

COMPACT CX SERIES



Screw compressors for conditioning



50Hz & 60Hz

frascold[®]
Blue is better

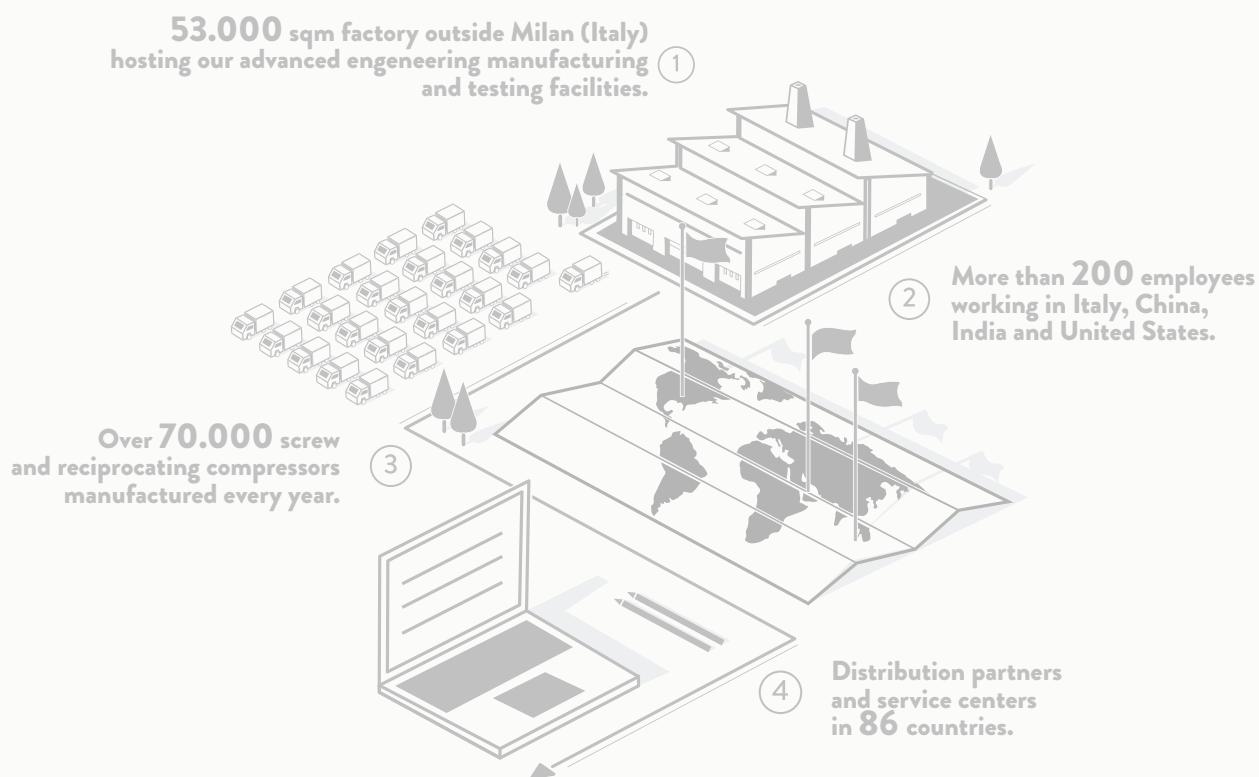
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ABOUT THE COMPANY

Frascold manufactures over 70,000 screw and reciprocating compressors a year. Our 53,000 m² factory outside of Milan (Italy) houses our advanced engineering, manufacturing and testing facilities. More than 200 employees work in the Headquarters and in the Subsidiaries based in the United States, China and India, with distribution partners and service centers in 86 countries.

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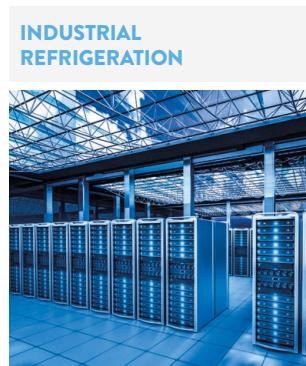
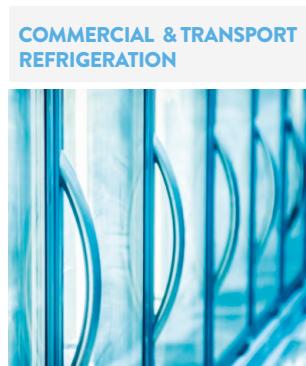


More than 85 years ago Frascold was born as a small family owned Company developing solutions in refrigeration and conditioning industry. Today we invest more and more in people, products, technologies and services aiming to become the best partner for our Customers and the touchstone for the market.

GIUSEPPE GALLI - Frascold Executive Managing Director

Our segments and solutions

SEGMENTS

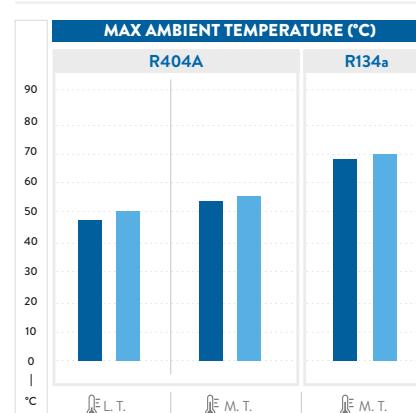
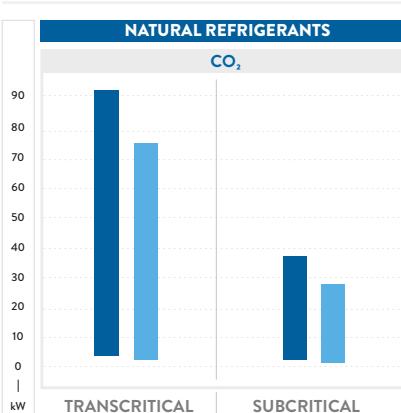
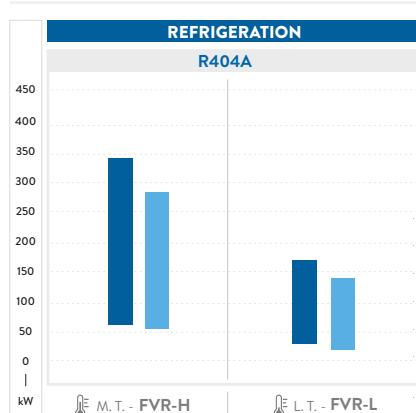
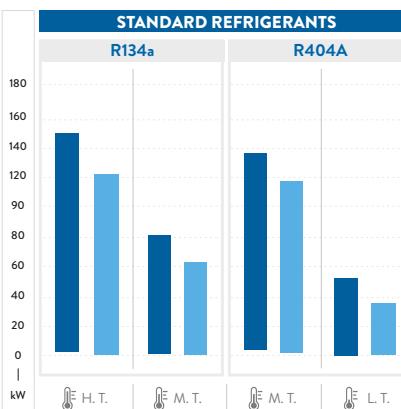
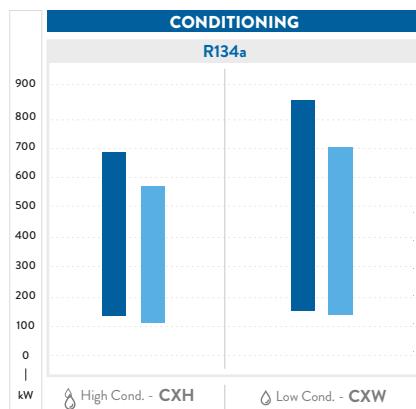


SOLUTIONS

Cooling capacity range @50Hz & @60Hz



60Hz 50Hz





CX COMPACT SCREW COMPRESSORS FOR CONDITIONING

Frascold CX compact screw compressors range has been designed to grant the maximum efficiency, reliability and flexibility. Currently the range consists of 19 swept volumes, which cover not only a wide cooling capacity range but also an extremely various application range (air conditioning, process cooling, heat pumps and even refrigeration at medium evaporating temperatures).

FEATURES & BENEFITS



High flexibility

Different versions and/or options widen the application envelope and assure always the best performances.



High Efficiency

All possible configurations grant the highest efficiency both at design (COP/EER) and seasonal (ESEER/IPLV) conditions, thanks to the optimized fluid dynamics and the latest design and manufacturing technologies.



Very Quiet Operation

N-type screws a pure rolling motion, doublewall compression chamber and hydraulic capacity control achieved through ultra-low friction bearings deliver the lowest levels of noise and vibrations.



Axial suction connection (Option)

Standard over 912m³/h and optional up to 912 m³/h.



Excellent Reliability

Designed for heavy-duty operation and equipped with top quality components.



Safe operation

The advanced controller INT69FRY ensures monitoring and protection.



Very Low Oil Carryover

Sophisticated 3-step oil separation (Venturi effect section, centrifugal pipe, demister). “P” version is meant for flooded evaporators and/or parallel compound and requires an external oil separator.



Long life

Generously sized bearings, both for loads and life.



Easy installation and accessibility

All main fittings and checks on just one side.



Inverter matching

External VFD makes it possible to increase drastically the efficiency at part loads.

CONFORMITY DECLARATION

Frascold CX compact screw compressors are intended for installation in refrigeration systems. The machine or partly completed machines shall comply with local safety regulation and standards of the place of installation (within the EU according to the EU Directives 2006/42/EC Machinery Directive, 2014/68/EU Pressure Equipment, 2006/95/EC Low Voltage Directive). They may be put into operation only if the compressor has been installed in accordance with these assembly instructions.

Commissioning is only possible if the entire system into which it is integrated has been inspected and approved in accordance to the provisions of legal regulations.

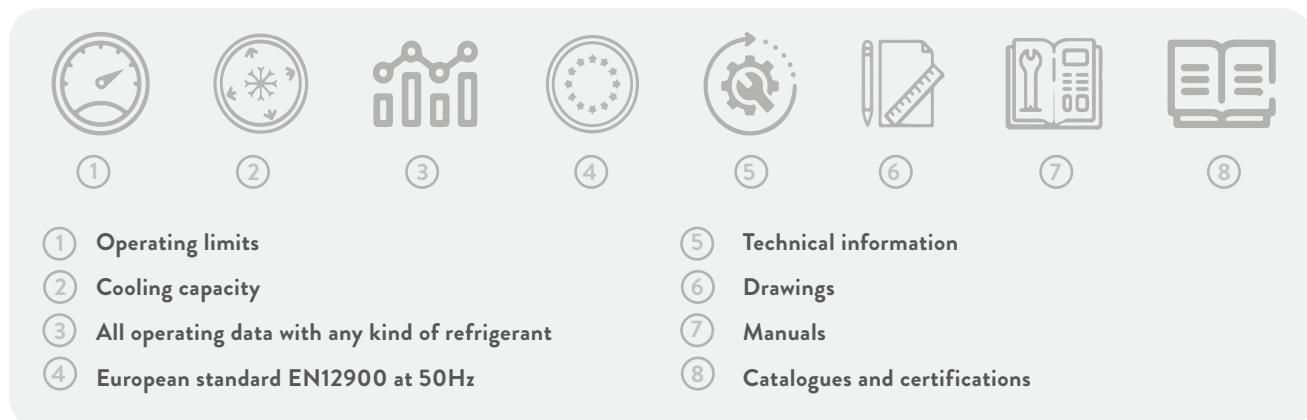
The Manufacturer Declaration, describes the standards to be applied.

The Manufacturer Declaration of incorporation, according to the 2006/42/EC, is available at: www.frascold.it, documentation, manufacturer's declaration.

PERFORMANCE DATA FSS3 SOFTWARE

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Please refer to our FSS3 to check performances of all our compressors.



CONTROL PROTECTION DEVICE

Standard compressor protection:

All the compressors are supplied complete with an **INT69 FRY** electronic protection module connected to a chain of PTC thermistors inserted into the electric motor, and a thermistor sensor positioned on the discharge temperature control output. If a problem is encountered, the module will shut the compressor down to prevent damage.

Optional compressor protection:

Optionally, all compressors can be equipped with the new **Kriwan INT69 FRYL® Diagnose** protection module. This adds data logging, diagnostic, and protection features that can improve the reliability and service life of the compressor. Logged data can be used to aid in system optimization, identify problems and prevent malfunctions before they happen. The **INT69 FRYL® Diagnose** protection device has a dedicated connection port for the following compressor protection devices:

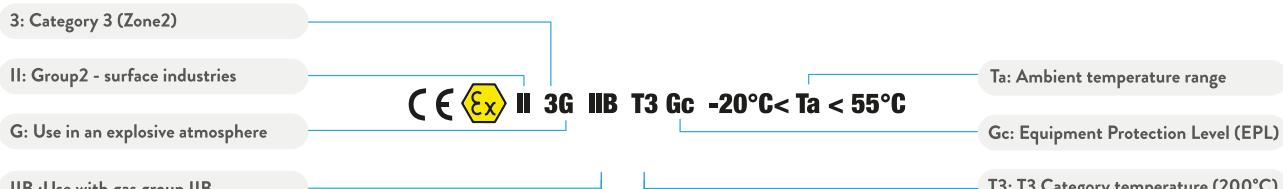
- Thermistor PTC (1, 2)
- Discharge temperature sensor (3, 4)
- Oil level check (5, 6)
- Oil filter clogging sensor (7, 8)
- Oil flowswitch (9, 10)



ATEX

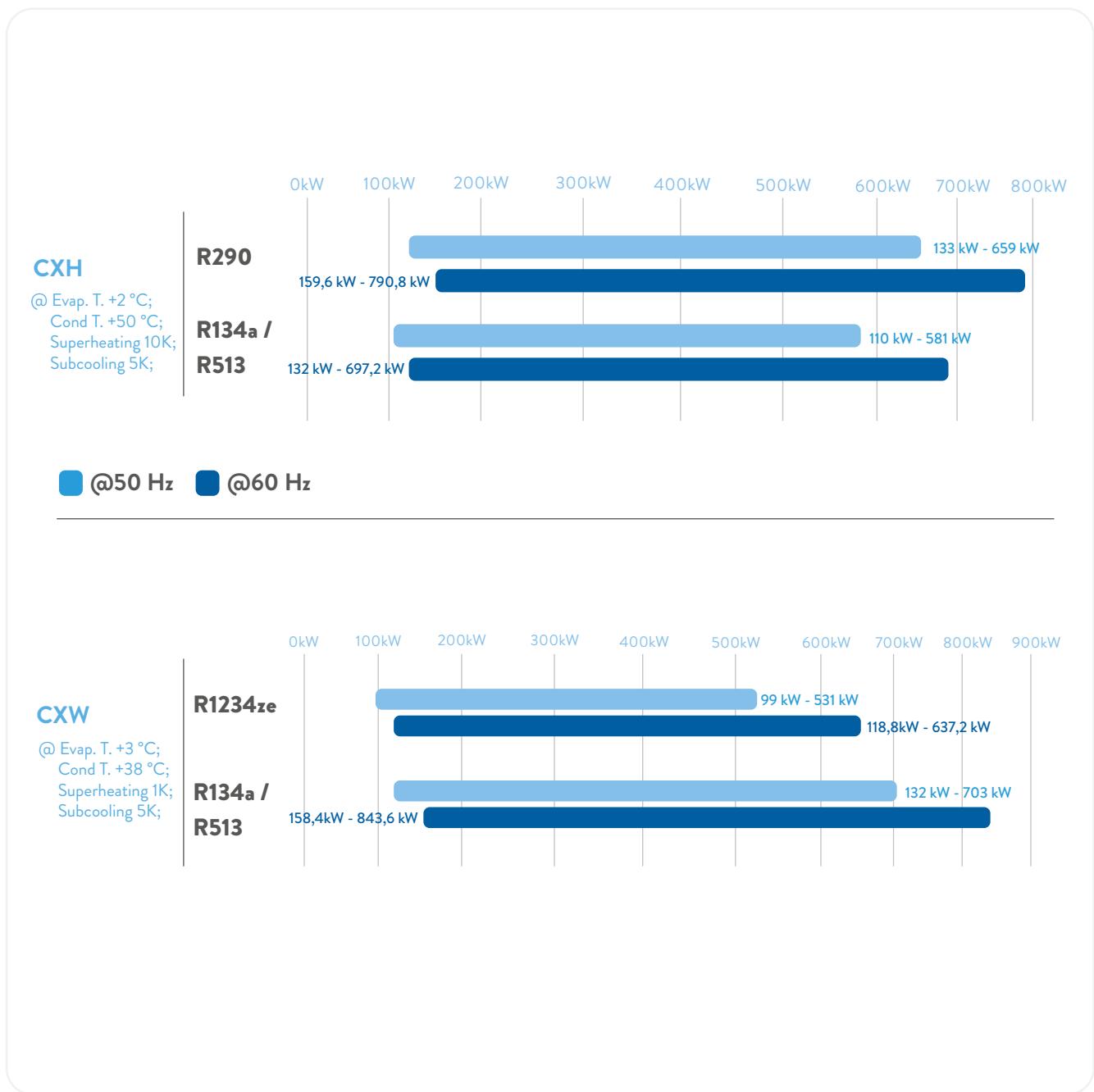
The ATEX directive (2014/34/EU) is a certification for equipment and protective systems intended for use in potentially explosive atmospheres, caused by the presence of gases or solid dust. **Our complete range of reciprocating and screw compressors (CX and FVR) is 100% certified** in category 3G: devices or protection systems that guarantee a very high level of protection Zone 2: an area where an explosive atmosphere may be present, but only in rare cases or for short periods.

The compressor label includes the following ATEX assembly marking, usually placed on the wiring box:



COOLING CAPACITY

Range @50Hz & @60Hz



LEGAL DISCLAIMER:

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PRODUCT RANGE

COMPACT SCREW MODELS RANGE

Low compression ratio High compression ratio

CXW.1	CXH.1	Motor 1
CXW.2	CXH.2	Motor 2

Available version:

P: For flooded evaporator and/or parallel compound
I: Suitable for operation with variable frequency drive (VFD)

CXH CXW

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CX EVO

Improvements:

- Redesigned volumetric ratio (VI) at full load
- Improved fluid flow with larger cross-section area
- Optimized oil lubrication improves full and part load
- HFO screw shape designed for lower density
- Redesigned to combine VI and performance at part load
- Overall 12 sizes available with three body shape (frame 0, frame 5, frame 9)

MODEL DESIGNATION

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		CX H 5 1 - 125 - 468 Y					
Family series							
Compact Screw Compressor							
Application							
H	Vi = 3,1						
W	Vi = 2,3						
HI-WI	Suitable for external VFD						
HP-WP	For parallel compound and/or flooded type evaporator						
Blank	EVO						
Frame Size							
0	Small						
5	Medium						
9	Big						
Motor Size							
1	Small						
2	Full						

STANDARD EQUIPMENT AND OPTIONAL ACCESSORIES

CX - COMPACT SCREW COMPRESSORS

Description	CXH		CXW		CX EVO	
	Std.	Opt.	Std.	Opt.	Std.	Opt.
Electronic Control Protection Module INT69FRY with manual reset. Standard power supply: AC 50-60 Hz 110-230V ± 10% 3 VA	•		•		•	
INT69FRYL Diagnose - AC 50-60 Hz 24-230V ± 10% 3 VA		•		•		•
Integrated three stage internal oil separator, crankcase heater, replaceable oil filter	•		•		•	
Two oil level (min & max) sight glasses (for 5 and 9 series)	•		•		•	
POE 170 cSt lubricant charge (not included for CXH-W...AX version)	•		•		•	
Discharge valve with soldering connections	•		•		•	
Suction flange with solder sleeve	•		•		•	
Axial suction layout for CXH-W91/2...1000/1085Y	•		•		•	
Integrated check valve and safety valve	•		•		•	
Step capacity control + unloaded start: 230V/1/50-60 coils	•		•		•	
Stepless capacity control upon request		•		•		•
Nitrogen protective charge	•		•		•	
Discharge Temperature PTC Sensor controlled by module T00EC45B	•		•		•	
Packing ensuring proper handling and adequate protection	•		•		•	
IP65 terminal box (IP54 for AX version)	•		•		•	
Oil Drain Valve	•		•		•	
Special voltage for electric motor		•		•		•
Suction Valve with soldering connections		•		•		•
Coils with different voltages	•		•		•	
Axial suction layout Series 9 excluded (CXH-W91/2...1000/1085Y) and 5 Series	•		•		•	
Opto electronic oil level control	•		•		•	
Oil Flow Switch (Standard for AX version)	•		•		•	
Oil Filter Clogging Differential Pressure Switch (Electronic)	•		•		•	
Electronic Alarm Control Module		•		•		•
Connection Kit for Economiser or Liquid Injection	•		•		•	
Adapter Kit for External Oil cooler		•		•		•
Bridges for DOL Start (STD for I Version)	•		•		•	
Rubber vibration dampers (4 pcs)		•		•		•
Special painting according to C5M painting requirements	•		•		•	

TECHNICAL DATA AND OPERATING LIMITS

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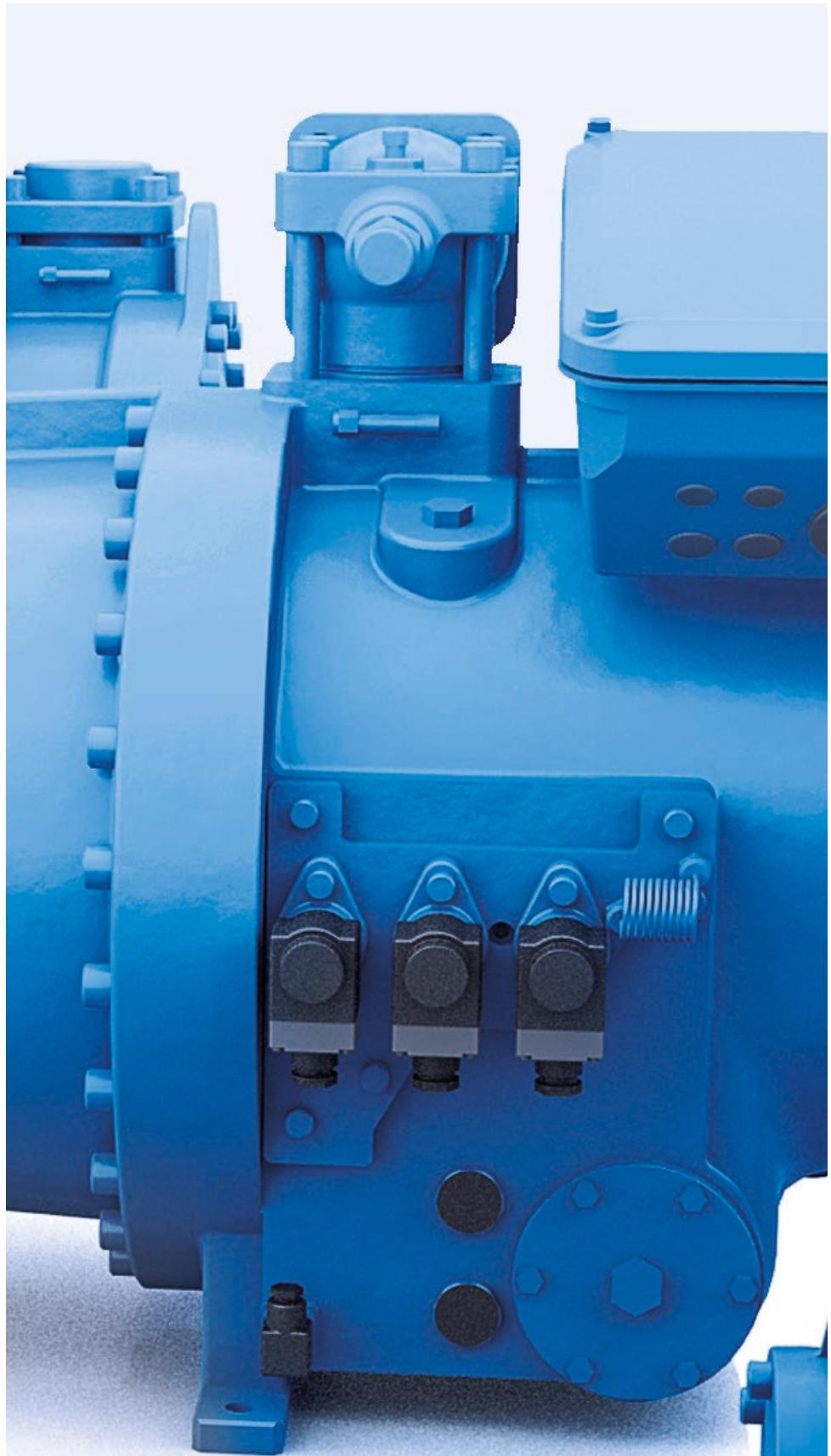
CX - Compact Screw Compressors

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Technical data

CXH

MODELS	Motor Vers.	Displacement		Nominal power	VALID ONLY FOR CXH-CXHP	VALID ONLY FOR CXHI		MRA	LRA, PW Motor	
		50Hz	60Hz			Partition Steps	Frequency min.			
		[m³/h]			50Hz	[%]	[Hz]		[A]	[A]
CXH01-50-199Y	1	199	238,8	50	75% - 50 % - 25%	30	70	80	203	
CXH01-60-230Y	1	230	276	60	75% - 50 % - 25%	30	70	98	262	
CXH01-70-264Y	1	264	316,8	70	75% - 50 % - 25%	30	70	125	298	
CXH01-80-298Y	1	298	357,6	80	75% - 50 % - 25%	30	70	145	373	
CXH01-90-340Y	1	340	408	90	75% - 50 % - 25%	30	70	152	405	
CXH01-100-370Y	1	370	444	100	75% - 50 % - 25%	30	70	169	488	
CXH51-110-398Y	1	398	477,6	110	75% - 50 % - 25%	30	70	180	434	
CXH51-125-468Y	1	468	561,6	125	75% - 50 % - 25%	30	70	198	530	
CXH51-140-538Y	1	538	645,6	140	75% - 50 % - 25%	30	70	221	587	
CXH91-160-620Y	1	620	744	160	75% - 50 % - 25%	30	70	283	436	
CXH91-180-702Y	1	702	842,4	180	75% - 50 % - 25%	30	70	315	465	
CXH91-210-810Y	1	810	972	210	75% - 50 % - 25%	30	70	356	586	
CXH91-240-912Y	1	912	1094,4	240	75% - 50 % - 25%	30	60	427	650	
CXH91-280-1000Y	1	1000	1200	280	75% - 50 % - 25%	30	60	474	805	
CXH91-310-1085Y	1	1085	1302	310	75% - 50 % - 25%	30	60	490	805	
CXH02-70-199Y	2	199	238,8	70	75% - 50 % - 25%	30	70	128	298	
CXH02-80-230Y	2	230	276	80	75% - 50 % - 25%	30	70	145	373	
CXH02-90-264Y	2	264	316,8	90	75% - 50 % - 25%	30	70	160	405	
CXH02-100-298Y	2	298	357,6	100	75% - 50 % - 25%	30	70	175	488	
CXH52-110-316Y	2	316	379,2	110	75% - 50 % - 25%	30	70	184	434	
CXH02-120-340Y	2	340	408	120	75% - 50 % - 25%	30	70	195	505	
CXH52-125-372Y	2	372	446,4	125	75% - 50 % - 25%	30	70	218	530	
CXH52-140-428Y	2	428	513,6	140	75% - 50 % - 25%	30	70	245	587	
CXH52-160-468Y	2	468	561,6	125	75% - 50 % - 25%	30	70	282	729	
CXH52-180-538Y	2	538	645,6	140	75% - 50 % - 25%	30	70	304	786	
CXH92-180-545Y	2	545	654	180	75% - 50 % - 25%	30	70	332	465	
CXH92-210-620Y	2	620	744	210	75% - 50 % - 25%	30	70	375	586	
CXH92-240-702Y	2	702	842,4	240	75% - 50 % - 25%	30	70	427	650	
CXH92-280-810Y	2	810	972	280	75% - 50 % - 25%	30	70	455	805	
CXH92-300-912Y	2	912	1094,4	300	75% - 50 % - 25%	30	60	474	805	
CXH92-310-1000Y	2	1000	1200	300	75% - 50 % - 25%	30	60	474	805	
CXH01-50-199Y	1	199	238,8	50	75% - 50 % - 25%	30	70	80	203	
CXH01-60-230Y	1	230	276	60	75% - 50 % - 25%	30	70	98	262	
CXH01-70-264Y	1	264	316,8	70	75% - 50 % - 25%	30	70	125	298	
CXH01-80-298Y	1	298	357,6	80	75% - 50 % - 25%	30	70	145	373	
CXH01-90-340Y	1	340	408	90	75% - 50 % - 25%	30	70	152	405	
CXH01-100-370Y	1	370	444	100	75% - 50 % - 25%	30	70	169	488	

Data reference valid for the same model in version CXH, CXHI and CXHP.

Find the most updated information in our Product Selection Software FSS3 at the link :
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	LRA, DOL Motor	Protection Index	maximum standstill pressure	maximum operative pressure	Suction valve	Suction Valve	Discharge Valve	Discharge Valve	Suction bushing	Suction bushing	Net Weight	MODELS		
					(SV)		(DV)		(SL)					
					[mm]	[inch]	[mm]	[inch]	[mm]	[inch]				
	330	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	490	CXH01-50-199Y		
	425	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	505	CXH01-60-230Y		
	518	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	505	CXH01-70-264Y		
	600	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	515	CXH01-80-298Y		
	649	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	525	CXH01-90-340Y		
	767	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	540	CXH01-100-370Y		
	720	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	870	CXH51-110-398Y		
	838	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	875	CXH51-125-468Y		
	921	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	878	CXH51-140-538Y		
	1364	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	1475	CXH91-160-620Y		
	1442	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	1475	CXH91-180-702Y		
	1853	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1475	CXH91-210-810Y		
	2029	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1475	CXH91-240-912Y		
	2520	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CXH91-280-1000Y		
	2520	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CXH91-310-1085Y		
	518	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	510	CXH02-70-199Y		
	600	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	520	CXH02-80-230Y		
	649	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	520	CXH02-90-264Y		
	767	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	525	CXH02-100-298Y		
	720	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	865	CXH52-110-316Y		
	793	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	537	CXH02-120-340Y		
	838	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	865	CXH52-125-372Y		
	921	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	875	CXH52-140-428Y		
	1114	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	878	CXH52-160-468Y		
	1209	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	878	CXH52-180-538Y		
	1442	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	1475	CXH92-180-545Y		
	1853	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	1490	CXH92-210-620Y		
	2029	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	1490	CXH92-240-702Y		
	2520	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CXH92-280-810Y		
	2520	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CXH92-300-912Y		
	2520	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CXH92-310-1000Y		
	330	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	490	CXH01-50-199Y		
	425	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	505	CXH01-60-230Y		
	518	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	505	CXH01-70-264Y		
	600	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	515	CXH01-80-298Y		
	649	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	525	CXH01-90-340Y		
	767	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	540	CXH01-100-370Y		

Technical data

CXW

MODELS	Motor Vers.	Displacement		Nominal power	VALID ONLY FOR CXH-CXHP	VALID ONLY FOR CXHI		MRA	LRA, PW Motor	
		50Hz	60Hz			Partition Steps	Frequency min.			
		[m³/h]			50Hz	[%]	[Hz]			
CXW01-50-230Y	1	230	276	50	75% - 50 % - 25%	30	70	80	203	
CXW01-60-264Y	1	264	316,8	60	75% - 50 % - 25%	30	70	98	262	
CXW01-70-298Y	1	298	357,6	70	75% - 50 % - 25%	30	70	125	298	
CXW01-80-340Y	1	340	408	80	75% - 50 % - 25%	30	70	134	373	
CXW01-90-370Y	1	370	444	90	75% - 50 % - 25%	30	70	160	405	
CXW51-100-428Y	1	428	513,6	110	75% - 50 % - 25%	30	70	180	434	
CXW51-110-468Y	1	468	561,6	110	75% - 50 % - 25%	30	70	187	434	
CXW51-125-538Y	1	538	645,6	125	75% - 50 % - 25%	30	70	198	530	
CXW91-140-620Y	1	620	744	160	75% - 50 % - 25%	30	70	255	436	
CXW91-160-702Y	1	702	842,4	160	75% - 50 % - 25%	30	70	283	436	
CXW91-180-810Y	1	810	972	180	75% - 50 % - 25%	30	70	315	465	
CXW91-210-912Y	1	912	1094,4	210	75% - 50 % - 25%	30	60	356	586	
CXW91-240-1000Y	1	1000	1200	300	75% - 50 % - 25%	30	60	427	650	
CXW91-280-1085Y	1	1085	1302	300	75% - 50 % - 25%	30	60	455	805	
CXW02-50-199Y	2	199	238,8	50	75% - 50 % - 25%	30	70	85	203	
CXW02-60-230Y	2	230	276	60	75% - 50 % - 25%	30	70	101	262	
CXW02-70-264Y	2	264	316,8	70	75% - 50 % - 25%	30	70	125	298	
CXW02-80-298Y	2	298	357,6	80	75% - 50 % - 25%	30	70	145	373	
CXW02-90-340Y	2	340	408	90	75% - 50 % - 25%	30	70	160	405	
CXW02-100-370Y	2	370	444	100	75% - 50 % - 25%	30	70	175	488	
CXW52-110-428Y	2	428	513,6	110	75% - 50 % - 25%	30	70	184	434	
CXW52-125-468Y	2	468	561,6	125	75% - 50 % - 25%	30	70	219	530	
CXW52-140-538Y	2	538	645,6	140	75% - 50 % - 25%	30	70	235	587	
CXW92-160-620Y	2	620	744	160	75% - 50 % - 25%	30	70	283	436	
CXW92-180-702Y	2	702	842,4	180	75% - 50 % - 25%	30	70	315	465	
CXW92-210-810Y	2	810	972	210	75% - 50 % - 25%	30	70	356	586	
CXW92-240-912Y	2	912	1094,4	240	75% - 50 % - 25%	30	60	427	650	
CXW92-280-1000Y	2	1000	1200	300	75% - 50 % - 25%	30	60	427	650	
CXW92-310-1085Y	2	1085	1302	300	75% - 50 % - 25%	30	60	455	805	

Data reference valid for the same model in version CXH, CXHI and CXHP.

	LRA, DOL Motor	Protection Index	maximum standstill pressure	maximum operative pressure	Suction valve	Suction Valve	Discharge Valve	Discharge Valve	Suction bushing	Suction bushing	Net Weight	MODELS
					(SV)		(DV)		(SL)			
					[A]	[IP]	[bar]		[mm]	[inch]	[mm]	[kg]
	330	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	490	CXW01-50-230Y
	425	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	500	CXW01-60-264Y
	518	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	505	CXW01-70-298Y
	600	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	510	CXW01-80-340Y
	649	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	525	CXW01-90-370Y
	720	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	840	CXW51-100-428Y
	720	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	850	CXW51-110-468Y
	838	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	865	CXW51-125-538Y
	1364	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	1475	CXW91-140-620Y
	1364	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	1465	CXW91-160-702Y
	1442	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1465	CXW91-180-810Y
	1853	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1465	CXW91-210-912Y
	2029	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CXW91-240-1000Y
	2520	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CXW91-280-1085Y
	330	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	490	CXW02-50-199Y
	425	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	505	CXW02-60-230Y
	518	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	500	CXW02-70-264Y
	600	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	515	CXW02-80-298Y
	649	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	525	CXW02-90-340Y
	767	IP56	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	540	CXW02-100-370Y
	720	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	840	CXW52-110-428Y
	838	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	875	CXW52-125-468Y
	921	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	878	CXW52-140-538Y
	1364	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	1475	CXW92-160-620Y
	1442	IP56	20,5	30	105	4-1/8"	DN80	DN80	105	4-1/8"	1475	CXW92-180-702Y
	1853	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1475	CXW92-210-810Y
	2029	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1475	CXW92-240-912Y
	2029	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CXW92-280-1000Y
	2520	IP56	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CXW92-310-1085Y

Technical data

CX EVO

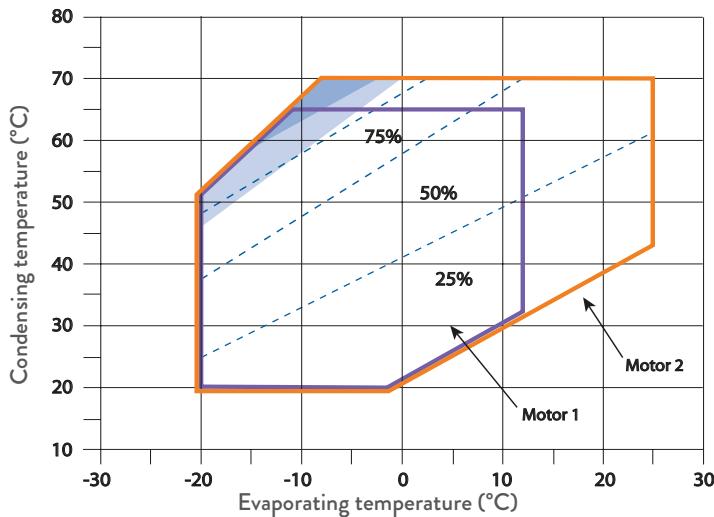
MODELS	Motor Vers.	Displacement		Nominal power	Partition Steps	MRA	LRA, PW Motor	LRA, DOL Motor	Protection Index	
		50Hz	60Hz							
		[m³/h]		50Hz	[%]	[A]	[A]	[A]	[IP]	
CX01-70-264-EVO	1	264	316,8	70	75% - 50 % - 25%	125	298	518	IP56	
CX01-80-298-EVO	1	298	357,6	80	75% - 50 % - 25%	145	373	600	IP56	
CX01-90-340-EVO	1	340	408	90	75% - 50 % - 25%	152	405	649	IP56	
CX51-110-398-EVO	1	398	477,6	110	75% - 50 % - 25%	180	434	720	IP56	
CX51-125-468-EVO	1	468	561,6	125	75% - 50 % - 25%	198	530	838	IP56	
CX51-140-538-EVO	1	538	645,6	140	75% - 50 % - 25%	221	587	921	IP56	
CX91-160-620-EVO	1	620	744	160	75% - 50 % - 25%	283	436	1364	IP56	
CX91-180-702-EVO	1	702	842,4	180	75% - 50 % - 25%	315	465	1442	IP56	
CX91-210-810-EVO	1	810	972	210	75% - 50 % - 25%	356	586	1853	IP56	
CX91-240-912-EVO	1	912	1094,4	240	75% - 50 % - 25%	427	650	2029	IP56	
CX91-280-1000-EVO	1	1000	1200	280	75% - 50 % - 25%	474	805	2520	IP56	
CX91-310-1085-EVO	1	1085	1302	310	75% - 50 % - 25%	490	805	2520	IP56	

Find the most updated information in our Product Selection Software FSS3 at the link :
https://www.frascold.it/en/download/software/fss_3_frascold_selection_software

	maximum standstill pressure	maximum operative pressure	Suction valve	Suction Valve	Discharge Valve	Discharge Valve	Suction bushing	Suction bushing	Net Weight	MODELS
			(SV)		(DV)		(SL)			
			[bar]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[kg]
	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	505	CX01-70-264-EVO
	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	515	CX01-80-298-EVO
	20,5	30	80	3-1/8"	54	2-1/8"	80	3-1/8"	525	CX01-90-340-EVO
	20,5	30	105	4-1/8"	80	DN80	105	4-1/8"	870	CX51-110-398-EVO
	20,5	30	105	4-1/8"	80	DN80	105	4-1/8"	875	CX51-125-468-EVO
	20,5	30	105	4-1/8"	80	DN80	105	4-1/8"	878	CX51-140-538-EVO
	20,5	30	105	4-1/8"	80	DN80	105	4-1/8"	1475	CX91-160-620-EVO
	20,5	30	105	4-1/8"	80	DN80	105	4-1/8"	1475	CX91-180-702-EVO
	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1475	CX91-210-810-EVO
	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1475	CX91-240-912-EVO
	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CX91-280-1000-EVO
	20,5	30	DN125	DN125	105	4-1/8"	DN125	DN125	1490	CX91-310-1085-EVO

Operating Limits

R134a - CXH / CXHP

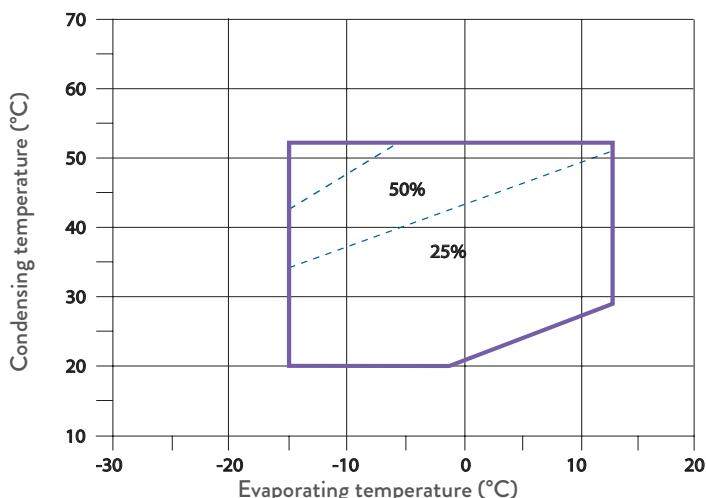


Full load operation (100%) - Motor 1

Full load operation (100%) - Motor 2

Suction gas superheating 10K

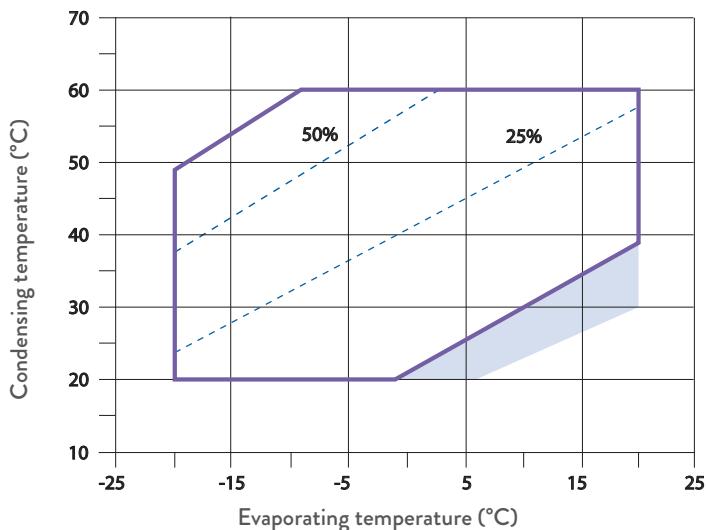
R134a - CXW / CXWP



Full load operation (100%)

Suction gas superheating 10K

R134a - CX EVO



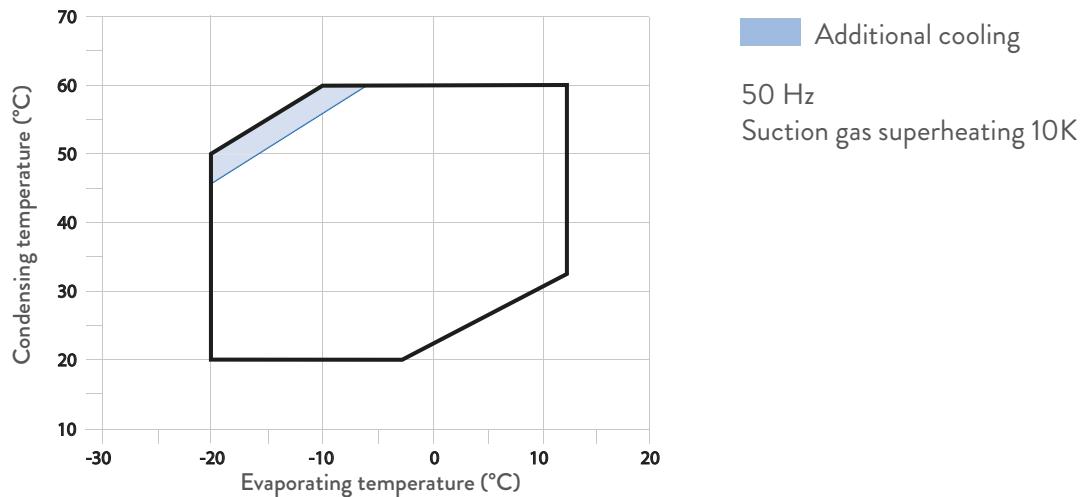
Full load operation (100%)

Only part load operations (25-50-75%)

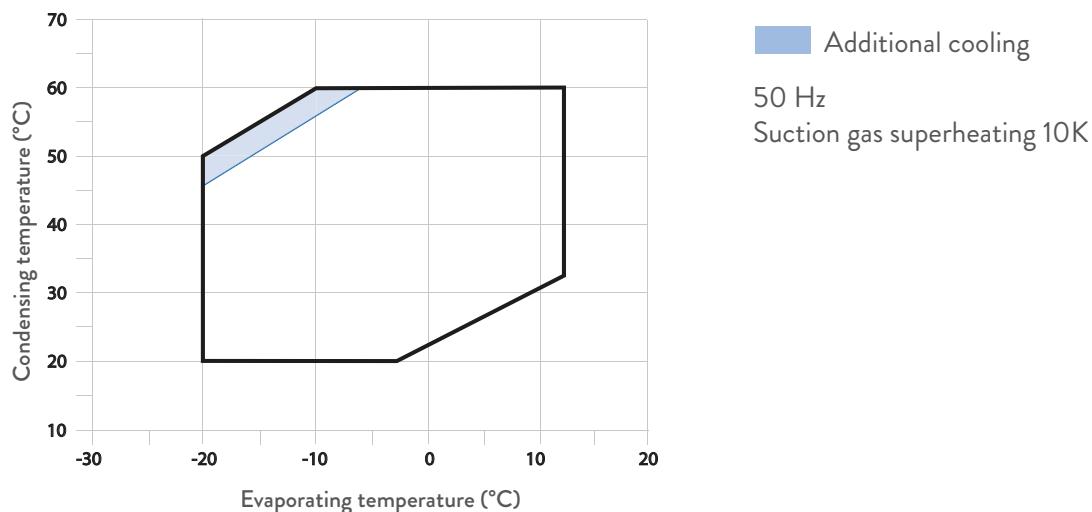
Suction gas superheating 10K

Note: For "I" version verify
with the selection software the frequency
limits for your application.

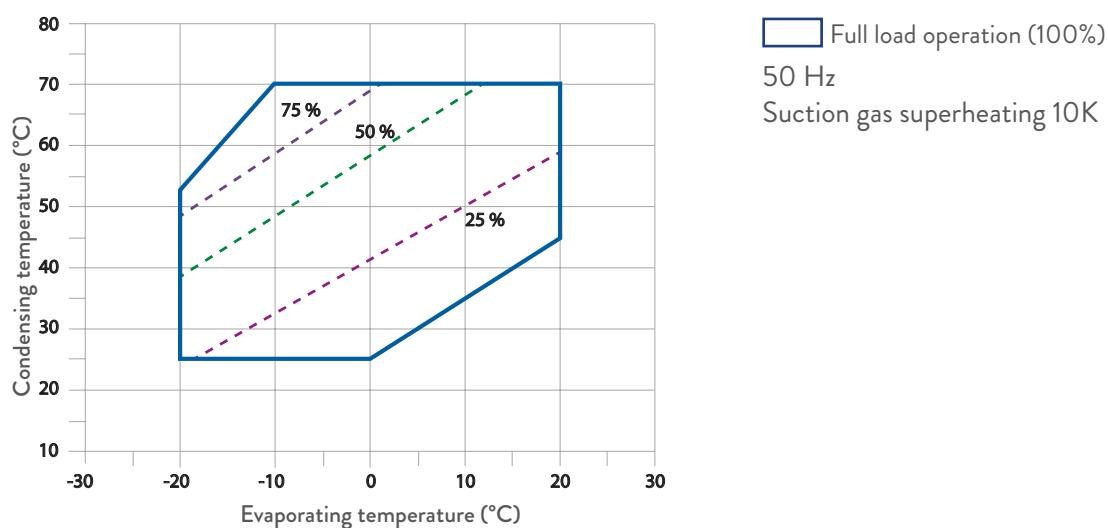
R290 - CXH



R290 - CXHI



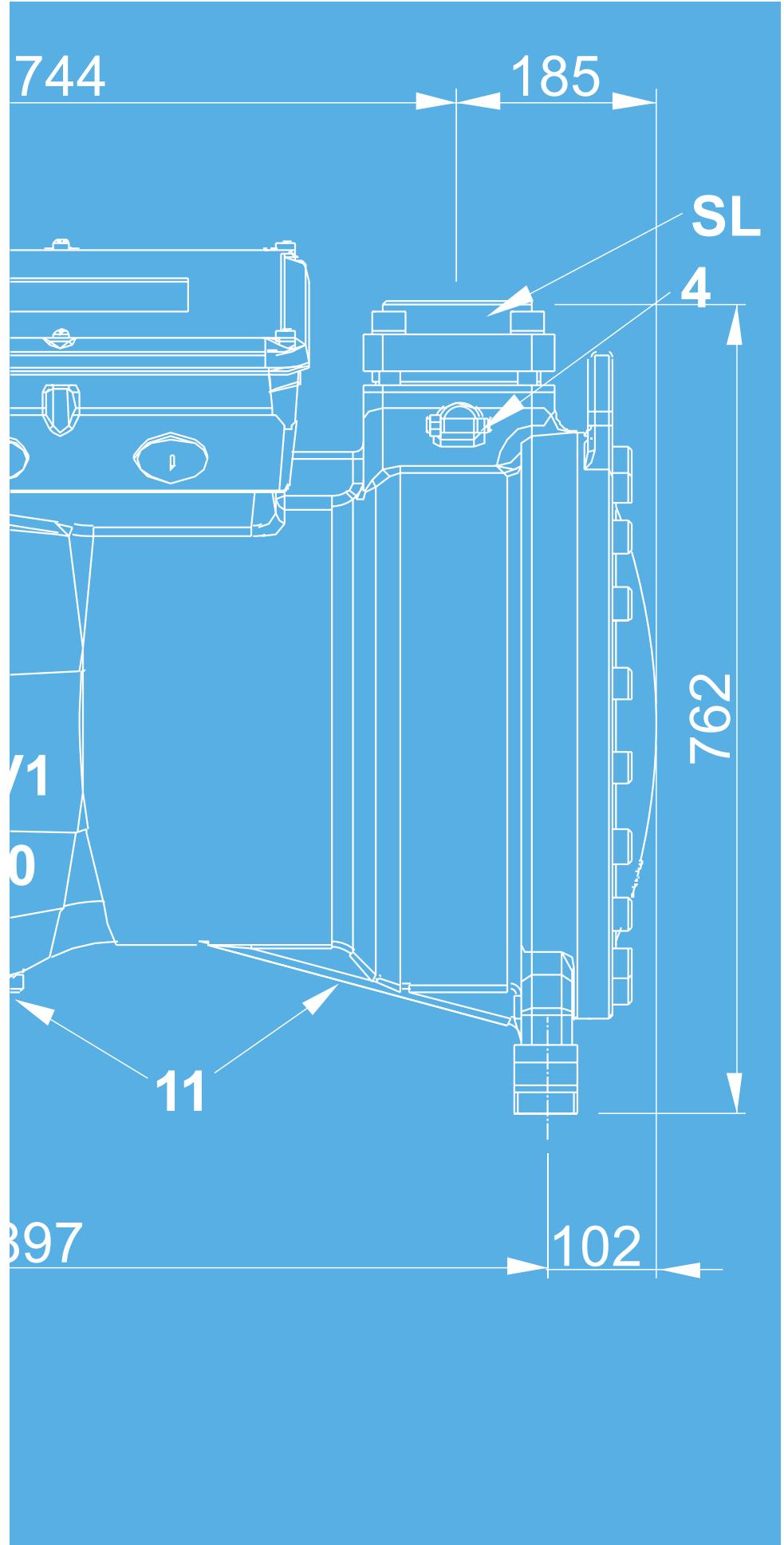
R1234ze(E) - CXH



TECHNICAL DRAWINGS AND DIMENSIONS

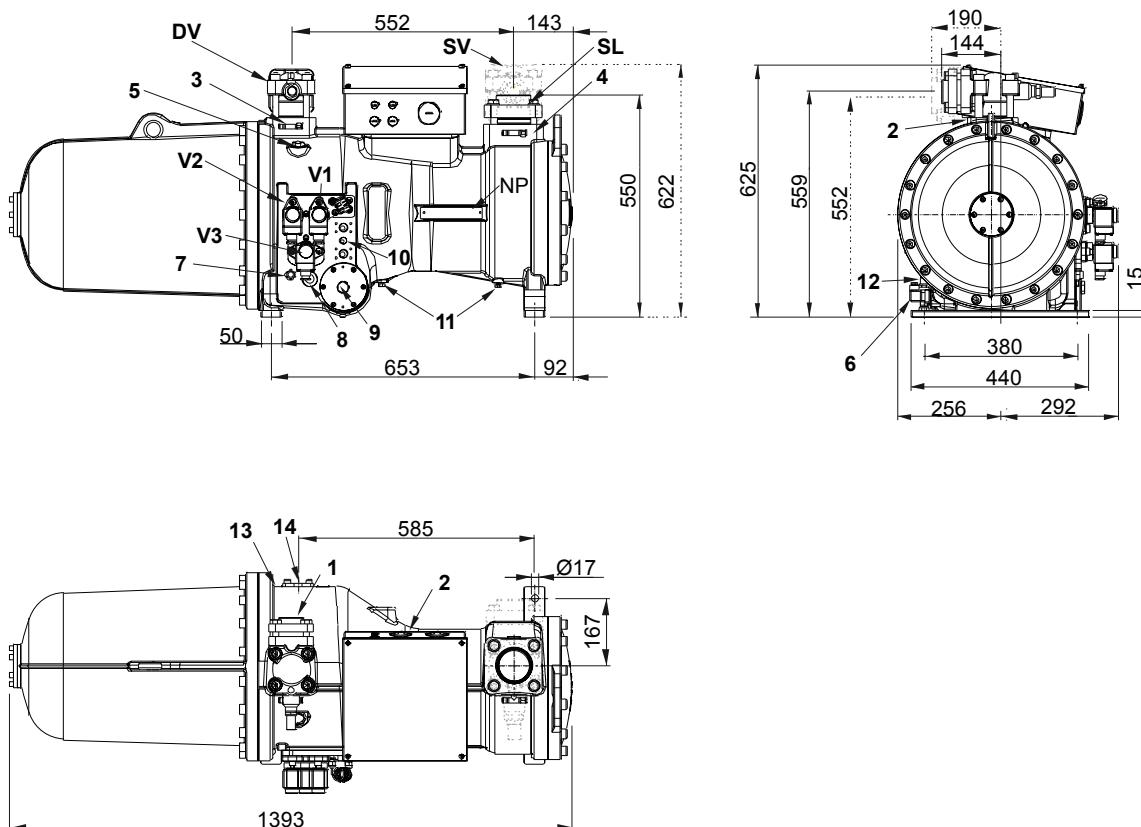
24

CX - Compact Screw Compressors



Dimensional drawing

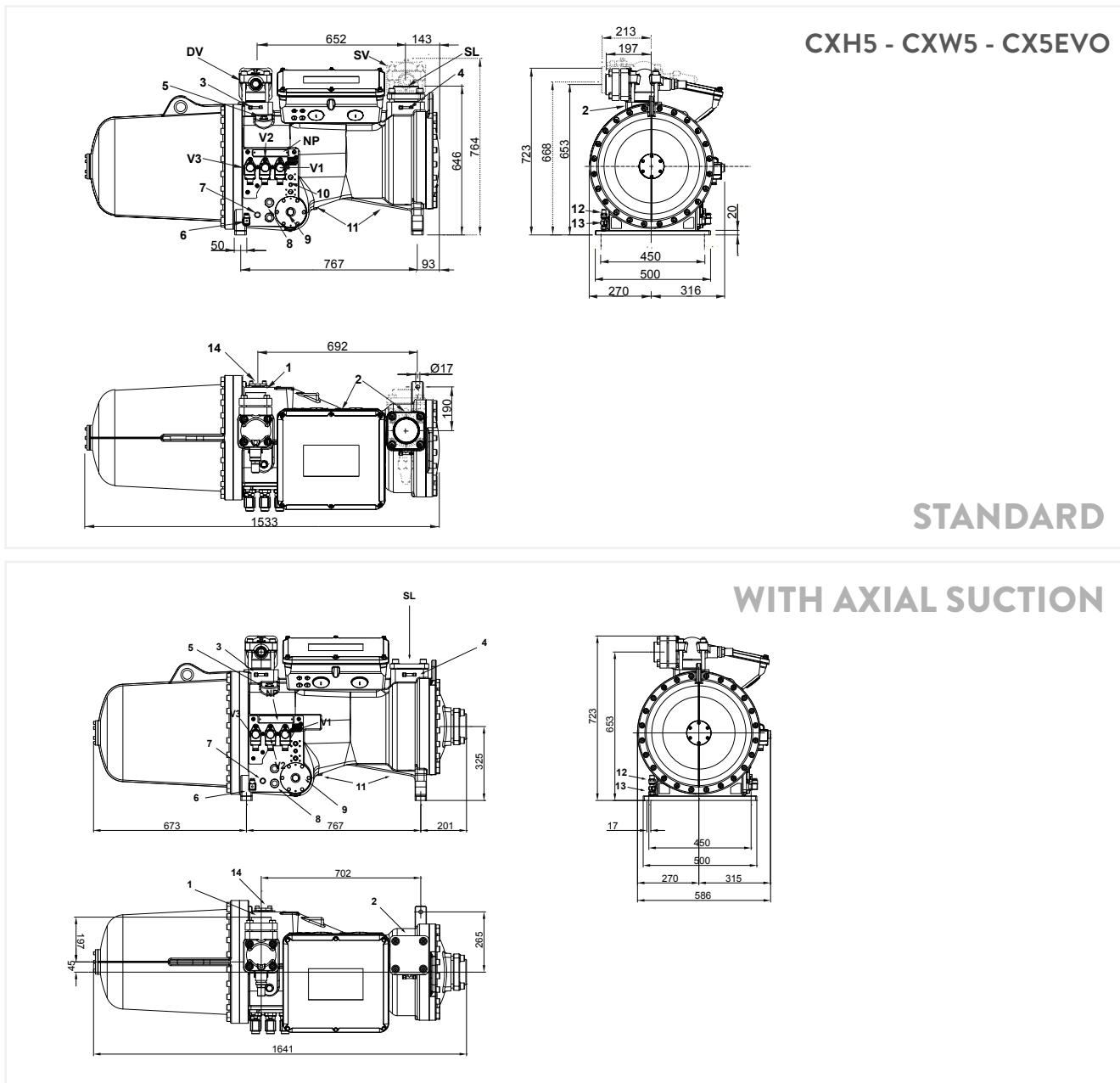
CXH0 - CXW0 - CX0EVO



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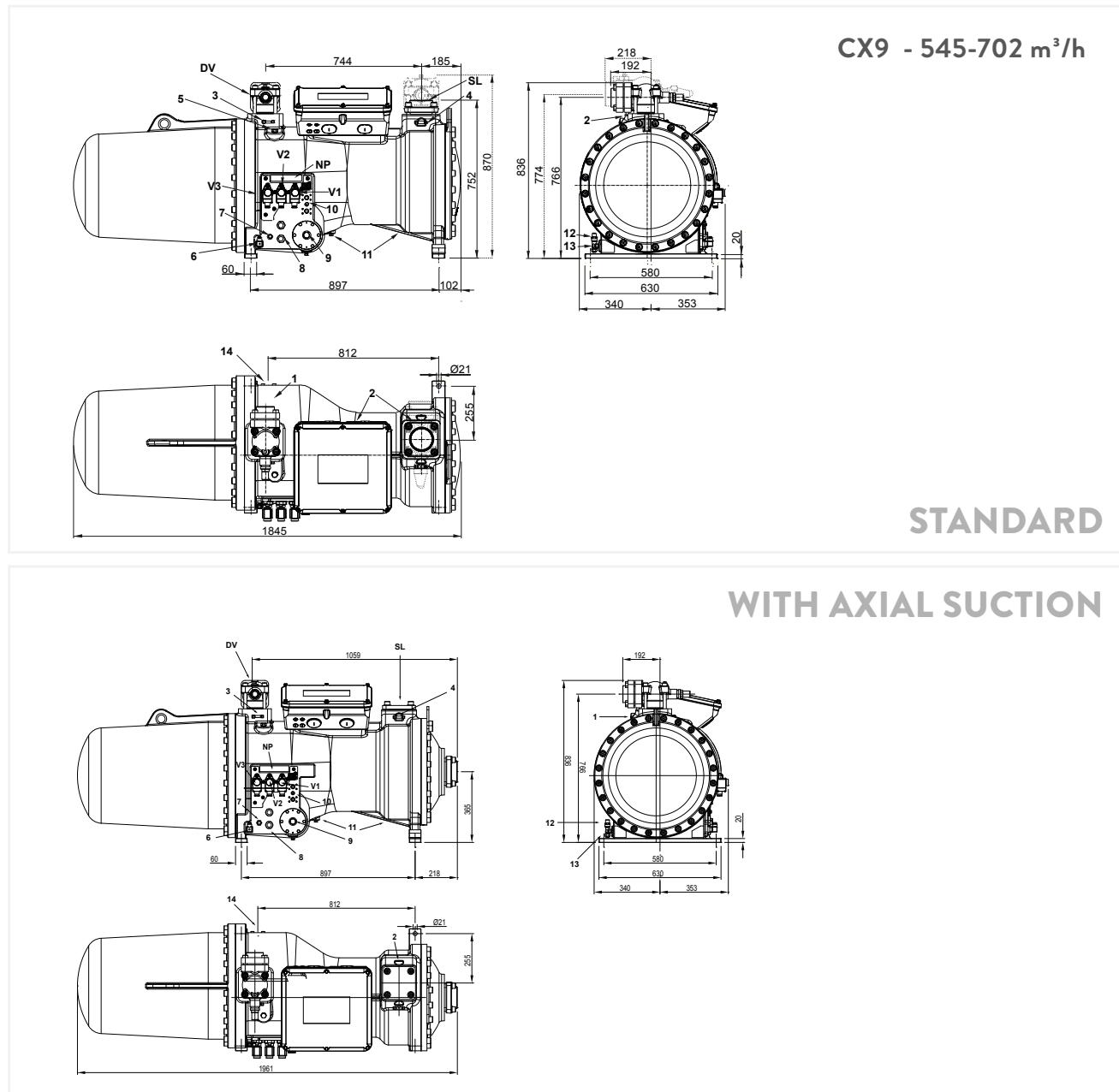
1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	
9	Filter clogging sensor connection	1/2" GAS
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1-1/8"
SV	Suction valve	3-1/8" - 80 mm
DV	Discharge valve	2-1/8" - 54 mm
SL	Suction line	3-1/8"
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	

Dimensional drawing



1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	
9	Filter clogging sensor connection	1/2" GAS
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1 1/8"
SV	Suction valve	4-1/8" - 105 mm
DV	Discharge valve	DN80
SL	Suction line	4-1/8"
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	

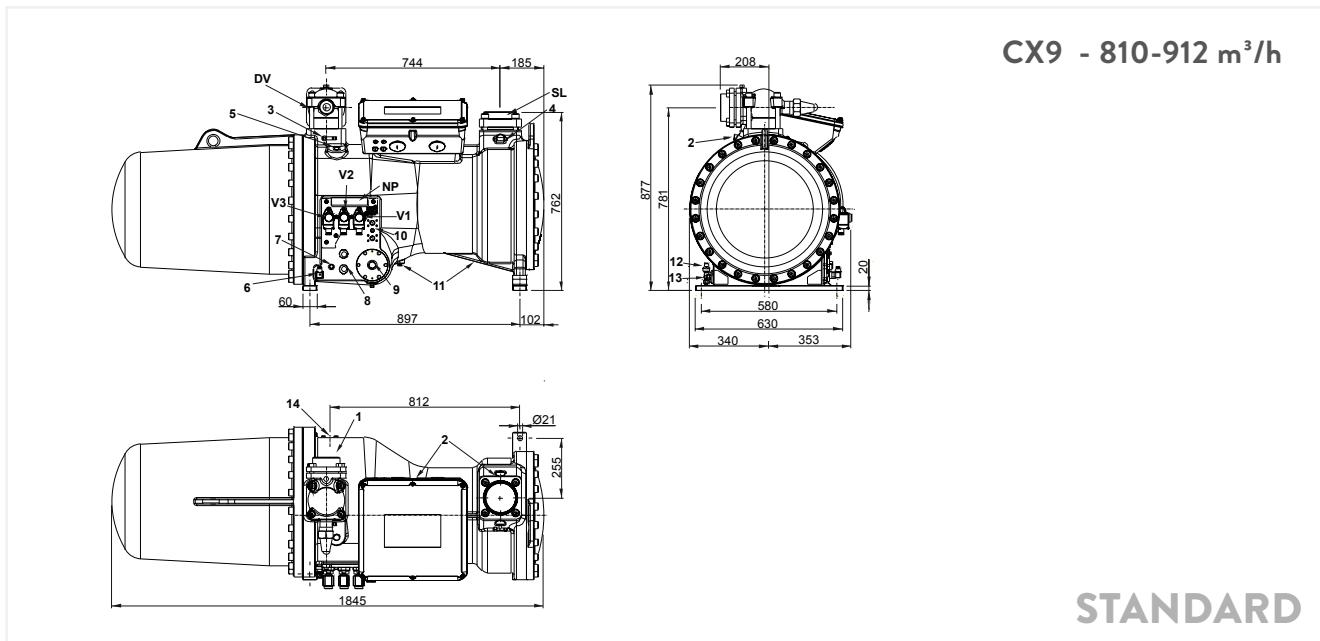
Dimensional drawing



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1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	
9	Filter clogging sensor connection	1/2" GAS
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1-1/8"
SV	Suction valve	4-1/8" - 105 mm
DV	Discharge valve	DN80
SL	Suction line	4-1/8"
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	

Dimensional drawing

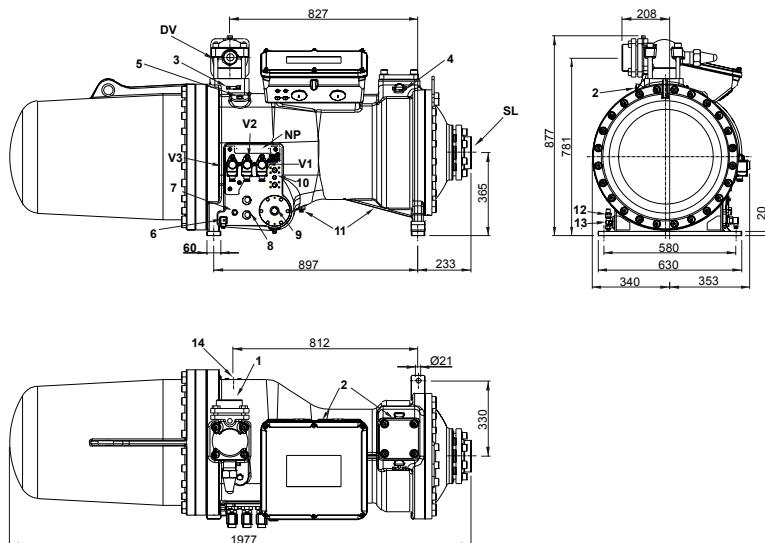


CX9 - 810-912 m³/h

STANDARD

WITH AXIAL SUCTION

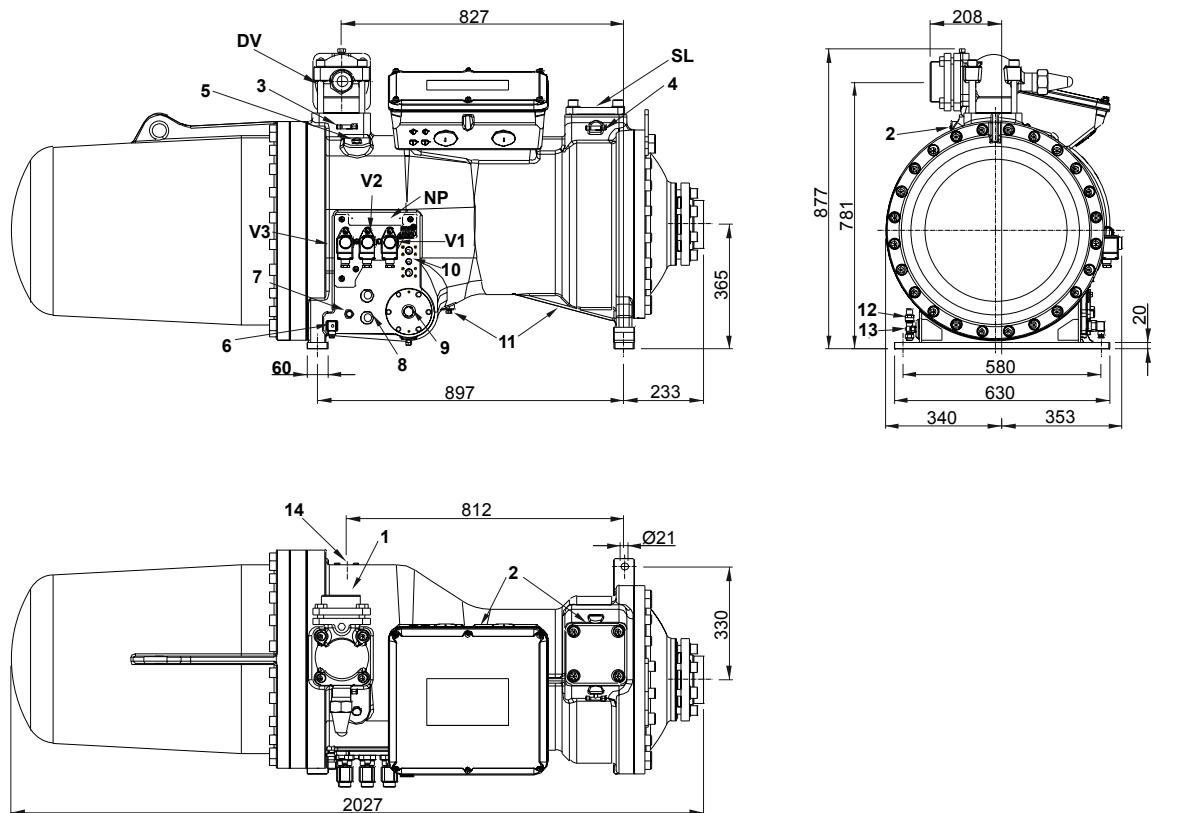
29



1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	
9	Filter clogging sensor connection	1/2" GAS
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1-1/8"
SV	Suction valve	DN125
DV	Discharge valve	4-1/8" - 105 mm
SL	Suction line	DN125
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	

Dimensional drawing

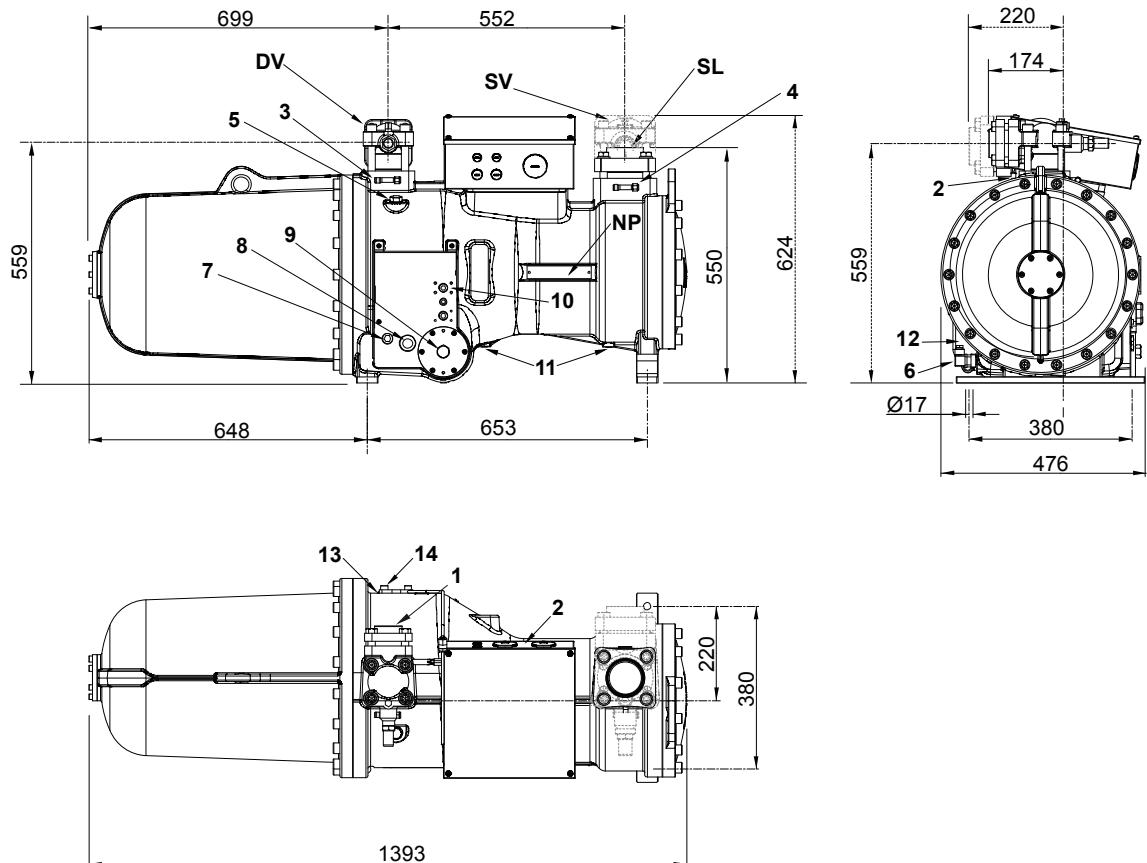
CX9 - 1000-1085 m³/h



1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	
9	Filter clogging sensor connection	1/2" GAS
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1-1/8"
SV	Suction valve	DN125
DV	Discharge valve	4-1/8" - 105 mm
SL	Suction line	DN125
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	

Dimensional drawing

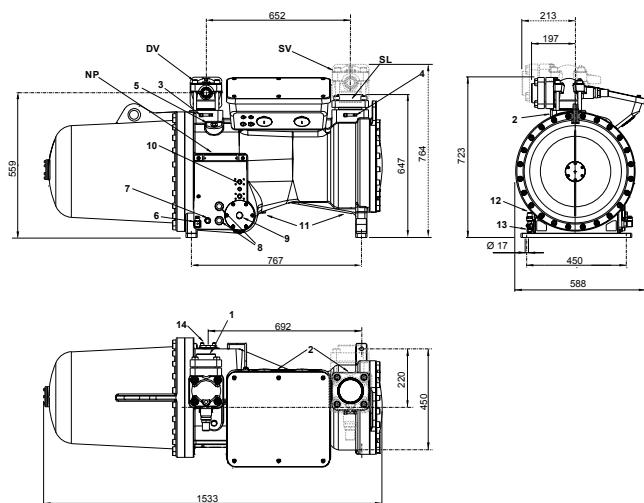
CXH10-CXW10



1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	1/2" GAS
9	Filter clogging sensor connection	
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1-1/8"
SV	Suction valve	3-1/8" - 80 mm
DV	Discharge valve	2-1/8" - 54 mm
SL	Suction line	3-1/8"

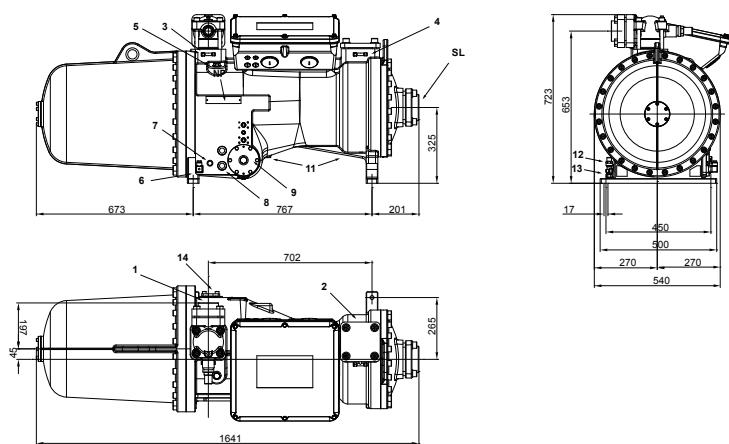
Dimensional drawing

CXH15-CXW15



STANDARD

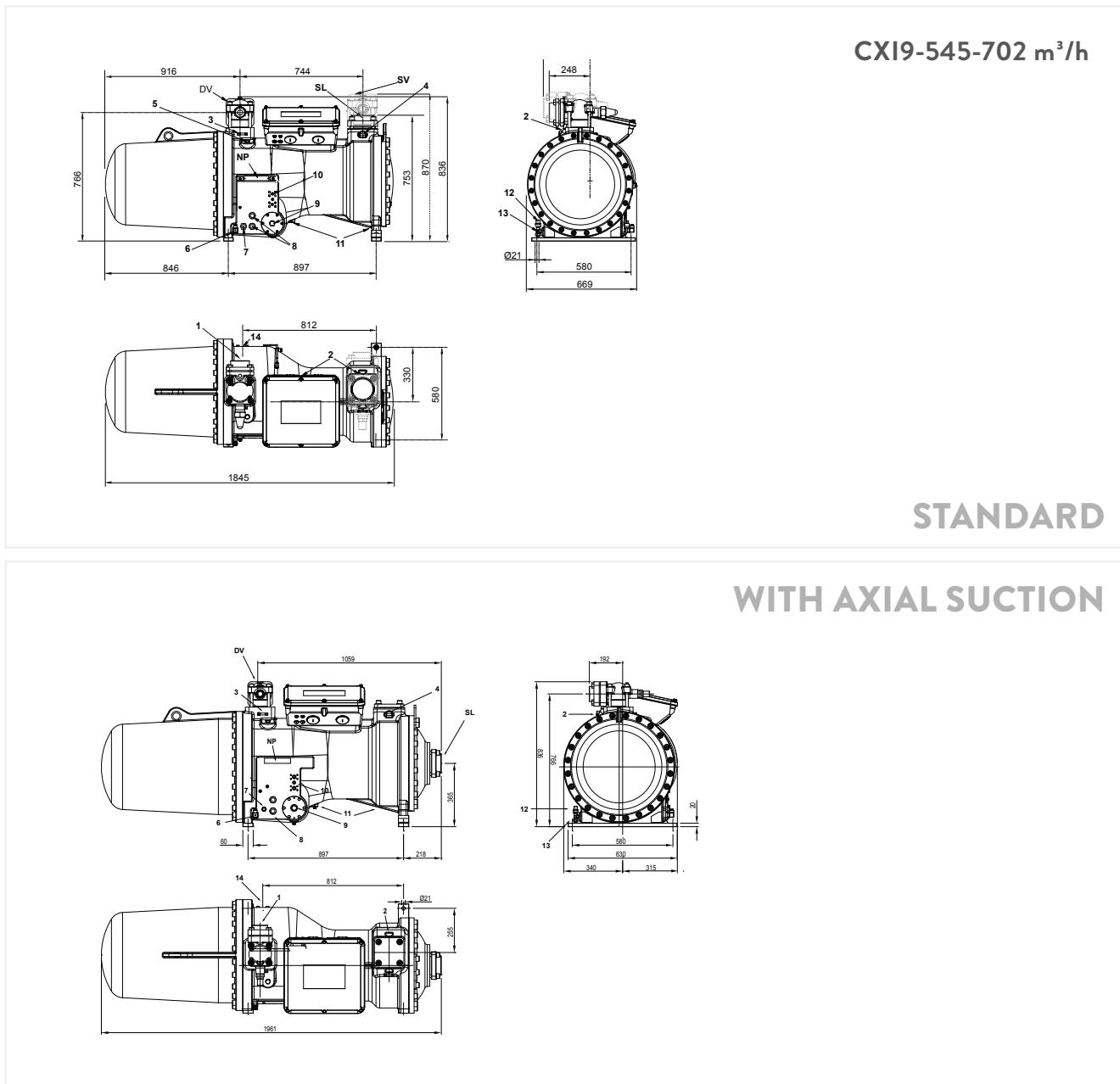
WITH AXIAL SUCTION



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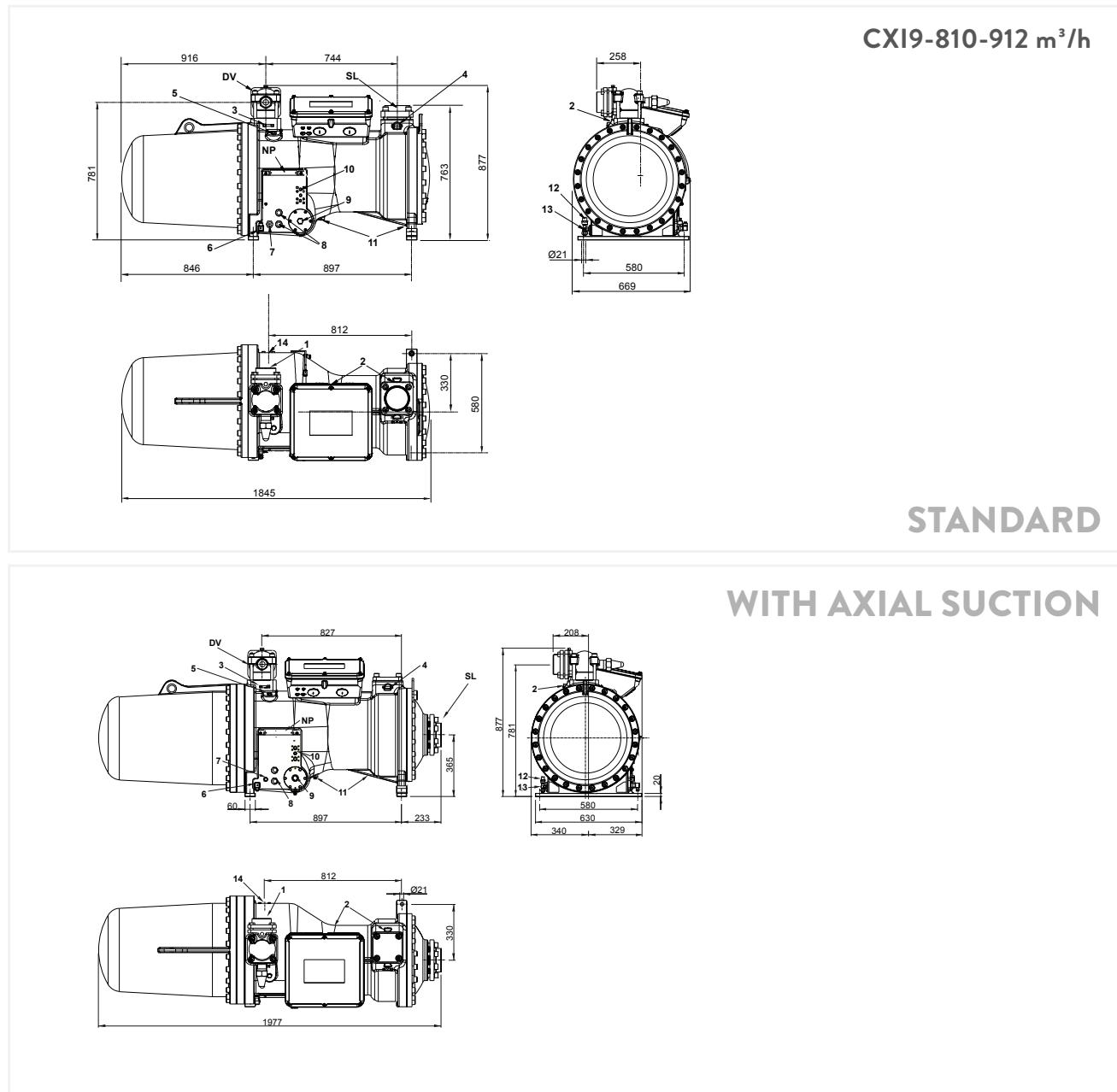
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2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	
9	Filter clogging sensor connection	1/2" GAS
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1-1/8"
SV	Suction valve	4-1/8" - 105 mm
DV	Discharge valve	DN80
SL	Suction line	4-1/8"

Dimensional drawing



1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	
9	Filter clogging sensor connection	1/2" GAS
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1-1/8"
SV	Suction valve	4-1/8" - 105 mm
DV	Discharge valve	DN80
SL	Suction line	4-1/8"

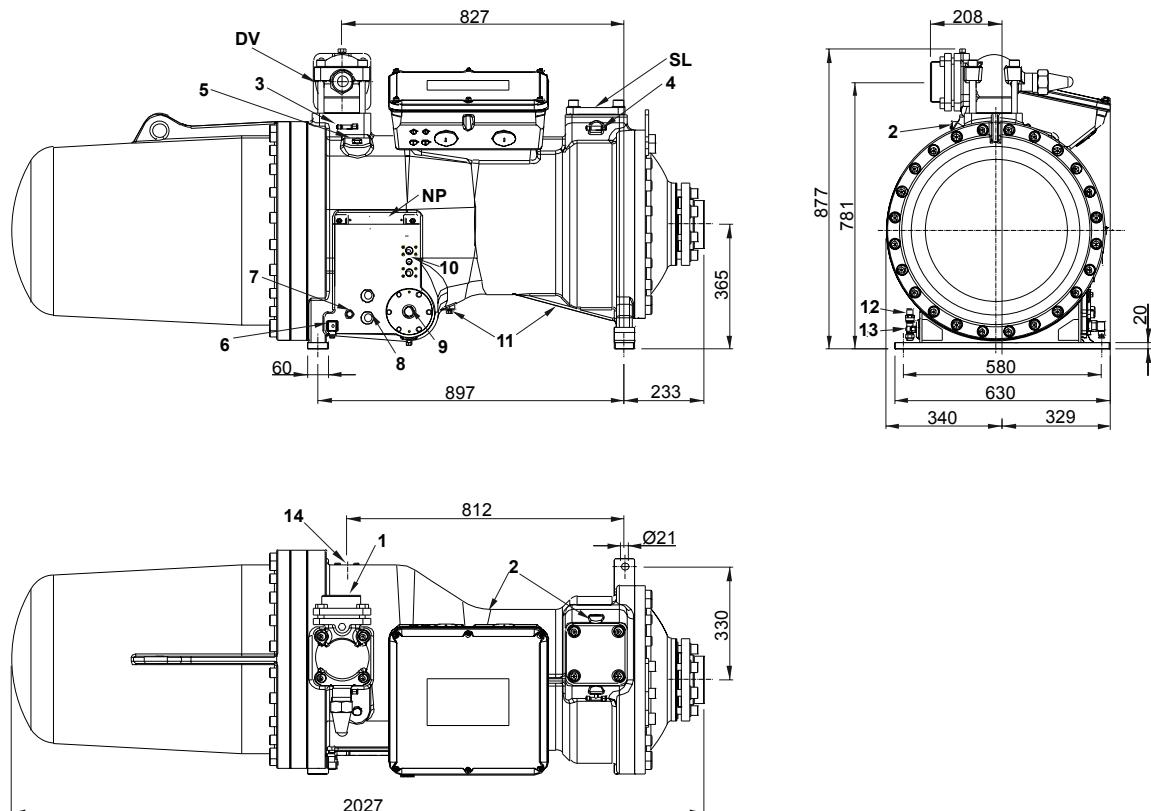
Dimensional drawing



1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	
9	Filter clogging sensor connection	1/2" GAS
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1-1/8"
SV	Suction valve	DN125
DV	Discharge valve	4-1/8" - 105 mm
SL	Suction line	DN125
14	ECO/Liquid injection connection	1-1/8"

Dimensional drawing

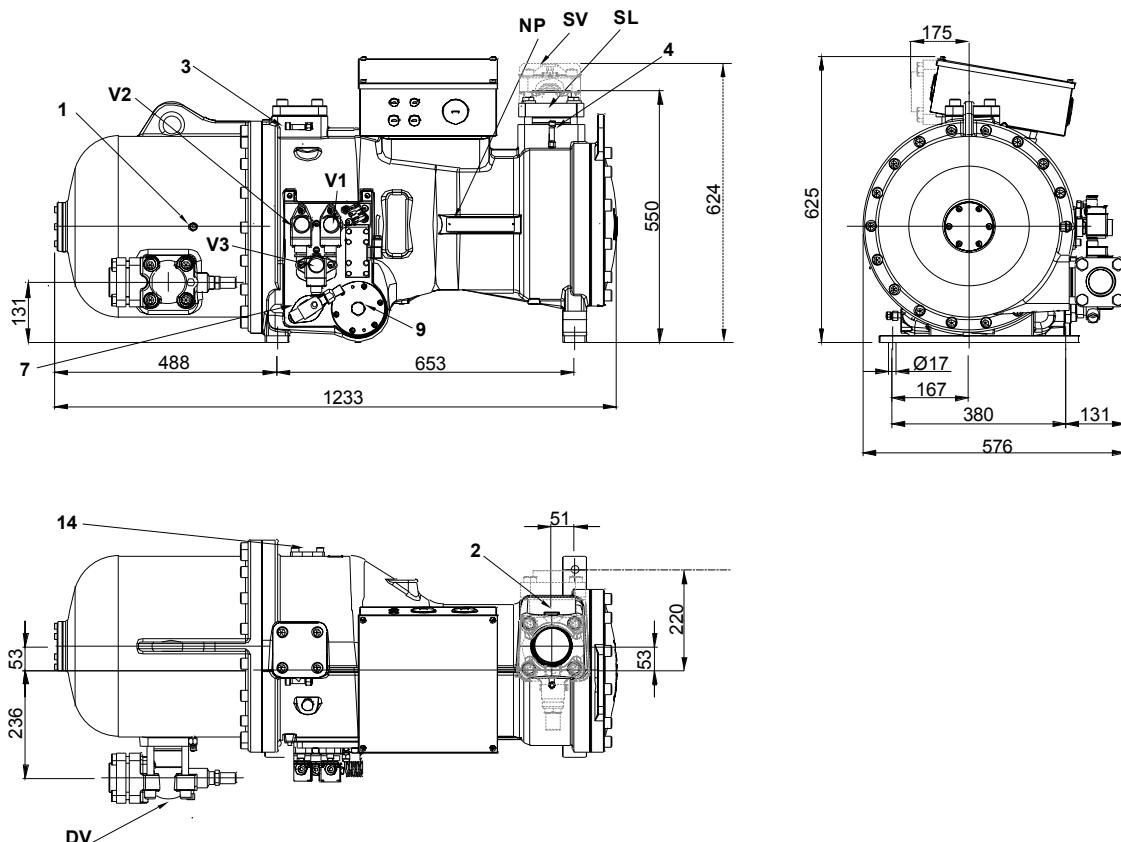
CXI9-1000-1085 m³/h



1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	3/8" GAS
6	Crankcase heater	
7	Oil level regulator connection	3/4" NPT
8	Oil level sight glass	
9	Filter clogging sensor connection	1/2" GAS
10	Oil cooler connection	1/2" NPT
11	Oil drain plug	1/4" NPT
12	Oil drain valve	1/8" NPT
13	Maximum oil temperature sensor	
14	ECO/Liquid injection connection	1-1/8"
SV	Suction valve	DN125
DV	Discharge valve	4-1/8" - 105 mm
SL	Suction line	DN125
14	ECO/Liquid injection connection	1-1/8"

Dimensional drawing

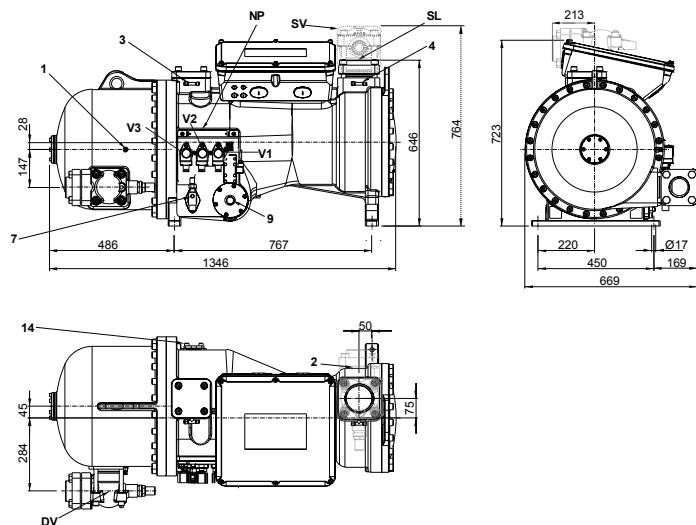
CXHP0-CXWP0



1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	
7	Oil level regulator connection	3/4" NPT
9	Filter clogging sensor connection	1/2" GAS
SV	Suction valve	3-1/8" - 80 mm
DV	Discharge valve	2-1/8" - 54 mm
SL	Suction line	3-1/8"
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	
14	ECO/Liquid injection connection	1-1/8"

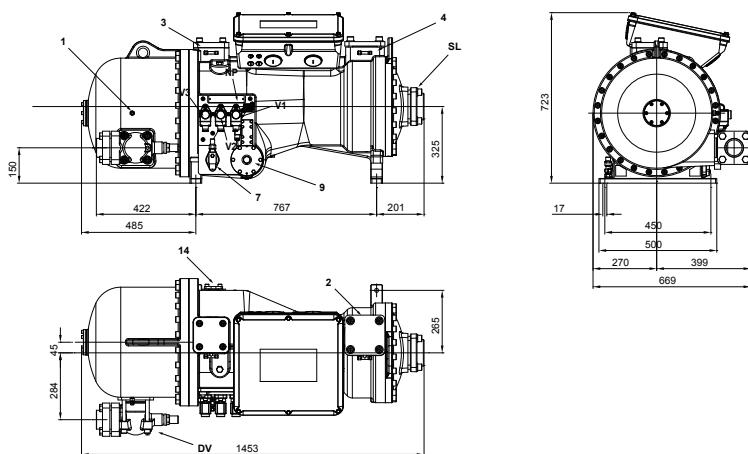
Dimensional drawing

CXHP5-CXWP5



STANDARD

WITH AXIAL SUCTION

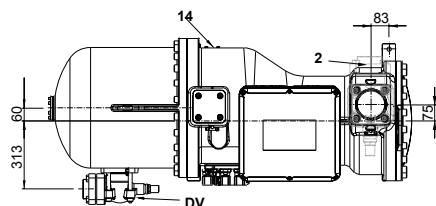
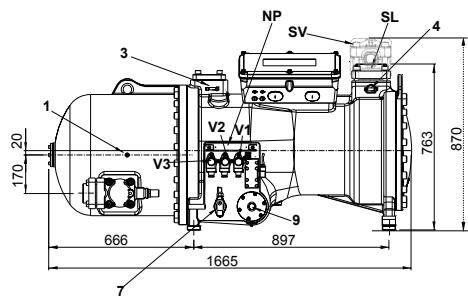


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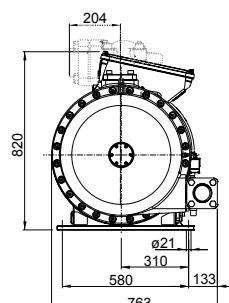
1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	
7	Oil level regulator connection	3/4" NPT
9	Filter clogging sensor connection	1/2" GAS
SV	Suction valve	4-1/8" - 105 mm
DV	Discharge valve	DN80
SL	Suction line	4-1/8"
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	
14	ECO/Liquid injection connection	1-1/8"

Dimensional drawing

CXP9-545-702 m³/h

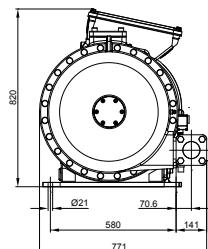
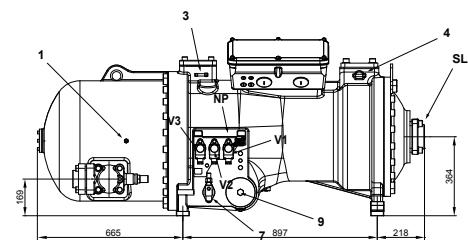


CXHP91 - CXWP91

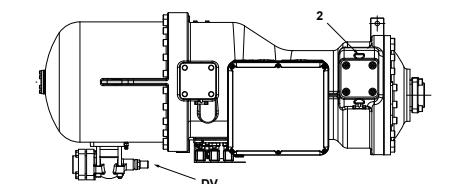
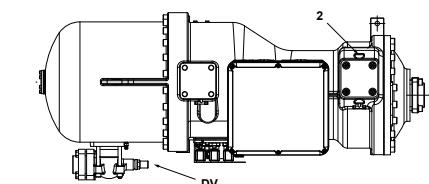


STANDARD

WITH AXIAL SUCTION



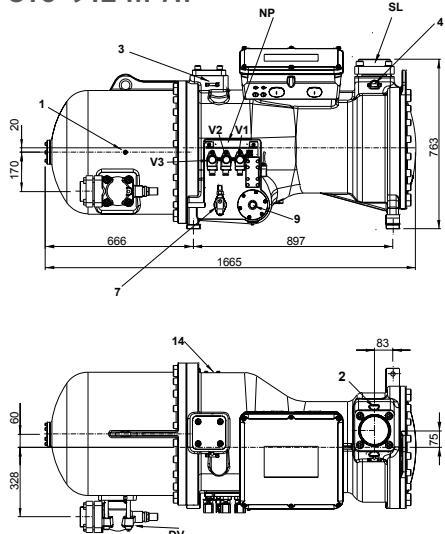
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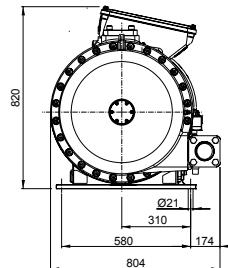
1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	
7	Oil level regulator connection	3/4" NPT
9	Filter clogging sensor connection	1/2" GAS
SV	Suction valve	4-1/8" - 105 mm
DV	Discharge valve	DN80
SL	Suction line	4 1/8"
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	
14	ECO/Liquid injection connection	1-1/8"

Dimensional drawing

CXP9-810-912 m³/h

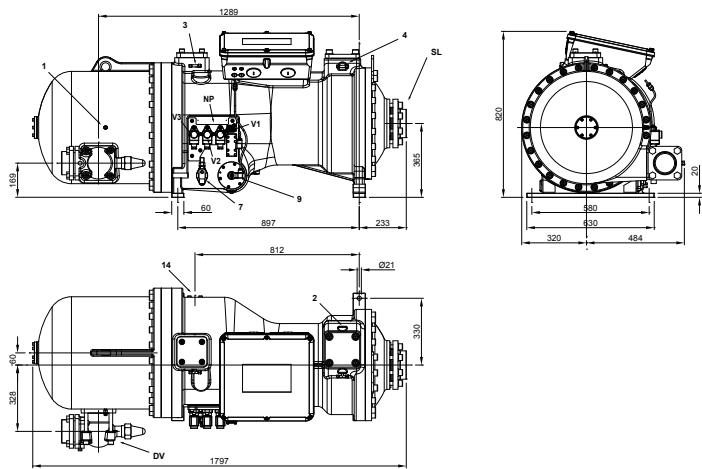


CXHP92 - CXWP92



STANDARD

WITH AXIAL SUCTION

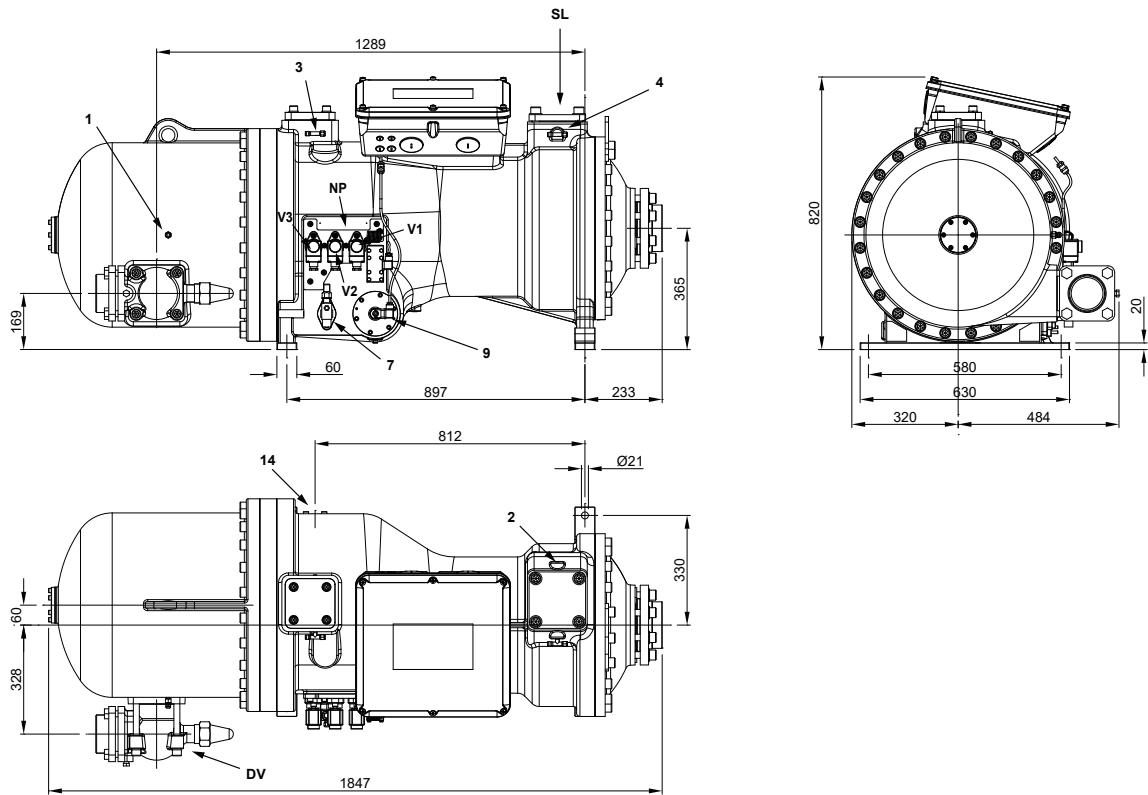


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1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	
7	Oil level regulator connection	3/4" NPT
9	Filter clogging sensor connection	1/2" GAS
SV	Suction valve	DN125
DV	Discharge valve	4-1/8" - 105 mm DN125
SL	Suction line	
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	

Dimensional drawing

CXP9-1000-1085 m³/h



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1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	High pressure connection	1/4" SAE x 1/4" SAE
4	Low pressure connection	1/4" SAE x 1/4" SAE
5	Oil charge plug	
7	Oil level regulator connection	3/4" NPT
9	Filter clogging sensor connection	1/2" GAS
SV	Suction valve	DN125
DV	Discharge valve	4-1/8" - 105 mm DN125
SL	Suction line	
V1	Capacity control valve	
V2	Capacity control valve	
V3	Capacity control valve	

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