

Thermo Scientific BIOS A and 16 Bioprocessing Centrifuges

Greener with every spin

Thermo Scientific™ BIOS A and 16 Centrifuges feature a next-generation natural refrigerant cooling system. Thermo Scientific™ GreenCool Technology operates with carbon dioxide (CO₂) as refrigerant, which has a Global Warming Potential (GWP) of 1, lower than other refrigerants, while not contributing to depletion of the ozone layer and is compliant with EU and US EPA F-gas regulations. Besides being less hazardous, the centrifuges are more energy efficient with up to 15% lower energy consumption compared to previous models. Additionally, they are manufactured in a certified zero-waste facility using 100% renewable energy in Osterode am Harz, Germany.

BIOS A Centrifuge

High performance, up to $12,000 \times g$ in a fixed-angle configuration (one rotor option), up to 10L capacity ($10 \times 1L$)

BIOS 16 Centrifuge

Lower speeds, but up to 16L capacity (8 x 2 L bottles) with flexibility to spin blood bags, bottles, bioprocess containers and tubes





GLOBAL WARMING POTENTIAL*

1

LOWER ENERGY CONSUMPTION UP TO**

-15%

MADE IN A
CERTIFIED
ZEROWASTE
FACILITY***

LESS WEIGHT

-60_{kg}

LOWER NOISE LEVEL****

-50%

 $^{^{\}star}$ Due to natural refrigerant (CO $_{\!\scriptscriptstyle 2}\!)$

^{**} Energy use measured for a 1-hour run at maximum speed and compared to previous model. New BIOS A: 5400W vs Previous Sorvall BIOS A model: 6400W; BIOS 16: 4600W vs. Previous Sorvall BIOS 16 model: 5400W

^{***} Zero waste defined as less than 10% of non-hazardous waste sent to landfill, incineration or waste-to-energy

^{**** 4} db(A) less for BIOS 16 model compared to previous model, measured at maximum speed.





Specifications	BIOS 16 Centrifuge	BIOS A Centrifuge
Maximum capacity	8 x 2,000 mL	10 x 1,000 mL
Maximum speed	5,400 rpm	6,250 rpm
Maximum RCF	8,500 x g	12,000 x g
Drive system	DuraFlex high-torque brushless drive technology	
Accumulated Centrifugal Effect (ACE) integrator	Yes	
Green technology	GreenCool technology; refrigeration off when door opens; Eco-Spin windshielded rotors	
Control	Centri-Touch touchscreen interface	
Accel/decel profiles and existing protocol emulation	11 accel, 12 decel, multiple emulation profiles	
Modes	At start, at speed, time start	
Step-runs	30 profile/speed/time triplets, up to 3 steps each	
Maintenance tracking log	Yes	
Protocol traceability	Built-in Centri-Track run logging software wit	h optional Centri-Log Plus software available
Performance range	Speed 300-5,400 rpm; RCF 29-8,500 x g	Speed 300-6,250 rpm; RCF 29-12,000 x g
Run time	99 hours 59 min 59 sec (1-second increment)	
Pre-cooling function	Yes	
Temperature set range	−20° to 40°C, adjustable to 1°C	−20° to 30°C, adjustable to 1°C
Other functions	Multilingual selection, onboard training videos, user logging, user lock-out, automatic door opening, automatic rotor ID, on-screen display for imbalance, over temperature, stainless steel chamber, guidance display for error messages	
Dimensions	(H x W x D) 1,015 x 816 x 990 mm (39.9 x 32.1 x 35.4 in.)	
Weight	200, 208, 220, 230, 240 V; 50/60 Hz: 415 kg (915 lb);	200, 208, 220, 230, 240 V; 50/60 Hz: 415 kg (915 lb);
	380, 400, 415 V; 50 Hz:	380, 400, 415 V; 50 Hz:
	438 kg (966 lb)	415 kg (915 lb)
Heat output	<2.9 kW	3.5 kW/h
Power consumption	<4,600 VA	<5,400 VA
Noise level	58dB (A)	60dB (A)
Certifications	UL, CE	UL, CE
Cleanroom compatibility	Class ISO 6 according to DIN EN ISO 14644-1	
Standards	EN 61010-1 3rd Edition, IEC 61010-2-020 2nd Edition and	
	IEC 61010-2-020 3rd Edition, EN 61326-1 Class B	
Warranty	2 years for unit, 5 years for powertrain (motor shaft and drive), 5 years for refrigeration	

Ordering information

Centrifuge	Cat. No.
BIOS 16 Bioprocessing Centrifuge with GreenCool Technology 200, 208, 220, 230, 240 V ±10%; 50/60 Hz; single phase	75008612
BIOS 16 Bioprocessing Centrifuge with GreenCool Technology 380, 400, 415 V ±10%; 50 Hz; 3 phase	75008617
BIOS 16 Heavy Duty Centrifuge with GreenCool Technology 200, 208, 220, 230, 240 ±10%; 50/60 Hz; single phase	75008614
BIOS A Centrifuge with GreenCool Technology (rotor to be ordered separately) 200, 208, 220, 230, 240 V ±10%; 60 Hz, single phase; 200 V ±10%; 50 Hz; Japan only	75008620
BIOS A Centrifuge with GreenCool Technology (rotor to be ordered separately) 380, 400, 415 V ±10%; 50/60 Hz; 3 phase	75008621
BIOS A Heavy Duty Centrifuge with GreenCool Technology (rotor to be ordered separately) 200, 208, 220, 230, 240 V \pm 10%; 60 Hz; single phase; 200 V \pm 10%; 50 Hz; Japan only	75008622





Learn more at thermofisher.com/bioscentrifuge

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