

9 Technical data

9.1 Power supply

Centrifuge 5418

Mains connection	230 V, 50 Hz – 60 Hz 120 V, 50 Hz – 60 Hz 100 V, 50 Hz – 60 Hz
Current consumption	1.4 A (230 V) 2.8 A (120 V) 3.4 A (100 V)
Power consumption	Maximum 170 W
EMC: Interference emission. (radio interference)	EN 61326 – Class B (230 V) FCC15 - Class A (120 V/100 V)
EMC: Noise immunity	EN 61326
Overvoltage category	II
Fuses	2.5 AT (230 V) 5.0 AT (120 V / 100 V)
Degree of pollution	2

Centrifuge 5418 R

Mains connection	230 V, 50 Hz – 60 Hz 120 V, 50 Hz – 60 Hz 100 V, 50 Hz – 60 Hz
Current consumption	1.4 A (230 V) 2.8 A (120 V) 3.0 A (100 V)
Power consumption	Maximum 320 W
EMC: Interference emission. (radio interference)	EN 61326 – Class B (230 V) FCC15 - Class A (120 V/100 V)
EMC: Noise immunity	EN 61326
Overvoltage category	II
Fuses	2.5 AT (230 V) 6.25 AT (120 V / 100 V)
Degree of pollution	2

Technical dataCentrifuge 5418 / 5418 R
English (EN)

9.2 Ambient conditions

Environment:	Only for use indoors.
Ambient temperature:	Centrifuge 5418: 2 °C to 40 °C Centrifuge 5418 R: 15 °C to 35 °C
Max. relative humidity:	75 %, non-condensing humidity.
Atmospheric pressure:	Use up to an altitude of 2 000 m above MSL.
Degree of pollution:	2

9.3 Weight/dimensions

Tab. 9-1: Centrifuge 5418

Dimensions:	Width: 208 cm (8.19 in) Depth: 300 cm (11.8 in) Height: 210 cm (8.27 in)
Weight without rotor:	7.7 kg
Noise level:	< 51 dB (A) *

Tab. 9-2: Centrifuge 5418 R

Dimensions:	Width: 298 cm (11.73 in) Depth: 463 cm (18.23 in) Height: 463 cm (18.23 in)
Weight without rotor:	22 kg
Noise level:	< 57 dB (A) *

*) 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.

9.4 Application parameters

Start and stop times according to DIN 58 970						
Rotor	5418			5418 R		
	Voltage	Acceleration times	Deceleration times	Voltage	Acceleration times	Deceleration times
FA-45-18-11	230 V	16 s	18 s	230 V	13 s	13 s
	120 V	16 s	18 s	120 V	13 s	13 s
	100 V	18 s	18 s	100 V	13 s	13 s

These values were calculated at 23°C.

run time (5418)	30 s to 9:59 h, as well as infinity (∞), Adjustable to 10 min in 30 s increments, then increments of 1 min
run time (5418 R)	0.5 min to 99 min, as well as infinity (∞), Adjustable to 10 min in 0.5 min increments, then increments of 1 min
Temperature (only 5418 R)	0°C to 40°C
Relative centrifugal force (RCF)	1 to 16,873 × g adjustable to 5000 × g in 100 × g increments, then increments of 200 × g.
RPM	100 to 14,000 rpm adjustable in 100 rpm increments
Maximum load	18 micro test tubes of 2.0 mL each.
Max. kinetic energy	2,600 Nm
Test log mandatory:	No
Allowable density of the centrifuge material (at maximum g-force (rcf)/speed (rpm) and maximum load)	1.2 g/mL