



**POL-EKO**  
Perfect Environment

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**POL-EKO A. Polok-Kowalska sp.k.**  
44-300 Wodzisław Śląski  
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## Data sheet

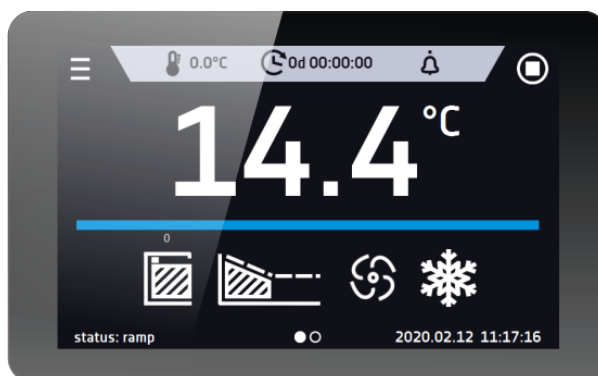
## Laboratory Freezer ZLN-T 200 Smart



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	natural
chamber capacity [l]	210
working capacity [l]	180
controller	microprocessor PID
display	4,3" full colour touch screen
insulation type	polyurethane foam

## TEMPERATURE

temperature range [°C]	-40...0
temperature resolution every ... [°C]	0,1
temperature fluctuation at -20°C [±/°C]*	0,5
temperature variation at -20°C [±/°C]*	2,5
temperature protection	class 3.2 to DIN 12880 (option)

## CHAMBER

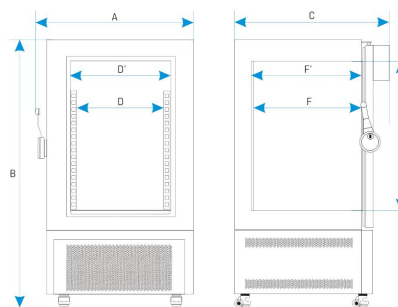
door type	solid
<b>interior</b>	
C Smart	stainless steel to DIN 1.4016
CS Smart	stainless steel to DIN 1.4016
P Smart	acid-proof stainless steel to DIN 1.4301
PS Smart	acid-proof stainless steel to DIN 1.4301
<b>housing</b>	
C Smart	powder coated sheet
CS Smart	stainless steel polished
P Smart	powder coated sheet
PS Smart	stainless steel polished

## overall dims [mm] /1/

width A	820
height B	1380
depth C	810

## internal dims [mm]

width D	450
width D'	520
height E	770
depth F	520
depth F'	530



shelves (standard   max)	2   4
max shelf workload [kg] /2/	10
- reinforced shelf version (PW) [kg] /3/	50
max unit workload [kg]	65
- reinforced unit version (W) [kg] /4/	130
weight [kg]	120



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## ELECTRICAL PARAMETERS

voltage**	230V 50-60Hz
nominal power [W]	450
refrigerant	R290 / GWP=3
warranty	24 months

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

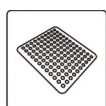
1 - depth doesn't include 50 mm of power cable

2 - on uniformly loaded surface

3 - reinforced shelf

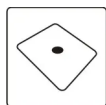
4 - reinforced version

## OPTIONS AND ACCESSORIES



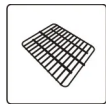
Order number: \*/PP

Perforated shelf



Order number: \*/PO

Full shelf with hole



Order number: \*/PW

Reinforced shelf



Order number: KUW GN\*/\*

Stainless steel cuvettes



Order number: \*/W

Reinforced version



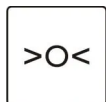
Order number: OWW/OWW LED

Interior lighting



Order number: LabDesk

LabDesk software



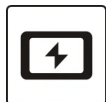
Order number: BRT\*/L or IQ/OQ/PQ

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



Bank: ING BŚ o/Wodzisław Śląski | Nr rachunku: 90 1050 1403 1000 0022 0879 5498 | Nr rej. w BDO 000005609  
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Order number: KD

Access control