# **Convo**therm

# **Combi steamer**

## Model

# Convotherm 4 easyTouch



#### Quantity FCSI section Approval

Date

Proiect

Item

- easyTouch
- 20 Shelves GN 2/1
- Electric Spritzer / Injection
- **Disappearing 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)
  - 0 HumidityPro (5 levels of humidification)
  - 0 Adjustable fan speed (5 levels)
- easyTouch full 9" touchscreen
- ConvoClean+ cleaning system with eco, regular and express modes (fully automatic operation with multi-measure dispensing; automatic operation with single-measure dispensing)
- Ethernet / LAN interface
- HygienicCare Concept
- USB port integrated in the control panel
- TriColor indicator ring indicates the current operating status
- Steam generated by injecting water into the cooking chamber

# Standard Equipment

- ACS+ operating modes:
  - 0 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
  - 0 easyTouch control panel
  - 0 Door handle and recoil hand shower
- easyTouch user interface:
  - 0 Full 9" touchscreen
  - 0 Press&Go (automatic cooking)
  - TrayTimer (load management for different products at the same time)
  - Regenerate+ (flexible regenerating function with preselect)
  - 0 ecoCooking (energy-save function)
  - Low-temperature cooking / Delta-T cooking
  - Cook&Hold
  - 0 Up to 399 cooking profiles each with up to 20 steps
  - On-screen Help with video function
  - 0 Starting time preselect
- 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

- Steam and vapor removal (built-in condensation hood)
- Ship model
- 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

Tel: +49(0)8847 67-0 Fax: +49(0)8847 414



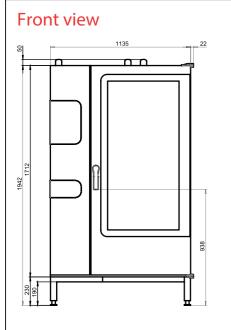




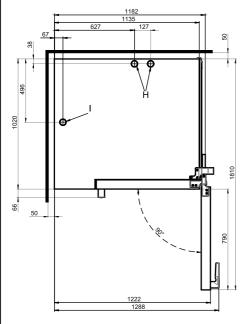
### **Dimensions**

Weights

Views



# View from above with wall clearances

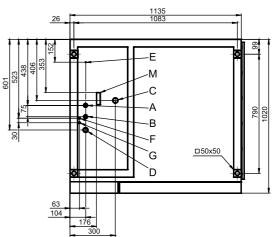


# Installation instructions

#### 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.

# 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	401 kg
Safety clearances*	
Rear	50 mm
Right-hand side (disappearing door open at 90° angle)	100 mm
Right-hand side (disappearing door retracted)	160 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.	



# Loading

### **Electrical supply**

Water

## 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. ∅ 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

# 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
Туре	DN50 (min. internal Ø: 46 mm)
Slope for waste-water pipe	min. 5% (3°)

# Water quality

Water quality	<ul> <li>Drinking water (install water treatment system if necessary)</li> <li>Treated tap water for water injection</li> <li>Untreated tap water for cleaning, recoil hand shower</li> </ul>
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	
рН	6.5 - 8.5
Cl-	max. 100 mg/l
Cl <sub>2</sub>	max. 0.2 mg/l
SO4 <sup>2-</sup>	max. 150 mg/l
Fe	max. 0.1 mg/l
Temperature	max. 40 °C
Electrical conductivity	min. 20 μS/cm

# 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),
phase)	(recommended), type B/F (optional)
phase) Recommended conductor cross-section**	(recommended), type B/F (optional)
phase) Recommended conductor cross-section** <b>3~ 200V 50/60Hz (3/PE)</b> *	(recommended), type B/F (optional) 4G70
phase) Recommended conductor cross-section** <b>3~ 200V 50/60Hz (3/PE)</b> * Rated power consumption	(recommended), type B/F (optional) 4G70 66.4 kW
phase) Recommended conductor cross-section** <b>3~ 200V 50/60Hz (3/PE)</b> * Rated power consumption Rated current	(recommended), type B/F (optional) 4G70 66.4 kW 191,9 A

# Water consumption

Cooking (total)		
Ø consumption	17.7 l/h	
Max. water flow rate	15 l/min	
<b>Cooking</b> (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	

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.



# **Emissions**

Accessories

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

# 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.

Convotherm Elektrogeräte GmbH Ovens & Advanced Cooking EMEA Manitowoc Foodservice Talstrasse 35, 82436 Eglfing, Germany Tel: +49(0)8847 67-0 Fax: +49(0)8847 414 www.convotherm.com

