# **Convo**therm

# **Combi steamer**

#### Model

# Convotherm 4 easyTouch, Marine



ltem	
Quantity	

FCSI section

Proiect

Approval

Date

- easyTouch
- 10+1 Shelves GN 1/1
- Electric
- Injection/Spritzer
- **Right-hinged 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
- easyTouch 9" full-touch screen
- ConvoClean+ fully automatic cleaning system with eco, regular and express modes, including optional single-measure dispensing
- Ethernet / LAN / USB interfaces
- HygienicCare
- TriColor indicator ring indicates the current operating status
- Steam generated by injecting water into the cooking chamber
- Right-hinged door and door buffer
- Standard feet with additional bracket for screwing or welding to the supporting surface

# Standard features

- ACS+ (Advanced Closed System +) operating modes:
  - <sup>o</sup> Steam (30-130°C) with guaranteed steam saturation
  - Combi-steam (30-250°C) with automatic humidity adjustment
  - Ο Convection (30-250°C) with optimized heat transfer
  - HygienicCare food safety thanks to antibacterial surfaces:
  - easyTouch control panel
  - 0 Door handle and recoil hand shower
- easyTouch user interface:
- 0 9" full-touch screen
- <sup>o</sup> Press&Go automatic cooking using quick-select buttons
- 0 TrayTimer - load management for different products at the same time
- 0 Regenerate+ - flexible multi-mode regenerating function
- 0 ecoCooking - energy-save function
- 0 Low-temperature cooking / Delta-T cooking
- 0 Cook&Hold - cooks and holds in one process
- 0 399 cooking profiles each containing up to 20 steps
- 0 On-screen help with topic-based video function
- Start-time preset
- Multi-point core temperature probe
- Door handle with safety latch and sure-shut function
- Data storage for HACCP and pasteurization figures
- Preheat and cool down function

# Options

- Steam and vapour removal built-in condensation module (on request)
- Disappearing door with door latch more space and greater safety at work (see separate datasheet)
- 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 rack, mobile shelf rack, transport trolley, thermal cover
- Stands in various sizes and designs
- Racks, choice of GN or BM versions with securing rod (BM = standard baking sheet size)
- Stacking kit with Marine securing feet
- Care products for the ConvoClean+ fully automatic cleaning system (multiple and single-measure dispensing)
  - CE





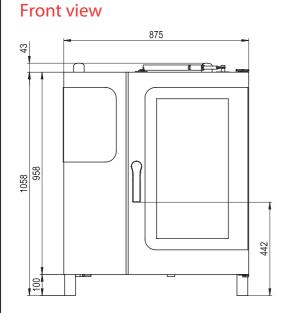
#### **Dimensions**

Weights

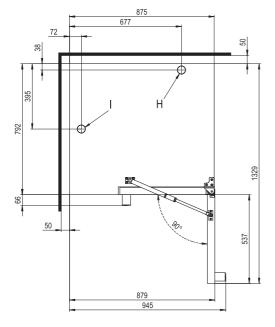
Views

### **Connection positions**





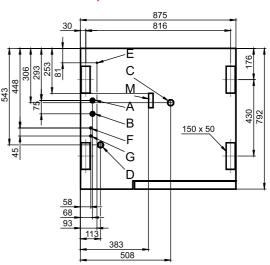
# View from above with wall clearances



# Installation instructions

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

\* Adjustable feet included as standard.



- 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	1110 x 128	0 x 940 mm
Weight		
Empty weight without options* / a	ccessories	129 kg
Weight of packaging		30 kg
Safety clearances**		
Rear		50 mm
Right		50 mm
Left (larger gap recommended for	servicing)	50 mm
Тор***		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*	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 weight	
GN 1/1 / 600 x 400	
Per combi steamer	50 kg
Per shelf level	15 kg
* Matching rack included as standard.	

\*\* Matching rack available as an accessory.

# **Electrical supply**

3~ 230 V 50/60Hz*	
Rated power consumption	19.3 kW
Rated current	48.5 A
Fuse	50 A
RCD (GFCI), frequency converter (single phase)	Type A (recommended), type B/F (optional)
Recommended conductor cross-section	4G16
3~ 400 V 50/60Hz	
(also available as <b>3N~ 400V 50/60Hz</b> )*	
Rated power consumption	19.5 kW
Rated current	28.1 A
Fuse	35 A
RCD (GFCI), three-phase frequency converter	Type B/F (recommended)
Recommended conductor cross-section	5G6
3~ 440 V 50/60Hz*	
Rated power consumption	16.3 kW
Rated current	21.4 A
Fuse	25 A
RCD (GFCI), three-phase frequency converter	Type B/F (recommended)
Recommended conductor cross-section	4G6
3~ 480 V 50/60Hz*	
Rated power consumption	19.3 kW
Rated current	23.3 A
Fuse	25 A
RCD (GFCI), three-phase frequency converter	Type B/F (recommended)
Recommended conductor cross-section	4G6
* C	te de contra de col

 $\ast$  Connection to energy optimization system included as standard.

# Loading

#### **Electrical supply**

Water

#### Water connection

Water supply	
Water supply*	$2 \times G 3/4$ " 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 (recommen- ded) or funnel waste trap
Туре	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)
Total 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
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

\* 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
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 positions, page 2.



# **Emissions**

#### **Accessories**

# **Emissions**

Dissipated heat	
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

# **ACCESSORIES**

(Please refer to the Accessories brochure for detailed information)

#### Stacking kit

6.10 on 10.10

Permitted combination Select "Stacking kit for Convotherm 4 Marine version"

- 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.

Convotherm Elektrogeräte GmbH **Ovens & Advanced Cooking EMEA** Manitowoc Foodservice

