Model FD 260 | Drying and heating chambers with forced convection

A BINDER FD series Avantgarde.Line heating oven is always used when fast drying and sterilization is required. Thanks to its fully homogeneous temperature distribution, quick dynamics and powerful fan, this heating oven saves valuable time.

BENEFITS

- Best energy efficiency on the market
- Excellent temporal and spatial temperature accuracy
- USB connection for recording data
- Temperature range up to +300 °C



Model 260

MAIN FEATURES

- Temperature range: +10 °C above ambient temperature to +300 °C
- High temperature accuracy thanks to APT.line™ technology
- Forced convection
- Controller with LCD display
- Electromechanical control of the exhaust air flap
- 2 chrome-plated racks
- Units up to 115 L are stackable
- Class 2 independent temperature safety device (DIN 12880) with visual temperature alarm
- Ergonomic handle design
- USB port for recording data

ORDERING INFORMATION

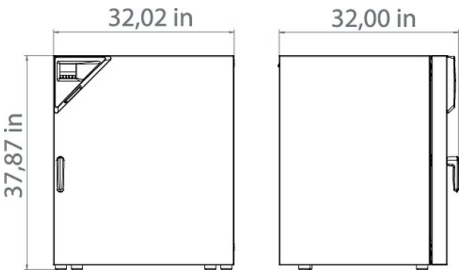
Interior volume [cu.ft.]	Voltage	Option model	Version	Art.-No.
9.1	230 V 1~ 50/60 Hz	Standard	FD260-230V	9010-0309
	240 V 1~ 60 Hz	Standard	FD260UL-240V	9010-0310

TECHNICAL DATA

Description	FD260-230V[1]	FD260UL-240V[1]
Article Number	**9010-0309**	**9010-0310**
Performance Data Temperature		
Temperature range +10 °C above ambient temperature to [°C]	300	300
Temperature variation at 150 °C [± K]	1.9	1.9
Temperature fluctuation at 150 °C [± K]	0.4	0.4
Heating-up time to 150 °C [min]	19	19
Recovery time after 30 seconds door open at 150 °C [min]	5	5
Air change data		
Air change (approx.) at 100 °C [x/h]	9	9
Electrical data		
Rated Voltage [V]	230	240
Power frequency [Hz]	50/60	60
Nominal power [kW]	2.3	2.5
Unit fuse [A]	12.5	16
Phase (Nominal voltage)	1~	1~
Measures		
Interior volume [cu.ft.]	9.1	9.1
Net weight of the unit (empty) [lbs]	185	185
Permitted load [lbs]	595	595
Load per rack [lbs]	88	88
Wall clearance back [in]	6.3	6.3
Wall clearance sidewise [in]	3.94	3.94
Internal Dimensions		
Width [in]	25.61	25.61
Height [in]	30.73	30.73
Depth [in]	20.29	20.29
Doors		
Unit doors	1	1
Housing dimensions not incl. fittings and connections		
Width net [in]	31.91	31.91
Height net [in]	37.04	37.04
Depth net [in]	32.5	32.5
Environment-specific data		
Energy consumption at 150 °C [Wh/h]	410	410
Sound-pressure level [dB(A)]	43	43
Fixtures		
Number of shelves (std./max.)	2/8	2/8

1 All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10 %. The temperature data is determined to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. Technical data refers to 100 % fan speed. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.

DIMENSIONS INCL. FITTINGS AND CONNECTIONS [MM]



OPTIONS

Designation	Description	*	Art.-No.
Access port with silicone plug	left		
	10 mm	01	8012-1276
	30 mm	01	8012-1016
	50 mm	01	8012-1020
	100 mm	01	8012-1027
	right		
	10 mm	01	8012-1269
	30 mm	01	8012-1015
	50 mm	01	8012-1019
	100 mm	01	8012-1028
	top		
	10 mm	01	8012-1263
	30 mm	01	8012-1364
	50 mm	01	8012-1380
	100 mm	01	8012-1671
Alarm function for overheating	Switchable acoustic alarm, with adjustable limit value on the independent temperature safety device	–	8012-1636
Analog output 4-20 mA	for temperature values (output not adjustable)	02	8012-1624
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	–	8012-1116
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature	–	8012-1135
	temperature measurement incl. certificate and 27 measuring points at specified temperature	–	8012-1594
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	–	8012-1573
	temperature measurement incl. certificate, 9 measuring points at specified temperature	–	8012-1552
Class 3.1 independent temperature safety device	with visual alarm (DIN 12880)	–	8012-1643
Clock	battery-backed	–	8012-1641
Door gasket	made of FKM, silicone-free	–	8012-1652
Door lock	lockable door handle	–	8012-1665
Ethernet interface	for Multi Management Software APT-COM™	–	8012-0988
Gas-tight option model	Incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior lighting option	–	8012-1687
HEPA air filter	On fresh air supply for unit; filter classification H14 (acc. to. EN 1822-1:2009, › 99.995% at 0.3 µm)	–	8012-1052
Inert gas connection	With gas inlet and outlet, Ø 10 mm, incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior lighting option	–	8012-1693
Inner chamber, reinforced	max. total load 300 kg	–	8012-1055
Interior lighting	with 15 W light bulb		
	230/240 V option model	–	8012-1628
Measurement of air exchange rate	in accordance with ASTM D5374, definition and protocol according to ambient temperature	–	8012-1195

* Notes › See last page

Designation	Description	*	Art.-No.
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	–	8012-1620
Viewing window and interior lighting	viewing window (triple insulating glass) in door, 370 x 370 mm, and 15 W interior		
	230 V option model	–	8012-1708
	240 V option model	–	8012-1710

* Notes › See last page

ACCESSORIES

Designation	Description	*	Art.-No.
Multi Management Software	Multi Management Software APT-COM™		
	version 4, BASIC edition	–	9053-0039
	version 4, GLP edition	–	9053-0042
	version 4, PROFESSIONAL edition	–	9053-0040
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	–	1002-0016
Qualification documents	IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature, CO_2, O_2, pressure, depending on unit		
	Digital in PDF format	–	7057-0001
	Hard copy inside folder	–	7007-0001
	IQ/OQ/PQ documents – supporting documents for validation performed by customers, according to customer requirements, PQ section added to qualification folder IQ/OQ; parameters: temperature, CO_2, O_2 – or pressure, depending on unit		
	Digital in PDF format	–	7057-0005
	Hard copy inside folder	–	7007-0005
Rack	chrome plated	–	8012-2042
	stainless steel	–	6004-0153
Rack, heavy load	Stainless steel, max. load per rack 70 kg	–	6004-0200
Rubber pads	set anti-slip feet	–	8012-2030
Shelf, perforated	Stainless steel	–	6004-0185
Table on castors	stable cart, casters with locking brakes, dimensions: W 1,300 x D 800 x H 780 mm	–	9051-0019

* Notes › See last page

SERVICES

Designation	Description	*	Art.-No.
Installation services			
Unit installation	Connect the unit to the customer-side connections (electricity, water, wastewater, gas), basic functions check, brief operating instructions. (excl.: unpacking, setup, controller instructions, programming, installation work)	05	DL10-0100
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	05	DL10-0500
Maintenance services			
BRONZE 3-year maintenance contract	Maintenance service as contractually agreed, visual inspection of mechanical and electrical components, check of control response, 20% discount on spare parts	05	DL20-0710
GOLD 3-year maintenance contract	Maintenance service as contractually agreed, visual inspection of mechanical and electrical components, check of control response, 20% discount on spare parts, testing of all key functions, replacement of wear parts, calibration of one test temperature specified by the user in the center of the usable space, including certificate	05	DL20-0910
Maintenance	One-off maintenance service in accordance with maintenance schedule. Visual inspection of mechanical and electrical components, testing of all key functions. Calibration of a test temperature specified by the user in center of usable space without certificate	05	DL20-0200
SILVER 3-year maintenance contract	Maintenance service as contractually agreed, visual inspection of mechanical and electrical components, check of control response, 20% discount on spare parts, testing of all key functions, calibration of one test temperature specified by the user in the center of the usable space, without certificate	05	DL20-0810

* Notes › See last page

Designation	Description	*	Art.-No.
Calibration services			
Measurement of air exchange rate	including certificate (in accordance with ASTM D5374)	03, 04, 05	DL33-0000
Temperature calibration	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	03, 04, 05	DL30-0101
	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	03, 04, 05	DL30-0102
Temperature measurement, 18 measuring points	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate	03, 04, 05	DL30-0118
Temperature measurement, 27 measuring points	Temperature measurement with 27 measuring points with a set value specified by the user, including certificate	03, 04, 05	DL30-0127
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	03, 04, 05	DL30-0109
Validation services			
Execution of IQ/OQ	Execution of IQ/OQ in accordance with qualification folder	05	DL40-0100
Execution of IQ/OQ/PQ	Execution of IQ/OQ/PQ in accordance with qualification folder	05	DL44-0500
Warranty service			
Warranty extension from 2 to 3 years	The warranty is extended by 1 year from the delivery date, wear parts are excluded	–	DL50-0010

* Notes › See last page

NOTES

01 Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.
02 UL mark is not granted when this option is used.
03 Sensor calibration is performed in an accredited calibration laboratory.
04 Calibration is performed according to the BINDER factory standard.
05 Quoted prices do not include travel costs. Please refer to the chapter on BINDER Service for travel costs for your region. Quoted prices for services performed in Switzerland do not include a country-specific added fee (available on request).

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