.3	131	82.9							
-5	284	39.8	250	54.4	231	61.5	210	68.6	188	75.7	165	85.2							
0	—	—	298	51.8	277	59.8	254	67.9	230	76.4	204	85.2							
5	—	—	352	47.9	328	56.9	303	66.3	276	76.3	249	86.8							

SW-1-H11500(R404A)																			
Tc	20			30			35			40			45			50			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	172	45.1	155	60.7	142	67	127	72.3	109	76.8	89.5	80.4							
-15	214	46.5	189	62	174	68.7	156	74.7	136	80.1	115	84.9							
-10	261	46.3	231	61.9	212	69.2	192	76	170	82.6	146	88.9							
-5	315	44.3	278	60.5	257	68.4	234	76.3	210	84.2	184	92.1							
0	—	—	332	57.6	308	66.5	282	75.6	255	85	227	94.7							
5	—	—	392	53.3	365	63.2	336	73.7	307	84.8	277	96.5							

SW-1-H12500(R404A)																			
Tc	20			30			35			40			45			50			
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	
-20	185	48.3	166	65.1	152	71.9	136	77.6	117	82.3	95.9	86.2							
-15	229	49.9	203	66.5	186	73.6	168	80.1	146	85.9	123	91.1							
-10	280	49.6	247	66.4	228	74.2	206	81.5	182	88.6	157	95.3							
-5	338	47.5	298	64.9	275	73.4	251	81.8	225	90.3	197	98.8							
0	—	—	356	61.8	330	71.3	303	81	274	91.1	244	102							
5	—	—	420	57.1	391	67.8	361	79	329	90.9	297	104							

# PERFORMANCES

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SW

SW-1-H14000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	193.7	61.4	174.6	74.4	163.5	80.1	150	85.1	133.1	88.9	111.7	91.4
-15	242.1	67.5	216.6	79.7	202.7	85.5	186.6	90.7	167.4	95.1	144.1	98.3
-10	299.7	71.4	267.7	84	251	90.3	232.3	96.3	210.8	101.6	185.3	106.1
-5	367.2	73.2	328.6	87	308.9	94.4	287.7	101.6	263.7	108.4	236.1	114.6
0	—	—	399.8	88.7	377.2	97.5	353.2	106.4	326.9	115.2	297.1	123.6
5	—	—	482	88.7	456.4	99.5	429.7	110.7	400.8	121.9	368.8	133

SW-1-H16000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	204.4	70.7	193.2	82.3	181.6	88.5	166	94.2	146.7	98.6	123.6	101.1
-15	257.9	77.4	239.7	88.2	225	94.5	206.6	100.4	184.7	105.4	159.5	108.8
-10	321.7	81.8	296.3	93	278.4	99.8	257.2	106.6	232.7	112.7	205.2	117.4
-5	396.4	83.7	363.7	96.3	342.6	104.3	318.4	112.4	291.3	120.2	261.4	126.8
0	—	—	442.6	98.1	418.2	107.7	391	117.8	361.2	127.7	328.9	136.8
5	—	—	533.6	98.2	505.8	110	475.6	122.5	443	135.2	408.2	147.3

SW-1-H19000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	244.3	75.4	221.5	94.3	207.5	101.8	190.3	107.9	168.7	112.7	141.7	115.9
-15	305.7	83.1	274.8	101.1	257.2	108.7	236.8	115.1	212.3	120.5	182.8	124.7
-10	378.8	88.1	339.6	106.6	318.5	114.7	294.8	122.1	267.3	128.8	235.1	134.6
-5	464.4	90.4	416.9	110.4	392	119.9	364.9	128.9	334.5	137.4	299.6	145.3
0	—	—	507.2	112.5	478.6	123.8	448.1	135	414.6	146	376.9	156.8
5	—	—	611.5	112.6	579.1	126.4	545.1	140.4	508.4	154.6	467.9	168.8

SW-1-H21000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	267.1	86	244	104	228.8	112	209.7	118.9	185.8	124.3	156.1	127.7
-15	334.7	94.5	302.8	111.4	283.6	119.5	260.9	126.8	233.9	132.9	201.4	137.4
-10	415.3	100	374.3	117.4	351.1	126.2	324.8	134.6	294.5	142.1	259.1	148.3
-5	509.6	102.5	459.4	121.7	432.1	131.9	402.1	142	368.5	151.5	330.1	160.2
0	—	—	559	124	527.6	136.3	493.8	148.8	456.7	161.1	415.3	172.8
5	—	—	673.9	124	638.3	139.1	600.7	154.7	560.1	170.5	515.6	186

SW-1-H24000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	263.1	91.7	260.5	111	245.6	119.6	223.8	127	197	132.7	166.7	136.4
-15	335.3	100.7	323.2	119	304.1	127.6	278.6	135.4	248.3	141.9	215	146.7
-10	421.3	106.6	399.6	125.4	376.2	134.8	346.8	143.7	313	151.7	276.6	158.3
-5	522.1	109.3	490.4	129.9	462.7	140.8	429.3	151.6	392	161.8	352.5	171
0	—	—	596.8	132.3	564.6	145.5	527.2	158.8	486.2	172	44.34	184.5
5	—	—	719.5	132.4	682.8	148.5	641.3	165.2	596.6	182	550.4	198.6

SW-1-H25000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-20	317.4	110.2	304	129.5	285.9	139.3	261.2	148.2	230.4	155	194.5	159.1
-15	401.6	120.7	377.1	138.8	354.2	148.7	325	158	290.3	165.8	250.9	171.1
-10	502	127.6	466.2	146.3	438.2	157.1	404.6	167.7	365.8	177.2	322.7	184.7
-5	619.5	130.7	572.2	151.5	539.2	164.1	500.9	176.9	458	188.9	411.2	199.5
0	—	—	696.2	154.4	658.1	169.5	615.1	185.3	567.9	200.8	517.3	215.2
5	—	—	839.4	154.5	796	173.1	748.2	192.7	696.7	212.5	642.2	231.6

KEY

- Pf = Cooling Capacity (kW)
- Pa = Input Power (kW)
- Te = Evaporating temperature (°C)
- Tc = Condensing temperature (°C)
- 50 Hz frequency
- Liquid subcooling 5K
- Suction gas superheat 10K



Working conditions which need not oil cooling



Working conditions which require the additional cooling (see application limits)

# PERFORMANCES

SW1L(Available with economizer) Refrigerant R407A/R507

SW-1-L3000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	12.8	14	10.7	16.8	9.6	18.5	—	—	—	—	—	—
-40	23.1	15.3	20	18.2	18.3	20	16.5	22	14.7	24.1	12.6	26.5
-35	29.9	16.1	26.1	19.1	24	20.9	21.9	22.9	19.5	25.1	17.1	27.5
-30	38.2	17.2	33.4	20.1	30.9	21.9	28.3	23.9	25.5	26.2	22.5	28.7
-25	47.9	18.4	42.2	21.3	39.1	23.1	35.9	25.1	32.6	27.4	29	29.9
-20	59.5	19.9	52.6	22.7	48.9	24.5	45.1	26.6	41.1	28.9	36.9	31.4
-15	—	—	—	—	—	—	—	—	—	—	46.2	33.1

SW-1-L3000(R404A) with ECO												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	18.3	16.9	16.9	21.7	16	24.7	—	—	—	—	—	—
-40	30.5	17.4	28.8	22	27.8	24.9	26.5	28.2	24.9	31.9	23	36.2
-35	38.1	17.8	36.2	22.4	34.9	25.2	33.4	28.5	31.6	32.2	29.5	36.4
-30	46.8	18.3	44.6	22.8	43.2	25.7	41.5	29	39.4	32.7	37	36.9
-25	56.7	19.1	54.2	23.5	52.6	26.3	50.6	29.5	48.3	33.3	45.5	37.5
-20	67.9	20	65	24.3	63.2	27.1	61	30.3	58.4	34	55.3	38.2
-15	—	—	—	—	—	—	—	—	—	—	66.5	39.1

SW-1-L4000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	16.3	17.3	13.7	20.9	12.4	23.1	—	—	—	—	—	—
-40	30.2	19.2	26.1	22.8	24.1	25	21.8	27.5	19.4	30.4	16.8	33.6
-35	39.4	20.4	34.4	23.9	31.7	26.1	29	28.6	26	31.5	22.7	34.8
-30	50.4	21.7	44.2	25.2	41	27.4	37.6	29.9	33.9	32.8	29.9	36.2
-25	63.4	23.3	56	26.7	52.1	28.8	47.9	31.4	43.5	34.3	38.7	37.7
-20	78.8	25.2	69.9	28.4	65.2	30.6	60.2	33.1	55	36.1	49.3	39.4
-15	—	—	—	—	—	—	—	—	—	—	62	41.4

SW-1-L4000(R404A) with ECO												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	22.7	20.3	20.9	26	20	29.5	—	—	—	—	—	—
-40	38.9	21.1	36.6	26.5	35.3	29.8	33.6	33.7	31.7	38.2	29.2	43.4
-35	48.8	21.7	46.2	26.9	44.6	30.2	42.7	34.1	40.3	38.5	37.4	43.7
-30	60.2	22.4	57.2	27.5	55.3	30.8	53.1	34.6	50.3	39	47	44.2
-25	73.1	23.3	69.7	28.3	67.6	31.5	65	35.3	61.9	39.7	58.1	44.8
-20	87.5	24.5	83.8	29.2	81.4	32.4	78.5	36.1	75	40.5	70.8	45.6
-15	—	—	—	—	—	—	—	—	—	—	85.3	46.6

SW-1-L5000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	19	19.7	15.9	23.8	14.4	26.2	—	—	—	—	—	—
-40	35.3	21.9	30.5	25.9	28.1	28.4	28.5	31.3	22.7	34.5	19.6	38.2
-35	46	23.2	40.1	27.2	37	29.7	33.8	32.6	30.3	35.9	26.5	39.6
-30	58.8	24.7	51.6	28.6	47.8	31.1	43.8	34	39.5	37.4	34.9	41.1
-25	74	26.5	65.3	30.3	60.7	32.8	55.9	35.7	50.7	39	45.1	42.9
-20	91.9	28.6	81.6	32.3	76.1	34.8	70.3	37.6	64.1	41	57.5	44.8
-15	—	—	—	—	—	—	—	—	—	—	72.4	47.1

SW-1-L5000(R404A) with ECO												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	26.1	22.6	24	28.9	22.9	32.8	—	—	—	—	—	—
-40	44.7	23.5	41.9	29.4	40.3	33.1	38.4	37.4	36.1	42.3	33.2	48.1
-35	56.1	24.1	52.9	29.9	51	33.6	48.8	37.8	46	42.7	42.6	48.4
-30	69.1	25	65.5	30.6	63.3	34.2	60.6	38.4	57.4	43.3	53.5	49
-25	83.8	26	79.8	31.4	77.3	35	74.2	39.1	70.6	44	66.1	49.6
-20	100.4	27.3	95.9	32.5	93.1	36	89.7	40.1	85.6	44.9	80.6	50.5
-15	—	—	—	—	—	—	—	—	—	—	97.1	51.5

SW-1-L6500(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	22.9	22.8	19.5	27.1	17.8	29.8	—	—	—	—	—	—
-40	41.4	26.2	36.1	30.3	33.3	32.8	30.3	35.8	27.1	39.2	23.5	43.2
-35	53.7	28.1	47.1	32.2	43.5	34.8	39.8	37.7	35.7	41.1	31.3	45.1
-30	68.6	30.1	60.3	34.4	55.9	37	51.3	40	46.3	43.4	40.9	47.3
-25	86.3	32.3	76.1	36.8	70.8	39.5	65.1	42.5	59	46	52.5	50
-20	107	34.6	94.9	39.5	88.4	42.3	81.6	45.4	74.3	49	66.6	53
-15	—	—	—	—	—	—	—	—	—	—	83.4	56.4

SW-1-L6500(R404A) with ECO												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	32	26.9	29.7	33.6	28.4	37.7	—	—	—	—	—	—
-40	53.7	29.1	50.6	35.4	48.7	39.3	46.4	43.7	43.6	48.9	40.2	55
-35	67.3	30.4	63.6	36.7	61.3	40.6	58.6	45	55.2	50.2	51.2	56.1
-30	82.9	31.7	78.6	38.2	75.9	42.1	72.7	46.6	68.7	51.8	64	57.7
-25	100.9	33	95.8	39.8	92.6	43.8	88.9	48.4	84.3	53.7	78.8	59.7
-20	121.1	34.4	115.3	41.5	111.7	45.6	107.4	50.4	102.2	55.7	96	61.9
-15	—	—	—	—	—	—	—	—	—	—	115.6	64.3

# PERFORMANCES

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SW

SW-1-L8000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	26.5	26.5	22.5	31.5	20.6	34.6	—	—	—	—	—	—
-40	47.9	30.4	41.7	35.2	38.5	38.1	35	41.6	31.3	45.6	27.1	50.2
-35	62.1	32.6	54.4	37.5	50.3	40.4	46	43.8	41.3	47.8	36.2	52.4
-30	79.3	35	69.7	40	64.7	43	59.3	46.4	53.5	50.4	47.3	55
-25	99.8	37.5	88	42.8	81.8	45.9	75.3	49.4	68.3	53.4	60.7	58.1
-20	123.9	40.2	109.7	45.9	102.2	49.1	94.3	52.7	86	56.9	77	61.6
-15	—	—	—	—	—	—	—	—	—	—	96.5	65.5

SW-1-L8000(R404A) with ECO												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	36.7	30.9	34.2	38.7	32.7	43.6	—	—	—	—	—	—
-40	61.4	33.2	58.1	40.6	56	45.2	53.5	50.5	50.4	56.6	46.5	64
-35	76.9	34.6	72.9	42	70.4	46.6	67.4	51.8	63.6	57.9	59.1	65.1
-30	94.6	36.1	89.9	43.6	86.9	48.2	83.4	53.4	79	59.5	73.7	66.7
-25	114.8	37.6	109.3	45.3	105.9	50	101.7	55.3	96.7	61.5	90.6	68.6
-20	137.6	39.1	131.3	47.1	127.4	51.9	122.6	57.4	116.9	63.7	110.1	70.9
-15	—	—	—	—	—	—	—	—	—	—	132.2	73.4

SW-1-L8000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	32	31.9	27.2	37.8	24.8	44.5	—	—	—	—	—	—
-40	57.8	36.5	50.3	42.3	46.4	45.8	42.3	49.9	37.7	54.7	32.7	60.3
-35	75	39.1	65.7	45	60.7	48.5	55.5	52.6	49.9	57.4	43.7	62.9
-30	95.7	42	84.1	48	78	51.6	71.5	55.8	64.6	60.5	57	66
-25	120.4	45.1	106.2	51.4	98.7	55.1	90.8	59.3	82.4	64.2	73.3	69.7
-20	149.6	48.3	132.4	55.1	123.4	58.9	113.8	63.3	103.7	68.3	92.9	73.9
-15	—	—	—	—	—	—	—	—	—	—	116.4	78.7

SW-1-L9500(R404A) with ECO												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	43.7	36.5	40.5	45.5	38.6	51	—	—	—	—	—	—
-40	73.3	39.5	69	48	66.3	53.2	63.1	59.2	59.2	66.2	54.4	74.5
-35	91.8	41.2	86.7	49.7	83.5	54.9	79.6	60.9	74.9	67.8	69.3	76
-30	113.2	42.9	107.1	51.7	103.3	57	98.7	63	93.2	70	86.6	78.1
-25	137.6	44.8	130.4	53.8	126	59.2	120.7	65.4	114.3	72.4	106.8	80.6
-20	165.1	46.7	156.9	56.1	151.8	61.6	145.8	68	138.5	75.2	130	83.5
-15	—	—	—	—	—	—	—	—	—	—	156.5	86.6

SW-1-L10500(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	35.6	35.3	30.3	41.9	27.6	46.1	—	—	—	—	—	—
-40	64.2	40.5	56	46.9	51.6	50.8	47	55.4	42	60.7	36.4	66.9
-35	83.4	43.4	73	49.9	67.5	53.8	61.7	58.4	55.4	63.6	48.6	69.8
-30	106.4	46.6	93.5	53.3	86.7	57.3	79.5	61.8	71.8	67.1	63.4	73.2
-25	133.9	50	118.1	57	109.8	61.1	101	65.8	91.6	71.2	81.5	77.3
-20	166.3	53.6	147.3	61.1	137.2	65.4	126.6	70.2	115.3	75.7	103.3	82
-15	—	—	—	—	—	—	—	—	—	—	129.4	87.3

SW-1-L10500(R404A) with ECO												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	48.1	39.9	44.5	49.7	42.4	55.8	—	—	—	—	—	—
-40	80.5	43.1	75.7	52.4	72.8	58	69.2	64.6	64.9	72.3	59.6	81.5
-35	100.8	44.9	95.1	54.2	91.5	59.9	87.3	66.5	82.1	74.1	75.9	83
-30	124.1	46.8	117.4	56.3	113.2	62.1	108.2	68.7	102.1	76.3	94.8	85.2
-25	150.8	48.9	142.9	58.6	138	64.5	132.2	71.2	125.2	78.9	116.8	87.9
-20	180.8	51	171.8	61.1	166.2	67.1	159.5	74	151.6	81.8	142.2	90.9
-15	—	—	—	—	—	—	—	—	—	—	171	94.2

SW-1-L11500(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	37.8	37.8	32.1	44.9	29.3	49.3	—	—	—	—	—	—
-40	68.2	43.3	59.5	50.2	54.9	54.4	49.9	59.3	44.6	65	38.7	71.6
-35	88.6	46.5	77.6	53.4	71.8	57.6	65.6	62.5	58.9	68.1	51.6	74.7
-30	113.1	49.9	99.4	57	92.2	61.3	84.5	66.2	76.3	71.9	67.4	78.4
-25	142.2	53.5	125.5	61	116.7	65.4	107.3	70.5	97.3	76.2	86.6	82.8
-20	176.7	57.4	156.5	65.4	145.8	70	134.5	75.2	122.6	81.1	109.8	87.8
-15	—	—	—	—	—	—	—	—	—	—	137.5	93.4

SW-1-L11500(R404A) with ECO /												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	50.7	42.2	47	52.7	44.8	59.2	—	—	—	—	—	—
-40	84.8	45.6	79.8	55.5	76.7	61.5	73	68.6	68.5	76.9	63	86.7
-35	106.1	47.5	100.1	57.4	96.4	63.4	92	70.4	86.6	78.6	80.1	88.2
-30	130.5	49.5	123.5	59.6	119.4	65.6	113.9	72.7	107.6	80.8	100	90.4
-25	158.4	51.7	150.2	61.9	145.1	68.1	139	75.2	131.7	83.5	123	93
-20	189.7	53.9	180.4	64.5	174.5	70.8	167.6	78.1	159.3	86.4	149.5	96.1
-15	—	—	—	—	—	—	—	—	—	—	179.6	99.5

# PERFORMANCES

SW-1-L13000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	46.4	43.8	38.4	52.4	34.1	57	—	—	—	—	—	—
-40	81.4	48.6	69.8	57.9	63.6	63	57	68.5	50	74.7	42.5	81.5
-35	104.8	51.3	90.6	60.7	83	66	75	71.8	66.6	78.1	57.7	85.2
-30	132.8	54.5	115.5	63.9	106.3	69.3	96.7	75.2	86.6	81.8	76	89.2
-25	166.3	58.2	145.3	67.6	134.3	73	122.7	79.1	110.7	85.8	98.1	93.4
-20	205.7	62.7	180.6	72	167.4	77.4	153.7	83.5	139.4	90.4	124.6	98.1
-15	—	—	—	—	—	—	—	—	—	—	156.2	103.5

SW-1-L13000(R404A) with ECO												
Tc	20		30		35		40		45		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	66.2	52.6	61	68.1	57.5	77.3	—	—	—	—	—	—
-40	107.1	54.5	101.2	69.8	97.3	78.9	92.6	89.4	86.8	101.6	79.8	116.2
-35	132.4	55.6	125.7	70.6	121.4	79.5	116.2	90.2	109.9	102.3	102.3	116.7
-30	161.3	57	153.7	71.8	148.8	80.8	143	91.1	136.1	103.2	127.8	117.4
-25	194	58.8	185.3	73.2	179.8	82.1	173.4	92.4	165.8	104.4	156.7	118.5
-20	230.6	61.3	220.8	75.2	214.7	83.9	207.5	94.1	199.2	106	189.4	119.9
-15	—	—	—	—	—	—	—	—	—	—	226	121.9

SW-1-L15000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	51.9	48.5	43	58	38.1	63.1	—	—	—	—	—	—
-40	91	53.8	78.1	64	71.1	69.7	63.7	75.9	55.9	82.6	47.5	90.2
-35	117.2	56.8	101.3	67.2	92.8	73	83.9	79.4	74.5	86.5	64.5	94.4
-30	148.6	60.3	129.2	70.7	118.9	76.7	108.2	83.3	96.9	90.6	85	98.7
-25	186	64.4	162.5	74.8	150.2	80.8	137.3	87.5	123.8	95	109.7	103.4
-20	230	69.4	202	79.7	187.2	82.7	171.9	92.4	155.9	100	139.4	108.6
-15	—	—	—	—	—	—	—	—	—	—	174.7	114.5

SW-1-L13000(R404A) with ECO												
Tc	20		30		35		40		45		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	73.4	57.6	67.4	74.3	63.5	84.2	—	—	—	—	—	—
-40	118.8	59.8	112	76.2	107.6	86.1	102.2	97.3	95.7	110.3	87.8	125.8
-35	146.9	61	139.3	77.3	134.3	87.1	128.3	98.3	121.2	111.3	112.6	126.5
-30	179.1	62.6	170.3	78.6	164.7	88.3	158	99.4	150.1	112.4	140.7	127.5
-25	215.5	64.6	205.4	80.3	199.1	89.8	191.7	100.9	183	113.8	172.7	128.8
-20	256.2	67.4	244.8	82.5	237.8	91.9	229.6	102.9	220	115.6	208.8	130.6
-15	—	—	—	—	—	—	—	—	—	—	249.3	132.8

SW-1-L17000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	60	55.5	49.8	66.4	44.2	72.3	—	—	—	—	—	—
-40	105.4	61.7	90.4	73.4	82.3	79.9	73.8	86.9	64.7	94.7	55	103.3
-35	135.6	65.1	117.3	77	107.5	83.7	97.1	91	86.2	99.1	74.6	108.1
-30	172	69.1	149.6	81.1	137.7	87.9	125.2	95.4	112.2	103.8	98.4	113.1
-25	215.3	73.8	188.2	85.8	173.8	92.6	158.9	100.3	143.3	108.9	127	118.5
-20	266.3	79.5	233.8	91.3	216.7	98.2	199	105.9	180.6	114.7	161.3	124.5
-15	—	—	—	—	—	—	—	—	—	—	202.2	131.3

SW-1-L17000(R404A) with ECO												
Tc	20		30		35		40		45		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	85.5	66	79.4	86.5	75.2	99.1	—	—	—	—	—	—
-40	137.2	67.6	130.8	87.4	126.4	99.6	121	114	114.2	131	105.6	151.8
-35	168.9	68.7	161.7	88	157	99.9	151.1	114	143.9	130.7	134.9	150.9
-30	204.8	70.2	196.7	88.8	191.4	100.5	185	114.2	177.2	130.6	167.7	150.3
-25	245	72.3	235.9	90.2	230	101.5	223	114.9	214.6	130.8	204.4	150
-20	289.5	75.2	279.3	92.3	272.9	103.2	265.2	116.1	256.2	131.6	245.4	150.3
-15	—	—	—	—	—	—	—	—	—	—	290.8	151.3

SW-1-L20000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	67.8	61.2	56.2	73.2	49.9	79.7	—	—	—	—	—	—
-40	119.1	68	102.2	80.9	93	88	83.4	95.8	73.1	104.4	62.2	113.9
-35	153.2	71.8	132.5	84.9	121.4	92.2	109.7	100.3	97.4	109.2	84.3	119.2
-30	194.3	76.1	169	89.3	155.6	96.9	141.5	105.1	126.7	114.4	111.1	124.7
-25	243.2	81.3	212.6	94.5	196.4	102.1	179.5	110.5	161.9	120	143.5	130.6
-20	300.9	87.6	264.2	100.6	244.9	108.2	224.8	116.8	204	126.3	182.3	137.2
-15	—	—	—	—	—	—	—	—	—	—	228.5	144.7

SW-1-L20000(R404A) with ECO												
Tc	20		30		35		40		45		55	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	96	72.1	88.9	94.2	84.2	107.7	—	—	—	—	—	—
-40	154.1	74	146.6	95.4	141.5	108.5	135.3	123.9	127.6	142.1	117.8	164.2
-35	189.7	75.2	181.3	96.1	175.8	108.9	169	124	160.7	141.9	150.5	163.4
-30	230	76.9	220.6	97.1	214.4	109.6	207	124.4	198	142	187.1	163
-25	275.3	79.2	264.6	98.7	257.8	110.9	249.6	125.3	239.9	142.4	228.2	162.9
-20	325.5	82.6	313.5	101.1	305.9	112.8	297	126.8	286.5	143.5	274.1	163.5
-15	—	—	—	—	—	—	—	—	—	—	324.9	164.8

# PERFORMANCES

22

SW

SW-1-L22000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	72.8	65.3	60.3	78.2	53.5	85.1	—	—	—	—	—	—
-40	128	72.6	110	86.3	99.8	94	89.5	102	78.4	111	66.7	122
-35	164	76.6	142	90.6	130	98.5	118	107	105	117	90.5	127
-30	209	81.3	181	95.4	167	103	152	112	136	122	119	133
-25	261	86.8	228	101	211	109	193	118	174	128	154	139
-20	323	93.5	283	107	263	116	241	125	219	135	196	146
-15	—	—	—	—	—	—	—	—	—	—	245	154

SW-1-L22000(R404A) with ECO												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	102	75.5	94.3	98.7	59.2	113	—	—	—	—	—	—
-40	163	77.5	155	99.8	150	113	143	130	135	149	125	172
-35	200	78.7	192	100	186	114	179	130	170	148	159	171
-30	243	80.5	233	101	226	114	218	130	209	148	198	170
-25	290	83.1	279	103	271	116	263	131	253	148	241	170
-20	342	86.7	329	106	322	118	312	132	301	149	288	170
-15	—	—	—	—	—	—	—	—	—	—	341	171

SW-1-L23000(R404A)												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	85.3	76.2	70.7	91.2	62.7	99.3	—	—	—	—	—	—
-40	150	84.7	129	101	117	110	105	119	92	130	78.2	142
-35	193	89.4	167	106	153	115	138	125	123	136	106	148
-30	244	94.8	213	111	196	121	178	131	159	143	140	155
-25	306	101	267	118	247	127	226	138	204	149	181	163
-20	379	109	332	125	308	135	283	145	257	157	229	171
-15	—	—	—	—	—	—	—	—	—	—	287	180

SW-1-L23000(R404A) with ECO												
Tc	20		30		35		40		45		50	
Te	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa	Pf	Pa
-50	118	87.2	109	114	103	130	—	—	—	—	—	—
-40	190	89.7	180	115	174	131	166	149	156	170	144	196
-35	233	91.2	222	116	215	131	207	149	196	170	183	195
-30	283	93.4	270	117	262	132	253	149	242	170	228	195
-25	338	96.5	324	119	315	134	305	151	292	171	278	195
-20	399	101	383	123	374	136	362	153	349	172	333	195
-15	—	—	—	—	—	—	—	—	—	—	394	197

## KEY

Pf = Cooling Capacity (kW)

Pa = Input Power (kW)


Te = Evaporating temperature (°C)


Tc = Condensing temperature (°C)

50 Hz frequency

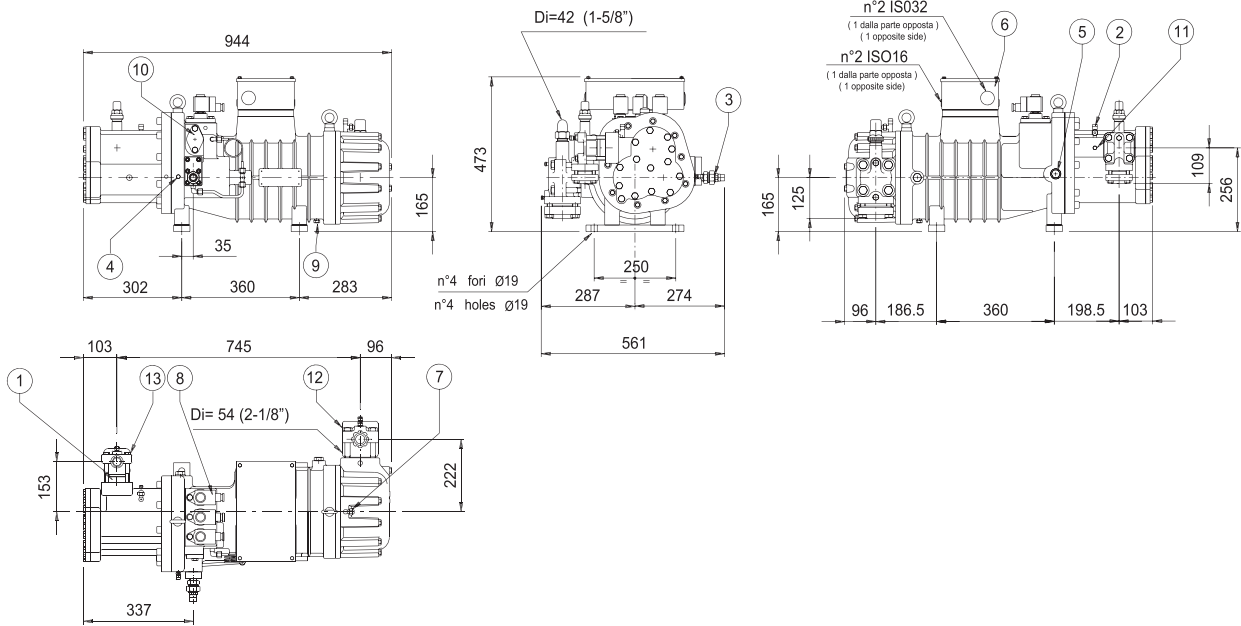
Liquid subcooling 5K

Suction gas superheat 10K

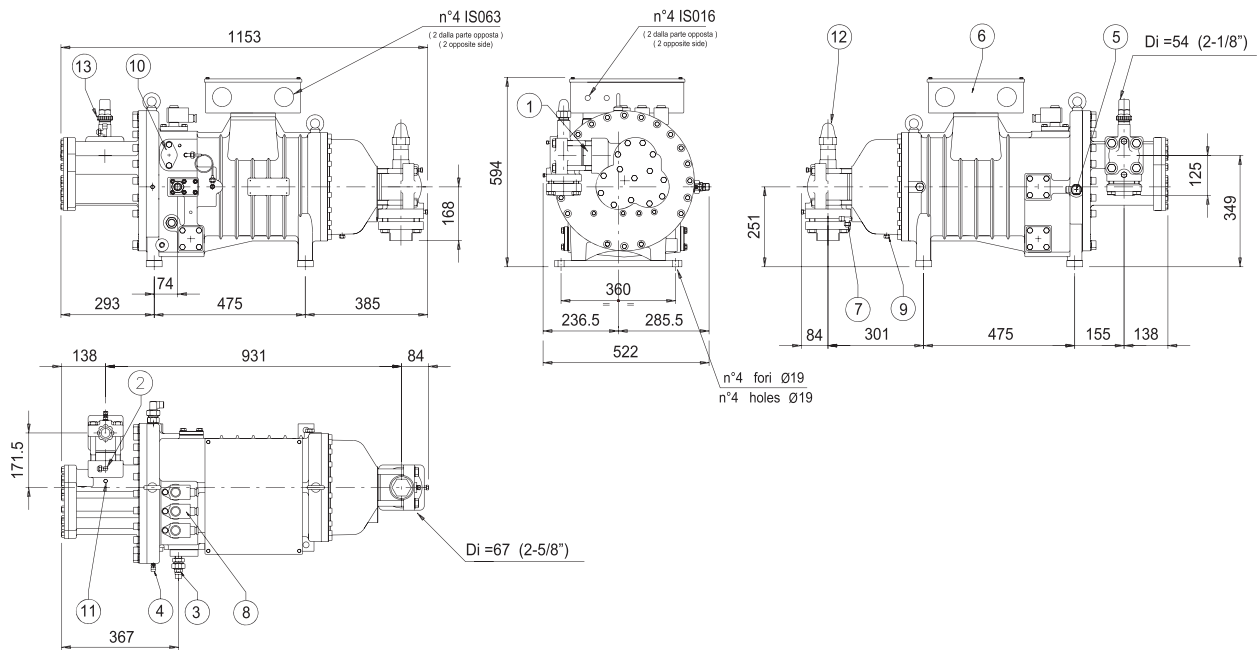
 Working conditions which need not oil cooling

 Working conditions which require the additional cooling (see application limits)

SW1H 4000\_5000\_6000  
SW1L 3000\_4000\_5000

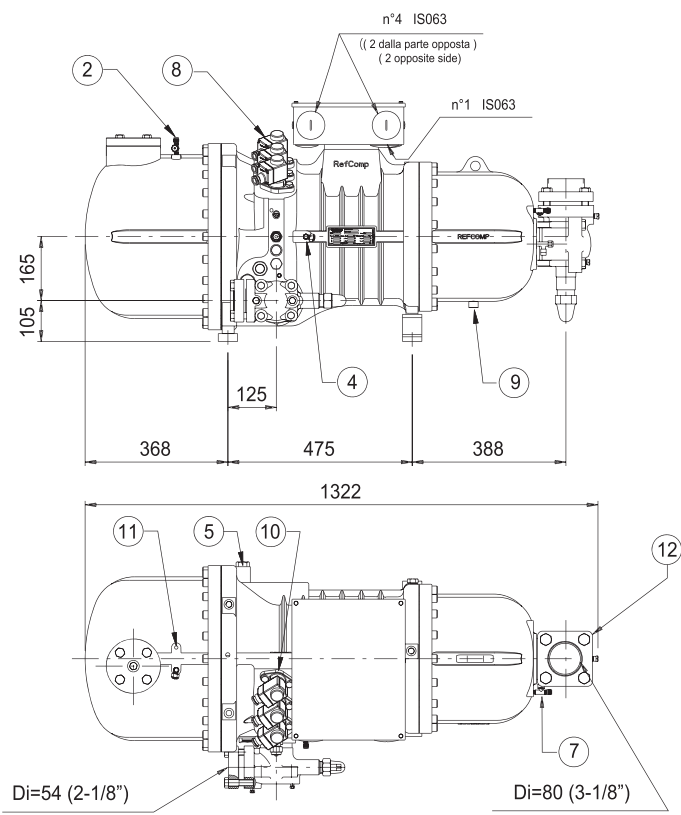
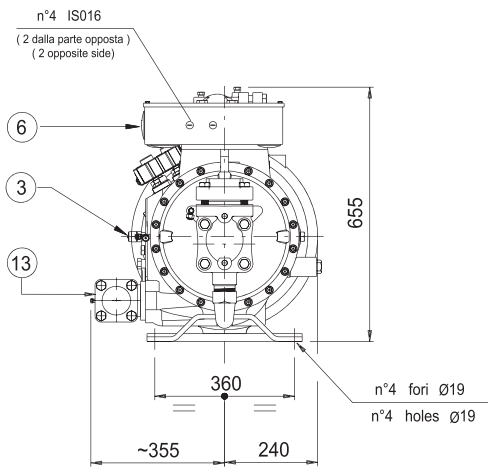


SW1H 7500\_9000  
SW1L 6500\_8000



KEY

- 1) Non return valve
- 2) High pressure gas 1/4" SAE-FLARE
- 3) Oil cooler connections
- 4) Oil pressure 1/4" SAE-FLARE
- 5) Liquid injection Ø 0.63"/economiser Ø0.866" (optional)
- 6) Electrical box
- 7) Low pressure gas 1/4" SAE-FLARE
- 8) Solenoid valves for part-load operation
- 9) Oil drain motor housing 1/4"-18NPT
- 10) Solenoid valves connection (step-less capacity control)
- 11) Discharge temperature sensor 1/8" NPT
- 12) Suction shut-off valve
- 13) Discharge shut-off valve

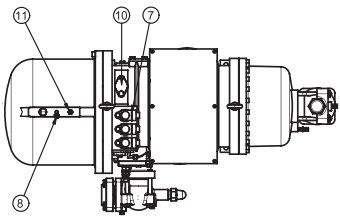
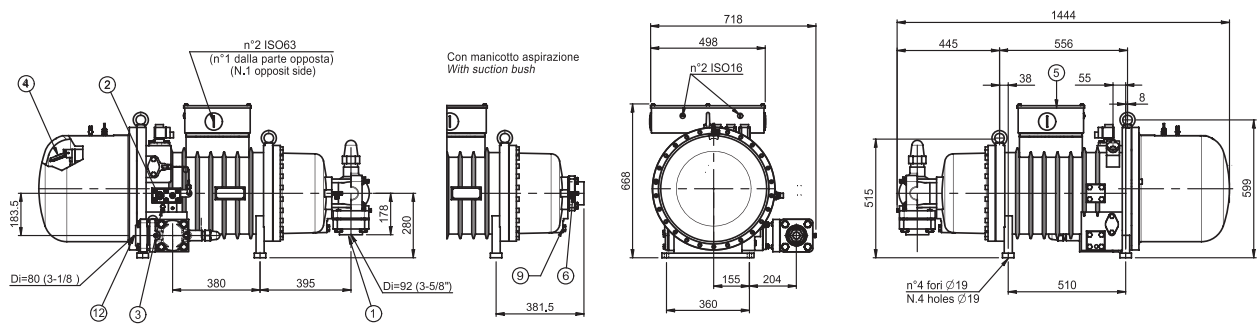


KEY

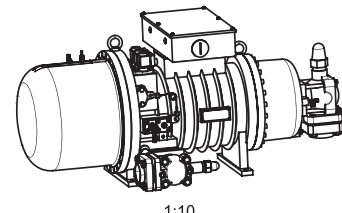
- 1) Non return valve
- 2) High pressure gas 1/4" SAE-FLARE
- 3) Oil cooler connections
- 4) Oil pressure 1/4" SAE-FLARE
- 5) Liquid injection Ø 0.63"/economiser Ø0.866" (optional)
- 6) Electrical box
- 7) Low pressure gas 1/4" SAE-FLARE
- 8) Solenoid valve for part-load operation
- 9) Oil drain motor housing 1/4"-18NPT
- 10) Solenoid valve connection (step-less capacity control)
- 11) Discharge temperature sensor 1/8"NPT
- 12) Suction shut-off valve
- 13) Discharge shut-off valve



SW1H 14000\_16000\_19000  
SW1L 13000\_15000\_17000

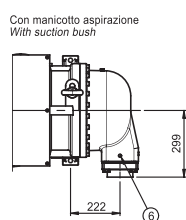
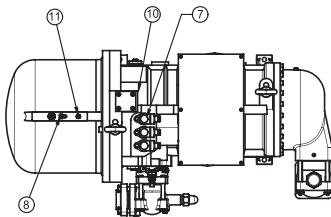
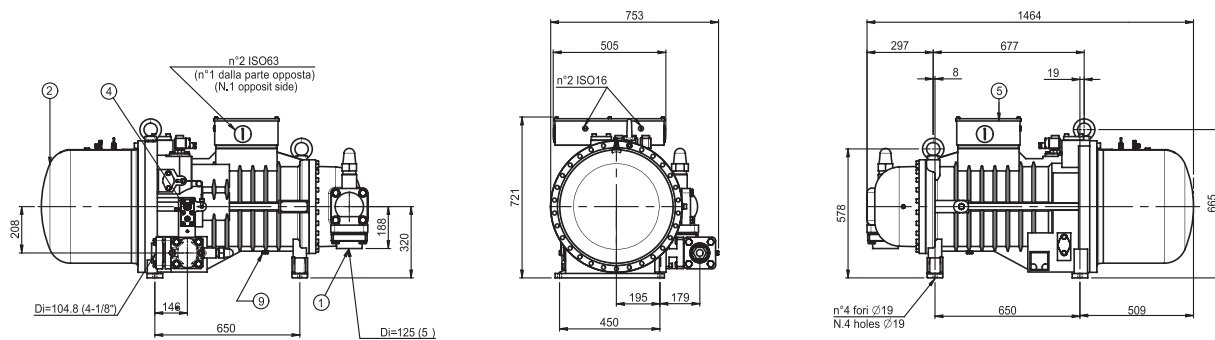


Possible connections	
Ø= Suction	Ø= Discharge
67 (2-5/8")	54 (2-1/8")
76 (2-1/2")	67 (2-5/8")
80 (3-1/8")	76 (2-1/2")
89 (3-3" )	80 (3-1/8")
92 (3-5/8")	

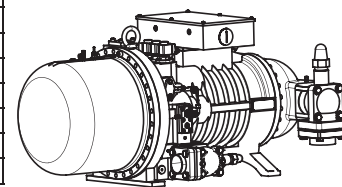


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SW1H 21000\_24000\_25000  
SW1L 20000\_22000\_23000



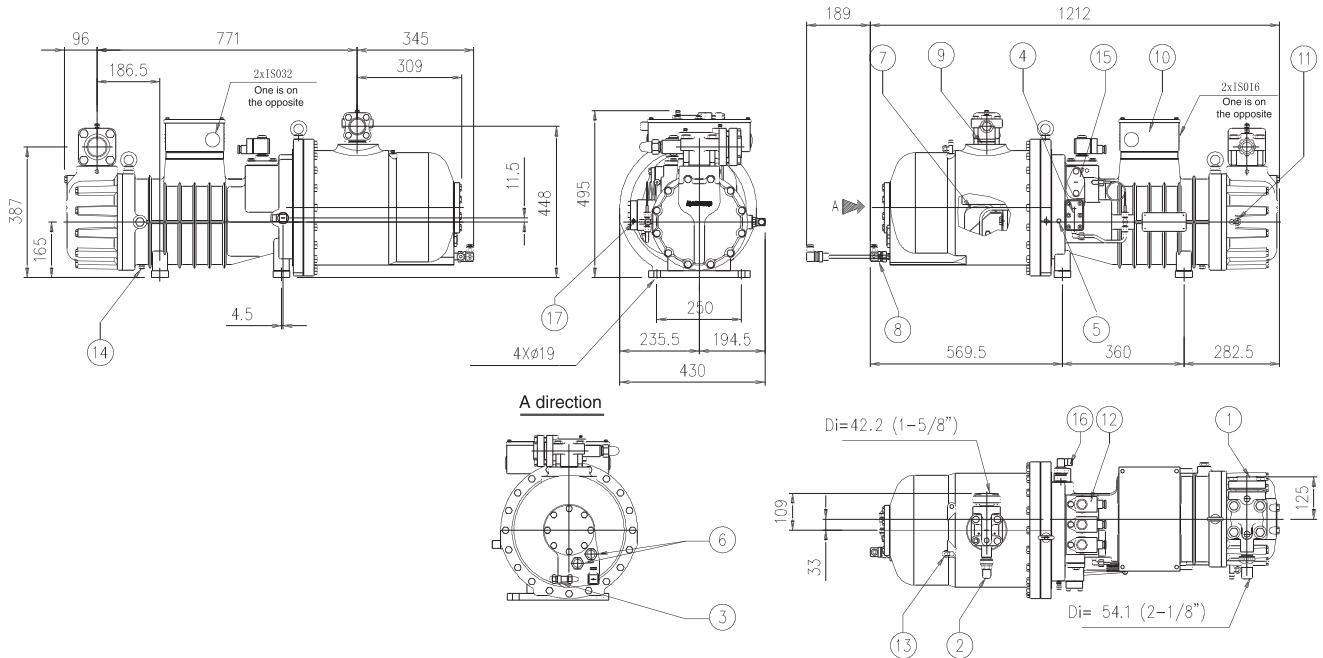
Possible connections	
Ø= Suction	Ø= Discharge
77 ( --- )	54 (2-1/8")
80 (3-1/8")	67 (2-5/8")
89 (3-1/2")	76 (2-1/2")
92 (3-5/8")	80 (3-1/8")
105 (4-1/8")	
108 (4-1/4")	



1:10

KEY

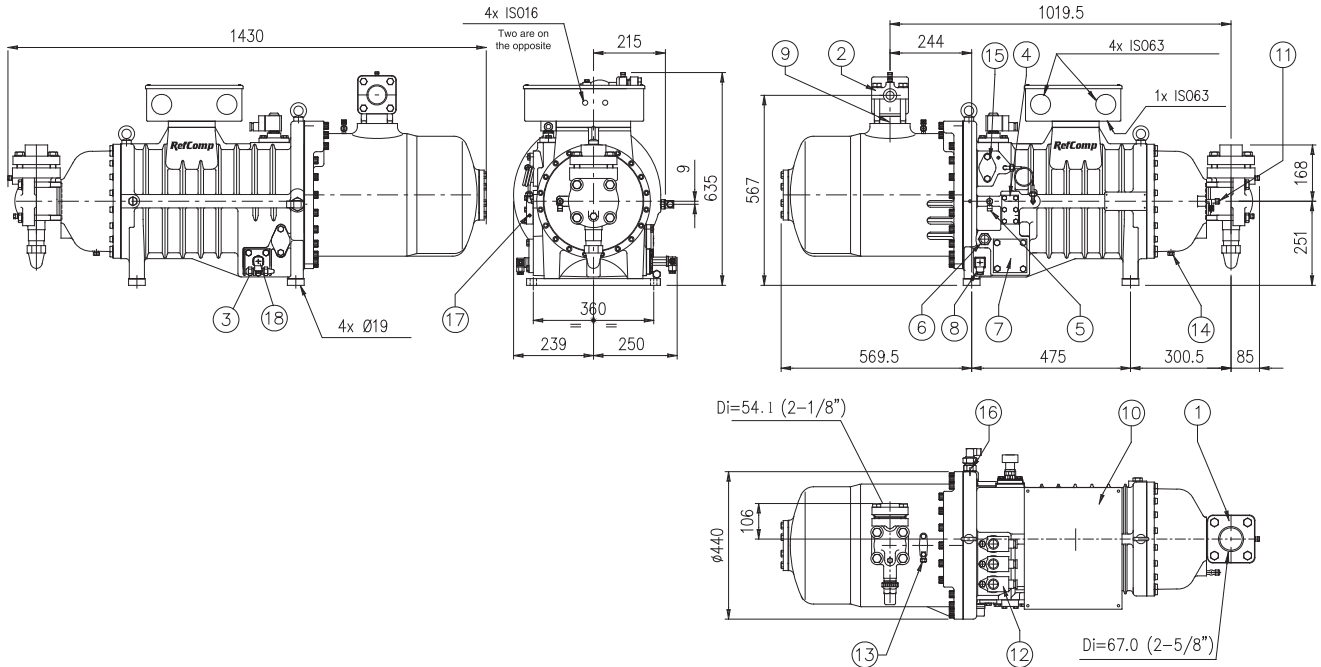
- 1) Suction connection
- 2) Oil line connections
- 3) Oil pressure 1/4" SAE-FLARE
- 4) Non return valve
- 5) Electrical box
- 6) Low pressure gas 1/4" SAE-FLARE
- 7) Solenoid valves for part-load operation.
- 8) High pressure gas 1/4" SAE-FLARE
- 9) Oil drain motor housing M14
- 10) Liquid injection connection Ø28 / Economizer shut-off valve Ø42 (optionals)
- 11) Discharge temperature sensor 1/8" NPT (optionals)
- 12) Discharge connection



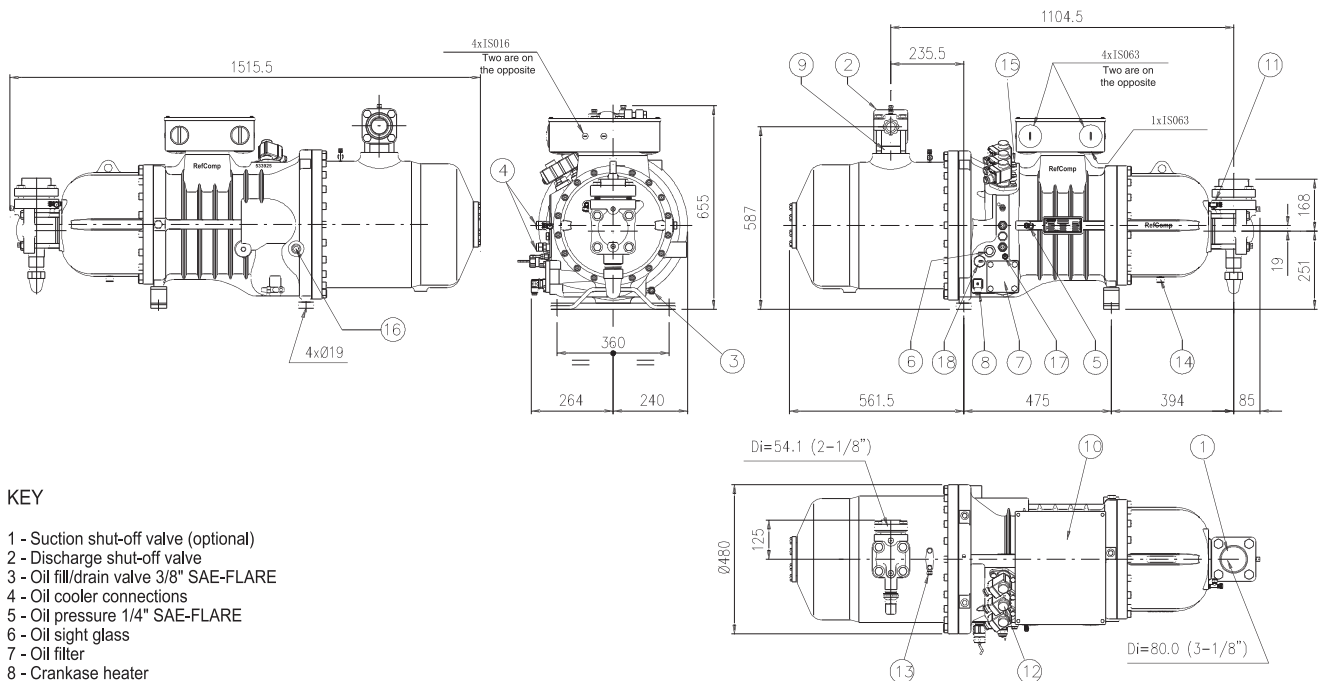
KEY

- 1) Suction shut-off valve (optional)
- 2) Discharge shut-off valve
- 3) Oil fill/drain valve 3/8" SAE-FLARE
- 4) Oil cooler connections (optional)
- 5) Oil pressure 1/4" SAE-FLARE
- 6) Oil sight glass
- 7) Oil filter
- 8) Crankcase heater
- 9) Non return valve
- 10) Electrical box
- 11) Low pressure gas 1/4" SAE-FLARE
- 12) Solenoid valves for part-load operation.
- 13) High pressure gas 1/4" SAE-FLARE
- 14) Oil drain motor housing 1/4"-18 NPT
- 15) Solenoid valve connection (step-less capacity control)
- 16) Liquid injection  $\phi$ 0,63"/economiser  $\phi$ 0,866"(optional)
- 17) Discharge temperature sensor 1/8"NPT (optional)

SWOH 7500\_9000  
SWOL 6500\_8000



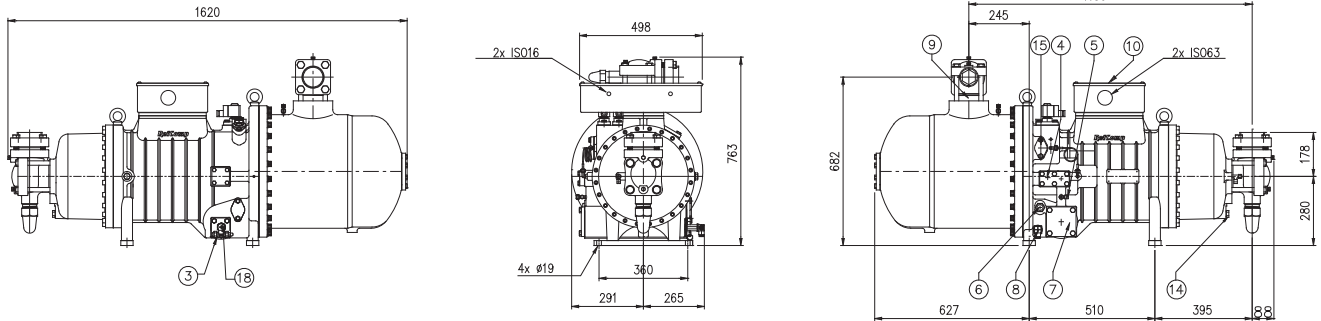
SWOH 10500\_11500\_12500  
SWOL 9500\_10500\_11500



KEY

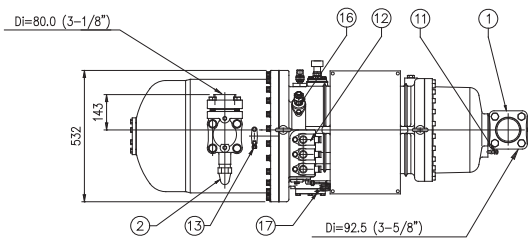
- 1 - Suction shut-off valve (optional)
- 2 - Discharge shut-off valve
- 3 - Oil fill/drain valve 3/8" SAE-FLARE
- 4 - Oil cooler connections
- 5 - Oil pressure 1/4" SAE-FLARE
- 6 - Oil sight glass
- 7 - Oil filter
- 8 - Crankcase heater
- 9 - Non return valve
- 10 - Electrical box
- 11 - Low pressure gas 1/4" SAE-FLARE
- 12 - Solenoid valves for part-load operation.
- 13 - High pressure gas 1/4" SAE-FLARE
- 14 - Oil drain
- 15 - Solenoid valve connection (step-less capacity control)
- 16 - Liquid injection Ø0,63"/economiser Ø0,866"(optional)
- 17 - Discharge temperature sensor 1/8"NPT (optional)
- 18 - Oil level control (optional)

SWOH 14000\_16000\_19000  
SWOL 13000\_15000\_17000

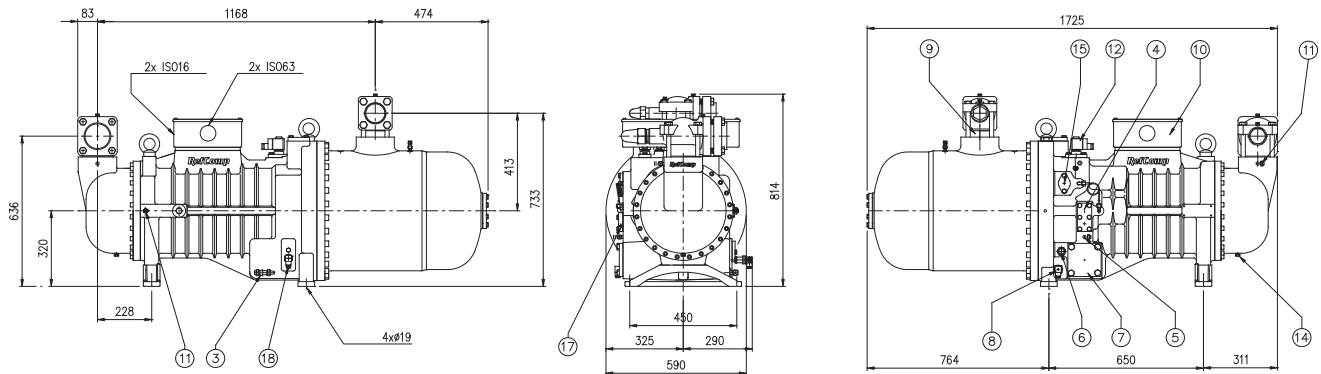


KEY

- 1) Suction shut-off valve (optional)
- 2) Discharge shut-off valve
- 3) Oil fill/drain valve 3/8" SAE-FLARE
- 4) Oil cooler connections (optional)
- 5) Oil pressure 1/4" SAE-FLARE
- 6) Oil sight glass
- 7) Oil filter
- 8) Crankcase heater
- 9) Non return valve
- 10) Electrical box
- 11) Low pressure gas 1/4" SAE-FLARE
- 12) Solenoid valves for part-load operation.
- 13) High pressure gas 1/4" SAE-FLARE
- 14) Oil drain motor housing M16
- 15) Solenoid valve connection (step-less capacity control)
- 16) Liquid injection  $\varnothing 0,866$ "/economiser  $\varnothing 1,102$ " (optional)
- 17) Discharge temperature sensor 1/8"NPT (optional)
- 18) Oil level control (optional)

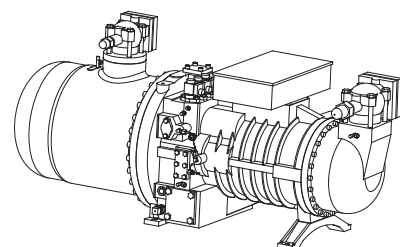
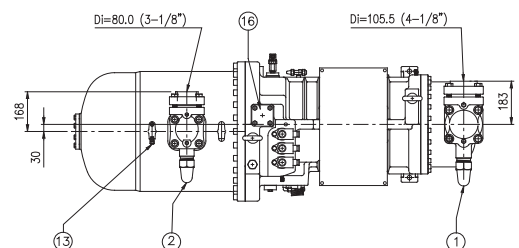


SWOH 21000\_24000\_25000  
SWOL 20000\_22000\_23000



KEY

- 1) Suction shut-off valve (optional)
- 2) Discharge shut-off valve
- 3) Oil fill/drain valve 3/8" SAE-FLARE
- 4) Oil cooler connections (optional)
- 5) Oil pressure 1/4" SAE-FLARE
- 6) Oil sight glass
- 7) Oil filter
- 8) Crankcase heater
- 9) Non return valve
- 10) Electrical box
- 11) Low pressure gas 1/4" SAE-FLARE
- 12) Solenoid valves for part-load operation.
- 13) High pressure gas 1/4" SAE-FLARE
- 14) Oil drain motor housing 1/4"-18 NPT
- 15) Solenoid valve connection (step-less capacity control)
- 16) Liquid injection  $\varnothing 1,653$ "/economiser  $\varnothing 1,653$ " (optional)
- 17) Discharge temperature sensor 1/8"NPT (optional)
- 18) Oil level control (optional)











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