Model ED 115 | Drying and heating chambers Avantgarde.Line with natural convection

BENEFITS

- Excellent temporal and spatial temperature accuracy
- · High energy efficiency
- USB connection for recording data
- Temperature range up to 300 °C



Model 115

MAIN FEATURES

- $\bullet\,$ Temperature range: ambient temperature plus 8 °C to 300 °C
- High temperature accuracy thanks to APT.line™ technology
- Natural convection
- · Controller with LCD display
- Electromechanical control of the exhaust air flap
- 2 chrome-plated racks

- 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 [L]	Voltage	Option model	Version	ArtNo.
Model ED 115				
	230 V 1~ 50/60 Hz	Standard	ED115-230V	9010-0335
114	120 V 1~ 60 Hz	Standard	ED115UL-120V	9010-0336

TECHNICAL DATA

Description	ED115-230V	ED115UL-120V
Article Number	9010-0335	9010-0336
Performance Data Temperature		
Temperature range 8 °C above ambient temperature to [°C]	300	300
Temperature uniformity at 150 °C [± K]	2	2
Temperature fluctuation at 150 °C [± K]	0.4	0.4
Heating-up time to 150 °C [min]	60	60
Recovery time after 30 seconds door open at 150 °C [min]	20	20

Data Sheet Model ED 115

Description	ED115-230V	ED115UL-120V	
Article Number	9010-0335	9010-0336	
Electrical data			
Rated Voltage [V]	230	120	
Power frequency [Hz]	50/60	60	
Nominal power [kW]	1.25	1.25	
Unit fuse [A]	6.3	12.5	
Phase (Nominal voltage)	1~	1~	
Measures - Outer dimensions			
Width net [mm]	710	710	
Height net [mm]	735	735	
Depth net [mm]	605	605	
Wall clearance back [mm]	160	160	
Wall clearance sidewise [mm]	100	100	
Measures - Doors			
Unit doors	1	1	
Measures - Internal Dimensions			
Width [mm]	510	510	
Height [mm]	530	530	
Depth [mm]	425	425	
Measures			
Interior volume [L]	114	114	
Net weight of the unit (empty) [kg]	54	54	
Load per rack [kg]	20	20	
Environment-specific data			
Energy consumption at 150 °C	250 Wh/h	250 Wh/h	

OPTIONS AND ACCESSORIES

Designation	Description	*	ArtNo.
	10 mm, back	01	8012-0390
	10 mm, left	01	8012-0388
	10 mm, right	01	8012-0387
	10 mm, top	01	8012-0386
	30 mm, back	01	8012-0540
	30 mm, left	01	8012-1018
	30 mm, right	01	8012-1017
Access port with silicone plug	30 mm, top	01	8012-0539
P.45	50 mm, back	01	8012-0546
	50 mm, left	01	8012-1022
	50 mm, right	01	8012-1021
	50 mm, top	01	8012-0545
	100 mm, left	01	8012-1030
	100 mm, right	01	8012-1031
	100 mm, top	01, 10	8012-1029
Calibration certificate, expanded	each measurement at additional measuring point or testing temperature	-	8012-0022

^{*} Notes > See last page

Designation	Description	*	ArtNo.
	for temperature, measurement in center of chamber at specified temperature	-	8012-003
Calibration certificate,	temperature measurement incl. certificate and 27 measuring points at specified temperature	-	8012-092
emperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	-	8012-0918
	temperature measurement incl. certificate, 9 measuring points at specified temperature	-	8012-091
Cart	stable cart, casters with locking brakes	-	9051-001
Class 3.1 independent temperature safety device	with visual alarm (DIN 12880)	04, 12	8012-098
Clock, battery-backed	Real-time clock	-	8012-098
Data Logger Kit	T 350: temperature logging from 0 °C to 350 °C	19	8012-071
Data Logger Kit, software	LOG ANALYZE software kit, configuration and evaluation software for all BINDER Data Logger Kits (incl. USB data cable)	19	8012-082
Door gasket	made of FKM, silicone-free	03	8012-100
Door lock	lockable door handle	-	8012-102
Ethernet interface	for communication software	=	8012-098
Instrument trav	ument tray small	-	4022-012
instrument tray	small	=	4022-012
	with 1x 15 W (not available in combiantion with interior socket)		
Interior lighting	120 V option model	-	8012-097
	230 V option model	-	8012-096
Measurement of air exchange rate	in accordance with ASTM D5374, definition and protocol according to ambient temperature	-	8012-019
Overheating alarm	audible, can be switched off, adjustable limit on the independent temperature safety device	-	8012-097
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	-	1002-001
Rack	chrome plated	03	6004-017
KdCK	stainless steel	-	6004-015
Rubber pads	set of 4 anti-slip feet, for safe stacking of unit	10	8012-000
Shelf, perforated	stainless steel	-	6004-019
	APT-COM™ communications software		
	version 2 to 3, GLP edition	19	9053-001
	version 3, BASIC edition	19	9053-001
Software	version 3, GLP edition	19	9053-001
	version 3, STANDARD edition	19	9053-001
	APT-COM™ communications software, price: for free		
	version 3, GLP DEMO Edition	19	9053-000
Viewing window	viewing window in door	_	8012-097

^{*} Notes > See last page

SERVICES

Designation	Description	*	ArtNo.
Installation services			
Installation	and set up of unit at operating location, connect to existing connections	13, 18	DL100100
Instruction	unit function instructions for operation and programming of the controller	18	DL100400
Preventive maintenance			
Preventive maintenance	Executive of equipment inspection according to maintenance plan	14, 18	DL200200
Calibration services			
Calibration temperature	including certificate, one measuring point in center of chamber at specified temperature	14, 16, 17, 18	DL300101
Measurement of air exchange rate	including certificate (in accordance with ASTM D5374)	14, 16, 17, 18	DL330000

^{*} Notes > See last page

Data Sheet Model ED 115

Designation	Description	*	ArtNo.
Temperature measurement 18 measuring points	including certificate, 18 measuring points at specified temperature	14, 16, 17, 18	DL300118
Temperature measurement 27 measuring points	including certificate, 27 measuring points at specified temperature	14, 16, 17, 18	DL300127
Temperature measurement 9 measuring points	including certificate, 9 measuring points at specified temperature	14, 16, 17, 18	DL300109
Validation services			
Execution of IQ/OQ	in accordance with qualification folder	15, 18, 20	DL400100
Execution of IQ/OQ/PQ	in accordance with customer's requirement, price: on request	15, 18	DL440500
Qualification folder IQ/OQ	supporting documents for validation performed by customer, consisting of: IQ/OQ checklists, unit schematics, QM certificate in accordance with ISO 9001	15, 18, 20	8012-0761
Qualification folder IQ/OQ/PQ	supporting documents for validation performed by customer, in accordance with customer's requirement, extension of Qualification folder IQ/OQ by chapter PQ	15, 18	8012-094
Warranty service			
Extension of the warranty from 2 to 3 years	beginning with the date of delivery, wearing parts are not included	_	DL002041
Extension of the warranty from 2 to 5 years	beginning with the date of delivery, wearing parts are not included	-	DL002042

^{*} 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.
- Heat resistant only to max. 200 °C. 03
- Only available on units rated for 230 V. 04
- Attention: The pump is delivered separately. The electric connection for the pump (230 V/1~/50 Hz) must be carried out by an authorized electrician. 05
- Heating-up time may increase as a result of the lower heat conductivity.
- The additional heat input may affect the temperature behavior.
- 08
- The pump (packaged separately) is ready for connection.

 Not in conjunction with the optional access port, door with window and interior lighting. 09
- Not available on 23-liter units. 10
- Not available on 23- or 53-liter units. 11
- 12 Only available on units rated for 230 V or 400 V.
- Installation and connections take place at unit location; transport within the company only upon consultation.
- We recommend a BINDER service contract (see the chapter on BINDER Service) to cover unit inspections, calibrations and validations.
- OQ according to Yellow Paper = completed factory validation documentation of all OQ checklists. Sensor calibration is performed in an accredited calibration laboratory. 15
- 16
- Calibration is performed according to the BINDER factory standard. 17
- 18 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).
- For additional accessories, refer to the Process documentation chapter.
- When ordering IQ/OQ qualification folders and associated IQ/OQ execution on one order, we offer a 15 % discount for both items.

 When ordering IQ/OQ/PQ qualification folders and associated IQ/OQ/PQ execution on one order, we offer a 15 % discount for the item of the IQ/OQ/PQ folder.
- ATEX conformity: 21

Pumping chamber (pumped gases): Il 2G IIC T3 X Environment with inert purge gas: II 2G IIB T4 X Environment without inert purge gas: II 3G IIB T4 X

Motor: II 2G Ex d IIB T4 Gb

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