

iCombi® Classic CombiDuo 6–full size + 6–full size E MarineLine



Capacity

- > Twelve (12) Full-size sheet pans or Twenty four (24) Steam table pans / GN 1/1
- > Special removable hinging rack with 2 5/8 inch rack spacing with protection against slipping (68 mm)
- > 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

Description

- > 2 individual combi-steamers in accordance with DIN 18866 for most cooking methods used in commercial kitchens, allowing use steam and convection either individually, consecutively, or simultaneously.

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 both cooking cabinets through 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

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 must not exceed 63 inch when using a RATIONAL stand
- > Ergonomic door handle with right- / left-handed door opening and swing-shut function
- > Adjustable door stop for securing the cooking cabinet door, even on rough seas
- > Hinging rack with special run-in rails secure standard accessories against slipping out, even on rough seas
- > Stainless steel feet can be welded to the floor or used in anchoring kit installations, securing the cooking system against slipping and tipping The cooking systems can also be screwed to the wall with the Combi-Duo kit
- > 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
- > Hygienic setup flush with the counter without feet for easy and safe cleaning
- > 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
- > Installation flush with the floor and wall through connection in the base area *
- > Installation flush with the floor through connection in the base area *
- > Double-pane glass door with heat reflective special coating 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

Options

- > Can be combined with HeavyDutyLine for particularly high demands
- > Safety door lock
- > 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 (total, incl. Stand I)	42 1/4 x 71 5/8 x 44 3/4 inches
Maximum working height of top level*	63 1/3 inches

* when using the RATIONAL Stand I Combi-Duo

Weights	
Net weight cooking system incl. Combi-Duo kit and Stand I	626 lb
Maximum load size per level	66/66 lb
Maximum total load capacity	132/132 lb

Each cooking system is individually

Electrical connection conditions

Voltage 3 AC 208 V / 240V	
Connected loads - electric	22.4 kW
Steam power	18 kW
Convection power	21.6 kW
Breaker	70 A
Connection impedance	0.09 Ω
RCD type	B
Cable diameter	AWG 3 140°F
Voltage 3 AC 440 V / 480 V	
Connected loads - electric	22.4 kW
Steam power	18 kW
Convection power	21.6 kW
Breaker	35 A
Connection impedance	0.09 Ω
RCD type	B
Cable diameter	AWG 8 140°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.

Approvals



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 ₂)	< 0.12 gr/gal (0.2 ppm)	Active carbon filter
Chloride (Cl ⁻)	< 4.68 gr/gal (80 ppm)	RO

Connected loads - exhaust air and thermal load

Latent heat load	6538 BTU
Sensible heat emission	8688 BTU
Sound level	56 dBA

Connection loads - data

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

Minimum distances at installation

Clearance Requirements

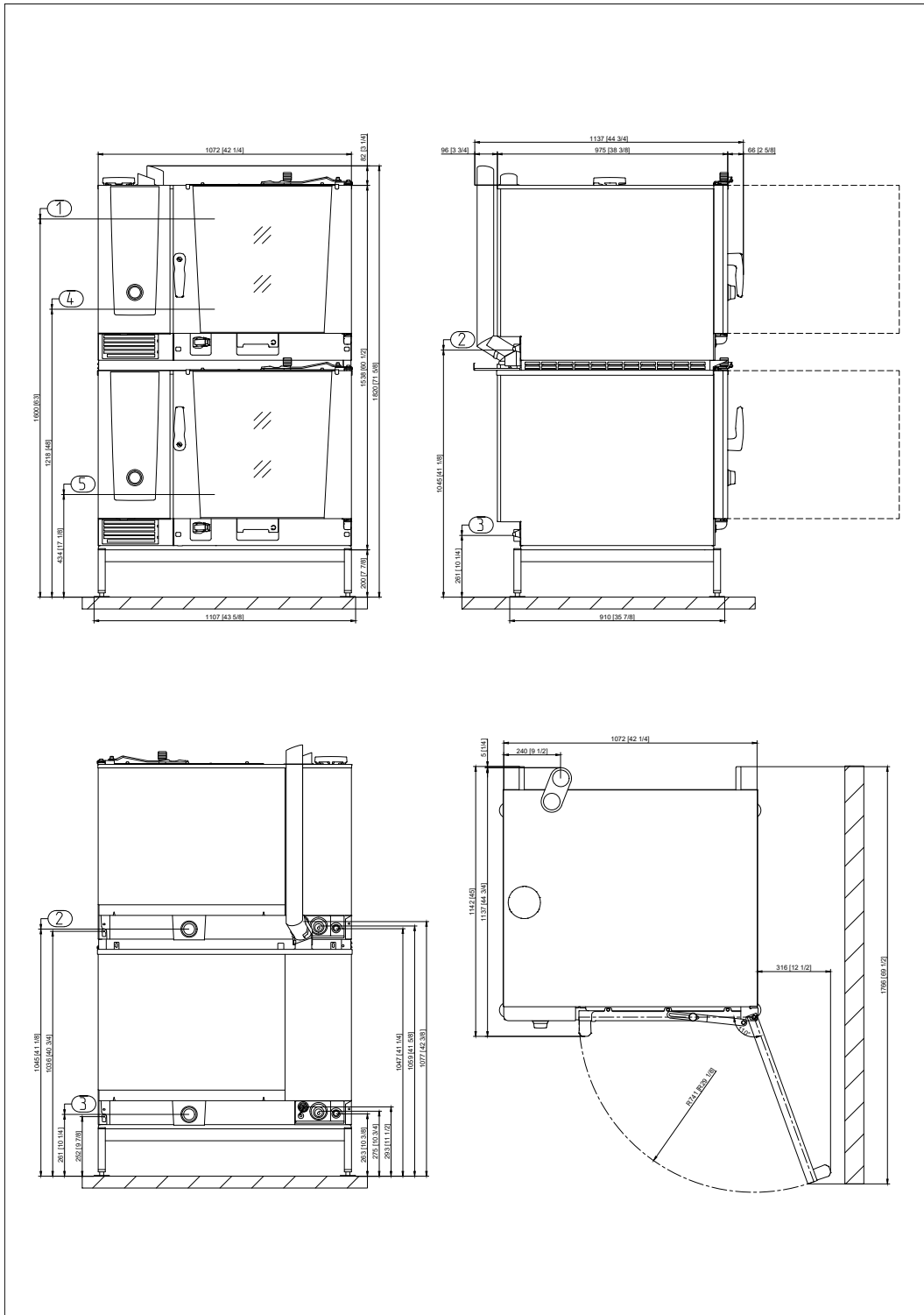
To facilitate servicing, we recommend leaving a 20" (500 mm) gap on the left-hand side of the unit. If there is not 20" (500 mm) left side clearance available, provisions for moving the unit to the left for service access must be made. Such provisions include, but are not limited to, having quick connections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



1	Top rack height
2	Water drain height - top unit
3	Water drain height - bottom unit
4	Rack loading height - top unit
5	Rack loading height - bottom unit

Accessories

> 6 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 6-half size, 10-half size, 6-full size and 10-full size	Item no. 60.72.592
Combi-Duo run-in rail for mobile rack and mobile plate rack Size 6-full size, 10-full size	Item no. 60.75.760
Hinging racks - Size 6-full size	Item no. 7 racks 60.62.168 Item no. 5 racks 60.62.171
Heat shield – for installing a unit near a heat source, e.g. a grill - Size 6-full size	Item no. left side 60.75.769 Item no. right side 60.75.768
Stackable Combi-Duo kit Size 6-half size E/G on Size 6-half size E or Size 10-half size E	Item no. 60.74.725
Combi-Duo transport trolley for mobile rack and mobile plate rack - height-adjustable - Sizes 6-full size, 10-full size	Item no. 60.75.387
UltraVent recirculating hood –for Combi-Duo 6-full size, 10-full size electrical units only	Item no. 60.76.180
UltraVent Plus recirculating hood – for electrical units only – Combi-Duo 6-full size, 10-full size	Item no. 60.76.178
Stands with fixing stainless steel feet	See Cooking Systems and Accessories catalog
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

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