

Combi oven

C4eD 12.20 ES DD Marine

Model

Convotherm 4 easyDial, Marine

- easyDial
- 12 Shelves GN 2/1
- Electric
- Injection/Spritzer
- Disappearing door



Key features

- ACS+ operating modes: Steam, Combi-steam, Convection
- ACS+ extra functions:
 - Crisp&Tasty / HumidityPro – each with 5 levels of humidity control
 - BakePro – 5 levels of traditional baking
 - Controllable fan – 5 speed settings
- easyDial: all functions are set in one operating level
- Semi-automatic cleaning system
- HygienicCare
- USB port integrated in the control panel
- TriColor indicator ring – indicates the current operating status
- Steam generated by injecting water into the cooking chamber
- Disappearing door with door latch: more space and greater safety at work (optionally available for an extra charge)
- Marine feet with flange plate for screwing or welding to the supporting surface

Standard features

- ACS+ (Advanced Closed System +) operating modes:
 - Steam (30-130°C) with guaranteed steam saturation
 - Combi-steam (30-250°C) with automatic humidity adjustment
 - Hot air (30-250°C) with optimized heat transfer
- HygienicCare – food safety thanks to antibacterial surfaces:
 - easyDial control panel
 - Door handle and recoil hand shower
- easyDial user interface:
 - Central control unit, Convotherm-Dial (C-Dial)
 - Digital display
 - Regenerating function – regenerates products to their peak level
 - 99 cooking profiles each containing up to 9 steps
- Multi-point core temperature probe
- Door handle with safety latch
- Integral preheat bridge
- Data storage for HACCP and pasteurization figures
- Preheat and cool down function

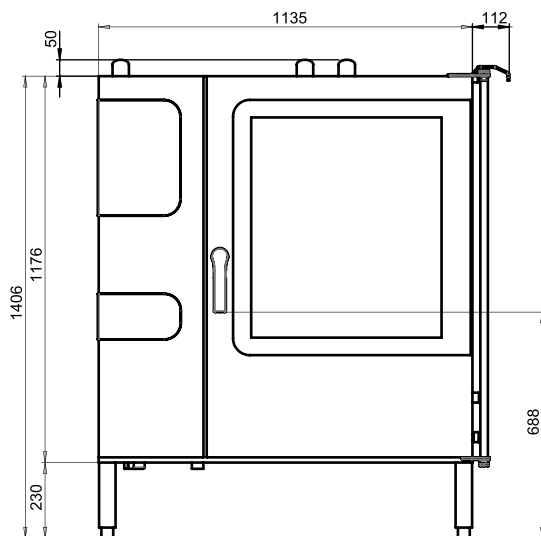
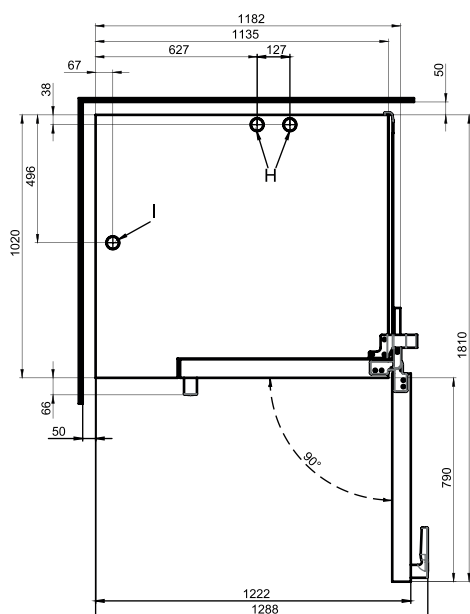
Options

- ConvoClean fully automatic cleaning system – including optional single-measure dispensing
- Steam and vapour removal – built-in condensation module (on request)
- Ethernet interface (LAN)
- Available in various voltages
- Sous-vide probe, external connection
- Core temperature probe, external connection

Accessories

- ConvoLink – HACCP and cooking profile management PC software
- Signal tower – external operating-state indicator
- Banquet system (optionally as a package or individually): Plate loading trolley, loading trolley, thermal cover
- Care products for the ConvoClean fully automatic cleaning system (multiple and single-measure dispensing) and for semi-automatic oven cleaning

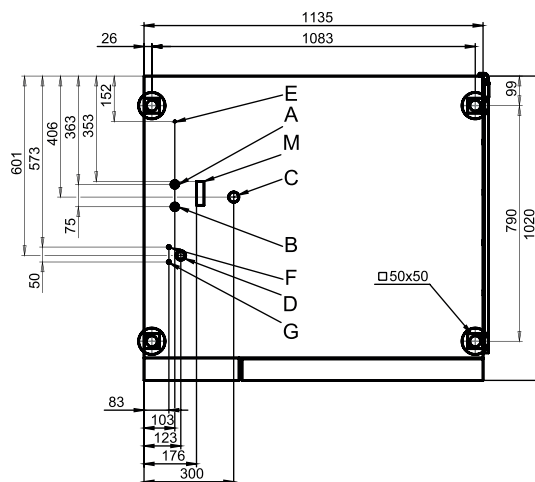


Front view

View from above with wall clearances


Installation instructions

Absolute tilt of unit in operation* max. 2° (3.5%)

* Adjustable feet included as standard.

Connection points


- A Water connection (for water injection)
- B Water connection (for cleaning, recoil hand shower)
- C Drain connection DN 50
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent Ø 50 mm
- I Ventilation port Ø 50 mm
- M Safety overflow 80 mm x 25 mm

Dimensions and weights

Dimensions including packaging

Width x Height x Depth 1410 x 1615 x 1170 mm

Weight

Empty weight without options* / accessories 250 kg

Weight of packaging 45 kg

Safety clearances**

Rear 50 mm

Right-hand side (disappearing door pushed back) 160 mm

Left (larger gap recommended for servicing) 50 mm

Top*** 500 mm

* Weight of options 15 kg max.

** Minimum distance from heat sources: 500 mm.

*** Depends on type of air ventilation system and nature of ceiling.

Loading capacity

Max. number of food containers	
GN 1/1*	24
GN 2/1*	12
Plates max. Ø 32 cm, Ring spacing 66 mm**	74
Plates max. Ø 32 cm, Ring spacing 79 mm**	59
Maximum loading weight	
GN 1/1 / 600 x 400	
Per combi oven	120 kg
Per shelf level	15 kg

* Matching loading trolley included as standard.

** Matching loading trolley available as an accessory.

Electrical supply

3~ 230V 50/60Hz*	
Rated power consumption	33.4 kW
Rated current	84.0 A
Fuse rating	100 A
RCD (GFCI), frequency converter (single phase)	Type A (recommended), type B/F (optional)
Recommended conductor cross-section	4G35
3~ 400V 50/60Hz (also available as 3N~ 400V 50/60Hz)*	
Rated power consumption	33.7 kW
Rated current	48.7 A
Fuse rating	50 A
RCD (GFCI), three-phase frequency converter	Type B/F (recommended)
Recommended conductor cross-section	5G16
3~ 440V 50/60Hz*	
Rated power consumption	28.2 kW
Rated current	37.0 A
Fuse rating	50 A
RCD (GFCI), three-phase frequency converter	Type B/F (recommended)
Recommended conductor cross-section	4G16
3~ 480V 50/60Hz*	
Rated power consumption	33.4 kW
Rated current	40.3 A
Fuse rating	50 A
RCD (GFCI), three-phase frequency converter	Type B/F (recommended)
Recommended conductor cross-section	4G16

* Connection to energy optimization system included as standard.

Water connection

Water supply	
Water supply*	2 x G 3/4" fixed connection, optionally including connecting pipe (min. DN13 / 1/2")
Flow pressure	150 - 600 kPa (1.5 - 6 bar)
Appliance drain	
Drain version	Fixed connection (recommended) or open tank or channel/gully
Type	DN50 (min. internal Ø: 46 mm)
Slope for waste-water pipe	min. 3.5% (2°)

* Install a backflow preventer approved by the manufacturer if stipulated by the relevant standards and regulations.

Water quality

Water-supply connection A* for water injection	
General requirements	Drinking water, typically soft water (install water treatment system if necessary)
General hardness	4 - 7 °dh / 70 - 125 ppm / 7 - 13 °TH / 5 - 9 °e
Water-supply connection B* for cleaning, recoil hand shower	
General requirements	Drinking water, typically hard water
General hardness	4 - 20 °dh / 70 - 360 ppm / 7 - 35 °TH / 5 - 25 °e
Water-supply connections A, B*	
pH value	6.5 - 8.5
Cl ⁻ (chloride)	max. 60 mg/l
Cl ₂ (free chlorine)	max. 0.2 mg/l
SO ₄ ²⁻ (sulphate)	max. 150 mg/l
Fe (iron)	max. 0.1 mg/l
Temperature	max. 40 °C
Electrical conductivity	min. 20 µS/cm

* See diagram of connection points, page 2.

Water consumption

Water-supply connection A*	
Ø Consumption for cooking	8.8 l/h
Max. consumption	0.6 l/min
Water-supply connections A, B	
Ø Consumption for cooking**	13.3 l/h
Max. water flow rate	15 l/min

* Values for selecting the capacity of the water treatment system.

** Including water used for cooling the wastewater.

PLEASE NOTE: See diagram of connection points, page 2.

Emissions

Dissipated heat	
Latent heat	6900 kJ/h / 1.92 kW
Sensible heat	7800 kJ/h / 2.17 kW
Waste water temperature	max. 80 °C
Noise during operation	max. 70 dBA

Please observe the following points:

- This document is to be used solely for planning purposes.
- Please refer to the Installation manual for further technical data and guidance on installation and positioning.