**Feature overview**

**Franke A400 FM CM**

**FoamMaster system FM CM, 1 or 2 grinders, 1 or 2 powder dosing units, hot water spout, steam wand, mains water connection****, incl. SU05 CM 5-liter cooling unit**

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 specialties with cold milk and cold milk foam. 1 or 2 built-in powder dosing units offer the possibility of preparing hot chocolate, milk 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\*:

|  |  |  |  |
| --- | --- | --- | --- |
|   | A400FM CM | 1LNPE 220-240V 50/60Hz2400-2800W 16A |  |
|   | SU05 CM | 1LNPE 220-240V 50/60Hz1950-2300W 16A |  |
|   |   | Single cup/h | Double cup/h |  |  |
| Espresso |   | 140 | 186 |  |  |
| Café Crème |   |  92 | 112 |  |  |
| Cappuccino |   | 93 | 156 |  |  |
| Latte Macchiato |   | 98 | 128 |  |  |
| Hot water |   | 116 | - |  |  |
| Hot water |   | (23 l/h) |  |  |  |
| Hot chocolate |   | 102 | - |  |  |
| Milk coffee |   | 105 | 140 |  |  |
| Warm milk |   | 108 | 128 |  |  |
| Cold milk |   | 122 | - |  |  |
|  |  |  |  |  |  |
| Energy loss | KWh/24h | 2,032 (incl. SU05 CM) |  |

Values determined in accordance with DIN 18873

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

|  |  |
| --- | --- |
| Mains power connection: | 220-240V, 1LNPE, 2400-2800W, 50-60Hz, 16Á (EU/GB/CH)  |
| (A400 FM CM) | 220-240V, 1LNPE, 2100-2300W, 50-60Hz, 10Á (CH) |
|  | 200-220V, 2L PE, 4500-5300W, 60Hz, 30Á (US) |
|  |  200V, 2L PE, 2300W, 50-60Hz, 16Á (JP) |
|  |  220V, 1LNPE, 2600W, 50Hz, 16À (CN) |
|  |  |
| Mains power connection: | 220-240V, 1LNPE, 1950-2300W, 50-60Hz, 0,72 Á (EU/GB/CH)  |
| (SU05 CM) |  120V, 1LNPE, 1440W, 60Hz, 1,50 Á (US) |
|  |  |  |
| Net weight: | up to 64 kg | incl. SU05 CM cooling unit |
|  |  |  |
|  |  |  |
| Dimensions: | Width 610 mm | A600 + SU05 |
|  | 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"

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: (FCS4043): 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 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.

**FoamMaster FM CM milk system**

For the preparation of hot milk and warm milk foam, as well as cold milk and cold milk foam. The FoamMaster module integrated in the cooling unit with high-performance milk pump ensures optimum dosing of the milk quantity. The fresh milk is heated with the FoamMaster technology, foamed via the milk foamer that is integrated in the coffee spout and dispensed along with the coffee in a single process. In addition to single preparation, the simultaneous preparation of two specialty coffees, e. g. Cappuccino and Latte Macchiato with cold and/or hot milk or with cold and/or warm milk foam in barista quality is also possible. The time at which milk is dispensed (before, during or after dispensing coffee) and the desired foam consistency from coarse/fluid to fine/stiff can be programmed individually.

**SU05 CM cooling unit (230 V 2300 W)**

The cooling unit is adapted to the design of the automatic coffee machine, it is installed on the left-hand side of the coffee machine and can be fastened to this with a rail. Transparent 5 l plastic container with carry handle and lid for storing stocks of milk. Rapid, time-saving placement or removal of the container without additional handles thanks to the integrated quick-coupling system for connection to the milk feed in the cooling unit. Manual insertion of the milk suction hose into the milk container is omitted. The "Empty" message, the product blocking function in the event of a lack of milk and the option of obtaining the remainders of milk/coffee products after the "Empty" message appears can be programmed on the connected coffee machine. The stepless temperature control and the temperature measurement performed directly in the medium itself guarantee an optimum milk temperature of +3°C to +8°C that is displayed in the cooling unit and on the display of the coffee machine. The cooling unit is equipped with a cleaning agent cartridge for automatic dosing of milk system cleaning agent. Parameters, e. g. for empty message, product block and option of obtaining the remainders of milk/coffee products can be programmed on the connected coffee machine. Separate device main switch, heated cup rack on the upper side, lockable, painted aluminum door with replaceable profile seal.

**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 CM CleanMaster**

The integrated, automatic CM CleanMaster rinsing and cleaning system for the entire preparation area makes caring for the device easy with a run-through time of only around 12 minutes. 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 cleaning steps on the touch screen. The milk container is simply replaced by the supplied cleaning container and connected to the cooling unit via the quick-coupling system. The necessary water quantity is automatically added by the connected coffee machine once the cleaning program has started. The automatic dosing of milk system cleaning agent proceeds automatically from the cleaning agent cartridge integrated in the cooling unit. This considerably reduces the time spent on cleaning. 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)