

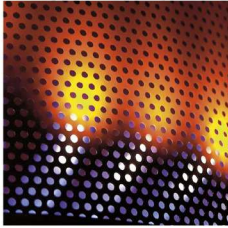


Universal Oven UN and UF with SingleDISPLAY  
Universal Oven UNplus and UFplus with TwinDISPLAY  
Natural convection or forced air circulation  
AtmoCONTROL software

Model sizes:

30 / 55 / 75 / 110 / 160 / 260 / 450 / 750 / 1060  
+20 °C up to +300 °C

**UNIVERSAL OVEN U** The all-round genius among the heating ovens covers a multitude of applications, ideally at temperatures above +50 °C. Without compromises! Thanks to two model variants and nine sizes, optionally with natural or forced convection, industry, science and research institutes will find a heating and drying oven which combines top precision and safety with optimal operating comfort.



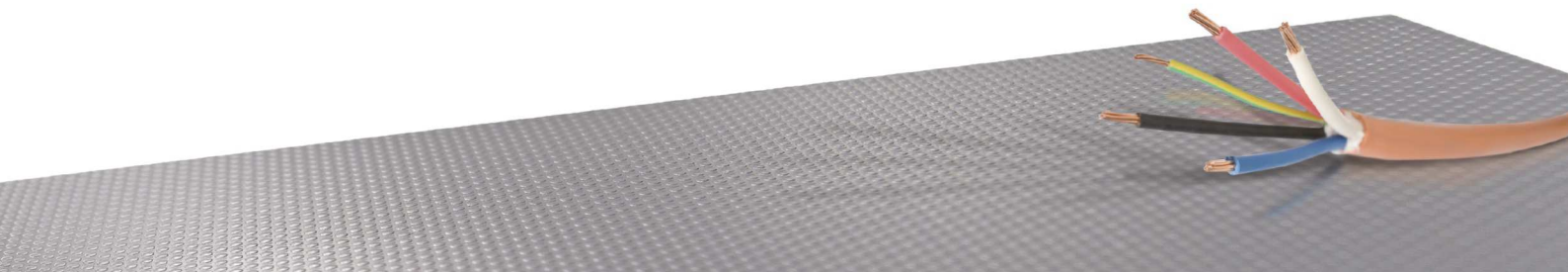
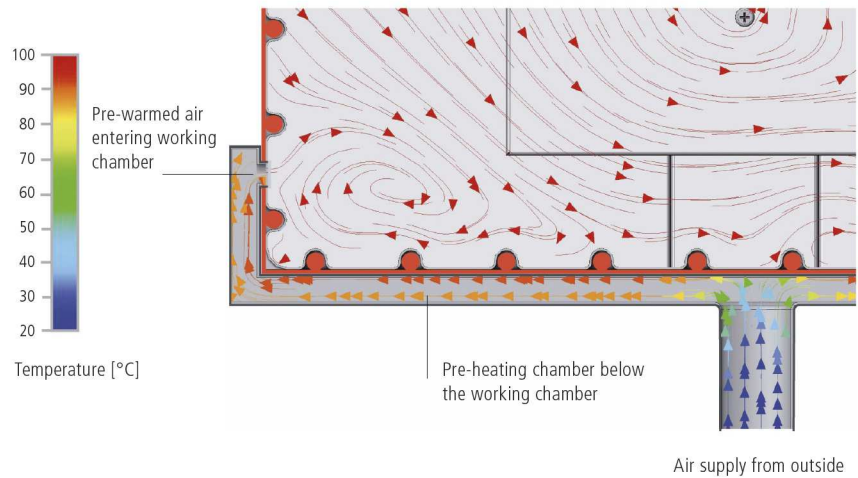
## Defined and programme-controlled fan speed

Air exchange rates and air flap position can be controlled electronically at the ControlCOCKPIT. More inlet and outlet openings lead to a higher air exchange and reduced drying times. Various applications recommend or even require controlled ventilation. When drying powder, sand or corn, reducing the ventilation prevents undesired swirls.

Other applications like testing of wires or cables demand for defined air exchange rates. UFplus appliances feature easy programming of temperature and air exchange rates with the AtmoCONTROL software.

## Fresh air is preheated

Temperature deviations caused by fresh air can influence sample characteristics or prolong drying. In Memmert universal ovens, the fresh air is therefore fed through a pre-heating chamber and introduced into the working chamber.




## UNIVERSAL OVENS U

according to DIN 12880:2007-05, EN 61010-1 (IEC 61010-1), EN 61010-2-010


Standard units are safety-approved and bear the test marks:

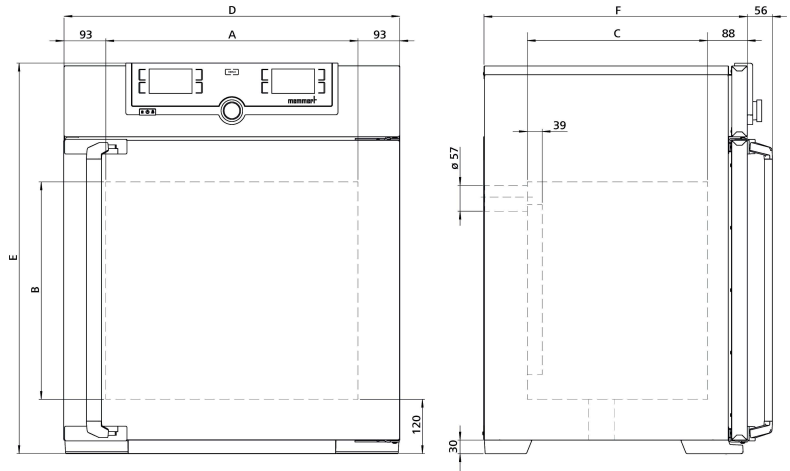


- Interior:** Stainless steel, material 1.4301 (ASTM 304), with all-round deep-drawn ribs to integrate the large-area heating with ceramic-metal sheath
- Housing:** Textured stainless steel, rear zinc-plated steel, intuitively operated SingleDISPLAY or TwinDISPLAY (TFT colour display) with touchscreen, fully insulated stainless steel door, (from size 450 two leaves)
- Fresh air:** Admixture of pre-heated fresh air by electronically adjustable air flap
- Connection:** Mains cable with plug (German type)  
CEE plug for 400 V
- Installation:** 4 feet; sizes 450, 750 and 1060 mounted on lockable castors
- Interfaces:**
- Ethernet



USB


- USB: only TwinDISPLAY



| Model sizes/Description           |   |            | 30   | 55       | 75       | 110       | 160       | 260       | 450       | 750       | 1060       |  |
|-----------------------------------|---|------------|--|----------|----------|-----------|-----------|-----------|-----------|-----------|------------|--|
| Stainless steel interior          | Volume  | approx. l  | 32   | 53       | 74       | 108       | 161       | 256       | 449       | 749       | 1060       |  |
|                                   | Width   | (A) mm     | 400  |          |          | 560       |           | 640       | 1040      |           |            |  |
|                                   | Height  | (B) mm     | 320  | 400      | 560      | 480       | 720       | 800       | 720       | 1200      |            |  |
|                                   | Depth (less 39 mm for fan)  | (C) mm     | 250  | 330      |          | 400       |           | 500       | 600       |           | 850        |  |
|                                   | Max. number of grids/shelves  | number     | 3  | 4        | 6        | 5         | 8         | 9         | 8         | 14        |            |  |
|                                   | Max. loading per grid/shelf   | kg         | 20   |          |          |           |           |           | 30        |           | 20         |  |
|                                   | Max. loading of chamber   | kg         | 60   | 80       | 120      | 175       | 210       | 300       |           |           |            |  |
|                                   | Max. loading per slide-in drip tray                                     | kg         | 1,5  |          |          | 3         |           | 4         | 8         |           |            |  |
| Max. loading per bottom drip tray | kg  | 1,5        |  |          | 3        |           | 4         | 8         |           |           |            |  |
| Textured stainless steel exterior | Width   | (D) mm     | 585  |          |          | 745       |           | 824       | 1224      |           |            |  |
|                                   | Height (size 450, 750, 1060 with castors)                               | (E) mm     | 704  | 784      | 944      | 864       | 1104      | 1183      | 1247      | 1720      |            |  |
|                                   | Depth (without door handle, depth of handle +56 mm)                     | (F) mm     | 434  | 514      |          | 584       |           | 684       | 784       |           | 1035       |  |
| Standard equipment                | Stainless steel grids, electropolished                                  | number     | 1  |          |          | 2         |           |           |           |           |            |  |
|                                   | Standard works calibration certificate (measuring point chamber center) | °C         | +160   |          |          |           |           |           |           |           |            |  |
| Temperature                       | Working temperature range   | °C         | at least 5 (UN/UNplus) or 10 (UF/UFplus) above ambient temperature to +300 |          |          |           |           |           |           |           |            |  |
|                                   | Setting temperature range   | °C         | +20 to +300  |          |          |           |           |           |           |           |            |  |
|                                   | Setting accuracy  | °C         | up to 99.9: 0.1 / from 100: 0.5  |          |          |           |           |           |           |           |            |  |
| Further data                      | Electrical load at 230 V, 50/60 Hz                                      | approx. W  | 1600   | 2000     | 2500     | 2800      | 3200      | 3400      | -         |           |            |  |
|                                   | Electrical load at 115 V, 50/60 Hz                                      | approx. W  | 1600   | 1700     | 1800     |           |           |           |           |           | -          |  |
|                                   | Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz            | approx. W  | -  |          |          |           |           |           | 5800      |           | 7000       |  |
| Packing data                      | Net weight  | approx. kg | 45   | 57       | 66       | 74        | 96        | 110       | 161       | 217       | 252        |  |
|                                   | Gross weight (packed in carton)   | approx. kg | 61   | 76       | 85       | 99        | 122       | 161       | 227       | 288       | 416        |  |
|                                   | Width   | approx. mm | 660  | 730      |          | 830       |           | 930       | 1330      |           | 1370       |  |
|                                   | Height  | approx. mm | 890  | 950      | 1130     | 1050      | 1300      | 1380      | 1440      | 1910      | 1970       |  |
|                                   | Depth   | approx. mm | 650  | 670      |          | 800       |           | 930       | 1050      |           | 1300       |  |
| <b>Universal Ovens</b>            |   |            | UN30   | UN55     | UN75     | UN110     | UN160     | UN260     | UN450     | UN750     | -          |  |
| U = Universal Oven                |   |            | UN30plus   | UN55plus | UN75plus | UN110plus | UN160plus | UN260plus | UN450plus | UN750plus | -          |  |
| N = Natural convection            |   |            | UF30   | UF55     | UF75     | UF110     | UF160     | UF260     | UF450     | UF750     | UF1060     |  |
| F = Forced air circulation        |   |            | UF30plus   | UF55plus | UF75plus | UF110plus | UF160plus | UF260plus | UF450plus | UF750plus | UF1060plus |  |
| plus = Model with TwinDISPLAY     |   |            |  |          |          |           |           |           |           |           |            |  |

| Options  | 30   | 55 | 75 | 110 | 160 | 260    | 450 | 750 | 1060 |
|--|--|----|----|-----|-----|--------|-----|-----|------|
| Voltage 115 V, 50/60 Hz  | X2   |    |    |     |     |        |     |     |      |
| Extended overtemperature protection by additionally integrated Pt100 sensor for independent temperature monitoring for models with SingleDISPLAY   |  |    |    |     |     | A6     |     |     |      |
| Full-sight glass door (4-layer insulating glass) Temperature-range up to max. +250 °C  |  |    |    |     |     | B0     |     |     |      |
| Full-sight glass door (4-layer insulating glass borsilicat) Temperature-range up to max. +300 °C   |  |    |    |     |     | B1     |     |     |      |
| Chamber modification for the application of reinforced perforated stainless steel shelves or stainless steel grids (bearing rails mounted in the working chamber) - includes replacement of standard grids by reinforced grids (standard with 1060)  |  |    |    |     |     |        | K1  |     |      |
| Fresh-air filter (filtration efficiency 80 %) mounted at the appliance bottom (for UF/UFplus, for sizes requires 30 - 260 castor frame R9 or subframe)   |  |    |    |     |     | R8     |     |     |      |
| Interior lighting for observing the load   |  |    |    |     |     | R0     |     |     |      |
| Interior socket (can only be ordered with limited temperature range - max. +70 °C), ampacity 230 V, 2.2 A, can be switched off with the On/Off switch, cannot be switched individually, moisture tight IP68 (option A8 necessary)  |  |    |    |     |     | R3     |     |     |      |
| Interior nearly gastight - technical clarification required for combination with other options   |  |    |    |     |     | K2     |     |     |      |
| Interior nearly gastight with possibility for gas inlet/outlet through 2 tubes with ball valves - technical clarification required for combination with other options  |  |    |    |     |     | K3     |     |     |      |
| Entry port, 23 mm clear diameter, for introducing connections at the side, can be closed by flap, standard positions   | left centre/centre   |    |    |     |     | F0     |     |     |      |
|  | left centre/top  |    |    |     |     | F1     |     |     |      |
|  | right centre/centre  |    |    |     |     | F2     |     |     |      |
|  | right centre/top   |    |    |     |     | F3     |     |     |      |
| Entry port, 23 mm clear diameter, can be closed by flap, in special positions (please state location)  | left   |    |    |     |     | F4     |     |     |      |
|  | right  |    |    |     |     | F5     |     |     |      |
|  | rear   |    |    |     |     | F6     |     |     |      |
| Entry port, 14 mm clear diameter, can be closed by flap, in special positions in the back wall (please state location)   |  |    |    |     |     | D6     |     |     |      |
| Entry port, 38 mm clear diameter, can be closed by flap, in special positions in the back wall (please state location)   |  |    |    |     |     | F7     |     |     |      |
| Entry port, 57 mm clear diameter, can be closed by flap, in special positions in the back wall (please state location; not possible for UF/UFplus size 30-75)  |  |    |    |     |     | F8     |     |     |      |
| Entry port, 100 mm clear diameter, can be closed by flap, in special positions in the back wall (please state location; not possible for UF/UFplus size 75)  |  |    |    |     |     |        | F9  |     |      |
| 4 - 20 mA current loop interface (0 to +310 °C = 4 - 20 mA)  | Temperature controller, actual value   |    |    |     |     | V3     |     |     |      |
|  | Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDISPLAY, max. 3 TwinDISPLAY) - price per sensor |    |    |     |     | V6     |     |     |      |
| Fan speed monitoring with switching off the heating and with alarm in case of failure (for UFplus)   |  |    |    |     |     | V4     |     |     |      |
| Works calibration certificate for 3 temperatures: +100, +160, +220 °C  |  |    |    |     |     | D00128 |     |     |      |
| Works calibration certificate for one (freely selectable) temperature value according to customer specification  |  |    |    |     |     | D00109 |     |     |      |
| Door with lock and key (safety lock)   |  |    |    |     |     | B6     |     |     |      |
| Door hinged on the left  | B8   |    |    |     |     |        |     |     |      |
| Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)   |  |    |    |     |     | H6     |     |     |      |
| Potential-free contact (24 V/2 A) with socket, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.). Only for units with TwinDISPLAY                              | 2 contacts   |    |    |     |     | H72    |     |     |      |
| Process-dependent programmable door lock (only for units with TwinDISPLAY)   |  |    |    |     |     | D4     |     |     |      |
| Door-open-recognition (only for units with TwinDISPLAY)  |  |    |    |     |     | V5     |     |     |      |
| Flexible Pt100 temperature sensor, positioned flexibly in chamber or load, for local temperature measurement (up to 1 additional sensor is possible). The measured temperature will be indicated on the display, recorded in the integral data store, and can be documented via the AtmoCONTROL software |  |    |    |     |     | H8     |     |     |      |
| MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)  |  |    |    |     |     | C3     |     |     |      |

| Options   | 30     | 55     | 75     | 110    | 160     | 260    | 450    | 750    | 1060 |
|---|--------|--------|--------|--------|---------|--------|--------|--------|------|
| Temperature restriction; Temperatures: +60, +70, +80, +95, +100, +120, +160, +180, +200 or +250 °C (Please indicate upon ordering)  | A8     |        |        |        |         |        |        |        |      |
| Castor frame (2-part), height 140 mm  | R9     |        |        |        |         |        |        |        |      |
| Accessories   | 30     | 55     | 75     | 110    | 160     | 260    | 450    | 750    | 1060 |
| Stainless steel grid, electropolished   | E28884 | E20164 |        | E20165 | E28891  | E20182 | B41251 |        |      |
| Reinforced stainless steel grid, electropolished, max. loading 60 kg; from size 450 with guide bars and fixing screws (only in connection with option K1). Please consider max. loading of chamber  |        | -      |        | E29767 | E29766  | B32190 | B32550 |        |      |
| Perforated stainless steel shelf  | B29727 | B03916 |        | B00325 | B29725  | B00328 | -      |        |      |
| Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber   |        |        |        |        |         | B32191 | B32549 |        |      |
| Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1)   | E02070 | E02072 |        | E02073 | E29726  | E02075 | B32599 |        |      |
| Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution, only in connection with option K1)   |        |        |        |        |         | B32763 | -      |        |      |
| Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1)   | B04356 | B04358 |        | B04359 | B29722  | B04362 | B29769 |        |      |
| Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, only in connection with option K1)  |        |        |        |        |         | B34055 | -      |        |      |
| Wall bracket for wall mounting  | B29755 | B29756 | B29757 | B29758 | B29759  |        | -      |        |      |
| Guarantee extension by 1 year   |        |        | GA1Q5  |        |         |        | GA2Q5  |        |      |
| USB-Ethernet adapter  |        |        |        |        | E06192  |        |        |        |      |
| Ethernet connection cable 5 m for computer interface  |        |        |        |        | E06189  |        |        |        |      |
| USB User-ID stick (with User-ID licence): Oven-linked authorisation licence (User-ID-programme) on Memory-stick, prevents undesired manipulation by unauthorised third parties. When reordering please specify serial number (only for units with TwinDISPLAY)  |        |        |        |        | B33170  |        |        |        |      |
| USB stick with documentation software AtmoCONTROL and operation manual for products with SingleDISPLAY (the standard equipment of appliances with TwinDISPLAY includes one USB stick with AtmoCONTROL). When reordering please specify serial number  |        |        |        |        | B33172  |        |        |        |      |
| Set of height adjustable feet (4 pcs)   |        |        |        | B29768 |         |        | -      |        |      |
| Stacking set (4 pcs) for stacking of appliances of same size  |        | B29744 |        |        |         |        | -      |        |      |
| Plug-in tube extension (outer diam. 60.3 mm, inner 57 mm), straight, for exhaust air ducting (if necessary for connection by hose)  |        |        |        |        | B29718  |        |        |        |      |
| Plug-in tube extension (outer diam. 60.3 mm, inner 57 mm), angled, for exhaust air ducting (if necessary for connection by hose)  |        |        |        |        | B29719  |        |        |        |      |
| Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots   | B29728 | B29730 | B29732 | B29734 | B29736  | B29738 | B29740 | B29742 |      |
| Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots  | B29729 | B29731 | B29733 | B29735 | B29737  | B29739 | B29741 | B29743 |      |
| Subframe, adjustable in height (size 30 to 75: height 600 mm, size 110 to 450: height 500 mm)   | B29745 | B29747 |        | B29749 | B29751  | B29753 |        | -      |      |
| Subframe, on castors (size 30 to 75: height 660 mm, size 110 to 160: height 560 mm)   | B29746 | B29748 |        | B29750 |         |        |        | -      |      |
| Subframe, adjustable in height, height 130 mm, for example for units with fresh air filter  | B33657 | B33659 |        | B33661 | B33664  |        |        | -      |      |
| Software conforming to FDA AtmoCONTROL. Meets the requirements for the use of electronically stored data sets and electronic signatures as laid down in Regulation 21 CFR Part 11 of the US Food and Drug Administration (FDA). Base licence for the control of one unit (only for units with TwinDISPLAY). Respective IQ/OQ documents available in German and English language (without surcharge) |        |        |        |        | FDAQ1   |        |        |        |      |
| Integration of one additional unit (up to max. 31 units) into an already existent FDA-software licence (only for units with TwinDISPLAY)  |        |        |        |        | FDAQ2   |        |        |        |      |
| DAkkS calibration for one free-selectable temperature value according to method C (DKD-R 5-7)   |        |        |        |        | E39696  |        |        |        |      |
| DAkkS calibration for further temperature values according to method C (DKD-R 5-7)  |        |        |        |        | E39697  |        |        |        |      |
| IQ document with device-specific works test data, OQ/PQ check list as support for validation by customer  |        |        |        |        | D00124  |        |        |        |      |
| IQ/OQ document with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 9 measuring points (size 30), 27 measuring points (sizes 55 - 1060) to DIN 12880:2007-05. PQ check list as support for validation by customer. 305 € for further temperature values   | D00125 |        |        |        |         | D00127 |        |        |      |
| On-site IQ/OQ for a freely selectable temperature value, including temperature distribution survey for 9 measuring points (size 30), 27 measuring points (sizes 55-1060) to DIN 12880: 2007-05 (plus travel costs, not subject to discount, only D, A, FR)  |        |        |        |        | DLQ100  |        |        |        |      |
| Extension of DLQ100 by an additional freely selectable temperature value (not subject to discount)  |        |        |        |        | DLQ100A |        |        |        |      |
| Individual on-site Performance Qualification (PQ)   |        |        |        |        | DLQ200  |        |        |        |      |

| Accessories   | 30 | 55 | 75 | 110 | 160 | 260 | 450 | 750 | 1060    |
|---|----|----|----|-----|-----|-----|-----|-----|---------|
| Maintenance UIS - carrying out and documentation according to Memmert maintenance plan (excluding travel costs, not subject to discount, GER, AT, FR only)                                    |    |    |    |     |     |     |     |     | S00311  |
| Maintenance contract UIS - carrying out and documentation according to Memmert maintenance plan, minimum duration 3 years (excluding travel costs, not subject to discount, GER, AT, FR only) |    |    |    |     |     |     |     |     | S00311J |
| Calibration of one freely selectable temperature value (excluding travel costs, not subject to discount, GER, AT, FR only)  |    |    |    |     |     |     |     |     | S00205  |
| Calibration of an additional temperature value (not subject to discount)  |    |    |    |     |     |     |     |     | S00215  |