

CXH91-160-620Y

Data sheets

Semi-hermetic compact compressors > CXH series - Vi 3.1 high compression ratio / for HFC - HCFC - HFO

Rotors	Technical data:		
Displacement @ 60 Hz	Rotors	#	2
Compressor version[1] 1 Motor power (HP) 240 Motor power (WW) 180 Motor voltage at 50 Hz[2] V/ph/Hz 400 (+/-10%) V/3/60Hz SDS Motor voltage at 60 Hz[2] V/ph/Hz 400 (+/-10%) V/3/60Hz SDS Capacity control (CC) step % 100-75-50-25 Capacity control (CC) stepless % 100-75-60-25 Capacity control (CC) stepless % 100-75-60-25 CAPACITY CONTROL (CC) stepless % 100-50 MRA, maximum operating current at 400V/50Hz and 460V/60Hz, SDS motor A 283 LEAR, maximum statring current at 400V/50Hz and 460V/60Hz, SDS motor with DOL connection A 1364 Max power consumption KW [@ 50Hz] 186.48 Frequency max[3] Hz 70 Protection device INT69 FRYL Diagnose Enclosure class IP65 Enclosure class IP65 Maximum pressure HP bar 30 Maximum pressure LP bar 30 Oil charge I 26 Oil filter Standard; replaceable<	Displacement @ 50 Hz	m3/h [50Hz]	620
Motor power (HP) 240 Motor power (kW) 180 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/3/50Hz SDS Capacity control (CC) step % 100-75-50-25 Capacity control (CC) stepless % 100-75-50-25 Capacity control (CC) stepless % 100-50 MRA. maximum poretain current at 400V/50Hz and 460V/60Hz, SDS motor A 283 LRA, maximum starting current at 230V/50Hz and 460V/60Hz, SDS motor A 1364 480V/60Hz, SDS motor with DOL connection A 1364 Max power consumption kW (@ 50Hz) 186.48 Frequency min Hz 30 Frequency max[3] Hz 70 Protection device INT69 FRYL Diagnose Enclosure class IP65 Maximum pressure HP bar 20.5 Oil type[4] POE 170 cst Oil filter Standard; integrate Crankcase heater Standard; integrate Oil west sight glass 2 2 <td>Displacement @ 60 Hz</td> <td>m3/h [60Hz]</td> <td>744</td>	Displacement @ 60 Hz	m3/h [60Hz]	744
Motor power (kW) 180 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/3/50Hz SDS Capacity control (CC) step % 100-75-50-25 Capacity control (CC) stepless % 100-50 MRA, maximum operating current at 400V/50Hz and 4A A 283 LRA, maximum starting current at 230V/50Hz and 460V/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) 186.48 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 type[4] Standard; replaceable Crank case heater Standard Oil evel sight glass 2 2 Oil evel sight glass <th< td=""><td>Compressor version[1]</td><td></td><td>1</td></th<>	Compressor version[1]		1
Motor voltage at 50 Hz[2] V/ph/Hz 400 (+/-10%) V/3/50Hz SDS Motor voltage at 60 Hz[2] V/ph/Hz 480 (+/-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 and 480V/50Hz, SDS motor A 436 LRA, maximum starting current at 400V/50Hz and 480V/50Hz, SDS motor with DOL connection A 1364 Max power consumption kW (@ 50Hz) 186.48 Frequency min Hz 30 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 Oil water cooling Standard Integrated check valve Standard Maximum oil temperature senso	Motor power (HP)		240
Motor voltage at 60 Hz[2] V/ph/Hz 460 (H/-10%) V/3/60Hz SDS Capacity control (CC) step % 100-75-50-25 Capacity control (CC) stepless % 100-75 MRA, maximum operating current at 400V/50Hz and 460V/60Hz A 283 LRA, maximum starting current at 400V/50Hz and 280V/60Hz , SDS motor A 436 LRA, maximum starting current at 400V/50Hz and 280V/60Hz , SDS motor A 1364 460V/60Hz, SDS motor with DOL connection A 1364 Max power consumption kW @ 50Hz] 186 48 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 1770 cSt Oil charge I 26 Oil water cooling Standard; replaceable Crankase heater Standard Oil water cooling Standard Integrated check valve Maximum oil tempera	Motor power (kW)		180
Capacity control (CC) step % 100-75-50-25 Capacity control (CC) stepless % 100-50 MRA, maximum operating current at 400V/50Hz and 460V/60Hz. SDS motor A 283 LRA, maximum starting current at 230V/50Hz and 280V/60Hz. SDS motor with DOL connection A 436 LRA, maximum starting current at 400V/50Hz and 460V/60Hz. SDS motor with DOL connection A 1364 Max power consumption RW [@ 50Hz] 186.48 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 Oil level sight glass 2 Oil water cooling Standard Integrated check valve Standard Maximum oil temperature sensor Standard Suction p	Motor voltage at 50 Hz[2]	V/ph/Hz	400 (+/-10%) V/3/50Hz SDS
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] 186.48 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 clarge I 26 Oil filter Standard; replaceable Crankcase heater Standard; integrate Oil level sight glass 2 2 Oil water cooling Standard 4 Maximum oil temperature sensor Standard Suction plug (SL) mm mm 104 Suction plug (SL) inch inch 4*1/8 <t< td=""><td>Motor voltage at 60 Hz[2]</td><td>V/ph/Hz</td><td>460 (+/-10%) V/3/60Hz SDS</td></t<>	Motor voltage at 60 Hz[2]	V/ph/Hz	460 (+/-10%) V/3/60Hz SDS
MRA, maximum operating current at 400V/50Hz and 460V/50Hz. 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/50Hz, SDS motor with DOL connection A 1364 Max power consumption KW [@ 50Hz] 186.48 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 evel 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	Capacity control (CC) step	%	100-75-50-25
460V/60Hz A 263 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 460V/60Hz, SDS motor with DOL connection kW [@ 50Hz] 186.48 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 level sight glass I 26 Oil level sight glass 2 3 Oil water cooling Standard 3 Integrated check valve Standard 3 Maximum oil temperature sensor Standard Suction plug (SL) mm mm 104 Suction plug (SL) mch inch 4* 1/8 Discharge valve (DV) mch inch 3* 1/8	Capacity control (CC) stepless	%	100-50
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] 186.48 Frequency min Hz 30 Frequency max[3] Hz 70 Protection device INT69 FRYL Diagnose Enclosure class INT69 FRYL Diagnose Maximum pressure HP bar 30 Maximum pressure LP bar 20.5 Oil type[4] POE 170 cSt Oil filter Standard; replaceable Crankcase heater Standard; integrate Oil evel 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 79.4 Discharge valve (DV) mm mm 79.4 Discharge valve (DV) inch inch 3* 1/8		А	283
460V/60Hz, SDS motor with DOL connection A 1394 Max power consumption kW (@ 50Hz) 186.48 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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836		А	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 evel 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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	Max power consumption	kW [@ 50Hz]	186.48
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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 693 Maximum height mm 836	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 693 Max Width mm 836	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	Oil filter		Standard; replaceable
Oil water coolingStandardIntegrated check valveStandardMaximum oil temperature sensorStandardSuction plug (SL) mmmm104Suction plug (SL) inchinch4" 1/8Discharge valve (DV) mmmm79.4Discharge valve DV inchinch3" 1/8Net weightkg1325Lengthmm1845Max Widthmm693Maximum heightmm836	Crankcase heater		Standard; integrate
Integrated check valve Maximum oil temperature sensor Standard Suction plug (SL) mm mm 104 Suction plug (SL) inch inch 4" 1/8 Discharge valve (DV) mm mm 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	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 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	Oil water cooling		Standard
Suction plug (SL) mm mm 104 Suction plug (SL) inch inch 4" 1/8 Discharge valve (DV) mm mm 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	Integrated check valve		Standard
Suction plug (SL) inch inch 4" 1/8 Discharge valve (DV) mm mm 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	Maximum oil temperature sensor		Standard
Discharge valve (DV) mm mm 79.4 Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	Suction plug (SL) mm	mm	104
Discharge valve DV inch inch 3" 1/8 Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	Suction plug (SL) inch	inch	4" 1/8
Net weight kg 1325 Length mm 1845 Max Width mm 693 Maximum height mm 836	Discharge valve (DV) mm	mm	79.4
Length mm 1845 Max Width mm 693 Maximum height mm 836	Discharge valve DV inch	inch	3" 1/8
Max Widthmm693Maximum heightmm836	Net weight	kg	1325
Maximum height mm 836	Length	mm	1845
	Max Width	mm	693
Sound power level (5/50, R134a)[5][5] dB(A) 82 4	Maximum height	mm	836
22 (2	Sound power level (5/50, R134a)[5][5]	dB(A)	82.4
Compressor body material Cast Iron	Compressor body material		Cast Iron

- [1] 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



CXH91-160-620Y

Data sheets

Semi-hermetic compact compressors > CXH series - Vi 3.1 high compression ratio / for HFC - HCFC - HFO

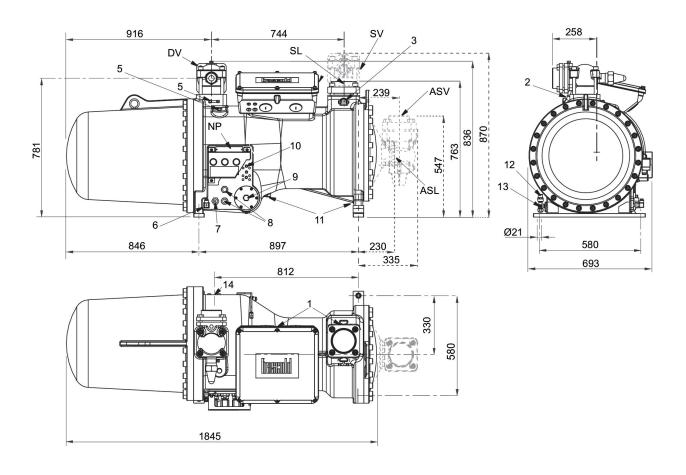
Accessories:	
DOL bridge bars	T00WK1200
Suction valve	T00SK103920B
Optoelectronic oil level switch	T00WP253
Filter clogging switch	T00W3501122
Motor cooling by means of suction gas	T00WK1400
Valve+muffler for ECO/liquid injection	T00WK1520
Rubber vibration absorber kit	T00SK205201
Oil separator	See if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



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Dir	nensional 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	104mm - 4"1/8
DV Discharge valve	79.4mm - 3"1/8
NP Name plate	-