rycobel

# ECOCELL - LABORATORY DRYING OVEN


The line of economic ovens with wide temperature range, exact and reliable course of simple processes of material heating and drying. The ECOCELL® line is characterised by noiseless operation and slow air flow in usable space.

- Internal volume: 22, 55, 111, 222, 404, 707 litres
- Temperature range: from 5°C above the ambient temperature up to 250/300°C
- Internal chamber: stainless steel DIN 1.4301 (AISI 304)
- Clean premises version – on request.

D-36-16-EcocellEcoEvo | 01-2023

## ECO LINE

- Intuitive control
- Microprocessor process control Fuzzy logic
- Multi-lingual communication
- Acoustic and visual alarm
- LED indicator of device functionality
- LCD display - 3 inches (7,6 cm)
- Transflective brilliant FSTN display, using COG technology (it is backlit and it uses external lighting reflection – higher intensity of external light increases the display readability)
- Adjustable display contrast depending on device placement
- Exceptionally wide vision angle
- Large signs on the display visible from afar
- Current values (eg. temperature, humidity for CLIMACELL®, pressure for VACUCELL®) during the device operation are enlarged for easy readibility
- Resistant foil keyboard with SoftTouch surface (pleasant to touch)
- Mechanic response of keys
- Lit symbols integrated directly in the foil keyboard
- Keyboard lock to block unauthorised access – adjustable by multiple pressing
- Real time programming and cycling (ramps as optional equipment)
- Up to 9 programs, 2 segments for each program and up to 99 cycles.
- USB Host port for flash disc connection for easy export of the relevant data (optional equipment)

## EVO LINE

- Intuitive control
- Microprocessor process control Fuzzy logic
- Multi-lingual communication
- Acoustic and visual alarm
- LED indicator of device functionality
- LCD display – 5,7 inches (14,5 cm)
- Graphic displaying of a new program • Control through colour icons • Touch display lock – protection from unauthorised access by a password • Multi-level administration of users (corresponding to FDA 21 Part 11)
- Data coding and no-manipulability (according to FDA 21 Part 11)
- Up to 100 programs and up to 100 segments for each program
- Programming of temperature ramps, real time and cycling
- Annual data recording in graphic and numeric form
- Data export in online and offline mode
- Pre-set service programs for prompt diagnostics of failures
- Easy service diagnostics including remote access
- SD memory card, USB Host and interface RS 232 – included as a standard
- Connection: WiFi, USB Device or Ethernet interface with proper IP address for remote data transfer, control and diagnostics (optional equipment)

| Technical data | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Inner space | volume | l | 22 | 55 | 111 | 222 | 404 | 707 |
| | width | mm | 240 | 400 | 540 | 540 | 540 | 940 |
| | depth | mm | 350 | 370 | 370 | 520 | 520 | 520 |
| | height | mm | 300 | 350 | 530 | 760 | 1415 | 1415 |
| External dimensions (including door, handle, legs N or casters K) | width | max. mm | 406 | 620 | 760 | 760 | 760 | 1160 |
| | depth | max. mm | 560 | 640 | 640 | 790 | 790 | 790 |
| | height | max. mm | 610N | 680N | 860N | 1095N | 1910K | 1910K |
| | ventilation neck diameter - internal / external | mm | 52/49 | 52/49 | 52/49 | 52/49 | 52/49 | 52/49 |
| Package – basic package | width | approx mm | 500 | 700 | 830 | 860 | 830 | 1230 |
| | depth | approx mm | 720 | 730 | 730 | 860 | 860 | 860 |
| | height (including palette) | approx mm | 810 | 875 | 1060 | 1260 | 2085 | 2085 |
| Package - case | width | approx mm | 720 | 780 | 810 | 920 | 910 | 1335 |
| | depth | approx mm | 780 | 800 | 910 | 960 | 970 | 1060 |
| | height (including palette) | approx mm | 835 | 900 | 1085 | 1310 | 2123 | 2163 |
| Package – wooden crate | width | approx mm | - | 780 | 900 | 900 | 910 | 1310 |
| | depth | approx mm | - | 800 | 800 | 940 | 940 | 940 |
| | height (including palette) | approx mm | - | 870 | 1090 | 1270 | 2120 | 2120 |
| Trays / shelves | maximal number | pc | 4 | 4 | 7 | 10 | 19 | 19 |
| | standard equipment | pc | 2 | 2 | 2 | 2 | 2 | 2 |
| | minimal distance between trays/shelves | mm | 60 | 70 | 70 | 70 | 70 | 70 |
| | usable area | mm | 185x265 | 380x335 | 520x335 | 520x485 | 520x485 | 920x485 |
| Maximal allowed loading of trays *) | per 1 tray | kg | 10 | 20 | 20 | 30 | 30 | 50 |
| | per 1 shelf | kg | 10 | 20 | 20 | 30 | 30 | 20 |
| | inside the device - in total | kg | 25 | 50 | 50 | 70 | 100 | 130 |
| Number of external metal door | | pc | 1 | 1 | 1 | 1 | 1 | 2 |
| Weight | net | approx kg | 31 | 55 | 75 | 100 | 150 | 215 |
| | gross (cartoon) | approx kg | 36 | 66 | 87 | 116 | 175 | 240 |
| Electric data – mains 50/60 Hz | max. input | kW | 0,9 | 1,2 | 1,8 | 1,8 | 3,6 | 5,4 |
| | stand by input | W | 5 | 5 | 5 | 5 | 5 | 5 |
| | current for voltage **) | A | 4 | 5,2 | 7,8 | 7,8 | 7,8 | 7,8 |
| | | V | 230 | 230 | 230 | 230 | 400/3NPE | 400/3NPE |
| | current for voltage **) | A | 8 | 10,4 | 15,6 | 15,6 | 20,8 | 27,1 |
| | | V | 115 | 115 | 115 | 115 | 115/3PE | 115/3PE |
| IP Code | | | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 |
| Temperature data | | | | | | | | |
| Operation temperature | from 5°C above ambient temperature | to°C | 250 | 250 | 250 | 250 | 250 | 250 |
| Variations from operation temperature with closed flap and door (DIN 12 880 part 2) | space | % temperature | 2,7 | 2 | 2 | 2 | 2,5 | 3,5 |
| | time | ±°C | 1 | 0,3 | 0,8 | 0,8 | 1 | 1 |
| Time to reach temperature of 250°C with closed flap and voltage 230 V | | min | 54 | 59 | 60 | 99 | 85 | 95 |
| Number of air exchanges at 250°C | | per hour | 6 | 8 | 12 | 5 | 4 | 3 |
| Heat losses | | W | 300 | 590 | 760 | 990 | 1940 | 2550 |

## Note:

All the technical data apply to 22°C of ambient temperature and ± 10% voltage oscillation (unless stated otherwise).

*) The trays may be covered to approximately 50% of their surface and if possibly in such a way so as the air may evenly flow inside the chamber space.

**) Mains voltage is specified on type label of the device.

The values may differ depending on specific charge and media parameters.

Changes in the design and make reserved.