

Combi steamer

Project _____
 Item _____
 Quantity _____
 FCSI section _____
 Approval _____
 Date _____

C4eD 20.20 ES

Model

Convotherm 4 easyDial

- easyDial
- 20 Shelves GN 2/1
- Electric
- Spritzer / Injection
- Right-hinged door



Essential Features

- ACS+ (Advanced Closed System +) operating modes: Steam, Combi-steam, Convection
- ACS+ Extra Functions:
 - Crisp&Tasty (5 levels of moisture removal)
 - BakePro (5 levels for the traditional baking function)
 - HumidityPro (5 levels of humidification)
 - Adjustable fan speed (5 levels)
- easyDial: all functions can be set on one operating level
- Semi-automatic cleaning system
- HygienicCare Concept
- USB port integrated in the control panel
- TriColor indicator ring - indicates the current operating status
- Steam generated by high-performance boiler outside the cooking chamber
- Right-hinged appliance door

Standard Equipment

- ACS+ operating modes:
 - Steam (30-130°C) with guaranteed steam saturation
 - Combi-steam (30-250°C) with automatic humidity adjustment
 - Convection (30-250°C) with optimized heat transfer
- HygienicCare Concept - 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: Regenerate products to their peak level
 - Up to 99 cooking profiles each with up to 9 steps
- Multi-point core temperature sensor
- Door handle with safety latch
- Built-in preheat bridge
- RS232 and RS485 interface
- Data storage for HACCP and pasteurization figures
- Preheat and Cool-Down function

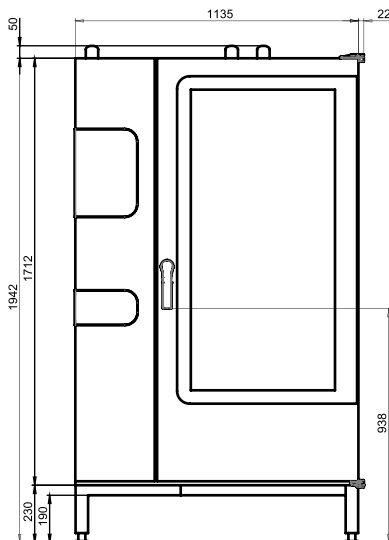
Options

- ConvoClean cleaning system (fully automatic operation with multi-measure dispensing; automatic operation with single-measure dispensing)
- Steam and vapor removal (built-in condensation hood)
- Ship model
- Ethernet / LAN interface
- Range of voltages
- Sous-vide sensor, with external socket
- Core temperature sensor – external socket

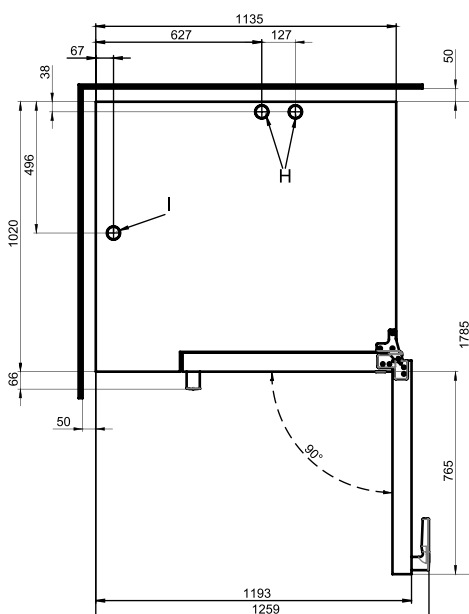
Accessories

- ConvoConnect appliance manager PC software
- ConvoVent 4 / ConvoVent 4+ condensation hoods
- Indicator tower for showing the operating status
- Banquet system (optionally as a package or individually)
 - Plate loading trolley
 - Loading trolley
 - Thermal cover
- Care products

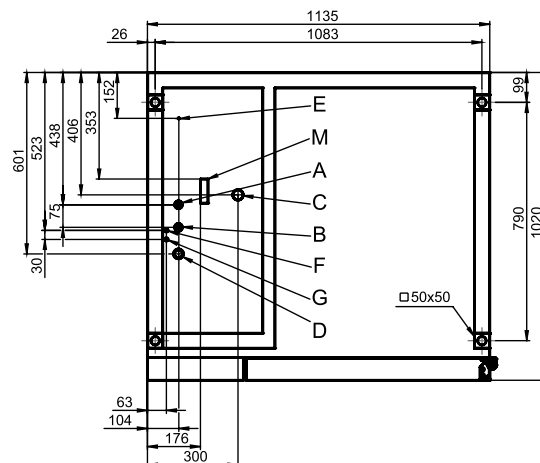
Front view



View from above with wall clearances



Connection positions in appliance floor



- A** Soft-water connection G 3/4"
- B** Hard-water connection G 3/4"
- C** Drain connection DN 50
- D** Electrical supply
- E** Equipotential bonding
- F** Nozzle-detergent connection
- G** Cleaning-fluid 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	1435 mm
Depth	1200 mm
Height	2185 mm

Weight including packaging

Including cleaning system	382 kg
---------------------------	--------

Safety clearances*

Rear	50 mm
Right	50 mm
Left (larger gap recommended for servicing)	50 mm
Top (for ventilation)	500 mm

*Heat sources must lie at a minimum distance of 50 cm from the appliance.

Installation instructions

Tilt

Absolute tilt of appliance in operation* max. 2° (3.4%)

*adjustable appliance feet included as standard to compensate for any differences in level across the mounting surface.

Loading capacity

No. of shelves

GN 1/1 (with standard loading trolley)	40
GN 2/1 (with standard loading trolley)	20
Plates max. Ø 32 cm, Ring spacing 66 mm	122
Plates max. Ø 32 cm, Ring spacing 79 mm	98

Maximum permissible loading weight

GN 1/1 / 600 x 400	
Per combi steamer	180 kg
Per shelf	15 kg

Electrical connected load ratings

3N~ 400V 50/60Hz (3/N/PE)*

Rated power consumption	67.3 kW
Rated current	97.3 A
Fuse	100 A
RCD (GFCI), frequency converter (single phase)	Type A (recommended), type B/F (optional)
Recommended conductor cross-section**	5G35

3~ 230V 50/60Hz (3/PE)*

Rated power consumption	66.4 kW
Rated current	166.9 A
Fuse	200 A
RCD (GFCI), frequency converter (single phase)	Type A (recommended), type B/F (optional)
Recommended conductor cross-section**	4G70

3~ 200V 50/60Hz (3/PE)*

Rated power consumption	66.4 kW
Rated current	191,9 A
Fuse	200 A
RCD (GFCI), frequency converter (single phase)	Type A (recommended), type B/F (optional)
Recommended conductor cross-section**	4G95

*Connection to an energy optimization system as standard.

**Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.

Water connection

Water supply

Water supply	2 x G 3/4" permanent connection, optionally including connecting pipe (min. DN13 / 1/2")
Flow pressure	150 - 600 kPa (1.5 - 6 bar)

Appliance drain

Drain version	Permanent connection (recommended) or open tank or channel/gully
Type	DN50 (min. internal Ø: 46 mm)
Slope for waste-water pipe	min. 5% (3°)

Water quality

Water quality

- Drinking water (install water treatment system if necessary)
- Treated tap water for water injection
- Untreated tap water for cleaning, recoil hand shower

Total hardness

Injection (soft water)	4 - 7 °dh / 70 - 125 ppm / 7 - 13 °TH / 5 - 9 °e
Cleaning, recoil hand shower (hard water)	4 - 20 °dh / 70 - 360 ppm / 7 - 35 °TH / 5 - 25 °e

Properties

pH	6.5 - 8.5
Cl ⁻	max. 100 mg/l
Cl ₂	max. 0.2 mg/l
SO ₄ ²⁻	max. 150 mg/l
Fe	max. 0.1 mg/l
Temperature	max. 40 °C
Electrical conductivity	min. 20 µS/cm

Water consumption

Cooking (total)

Ø consumption	17.7 l/h
Max. water flow rate	15 l/min

Cooking (values for selecting the capacity of the water treatment system)

Ø consumption (water 4-7 °dh)	11.8 l/h
Max. consumption (water 4-7 °dh)	0.6 l/min

Emissions

Heat output

Latent heat 11000 kJ/h / 3.06 kW

Sensible heat 14100 kJ/h / 3.92 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 instructions for further technical data and guidance on installation and positioning.

C4eD 20.20 ES

03/14, © 2014 Manitowoc. Subject to changes!