Laboratory refrigerators are equipped with a cooling system and can provide a stable temperature between 0°C ... +15°C

USB port

door lock

temperature sensor

internal LED light

access port (Ø30 mm)

fan

wire shelf

solid door,
glass (option),
double (option)

Laboratory refrigerator CHL 2 P Smart PRO

All thermostatic equipment manufactured by POL-EKO-APARATURA can be provided with Calibration Certificate issued by accredited Measurement Laboratory. Detailed information on accreditation is available on website: www.pol-eko.eu.

We have been always reaching our goals by designing and implementing innovative technical solutions. Our designers, supported by the R&D unit, combine cutting-edge technology with creativity to deliver state-of-the art equipment. Customized solutions and out-of-the box projects that we willingly carry out are a great an endeavour and inspire us for further development.

Dawid Rybarz, Head of Technical Department

STANDARD FEATURES

- temperature range 0...+15°C
- quality control protocol (at +4°C)
- English instruction manual
- temperature protection class 1.0 (Smart) and 3.2 (Smart PRO) to DIN 12880
- open door alarm
- castors in standard for models CHL 1200 and 1450
- LAN and USB ports
- internal LED light
- access port (Ø30 mm) on the left wall
- door lock
- wire shelves in B (basic) models, stainless steel wire shelves (INOX) in C (comfort) and P (premium) models
- solid door
- anchoring kit for CHL 500, 700, 1200, 1450 and double/triple chambers

EXTRA FOR **SMART PRO**

- Wi-Fi
- LAN cable
- LabDesk

AVAILABLE VERSIONS

- Smart
- Smart PRO
- TR tropic (on request) for higher ambient temperatures
- double/triple chamber
- combined with ZLN 85 or ST

SOFTWARE

- LabDesk for data download to a PC via LAN or Wi-Fi (optional for Smart version)

Application

- storage of water and sewage samples, piezometer leachate
- storage of AAS, GC or HPLC calibration standards
- storage of reagents
- storage of medicines and vaccines

		CHL 1	CHL 2	CHL 3	CHL4	CHL 5	CHL 6	CHL 500	CHL 700	CHL 1200	CHL 1450
Parameter											
air convection		forced									
chamber capacity [l]		70	150	200	250	300	400	500	625	1365	1540
working capacity [l]		55	122	163	203	243	324	469	611	1355	1525
door type		solid / glass or double¹ (option)									
temperature range [°C]		0...+15									
temperature resolution [°C]		every 0,1									
controller		microprocessor PID, 4,3" (Smart) / 7" (Smart PRO) full colour touch screen									
interior	B (basic)	aluminum									
	C (comfort)	stainless steel to DIN 1.4016									
	CS (comfort/S)	stainless steel to DIN 1.4016									
	P (premium)	acid-proof stainless steel to DIN 1.4301									
	PS (premium/S)	acid-proof stainless steel to DIN 1.4301									
housing	B (basic)	powder coated sheet									
	C (comfort)	powder coated sheet									
	CS (comfort/S)	polished stainless steel									
	P (premium)	powder coated sheet									
	PS (premium/S)	polished stainless steel									
overall dims² [mm]	A width	570	620	620	620	620	620	660	750	1480	1460
	B height	660	900	1100	1300	1500	1900	1990	1990	1990	1940
	C depth	680	650	650	650	650	650	810	890	890	990
internal dimis³ [mm]	D width	430	480	480	480	480	480	480	540	1270	1270
	D' width	470	520	520	520	520	520	510	600	1340	1340
	E height	430	660	860	1060	1260	1660	1510	1510	1510	1460
	F depth	300	420	420	420	420	420	610	680	680	780
	F' depth	360	480	480	480	480	480	–	–	–	–
	G depth	–	320	320	320	320	320	–	–	–	–
	H height	–	440	640	840	1040	1440	–	–	–	–
	I height	–	–	–	–	–	–	1380	1380	1380	1380
max shelf workload⁴ [kg]	–	10	10	10	10	10	10	20	30	30	30
	PW⁵ version	on request						100	100	100	100
max unit workload [kg]	–	20	30	40	50	60	60	100	150	300	300
	W⁶ version	on request									
nominal power [W]		250	250	250	250	350	350	650	650	650	950
weight⁷ [kg]		37	54	61	69	75	90	105	121	185	200
temperature fluctuation* at +4°C [+/- °C]		0,4	0,4	0,4	0,4	0,4	0,6	0,6	0,8	1,0	1,0
temperature variation* at +4°C [+/- °C]		0,7	0,7	0,7	0,8	0,9	0,9	1,0	1,0	1,2	1,2
temperature protection		class 1.0 to DIN 12880 / class 3.2 (option) / class 3.2 in Smart PRO									
power supply**		230V 50-60Hz									
shelves fitted/max		2/2	3/4	3/4	4/6	4/7	4/10	3/11	3/11	2 x 3/11⁸	2 x 3/11⁸
refrigerant		R1234ze / GWP=1						R290 / GWP=3			
warranty		24 months									
manfacturer		POL-EKO-APARATURA									

all the above technical data refer to standard units (without optional accessories)
* - fluctuation measured in centre of chamber; in space, variation (K) calculated for chamber as: K= +/- (T avg max - T avg min) / 2
** - other power supplies on request
1 - additional internal glass door
2 - depth doesn't include 50 mm of power cable
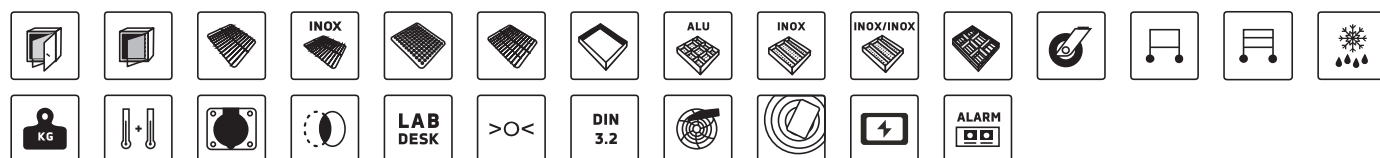3 - dims of units with double door are smaller
4 - on uniformly loaded surfce

5 - reinforced shelf
6 - reinforced version
7 - for units with solid door, in version B (basic)
8 - two columns with 3 shelves each

Options and accessories (icon description see pages 76-82)

Parameter		CHL 1/1	CHL 1/1/1	CHL 2/2	CHL 2/3
air convection		forced			
chamber capacity [l]		70 / 70	70 / 70 / 70	150 / 150	150 / 200
working capacity [l]		55 / 55	55 / 55 / 55	122 / 122	122 / 163
door type		solid / glass or double[1] (option)			
temperature range [°C]		0...+15			
temperature resolution [°C]		every 0,1			
controller		microprocessor PID, 4,3" (Smart) / 7" (Smart PRO) full colour touch screen			
interior	B (basic)	aluminum			
	C (comfort)	stainless steel to DIN 1.4016			
	CS (comfort/S)	stainless steel to DIN 1.4016			
	P (premium)	acid-proof stainless steel to DIN 1.4301			
	P/S (premium/S)	acid-proof stainless steel to DIN 1.4301			
housing	B (basic)	powder coated sheet			
	C (comfort)	powder coated sheet			
	C/S (comfort/S)	polished stainless steel			
	P (premium)	powder coated sheet			
	P/S (premium/S)	polished stainless steel			
overall dims[2] [mm]	A width	570	570	620	620
	B height	1290	1920	1720	1910
	C depth	680	680	650	650
internal dims[3] [mm]	D width	430	430	480	480
	D' width	470	470	520	520
	E height	430	430	660	660 / 860
	F depth	300	300	420	420
	F' depth	360	360	480	480
	G depth	-	-	320	320
	H height	-	-	440	440 / 640
max shelf workload[4] [kg]	-	10	10	10	10
	PW[5] version	on request			
max unit workload [kg]	-	20 / 20	20 / 20 / 20	30 / 30	30 / 40
	W[6] version	on request			
nominal power [W]		500	750	500	500
weight[7] [kg]		65	98	109	114
temperature fluctuation* at +4°C [+/- °C]		0,4	0,4	0,4	0,4
temperature variation* at +4°C [+/- °C]		0,7	0,7	0,7	0,7
temperature protection		class 1.0 to DIN 12880 / class 3.2 (option) / class 3.2 in Smart PRO			
power supply**		230V 50-60Hz			
shelves fitted/max		see page 22			
refrigerant		R1234ze / GWP=1			
warranty		24 months			
manfacturer		POL-EKO-APARATURA			

all the above technical data refer to standard units (without optional accessories)
* - fluctuation measured in centre of chamber; in space, variation (K) calculated for chamber as: K= +/- (T avg max - T avg min) / 2
** - other power supplies on request
1 - additional internal glass door
2 - depth doesn't include 50 mm of power cable
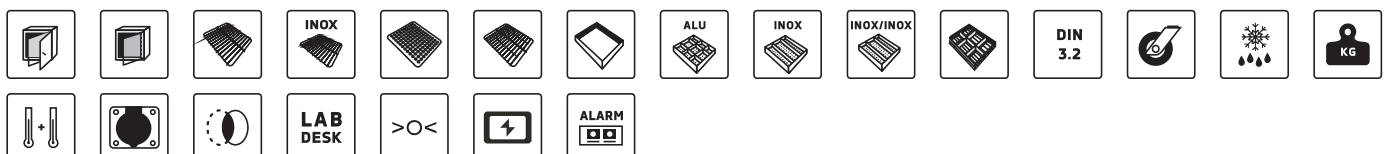3 - dims of units with double door are smaller
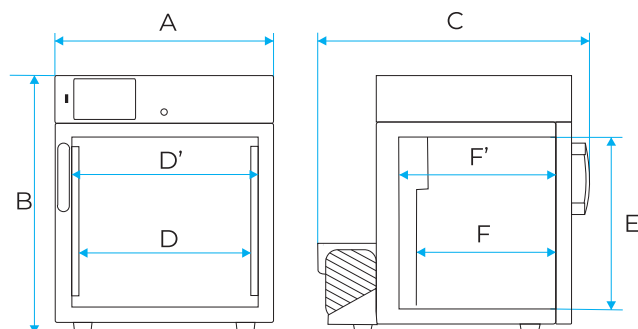4 - on uniformly loaded surface
5 - reinforced shelf
6 - reinforced version
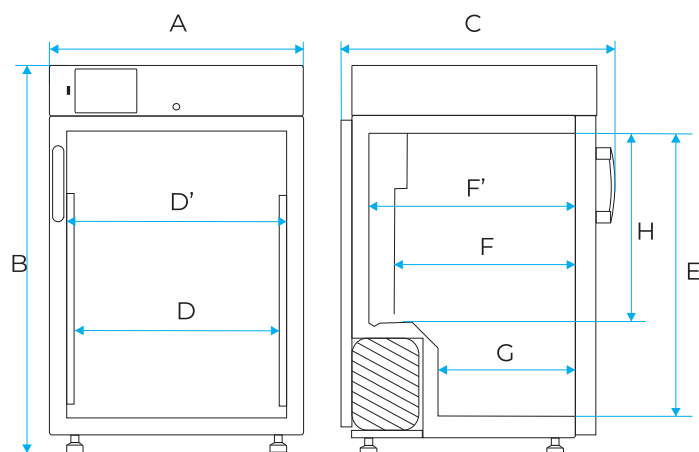7 - for units with solid door, in version B (basic)

Options and accessories (icon description see pages 76-82)

Dimensions CHL 1

Dimensions CHL 2/3/4/5/6

Dimensions CHL 500/700/1200/1450