# Model: GENIUS^MT 12-21 Electric (boilerless)

**Dimension:**

| | |
|---|---|
| Width: | 51 5/8 inch / 1312 mm |
| Depth: | 42 7/8 inch / 1088 mm |
| Height: | 58 7/8 inch / 1495 mm |
| Weight: | 772 lbs / 350 kg |
| **Number of sheet pans**: | 12 x full size 18" x 26" |
| Number of Hotel pans: | 24 x full Steam Pan 12" x 20" x 2" |
| **Distance/Levels**: | 2 5/8 inch / 67 mm |

**Cold water inlet:** two (2) 3/4 inch garden hose connection

**Drain:** 2 inch / 50 mm

IT IS THE SOLE RESPONSIBILITY OF THE OWNER/ OPERATOR/PURCHASER OF THIS EQUIPMENT TO VERIFY THAT THE INCOMING WATER SUPPLY MEETS AND COMPLIES WITH THE WATER QUALITY SPECIFIED. NON-COMPLIANCE WITH THESE MINIMUM STANDARDS WILL POTENTIALLY DAMAGE THIS EQUIPMENT AND/OR COMPONENTS AND VOID THE ORIGINAL EQUIPMENT MANUFACTURER'S WARRANTY.

**Softened water quality:**

| | |
|---|---|
| - total hardness | $\leq$ 3° dH / 3 grains/gal |
| - pH value | 7,0 - 8,5 |
| - conductivity | max. 90 $\mu S/cm^3$ |
| - Cl: | max. 240 mg/gal |
| - $SO_4$: | max. 400 mg/gal |
| - $SiO_4$: | max. 40 mg/gal |
| - Fe: | max. 0,2 mg/gal |
| - Mn: | max. 0,2 gal/l |
| - Cu: | max. 0,2 mg/gal |
| - $Cl_2$: | max. 0,40 mg/gal |

**Water pressure:** 60 PSI (35 - 87 PSI)

**Water flow rate:**

| | |
|---|---|
| - Softened water | 6,6 gal/h (at 60 PSI) |
| - Hard water | 14,5 gal/h (at 60 PSI) |

**Electrical: (Version 1):**

| | |
|---|---|
| Voltage: | 208 VAC |
| Phases: | 3 phase |
| Factory recommended Amperage: | 70 amp |
| Maximum fuse rating: | 80 amp |
| Connected load: | 21,5 kW |

**Electrical: (Version 2):**

| | |
|---|---|
| Voltage: | 480VAC |
| Phases: | 3 phase |
| Factory recommended Amperage: | 35 amp |
| Maximum fuse rating: | 35 amp |
| Connected load: | 21,5 kW |
| | |
| Hz: | 50 or 60 |

**Certification:** ETL, ETL Sanitation
**Protection (water tight):** IPX 5

**Heat emission:**

| | |
|---|---|
| - latent | 11610 Btu/Hr |
| - sensitive | 8121 Btu/Hr |

**Noise level:** < 70 dB (A)

1. Drain
2. Feet, adjustable +/- 0,4 inch (10 mm)
3. Cleaner connection
4. Rinsing agent connection
5. Softened water connection
6. Hard water tap
7. Potential equalization
8. Electrical cable connection (for gas devices only)
   Potential-free contact (optional) (for electrical devices only)
9. Air filter
10. Gas line connection (for gas units only)
11. Electrical cable connection (for electrical devices only)
12. Energy optimization connection (for electrical devices only)
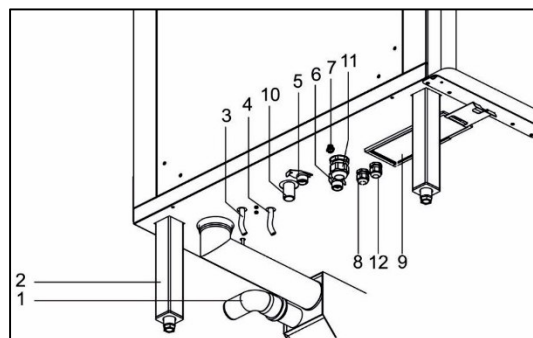
# Model:   GENIUS<sup>MT</sup> 12-21 Electric (boilerless)

<u>Standard features</u>

- **MT Technology -** Genuine MultiTouch display with ultrafast response and high resolution. Intuitive and precise operating by means of sliding, swiping or scrolling.
- **Quick Set -** Puts all settings in the exact position with your fingertip. Changes or adds temperature and time settings without interrupting the current cooking process on the display.
- **4 Unique Start Screens** manual, climatic<sup>MT</sup>, favorite, program list
- **9 Menu Groups** - Pasta, Desert/cakes, Bread/rolls, Poultry, Meat, Fish/seafood, Vegetables, Side dishes, Banqueting/Rethermalization
- **9 modes of operation** from 86°F to 572°F with an adjustable humidity between 0% to 100% - Vario-Steaming, Steaming, Forced Steaming, Combi-Steam Cooking, Convection, LT-cooking (cook & hold), Delta-T Cooking, Baking
- **Favorite** - Customized listing for fully automatic programs.
- **Images** - Saves individual product images.
- **Last 20** - Function display allows selection of the 20 most recently used cooking processes including manual and programmed settings for immediate restart.
- **Multi Cooking -** automatically selects programs with the same cooking method and displays up to 15 timers interchangeably and simultaneously on screen.
- **Climate Control -** Patented Climatic®<sup>MT</sup> controls temperature and moisture level. Active humidification and/or de-humidification. Dry heat and humidity in combination with temperature and humidity graphically displayed.
- **Climatic®<sup>MT</sup> -** simultaneous setting of temperature and humidity to the exact degree and percentage, temperature (°C/°F), air humidity, time, core temperature, humidity quantity, pause times
- **Program capacity -** An integrated 9 Menu group display including a library with up to 400 recipes with 20 steps each and 400 product pictures.
- **Quick Mode -** An operating concept especially adapted to the needs of a multi unit operator. It allows using only set recipes and no manual change.
- **Multi Connect -** Easy administration of multiple units with ProConnectMT software and advanced communication interfaces such as LAN or USB.
- **Preconfigured start time** for automatic start at a freely selected time, up to 24h
- **Cook and Hold -** Slow cooking from 86°F to 248°F.
- **Delta-T cooking** – cooking processes regulated in accordance with the core temperature
- **Regeneration –** storable special programs for regeneration of banquets, plates and hotel pans
- **Steptronic®** – automatic program sequences using variable combination of cooking steps
- **Core temperature control** for multi-point probe for precise measurement of the core temperature from 32 °F to 210 °F, control of cooking procedures and explain correction in case of false core temperature probe readings.
- **HACCP log book –** automatic internal recording and display of HACCP/LMHV data
- **Half Energy Feature (e/2**) - Reduced electrical load. Ideal in peak times.
- **SPS®** – **S**team **P**rotection **S**ystem for prevention of burns using active steam extraction at the end of the cooking process
- **Heat Exchanger -** Heat recovery through Multi-Eco System. Pre-heats incoming water for on-demand steam generation. Highly water and energy efficient. Exceeds drain temperature standards for most municipalities.
- **autoclean®<sup>MT</sup> - Patented fully-automatic technology. 100% process-controlled for guaranteed hygiene. Reduced consumption of water and rinsing agents - quick clean in 15 minutes. Color-coded indicator of care product shows remaining quantities. No manual cool-down required. No direct employee contact with cleaning agents. Biodegradable cleaning/ri**
- **Fan speed** – with 2 levels or **preconfigured fan timer function or pulsing by fixed speed, fan auto reverse for even browning**
- **Manual steam injection at any time**. No pre-heating or stand-by required. Significant energy and water savings.
- **Steam Extraction** - Steam extracted via patented Steam Protection System (SPS®) before program ends. Reduces danger of steam burns. Reduces excess humidity in the kitchen environment. Recirculation system reuses steam for maximum energy efficiency.
- **Active Temp** – automatic preheating or cooling of the cooking chamber to set temperature
- **Cleaning Alert** – adjustable from 5-100 hours
- **Maintenance Alert** – adjustable from 1-12 months
- **Safety door lock** – 2-step door lock, to reduce the risk of burning due to steaming during opening the door
- **Integrated- self-retracting hand shower** with adjustable spray functions and automatic shut off
- **Sensor- controlled steam cooling -** for reducing the steam emission out of the exhaust air pipe

Eloma North America    101 Corporate Woods Parkway    Vernon Hills    IL 60061 / USA
Direct: 847-215-6491    Free: 844-ELOMAUS(356-6287)    Fax: 336-217-8807
sales@elomausa.com    www.elomausa.com

2/5

## Model:  GENIUS<sup>MT</sup> 12-21 Electric (boilerless)

Model: GENIUS$^{MT}$ 12-21 Electric (boilerless)

### Description

The unit is a boilerless, self-cleaning, combi oven designed for steaming and convection cooking either separately, sequentially or combined. The combi oven has live-steam system that generates steam directly into the cooking chamber, for faster heating and re-heating without requiring a stand-by mode. An award winning Multi-Eco system simultaneously pre-heats incoming water and cools outgoing condensate to reduce energy and water consumption. The oven fits 12 full size sheet pans or 24 steam table pans.

### Construction:

- Constructed to withstand temperature range from 86˚ to 572°F and humidification from 0% to 100%.
- Hygienic cooking chamber with coved corners, seamless welding. Interior and exterior housing of chrome nickel steel CrNi 18 10, BS 304 S15, AISI 304.
- Tempered door glass (with hinged double panes for easy cleaning) with lock-in-place positions, ventilated door, removable door gaskets & integrated drip tray.
- Quick release safety door lock for single-handed operation.
- Automatic fan break when door opens by contact-free magnetic front size switch.
- Integrated, external hand shower, with automatic return and shut off - for use with door opened or closed.
- Bright interior lighting with halogen lamps integrated in the door, for easy exchange.
- Exhaust and/or seal integrated in drain – fixed connection in accordance with national and international regulations. Sensor controlled, two-stage cool down water condensation (max. discharge temperature 176 °F).
- Split water connections for hard and soft water.
- Hinged control panel - easy service access from the front.
- Rack can be easily removed without tools and has a pan slide stop.
- Manufactured according to quality management system EN ISO 9001.
- IPX 5 Water-tight rating.

### Options

- LAN interface
- External core temperature probe
- Connection for energy improvement
- Heat shield

### System accessories

- Multi-Eco condensation hood
- ProConnect programming software
- Ocean version
- Tray trolley
- Mobile banquet plate rack

Eloma North America   101 Corporate Woods Parkway   Vernon Hills   IL 60061 / USA
Direct: 847-215-6491    Free: 844-ELOMAUS(356-6287)    Fax: 336-217-8807
sales@elomausa.com    www.elomausa.com

3/5

# Model:    GENIUS<sup>MT</sup> 12-21 Electric (boilerless)

## Weight und Shipping dimensions:

| Weight | |
| --- | --- |
| Max. load per shelf: | 33 lbs / 15 kg |
| Max. load size: | 330 lbs / 150 kg |
| Net load device: | 772 lbs / 350 kg |
| Shipping load device: | 1000 lbs / 455 kg |

| Shipping dimension | Width | Depth | Height |
| --- | --- | --- | --- |
| | 49 5/8 inch/ 1260 mm | 58 2/3 inch/ 1490 mm | 67 2/3 inch/ 1720 mm |
| Freight class | class 150 | | |
| Cubing packing | one unit on a pallet | | |



## Minimum clearance for operation and maintenance work
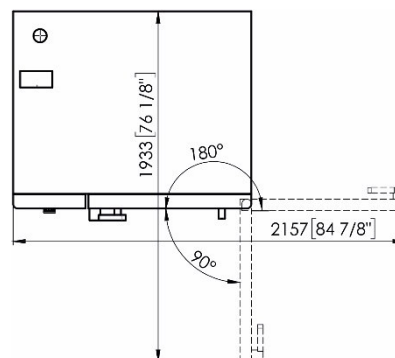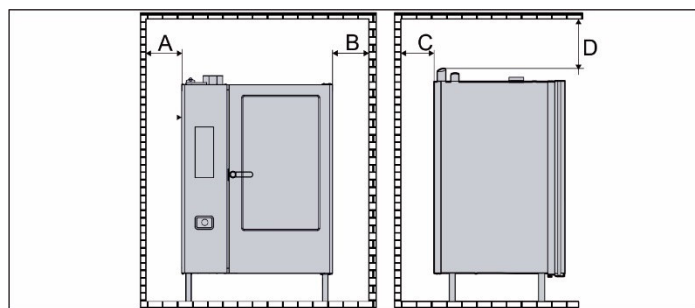


| Dimension | Clearance [inch (mm)] | Standalone devices |
| --- | --- | --- |
| A | **Side with operating panel to the wall** | |
| | Minimum clearance | > 2 (50) |
| | Recommended free space for maintenance / repair | > 19 5/8 (500) |
| B | **Side without operating panel to the wall** | |
| | Minimum clearance | > 2 (50) |
| C | **Rear of the combi steamer to the wall** | |
| | Minimum clearance | > 2 (50) |
| D | **Top edge of the exhaust air pipe to the ceiling** | |
| | Exhaust hood provided by the operating company | > 2 (50) |
| | Without exhaust hood provided by the operating company | > 39 3/8 (1000) |
| Min. distance | To Broiler, flat top, open flames, fryers without heatshield | > 10 inch |
| | with heat shield | > 2 1/2 inch |

Eloma North America   101 Corporate Woods Parkway   Vernon Hills   IL 60061 / USA
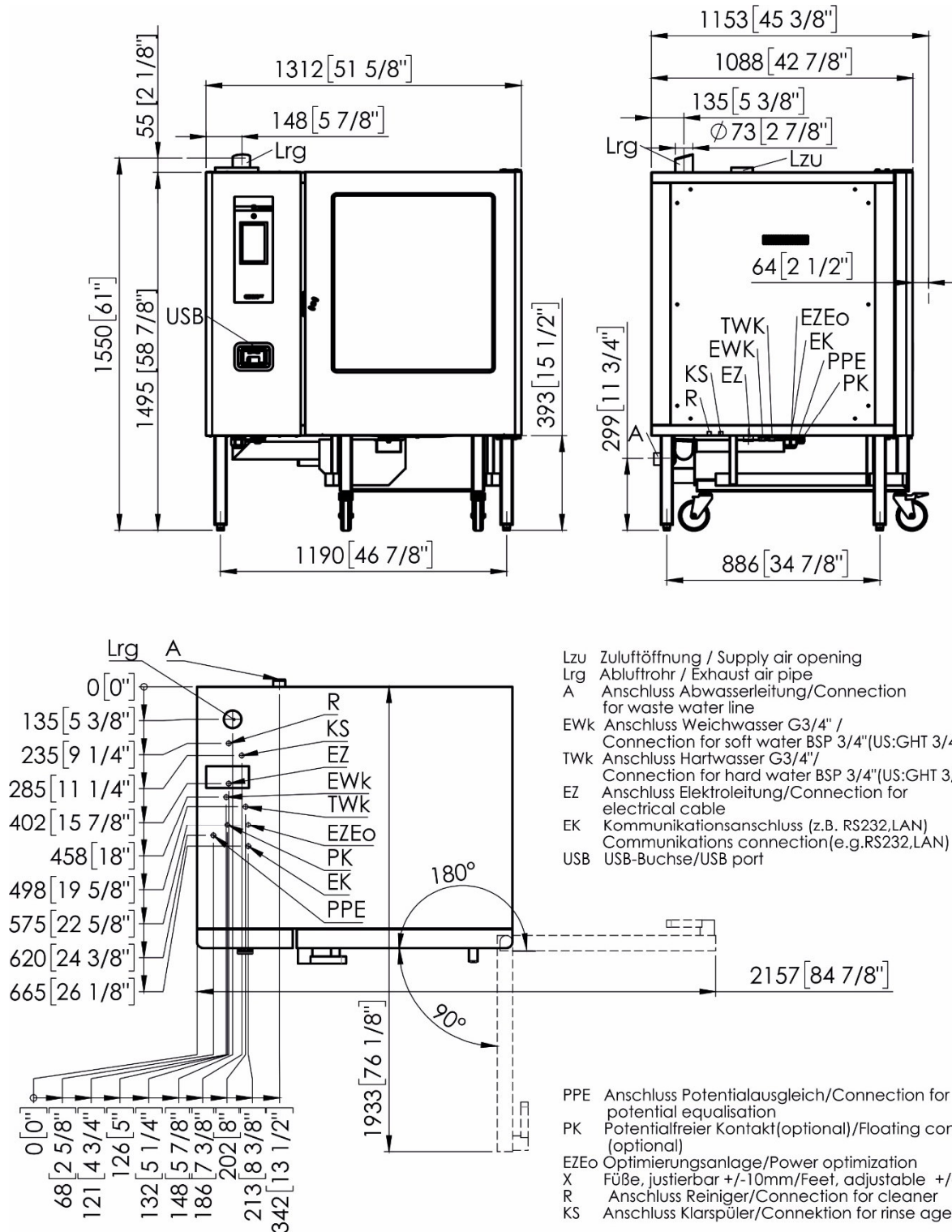Direct: 847-215-6491    Free: 844-ELOMAUS(356-6287)    Fax: 336-217-8807
sales@elomausa.com    www.elomausa.com

4/5

**Please note:**

Based on the water quality in your area, a water filtration system is required. Any filter applied should be sized to handle the flow rate of the device selected, as well as achieve the water quality specified.

**Model:** GENIUS$^{MT}$ 12-21 Electric (boilerless)



Lzu  Zuluftöffnung / Supply air opening
Lrg  Abluftrohr / Exhaust air pipe
A    Anschluss Abwasserleitung/Connection
     for waste water line
EWk  Anschluss Weichwasser G3/4" /
     Connection for soft water BSP 3/4"(US:GHT 3/4")
TWk  Anschluss Hartwasser G3/4"/
     Connection for hard water BSP 3/4"(US:GHT 3/4")
EZ   Anschluss Elektroleitung/Connection for
     electrical cable
EK   Kommunikationsanschluss (z.B. RS232,LAN)
     Communikations connection(e.g.RS232,LAN)
USB  USB-Buchse/USB port

PPE  Anschluss Potentialausgleich/Connection for
     potential equalisation
PK   Potentialfreier Kontakt(optional)/Floating contact
     (optional)
EZEo Optimierungsanlage/Power optimization
X    Füße, justierbar +/-10mm/Feet, adjustable  +/- 3/8"
R    Anschluss Reiniger/Connection for cleaner
KS   Anschluss Klarspüler/Connektion for rinse agent

---