

# Combi steamer

Project
Item
Quantity
FCSI section
Approval
Date

### Model

# Convotherm 4 easyTouch

#### easyTouch

- 10+1 Shelves GN 1/1
- Gas
- Injection/Spritzer
- Disappearing door





### **Key Features**

- ACS+ operating modes: Steam, Combi-steam, Convection
- ACS+ Extra Functions:
  - Crisp&Tasty 5 moisture-removal settings
  - BakePro 5 levels of traditional baking
  - HumidityPro 5 humidity settings
  - Controllable fan 5 speed settings
- easyTouch 9" full-touch screen
- ConvoClean+ fully automatic cleaning system with eco, regular and express modes, including optional single-measure dispensing
- Ethernet interface (LAN)
- 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: more space and greater safety at work (optionally available for an extra charge)

#### **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
  - Convection (30-250°C) with optimized heat transfer
- HygienicCare food safety thanks to antibacterial surfaces:
  - easyTouch control panel
  - O Door handle and recoil hand shower
- easyTouch user interface:
  - 9" full-touch screen
  - O Press&Go automatic cooking using quick-select buttons
  - TrayTimer load management for different products at the same time
  - O Regenerate+ flexible multi-mode regenerating function
  - ecoCooking energy-save function
  - Low-temperature cooking / Delta-T cooking
  - Ocok&Hold cooks and holds in one process
  - 399 cooking profiles each containing up to 20 steps
  - On-screen help with topic-based video function
  - Starting time preselect
- Multi-point core temperature sensor
- Door handle with safety latch and sure-shut function
- RS232 and RS485 interface
- Data storage for HACCP and pasteurization figures
- Preheat and cool down function

# **Options**

- Steam and vapour removal built-in condensation
- Grill model with grease management
- Available in various voltages
- Sous-vide sensor, with external socket
- Core temperature sensor, with external socket

### **Accessories**

- ConvoLink HACCP and cooking-profile management PC software
- Signal tower operating-state indicator visible from distance
- Banquet system (optionally as a package or individually): Plate rack, shelf rack, transport trolley, thermal cover
- Stands in various sizes and designs
- Racks, choice of GN or BM versions (BM = standard baking sheet size)
- Care products for the ConvoClean+ fully automatic cleaning system and the semi-automatic cleaning system



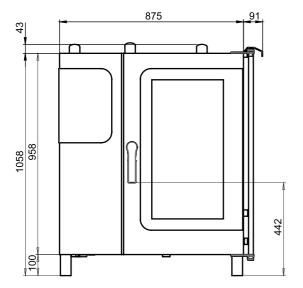


### **Dimensions**

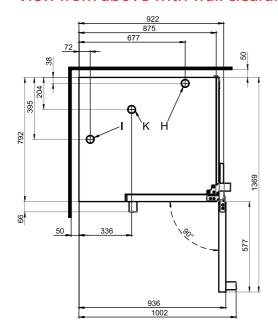
# Weights

### **Views**

# Front view



## View from above with wall clearances



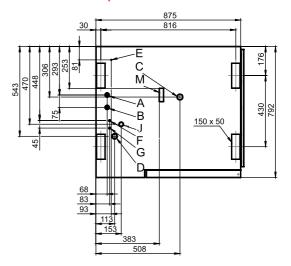
### Installation instructions

T	ï	t	

Absolute tilt of unit in operation*	2° (3.4%)

<sup>\*</sup>Adjustable feet included as standard.

# **Connection positions**



- **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
- J Gas supply
- **K** Exhaust outlet (cooking-chamber heating element)
- M Safety overflow 80 mm x 25 mm

# Dimensions and weights

#### **Dimensions including packaging**

Width x Height x Depth	1110 x 128	0 x 940 mm
Weight		
Empty weight without options* / ac	cessories	149 kg

#### Weight of packaging

Safe	ty clearances**	
Rear		50 mm
Righ	t-hand side (disappearing door pushed back)	130 mm
Left	larger gap recommended for servicing)	50 mm
Top*	**	1000 mm

<sup>\*</sup>Weight of options 10 kg max.

30 kg

<sup>\*\*</sup>Minimum distance from heat sources: 500 mm.

<sup>\*\*\*</sup>Depends on type of air ventilation system and nature of ceiling.



# Loading

## **Electrical supply**

#### Water

# Loading capacity

Max. number of food containers	
GN 1/1*	10+1
600 x 400** baking tray	8
Plates max. Ø 32 cm, Ring spacing 66 mm**	32
Plates max. Ø 32 cm, Ring spacing 79 mm**	26
Maximum loading woight	

#### Maximum loading weight

GN 1/1 / 600 x 400

Per combi steamer 50 kg Per shelf 15 kg

Recommended conductor cross-section\*

# **Electrical supply**

1N~ 230V 50/60H
-----------------

Rated power consumption	0.5 kW
Rated current	2.3 A
Fuse	16 A
RCD (GFCI), frequency converter (single phase)	Type A (recommended), type B/F (optional)

3G2.5

#### 1N~ 100V 50/60Hz

IN~ 100V 30/00H2	
Rated power consumption	0.5 kW
Rated current	5.2 A
Fuse	16 A
RCD (GFCI), frequency converter (single phase)	Type A (recommended), type B/F (optional)
Recommended conductor cross-section*	3G2.5

<sup>\*</sup>Recommended conductor cross-section for wires laid uncovered in air up to

### Water connection

#### Water supply

2 x G 3/4" permanent connection, optionally including connecting Water supply

pipe (min. DN13 / 1/2")

Flow pressure 150 - 600 kPa (1.5 - 6 bar)

**Appliance drain** 

Drain version Permanent connection

(recommended) or funnel waste

DN50 (min. internal Ø: 46 mm)

Slope for waste-water pipe min. 3,5% (2°)

# Water quality

#### Water-supply connection A\* for water injection

General Drinking water, typically soft water requirements (install water treatment system if

necessary)

4 - 7 °dh / 70 - 125 ppm / 7 - 13 °TH / 5 - 9 °e **Total hardness** 

Drinking water, typically hard water

#### Water-supply connection B\* for cleaning, recoil hand shower

General requirements

**Total 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 <sup>-</sup> (chloride)	max. 60 mg/l
Cl <sub>2</sub> (free chlorine)	max. 0.2 mg/l
SO <sub>4</sub> <sup>2-</sup> (sulphate)	max. 150 mg/l
Fe (iron)	max. 0.1 mg/l
Temperature	max. 40 °C
Electrical conductivity	min. 20 μS/cm

<sup>\*</sup>See diagram of connection positions, page 2.

### Water consumption

Water-supply connection A*	
Ø Consumption for cooking	4.2 l/h
Max. consumption	0.6 l/min
Water-supply connections A, B	
Ø Consumption for cooking**	6.3 l/h

<sup>\*</sup>Values for selecting the capacity of the water treatment system.

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

<sup>\*</sup>Matching rack included as standard.

<sup>\*\*</sup>Matching rack available as an accessory.

<sup>\*\*</sup>Including water used for cooling the wastewater.



# **Emissions**

### Gas

### **Emissions**

Heat output	
Latent heat	3500 kJ/h / 0.97 kW
Sensible heat	4500 kJ/h / 1.25 kW
Waste water temperature	max. 80 °C
Noise during operation	max. 70 dBA

# Gas data

Fuels	Natural gas liquid see
. 40.3	Natural gas, liquid gas
Exhaust gas duct	Air conditioning system with safety shutdown
Connection to gas supply	R 3/4"
Supply flow pressure (CE compliant)	
Natural gas 2H (E)	17 - 25 mbar
Natural gas 2L (LL)	18 - 30 mbar
Liquid gas 3B/P	20 - 57.5 mbar
Propane 3P	25 - 57.5 mbar
Heat output	
Natural gas 2H (E)	
Convection burner	21 kW
Natural gas 2L (LL)	
Convection burner	20 kW
Propane 3P*	
Convection burner	22 kW
Gas consumption	
Natural gas 2H (E)	2.1 m³/h
Natural gas 2L (LL)	2.5 m <sup>3</sup> /h
Propane 3P / Liquid gas 3B/P	1.7 kg/h
Exhaust gas output rate	
Natural gas, liquid gas	max. 92 m <sup>3</sup> /h

#### Please observe the following points:

\*The heat output is up to 15% higher with 3B/P liquid gas.

- 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.



9758134\_02 ENG\_BBR 10/14. © 2014 Manitowoc. Continuous improvements to the product may mean changes to the specification are made without explicit mention.