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

- Uniform drying conditions thanks to APT.line™ technology
- Identical test conditions throughout the chamber interior independent of sample size and quantity
- · Outstanding thermal insulation saves operation costs
- · Advanced programming options



Model 260



Model 260

MAIN 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]	Voltage	Option model	Version	ArtNo.
259	230 V 1~ ph 50/60 Hz	Standard	FP260-230V	9010-0365
	120 V 3~ ph 60 Hz	Standard	FP260UL-240V	9010-0369

TECHNICAL DATA

Anticologo (Performance Data Temperature (Part Capear Langer (1) Capear (1)	Description	FP260-230V1	FP26oUL-24oV ¹
Temperature range +10 °C above ambient temperature (PC) 300 300 Temperature variation at 50 °C [κ IR] 1,7 <td>Article Number</td> <td>9010-0365</td> <td>9010-0369</td>	Article Number	9010-0365	9010-0369
Temperature variation at 150°C[s K] 1,7	Performance Data Temperature		
Temperature fluctuation at 150 °C [K] 0.4 0.4 Heating-up lime to 150 °C [min] 19 19 Recovery time after 30 seconds door open at 150 °C [min] 6 0 0 Recovery time after 30 seconds door open at 150 °C [min] 9 9 Tabellen V V Air change (approx.) at 100 °C [k/h] 9 9 Better (at data V V Brace (Voltage [V] 230 120 Owner (requency [k] 30/60 6 Nominal power [kW] 2,5 2.5 Unit fuse [A] 1,6 3,16 Phase (Dinnial voltage) 2,5 3,2 Will fuse [M] 2,5 3,2 Will fuse [M] 2,5 3,2 Resure 2,5 3,2 Resure 3,2 3,2 Resure 3,2 3,2 Resure 3,2 3,2 Resure 4,2 3,2 Resure [M] 4,0 4,2 Mall clearance (abely [m] 3,2 <td>Temperature range +10 °C above ambient temperature to [°C]</td> <td>300</td> <td>300</td>	Temperature range +10 °C above ambient temperature to [°C]	300	300
Recovery time after 30 seconds door open at 150 °C (min) 19 49 Tabellen Company of the property	Temperature variation at 150 °C [± K]	1.7	1.7
Recovery time after 30 seconds door open at 150 °C [min] 6 6 Tabellen Very Clay (Min) 9 9 Air change (approx.) at 100 °C [x/h] 9 9 Electrical data Very Clay (Min) 120 Power frequency [Mz] 230 120 Nominal power [W] 25 25 Unit fuse [A] 6 3x 16 Phase (Moninal voltage) 1- 3x 16 Measures 3 3x 16 Net weight of the unit (empty) [kg] 82 82 Net weight of the unit (empty) [kg] 82 82 Permitted load [kg] 40 40 Wall clearance slewise [min] 160 10 Wall clearance slewise [min] 50 50 Interior width [min] 60 50 Interior width [min] 80 50	Temperature fluctuation at 150 °C [± K]	0.4	0.4
Tabellen Fractionage (approx.) at 100 °C (k/h) 9 9 Electrical data Very Carlot (ale table) Very Ca	Heating-up time to 150 °C [min]	19	19
Air change (approx.) at 100°C (l/h) 9 9 Electrical data 2 30 120 Power frequency (l/q) 50/60 60 30 Dominal power (kW) 2.5 2.5 2.5 Unit fuse (A) 4 3 × 10 30 Phase (Nominal voltage) 1 3 × 10 30 <td>Recovery time after 30 seconds door open at 150 °C [min]</td> <td>6</td> <td>6</td>	Recovery time after 30 seconds door open at 150 °C [min]	6	6
Electrical data Electrical data Rated Voltage [V] 230 120 Power frequency [Hz] 50/60 60 Nominal power [kW] 2,5 2.5 Unit fuse [A] 3 x16 3 Phase (Rominal voltage) 1- 3- Phase (Rominal voltage) 25 39 Net weight of the unit (empty) [kg] 82 82 Permited load [kg] 270 270 Load per rack [kg] 40 40 Wall clearance back (mm] 160 40 Wall clearance back (mm] 60 60 Wall clearance sidewise [mm] 650 50 Interior width [mm] 59 50 Interior loeght [mm] 50 50 Interior loeght [mm] 50 50 Interior depth [mm] 12 20 Unit doors 1 1 Unit doors 1 1 Hother [mm] 80 80 Housing dimensions not incl. fittings and connections 81 <tr< td=""><td>Tabellen</td><td></td><td></td></tr<>	Tabellen		
Rated Voltage [V] 230 120 Power frequency [Hz] 50/60 60 Nominal power [kW] 2.5 2.5 Unit fuse [A] 16 3x 16 Phase (Nominal voltage) 3- ************************************	Air change (approx.) at 100 °C [x/h]	9	9
Power frequency [kiz] 50/60 60 Nominal power [kW] 2.5 2.5 Unit fuse [A] 3 × 16 Phase (Nominal voltage) 1- 3 × 2 Measures 3- Interior volume [L] 259 259 Net weight of the unit (empty) [kg] 82 270 Load per rack [kg] 40 40 Wall clearance back [mm] 160 160 Wall clearance sidewise [mm] 160 60 Interior width [mm] 550 50 Interior depth [mm] 780 52 Interior depth [mm] 780 52 Doors 12 52 Unit doors 8 8 Housing dimensions not incl. fittings and connections 8 8 Width net [mm] 810 8 Height net [mm] 810 8 Beight net [mm] 862 962 Depth net [mm] 862 962 Depth net [mm] 862 962 Depth net [mm] <td>Electrical data</td> <td></td> <td></td>	Electrical data		
Nominal power [kW] 2.5 2.5 Unit fuse [A] 3 x 16 Phase (Nominal voltage) 1- 3 - Measures ************************************	Rated Voltage [V]	230	120
Unit fuse [A] 16 3 x 16 Phase (Nominal voltage) 1- 3- Measures Terrior volume [L] 259 259 Net weight of the unit (empty) [kg] 82 20 Demitted load [kg] 270 270 Load per rack [kg] 40 40 Wall clearance back [mm] 160 40 Wall clearance sidewise [mm] 100 100 Interior width [mm] 650 650 Interior height [mm] 780 780 Interior depth [mm] 12 12 Doors 1 1 Unit doors 1 1 Housing dimensions not int. fittings and connections 81 80 Width net [mm] 810 80 Height net [mm] 962 962 Depth net [mm] 962 962 Depth net [mm] 86 786 Environment-specific data 87 86 Environment-specific data 962 962 Environment-specific data <td>Power frequency [Hz]</td> <td>50/60</td> <td>60</td>	Power frequency [Hz]	50/60	60
Phase (Nominal voltage) 1- 3~ Measures 259 259 Net weight of the unit (empty) [kg] 82 20 Permitted load [kg] 270 270 Load per rack [kg] 40 40 Wall clearance back [mm] 160 100 Vall clearance sidewise [mm] 100 100 Interior width [mm] 650 650 Interior width [mm] 780 780 Interior depth [mm] 12 12 Booss 1 1 Unit doors 1 1 Housing dimensions not incl. fittings and connections 810 810 Width net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 786 786 Environment-specific data 92 92 Environment-specific data 92 92 Environment-specific data 92 92 Environment-specific data 92 92 Environment-specific data	Nominal power [kW]	2.5	2.5
Measures Interior volume [L] 259 259 Net weight of the unit (empty) [kg] 82 82 Permitted load [kg] 270 270 Load per rack [kg] 40 40 Wall clearance back [mm] 160 160 Wall clearance sidewise [mm] 100 100 Interior width [mm] 650 50 Interior height [mm] 780 780 Interior height [mm] 1 1 Boors 1 1 Unit doors 1 1 Housing dimensions not incl. fittings and connections 810 810 Width net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 5 786 Environment-specific data 43 43	Unit fuse [A]	16	3 x 16
Interior volume [L] 259 259 Net weight of the unit (empty) [kg] 82 82 Permitted load [kg] 270 270 Load per rack [kg] 40 40 Wall clearance back [mm] 160 160 Wall clearance sidewise [mm] 100 100 Interior width [mm] 650 650 Interior height [mm] 780 780 Interior depth [mm] 512 512 Doors 1 1 Unit doors 1 1 Housing dimensions not incl. fittings and connections 810 810 Width net [mm] 810 810 Beight net [mm] 786 786 Environment-specific data 786 786	Phase (Nominal voltage)	1~	3~
Net weight of the unit (empty) [kg] 82 82 Permitted load [kg] 270 270 Load per rack [kg] 40 40 Wall clearance back [mm] 160 160 Wall clearance sidewise [mm] 100 100 Interior width [mm] 650 650 Interior height [mm] 780 780 Interior depth [mm] 512 512 Doors 1 1 Unit doors 1 1 Housing dimensions not incl. fittings and connections 810 810 Width net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 786 786 Environment-specific data 43 43 Fixtures 43 43	Measures		
Permitted load [kg] 270 270 Load per rack [kg] 40 40 Wall clearance back [mm] 160 160 Wall clearance sidewise [mm] 100 100 Internal Dimensions ************************************	Interior volume [L]	259	259
Load per rack [kg] 40 40 Wall clearance back [mm] 160 160 Wall clearance sidewise [mm] 100 100 Internal Dimensions 50 550 Interior width [mm] 780 780 Interior depth [mm] 512 512 Doors Unit doors 1 1 Housing dimensions not incl. fittings and connections 810 810 Width net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 43 43 Fixtures 500nd-pressure level [dB(A)] 43 43	Net weight of the unit (empty) [kg]	82	82
Wall clearance back [mm] 160 160 Wall clearance sidewise [mm] 100 100 Internal Dimensions Interior width [mm] 650 650 Interior height [mm] 780 780 Interior depth [mm] 512 512 Doors Unit doors 1 Housing dimensions not incl. fittings and connections Width net [mm] 810 810 Height net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 43 43 Fixtures	Permitted load [kg]	270	270
Wall clearance sidewise [mm] 100 100 Internal Dimensions Common Septiment (mm) 650 650 Interior width [mm] 780 780 780 Interior depth [mm] 512 <td>Load per rack [kg]</td> <td>40</td> <td>40</td>	Load per rack [kg]	40	40
Internal Dimensions Interior width [mm] 650 650 Interior height [mm] 780 780 Interior depth [mm] 512 512 Doors Unit doors 1 1 Housing dimensions not incl. fittings and connections 810 810 Width net [mm] 810 810 Height net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 43 43 Fixtures	Wall clearance back [mm]	160	160
Interior width [mm] 650 650 Interior height [mm] 780 780 Interior depth [mm] 512 512 Doors Unit doors 1 1 Housing dimensions not incl. fittings and connections 810 810 Width net [mm] 810 810 Height net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 43 43 Fixtures	Wall clearance sidewise [mm]	100	100
Interior height [mm] 780 780 Interior depth [mm] 512 512 Doors Unit doors 1 1 Housing dimensions not incl. fittings and connections Width net [mm] 810 810 Height net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data Sound-pressure level [dB(A)] 43 43 Fixtures Fixtures	Internal Dimensions		
Interior depth [mm] 512 512 Doors ************************************	Interior width [mm]	650	650
Doors Unit doors 1 1 Housing dimensions not incl. fittings and connections Width net [mm] 810 810 Height net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 5ound-pressure level [dB(A)] 43 43 Fixtures Fixtures Fixtures Fixtures	Interior height [mm]	780	780
Unit doors 1 1 Housing dimensions not incl. fittings and connections Vidth net [mm] 810 810 Height net [mm] 962 962 786 Depth net [mm] 786 786 Environment-specific data 43 43 Fixtures Fixtures	Interior depth [mm]	512	512
Housing dimensions not incl. fittings and connections Width net [mm] 810 810 Height net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 50und-pressure level [dB(A)] 43 43 Fixtures Fixtures Fixtures 43 43	Doors		
Width net [mm] 810 810 Height net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 50und-pressure level [dB(A)] 43 43 Fixtures Fixtures	Unit doors	1	1
Height net [mm] 962 962 Depth net [mm] 786 786 Environment-specific data 43 43 Fixtures Fixtures 43	Housing dimensions not incl. fittings and connections		
Depth net [mm] 786 786 Environment-specific data 5 ound-pressure level [dB(A)] 43 43 Fixtures Fixtures	Width net [mm]	810	810
Environment-specific data Sound-pressure level [dB(A)] 43 43 Fixtures	Height net [mm]	962	962
Sound-pressure level [dB(A)] 43 43 Fixtures	Depth net [mm]	786	786
Fixtures	Environment-specific data		
	Sound-pressure level [dB(A)]	43	43
Number of shelves (std./max.) 2/8	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 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.

OPTIONS

Designation	Description	*	ArtNo.
	left		
	10 mm	01	8012-2198
	30 mm	01	8012-221
	50 mm	01	8012-221
	100 mm	01	8012-220
	right		
	10 mm	01	8012-220
Access port with silicone olug	30 mm	01	8012-221
	50 mm	01	8012-221
	100 mm	01	8012-220
	top		
	10 mm	01	8012-219
	30 mm	01	8012-221
	50 mm	01	8012-221
	100 mm	01	8012-220
Analog output 4-20 mA	for temperature values (output not adjustable)	02	8012-218
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	-	8012-223
	for temperature, measurement in center of chamber at specified temperature	-	8012-222
Calibration certificate,	temperature measurement incl. certificate and 27 measuring points at specified temperature	-	8012-222
temperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	-	8012-222
	temperature measurement incl. certificate, 9 measuring points at specified temperature	-	8012-223
Door gasket	made of FKM, silicone-free	-	8012-223
Door lock	lockable door handle	-	8012-223
Gas-tight option model	Incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior lighting option	-	8012-221
HEPA air filter	On fresh air supply for unit; filter classification H14 (acc. to. EN 1822-1:2009, > 99.995% at 0.3 µm); not in conjunction with reinforced heating output, reinforced fan	-	8012-222
nert 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	-	8012-219
Inner chamber, reinforced	max. total load 300 kg	-	8012-222
Measurement of air exchange rate	in accordance with ASTM D5374, definition and protocol according to ambient temperature	_	8012-223
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	-	8012-219
* Notes > See last nage			

^{*} Notes > See last page

ACCESSORIES

Designation	Description	*	ArtNo.
APT-COM™ 4 BASIC- Edition	for simple logging and documentation requirements with up to 5 networked units.		
	version 4, BASIC edition	-	9053-0039
APT-COM™ 4 GLP-	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.		
Edition	version 4, GLP edition	-	9053-0042
APT-COM™ 4	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.		
PROFESSIONAL-Edition	version 4, PROFESSIONAL edition	-	9053-0040
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	-	8012-2250

^{*} Notes > See last page

Designation	Description	*	ArtNo.
	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
O	Hard copy inside folder	-	7007-0001
Qualification documents	$IQ/OQ/PQ$ 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
Dl-	chrome plated	-	8012-2042
Rack	stainless steel	-	8012-2169
Rack accessories	fasteners (1 set of 4) for additional security of racks	-	8012-0531
Rack, heavy load	Stainless steel, max. load per rack 70 kg	-	8012-2184
Rubber pads	set anti-slip feet	-	8012-2030
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

^{*} Notes > See last page

SERVICES

Designation	Description	*	ArtNo.
Maintenance contracts			
Installation services			
Maintenance services			
Calibration services			
Validation services			
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	-	DL50-0010
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
	Calibration of one (1) test temperature specified by the user in center of chamber, including certificate	03, 04, 05	DL30-0101
Calibration certificate, temperature	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
Execution of IQ/OQ	Execution of IQ/OQ in accordance with qualification folder	05	DL41-0200
Execution of IQ/OQ/PQ	Execution of IQ/OQ/PQ in accordance with qualification folder	05	DL44-0500
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
Measurement of air exchange rate	including certificate (in accordance with ASTM D5374)	03, 04, 05	DL33-0000
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
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

^{*} Notes > See last page

Data Sheet Model FP 260

Designation	Description	*	ArtNo.
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
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)	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

^{*} Notes > See last page

NOTES

- Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge. UL mark is not granted when this option is used.
- 02
- Sensor calibration is performed in an accredited calibration laboratory. 03
- Calibration is performed according to the BINDER factory standard.
- 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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