

# Datasheet

## iCombi® Classic 20–full size E MarineLine



### Description

- > Combi-steamer in accordance with DIN 18866 for most cooking methods used in commercial kitchens for optional use of steam and convection, individually, one after the other, or combined.

### Unit description and functions

#### Cooking functions

- > **ClimaPlus:** The active climate management in the cooking cabinet, which constantly measures and controls the humidity and guarantees effective dehumidification, combined with high productivity, cooking quality and low energy consumption. Humidity can be adjusted in increments of 10% and monitored via the digital display for precise manual cooking
- > Dynamic air circulation in the cooking cabinet through 3 reversing high-performance fan propellers with five fan speeds that can be programmed manually. The optimal energy yield results in excellent uniformity and short cooking times.
- > High-performance steam generator for optimal steaming performance even at low temperatures below 212°F
- > Integrated, maintenance-free fat separation system without an additional fat filter
- > Cool-down function for quick cooling of the cooking cabinet via a fan propeller
- > Core temperature measurement via core temperature probe and optional positioning aid (accessories)
- > Delta-T cooking for extremely gentle preparation with minimal cooking losses
- > Digital temperature display, can be set to °C or °F, displays target and actual values
- > Cooking cabinet humidity and time displayed digitally; displays target and actual values
- > Individual programming of up to 100 single or multi-stage cooking programs with up to 12 steps
- > Individual adjustment of the cooking parameters time, temperature and humidity for a program step during ongoing operation
- > Easy transfer of cooking programs to other cooking systems via USB stick.
- > Integrated hand shower with automatic retraction and switchable spray/jet function
- > Energy-saving, long-lasting LED lighting in the cooking cabinet, with excellent color fidelity to allow quick determination of cooking progress
- > No-charge 4-hour RATIONAL certified chef assistance program

### Capacity

- > Twenty (20) Full-size sheet pans or Fourty (40) Steam table pans or Twenty (20) 2/1 GN accessories
- > Mobile oven rack with 2 1/2 inch rack spacing and tandem casters (63 mm)
- > Handle holder for mobile rack
- > Large selection of accessories for various cooking procedures, such as grilling, braising or baking
- > For use with 2/1, 1/1, 2/4 GN accessories

### Combi-steamer mode

- > Steaming 86 °F - 266 °F
- > Convection 86 °F - 572 °F
- > Combination of steam and convection 86 °F - 572 °F

### ClimaPlus

- > Climate management – humidity measurement and control
- > Humidity setting in 10-% increments

### Occupational and operating safety

- > Electronic safety temperature limiter for steam generator and convection heating
- > Integrated fan wheel brake
- > Use of Active Green cleaning tabs and Care tabs (solid cleaning agent) for ideal occupational safety levels
- > HACCP data memory and output via USB
- > Tested according to national and international standards for unsupervised operation
- > Maximum tray height 63 inch when using RATIONAL mobile oven rack with 20 trays, 2 4/8 inch rack spacing (loss of USPHS certification)
- > Adjustable door stop for securing the cooking cabinet door, even on rough seas
- > Reinforced mobile oven rack with lock protects catering accessories against sliding out even during tough sea crossings
- > Stainless steel feet can be welded to the floor or used in anchoring kit installations, securing the cooking system against slipping and tipping
- > Approved by German Lloyd and USPHS

### Networking

- > Integrated, IP-protected USB interface for local data exchange
- > Optional integrated IP-protected Ethernet interface
- > Optional integrated Wi-Fi interface (incl. Ethernet interface)

### Cleaning and care

- > Automatic, water pressure-independent cleaning and maintenance system for cooking cabinet and steam generator
- > Care system: Automatic cleaning and descaling of the steam generator
- > 4 cleaning programs of varying degrees for unsupervised cleaning, including overnight
- > Easy and intuitive operation of the cleaning programs: Display of the selected cleaning program, the recommended quantity of tabs and the remaining cleaning time
- > Safe ending of the cleaning in the event of a power failure with no cleaning agent left in the cooking cabinet
- > Use of phosphate and phosphorous-free Active Green cleaner tabs and care tabs
- > Unit door with rear-ventilated double glass panel and hinged inner pane for easy cleaning

- > Inside and outside material: stainless steel DIN 1.4301 / ASTM 304, seamless hygienic cooking cabinet with rounded corners and optimized air flow
- > Glass and stainless steel surfaces allow easy, safe external cleaning; IPX5-class protection against spraying water in all directions

#### **Operation**

- > 4.3 inch TFT color display and softkeys for easy and intuitive operation. Operating modes and functions are visually highlighted
- > Easy operation and exact settings through a central dial with push function
- > Acoustic prompts and visual messages when user action is required
- > Recirculating hoods (accessories) with situational adjustment of extraction power and service message transmission.

#### **Installation, maintenance and environment**

- > Professional installation by RATIONAL-certified technicians recommended
- > Fixed waste water connection conforming to SVGW requirements is permitted
- > Adaptation to the installation site (height above sea level ) through automatic calibration
- > Operation without water softener and without additional manual descaling possible
- > Flush-mounted installation \*
- > Double-pane glass door with integrated sealing mechanism for minimal energy losses
- > Service diagnostic system with automatic service message display
- > Regular maintenance is recommended. Maintenance according to manufacturer recommendations available from RATIONAL service partners
- > 2-year RATIONAL warranty including parts, labor, and travel and 5-year steam generator warranty\*\*
- > \* See the installation or planner manual for details
- > \*\* Terms and conditions apply, see manufacturer warranty statement at [www.rational-online.com](http://www.rational-online.com)

#### **Options**

- > Can be combined with HeavyDutyLine for particularly high demands
- > Safety door lock
- > Protection for control panel
- > Lockable control panel
- > Integrated, IP-protected Ethernet interface
- > Integrated Wi-Fi interface (incl. Ethernet interface)

## Technical specifications

### Dimensions and weights

Dimensions (W x H x D)	
Cooking system (body)	42 5/8 x 71 1/8 x 41 3/8 inches
Cooking system (total)	42 3/5 x 73 3/4 x 44 inches
Cooking system with packaging	46 7/8 x 80 3/8 x 48 inches
Top rack maximum working height*	≤ 5 ft. 2 7/8 inches

\* when using a RATIONAL mobile oven rack, type 20-full size with 20 trays, rack spacing 62 mm (loss of USPHS certification)

Weights	
Maximum load size per tray	66 lb
Maximum total load capacity	396 lb
Weight - electric unit without packaging	670 lb
Weight - electric unit with packaging	771 lb

### Electrical connection conditions

Voltage 3 AC 208 V / 240V	
Connected loads - electric	67.9 kW
Steam power	54 kW
Convection power	66 kW
Breaker	200 A
Connection impedance	0.09 Ω
RCD type	B
Cable diameter	AWG 2/0 167°F
Voltage 3 AC 440 V / 480 V	
Connected loads - electric	67.9 kW
Steam power	54 kW
Convection power	66 kW
Breaker	100 A
Connection impedance	0.09 Ω
RCD type	B
Cable diameter	AWG 1 140°F

### Connection conditions water

Water inlet (pressure hose), each	3/4"
Water pressure (flow pressure), each	14.5-87.0 psi
Water drain, each	2" OD
Maximum flow rate per cooking system	3.17 gal/min

### Installation conditions

- > Observe all local and country-specific standards and regulations regarding the installation and operation of industrial cooking appliances. The local standards and regulations for interior ventilation systems must also be taken into account.

### Water quality requirements

Untreated water can be 0 to 24.5 gr/gal (0 to 420ppm) hardness. We do not recommend treated water hardness < 5 gr/gal (86ppm) because the water could be corrosive. Sodium ion exchangers are not recommended; H+ Ion exchange systems are recommended. Water that does not meet the following minimum standards will require the proper conditioning

Contaminant	Water Requirements	If > than recommended
Sand / Particles	< 15 µm	Particle filter
Chlorine (Cl <sub>2</sub> )	< 0.12 gr/gal (0.2 ppm)	Active carbon filter
Chloride (Cl <sup>-</sup> )	< 4.68 gr/gal (80 ppm)	RO

### Connected loads - exhaust air and thermal load

Latent heat load	10331 BTU
Sensible heat emission	13667 BTU
Sound level (electric)	60 dBA
Sound level (gas)	65 dBA

### Connection loads - data

LAN data interface	RJ45
WiFi data interface	IEEE 802.11 a/g/n

### Minimum distances at installation

#### Clearance Requirements

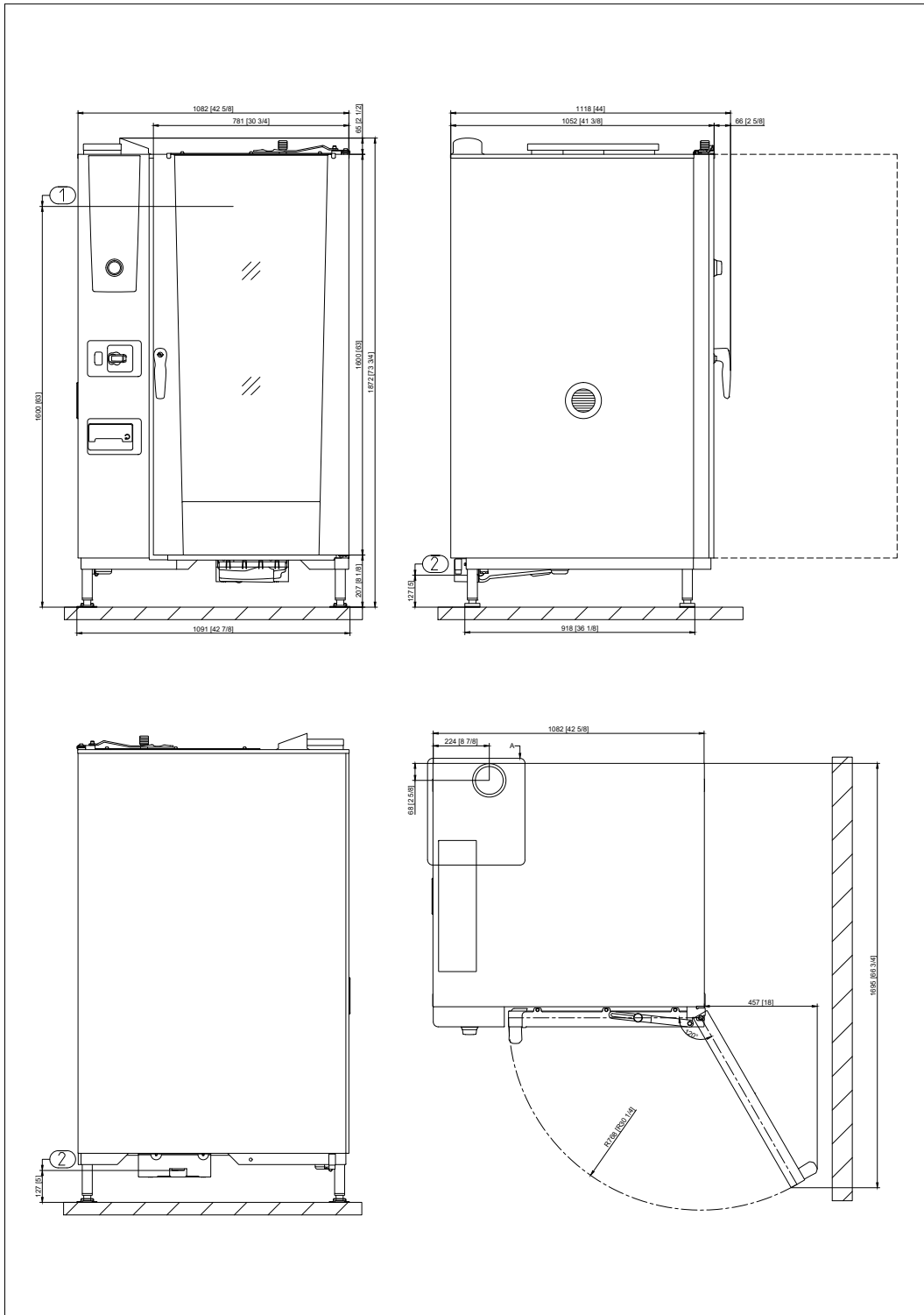
To facilitate servicing, we recommend leaving a 20" (500 mm) gap on the left-hand side of the unit. If there is not 20" (500 mm) left side clearance available, provisions for moving the unit to the left for service access must be made. Such provisions include, but are not limited to, having quick connections (water, gas, etc.) and lengthened electrical connections with flexible cords.

If there are no external heat sources acting on the unit, there should be at least 2" (50 mm) of clearance on either side of the unit. The back of the unit can be mounted flush with the wall.

If a high temperature heat source is on the left side of the unit, clearance of at least 14" (350 mm) must be maintained on the left-hand side. This clearance may be reduced to 2" (50 mm) if a heat shield is used (see accessories).

Recommended clearance from unobstructed rear exhaust pipes and any surface collecting grease or flammable material; 16" (400 mm) gas, 10" (254 mm) electric. It is recommended to have a hood overhang of 6" (150 mm) to 18" (450 mm) at the front of the unit and 6" (150 mm) on the sides if installed at the end of the cooking line. Please refer to the Installation Manual for additional technical data and for instructions on installation and setup.

Technical drawing



1	Top rack height
2	Water drain height

**Accessories**

> 10 full size stainless steel grids included with delivery of the cooking system

Accessories	Item number
RATIONAL Active Green cleaning agent tabs – guarantee the best cleaning performance	Item no. 56.01.535
RATIONAL Care tabs – effectively prevent limescale deposits	Item no. 56.00.562
Condensation breaker – diverts steam and vapors to an existing exhaust air system Sizes 20-half size and 20-full size	Item no. 60.75.326
Heat shield – for installing a unit near a heat source, e.g. a grill - Size 20-full size	Item no. 60.75.826
RATIONAL USB stick – to securely transfer cooking programs and HACCP data	Item no. 42.00.162
RATIONAL Double Water Filter - for Combi Duo 6-full size/6-full size and 6-full size/10-full size or if used for more than 2 units	Item no. 1900.1150US

We offer a wide range of cooking accessories to help you achieve ideal cooking results; for more information, please consult our accessories brochure, ask your dealer, or visit [www.rational-online.com](http://www.rational-online.com)

**Approvals**



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