Data sheet

print date: 2026-11-06

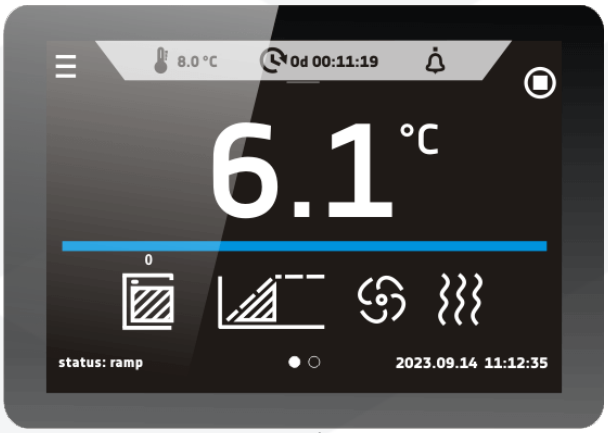
Laboratory Refrigerator

CHL 1 Smart



The photo above is for reference only, may show additional options not included in standard equipment. The real appearance, particularly color and structure of the material may differ from the ones presented in the photo.

Advantages of the SMART controller:
- 4,3”, clear, full colour touch screen
- LAN, USB ports for data transfer
- multi-segment time and temperature programs
- visual and sound alarm
- internal memory for programs and data storage
- event registry
- user manual for direct download
- Quick change of program parameters
- Alarm Bar
- operating with gloves on



Smart - preview screen

Features:
- open door alarm
- internal LED light
- access port for external sensor (Ø30 mm) on the left side of the unit
- door lock
- automatic defrost function

Richmond Scientific

TECHNICAL DATA

air convection	forced
chamber capacity [l]	74
working capacity [l]	54
controller	microprocessor PID
display	4,3" full colour touch screen

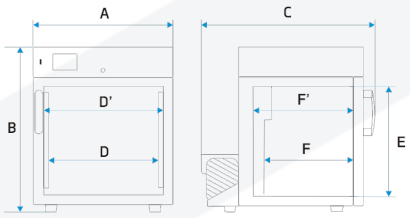
TEMPERATURE

temperature range [°C]	0...+15
temperature resolution every ... [°C]	0,1
temperature fluctuation at 4°C [+/-°C]*	0,4
temperature variation at 4°C [+/-°C]*	0,7
temperature protection	class 1.0 to DIN 12880 / class 3.2 (option)

CHAMBER

door type	solid / glass or double (option) /4/
interior	
C Smart	stainless steel to DIN 1.4016
CS Smart	stainless steel to DIN 1.4016
P Smart	corrosion-resistant stainless steel to DIN 1.4301
PS Smart	corrosion-resistant stainless steel to DIN 1.4301
housing	
C Smart	powder coated sheet
CS Smart	stainless steel polished
P Smart	powder coated sheet
PS Smart	stainless steel polished

overall dims [mm] /1/	
width A	560
height B	660
depth C	690
internal dims [mm]	
width D	430
width D'	470
height E	430
depth F	300
depth F'	360

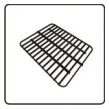
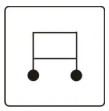


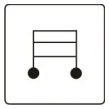
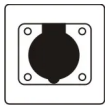
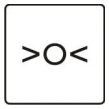
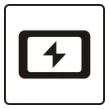
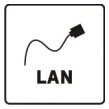
shelves (standard | max)	2 | 2
max shelf workload [kg] /2/	10
max unit workload [kg]	20
weight [kg]	43

ELECTRICAL PARAMETERS	
voltage	230V 50/60Hz
nominal power [W]	250
refrigerant	R1234ze / GWP=1,37
warranty	24 months
manufacturer	POL-EKO®

all the above technical data refer to standard units (without optional accessories)
* - fluctuation measured in centre of the chamber; in space, variation (K) calculated for chamber as:
K= +/- (T average max. - T average min.) / 2
** - other power supplies on request
1 - depth doesn't include 50 mm of power cable, the width does not include the 20 mm of rubber plug
2 - on uniformly loaded surface
3 - reinforced shelf
4 - additional internal glass door

OPTIONS AND ACCESSORIES

	Order number: */C	Internal glass door
	Order number: */A	External glass door
	Order number: */P INOX	Stainless steel wire shelf INOX
	Order number: */PP	Perforated shelf
	Order number: */PW	Reinforced shelf
	Order number: KUW GN*/*	Stainless steel cuvettes
	Order number: ST/CHL/SWP ALU	Aluminum drawer with powder coated slides
	Order number: ST/CHL/SWPN INOX	Stainless steel drawer with stainless steel slides
	Order number: QLK*	Castors
	Order number: */S or */S INOX	Table with castors

	Order number: */ST or */S INOX	Base on castors
	Order number: GNZ	Internal socket
	Order number: LabDesk	LabDesk software
	Order number: BRT/*/L or IQ/OQ/PQ	Calibration and IQ, OQ, PQ qualification
	Order number: */3.2	Over temperature protection 3.2 class according to DIN 12880
	Order number: RFID LOCK (SMART)	RFID LOCK (SMART)
	Order number: BPP 12	Battery backup for display
	Order number: PORT ALARM	Dry alarm contact
	Order number: LANK	LAN cable
	Order number: OCZ/20	Non-standard access port 20 mm
	Order number: OCZ/30	Additional access port 30 mm
	Order number: OCZ/60	Non-standard access port 60 mm
	Order number: OCZ/100	Non-standard access port 100 mm