

**Feature overview**

**Franke A600 FM EC MU**

**FoamMaster system FM EC MU, 1 or 2 grinders, 1 or 2 powder dosing units, hot water spout, wand for steam or autosteam, mains water connection, milk pump module**

Microprocessor-controlled fully automatic coffee machine with 1 or 2 precision coffee grinders for the individual preparation of coffee and coffee specialties such as Ristretto, Espresso and Café Crème. The processing of fresh milk can be used to prepare additional products such as Cappuccino, Latte Macchiato and milk coffee with warm milk and warm milk foam in barista quality, in addition to specialities with cold milk and cold milk foam. The milk is conveyed with the MU EC pump module from the customer's own cooling unit. 1 or 2 built-in powder dosing units offer the option to prepare hot chocolate, milk drinks or mixed drinks, e. g. with chocolate powder or milk powder or two different types of chocolate. Dosed or non-dosed preparation of hot water is possible through a separate dispensing spout. Steam wand for the dosed or undosed steam dispensing in order to manually heat milk or preheat cups.

**Technical data**

Number of cups per hour\*:

|  |  |  |  |
| --- | --- | --- | --- |
|   |  | 1L N PE 220-240V 50/60Hz2400-2800W16A | 3L N PE 380-415V 50/60Hz6300-7500W 16A |
|   |   | Single preparation: | Double preparation: | Single preparation: | Double preparation: |
| Espresso |   | 150 | 194 | 150 | 194 |
| Café Crème |   | 100 | 121 | 100 | 121 |
| Cappuccino |   | 98 | 160 | 98 | 160 |
| Latte Macchiato |   | 102 | 155 | 102 | 155 |
| Hot water |   | 164 | - | 164 | - |
| Hot water |   | (33 l/h) |  | (33 l/h) |  |
| Hot chocolate |   | 111 | - | 111 | - |
| Milk coffee |   | 124 | 186 | 124 | 186 |
| Warm milk |   | 108 | 128 | 108 | 128 |
| Cold milk |   | 122 | - | 122 | - |
|  |  |  |  |  |  |
| Energy loss | KWh/24h | - | - |

\*All specified values are dependent on various factors, e. g. water supply and product temperature or the grind coarseness setting.

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| --- | --- |
| Mains power connections: | 220-240V 1L N PE 2400-2800W 50-60Hz 16Á (EU)220-240V 1L N PE 2100-2300W 50Hz 10Á (CH/GB/EU)200-220V 2L PE 4500-5300W 60Hz 30Á (USA) 200V 2L PE 2300W 50-60Hz 16Á (JP) 220V 1L N PE 2600W 50Hz 16À (China)380-415V 3L N PE 6300-7500W 50-60Hz 16À (EU)220-240V 1L N PE 2400-2800W 50-60Hz 16À (CH/EU/GB)220-240V 1L N PE 4400-5000W 50-60Hz 30À (EU)220-240V 3L PE 5600-7900W 50/60Hz 30À (EU)200-220V 2L PE 4500-5300W 60Hz 30Á (US) 200V 2L PE 4500-5300W 50-60Hz 30Á (JP) 200V 2L PE 2000W 50-60Hz 16Á (JP) 200V 3L PE 6800W 50-60Hz 30À (JP) 380V 3L N PE 6300W 50Hz 16À (CN) 220V 1L N PE 2400W 50Hz 16À (CN) |
| Mains power connection MU EC: | 24V DC, 3,5Á – power supply by the fully automatic coffee machine |
| Net weight: | up to max. 38 kg – A600up to max. 2 kg – MU EC |  |
|  |  |  |
| Dimensions: A600: MU EC: Milk container:width: 340 mm 198 mm 186 mmheight: 754 mm (feet 7 mm) 96 mm 272 mmheight: 796 mm (feet 40 mm)depth: 600 mm 280 mm 370 mm |

Mains water connection: Cold water: G 3/8" external thread

 Water pressure: 80 to 800 kPa (0,8 to 8,0 bar)

 With water filter: 80 to 600 kPa (0,8 to 6,0 bar)

 Inlet hose: ∅ 8 x 1500 mm; union nut G3/8"

Wastewater connection: Water drain: Funnel trap ∅ 50 mm, vented

 Waste-water hose: ∅ 20 x 2000 mm

Ingress protection: No water protection: IPX0

Noise emission: Acoustic pressure: < 70 dB (A)

Approvals: (FCS4050): CE / CB / HACCP

**Version**

Housing parts and product container are manufactured from low-maintenance plastic, the front door is made of aluminum and the drip grid is made of stainless steel. All safety-relevant components are certified by the respective testing authorities. Housing colours Black Line (high-gloss black) or Grey Line (anthracite/black).

**Operating panel Touch+Go Control**

The entire operator guidance, settings and status function displays are shown on the 8" touch screen protected by an aluminum frame. 6 menu cards, all Individual definable for example for seasonal summer and winter drinks or beverages with the distinction according to recipes. The "Size", "Flavor intensity" and "Bean selection" preselection buttons provide you with additional beverage options. Display of 4, 6, 9, 12, 16 or 20 product buttons with photorealistic images of drinks per page, up to five pages. The products can be displayed individually with predefined images and text or via USB interface with customer-specific images. Onboard media pool, to show images and advertising messages during operation-breaks. Up to 7 different languages can be selected. Display of nutritional and allergen information is possible. Payment mode displays the product price and any credit. Events and information, e.g., the absence of coffee beans, are displayed in different colors or can be called up from the dashboard located behind the product level. The edge lighting is individually programmable. The functional lighting concept offers the possibility to notice these messages through a for example red and optional flashing edge lighting from any distance.

**Grinder**

One or two low-noise precision grinders with ceramic grinding discs and direct grinding function. Transparent single-chamber bean hopper with 2000 g content for one grinder. Transparent double-chamber bean hopper for two different bean types with 1200 g or 600 g content each for two grinders. Bean hopper made of easy care plastic. Removable using central fastener for release mechanism with simultaneous bean hopper fastener. Option to adjust the grind coarseness. Optional the bean hopper can be locked using a cylinder lock. Monitoring for lack of beans with messages on the display.

**Powder hopper**

One or two dosing units, e. g. for chocolate and/or milk powder or a dark and/or light-colored chocolate powder with a container content of approx. 1000 g or approx. 600 g. In the event of a lack of powder or missing hopper, the message appears on the display and the drink preparation is blocked. The special mixer system with high-performance motor ensures the preparation of homogeneous chocolate and milk products, and also (in connection with coffee products) combinations thereof. A special mechanism prevents the formation of tunnels in the powder stored in the hopper. The finished beverage is dispensed via the coffee spout as a single product. Optional the powder hopper can be locked using a central cylinder lock.

**Iced Coffee IC**

The optional Iced Coffee Module (IC) actively cools the freshly brewed coffee immediately after the brewing process and immediately before the product is issued. It can be used to prepare additional other freshly brewed and actively chilled products with freshly ground coffee beans such as Iced Coffee, Iced Espresso or Iced Americano or products in combination with milk, milk foam and/or syrup. Temperature control is carried out via a coaxial heat exchanger. The standard iQFlow brewing system prepares the Iced products in consistently high quality and taste. The Iced Coffee Module is integrated in the cleaning process of the coffee machine. A separate cleaner is not necessary. Installation instead of the second powder dosing unit.

**Brewing system**

The brewing system with patented brewing unit that features a fill level of up to 22 g and pre-brewing function is, when equipped with a corresponding brewing insert, suitable for the preparation of classic espresso, café crème, and other specialty coffees. Pressing a product button triggers the respective fresh grinding of the coffee beans. Specialty coffees can be prepared in single or double cups, fresh and according to demand. The optional iQFlow system is monitoring and regulating the brewing process through programmable brewing times. The Powder lid for the manual dosing of the coffee powder is optional lockable. After brewing, the dry coffee grounds are collected in the integrated grounds drawer (up to 80 portions). The drawer is easily emptied via the direct, separate access on the front of the machine. Monitoring for overfilling. Optional coffee grounds chute for disposal of coffee grounds directly into a waste container installed under the counter. Tool-free brewing unit removal, e. g. for cleaning, with presence monitoring.

**Coffee spout**

The automatic height adjustment of the double coffee spout from 85 mm to 180 mm enables the utilization of all conventional cups and drinking vessels up to a maximum height of 180 mm. The optional cup sensor detects whether a drinking vessel is placed under the product spout. If there is no cup under the spout, the products and the rinsing process are locked. In addition to individual preparation, the double spout also enables the simultaneous preparation of two specialty coffees, e.g., classic espresso or café crème. LED lighting for the dispensing area while the product is being dispensed. Marking for the coffee cup positioning in the drip grid.

**FoamMaster system FM EC MU**

For the preparation of warm and cold milk, warm and cold milk foam. With the FoamMaster Technology, the milk is foamed and heated up. The FoamMaster module integrated into the coffee machine with high-performance milk pump integrated in the MU EC pump module, ensures optimal dosage of the quantity of milk and milk foam. In addition to the dispensing of single products, the double-cappuccinatore allows the simultaneously dispensing of 2 coffee products with milk such as cappuccino or latte macchiato. The time at which milk is dispensed (before, with or after dispensing coffee) and the desired foam consistency from coarse/fluid to fine/stiff can be programmed individually. The milk dispensing takes place together with the coffee in a single operation. The milk deficiency monitoring in the milk line blocks the purchase of dairy products in the absence of milk and enables the monitored milk supply from the customer's own cooling unit. Empty message and product lock by lack of milk. The MU EC pump module with changeover valve installed in the customer's own cooling unit also enables the purchase of 2 different types of milk. Milk storage in 2 containers of 12 litres each. Separate milk temperature monitoring and control in the cooling unit with 2 types of milk.

**Customer settings**

The user can directly adjust the key parameters as for example the amount of coffee powder and water via the touch screen. Uploading own customer images and saving product settings via USB interface. Access authorization can be defined individually and secured with a PIN code. Programmable switch-on and switch-off times with a timer for maximum energy efficiency and minimum current consumption in stand-by mode.

**Accounting systems**

\*\* VIP interface with MDB interface for connecting to commercial accounting systems such as coin validator, coin changer or card-reading systems. Internal counter per product and total preparations. Up to four price lists can be programmed (1x cash, 3 x credit). SD card reader and optional IrDA interface (Infrared for a customer's own reader) for reading the counter values. Data export option in .csv format via USB interface. EVA-DTS standard for data transmission. Data backup in the VIP interface.

Optional payment casing:

|  |  |
| --- | --- |
| * Coin validator
 | Add-on unit (A line design)\*\* |
| * Coin changer
 | Add-on unit (A line design)\*\* |
| * Stored value and money card system\*
 | Add-on unit (A line design)\*\* |
| * smartSCHANK
 | Add-on unit (aluminum housing) |

\* Reading unit provided by the customer.

**Cleaning system EC EasyClean**

The integrated, automatic rinsing and cleaning system EC EasyClean for the entire preparation area makes maintaining the device easy. The special system cleaning agents (DDAC- and BAC- free) ensures maximum cleaning quality, optimum hygiene and uniform product quality. Visual user guide and display of all manual cleaning steps on the touch screen, e. g. the dosing of cleaners for the cleaning process. The necessary water quantity is automatically added to the supplied cleaning container by the connected coffee machine once the cleaning program has started. Programmable starting time for rinsing of the milk line, even up into the cooling unit and for the foamer head, e. g. directly after each product preparation or, e. g. 3 minutes after the last preparation. LED lighting for the dispensing area while the cleaning process is running.

**Additional options**

* Autosteam Programmable temperature (Instead of steam)
* Cup warmer Add-on unit with hated trays for around 120 coffee cups
* Coffee Caddy Transport carriage for mobile coffee machine insert
* Digital services (IoT) Internet access via smartphone, tablet, laptop, or PC to machine sales, counter values,
 error messages, and product purchases at all machine locations. Evaluation option for
 the current month. Option to monitor and set machine data via the Cloud, as well as
 information regarding the machine status, cleaning intervals, and pending
 maintenance schedules. This makes it possible to ensure a permanently high quality
 standard in terms of product preparation and to avoid periods of downtime that are
 associated with a loss of sales
* First Shot Intelligent brewing chamber pre-heating feature. Automatically activated depending on
 the idling time of the coffee machine
* Flavor Station FS30 as side unit or FSU30 as under table unit for automatic dosing with up to three
 different flavors, which (combined with a coffee machine) can be used to add flavor
 to the beverages
* Optical Cup Recognition Camera module recognizes the dimensions of the drinking vessel and passes them
 on to the coffee machine. As a result, both spout height and product
 offering automatically adjust to the respective drinking vessel

**Manufacturer** Franke Kaffeemaschinen AG (ISO9001, ISO14001, ISO45001 certified)