

CXH92-280-810Y

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]	Displacement @ 50 Hz	m3/h [50Hz]	810	
Motor power (HP) 280 Motor power (kW) 210 Motor voltage at 50 Hz[2] V/ph/Hz 400 (+/-10%) V/350Hz SDS Motor voltage at 60 Hz[2] V/ph/Hz 460 (+/-10%) V/350Hz SDS Capacity control (CC) step % 100-75-50-25 Capacity control (CC) stepless % 100-75 MRA maximum poerating current at 400V/50Hz and 460V/60Hz A 455 LRA, maximum starting current at 230V/50Hz and 460V/60Hz, SDS motor A 805 LRA, maximum starting current at 400V/50Hz and 460V/60Hz, SDS motor with DOL connection A 2550 Max power consumption kW (@ 50Hz) 30.4 560-4 Frequency min Hz 30 70 Frequency min Hz 30 70 Protection device INT69 FRYL Diagnose 8 Enclosure class IP65 Maximum pressure HP bar 30 Maximum pressure LP bar 30 90 Maximum pressure LP bar 26 01 Oil charge I 26 01 <th< td=""><td>Displacement @ 60 Hz</td><td>m3/h [60Hz]</td><td>972</td></th<>	Displacement @ 60 Hz	m3/h [60Hz]	972	
Motor power (kW) 210 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 455 LRA, maximum starting current at 230V/50Hz and 460V/60Hz. A 805 LRA, maximum starting current at 400V/50Hz and 460V/60Hz. A 2520 Max power consumption kW (@ 50Hz) 350-4 Frequency min Hz 30 Frequency max[3] Hz 70 Protection device INF69 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] POE 170 cst Oil water cooling Standard; replaceable Crankcase heater Standard Oil water cooling Standard Max	Compressor version[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 455 LRA, maximum starting current at 230V/50Hz and 280V/50Hz. A 805 LRA, maximum starting current at 400V/50Hz and 460V/60Hz. SDS motor A 2520 LRA, maximum starting current at 400V/50Hz and 460V/60Hz. SDS motor with DOL connection A 2520 Max power consumption kW [@ 50Hz] 350.4 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 easily glass 2 Oil early easily glass 2	Motor power (HP)		280	
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 455 LRA, maximum starting current at 230V/50Hz and 280V/60Hz. A 805 LRA, maximum starting current at 400V/50Hz and 460V/60Hz. A 2520 460V/60Hz. SDS motor with DOL connection A 2520 Max power consumption kW @ 50Hz] 350.4 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 Oil evel sight glass 2 Oil water cooling Standard	Motor power (kW)		210	
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 455 LRA, maximum starting current at 230V/50Hz and 280V/50Hz, SDS motor A 805 LRA, maximum starting current at 400V/50Hz and 460V/60Hz, SDS motor with DOL connection A 2520 Max power consumption kW (@ 50Hz) 350.4 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 455 LRA, maximum starting current at 230V/50Hz and 280V/60Hz. A 805 LRA, maximum starting current at 400V/50Hz and 460V/60Hz. A 2520 Max power consumption kW [@ 50Hz] 350.4 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 otharge I 26 Oil filter Standard; replaceable Crankcase heater Standard; replaceable Crankcase heater Standard Oil level sight glass 2 Oil water cooling Standard Integrated check valve Standard Maximum oil temperature sensor Standard Suction plug (SL) imm mm DN125 Suction plug (SL) inch inch DN125	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 455 LRA, maximum starting current at 230V/50Hz and 280V/60Hz. SDS motor A 805 LRA, maximum starting current at 400V/50Hz and 460V/60Hz. SDS motor with DOL connection A 2520 Max power consumption kW [@ 50Hz] 350.4 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 DN125 Discharge valve DV inch inch DN125 Discharge valve DV inc	Capacity control (CC) step	%	100-75-50-25	
A60V/60Hz SDS motor	Capacity control (CC) stepless	%	100-50	
280V/60Hz	460V/60Hz	А	455	
ABOV/60Hz, SDS motor with DOL connection A 2520 Max power consumption kW [@ 50Hz] 350.4 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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4*1/8 Net weight kg 1410 <td>280V/60Hz , SDS motor</td> <td>Α</td> <td colspan="2">805</td>	280V/60Hz , SDS motor	Α	805	
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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 14*10 Length mm 693 Max Width mm 693 Maximum height m		Α	2520	
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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Max power consumption	kW [@ 50Hz]	350.4	
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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 693 Max Width mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 693 Max Width mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4* 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	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 DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Oil filter		Standard; replaceable	
Oil water cooling Standard Integrated check valve Standard Maximum oil temperature sensor Standard Suction plug (SL) mm mm DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Crankcase heater		Standard; integrate	
Integrated check valve Standard Maximum oil temperature sensor Standard Suction plug (SL) mm mm DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Oil level sight glass		2	
Maximum oil temperature sensor Standard Suction plug (SL) mm mm DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Oil water cooling		Standard	
Suction plug (SL) mm mm DN125 Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Integrated check valve		Standard	
Suction plug (SL) inch inch DN125 Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Maximum oil temperature sensor		Standard	
Discharge valve (DV) mm mm 104 Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Suction plug (SL) mm	mm	DN125	
Discharge valve DV inch inch 4" 1/8 Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Suction plug (SL) inch	inch	DN125	
Net weight kg 1410 Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Discharge valve (DV) mm	mm	104	
Length mm 1845 Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Discharge valve DV inch	inch	4" 1/8	
Max Width mm 693 Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Net weight	kg	1410	
Maximum height mm 877 Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Length	mm	1845	
Sound power level (5/50, R407A)[5] dB(A) 93.2 Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Max Width	mm	693	
Sound pressure level @ 1m (5/50, R407A)[5] dB(A) 85.2	Maximum height	mm	877	
	Sound power level (5/50, R407A)[5]	dB(A)	93.2	
Compressor body material Cast Iron	Sound pressure level @ 1m (5/50, R407A)[5]	dB(A)	85.2	
	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



CXH92-280-810Y

Data sheets

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

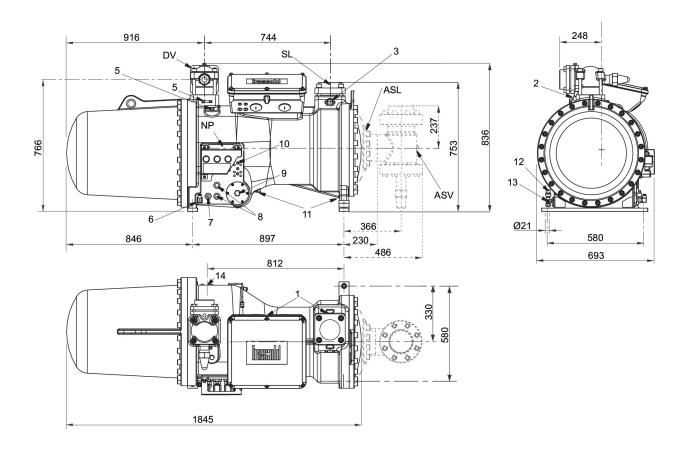
Accessories:		
DOL bridge bars	T00WK1200	
Optoelectronic oil level switch	T00WP253	
Filter clogging switch	T00W3501122	
Motor cooling by means of suction gas	T00WK1400	
Valve+muffler for ECO/liquid injection	T00WK1520	
Rubber vibration absorber kit	T00SK205201	
Oil separator	See if You need and the selection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



CXH92-280-810Y

Data sheets

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



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	DN125
SL Suction plug	DN125
DV Discharge valve	104mm - 4"1/8
NP Name plate	-