**Feature overview**

**Franke A400 MS EC**

**Milk system MS EC, 1 or 2 grinders, 1 or 2 powder dosing units, hot water spout, wand for steam, mains water connection, internal tank**

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 with warm milk and milk foam such as Cappuccino, Latte Macchiato and milk coffee in addition to cold milk. 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 50/60Hz2100-2300W10A | 1L N PE 220-240V 50/60Hz2400-2800W 16A |
|   |   | Single preparation: | Double preparation: | Single preparation: | Double preparation: |
| Espresso |   | 127 | 164 | 140 | 186 |
| Café Crème |   | 87 | 110 | 92 | 112 |
| Cappuccino |   | 93 | 156 | 93 | 156 |
| Latte Macchiato |   | 98 | 128 | 98 | 128 |
| Hot water |   | 100 | - | 116 | - |
| Hot water |   | (20 l/h) | - | (23 l/h) |  |
| Hot chocolate |   | 102 | - | 102 | - |
| Milk coffee |   | 100 | 128 | 105 | 140 |
| Warm milk |   | 108 | 128 | 108 | 128 |
| Cold milk |   | 122 | - | 122 | - |
|  |  |  |  |  |  |
| Energy loss | KWh/24h | 1,529 | 1,556 |

Values determined in accordance with DIN 18873.

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

|  |  |
| --- | --- |
| Mains power connections: | 220-240 V, 1LNPE, 2400-2800W, 50-60Hz, 16Á (EU/GB/CH)  |
|  | 220-240 V, 1LNPE, 2100-2300W, 50-60Hz, 10Á (CH) |
|  | 200-220 V, 2L PE, 4500-5300W, 60Hz, 30Á (US) |
|  |  200 V, 2L PE, 2300W, 50-60Hz, 16Á (JP) |
|  |  220 V, 1LNPE, 2600W, 50Hz, 16À (CN) |
|  |  |  |
| Net weight: | up to 38 kg |  |
|  |  |  |
| Dimensions: | Width 340 mm |  |
|  | Height 705 mm (optional foot 7) | with 2G / 2x 0.6 kg |
|  | Height 744 mm (standard foot 40) | with 2G / 2x 0.6 kg |
|  | Height 757 mm (optional foot 7)  | with 1G / 1x 2,0 kg and 2G / 2x 1.2 kg |
|  | Height 796 mm (standard foot 40) | with 1G / 1x 2,0 kg and 2G / 2x 1.2 kg |
|  | Depth 600 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"

 *Optional (additional or alternative):*

 Internal water tank 4,0 l Presence and Level monitoring.

 Incl. filter cartridge

 electronically switchable to mains water connection

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

 Waste-water hose: ∅ 20 x 2000 mm

 *Optional (additional or alternative):*

 Drip tray 3,0 l removable with Level monitoring

Ingress protection: No water protection: IPX0

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

Approvals: (FCS4060): 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 plate 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).

**Operator panel for Touch+Go Control**

The entire operator guidance, settings and status function displays are on the 8" touch screen made of safety glass (ESG). Up to 5 pages for the presentation of 4, 6, 9, 12, 16 or 20 product keys per page. Language switching and selection of up to 7 pre-defined languages by the user, as well as the display of information relating to nutritional values and allergens possible. The product designations can be displayed individually with pre-defined images or via USB interface with the customer's own images and texts. The integrated media pool also offers the option of displaying images and advertising messages during pauses between operations. The product price and possibly a credit balance are displayed in the payment mode. 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.

**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 600 g or 1200 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. Fineness of grind setting option when bean hopper is removed. Optional the bean hopper can be locked using a cylinder lock. Monitoring for lack of beans and presence of container 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. 600 g or approx. 1000 to 1200 g. In the event of a lack of powder or missing container, 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 container. 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.

**Brewing system**

The certified brewing system with a plastic 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. The respective coffee beans are ground freshly and automatically after a product key is pressed. Specialty coffees can be prepared in single or double cups, fresh and according to demand. Manual insert for manual coffee powder dosing for the preparation of, for example, decaffeinated coffee. After brewing, the dry coffee grounds are collected in the integrated grounds drawer (up to 80 portions). 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**

Manual height adjustment from 88 mm to 180 mm for the utilization of all conventional cups and drinking vessels up to a maximum height of 180 mm. With the optional cup sensor, the products are blocked if there is no cup under the dispensing spout. Intermediate rinsing processes are blocked if there is a cup under the dispensing spout. In addition to individual preparation, the double spout also enables the simultaneous preparation of 2 specialty coffees, e. g. classic espresso or Café Crème. Cup positioning aid in the drip grid.

**Milk system MS EC**

For the preparation of hot milk, warm milk foam and cold milk. The coffee machine is equipped with an integrated milk pump, which ensures optimum dosing of the milk quantity. The fresh milk is sucked in and foamed, heated and dispensed along with the coffee via the milk foamer that is integrated in the coffee spout, all in one process. The time at which milk is dispensed (before, during or after dispensing coffee) can be programmed individually. In addition to single preparation, the double Cappuccinatore also enables the simultaneous preparation of two specialty coffees with milk and/or milk foam, e. g. Cappuccino and Latte Macchiato. The mechanism for monitoring a lack of milk in the milk line blocks the preparation of milk products when no milk is available and it also enables the monitored milk preparation from a customer's own cooling unit.

Optional cooling units:

|  |  |  |
| --- | --- | --- |
| * Franke KE200 EC
 | - for 1 machine / 1 type of milk (Side unit) | Storage 1 x 4 l |
| * Franke Chill&Cup EC
 | - for 1 machine / 1 type of milk (Cup warmer integrated) | Storage 1 x 5 l |
| * Franke SU05 EC
 | - for 1 machine / 1 type of milk (Side unit) | Storage 1 x 5 l |
| * Franke SU12 EC
 | - for 1 machine / 1 type of milk (Side unit) | Storage 1 x 12 l |

**Customer setting**

Users can use the touch screen to set or correct decisive parameters directly themselves, e. g. coffee grounds and water quantities or to define new products. The uploading of the customer's own images and the safeguarding of product settings takes place via the 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 commercially available payment and accounting systems as well as to coin validators, coin changers or card readers. Internal counter per product and total preparations. Up to 4 price lists can be programmed (1x cash, 3x 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 accounting systems:

|  |  |
| --- | --- |
| * 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 EC EasyClean rinsing and cleaning system for the entire preparation area makes caring for the device easy. The special system cleaner (free of both DDAC and BAC) 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. With the SU05 EC and SU12 EC cooling units, the milk container is simply replaced by the supplied cleaning container and connected to the cooling unit via the quick-coupling system. 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 3 minutes after the last preparation.

**Additional options**

* 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

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