



**POL-EKO**  
Perfect Environment

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Data sheet



Crucial Temperature Solutions

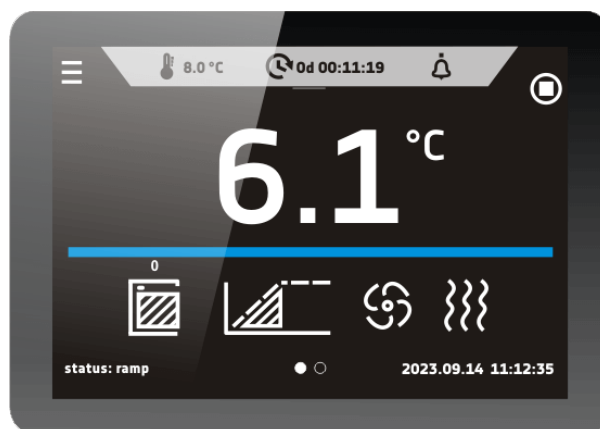
**Laboratory Refrigerator**  
**CHL 1 Smart**



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



## TECHNICAL DATA

|                      |                               |
|----------------------|-------------------------------|
| air convection       | forced                        |
| chamber capacity [l] | 70                            |
| working capacity [l] | 55                            |
| 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/   solid (ZL) |
|-----------|---|

### interior

|          |  |
|----------|--|
| C Smart  | stainless steel to DIN 1.4016            |
| CS Smart | stainless steel to DIN 1.4016            |
| P Smart  | acid-proof stainless steel to DIN 1.4301 |
| PS Smart | acid-proof stainless steel to DIN 1.4301 |

### housing

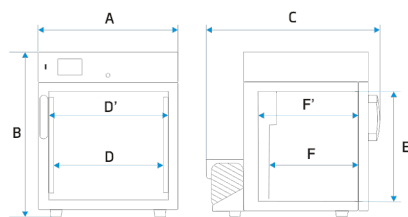
|          |                          |
|----------|--------------------------|
| C Smart  | powder coated sheet      |
| CS Smart | stainless steel polished |
| P Smart  | powder coated sheet      |
| PS Smart | stainless steel polished |

### overall dims [mm] /1/

|          |     |
|----------|-----|
| width A  | 550 |
| height B | 660 |
| depth C  | 680 |

### 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]                 | 37    |



## ELECTRICAL PARAMETERS

|                   |                 |
|-------------------|-----------------|
| voltage**         | 230V 50-60Hz    |
| nominal power [W] | 250             |
| refrigerant       | R1234ze / GWP=7 |
| 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:

$K = \pm (T \text{ average max.} - T \text{ average min.}) / 2$

\*\* - other power supplies on request

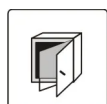
1 - depth doesn't include 50 mm of power cable, the width does not include the 20 mm of rubber plug

2 - on uniformly loaded surface

3 - reinforced shelf

4 - additional internal glass door

## OPTIONS AND ACCESSORIES



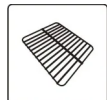
Order number: \*/C

Internal glass door



Order number: \*/A

External glass door



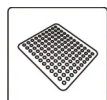
Order number: \*/P

Wire shelf



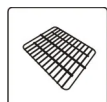
Order number: \*/P INOX

Stainless steel wire shelf INOX



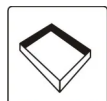
Order number: \*/PP

Perforated shelf



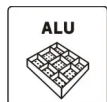
Order number: \*/PW

Reinforced shelf



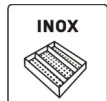
Order number: KUW GN\*/\*

Stainless steel cuvettes



Order number: ST/CHL/SWP ALU

Aluminum drawer with powder coated slides



Order number: ST/CHL/SWP INOX

Stainless steel drawer with powder coated slides



Order number: ST/CHL/SWP INOX

Stainless steel drawer with stainless steel slides



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|  |                                  |  |
|--|----------------------------------|--|
|  | Order number: QLK*               | Castors  |
|  | Order number: */S or */S INOX    | Table with castors   |
|  | Order number: */ST or */S INOX   | Base on castors  |
|  | Order number: *PLUS              | Automatic defrosting function                                |
|  | 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: 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                              |
|  | Order number: KD                 | Access control   |