

# SRMTEC

## PRODUCT GUIDE

HVAC-R compressors  
for commercial and industrial applications

[www.srmtec.it](http://www.srmtec.it)



## ADVANCED COMPRESSOR TECHNOLOGIES

The SRMTec brand represents the most complete range of screw and reciprocating compressors for commercial and industrial applications, straight from Europe's newest manufacturing facilities.

Our technologically innovative solutions are backed by expert support on every continent worldwide.



MADE IN ITALY

New production facility in Italy



CONTINUOUS INNOVATION

The most advanced technologies  
for HVAC-R compressors



# COMPRESSOR RANGE

## 1 Semi-hermetic reciprocating compressors

Piston compressors with 2, 4, 6 or 8 cylinders. Low and High evaporating temperatures. Applications: commercial, industrial refrigeration.

Range	Displacement (m <sup>3</sup> /h at 50Hz)	Motor Power (HP)	Refrigerants	Configuration	Temperature Low High	Page
RP1/RP2	4,2 to 222	1 to 70	Freon	Single stage	● ●	8
SP1	1,5 to 48,5	0,5 to 30	CO <sub>2</sub>	Subcritical	●	10
TP1	4,4 to 25,5	6 to 40	CO <sub>2</sub>	Transcritical	● ●	12
PP1/PP2	17,5 to 222	3 to 70	Propane	Single stage	● ●	14
DP1	27,6 to 51,5	12 to 30	Standard	Double stage	●	16

## 2 Semi-hermetic compact screw compressors (with oil separator)

Compact screw compressor, mainly for high evaporating temperatures. Applications: air conditioning, chillers, heat pump, cooling process.

Range	Displacement (m <sup>3</sup> /h at 50Hz)	Motor Power (HP)	Refrigerants	Configuration	Temperature Low High	Page
ES3	270 to 1100	70 to 300	Freon	High efficiency	●	18
RS3	118 to 1100	30 to 390	Freon	Multipurpose	●	20
RS5	365 to 1150	100 to 400	Freon	Very high efficiency	●	22
IS3	378 to 1540	100 to 420	Freon	Internal inverter	●	24
PS3	118 to 1100	40 to 390	Propane	HC optimized	●	26
SRS-C	140 to 550	70 to 180	Ammonia	High separation	● ●	28

## 3 Semi-hermetic screw compressors (without oil separator)

Compact screw compressor low temperatures. Applications: marine refrigeration, industrial refrigeration, cold chain logistics, ultra-low temperature refrigeration and high temperature ammonia heat pumps.

Range	Displacement (m <sup>3</sup> /h at 50Hz)	Motor Power (HP)	Refrigerants	Configuration	Temperature Low High	Page
SRS	84 to 608	22 to 134 kW	Ammonia	Single-stage	●	29
RW3	118 to 700	30 to 250 HP	Freon	Versatile	●	30
RW5	85 to 500	20 to 150 HP	Freon	High efficiency	●	32
SRS 2-stage	141 to 652	29 to 155 kW	Ammonia	Two-stage	●	34

# At 50Hz for RW, at 3600rpm for SRS

## 4 Open-drive screw compressors

High pressure versions, ideally suited for industrial refrigeration and heat pump applications. All models can have stepless capacity control.

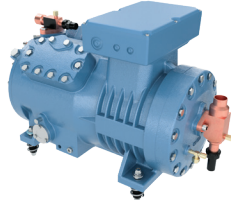
Range	Displacement (m <sup>3</sup> /h at 50Hz)	Max Speed (rpm)	Refrigerants	Configuration	Temperature Low High	Page
SRM	265 to 6350	3600 to 6000	Ammonia	Single stage	●	35
SRM 2-stage	652 to 5090	3000 to 3600	Ammonia	Two stage	●	36
SRH	161 to 1409	3600 to 4200	Ammonia	High pressure	●	37

# COMPRESSOR RANGE

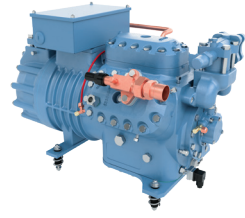
## 1 Semi-hermetic reciprocating compressors



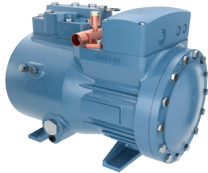
RP2 - Standard Refrigerant



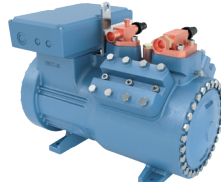
RP1 - Standard Refrigerant



DP1 - Double Stage



 SP1 - Co2 Subcritical

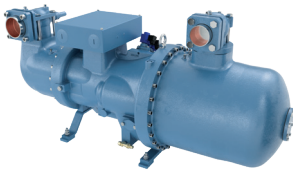


 TP1 - Co2 Transcritical

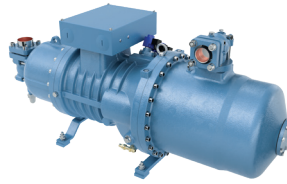


 PP1 - Hydrocarbons

## 2 Semi-hermetic compact screw compressors (with oil separator)



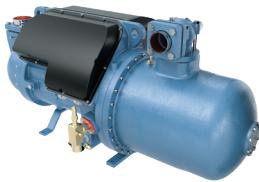
ES3 - R134a Optimized



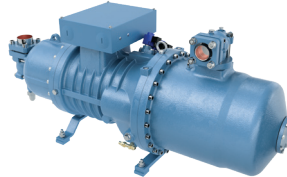
RS3 - Standard Refrigerant



RS5 - High Efficiency



IS3 - Inverter



 PS3 - Hydrocarbons



 SRS-C - Ammonia

## 3 Semi-hermetic screw compressors (without oil separator)



RW3 - Standard Refrigerant



RW5 - High Efficiency

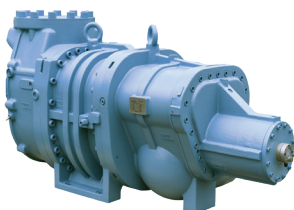


 SRS - Ammonia



 SRS 2 STAGE - Ammonia

## 4 Open-drive screw compressors



 SRM - Ammonia



 SRM 2 - Ammonia



 SRH - Ammonia

# DISPLACEMENT AND POWER



## STANDARD REFRIGERANTS

### 1 Semi-hermetic reciprocating compressors

Page

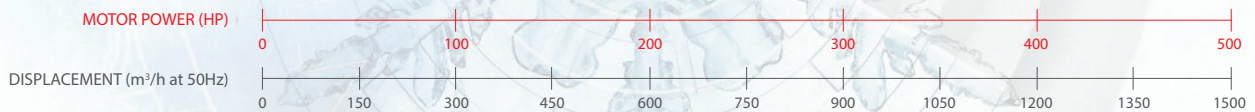
RP1/RP2 (Single stage)		8
DP1 (Double stage)		16

### 2 Semi-hermetic compact screw compressors (with oil separator)

ES3 (high efficiency)		18
RS3 (Multipurpose)		20
IS3 (Internal inverter)		24
RS5 (Very high efficiency)		22

### 3 Semi-hermetic screw compressors (without oil separator)

RW3 (Refrigeration)		30
RW5 (Refrigeration)		32



## GREEN REFRIGERANTS

### 1 Semi-hermetic reciprocating compressors

Page

SP1 (Subcritical CO <sub>2</sub> )		10
TP1 (Transcritical CO <sub>2</sub> )		12
PP1/PP2 (Propane)		14

### 2 Semi-hermetic compact screw compressors (WITH oil separator)

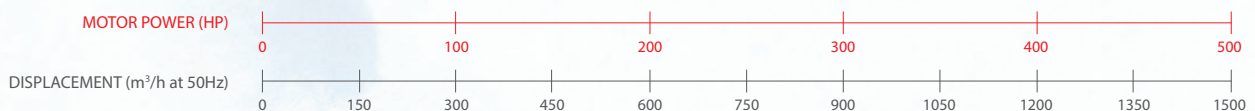
PS3 (Propane)		26
SRS-C (Ammonia)		28

### 3 Semi-hermetic screw compressors (WITHOUT oil separator)

SRS (Ammonia)		29
SRS DOUBLE STAGE (Ammonia double stage)		34

### 4 Open-drive screw compressors

SRM (Ammonia)		35
SRM (Double stage)		36
SRH (Ammonia)		37



# MODEL DESIGNATION

RP2 - H 4 08 - S L 0

• RP2  
Compressor type / series number

• H  
Motor Size  
L = Small size motor / H = Full size motor

• 4  
No. of cylinders

• 08  
Nominal power [Hp]

• F/S  
Specification of lubrication type (where required)  
F: Forced lubrication (with oil gear pump)  
S: Splasher lubrication (without oil gear pump)

• L  
Accessories voltage  
L = Electrical accessories 220V AC 50/60Hz;  
M = Electrical accessories 110V AC 50/60Hz;  
Y = Electrical accessories 24V AC 50/60Hz;  
U = Electrical accessories UL approved 220V AC 50/60Hz (only for S series);  
V = Electrical accessories UL approved 110V AC 50/60Hz (only for S series)

• 0  
Partial load control (0/1/2)  
0 = without steps capacity control;  
1 = 1 steps capacity control (100-50% step) made with 1 solenoid valve (where available);  
2 = 2 steps capacity control (100-66-33% step) made with 2 solenoid valve (where available);

ES3 - H 140 - L 4 H

• ES3  
Compressor type / series number

• H  
Motor Size  
L = Small size motor / H = Full size motor

• 140  
Nominal power [Hp]

• L  
Accessories voltage  
L = Electrical accessories 220V AC 50/60Hz;  
M = Electrical accessories 110V AC 50/60Hz;  
Y = Electrical accessories 24V AC 50/60Hz;  
U = Electrical accessories UL approved 220V AC 50/60Hz (only for S series);  
V = Electrical accessories UL approved 110V AC 50/60Hz (only for S series)

• 4  
Partial load control (0/4/Z)  
0 = without steps capacity control;  
4 = 4 steps capacity control (100-75-50% - minimum step) made with 3 solenoid valves, only for S series;  
Z = Infinite capacity control (from minimum capacity to 100% or from 50 to 100%), only for S series;

• H  
High compression ratio version (if required)

## RP1 / RP2

### Semi-hermetic reciprocating Compressor

For standard Refrigerants

#### Refrigerants

- Standard refrigerants: R22, R134a, R407C, R404A, R507A, R1233ze, R448A, R449A, R1233zde



#### Applications

- Low and high evaporating temperatures: refrigeration, liquid chiller, heat pumps, process cooling, supermarkets cells, refrigerated counter

#### Key advantages

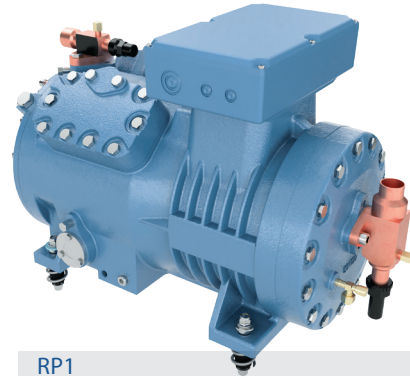
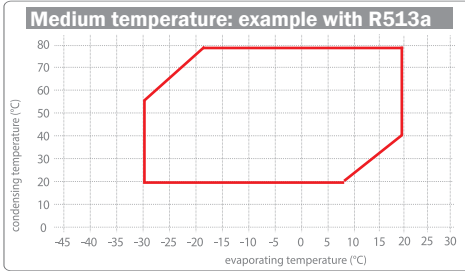
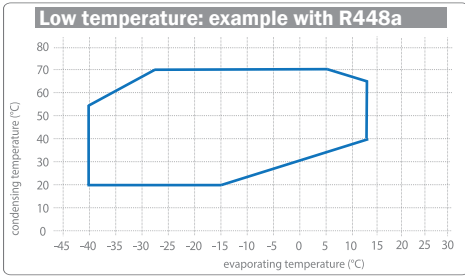
- Low noise and vibrations: internal chambers and volumes dampening pressure pulsations
- Superior compression efficiency: "Computational Fluid Dynamics" (CFD) optimized reed valves
- Advanced oil management system
- Reliability: long life sleeve bearings
- In addition, for RP2:
  - Ultra-compact design: most compact dimensions in its power range
  - Heavy loads: 30+ bars

Options						1	2	3	4	5	6	7
Model	Displacement (m <sup>3</sup> /h @ 50Hz)	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Version with oil pump (-F)	Electrical Motor	Motor with special voltage	Motor with DUAL voltage	SU device + discharge temperature sensor	Crankcase heater	1 x Capacity control head with coil	
2 cylinder	RP2-H2010-S*	4,2	37*20*28	47	-	400V Y - 230V D/3/50Hz - 440V/3/60Hz Y	0	0	-	0	-	
	RP2-H2015-S	5,4	37*20*28	48,7	-		0	0	-	0	-	
	RP2-H2020-S	6,7	37*20*28	50,7	-		0	0	-	0	-	
	RP2-H2021-S	8,2	37*20*28	50,3	-		0	0	-	0	-	
	RP2-H2030-S	9,8	44*25*32	108,4	-		0	0	-	0	-	
	RP2-H2031-S	11,6	44*25*32	73,8	-		0	0	-	0	-	
	RP2-H2035-S	13,6	44*25*32	77,5	-		0	0	-	0	-	
	RP2-H2040-S	16,5	44*25*32	79,7	-		0	0	-	0	-	
4 cylinder	RP2-H405-S	19,3	45*29*29	84	-		400V/3/50Hz-440V/3/60Hz PW	0	0	-	0	-
	RP2-H406-S	23,1	45*29*29	84,5	-			0	0	-	0	-
	RP2-H407-S	27,3	48*29*29	89,5	-			0	0	-	0	-
	RP2-H409-S	33,1	48*29*29	92	-			0	0	-	0	-
	RP1-H410-S	35	65*34*40	143	0			0	0	0	0	0
	RP1-H412-S	42	65*34*40	146	0			0	0	0	0	0
	RP1-H415-S	49	68*44*40	152	0			0	0	0	0	0
	RP1-H420-S	56	68*44*40	155	0			0	0	0	0	0
RP1-H422-F**	64,7	72*51*46	193	S	0	0		0	0	0		
RP1-H425-F	75	72*51*46	206	S	0	0		0	0	0		
RP1-H430-F	86,1	72*51*46	209	S	0	0		0	0	0		
RP1-H435-F	102,9	72*51*46	238	S	0	0		0	0	0		
6 cylinder	RP1-H637-F	112,5	81*56*50	241	S	0		0	0	0	0	
	RP1-H640-F	129,1	81*56*50	246	S	0		0	0	0	0	
	RP1-H650-F	154,4	79*56*50	250	S	0		0	0	0	0	
8 cylinder	RP1-H860-F	186	91*51*54	537	S	0		0	-	0	0	
	RP1-H870-F	222	91*51*54	537	S	0	0	-	0	0		

\*S: Splasher \*\*F: Forced oil lubrication  
 H-Motor for high evaporating temperatures  
 L-Motor for low evaporating temperatures - In Option



# 1. SEMI-HERMETIC RECIPROCATING COMPRESSORS



RP1



RP2

## Standard extent of delivery

- Pressure relieve valve
- Sight glass
- Lubrication oil
- Motor PTC temp sensor
- Nitrogen protection
- Nitrogen protection
- Motor protector
- IP54 electrical box

8	9	10	11	12	13	14	15	16	17	18	19	20	21
2 x Capacity control head with coil	Additional fan	Liquid injection kit with LCM module	Electronic oil pressure safety switch, not mounted	Opto-electronic oil sensor	Discharge temperature sensor	Oil & Gas equalizing fittings for parallel operation	Oil service valve	Suction shut-off valve	Discharge shut-off valve	Rubber vibration dampers	Spring vibration dampers	Kit bridges for d.o.l. start	Special wooden package
-	0	-	-	0	0	0	0	S	S	S	-	-	0
-	0	-	-	0	0	0	0	S	S	S	-	-	0
-	0	-	-	0	0	0	0	S	S	S	-	-	0
-	0	-	-	0	0	0	0	S	S	S	-	-	0
-	0	-	-	0	0	0	0	S	S	S	-	-	0
-	0	-	-	0	0	0	0	S	S	S	-	-	0
-	0	-	-	0	0	0	0	S	S	S	-	-	0
-	0	-	-	0	0	0	0	S	S	S	0	-	0
-	0	-	-	0	0	0	0	S	S	S	0	-	0
-	0	-	-	0	0	0	0	S	S	S	0	-	0
-	0	0	-	0	0	0	0	S	S	-	S	0	0
-	0	0	-	0	0	0	0	S	S	-	S	0	0
-	0	0	-	0	0	0	0	S	S	-	S	0	0
-	0	0	-	0	0	0	0	S	S	-	S	0	0
-	0	0	0	0	0	0	0	S	S	-	S	0	0
-	0	0	0	0	0	0	0	S	S	-	S	0	0
-	0	0	0	0	0	0	0	S	S	-	S	0	0
-	0	0	0	0	0	0	0	S	S	-	S	0	0
0	0	0	0	0	0	0	0	S	S	-	S	0	0
0	0	0	0	0	0	0	0	S	S	-	S	0	0
0	0	0	0	0	0	0	0	S	S	-	S	0	0
0	-	0	0	0	0	0	0	0	0	S	0	0	0
0	-	0	0	0	0	0	0	0	0	S	0	0	0

## SP1 Semi-hermetic reciprocating Compressor

CO2 Subcritical 

### Refrigerants

- CO2

### Applications

- Refrigeration and low evaporating temperatures

### Key advantages


- Low noise and vibrations: internal chambers and volumes dampening pressure pulsations
- Innovative piston heads: reduced internal discharge-to-suction heat transfer
- “Computational Fluid Dynamics” optimized reed valves, for superior compression efficiency
- Compact design
- Suitable for heavy loads: shaft, body and all components designed for up to 50 bars working pressure
- Advanced oil management system, high efficiency splasher with anti-foaming design
- Reliability: long life sleeve bearings

Developed for low GWP CO2 and for operation in subcritical applications, with displacements from 1,5 to 48,5 m3/h and motor powers spanning 0,5-30HP. Typically used for cascade and 2-stage compound systems.

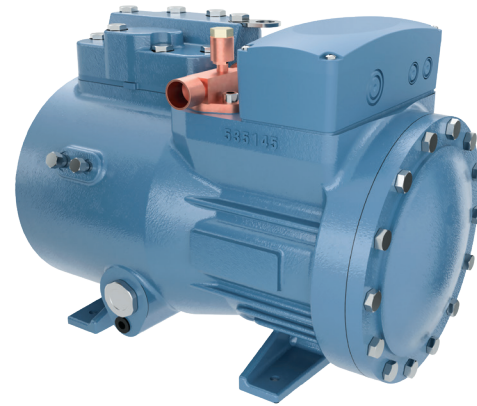
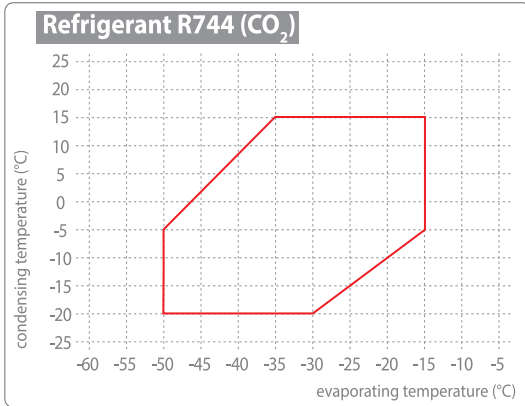
Available in 2 or 4 cylinder configurations for low and medium temperature applications.

Options						1	2	3	4
Model	Displacement (m3/h @ 50Hz)	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Version with oil pump (-F)	L-Motor (for low evaporating temperatures)	Electrical Motor	Motor with special voltage	
2 cylinder	SP1-H2005-S*	1,5	0,5	37*20*30	47	-	-	400V/3/50Hz-440V/3/60Hz PW	0
	SP1-H2007-S	1,8	0,7	37*20*30	47	-	-		0
	SP1-H2008-S	2,3	0,7	37*20*30	48	-	-		0
	SP1-H2010-S	2,8	1	37*20*30	48	-	-		0
	SP1-H2020-S	3,6	2	37*20*30	50	-	-		0
	SP1-H2030-S	4,5	3	37*20*30	50	-	-		0
	SP1-H2031-S	5,5	3	39*20*30	52	-	-		0
	SP1-H2040-S	6,7	4	39*20*30	52	-	-		0
	SP1-H2041-S	7,8	4	44*26*35	78	-	-		0
	SP1-H2050-S	9,2	5	44*26*35	80	-	-		0
SP1-H2060-S	11,2	6	46*26*35	84	-	-	0		
4 cylinder	SP1-H4070-S	13	7	51*32*40	97	-	-	0	
	SP1-H4090-S	15,6	9	51*32*40	98	-	-	0	
	SP1-H4100-S	18,4	10	53*31*40	103	-	-	0	
	SP1-H4120-S	22,3	12	53*31*40	103	-	-	0	
	SP1-H4150-S	28,7	15	22*34*41	158	-	-	0	
	SP1-H4200-S	34,7	20	22*34*41	162	-	-	0	
	SP1-H4250-S	41,3	25	77*34*41	172	-	-	0	
	SP1-H4300-S	48,5	30	77*34*41	175	-	-	0	

\*S: Splasher oil lubrication

 H-Motor for high evaporating temperatures

# 1. SEMI-HERMETIC RECIPROCATING COMPRESSORS



## Standard extent of delivery

- Pressure relieve valve
- Sight glass
- Lubrication oil
- Motor PTC temp sensor
- Suction & Discharge shut-off valves
- Motor protector IN69B2
- IP54 electrical box
- Nitrogen protection
- DOL starting connections

5	6	7	8	9	10	11	12	13	14	15
SU device + discharge temperature sensor	Crankcase heater	PAGO oil charge	Additional fan	Electronic oil pressure safety switch, not mounted	Opto-electronic oil sensor	Discharge temperature sensor	Oil service valve	Rubber vibration dampers	Spring vibration dampers	Special wooden package
-	0	0	0	-	0	0	0	S	0	0
-	0	0	0	-	0	0	0	S	0	0
-	0	0	0	-	0	0	0	S	0	0
-	0	0	0	-	0	0	0	S	0	0
-	0	0	0	-	0	0	0	S	0	0
-	0	0	0	-	0	0	0	S	0	0
-	0	0	0	-	0	0	0	S	0	0
-	0	0	0	-	0	0	0	-	S	0
-	0	0	0	-	0	0	0	-	S	0
-	0	0	0	-	0	0	0	-	S	0
-	0	0	0	-	0	0	0	-	S	0
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-	0	0	0	-	0	0	0	-	S	0
-	0	0	0	-	0	0	0	-	S	0
-	0	0	0	-	0	0	0	-	S	0
-	0	0	0	-	0	0	0	-	S	0
-	0	0	0	-	0	0	0	-	S	0

## TP1

### Semi-hermetic reciprocating Compressor

CO2 Transcritical 

#### Refrigerants:

- CO2

#### Applications:


- Low refrigeration temperatures with natural refrigerant and sub or trans-critical cycles


#### Key advantages

- Low noise and vibrations: internal chambers and volumes dampening pressure pulsations
- Innovative piston heads for reduced internal discharge-to-suction heat transfer
- CFD optimized reed valves for superior compression efficiency
- Compact design
- Suitable for heavy loads: shaft, body and all components designed for up to 140 bars working pressure
- Advanced oil management system, high efficiency splasher with anti-foaming design
- Reliability: long life sleeve bearings

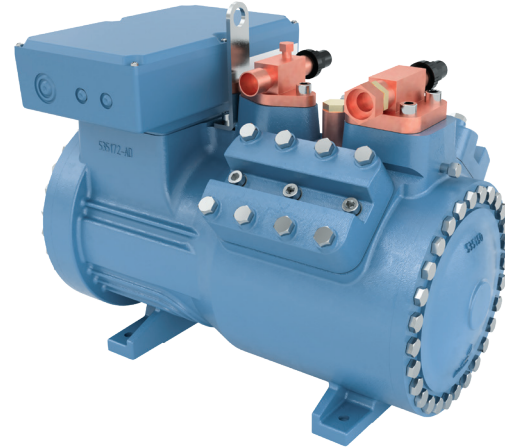
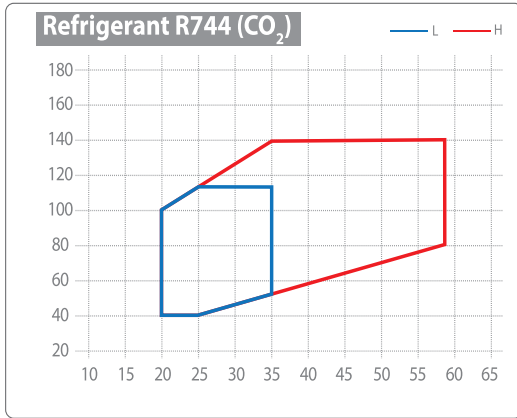
Options		1	2	3	4					
Model	Displacement (m <sup>3</sup> /h @ 50Hz)	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Version with oil pump (-F)	Electrical Motor	Motor with special voltage	SU device + discharge temperature sensor		
L motor	4 cylinder	TP1-L4060-S*	4,4	6	51*31*40	98	-	400V/3/50Hz-440V/3/60Hz PW	0	-
		TP1-L4061-S	5,4	6	51*31*40	100	-		0	-
		TP1-L4070-S	6,6	7	51*31*40	103	-		0	-
		TP1-L4071-S	8	7	51*31*40	110	-		0	-
		TP1-L4090-S	9,6	9	51*31*40	112	-		0	-
		TP1-L4100-S	9,2	10	67*35*41	154	-		0	-
		TP1-L4150-S	11,9	15	67*35*41	158	-		0	-
		TP1-L4200-S	14,4	20	67*35*41	165	-		0	-
		TP1-L4201-S	17,8	20	67*35*41	170	-		0	-
		TP1-L4250-S	21,9	25	72*35*41	182	-		0	-
TP1-L4300-S	25,5	30	72*35*41	188	-	0	-			
H motor	4 cylinder	TP1-H4070-S	4,4	7	51*31*40	102	-	400V/3/50Hz-440V/3/60Hz PW	0	-
		TP1-H4071-S	5,4	7	51*31*40	102	-		0	-
		TP1-H4090-S	6,6	9	51*31*40	109	-		0	-
		TP1-H4091-S	8	9	54*31*40	114	-		0	-
		TP1-H4150-S	9,2	15	67*35*41	158	-		0	-
		TP1-H4200-S	11,9	20	67*35*41	165	-		0	-
		TP1-H4250-S	14,4	25	67*35*41	170	-		0	-
		TP1-H4300-S	17,8	30	72*35*41	182	-		0	-
		TP1-H4370-S	21,9	37	72*35*41	188	-		0	-
		TP1-H4400-S	25,5	40	72*35*41	195	-		0	-

\*S: Splasher oil lubrication

 H-Motor for high evaporating temperatures

 L-Motor for low evaporating temperatures

# 1. SEMI-HERMETIC RECIPROCATING COMPRESSORS



## Standard extent of delivery

- Pressure relieve valve
- Sight glass
- Lubrication oil
- Motor PTC temp sensor
- Suction & Discharge shut-off valves
- Motor protector IN69B2
- IP54 electrical box
- Nitrogen protection
- Spring vibration dampers
- DOL starting connections

5	6	7	8	9	10	11	12	13	14	15
Crankcase heater	PAGO oil charge	Additional fan	Electronic oil pressure safety switch, not mounted	Opto-electronic oil sensor	Discharge temperature sensor	Oil service valve	Suction & Discharge shut-off valve	Rubber vibration dampers	Spring vibration dampers	Special wooden package
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O
O	O	O	-	O	O	O	S	-	S	O

## PP1 / PP2

### Semi-hermetic reciprocating Compressor

For Hydrocarbons Refrigerants 

#### Refrigerants

- Hydrocarbons such as R290 (propane), R600A (isobutane), R1270 (propylene)

#### Applications

- Water coolers, air coolers, heat pumps and medium temperature refrigeration systems

#### Key advantages

- Special reed valves for hydrocarbons gasses, "Computational Fluid Dynamics" (CFD) optimized
- Low noise and vibrations: internal chambers and volumes dampening pressure pulsations
- Suitable for heavy loads: shaft, body and all components designed to work at 30+ bars
- Advanced oil management system, high efficiency splasher with anti-foaming effect, or pump operating even with reduced oil level.
- Long life sleeve bearings
- Advanced sealing materials to avoid refrigerant leakages

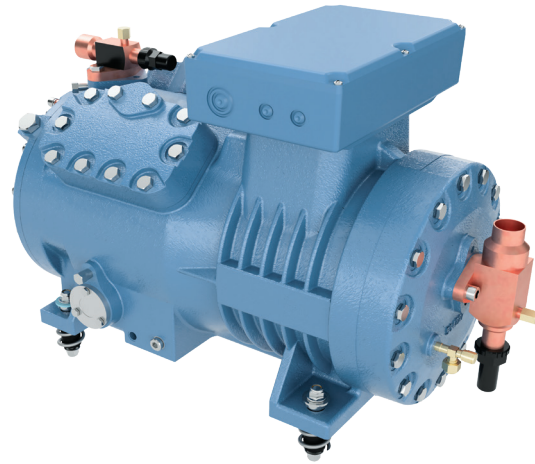
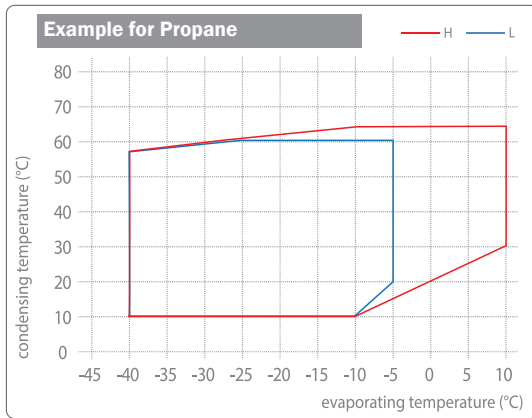
Options		1	2	3	4	5	6	7			
Model	Displacement (m <sup>3</sup> /h @ 50Hz)	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Version with oil pump (-F)	L-Motor (for low evaporating temperatures)	Electrical Motor	Motor with special voltage and with DUAL voltage	SU device + discharge temperature sensor	Crankcase heater	1x Capacity control head with coil
PP2-H405-S*	19,3	5	45*29*29	84	-	0		0	-	0	-
PP2-H406-S	23,1	6	45*29*29	84,5	-	0	400V Y - 230V D/3/50Hz - 440V/3/60Hz Y	0	-	0	-
PP2-H407-S	27,3	8	48*29*29	89,5	-	0		0	-	0	-
PP2-H409-S	33,1	9	48*29*29	92	-	0		0	-	0	-
PP1-H410-S	35	10	65*34*40	143	0	0		0	0	0	0
PP1-H412-S	42	12	65*34*40	146	0	0		0	0	0	0
PP1-H415-S	49	15	68*34*40	152	0	0		0	0	0	0
PP1-H420-S	56	20	68*34*40	155	0	0		0	0	0	0
PP1-H422-F**	64,7	22	73*51*46	193	S	0		0	0	0	0
PP1-H425-F	75	25	73*51*46	206	S	0		0	0	0	0
PP1-H430-F	86,1	30	73*51*46	209	S	0		0	0	0	0
PP1-H435-F	102,9	35	73*51*46	238	S	0		0	0	0	0
PP1-H637-F	112,5	37	81*56*50	241	S	0		0	0	0	0
PP1-H640-F	129,1	40	81*56*50	246	S	0		0	0	0	0
PP1-H650-F	151,4	50	79*56*50	250	S	0		0	0	0	0
PP1-H860-F	186	60	91*51*54	345	S	0		0	-	0	0
PP1-H870-F	222	70	91*51*54	350	S	0		0	-	0	0

H - motor

400V/3/50Hz-440V/3/60Hz PW

\*S: Splasher oil lubrication \*\*F: Forced oil lubrication  
 H-Motor for high evaporating temperatures  
 L-Motor for low evaporating temperatures - In Options

# 1. SEMI-HERMETIC RECIPROCATING COMPRESSORS



## Standard extent of delivery

- Pressure relieve valve
- Sight glass
- Lubrication oil
- Motor PTC temp sensor
- Discharge shut-off valves
- Motor protector (to be mounted in separate box)
- IP54 electrical box
- Nitrogen protection

8	9	10	11	12	13	14	15	16	17	18	19	20	21
2x Capacity control head with coil	1x & 2x Capacity control head with Atex coil	Additional fan	Liquid injection kit with LCM module	Electronic oil pressure safety switch, not mounted	Opto-electronic oil sensor	Discharge temperature sensor	Oil & Gas equalizing fittings for parallel operation	Oil service valve	Suction shut-off valve	Rubber vibration dampers	Spring vibration dampers	Kit bridges for d.o.l. start	Special wooden package
-	-	0	-	-	0	0	0	0	S	S	0	-	0
-	-	0	-	-	0	0	0	0	S	S	0	-	0
-	-	0	-	-	0	0	0	0	S	S	0	-	0
-	-	0	-	-	0	0	0	0	S	S	0	-	0
-	0	0	0	-	0	0	0	0	S	-	S	S	0
-	0	0	0	-	0	0	0	0	S	-	S	S	0
-	0	0	0	-	0	0	0	0	S	-	S	S	0
-	0	0	0	-	0	0	0	0	S	-	S	S	0
-	0	0	0	0	0	0	0	0	S	-	S	0	0
-	0	0	0	0	0	0	0	0	S	-	S	0	0
-	0	0	0	0	0	0	0	0	S	-	S	0	0
0	0	0	0	0	0	0	0	0	S	-	S	0	0
0	0	0	0	0	0	0	0	0	S	-	S	0	0
0	0	0	0	0	0	0	0	0	S	-	S	0	0
0	0	-	0	0	0	0	0	0	0	S	0	0	0
0	0	-	0	0	0	0	0	0	0	S	0	0	0

## DP1

### Double-stage, semi-hermetic reciprocating Compressor

#### For Standard Refrigerants

#### Refrigerants

- Standard refrigerants, such as R404A, R407F, R507A, R448A, R449A

#### Applications


- Low and ultra-low evaporating temperatures

#### Key advantages

- Two consecutive compression stages, able to reach lower temperature and higher compression ratio with enhanced efficiency
- Advanced oil management system, with integrated oil pump and venturi recovery system
- High efficiency oil filter
- Suction and discharge valves made with a specific material for low temperatures

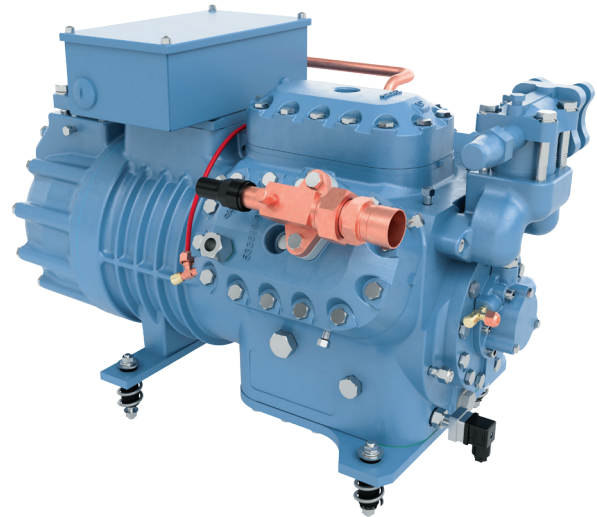
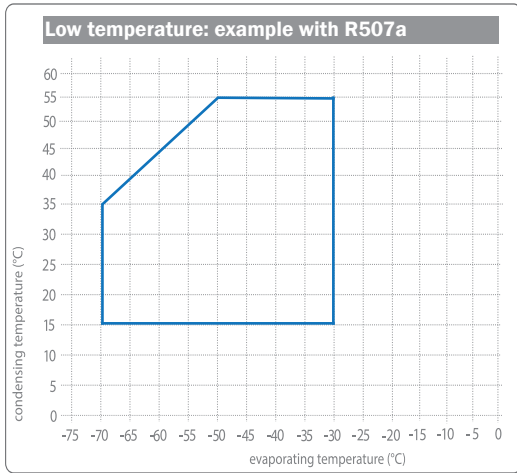
Options		1	2	3	4	5	6				
Model	Displacement (m <sup>3</sup> /h @ 50Hz) 1st stage/2nd stage	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Electrical Motor	Motor with special voltage	SU device + discharge temperature sensor	Crankcase heater	1 x Capacity control head with coil	2 x Capacity control head with coil	
4 cylinder	DP1-L412-F	43,0/27,6	12	72*49*51	197	400V/3/50Hz-440V/3/60Hz PWM	0	-	0	-	-
	DP1-L414-F	51,5/27,6	14	72*49*51	201		0	-	0	-	-
6 cylinder	DP1-L616-F	64,7/32,4	16	82*55*53	205		0	-	0	-	-
	DP1-L620-F	75,0/37,5	20	82*55*53	215		0	-	0	-	-
	DP1-L625-F	86,1/43	25	82*55*53	225		0	-	0	-	-
	DP1-L630-F	102,9/51,5	30	82*55*53	232		0	-	0	-	-

\*\*\*F: Forced oil lubrication

 L-Motor for low evaporating temperatures



# 1. SEMI-HERMETIC RECIPROCATING COMPRESSORS



## Standard extent of delivery

- Pressure relieve valve
- Sight glass
- Lubrication oil
- Motor PTC temp sensor
- Discharge shut-off valves
- Oil Pump
- Motor protector IN69B2
- IP54 electrical box
- Nitrogen protection
- DOL starting connections
- Spring vibration dampers

7	8	9	10	11	12	13	14	15	16	17	18	19
Additional fan	Liquid injection kit with LCM module	Oil pressure safety switch, mounted on bracket	Electronic oil pressure safety switch, not mounted	Opto-electronic oil sensor	Discharge temperature sensor	Oil & Gas equalizing fittings for parallel operation	Oil service valve	Suction & Discharge shut-off valve	Rubber vibration dampers	Liquid sub-cooler, not mounted	Liquid sub-cooler, mounted	Special wooden package
O	O	O	O	-	O	-	O	O	O	O	O	O
O	O	O	O	-	O	-	O	O	O	O	O	O
O	O	O	O	-	O	-	O	O	O	O	O	O
O	O	O	O	-	O	-	O	O	O	O	O	O
O	O	O	O	-	O	-	O	O	O	O	O	O

# ES3

## Semi-hermetic Screw Compressor with oil separator

R134a/R1234yf/R1234ze/R513a Optimized

### Refrigerants

- Standard refrigerants optimized for R134a and HFO refrigerants, such as R1234yf, R1234ze, R513A, R450

### Application

- AC, data center, flooded evaporator and/or high condensing temperature applications

### Key advantages

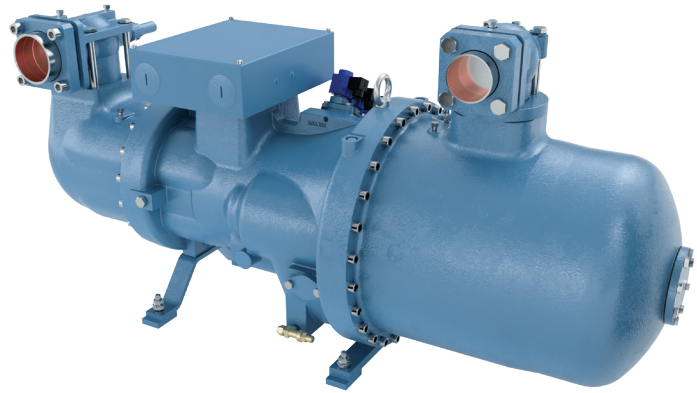
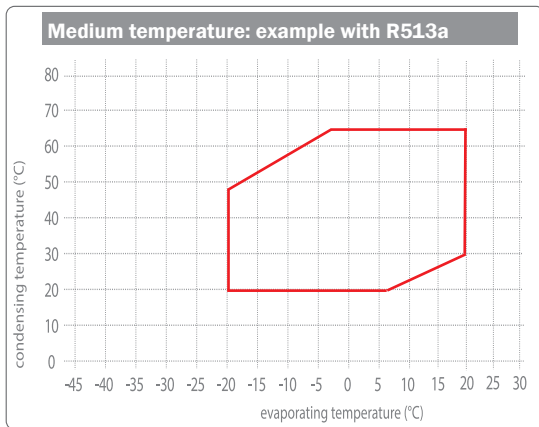
- Compact dimensions
- Standard Vi: 3,2; optional Vi: 2,2 - 2,6 - 4,4
- Easy maintenance: accessible refrigerant and oil filters, integrated oil cooling connections
- Internal Capacity control system: step or stepless
- Modern rotor profile for higher specific displacement
- Integral check valve with negligible pressure drop
- Electronic motor protection with 6 PTC sensors
- Suitable for variable speed operations with external inverter

Options					1	2	3	4	5	6
Model	Displacement (m3/h @ 50Hz)	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Electrical Motor	Motor with special voltage	Permanent magnet motor	Kit connection for liquid injection without Solenoid Valve	Kit ECO connection with shut-off valve	Suction Shut-off valve
ES3-L070	270	70	139*50*66	510	400V/3/50Hz- 440V/3/60Hz PW	0	0	0	0	0
ES3-L080	307	80	139*50*66	518		0	0	0	0	0
ES3-L090	344	90	139*50*66	532		0	0	0	0	0
ES3-L100	380	100	139*50*66	538		0	0	0	0	0
ES3-L110	413	110	154*53*77	660		0	0	0	0	0
ES3-L120	480	120	154*53*77	670		0	0	0	0	0
ES3-L140	560	140	154*53*77	680	400V/3/50Hz - 440V/3/60Hz YD	0	0	0	0	0
ES3-L160	640	160	178*62*82	930		0	0	0	0	0
ES3-L180	720	180	178*62*82	940		0	0	0	0	0
ES3-L210	805	210	178*62*82	950		0	0	0	0	0
ES3-L220	850	220	178*62*82	980		0	0	0	0	0
ES3-L240	910	240	209*70*88	1330		0	0	0	0	0
ES3-L270	1000	270	209*70*88	1350		0	0	0	0	0
ES3-L300	1100	300	209*70*88	1390		0	0	0	0	0

L - motor

— L-Motor for low evaporating temperatures

## 2. SEMI-HERMETIC COMPACT SCREW COMPRESSORS (WITH OIL SEPARATOR)



### Standard extent of delivery

- Built-in volumetric ratio  $V_i=3,2$
- Suction side solder connection
- Integrated discharge check valve
- Integrated safety relief valve
- Flanged-on oil separator
- Discharge Shut-off valve
- Kit oil cooling connection
- Electronic protection device INT69SNY
- Oil filter, oil charge/drain valve
- Oil charge POE170
- Capacity control
- Electrical motor with 6 PTC temperature sensors embedded
- Oil sight glasses
- Electrical box with IP54 enclosure class
- Nitrogen protective charge
- Rubber vibration dampers
- Suction bushing (Suction soldering bushing only for ES3-L400/450/500)

7	8	9	10	11	12	13	14	15	16	17
Photoelectric oil level control switch	Kit oil flow switch without INT69 B2	Kit oil flow switch with INT69 B2	Kit conversion from step to stepless capacity control	Kit conversion from stepless to step capacity control	Kit bridges for d.o.l. start	Rubber vibration dampers	Kit Oil Cooling connection	Extra for oversized motor (70°C max condensing temp without ECO)	Extra for R(VI=4.4) Version	Special wooden package
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O
O	O	O	O	O	O	S	S	O	O	O

# RS3

## Semi-hermetic Screw Compressor with oil separator

For Standard Refrigerants

### Refrigerants

- Standard refrigerants R22, R407C, R404A, R507, R1233ze, R448A, R449A, R407F, R134a, R1234yf, R1234ze, R245fa

### Application

- Air conditioning, refrigeration, heat pump, flooded evaporator and/or tropicalized systems

### Key advantages

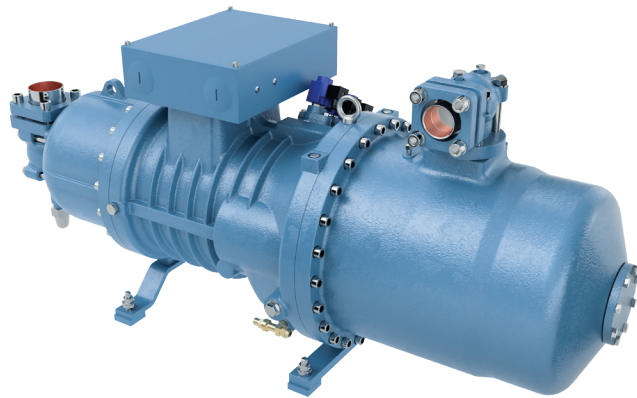
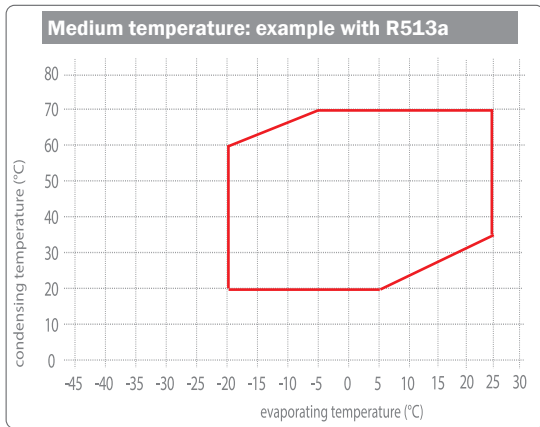
- Compact dimensions
- Four Vi ratio available. Standard Vi: 2,6; optional Vi: 2,2 - 3,2
- Easy maintenance: accessible refrigerant and oil filters, integrated oil cooling connections
- Internal Capacity control system: step or stepless
- Modern rotor profile for higher specific displacement
- Suitable for heavy loads and continuous operations
- Electronic motor protection with 6 PTC sensors
- Suitable for variable speed operations with external inverter
- Long life rolling bearings with low noise operation

Options					1	2	3	4	5	6
Model	Displacement (m3/h @ 50Hz)	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Electrical Motor	Motor with special voltage	Kit motor protector INT69SNY	Kit connection for liquid injection without Solenoid Valve	Kit ECO connection with shut-off valve	Photoelectric oil level control switch
RS3-H040	118	40	121*43*50	325	400V/3/50Hz-440V/3/60Hz PW	O	O	O	O	O
RS3-H050	150	50	121*43*50	330		O	O	O	O	O
RS3-H060	175	60	121*43*50	335		O	O	O	O	O
RS3-H070	205	70	145*44*64	510		O	O	O	O	O
RS3-H080	237	80	145*44*64	515		O	O	O	O	O
RS3-H100	286	100	152*48*66	615		O	O	O	O	O
RS3-H110	318	110	152*48*66	590		O	O	O	O	O
RS3-H120	341	120	152*48*66	625		O	O	O	O	O
RS3-H140	402	140	162*53*76	730	400V/3/50Hz-440V/3/60Hz YD	O	O	O	O	O
RS3-H160	445	160	162*53*76	740		O	O	O	O	O
RS3-H180	510	180	162*53*76	775		O	O	O	O	O
RS3-H200	562	200	173*59*81	1010		O	O	O	O	O
RS3-H220	600	220	173*59*81	1030		O	O	O	O	O
RS3-H240	700	240	173*59*81	1020		O	O	O	O	O
RS3-H280	860	280	178*62*82	980		O	O	O	O	O
RS3-H300	910	300	209*70*88	1400		O	O	O	O	O
RS3-H350	1000	350	209*70*88	1400	O	O	O	O	O	
RS3-H390	1100	390	209*70*88	1400	O	O	O	O	O	

H - motor

H-Motor for high evaporating temperatures

## 2. SEMI-HERMETIC COMPACT SCREW COMPRESSORS (WITH OIL SEPARATOR)



### Standard extent of delivery

- Built-in volumetric ratio  $V_i=2,6$
- Crankcase heater (230V/1/50-60 Hz)
- Integrated discharge check valve
- Integrated safety relief valve
- Flanged-on oil separator
- Electronic protection device INT69SVS
- Oil filter, oil charge/drain valve
- Oil charge POE170
- Capacity control
- Electrical motor with 6 PTC temperature sensors embedded
- Oil sight glasses
- Electrical box with IP54 enclosure class
- Nitrogen protective charge
- Rubber vibration dampers
- Suction & Discharge Shut-off valve

7	8	9	10	11	12	13	14	15	16	17	18
Crankcase heater	Suction & Discharge Shut-off valve	Kit oil flow switch without INT69 B2	Kit oil flow switch with INT69 B2	Oil pressure safety switch-Mechanic	Kit bridges for d.o.l. start	Discharge temperature sensor	Kit conversion from step to stepless capacity control	Kit conversion from stepless to step capacity control	Rubber vibration dampers	Kit Oil Cooling connection	Special wooden package
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	S	O
S	S	O	O	O	O	O	O	O	S	S	O
S	S	O	O	O	O	O	O	O	S	S	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	O	O
S	S	O	O	O	O	O	O	O	S	S	O
S	S	O	O	O	O	O	O	O	S	S	O
S	S	O	O	O	O	O	O	O	S	S	O
S	S	O	O	O	O	O	O	O	S	S	O

# RS5

## High Efficiency, semi-hermetic Screw Compressor with centrifugal oil separator

For standard Refrigerants

### Refrigerants

- Standard refrigerants, such as R22, R407C, R404A, R507, R1233ze, R448A, R449A, R407F, R134a, R1234yf, R1234ze, R245fa

### Application

- Air conditioning, data center, heat pump, flooded evaporator, tropicalized systems

### Key advantages

- The most innovative compressor of the AC range
- Compact dimensions
- Patented automatic compression ratio (Auto-Vi) system to always reach the best compression efficiency even in continuous varying working conditions
- Easy maintenance: accessible refrigerant and oil filters, integrated oil cooling connections, oil flow switch, oil level sensor
- Internal Capacity control system: step and stepless
- Modern rotor profile for higher specific displacement
- Suitable for heavy loads and continuous operations
- Electronic motor protection with 6 PTC sensors
- Suitable for variable speed operations with external inverter
- Long life rolling bearings with low noise operation

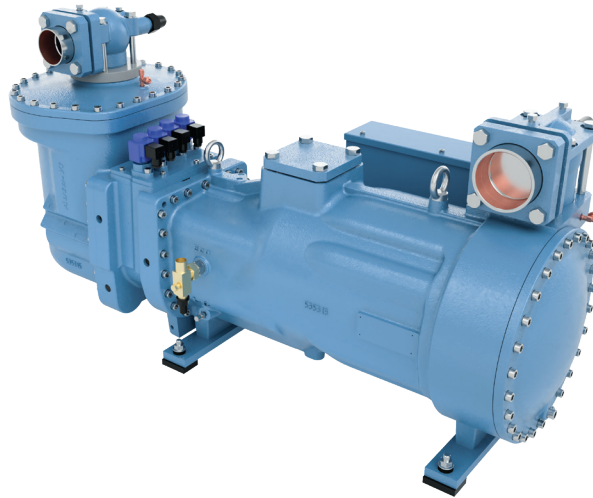
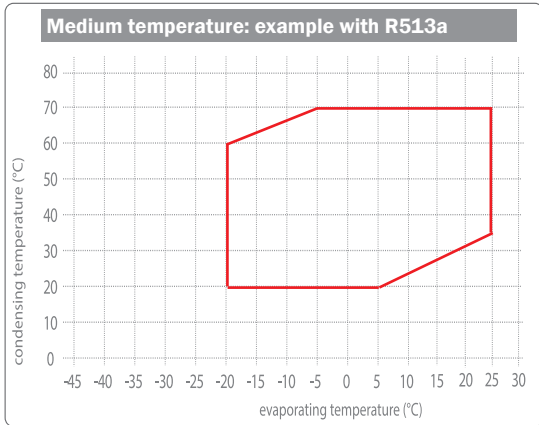
Options										
					1	2	3	4	5	
Model	Displacement (m <sup>3</sup> /h @ 50Hz)	Nominal motor power (HP)	Frame / Size	Length* Width* Height (cm)	Electrical Motor	Motor with special voltage	Kit connection for liquid injection without Solenoid Valve	Kit ECO connection with shut-off valve	Photoelectric oil level control switch	
L - motor	RS5-L100	365	100	4	141*55*74	400V/3/50Hz-440V/3/60Hz PW YD	0	0	0	0
	RS5-L110	415	110	4	141*55*74		0	0	0	0
	RS5-L125	480	120	5	146*61*67		0	0	0	0
	RS5-L140	570	140	5	146*61*67		0	0	0	0
	RS5-L160	620	160	6	164*66*88		0	0	0	0
	RS5-L180	710	180	6	164*66*88		0	0	0	0
	RS5-L210	830	210	7	200*75*101		0	0	0	0
	RS5-L240	930	240	7	200*75*101		0	0	0	0
	RS5-L270	1020	270	8	203*76*106		0	0	0	0
	RS5-L300	1150	300	8	203*76*106		0	0	0	0
H - motor	RS5-H125	365	125	4	141*55*74	400V/3/50Hz-440V/3/60Hz YD	0	0	0	0
	RS5-H140	415	140	4	141*55*74		0	0	0	0
	RS5-H160	480	160	5	146*61*67		0	0	0	0
	RS5-H180	570	180	5	146*61*67		0	0	0	0
	RS5-H210	620	210	6	164*66*88		0	0	0	0
	RS5-H240	710	240	6	164*66*88		0	0	0	0
	RS5-H270	830	270	7	200*75*101		0	0	0	0
	RS5-H300	930	300	7	200*75*101		0	0	0	0
	RS5-H350	1020	350	8	203*76*106		0	0	0	0
	RS5-H400	1150	400	8	203*76*106		0	0	0	0

Additional models are being added to the range, to cover displacements of 365-1150m<sup>3</sup>/h (at 50Hz) and motor powers of 100-400HP.

■ L-Motor for low evaporating temperatures

■ H-Motor for high evaporating temperatures

## 2. SEMI-HERMETIC COMPACT SCREW COMPRESSORS (WITH OIL SEPARATOR)



### Standard extent of delivery

- Built-in variable  $V_i=2,6\div3,5$
- Integrated discharge check valve
- Integrated safety relief valve
- Flanged-on centrifugal oil separator
- Electronic protection device INT69SNY
- Oil sight glasses
- Oil filter, oil charge/drain valve
- Oil charge POE170
- Discharge Shut-off valve
- Electrical motor with 6 PTC temperature sensors embedded
- Kit Oil Cooling connection
- Electrical box with IP54 enclosure class
- Nitrogen protective charge
- Rubber vibration dampers
- Kit conversion from step to stepless capacity control
- Kit conversion from stepless to step capacity control

6	7	8	9	10	11	12	13	14	15
Discharge Shut-off valve	Suction Shut-off valve	Kit oil flow switch without INT69 B2	Kit oil flow switch with INT69 B2	Kit bridges for d.o.l. start	Step and stepless capacity control	Rubber vibration dampers	Kit Oil Cooling connection	Extra for oversized motor (75°C max condensing temp without ECO)	Special wooden package
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O
S	O	O	O	O	S	S	S	O	O

# IS3

## Semi-hermetic Screw Compressor with Inverter with oil separator

For standard Refrigerants

### Refrigerants

- Standard refrigerants optimized for R134a and HFO refrigerants, such as R1234yf, R1234ze, R513A, R450

### Application

- AC, data center, flooded evaporator and/or high condensing temperature applications

### Key advantages

- Compact dimensions
- Integrated inverter with auto-cooling system
- Variable compression ratio (Vi) version available to adapt the compressor operation to system working conditions
- Easy maintenance: accessible refrigerant and oil filters, integrated oil cooling connections
- Modern rotor profile for higher specific displacement
- Integral check valve with negligible pressure drop
- Electronic motor protection with 6 PTC sensors

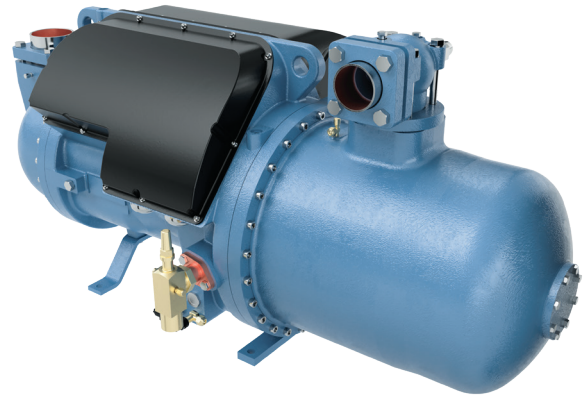
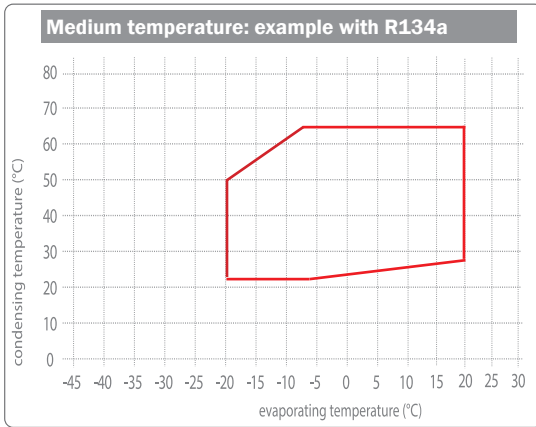
Options					1	2	3
Model	Displacement (m3/h @ 50Hz)	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Optimized electrical motor (400V +/- 10%-3-50 Hz power supply)	Kit connection for liquid injection	Kit ECO connection with shut-off valve
IS3-H100	378	100	143*72*71	560	S	O	O
IS3-H110	430	110	143*72*71	568	S	O	O
IS3-H130	482	130	143*72*71	582	S	O	O
IS3-H140	532	140	143*72*71	588	S	O	O
IS3-H160	578	160	154*77*77	780	S	O	O
IS3-H180	672	180	154*83*77	790	S	O	O
IS3-H220	784	220	154*83*77	800	S	O	O
IS3-H230	896	230	177*82*82	980	S	O	O
IS3-H250	1008	250	177*82*82	990	S	O	O
IS3-H300	1127	300	177*82*82	1000	S	O	O
IS3-H330	1274	330	217*88*82	1380	S	O	O
IS3-H380	1400	380	217*88*82	1410	S	O	O
IS3-H420	1540	420	217*88*82	1460	S	O	O

H - motor

— H-Motor for high evaporating temperatures



## 2. SEMI-HERMETIC COMPACT SCREW COMPRESSORS (WITH OIL SEPARATOR)



### Standard extent of delivery

- Suction side solder connection
- Discharge shut-off valve
- Integrated check valve
- Integrated safety relief valve
- Flanged-on oil separator
- Oil filter, oil charge
- Oil sight glass
- Built-in VFD
- EMC filter (loose)
- Optimized electrical motor (400V +/- 10%-3-50 Hz power supply)
- Electrical motor with 6 PTC sensors managed by the VFD
- Nitrogen protective charge
- Kit rubber vibration dampers
- Electrical box with enclosure class IP 54

4	5	6	7	8	9	10	11	12	13	14
Discharge Shut-off valve	Suction Shut-off valve	Kit oil flow switch without INT69 VS	Kit oil flow switch with INT69 VS	Crankcase heater	Adjustable-Vi system	Rubber vibration dampers	Kit Oil Cooling connection	Extra for oversized motor (70C° max condensing temp without ECO)	Emi filter	Special wooden package
S	O	O	O	S	O	S	S	O	O	O
S	O	O	O	S	O	S	S	O	O	O
S	O	O	O	S	O	S	S	O	O	O
S	O	O	O	S	O	S	S	-	O	O
S	O	O	O	S	O	S	S	O	O	O
S	O	O	O	S	O	S	S	O	O	O
S	O	O	O	S	O	S	S	-	O	O
S	O	O	O	S	O	S	S	O	O	O
S	O	O	O	S	O	S	S	-	O	O
S	O	O	O	S	O	S	S	O	O	O
S	O	O	O	S	O	S	S	-	O	O

# PS3

## Semi-hermetic Screw Compressor with oil separator

For Hydrocarbons Refrigerants 

### Refrigerants

- Propane (R290), R600A, R1270

### Applications


- AC and high evaporating temperatures

### Key advantages

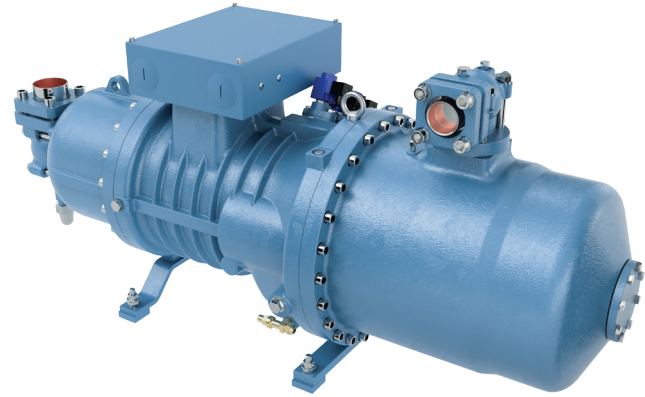
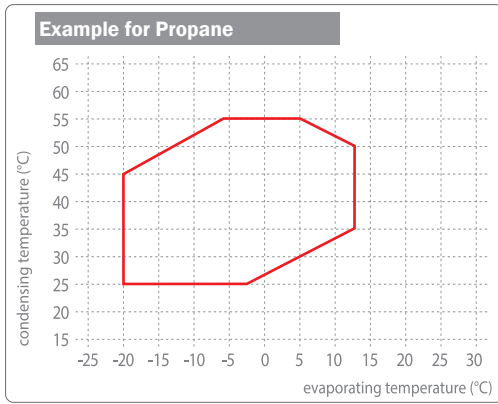
- Compact dimensions
- Four Vi ratio available
- Easy maintenance: accessible refrigerant and oil filters, integrated oil cooling connections
- Modern rotor profile for higher specific displacement
- Suitable for heavy loads and continuous operations
- Electronic motor protection with 6 PTC sensors
- Suitable for variable speed operations with external inverter
- Long life rolling bearings with low noise operation

Options					1	2	3	4	5
Model	Displacement (m3/h @ 50Hz)	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Electrical Motor	Motor with special voltage	Kit connection for liquid injection without Solenoid Valve	Kit ECO connection with shut-off valve	Photoelectric oil level control switch (no Atex)
PS3-H040	118	40	121*43*50	325	400V/3/50Hz-440V/3/60Hz PW	O	O	O	O
PS3-H050	150	50	121*43*50	330		O	O	O	O
PS3-H060	175	60	121*43*50	335		O	O	O	O
PS3-H070	205	70	145*44*64	510		O	O	O	O
PS3-H080	237	80	145*44*64	515		O	O	O	O
PS3-H100	286	100	152*48*66	615		O	O	O	O
PS3-H110	318	110	152*48*66	590	400V/3/50Hz - 440V/3/60Hz YD	O	O	O	O
PS3-H120	341	120	152*48*66	625		O	O	O	O
PS3-H140	402	140	162*53*76	730		O	O	O	O
PS3-H160	445	160	162*53*76	740		O	O	O	O
PS3-H180	510	180	162*53*76	775		O	O	O	O
PS3-H200	562	200	173*59*81	1010		O	O	O	O
PS3-H220	600	220	173*59*81	1030		O	O	O	O
PS3-H240	700	240	173*59*81	1020		O	O	O	O
PS3-H280	860	280	178*62*82	980		O	O	O	O
PS3-H300	910	300	202*70*88	1400		O	O	O	O
PS3-H350	1000	350	202*70*88	1400		O	O	O	O
PS3-H390	1100	390	202*70*88	1400		O	O	O	O

H - motor

 H-Motor for high evaporating temperatures

## 2. SEMI-HERMETIC COMPACT SCREW COMPRESSORS (WITH OIL SEPARATOR)



### Standard extent of delivery

- Built-in volumetric ratio  $V_i=2,6$
- Integrated discharge check valve
- Integrated safety relief valve
- Flanged-on oil separator
- Electronic protection device INT69SNY (to be mounted in Safe Zone)
- Oil filter, oil charge/drain valve
- Oil charge POE170
- Discharge Shut-off valve
- Electrical motor with 6 PTC temperature sensors embedded
- Electrical box with IP54 enclosure class
- Nitrogen protective charge
- Rubber vibration dampers
- Oil sight glasses

6	7	8	9	10	11	12	13	14	15	16	17
Photoelectric oil level control switch IIG Ex	Discharge Shut-off valve	Suction Shut-off valve	Kit oil flow switch without INT69 B2 - No Atex	Kit oil flow switch with INT69 B2 - IIG Ex	Oil pressure safety switch-Mechanic	Kit bridges for d.o.l. start	Kit conversion from step to stepless capacity control	Kit conversion from stepless to step capacity control	Oil charge (shipped separately)	Kit Oil Cooling connection	Special wooden package
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	S	O
O	S	O	O	O	O	O	O	O	O	S	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	O	O
O	S	O	O	O	O	O	O	O	O	S	O
O	S	O	O	O	O	O	O	O	O	S	O
O	S	O	O	O	O	O	O	O	O	S	O
O	S	O	O	O	O	O	O	O	O	S	O

# SRS-C

## Semi-hermetic Screw Compressor With centrifugal oil separator and coalescing filter

For Ammonia 

### Refrigerants

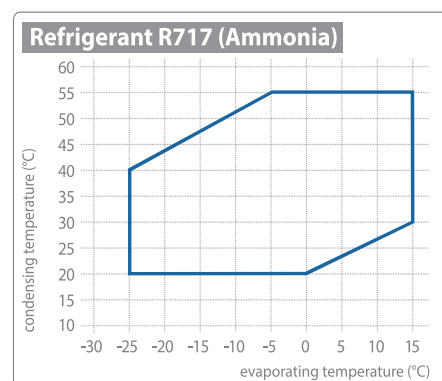
- Ammonia (R717)

### Applications


- Air conditioning, refrigeration, heat pump, flooded evaporator, tropicalized systems

### Key advantages

- Compact dimensions
- Centrifugal oil separator
- Coalescing oil separation stage
- Patented automatic compression ratio (Auto-Vi)
- Easy maintenance: accessible refrigerant and oil filters, integrated oil cooling connections, oil flow switch, oil level sensor
- Internal Capacity control system: step and stepless
- Modern rotor profile for higher specific displacement
- Suitable for heavy loads and continuous operations
- Electronic motor protection with 6 PTC sensors
- Suitable for variable speed operations with external inverter
- Long life rolling bearings with low noise operation



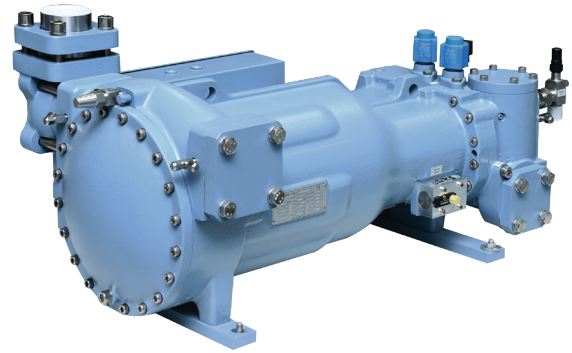
	Model	Nominal motor power (kW)#	Displacement (m <sup>3</sup> /h)#	Housing Size	Length (mm)	Width (mm)	Height (mm)
L - motor	SRS-C-125	54	140	1	120	97	223
	SRS-C-12L	54	175	1	120	97	223
	SRS-C-14S	90	280	3	143	119	257
	SRS-C-14L	90	320	3	143	119	257
	SRS-C-17S	134	480	5	170	141	314
	SRS-C-17L	134	550	5	1490	719	1128

 L-Motor for low evaporating temperatures

# SRS

## High efficiency, semi-hermetic Screw Compressor Without oil separator

For Ammonia 



### Refrigerants

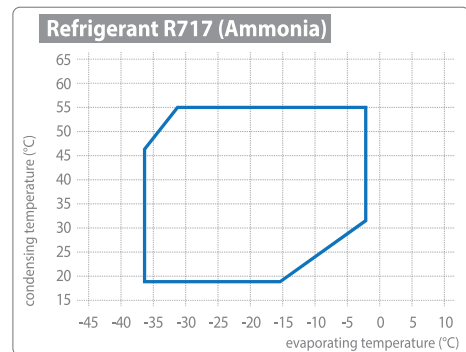
- Ammonia (R717)

### Application

- Food processing and storage, marine refrigeration, industrial process chillers

### Key advantages


- Compact design
- High power permanent magnet motor
- Aluminium windings (PMSM)
- Variable Vi ratios
- Computational Fluid Dynamics (CFD) optimized
- i-series rotor design (5+7 lobes)
- Low pulsations and vibrations
- Suitable for inverter control



Model	Nominal motor power (kW)#	Displacement (m <sup>3</sup> /h)#	Length (cm)	Width (cm)	Height (cm)	Weight (kg)
SRS08SH	22	102	80	47	41	185
SRS08MH	27	122	80	47	41	195
SRS08LH	33	146	80	47	41	205
SRS10SH	45	170	89	49	39	240
SRS10LH	45	204	89	49	39	260
SRS12SH	54	255	104	59	49	370
SRS12MH	62	280	104	59	49	375
SRS12LH	72	304	104	59	49	380
SRS14SM	90	377	128	60	50	505
SRS14MM	90	414	128	60	50	510
SRS14LM	107	450	128	60	50	515
SRS16SM	134	511	135	80	63	680
SRS16MM	134	547	135	80	63	690
SRS16LM	134	608	138	80	63	700

SRS08SL	22	84	80	465	41	185
SRS08ML	27	100	80	465	41	195
SRS10SL	45	140	89	490	39	240
SRS12SL	54	210	104	586	49	370
SRS12ML	62	230	104	586	49	375
SRS14SR	90	310	128	600	50	505
SRS14MR	90	340	128	600	50	510
SRS16SR	134	420	135	798	63	680
SRS16MR	134	450	135	798	63	690

 L-Motor for low evaporating temperatures

 H-Motor for high evaporating temperatures

# RW3

## Semi-hermetic Screw Compressor without oil separator

### For Standard Refrigerants

#### Refrigerants:

- Standard refrigerants R22, R407C, R404A, R507, R1233ze, R448A, R449A

#### Applications:

- Low (L) and High (H) evaporating temperatures, refrigeration, liquid chillers, heat pumps, process cooling

#### Key advantages

- Silent and vibration free operations
- Easy installation and maintenances
- Compact dimensions
- Different compression ratio (Vi) to select the best solution according to customer application
- Internal Capacity control system: step or stepless
- Modern rotor profile for higher specific displacement
- Suitable for heavy loads and continuous operations
- Electronic motor protection with 6 PTC sensors
- Suitable for variable speed operations with external inverter
- Long life rolling bearings with low noise operation

Options						1	2	3
Model	Displacement (m3/h @ 50Hz) 1st stage / 2nd stage	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Electrical Motor	Built-in volumetric ratio Vi=4,0	Built-in volumetric ratio Vi=2,6	
L - motor	RW3-L030	118	30	94*56*47	245	400V/3/50Hz-440V/3/60Hz PW	S	-
	RW3-L040	150	40	94*56*47	255		S	-
	RW3-L050	175	50	94*56*47	265		S	-
	RW3-L060	205	60	115*52*60	410		S	-
	RW3-L070	237	70	115*52*60	420		S	-
	RW3-L080	286	80	132*60*66	520		S	-
	RW3-L095	318	95	132*60*66	525		S	-
	RW3-L105	341	105	132*60*66	530	400V/3/50Hz-440V/3/60Hz YD	S	-
	RW3-L115	402	115	144*72*67	665		S	-
	RW3-L130	445	130	144*72*67	675		S	-
	RW3-L160	510	160	144*72*67	710		S	-
	RW3-L180	562	180	148*75*72	1030		S	-
	RW3-L200	600	200	148*75*72	1050		S	-
	RW3-L220	700	220	148*75*72	980		S	-
H - motor	RW3-H040	118	30	94*56*47	245	400V/3/50Hz-440V/3/60Hz PW	-	S
	RW3-H050	150	40	94*56*47	255		-	S
	RW3-H060	175	50	94*56*47	265		-	S
	RW3-H075	205	60	115*52*60	410		-	S
	RW3-H090	237	70	115*52*60	420		-	S
	RW3-H105	286	80	132*60*66	535		-	S
	RW3-H115	318	95	132*60*66	540		-	S
	RW3-H125	341	105	132*60*66	545	400V/3/50Hz-440V/3/60Hz YD	-	S
	RW3-H140	402	115	144*72*67	665		-	S
	RW3-H160	445	130	144*72*67	675		-	S
	RW3-H190	510	160	144*72*67	710		-	S
	RW3-H210	562	180	148*75*72	1030		-	S
	RW3-H240	600	200	148*75*72	1050		-	S
	RW3-H250	700	220	148*75*72	980		-	S

— L-Motor for low evaporating temperatures

— H-Motor for high evaporating temperatures



# RW5

## High efficiency, semi-hermetic Screw Compressor, without oil separator

### For Standard Refrigerants

#### Refrigerants

- Standard refrigerants, such as R22, R407C, R404A, R507, R1233ze, R448A, R449A

#### Applications

- Low (L) and Medium (H) evaporating temperatures, refrigeration, liquid chillers, heat pumps, process cooling

#### Key advantages

- The most innovative compressor for refrigeration applications
- Silent and vibration free
- Easy installation and maintenance: valves can be repositioned left hand side or right hand side
- Compact dimensions
- Patented variable compression ratio (Vi)
- Built in capacity control system: step or stepless
- Modern rotor profile for higher specific displacement
- Suitable for heavy loads and continuous operations
- Electronic motor protection with 6 PTC sensors
- Suitable for variable speed operations with external inverter

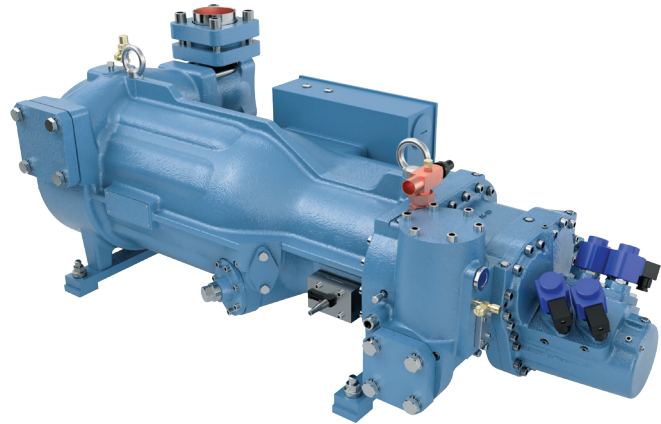
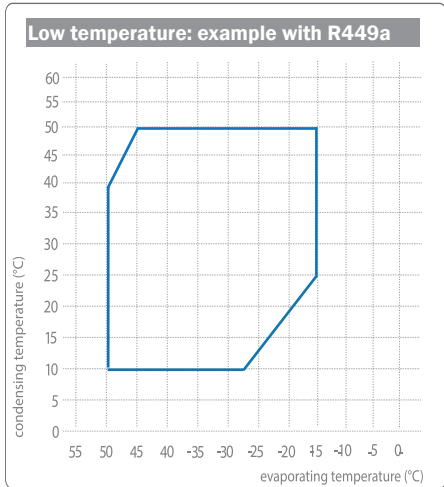
Options					1	2	3	4	5
Model	Displacement (m <sup>3</sup> /h @ 50Hz) 1st stage/2nd stage	Nominal motor power (HP)	Length* Width* Height (cm)	Weight (kg)	Electrical Motor	Oil stop-valve + oil filter	Shut-off valve for oil injection	Motor with special voltage	Suction & Discharge Shut-off valve
RW5-L020	84	20	80*47*41	190	400V/3/50Hz- 440V/3/60Hz PW	-	-	O	S
RW5-L025	100	25	80*47*41	200		-	-	O	S
RW5-L030	120	30	80*47*41	210		-	-	O	S
RW5-L040	140	40	89*49*39	245		-	-	O	S
RW5-L050	168	50	89*49*39	250		-	-	O	S
RW5-L060	210	60	104*59*49	365	400V/3/50Hz- 440V/3/60Hz YD	S	S	O	S
RW5-L070	230	70	104*59*49	370		S	S	O	S
RW5-L075	250	75	104*59*49	375		S	S	O	S
RW5-L090	310	90	128*60*50	505		S	S	O	S
RW5-L100	340	100	128*60*50	510		S	S	O	S
RW5-L110	370	110	128*60*50	515		S	S	O	S
RW5-L125	420	125	135*80*63	680		S	S	O	S
RW5-L140	450	140	135*80*63	690		S	S	O	S
RW5-L150	500	150	135*80*63	700		S	S	O	S

L - motor

 L-Motor for low evaporating temperatures



### 3. SEMI-HERMETIC SCREW COMPRESSORS (WITHOUT OIL SEPARATOR)



#### Standard extent of delivery

- Built-in volumetric ratio  $V_i=4,0$
- Integrated discharge check valve
- Integrated safety relief valve
- 2 step partial load control
- Pressure relieve valve
- Motor PTC temp sensor
- Motor protector IN69SNY
- Oil circuit kit (solenoid valve, changeable oil filter, oil flow switch, sight glass, INT69VS elec. protection module and capacitor)
- IP54 electrical box
- Nitrogen protection
- Rubber vibration damper

6	7	8	9	10	11	12	13	14
Adapter for liquid injection	Adapter & shut-off valve for ECO connection	External Oil Circuit Kit (including solenoid valves, coils, oil filter with replaceable cartridge, sight glass, oil flow switch with INT69B2, and electrolytic condenser).	Oil flow switch	Oil filter differential pressure switch	Oil pressure safety switch-Mechanic	VI adjust device - Automatic	Internal oil filter & internal oil stop valve	Special wooden package
O	O	S	-	-	O	-	-	O
O	O	S	-	-	O	-	-	O
O	O	S	-	-	O	-	-	O
O	O	S	-	-	O	-	-	O
O	O	-	O	O	O	-	S	O
O	O	-	O	O	O	-	S	O
O	O	-	O	O	O	O	-	O
O	O	-	O	O	O	O	-	O
O	O	-	O	O	O	O	-	O
O	O	-	O	O	O	O	-	O
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O	O	-	O	O	O	O	-	O

# SRS DOUBLE STAGE

## Semi-hermetic Screw Compressor without oil separator

For Ammonia 

### Refrigerants

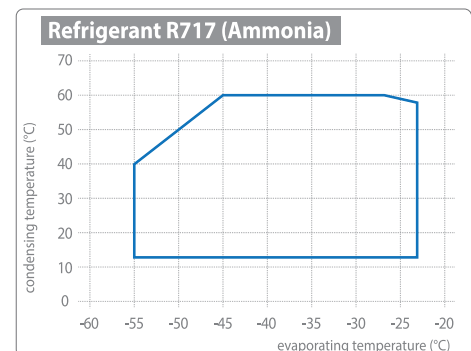
- Ammonia (R717)

### Application

- Very low temperatures
- Food processing, blast, spiral and tunnel-freezing, marine refrigeration, very low cold storage

### Key advantages

- Compact solution.
- Two compressors on one single drive-shaft



L - motor	Model	Nominal motor power (kW)#	Displacement (m <sup>3</sup> /h)#	Length (cm)	Width (cm)	Height (cm)	Weight (kg)
	SRS1008SS	28,8	141	133	67	46	362
	SRS1008LL	44,4	221	140	67	46	445
	SRS1210SS	67,2	332	147	73	47	500
	SRS1210LL	90	463	154	73	47	700
	SRS1612LS	155	652	198	78	69	1161

 L-Motor for low evaporating temperatures

# Referred to rated speed 3600rpm

# SRM SERIES

## Open-drive Screw Compressor

For Ammonia 

### Refrigerants

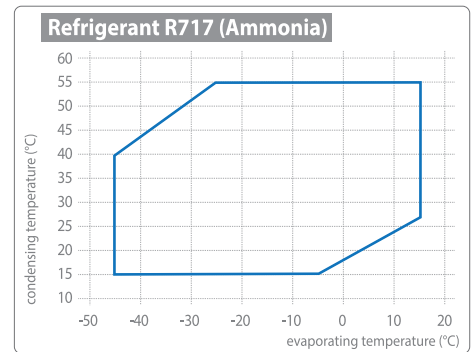
- Ammonia (R717)

### Application

- Industrial refrigeration (petrolchemical, pharmaceutical, chemical, low temperatures, storage, marine refrigeration)

### Key advantages

- Low noise levels
- Fixer moving parts
- High life spour bearings
- Low maintenance
- i-profile rotor design (5+7 lobes)
- Stepless capacity control
- Auto-Vi regulation
- Variable speed with external inverter



Low temperature

Model	Displacement (m <sup>3</sup> /h at 50Hz)	Max speed (rpm)	Length (cm)	Width (cm)	Height (cm)	Weight (kg)
SRM12L	265	6000	107	38	45	280
SRM16S	435	4800	107	50	55	470
SRM16M	544	4800	113	50	55	514
SRM16L	652	4800	121	50	55	530
SRM20S	850	4800	122	57	56	745
SRM20M	1100	4800	134	57	56	789
SRM20L	1270	4800	142	57	56	850
SRM20LL	1496	4800	168	57	56	990
SRM26S	1659	4500	153	72	81	1680
SRM26M	2075	4500	164	72	81	1800
SRM26L	2478	4500	173	72	81	1920
SRM26LL	2940	4500	186	72	81	2075
SRM34S	3360	3600	192	85	77	2970
SRM34M	4280	3600	207	85	77	3190
SRM34L	5090	3600	221	85	77	3395
SRM34LL	6350	3600	243	85	77	3741

# SRM 2

## Double stage, open-drive Screw Compressor

For Ammonia 

### Refrigerants

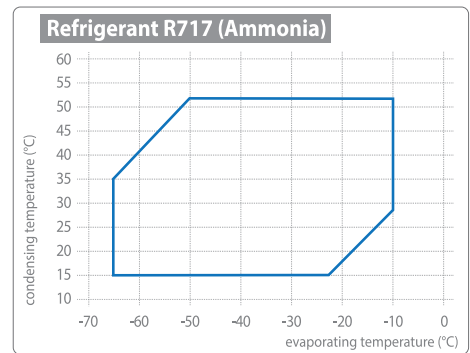
- Ammonia (R717)

### Application

- Ultra low temperature in industrial refrigeration (food freezing, cold chain logistics, marine refrigeration)

### Key advantages

- High efficient
- High compression ratio
- No side loads on the high storage are needed



Low temperature

Model	Displacement (m <sup>3</sup> /h at 50Hz)	Max speed (rpm)	Length (cm)	Width (cm)	Height (cm)	Weight (kg)
SRM1612LS	652	3600	152	66	66	990
SRM2016LS	1270	3600	211	53	60	1170
SRM2620MS	2075	3600	232	69	85	2200
SRM2620LS	2478	3600	232	69	85	2320
SRM3426LS	5090	3000	389	84	97	4300

# SRH

## High pressure, open-drive Screw Compressor

For Ammonia 

### Refrigerants

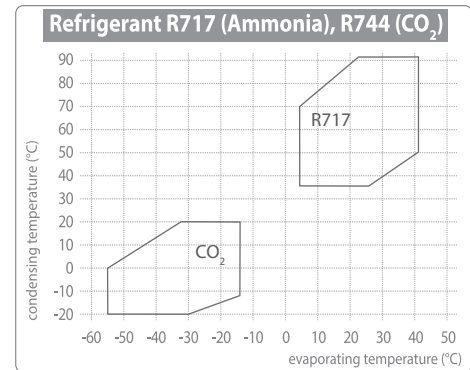
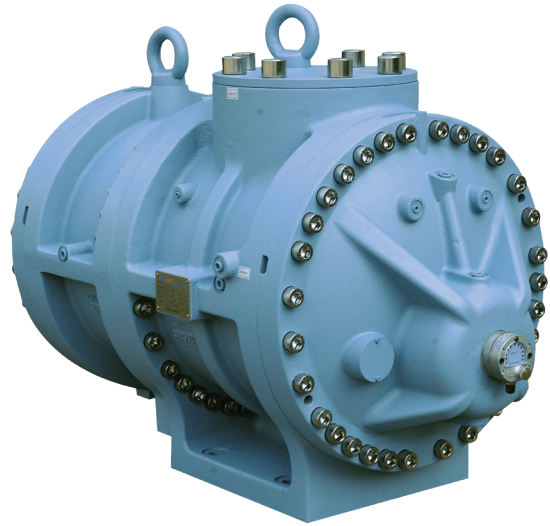
- Ammonia (R717), CO<sub>2</sub>

### Application

- High temperatures Ammonia heat pumps

### Key advantages

- High compression ratio
- 63 bars
- Auto-Vi regulation
- High wear resistant slide bearings
- i-profile rotor (6+8 lobes)



Low temperature High temperature	Model	Displacement (m <sup>3</sup> /h at 50Hz)	Max speed (rpm)	Length (cm)	Width (cm)	Height (cm)	Weight (kg)
	SRH12M	161	4200	103	56	73	380
	SRH16M	322	3600	118	61	79	965
	SRH18M	480	3600	125	67	79	1260
	SRH20M	854	3600	145	71	89	1477
	SRH26M	1409	3600	167	97	117	2150

# APPLICATIONS



## COMMERCIAL REFRIGERATION

SRMTec compressors ensure customers to receive fresh and safe food all year round, with a 24/7 reliability these processes demand.



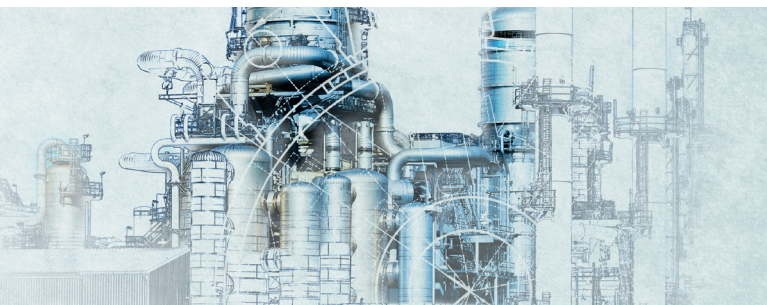
## INDUSTRIAL REFRIGERATION

SRMTec has already served countless industrial customer needs worldwide, with specific products and solutions this industry needs.



## COLD CHAIN LOGISTICS

The ideal solution for all temperature-controlled transport and storage requirements along the entire cold chain.



## PROCESS COOLING

From industrial processes to data centres and machinery, SRMTec compressors ensure efficient and reliable operation all year round.



## AIR CONDITIONING

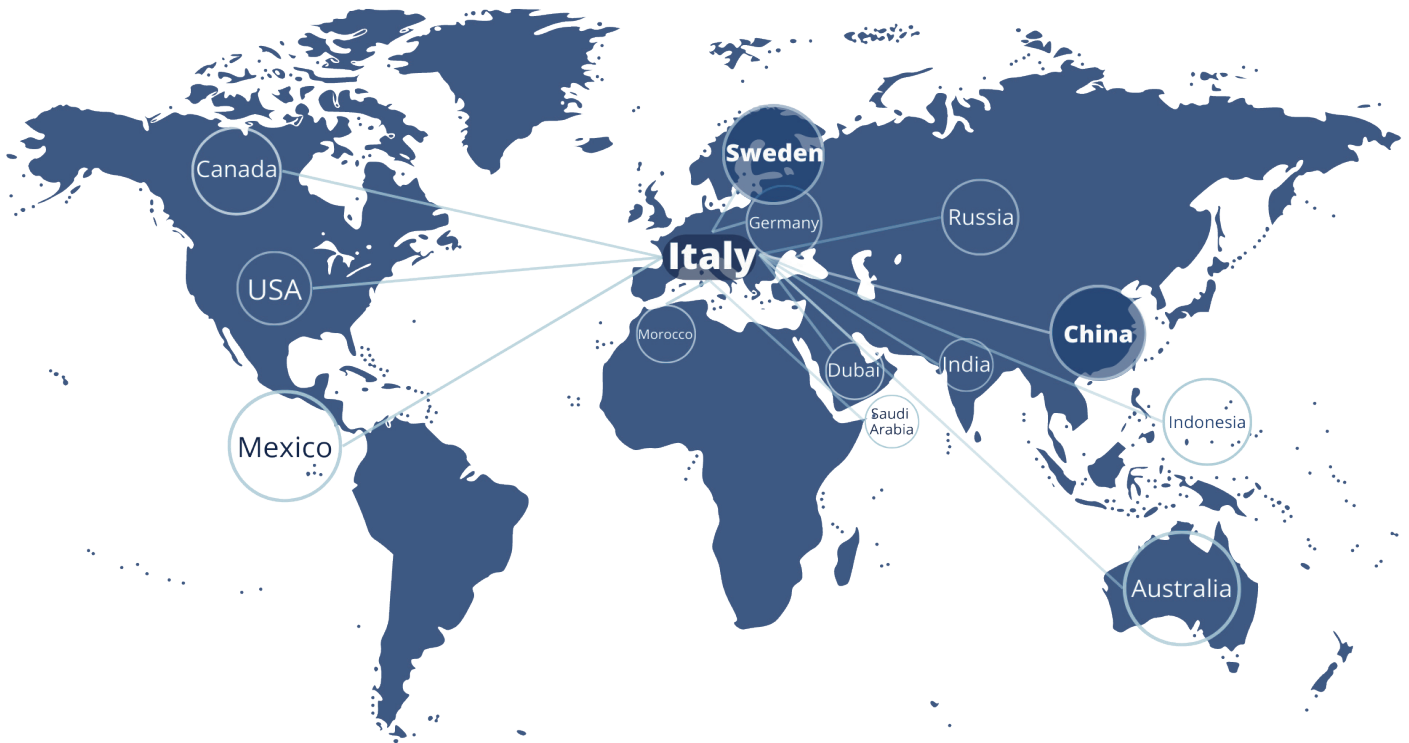
Human comfort and well-being in the most varying commercial, residential and institutional air conditioning applications.



## HEAT PUMPS

All heat pump applications, whether low, medium or high temperature, find their perfect companion with SRMTec compressors.

## WORLDWIDE NETWORK

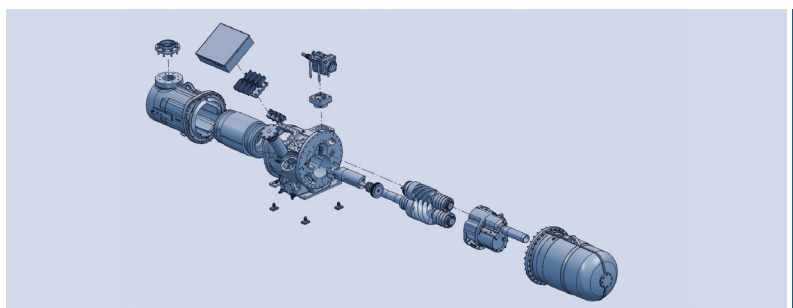


## SERVICES



### SELECTION SOFTWARE

Download the selection software:



### REFCOMP & SRMTEC SPARE PARTS

- All spare parts of SRMTEC compressors available
- Revision of old products.
- Worldwide service network to repair Refcomp & SRMTEC compressors.



### TECHNICAL SUPPORT

We help you choose the right product, fit in your application, and we give you assistance after installation.

phone: +39 0444 726 726

email: [info@srmtec.it](mailto:info@srmtec.it)

## AUTHORIZED DISTRIBUTOR

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e-mail:biuro@bluref.pl



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