

9 Technical data

9.1 Power supply

Mains/power connection	230 V, 50 to 60 Hz 120 V, 50 to 60 Hz 100 V, 50 to 60 Hz
Current consumption	1.6 A (230 V) 3.2 A (120 V) 3.7 A (100 V)
Power consumption	max. 360 W
EMC: Noise emission (radio interference)	230 V: EN 61326-1/EN 55011 – Class A 120 V: CFR 47 FCC Part 15 – Class A 100 V: EN 61326-1/EN 55011 – Class A
EMC: Noise immunity	EN 61326-1- industrial electromagnetic environment
Overvoltage category	II
Fuses	250 V 3.15 AT HBC (230 V)
Fuses	250 V 6.3 AT (120 V)
Fuses	250 V 6.3 AT (100 V)
Degree of pollution	2

9.2 Ambient conditions

Environment:	For indoor use only.
Ambient temperature:	10 to 40 °C
Max. relative humidity:	10 to 75 %, no condensing humidity
Atmospheric pressure:	79.5 kPa – 106 kPa

9.3 Weight/dimensions

Dimensions:	Width: 290 mm (11.42 in) Depth: 480 mm (18.90 in) Height: 260 mm (10.24 in)
Weight without rotor:	21.0 kg (46.3 lb)

Rotor weights	Weight
F-24x2	797.5 g
FA-10x5	756.5 g
FA-18x2-KIT	860 g
F-32x0.2-PCR	383 g
S-96x0.2	270 g

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:	< 54 dB(A)
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9.5 Application parameters

Tab. 9-1: Acceleration time and braking time according to DIN 58 970

Rotor	Acceleration time	Deceleration time
FA-24x2	15 s	15 s
FA-10x5	15 s	15 s
F-32x0.2-PCR	15 s	15 s

Run time	10 s – 9:59 h, unlimited (∞) • 1 min – 2 min: can be set in increments of 10 s • 2 min – 10 min: can be set in increments of 30 s • > 10 min can be set in increments of 1 min
Temperature	-10 °C – 40 °C
Speed	100 rpm – 15 060 rpm • 100 rpm – 5000 rpm: can be set in increments of 10 rpm • 5000 rpm – 15 060 rpm: can be set in increments of 100 rpm
Relative centrifugal force	1 rcf – 21 300 × g • 50 rcf – 2 990 rcf: can be set in increments of 10 rcf • 1 rcf – 21 300 × g: can be set in increments of 100 rcf
Maximum load	Fixed-angle rotor: 10 × 5 mL Swing-bucket rotors: 96 × 0.2 mL
Maximum kinetic energy	4136 J
Permitted density of the material for centrifuging (at maximum <i>g</i> -force (rcf) or rotational speed (rpm) and maximum load)	1.2 g/mL
Inspection obligation in Germany	no

9.6 Service life of accessories



CAUTION! Danger due to material fatigue.

If the service life is exceeded, it cannot be guaranteed that the material of the rotors and the accessories will withstand the stresses during centrifugation.

- ▶ Do not use accessories that have exceeded their maximum service life.

Eppendorf states the maximum service life of rotors and accessories in cycles and years. The number of cycles is decisive. If determination of the number of cycles is not possible, the service life in years applies.

Each centrifugation run during which the rotor is accelerated and braked is counted as a cycle, independent of the speed and the duration of the centrifugation run.

Unless stated otherwise (in the manual of the centrifuge, indications of the number of cycles on the rotor, in the instructions for use of the rotor), all other rotors and rotor lids can be used over the entire service life of the centrifuge if the following prerequisites are met:

- proper use
- recommended maintenance
- undamaged condition