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Perfect Environment

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## Data sheet

# VDW

Crucial Temperature Solutions

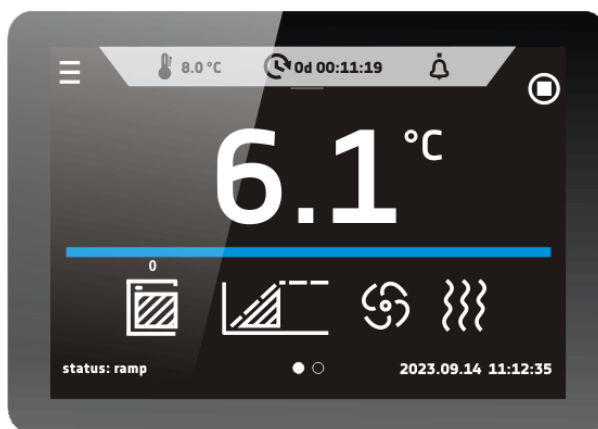
## Laboratory Refrigerator CHL 1450 Smart



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]	1540
working capacity [l]	1525
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]*	1,0
temperature variation at 4°C [±/°C]*	1,2
temperature protection	class 1.0 to DIN 12880 / class 3.2 (option)

## CHAMBER

door type	solid / glass or double (option) /4/   solid (ZL)
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### 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

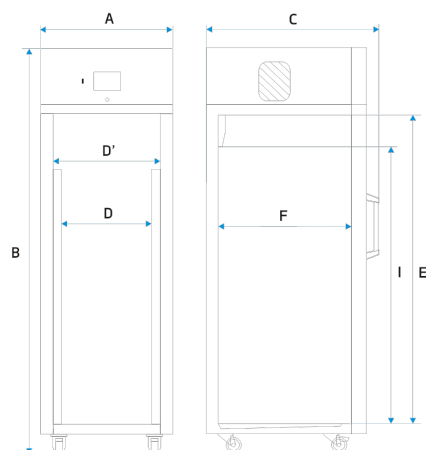
C Smart	powder coated sheet
CS Smart	stainless steel polished
P Smart	powder coated sheet
PS Smart	stainless steel polished

### overall dims [mm] /1/

width A	1440
height B	1940
depth C	1060

### internal dims [mm]

width D	1270
width D'	1340
height E	1460
depth F	780
height I	1380



shelves (standard   max)	2 x 3   11
max shelf workload [kg] /2/	30
- reinforced shelf version (PW) [kg] /3/	100
max unit workload [kg]	300
weight [kg]	200



## ELECTRICAL PARAMETERS

voltage**	230V 50-60Hz
nominal power [W]	950
refrigerant	R290 / GWP=3
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

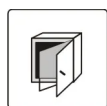
1 - depth doesn't include 50 mm of power cable, the width does not include the 20 mm of rubber plug

2 - on uniformly loaded surface

3 - reinforced shelf

4 - additional internal glass door

## OPTIONS AND ACCESSORIES



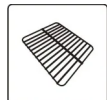
Order number: \*/C

Internal glass door



Order number: \*/A

External glass door



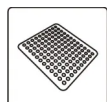
Order number: \*/P

Wire shelf



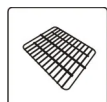
Order number: \*/P INOX

Stainless steel wire shelf INOX



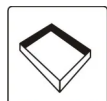
Order number: \*/PP

Perforated shelf



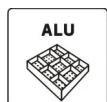
Order number: \*/PW

Reinforced shelf



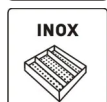
Order number: KUW GN\*/\*

Stainless steel cuvettes



Order number: ST/CHL/SWP ALU

Aluminum drawer with powder coated slides



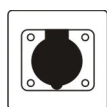
Order number: ST/CHL/SWP INOX

Stainless steel drawer with powder coated slides



Order number: ST/CHL/SWP INOX

Stainless steel drawer with stainless steel slides



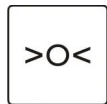
Order number: GNZ

Internal socket



Order number: LabDesk

LabDesk software



Order number: BRT/\*L or IQ/OQ/PQ

Calibration and IQ, OQ, PQ qualification



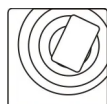
Order number: \*/3.2

Over temperature protection 3.2 class according to DIN 12880



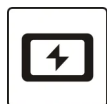
Order number: \*/RK

Chart recorder



Order number: ZKM

Magnetic door lock



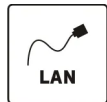
Order number: BPP 12

Battery backup for display



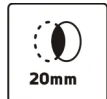
Order number: PORT ALARM

Dry alarm contact



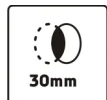
Order number: LANK

LAN cable



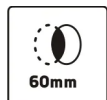
Order number: OCZ/20

Non-standard access port 20 mm



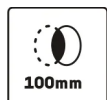
Order number: OCZ/30

Additional access port 30 mm



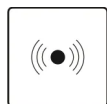
Order number: OCZ/60

Non-standard access port 60 mm



Order number: OCZ/100

Non-standard access port 100 mm



Order number: KD

Access control