

**Smart design  
has its rewards**



**Thermo Scientific MSC-Advantage™**  
Class II Biological Safety Cabinet

# MSC-Advantage:



Laboratories today are facing new challenges. Safety and reliability continue to be paramount. Yet, there is growing need worldwide for improved energy efficiency, simpler operation and less maintenance.

Thermo Scientific MSC-Advantage: a new line of Class II biological safety cabinets for best-in-class energy efficiency, reliability and operation. The MSC-Advantage platform is flexible and easy-to-use with exactly the features you need – ensuring the highest safety, quality and value.

## *proven global leadership in safety*

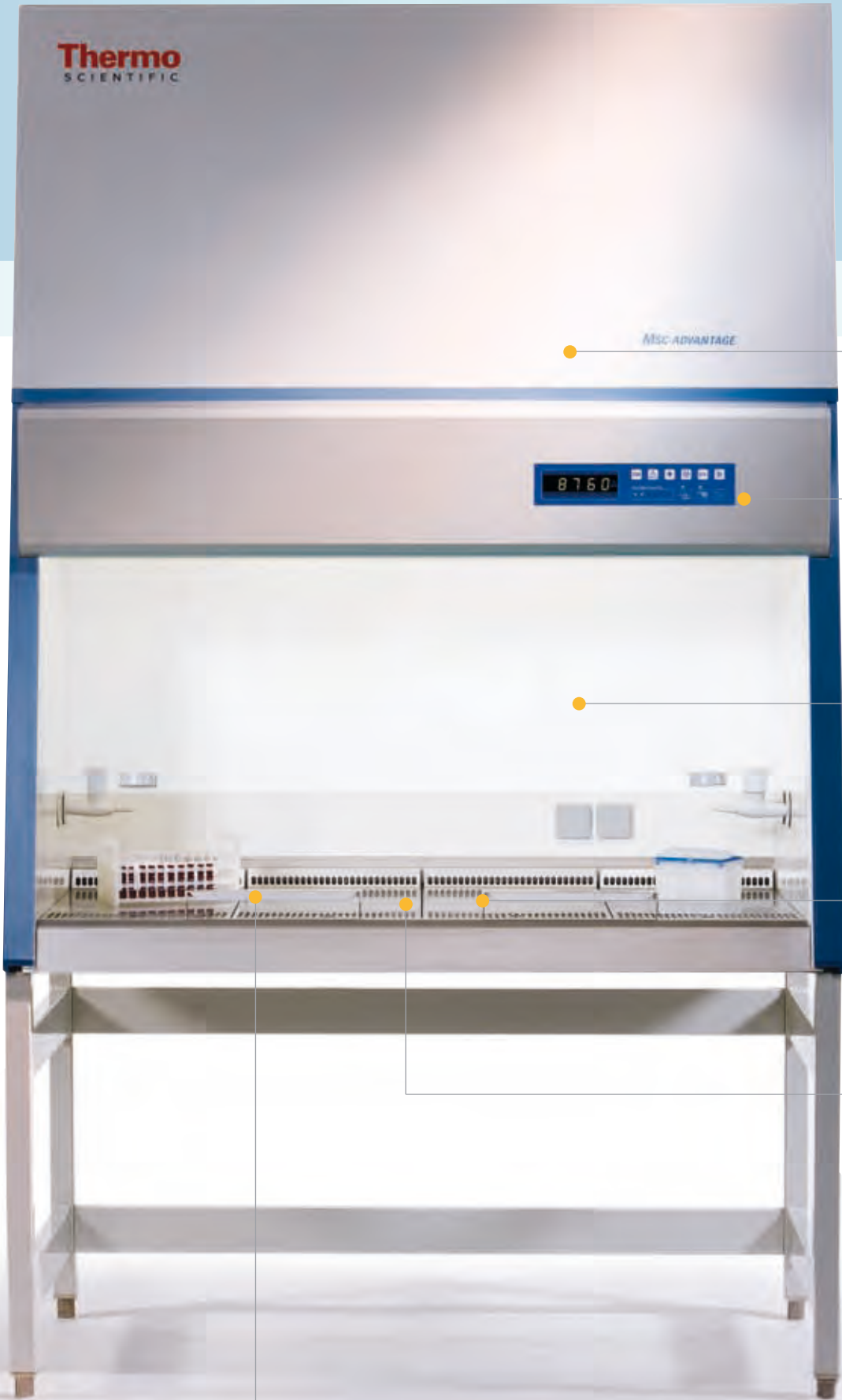
Our MSC-Advantage is backed by our global reputation and commitment to provide the safest and most reliable biological safety cabinets available.

We have decades of market leadership in biological safety cabinets, as well as a full suite of laboratory solutions – all with unmatched quality and world-renowned service and support.

**Thermo**  
SCIENTIFIC

MISC ADVANTAGE

8760



## *Ease-of-Use for Enhanced Safety*

Our Thermo Scientific MSC-Advantage delivers easy-to-use features that enable you to perform your best work – productively and safely. An inefficient working environment can create expensive disruptions to lab procedures and devastate important results.

### **Whisper-Quiet Operation**

The cabinet offers a very quiet environment that does not compromise safety or comfort.

### **Easy-to-Read Controls**

Clearly visible from a seated position, an easy-to-reach microprocessor control panel offers a large display of operating parameters and functions.

### **Ergonomically Angled Cabinet Front**

Cabinet front is sloped 10° for enhanced comfort and reduced operator fatigue.

### **Spacious Work Area**

A very large work surface enables productivity with plenty of space for your research.

### **Flexible, Divided Work Tray**

The standard divided, stainless steel work tray is offered in 4 or 6 pieces (depending on cabinet size), each section 300 mm wide. Pieces are easily removable for cleaning and autoclaving.

### **Comfortable Armrest**

Standard armrests sit just above the intake grill to avoid accidental blocking with coat sleeves, while improving overall user comfort.



### **Effective Cleaning**

To reduce risk of sample cross-contamination, a patent-pending window design easily lowers to thoroughly clean window sash interior. This unique design assures that the operator can clean the entire front window safely and easily.

### **Easy Servicing**

All cabinet components, including HEPA filters, are easily accessible from the front to allow for rapid service and minimal work disruption during preventative maintenance and recertification.

### **Exceptional Safety**

Smooth components are used throughout the cabinet, virtually eliminating risk of injury during routine cleaning, servicing, and maintenance procedures.

### **Reduced Maintenance**

The optional UV light is programmable from 1 minute to 24 hours, minimizing bulb replacement.

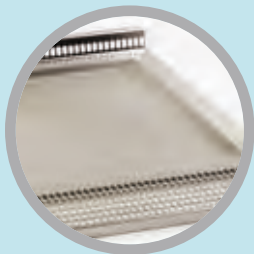


## Easy-to-Access Control Panel & Performance Data

The large microprocessor control panel displays valuable safety and performance data, and is always within easy reach from a seated position. The intuitive interface delivers a constant read-out of downflow and inflow velocities and filter usage status. The exclusive Performance Factor monitoring system clearly displays when service of the cabinet is necessary.



## Options and Accessories



### Easy-to-Clean, One-Piece Work Tray

Traps spills for quick and easy clean up.



### Multiple Stand Options

Three different stand designs are available to accommodate user needs.



### Programmable UV Light

Optimizes decontamination and minimizes bulb usage with programmable timer.



### Service Valve Kits

Dispenses combustible and non-combustible gas into the cabinet. Vacuum and water taps are also available.

### ADDITIONAL ACCESSORIES:

**Additional Charcoal Exhaust Filter** absorbs odors caused by animal research or other odorous applications.

**Additional Exhaust Filter** provides enhanced security for exhausted air.

**Direct Duct Exhaust System and Thimble Duct Exhaust System** allows for air to exhaust outside the building rather than into the laboratory environment.

SEE WEB FOR ORDERING INFORMATION  
[www.thermo.com/msc](http://www.thermo.com/msc)

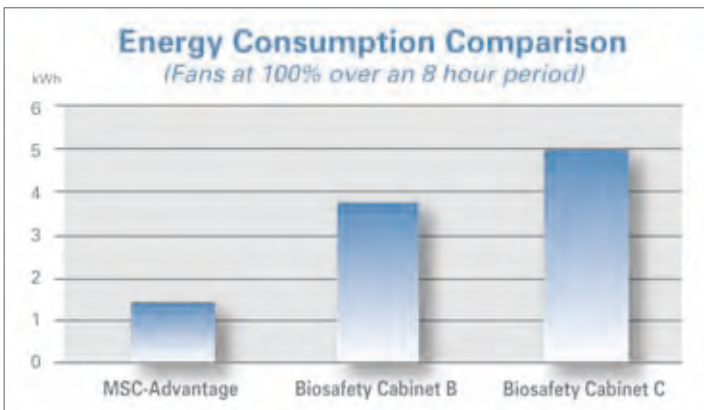
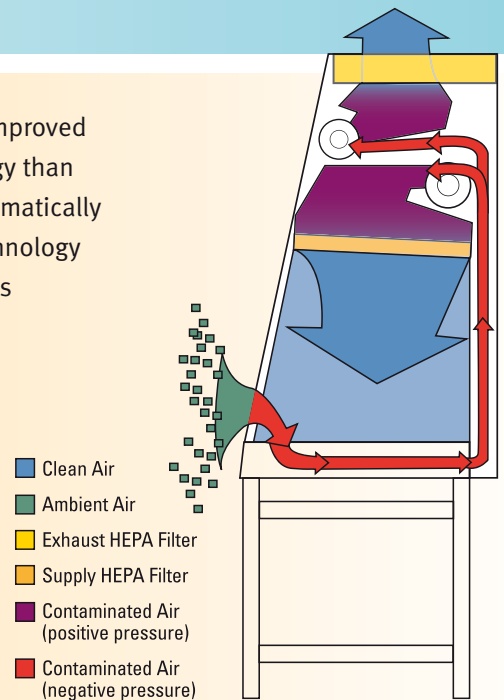
# Smart design has its rewards –

*intelligent technology, exceptional value*

Our MSC-Advantage features advancements in motor technology for dramatically improved energy efficiency and operation. At full speed, the motors consume 60% less energy than competing motor technologies. During low usage, an intelligent speed control automatically reduces blower speed to 30% when the cabinet window is closed. This unique technology extends HEPA filter usage life, ensures a sterile working environment and minimizes energy and operating costs.

### Unique Airflow Technology

*Ambient air is pulled into the cabinet by the blower and immediately trapped by the patented negative pressure drain pan. Contaminated air is pulled through the supply and exhaust HEPA filters. Approximately 30% of the air volume is exhausted as sterile air back into the environment and approximately 70% of the air is recirculated inside the MSC-Advantage work area.*



*\*based on internal performance benchmarks*

### Energy Efficiency

*Reducing overall energy usage is critical for a cost-efficient laboratory. With 60% less energy consumption and heat emission\* than traditional cabinets, energy usage and lab air conditioning costs are significantly reduced.*



# Best-in-Class Value

▶ *optimizing efficiency and operation*

**With the Thermo Scientific MSC-Advantage, you'll enjoy best-in-class performance:**

- **Energy Efficiency**  
*60% less energy consumption and heat output\**
- **Ease-of-Use**  
*simple operation for ultimate safety*
- **Optimized Maintenance**  
*superior lifecycle reliability*

The MSC-Advantage fully complies with the EN 12469 safety standard as independently tested and certified by TÜV Nord.



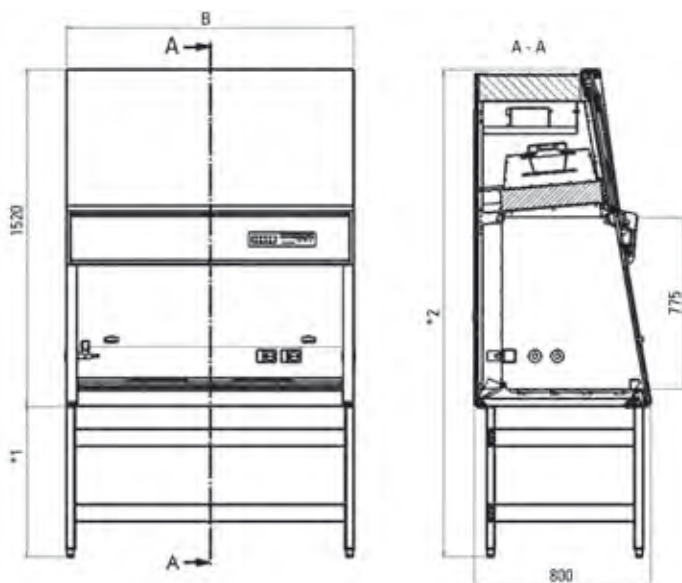
\*based on internal performance benchmarks



## Thermo Scientific MSC-Advantage, Class II Biosafety Cabinets

### Specifications and Ordering Information

Model		MSC-Advantage 1.2	MSC-Advantage 1.8
Cat. No.		51025411	51025413
<b>Dimensions</b>	Exterior dimensions with stand (w x h x d)	1300 x 2200 x 795 mm (51.2 x 86.6 x 31.3 in)	1900 x 2200 x 795 mm (79.5 x 86.6 x 31.3 in)
	Interior dimensions (w x h x d)	1200 x 780 x 495 mm (47.2 x 30.7 x 19.5 in)	1800 x 780 x 495 mm (70.9 x 30.7 x 19.5 in)
	Work surface with adjustable stand	750 x 960 mm (30 to 38 in)	750 x 960 mm (30 to 38 in)
	Interior work surface area	0.56 m <sup>2</sup> (930 sq. in)	0.84 m <sup>2</sup> (1395 sq. in)
	Working height of front window	200 mm (8 in)	200 mm (8 in)
	Maximum lifting height of front window	535 mm (21 in)	535 mm (21 in)
	Shipping dimensions (w x h x d)	1410 x 1700 x 925 mm (55.5 x 66.9 x 36.4 in)	2010 x 1700 x 925 mm (79.1 x 66.9 x 36.4 in)
<b>Weight</b>	Net weight	~240 kg (~530 lbs)	~340 kg (~750 lbs)
	Shipping weight	~260 kg (~575 lbs)	~360 kg (~795 lbs)
	Maximum weight load of one-piece work tray	50 kg (110 lbs)	50 kg (110 lbs)
	Maximum weight load of divided work tray	25 kg (55 lbs) (max of 50 kg)	25 kg (55 lbs) (max of 50 kg)
<b>Ventilation System</b>	Exhaust/inflow air volume	400 m <sup>3</sup> /h (230 CFM)	600 m <sup>3</sup> /h (345 CFM)
	Heat emission at 25°C ambient	~0.15 kW	~0.26 kW
<b>Filter Specification</b>	Supply/exhaust air filter	HEPA H 14 EN 1822, 99.999% at 0.3µm particle size	HEPA H 14 EN 1822, 99.999% at 0.3µm particle size
	Additional exhaust filter option (AEF)	HEPA H 14 EN 1822, 99.999% at 0.3µm particle size	HEPA H 14 EN 1822, 99.999% at 0.3µm particle size
<b>Performance</b>	Certification	EN 12469; GS Nord Cert-TÜV	EN 12469; GS Nord Cert-TÜV
	Sound pressure level	<55 dB (A)	<57 dB (A)
	Lighting power	>1200 lx	>1200 lx
<b>Electrical Data</b>	Voltage	1/N/PE 230 V AC	1/N/PE 230 V AC
	Frequency	50 Hz	50 Hz
	Power consumption	0.4 kW	0.8 kW
	Current consumption	1.7 A	3.4 A
	Protection class	I / IP 20	I / IP 20
	Protective measure	Conductor connection	Conductor connection
	Individual precautions on customer side	Lead fuse (slow blow) T 16 A or circuit breaker B 16. The local electrical regulations in the country of use as well as the relevant connection conditions must be observed. The national regulations for electrical engineering as well as the relevant technical connection conditions must be taken into account.	
	<b>Supply Management</b>	Supply requirement	230 V, 50/60 Hz standard supply. Total requirement including interior sockets 13-16 Amps.
Receptacles		The receptacles have a load capacity of up to 5 A and are protected with T 5 A fuses. When all receptacles are in use simultaneously, they must not exceed the maximum total load capacity of 5 A.	
Radio interference		Circuit is interference free in accordance with EN 55 014	
<b>Features</b>	Access ports (23 mm)	4 (2 on each side)	4 (2 on each side)
	Service valves	Up to 4 (installed through access ports)	Up to 4 (installed through access ports)
	Receptacles	One double, right side	Two double, left and right side
	Warranty	2 years parts and labor	2 years parts and labor



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**Countries not listed:** +49 6184 90 6940 or +33 2 2803 2000

[www.thermo.com/msc](http://www.thermo.com/msc)

\* 1 = Floorstand for seating position 680 mm +15/-5; Floorstand for standing position 880 mm +15/-5  
 \* 2 = Seating position 2200 mm +15/-5; Standing position 2400 mm +15/-5  
 B = 1300 mm with MSC-Advantage 1.2 / 1900 mm with MSC-Advantage 1.8

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