

9 Technical data

9.1 Power supply

Mains/power connection	230 V, 50 Hz – 60 Hz 120 V, 50 Hz – 60 Hz 100 V, 50 Hz – 60 Hz	
Current consumption	2.4 A (230 V) 4.6 A (120 V) 5.5 A (100 V)	
Power consumption	maximum 550 W (230 V) maximum 550 W (120 V) maximum 550 W (100 V)	
EMC: noise emission (radio interference)	230 V: EN 61326-1/EN 55011 – Class B 120 V: CFR 47 FCC Part 15 – Class A 100 V: EN 61326-1/EN 55011 – Class A	
EMC: noise immunity	EN 61326-1	
Degree of pollution	2	
Fuses	Voltage variant	Fuse
	230 V	250 V 4AT HBC
	120 V	250 V 8AT HBC
	100 V	250 V 10AT

9.2 Ambient conditions

Environment	For indoor use only
Ambient temperature	10 °C – 40 °C
Relative humidity	10 % – 75 %, non-condensing
Atmospheric pressure	79.5 kPa – 106 kPa Use up to a height of 2 000 m above sea level.

9.3 Weight/dimensions

Dimensions	Width: 31.9 cm (12.6 in) Depth: 54.0 cm (21.3 in) Height: 25.4 cm (10.2 in)
Weight without rotor	30.0 kg (66.14 lb)

Rotor weights	Accessories	Weight
F-45-48-11		1770 g
FA-45-48-11		2110 g
FA-45-30-11		1500 g
F-45-30-11		1020 g
FA-45-24-11		1290 g
FA-45-24-11-Kit		1600 g
S-24-11-AT		1340 g
	Buckets without caps	27
FA-45-12-17		2090 g
F-45-48-5-PCR		850 g

9.4 Noise level

Noise level	< 56 dB(A)
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The noise level was measured according to DIN EN ISO 3745 frontally in a sound measuring room with accuracy class 1 at a distance of 1 m from the device and at lab bench height.

9.5 Application parameters

Run time	10 s – 9:59 h, infinite (∞), • 10 s – 2 min: can be set in increments of 10 s • 2 min – 10 min: can be set in increments of 30 s • 10 min – 9:59 h: can be set in increments of 1 min
Temperature	-11 °C – 40 °C
Relative centrifugal force	1 × <i>g</i> – 25 001 × <i>g</i> can be set in increments of 50 × <i>g</i>
Speed	100 rpm – 16 220 rpm can be set in increments of 50 rpm
Maximum load	48 tube with 2.0 mL volume
Maximum kinetic energy	9920 J
Compulsory test log book (in Germany)	No
Permissible density of the material for centrifuging (at maximum <i>g</i> -force (rcf) or speed (rpm) and maximum load)	1.2 g/mL

9.6 Acceleration times and deceleration times for the Centrifuge 5427 R (according to DIN 58 970)

Rotor	Acceleration time/Deceleration time		Mains voltage		
			230 V	120 V	100 V
FA-45-12-17	Without soft ramp	Acceleration time	27 s	29 s	29 s
		Deceleration time	24 s	25 s	25 s
	With soft ramp	Acceleration time	39 s	39 s	39 s
		Deceleration time	39 s	39 s	39 s
FA-45-24-11	Without soft ramp	Acceleration time	18 s	19 s	19 s
		Deceleration time	18 s	19 s	19 s
	With soft ramp	Acceleration time	29 s	29 s	29 s
		Deceleration time	31 s	31 s	31 s

Rotor	Acceleration time/Deceleration time		Mains voltage		
			230 V	120 V	100 V
FA-45-24-11-Kit	Without soft ramp	Acceleration time	21 s	22 s	22 s
		Deceleration time	21 s	21 s	21 s
	With soft ramp	Acceleration time	32 s	32 s	32 s
		Deceleration time	31 s	31 s	31 s
FA-45-30-11	Without soft ramp	Acceleration time	21 s	22 s	22 s
		Deceleration time	18 s	19 s	19 s
	With soft ramp	Acceleration time	32 s	32 s	32 s
		Deceleration time	33 s	33 s	33 s
F-45-30-11	Without soft ramp	Acceleration time	21 s	22 s	22 s
		Deceleration time	18 s	19 s	19 s
	With soft ramp	Acceleration time	29 s	29 s	31 s
		Deceleration time	32 s	32 s	32 s
FA-45-48-11	Without soft ramp	Acceleration time	28 s	29 s	29 s
		Deceleration time	22 s	23 s	23 s
	With soft ramp	Acceleration time	36 s	36 s	39 s
		Deceleration time	35 s	35 s	35 s
F-45-48-11	Without soft ramp	Acceleration time	28 s	29 s	29 s
		Deceleration time	22 s	23 s	23 s
	With soft ramp	Acceleration time	36 s	36 s	36 s
		Deceleration time	35 s	35 s	35 s

Rotor	Acceleration time/Deceleration time		Mains voltage		
			230 V	120 V	100 V
F-45-48-PCR	Without soft ramp	Acceleration time	11 s	12 s	12 s
		Deceleration time	12 s	13 s	13 s
	With soft ramp	Acceleration time	22 s	22 s	22 s
		Deceleration time	22 s	22 s	22 s
S-24-11-AT	Without soft ramp	Acceleration time	18 s	18 s	18 s
		Deceleration time	17 s	17 s	17 s
	With soft ramp	Acceleration time	29 s	29 s	29 s
		Deceleration time	30 s	30 s	30 s

9.7 Service life of accessories



WARNING! Risk of injury from chemically or mechanically damaged accessories.
Even minor scratches and cracks can lead to severe internal material damage.

- ▶ Protect all accessory parts from mechanical damage.
- ▶ Inspect the accessories for damage before each use. Replace any damaged accessories.
- ▶ Do not use rotors, rotor lids or buckets showing signs of corrosion or mechanical damage (e.g., deformations).
- ▶ Do not use accessories that have exceeded their maximum service life.



CAUTION! Risk of injury due to chemically damaged rotor lids or caps.
Transparent rotor lids or caps made of PC, PP or PEI may lose their strength if exposed to organic solvents (e.g., phenol, chloroform).

- ▶ If rotor lids or caps have come into contact with organic solvents, clean them immediately.
- ▶ Regularly check the rotor lids and caps for damage and cracks.
- ▶ Replace any rotor lids or caps that show cracks or milky stains immediately.