memmert
Experts in Thermostatics

Universal oven

Model UNP 400

Standard equipment

Ventilation and Control

- natural convection
- adjustment of pre-heated fresh air admixture by air flap through process controller in 10% steps for each segment individually
- vent connection with restrictor flap
- adaptive, fuzzy-supported, multifunctional, digital microprocessor PID-controller
- autodiagnostic system with fault indication
- 2 Pt100 sensors Class A in 4-wire-circuit, mutually monitoring and taking over the performance at the same temperature value
- digital 7-day-programme-timer with real time clock, precise minute setting, for one set value or start of ramp operation
- integrated timer for tempering profiles of up to 40 ramps, each segment adjustable from 1 min. up to 999 hours
- multifunctional programming via menu on 8-digit alphanumeric digital display (language to be chosen via set-up):
  tempering profiles of up to 40 ramps
  time- and set-point dependent operation
  air flap adjustable in 10% steps
- digital display (LED) of all set parameters, such as temperature, weekdays, time, air flap position, programme status and set-up values
- resolution of display for set value 0,1 °C below 99,9 °C, 0,5 °C above 100 °C; for actual value 0,1 °C
- long-term logging (ring store) of all relevant data, GLP-conforming as data logger - 1024 kB
- programme stored on power failure
- parallel printer interface (incl. real-time clock with date function) for printing logging files, suitable all PCL3-compatible ink-jet printers (USB available via converter, see accessories)
- serial interface RS 232 including MEMMERT Software "Celsius" for programming and documentation
- chip card control incl. one MEMoryCard XL with 32 kB (up to 40 ramps)
- incl. works calibration certificate for +160 °C

Multiple Overtemperature Protection

- with audible and visual alarm
- digitally adjustable, electronic microprocessor overtemperature controller TWW protection class 3.1 - maximum value for overtemperature - minimum value for undertemperature
- additional integral over- and undertemperature monitor "ASF" (Auto-Safety-Function) automatically following the setpoint value at a preset tolerance range; audible alarm is activated in case of over- or undertemperature, heating is switched off in case of overtemperature
- resolution of display and setting accuracy: 0,5 °C below 99,9 °C, 1 °C above 100 °C
- mechanical temperature limiter TB protection class 1 switching the heating off at approx. 10 °C above max. oven temperature

Textured Stainless Steel Casing

- w x h x d: 550 x 680 x 480 mm
- fully insulated stainless steel door with double locking and 4-point adjustment
- rear zinc-plated steel

Interior - Heating Concept

- w x h x d: 400 x 400 x 330 mm, 53 l
- easy-to-clean interior, made of stainless steel, reinforced by deep drawn ribbing with integrated and protected large-area heating on four sides
- 2 stainless steel grids

Temperature Range

- from +30 °C (however, at least 5 °C above ambient) up to +250 °C

Voltage / Power Rating

- 230 V (+/- 10%), 50/60 Hz
- ca. 1.400 W (during heating)
- adaption of effective heating power depending on the set temperature

Packing Data

- net weight approx. 35 kg
- gross weight carton approx. 45 kg
- dimensions approx.:
  carton w x h x d: 67 x 78 x 63 cm
- the appliances must be transported upright

Customs Tariff Number

- 8419 3990

Country of Origin

- Federal Republic of Germany

WEEE-Reg.-No.

- DE 66812464

Accessories

Temperature range +300 °C for universal ovens (not available for ovens with glass door)	A0
Perforated stainless steel shelf	E0(x)
Stainless Steel Grid (for good air circulation)	E3(x)
Interface USB instead of interface RS232	W3
Interface Ethernet instead of RS232 inclusive software "Celsius Ethernet-Edition"	W4
Parallel/USB converter cable with integrated power supply unit to connect PCL3-compatible HP printers with USB interface to MEMMERT units.	W1
Documentation package consisting of parallel USB converter cable including PLC3-compatible HP colour inkjet printer with USB interface (HP Deskjet 6940 or successor) for direct connection of printer to Memmert unit	W2
IQ check list with works test data for oven as support for validation by customer	Q1
OQ check list including one free-selectable temperature distribution survey to DIN 12880: 2007-05 (size 200/300: 9 measuring points, size 400-800: 27 measuring points) with works test data for oven as support for validation by customer	Q2
Software conforming to FDA "Celsius FDA-Edition" for up to 16 units	Q3
Oven-linked authorisation card (User-ID-Card) - prevents undesired manipulation by unauthorised third parties	V1
Computer interface RS485 (for networking a maximum of 16 ovens) instead of interface RS232	V2
Temperature profile write/read unit for programming via PC, for writing to and reading from the chip card, up to 40 ramps	V3
Additional chip card, blank, formatted (32 kB MEMoryCard XL for a maximum of 40 ramps)	V4
Connection cable for computer interface RS232 according to DIN 12 900-1	V6