

## CXW92-160-620Y

### **Data sheets**

Semi-hermetic compact compressors > CXW series - Vi 2.3 low compression ratio / for HFC - HCFC - HFO

Rotors	Technical data:		
Displacement @ 60 Hz	Rotors	#	2
Compressor version[1]	Displacement @ 50 Hz	m3/h [50Hz]	620
Motor power (HP)	Displacement @ 60 Hz	m3/h [60Hz]	744
Motor power (kW)         120           Motor voltage at 50 Hz[2]         V/ph/Hz         400 (+/-10%) V/3/50Hz SDS           Motor voltage at 60 Hz[2]         V/ph/Hz         460 (+/-10%) V/3/60Hz SDS           Capacity control (CC) step         %         100-75-50-25           Capacity control (CC) stepless         %         100-50           MRA, maximum operating current at 400V/50Hz and 460V/60Hz.         A         283           LRA, maximum starting current at 230V/50Hz and 460V/60Hz.         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz.         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz.         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz.         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz.         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz.         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz.         A         436           LRA, maximum starting current at 400V/50Hz and 470V/50Hz a	Compressor version[1]	1	2
Motor voltage at 50 Hz[2]         V/ph/Hz         400 (+/-10%) V/3/50Hz SDS           Motor voltage at 60 Hz[2]         V/ph/Hz         460 (+/-10%) V/3/60Hz SDS           Capacity control (CC) step         %         100-75-50-25           Capacity control (CC) stepless         %         100-50           MRA, maximum operating current at 400V/50Hz and 460V/60Hz.         A         283           LRA, maximum starting current at 230V/50Hz and 280V/50Hz.         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz.         A         1364           Max power consumption         kW [@ 50Hz]         181.3           Frequency min         Hz         30           Frequency max[3]         Hz         70           Protection device         INT69 FRYL Diagnose           Enclosure class         IP66           Maximum pressure HP         bar         30           Maximum pressure LP         bar         20.5           Oil tharge         I         26           Oil filter         Standard; integrate           Oil early eights         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard	Motor power (HP)		160
Motor voltage at 60 Hz[2]         V/ph/Hz         460 (+/-10%) V/3/60Hz SDS           Capacity control (CC) step         %         100-75-50-25           Capacity control (CC) stepless         %         100-50           MRA, maximum operating current at 400V/50Hz and 460V/60Hz.         A         283           LRA, maximum starting current at 230V/50Hz and 480V/50Hz, SDS motor         A         436           LRA, maximum starting current at 400V/50Hz and 460V/50Hz, SDS motor with DOL connection         A         1364           Max power consumption         kW @ 50Hz   181.3         181.3           Frequency min         Hz         30         70           Protection device         INT69 FRYL Diagnose         181.3 <td>Motor power (kW)</td> <td></td> <td>120</td>	Motor power (kW)		120
Capacity control (CC) stepless         %         100-75-50-25           Capacity control (CC) stepless         %         100-50           MRA, maximum operating current at 400V/50Hz and 460V/60Hz         A         283           LRA, maximum starting current at 230V/50Hz and 280V/50Hz, SDS motor         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz, SDS motor with DOL connection         A         1364           Max power consumption         kW (@ 50Hz)         181.3           Frequency min         Hz         30           Frequency max[3]         Hz         70           Protection device         INT69 FRYL Diagnose           Enclosure class         IP65           Maximum pressure HP         bar         30           Maximum pressure LP         bar         20.5           Oil type[4]         POE 170 cSt           Oil charge         I         26           Oil filter         Standard, replaceable           Crankcase heater         Standard; integrate           Oil eval sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) inch	Motor voltage at 50 Hz[2]	V/ph/Hz	400 (+/-10%) V/3/50Hz SDS
Capacity control (CC) stepless         %         100-50           MFA, maximum operating current at 400V/50Hz and 460V/60Hz.         A         283           LRA, maximum starting current at 230V/50Hz and 280V/60Hz.         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz.         A         1364           460V/60Hz.         SDS motor with DOL connection         A         1364           Max power consumption         kW [@ 50Hz]         181.3           Frequency min         Hz         30           Frequency max[3]         Hz         70           Protection device         INT69 FRYL Diagnose           Enclosure class         IP65           Maximum pressure HP         bar         30           Maximum pressure LP         bar         20.5           Oil otharge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) imm	Motor voltage at 60 Hz[2]	V/ph/Hz	460 (+/-10%) V/3/60Hz SDS
MRA, maximum operating current at 400V/50Hz and 460V/60Hz.         A         283           LRA, maximum starting current at 230V/50Hz and 280V/60Hz. SDS motor         A         436           LRA, maximum starting current at 400V/50Hz and 460V/60Hz. SDS motor with DOL connection         A         1364           Max power consumption         kW [@ 50Hz]         181.3           Frequency min         Hz         30           Frequency max[3]         Hz         70           Protection device         INT69 FRYL Diagnose           Enclosure class         IP65           Maximum pressure HP         bar         30           Maximum pressure LP         bar         20.5           Oil type[4]         POE 170 cSt           Oil charge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; replaceable           Oil level sight glass         2           Oil level cooling         Standard; maximum oil temperature sensor           Standard         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) inch         inch         4" 1/8           Discharge valve DV inch         inch         DN80           Net weight	Capacity control (CC) step	%	100-75-50-25
A60V/60Hz   SDS motor	Capacity control (CC) stepless	%	100-50
280V/60Hz	460V/60Hz	А	283
ABOV/60Hz, SDS motor with DOL connection   AW (@ 50Hz)   181.3	280V/60Hz , SDS motor	Α	436
Frequency min         Hz         30           Frequency max[3]         Hz         70           Protection device         INT69 FRYL Diagnose           Enclosure class         IP65           Maximum pressure HP         bar         30           Maximum pressure LP         bar         20.5           Oil type[4]         POE 170 cSt           Oil charge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve (DV) mm         mm         DN80           Net weight         kg         1350           Length         mm         693           Maximum height         mm         836           Sound pressure level (2/500, R407A)[5]         dB(A)         92.8           Sound pressur		Α	1364
Frequency max[3]         Hz         70           Protection device         INT69 FRYL Diagnose           Enclosure class         IP65           Maximum pressure HP         bar         30           Maximum pressure LP         bar         20.5           Oil type[4]         POE 170 cst           Oil charge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4* 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure le	Max power consumption	kW [@ 50Hz]	181.3
Protection device         INT69 FRYL Diagnose           Enclosure class         IP65           Maximum pressure HP         bar         30           Maximum pressure LP         bar         20.5           Oil type[4]         POE 170 cSt           Oil charge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8 <td>Frequency min</td> <td>Hz</td> <td>30</td>	Frequency min	Hz	30
Enclosure class         IP65           Maximum pressure HP         bar         30           Maximum pressure LP         bar         20.5           Oil type[4]         POE 170 cSt           Oil charge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Frequency max[3]	Hz	70
Maximum pressure HP         bar         30           Maximum pressure LP         bar         20.5           Oil type[4]         POE 170 cSt           Oil charge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Protection device		INT69 FRYL Diagnose
Maximum pressure LP         bar         20.5           Oil type[4]         POE 170 cSt           Oil charge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Enclosure class		IP65
Oil type[4]         POE 170 cSt           Oil charge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Maximum pressure HP	bar	30
Oil charge         I         26           Oil filter         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4* 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Maximum pressure LP	bar	20.5
Oil filter         Standard; replaceable           Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Oil type[4]		POE 170 cSt
Crankcase heater         Standard; integrate           Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Oil charge	I	26
Oil level sight glass         2           Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Oil filter		Standard; replaceable
Oil water cooling         Standard           Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Crankcase heater		Standard; integrate
Integrated check valve         Standard           Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Oil level sight glass		2
Maximum oil temperature sensor         Standard           Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Oil water cooling		Standard
Suction plug (SL) mm         mm         104           Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Integrated check valve		Standard
Suction plug (SL) inch         inch         4" 1/8           Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Maximum oil temperature sensor		Standard
Discharge valve (DV) mm         mm         DN80           Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Suction plug (SL) mm	mm	104
Discharge valve DV inch         inch         DN80           Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Suction plug (SL) inch	inch	4" 1/8
Net weight         kg         1350           Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Discharge valve (DV) mm	mm	DN80
Length         mm         1845           Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Discharge valve DV inch	inch	DN80
Max Width         mm         693           Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Net weight	kg	1350
Maximum height         mm         836           Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Length	mm	1845
Sound power level (5/50, R407A)[5]         dB(A)         92.8           Sound pressure level @ 1m (5/50, R407A)[5]         dB(A)         84.8	Max Width	mm	693
Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 84.8	Maximum height	mm	836
	Sound power level (5/50, R407A)[5]	dB(A)	92.8
Compressor body material Cast Iron	Sound pressure level @ 1m (5/50, R407A)[5]	dB(A)	84.8
	Compressor body material		Cast Iron

<sup>[1]</sup> Motor version: 1, high and middle temperature, all refrigerants; 2, low and middle temperature, all refrigerants; 3 ECOinside, low temperature, only R134a and R1234ze

- [2] Other available on request
- [3] Maximum frequency depends from the working condition: see FSS3 (Frascold selection software)
- [4] Different kind of oil available on request
- [5] Sound pressure in free-field, semi-spherical emission, at 1 meter of distance, at 50Hz; power and pressure levels in different condition are available on FSS2



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### **Data sheets**

Semi-hermetic compact compressors > CXW series - Vi 2.3 low compression ratio / for HFC - HCFC - HFO

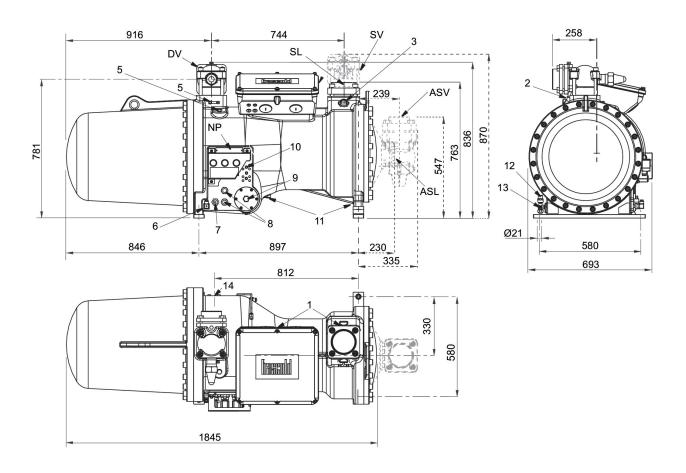
Accessories:		
DOL bridge bars	T00WK1200	
Suction valve	T00SK103920B	
Optoelectronic oil level switch	T00WP253	
Filter clogging switch	T00W3501122	
Motor cooling by means of suction gas	T00WK1400	
Valve+muffler for ECO/liquid injection	T00WK1520	
Rubber vibration absorber kit	T00SK205201	
Oil separator	See if You need and the selection on FSS	
Nipples for oil cooler connection	T00WK1450	



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### **Data sheets**

Semi-hermetic compact compressors > CXW series - Vi 2.3 low compression ratio / for HFC - HCFC - HFO



Dir	Dimensional drawing:		
1	Low pressure connection	1/8" NPT	
2	High pressure connection	1/8" NPT	
3	Low pressure connection	1/4"SAE x 1/4"SAE	
4	High pressure connection	1/4"SAE x 1/4"SAE	
5	Oil charge plug	3/8"GAS	
6	Crankcase heater	-	
7	Oil level switch connection	3/4"NPT	
8	Oil level sight glass	-	
9	Connection for filter clogging sensor	1/2"GAS	
10	Connection for oil cooler	1/2"NPT	
11	Connection for oil drain	1/4"NPT	
12	Oil drain valve	1/8" NPT	
13	Maximum oil temperature sensor	-	
14	Connection for ECO/liquid injection	Ø1"1/8	
V1 Capacity control valve (step 1) -		-	

V2 Capacity control valve (step 2)	-
V3 Capacity control valve (step 3)	-
SV Suction valve	104mm - 4"1/8
SL Suction plug	-
DV Discharge valve	79.4mm - 3"1/8
NP Name plate	-