

Model FP 260 | Drying and heating chambers with forced convection and program functions

A BINDER material test chamber with mechanical convection of the FP series provides reliably short drying times and particularly fast heating – even for chambers under full loads.

BENEFITS

- High temperature accuracy thanks to APT.line™ technology
- · User-friendly controller with large display
- · Computer interface: Ethernet
- Class 2 independent adjustable temperature safety device (DIN 12880) and class 3.1 independent temperature safety device (DIN 12880) with visual/acoustic
 alarm available for selection on the controller



Model 260



Model 260

IMPORTANT FEATURES

- Temperature range: +10°C above ambient temperature up to +300°C
- High temperature accuracy thanks to APT.line™ technology
- Adjustable fan speed
- Controller with interval and real-time programming
- · Electromechanical control of the exhaust air flap
- 2 chrome-plated racks
- Units up to 115 liters are stackable

- Class 2 independent adjustable temperature safety device (DIN 12880) and class 3.1 independent temperature safety device (DIN 12880) with visual/ acoustic alarm available for selection on the controller
- Ergonomic handle design
- · Computer interface: Ethernet
- Internal data logger, measured values can be read out in open format via USB

ORDERING INFORMATION

Interior volume [L]	Power supply - unit fuse	Plug*	Version	Model version	ArtNo.
Model FP 260					
	230 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	FP260-230V	9010-0365
259	240 V 3~ 60 Hz -16,0 A	NEMA L21-20	Standard	FP260UL-240V	9010-0369



TECHNICAL DATA

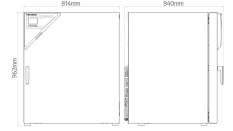
TECHNICAL DATA				
Data				
Designation	FP260-230V	FP260UL-240V		
Article Number	9010-0365	9010-0369		
Option model	Standard	Standard		
Performance Data Temperature				
Temperature range	+10 °C above ambient temperature to 300 °C	+10 °C above ambient temperature to 300 °C		
Temperature uniformity at 150°C	1.7 ± K	1.7 ± K		
Temperature fluctuation at 150°C	0.4 ± K	o.4 ± K		
Heating up time to 150°C	19 min	19 min		
Recovery time after door was opened for 30 s at 150°C	6 min	6 min		
Air change data				
Air change rate at 100°C	9 x/h	9 x/h		
Electrical data				
Rated Voltage	230 V	240 V		
Power frequency	50/60 Hz	60 Hz		
Nominal power	2,5 kW	2,5 kW		
Unit fuse	16,0 A	16,0 A		
Phase (Nominal voltage)	1~	3~		
Dimensions and weights				
Interior volume	259 L	259 L		
Net weight of the unit (empty)	82 kg	82 kg		
Load per rack	40 kg	40 kg		
Permitted load	270 kg	270 kg		
Wall clearance back	160 mm	160 mm		
Wall clearance sidewise	100 mm	100 mm		
Housing dimensions not incl. fittings and connections				
Width net	810 mm	810 mm		
Height net	962 mm	962 mm		
Depth net	786 mm	786 mm		
Internal Dimensions				



Interior width	650 mm	650 mm
Interior height	78o mm	780 mm
Interior depth	512 mm	512 mm
Unit doors	1	1
Environment-specific data		
Sound-pressure level	43 dB(A)	43 dB(A)
Energy consumption at 100°C	275 Wh/h	275 Wh/h
Energy consumption at 150°C	465 Wh/h	465 Wh/h
Fixtures		
Number of shelves (std./max.)	2/8	2/8

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 in accordance 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	FP 260	*	ArtNo.
	left			
	10 mm	•	01	8012-2198
	30 mm	•	01	8012-2210
Access port with silicone plug	50 mm	•	01	8012-2213
	100 mm	•	01	8012-2207
	right			
	10 mm	•	01	8012-2206
	30 mm	•	01	8012-2212
	50 mm	•	01	8012-2215



Designation	Description	FP 260	*	ArtNo.
	100 mm	•	01	8012-2209
	top			
	10 mm	•	01	8012-2199
	30 mm	•	01	8012-2211
	50 mm	•	01	8012-2214
	100 mm	•	01	8012-2208
Analog output 4-20 mA	for temperature values (output not adjustable)	•	02	8012-2188
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	•	-	8012-2231
	for temperature, measurement in center of chamber at specified temperature	•	-	8012-2227
Calibration certificate,	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2230
temperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-2228
	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	-	8012-2229
Door gasket	made of FKM, silicone-free	•	-	8012-2235
Door lock	lockable door handle	•	-	8012-2237
Gas-tight option model	Incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior lighting option	•	-	8012-2218
HEPA air filter	On fresh air supply for unit; filter classification H14 (acc. to. EN 1822-1:2009, > 99.995% at 0.3 μ m); not in conjunction with reinforced heating output, reinforced fan	•	-	8012-2221
Inert gas connection	With gas inlet and outlet, \emptyset 10 mm, incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior lighting option	•	-	8012-2197
Inner chamber, reinforced	max. total load 300 kg	•	-	8012-2225
Interior lighting	with 27 W light bulb			
	230/240 V option model	•	-	8012-2190
Measurement of air exchange rate	in accordance with ASTM D5374, definition and protocol according to ambient temperature	•	-	8012-2232
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	•	-	8012-2193

ACCESSORIES

Designation	Description	FP 260	*	ArtNo.
ADT COMTM / PASIC Edition	for cimple logging and documentation requirements with up to a networked units			



Designation	Description	FP 260	*	ArtNo.
	version 4, BASIC edition	•	-	9053-0039
APT-COM™ 4 GLP-Edition	for working under GLP-compliant conditions. Measured values are documented in a tamper- proof way in line with the requirements of FDA Regulation 21 CFR 11.			
, , , , , , , , , , , , , , , , , , ,	version 4, GLP edition	•	-	9053-0042
APT-COM™ 4 PROFESSIONAL-	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.			
Edition	version 4, PROFESSIONAL edition	•	-	9053-0040
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-2250
	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, ${\rm CO_2}$, ${\rm O_2}$ – or pressure, depending on unit			
	Digital in PDF format	•	-	7057-0005
Outliff attended and a	Hard copy inside folder	•	-	7007-0005
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, $\mathrm{CO_2}$, $\mathrm{O_2}$, pressure, depending on unit			
	Digital in PDF format	•	-	7057-0001
	Hard copy inside folder	•	-	7007-0001
	max. load per rack 40 kg			
Rack	chrome plated	•	-	8012-2042
	stainless steel	•	-	8012-2169
Rack, heavy load	max. load per rack 70 kg			
rack, fleavy todu	Stainless steel	•	-	8012-2184
Rack accessories	fasteners (1 set of 4) for additional security of racks	•	-	8012-0531
Rubber pads	set anti-slip feet	•	-	8012-2030
Shalf parforated	max. load per rack 40 kg			
Shelf, perforated	Stainless steel	•	-	8012-2177
Table on castors	stable cart, casters with locking brakes, dimensions: W 1,300 x D 800 x H 780 mm	•	-	9051-0019

SERVICES

Designation	Description	*	ArtNo.
Calibration services			



Designation	Description	*	ArtNo.
Calibration certificate, temperature	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	-	DL30-0120
Campianon cermicate, temperature	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate	-	DL30-0102
Measurement of air exchange rate	including certificate (in accordance with ASTM D5374)	-	DL33-0000
Temperature measurement, 9 measuring points	Temperature measurement with 9 measuring points with a set value specified by the user, including certificate	-	DL30-0109
Temperature measurement, 18 measuring points	Temperature measurement with 18 measuring points with a set value specified by the user, including certificate	-	DL30-0118
Temperature measurement, 27 measuring points	Temperature measurement with 27 measuring points with a set value specified by the user, including certificate	-	DL30-0127
Installation services			
Unit commissioning	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)	-	DL10-0100
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming	-	DL10-0500
Maintenance contracts			
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	-	DL20-0720
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	-	DL20-0910
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	-	DL20-0810
Maintenance services			
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	-	DL20-0602
Validation services			
Execution of IQ/OQ	Execution of IQ/OQ in accordance with qualification folder	-	DL41-0200
Execution of IQ/OQ/PQ	Execution of IQ/OQ/PQ in accordance with qualification folder	-	DL44-0500
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010



NOTES

- O1 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.

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