

9 Technical data
9.1 Power supply

	5305 Basic device	5305 Complete system
Mains/power connection	230 V, 50 – 60 Hz 120 V, 50 – 60 Hz 100 V, 50 – 60 Hz	230 V, 50 – 60 Hz 120 V, 50 – 60 Hz 100 V, 50 – 60 Hz
Current consumption	2.1 A (230 V) 6.0 A (120 V) 5.2 A (100 V)	1.7 A (230 V) 5.6 A (120 V) 3.8 A (100 V)
Power consumption	max. 500 W (230 V) max. 550 W (120 V) max. 520 W (100 V)	max. 350 W (230 V) max. 400 W (120 V) max. 380 W (100 V)
EMC: Noise emission (radio interference)	100 V: EN 61326-1/EN 55011 – Class B 120 V: CFR 47 FCC Part 15 – Class B 230 V: EN 61326-1/EN 55011 – Class B	
EMC: Noise immunity	EN 61326-1- basic electromagnetic environment	
Overvoltage category	II	
Fuses	230 V > 250 V 4AT HBC 100/120 V > 250 V 6.3AT HBC	
Degree of pollution	2	

9.2 Ambient conditions

Environment:	For indoor use only.
Ambient temperature:	15 to 35 °C
Max. relative humidity:	75 %, non-condensing humidity
Atmospheric pressure:	79.5 kPa – 106 kPa

9.3 Weight/dimensions

	5305 Basic device	5305 Complete system with connection for external device
Dimensions:	Width: 330 mm (12.6 in.) Depth: 372 mm (14.5 in.) Height: 231 mm (9.1 in.)	Width: 330 mm (12.6 in.) Depth: 579 mm (20.9 in.) Height: 290 mm (11.7 in.)
Weight without rotor:	16.5 kg (37.5 lb.)	31.5 kg (68.3 lb.)

Technical dataConcentrator plus/Vacufuge® plus
English (EN)

Rotor weights	Weight [g]
F-45-72-8	245
F-45-70-11	550
F-45-48-11	245
F-45-22-17	710
F-45-24-12	470
F-50-8-16	485
F-50-8-18	480
F-35-6-30	615
F-45-8-17	400
F-40-36-12	330
F-45-36-15	485
F-45-16-20	395
F-40-18-19	635
F-45-12-31	395
F-35-8-24	605
A-2-VC	990

9.4 Noise level

The noise level was measured in a sound measuring room with accuracy class 1 (DIN EN ISO 3745) frontally, at a distance of 1 m from the device and at lab bench height.

Noise level:	< 50 dB(A)
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9.5 Diaphragm vacuum pump for the complete system

Max. current:	1.4/1.6 A (230 V, 50/60 Hz) 3.0 A (120 V, 50 Hz) 3.6/3.8 A (100 V, 50/60 Hz)
Max. drive power:	180 W (230/120/100 V)
Motor protection:	Thermal winding protection
Protection class according to IEC 529:	IP 54
Suction capacity (in accordance with DIN EN 60529; VDE 0470-1):	1.9/2.1 m ³ /h (50/60 Hz)
Achievable ultimate pressure (absolute):	<20 mbar
Max. permissible pressure at the outlet (absolute):	2 bar
Max. differential pressure between the inlet and the outlet:	1 bar
Nominal speed at 50/60 Hz:	1,500/1,800 rpm
Radio interference protection class:	B

Materials of the surfaces that are in contact with media

Inner part of the housing lid:	PTFE, with carbon reinforcement
Head cover, diaphragm clamping disk:	ETFE, with carbon reinforcement
Valve:	FFKM
Diaphragm:	PTFE
Inlet:	ETFE
Outlet:	ETFE
Screw connection:	ETFE
Hose:	PTFE

9.6 Application parameters

Run time:	1 min to 9:59 h, unlimited (∞), adjustable in 1 min. increments.
Rotational speed:	1,400 rpm, not adjustable
Max. relative centrifugal force (RZB or rcf):	248 x g, not adjustable
Max. load:	144 tubes/2 microplates (0.2 to 50 mL)
Permissible density of the material for centrifuging (at max. g-force/speed and max. load):	1.2 g/mL
Emission condenser volume:	280 mL