11 Technical data

11.1 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	230 V: 10.5 A 120 V: 12 A 100 V: 15 A
Power consumption	230 V: Maximum 1650 W 120 V: Maximum 1440 W 100 V: Maximum 1500 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
Overvoltage category	II
Degree of pollution	2

11.2 Weight/dimensions

Dimensions	Width: 71.5 cm (28.1 in) Depth: 62.0 cm (24.4 in)/66 cm (26.0 in) Height: 36.8 cm (14.5 in)
Weight without rotor	109.0 kg (240.3 lb)

Rotor weights:		Accessories without caps:	
S-4×Universal	6790 g	Universal bucket	920 g
S-4×750	5100 g	Round bucket	605 g
		DWP bucket	700 g
S-4×500	5400 g	Bucket	585 g
		Flex bucket	810 g
		Form bucket 7x50	880 g
S-4×400	5200 g	Round bucket	490 g
FA-6×250	5450 g		
FA-6×50	3450 g		
FA-48×2	2500 g		
FA-20×5	2800 g		
FA-30×2	1800 g		
F-48×15	2100 g	Sleeve	30

11.3 Noise level

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

	Swing-bucket rotor	Fixed-angle rotor
Noise level at maximum rotor speed		
	< 53 dB(A) (S-4×Universal) < 57 dB(A) (S-4×750)	< 59 dB(A) (FA-6×50)

11.4 Ambient conditions

Environment	For indoor use only
Ambient temperature	10 °C – 35 °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.

11.5 Application parameters

Cycle time	10 s – 99:59 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 – 99:59 h: can be set in increments of 1 min
Temperature	-11 °C – 40 °C
Relative centrifugal force	1 × *g* – 22132 × *g* • 1 × *g* – 3000 × *g*: can be set in increments of 10 × *g* • 3000 × *g* – 22132 × *g*: can be set in increments of 100 × *g*
Rotational speed	10 rpm – 14000 rpm • 10 rpm – 5000 rpm: can be set in increments of 10 rpm • 5000 rpm – 14000 rpm: can be set in increments of 100 rpm
Maximum load	Fixed-angle rotor: 6 × 250 mL Swing-bucket rotors: 4 × 1000 mL
Maximum kinetic energy	36400 J
Permitted density of the material for centrifuging (at maximum *g*-force (rcf) or rotational speed (rpm) and maximum load)	1.2 g/mL
Inspection obligation in Germany	yes