

## Data sheet

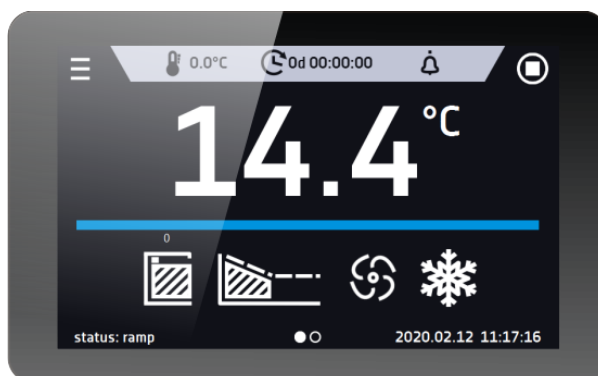
## Laboratory Refrigerator CHL 3 Smart



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] | 200                           |
| working capacity [l] | 163                           |
| 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   |
| over temperature protection            | class 1.0 to DIN 12880 / class 3.2 (option) |

**CHAMBER**

|                 |  |
|-----------------|--|
| door type       | solid / glass or double (option) /5/     |
| <b>interior</b> |  |
| B Smart         | aluminium                                |
| 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**

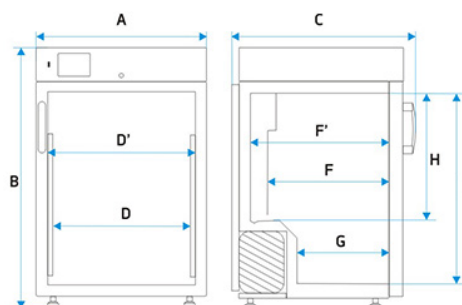
|          |                          |
|----------|--------------------------|
| B Smart  | powder coated sheet      |
| C Smart  | powder coated sheet      |
| CS Smart | stainless steel polished |
| P Smart  | powder coated sheet      |
| PS Smart | stainless steel polished |

**overall dims [mm] /1/**

|          |      |
|----------|------|
| width A  | 620  |
| height B | 1100 |
| depth C  | 650  |

**internal dims [mm]**

|          |     |
|----------|-----|
| width D  | 480 |
| width D' | 520 |
| height E | 860 |
| depth F  | 420 |
| depth F' | 480 |
| depth G  | 320 |
| height H | 640 |



|                             |       |
|-----------------------------|-------|
| shelves (standard   max)    | 3   4 |
| max shelf workload [kg] /2/ | 10    |
| max unit workload [kg]      | 40    |
| weight [kg]                 | 59    |

## ELECTRICAL PARAMETERS

|                     |  |
|---------------------|--|
| voltage**           | 230V 50Hz  |
| nominal power [W]   | 250  |
| refrigerant         | R1234ze / GWP=1  |
| warranty            | 24 months  |
| manufacturer        | POL-EKO-APARATURA  |
| txt_opis pod tabelą | <p>all the above technical data refer to standard units (without optional accessories)</p> <p>* - fluctuation measured in centre of the chamber; in space, variation (K) calculated for chamber as:<br/> <math>K = +/- (T \text{ average max.} - T \text{ average min.}) / 2</math></p> <p>** - other power supplies on request</p> <p>1 - depth doesn't include 50 mm of power cable<br/>           2 - on uniformly loaded surface<br/>           3 - reinforced shelf<br/>           4 - reinforced version<br/>           5 - additional internal glass door</p> |
| PL typ urządzenia   | Laboratory Refrigerator  |

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:

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

\*\* - other power supplies on request

1 - depth doesn't include 50 mm of power cable

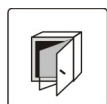
2 - on uniformly loaded surface

3 - reinforced shelf

4 - reinforced version

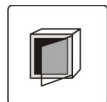
5 - additional internal glass door

## OPTIONS AND ACCESSORIES



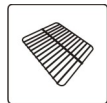
Order number: \*/C

Internal glass door



Order number: \*/A

External glass door



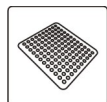
Order number: \*/P

Wire shelf



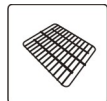
Order number: \*/P INOX

Stainless steel wire shelf INOX



Order number: \*/PP

Perforated shelf



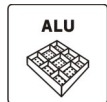
Order number: \*/PW

Reinforced shelf







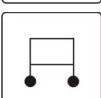
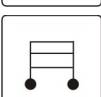

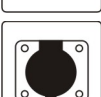
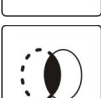





Order number: KUW GN\*/\*

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/SWPN INOX   | Stainless steel drawer with stainless steel slides           |
|    | Order number: ORG-FARM           | Pharma organizer   |
|    | Order number: QLK*               | Wheels   |
|    | Order number: */S or */S INOX    | Table with wheels  |
|    | Order number: */ST or */S INOX   | Base on castors  |
|    | Order number: *PLUS              | Automatic defrosting function                                |
|  | Order number: GNZ                | Internal socket  |
|  | Order number: OCZ/N              | Non-standard access port for external sensor                 |
|  | 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  |