Biohazard Safety Cabinet - Class II Type A2

Compliance with KS J 0012:2010, ISO 14644-1, ISO Class 3, EN 12469 and NSF 49 test method



Model LCB-1203B-A2



Model LCB-1803B-A2

Air Leak Proof Cabinet Structure
공기 누출 방지 제품구조

Easy to replace main filter from front panel
전면부 판넬을 간편히 올려 메인휠타를 쉽게 교체하는 구조

Class II Type A2

30% Exhaust



Airflow

- Room air
- ULPA Filtered air
- Unfitered / Potentially contaminated air

70% Recirculate

70% of the air is recirculated
and 30% of the air is exhausted



이동 · 설치가 편리한 직립일체형 제품 설계구조

Easy to move & install one piece structure floor standing

Detail Spectification is described at page 22
제품 상세 규격표는 22 페이지에 수록됨

Remark When ordering model, please specify electric frequency
제품 주문 하실 때, 전기 주파수를 명시해 주시기바랍니다

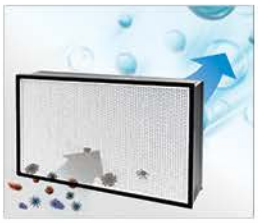
Performance data is based on unload condition
성능 데이터는 무부하 상태에서 작동한 규격입니다

Feature 특장점

1 ULPA Filter

High-efficiency particulate air filter removal 99.9999% efficiency for particle sizes of 0.1 ~ 0.3μm

고품질 고효율 울파휠터



2 Pressure gauge & PAO Test Valve

Pressure for leakage and clogged filter status, Starting Pressure 10 ~ 15 mmAq

누출 압력 및 필터 막힘 상태 확인
PAO 누설 테스트 밸브 장착



3 Tempered safety glass door with safety alarm

in case the door is opened above the proper height

적정 높이 이상으로 문이 열린 경우 경보발생



4 High efficiency centrifugal blower

is installed to provide reduced noise and vibration

저소음 저진동
고성능 원심 블로어 장착



5 Utility device 1

UV lamps and FL lamps are installed as standard

자외선램프 및 형광램프 가 기본으로 설치



6 Utility device 1

NPT 1/4 air/vacuum, gas inlet valve 110 V or 220 V electric socket with cover

NPT 1/4 공기/진공 가스 유입 밸브,
110V 또는 220V 전원 안전소켓



7 Work zone structure

Stainless steel interior for work station

내부 스테이니스 스틸 구조 작업공간



8 Air inflow grill & Arm rest

With wire mesh prefilter efficient working structure

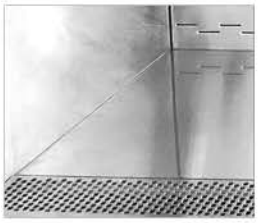
효율적인 작업을 위한 설계 구조
와이어 메쉬 프리필터 포함



9 Stainless steel single piece flat work top

for easy cleaning and to prevent contaminants

고품질 스테인리스강 평면 구조의 작업대로 편리한 청소작업 및 오염물질 방지



10 Floor standing

Easy to move & install one piece structure floor standing

이동 · 설치가 편리한 직립일체형 제품 설계구조



Microprocessor Digital Controller with LCD Display



LCD Display
Inflow air Velociy
Inflow 0.51 m/sec

Blower level lamp

Visible & Audible Alarm
Low Air Velocity, Lamp on/off
Fan on/off status indicator

Mode, Lamp on/off,
Fan on/off button

Setting values

- **The controller enables:**
  velocity setting, alarms, filter lifetime check, UV&FL lamp on/off, UV lamp timer, room temperature, present date and time

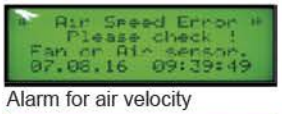
Control function



Menu



UV time setting



Alarm for air velocity



Air velocity set



Menu



Alarm for filter



Alarm for door open



Display for working

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IQ/OQ Validation documentation

* Available with the product on site only

유효성 검증 문서 작업



3 Pieces work tops

for easy sterilization in autoclaves

멸균가능 3 피스분리 작업판



Exhaust air canopy duct

to connect with the duct to Exterior

(for A2 Option) (for B2 Standard)

배출공기 외부브로어 연결용 덕트



Electric Socket with USB Port

for easy connecting equipment without outside contamination

USB 포트 장착 전원 소켓



Arm support

to prevent blocking of the intake grill and for better arm support

유입 공기 방해 방지 팔걸이 작업대



Height adjustable foot rest

for comfotable working posture

상하 높이조절 발걸이

IQ/OQ Validation

Our experienced validation engineers perform installation qualification(IQ) and operational qualification(OQ)



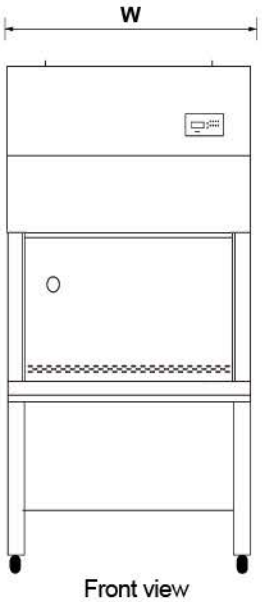
1 **Filter integrity test (PAO Test)** to check for cleanliness and safety of the filters	2 **Downflow & inflow velocity test** to check if the air is supplied uniformly and stably	3 **Lighting intensity test** to check the lighting inside the cabinet is in proper range	4 **Vibration test** to check the vibration of the cabinet during operation is in proper range
5 **Particle count test** to check whether the cabinet maintains proper cleanliness pertinent to the standards	6 **Noise level test** to check for proper noise level during operation	7 **Airflow smoke pattern test** to check the airflow is downward without flowing backwards of leakage	8 **Intake Air Velocity Test**

Remark External dimensions is included the size of door handle, hinge, casters
외부 규격은 돌출된 도어 핸들, 힌지, 바퀴 등이 포함된 치수입니다

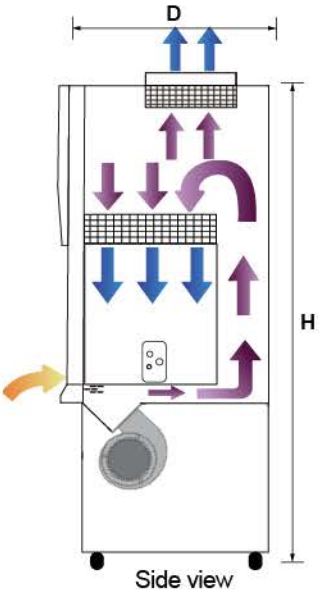
Electric specifications is subject to 50 Hz or 60 Hz frequency voltage
전기 규격은 전압과 50 Hz or 60 Hz 주파수에 따라 기술된 변동 규격입니다

생물학적 안전 작업대 - Class II Type A2





Front view



Side view

MODEL		LCB-603B-A2	LCB-903B-A2	LCB-1203B-A2	LCB-1503B-A2	LCB-1803B-A2
Dimensions (W×D×Hmm)	Interior	590X550X650	900X550X650	1200X550X650	1500X550X650	1800X550X650
	Exterior	750X820X1900	1050X820X1900	1350X820X1900	1650X820X1900	1950X820X1900
	Worktop Dish type	896X450X10	896X450X10	1196X450X10	1496X450X10	1796X450X10
Maximum door opening height		450 mm				
Working door opening height		200 mm (with over height level Alarm)				
Digital Controller		Microprocessor controller with air velocity set, Low air speed alarm, Record working time and date set, Temperature monitoring, UV & FL Lamp operation				
Centrifugal blower	50 Hz ~ 60 Hz	200 ~ 260 w	200 ~ 260 w	200 ~ 260 w	400 ~ 520 w	400 ~ 520 w
Air volume (approx.)	50 Hz ~ 60 Hz (m3/h)	1400 ~ 1450	1400 ~ 1450	1400 ~ 1450	2800 ~ 2900	2800 ~ 2900
Filter type		Standard: ULPA Filter, Aluminum fraimed 99.9999% 0.1 ~ 0.3㎛ particle removal ISO Class 3 Option - PTFE ULPA Filter				
Air flow	Downflow	Standard average: 0.3 m/sec, Range: 0.25~0.35 m/sec				
	Inflow	Standard average: 0.5 m/sec, Range: 0.5 ~ 0.6 m/sec				
Noise sound level		Standard < 60 dB, Range 56~65 dB(A)				
Illumination	Fluorescent Lamp	20 W	20 ~ 36 W, U Type	30 ~ 36 W, U Type	36 ~ 40 W	36 ~ 40 W
	Lux	810 ~ 1200 lux	810 ~ 1200 lux	810 ~ 1200 lux	810 ~ 1200 lux	810 ~ 1200 lux
UV Disinfection	UV Lamp 253.7 nm	20 watt	20 ~ 25 watt	20 ~ 30 watt	36 ~ 40 watt	36 ~ 40 watt
Utility device		npt 1/4 Air/Gas valve, Vaccum valve, 110 V or 220 V Electric socket(selectable), PAO Test valve				
Material	Interior	Stainless steel grade 304 with hair lined finish				
	Exterior	Standard - Epoxy powder coated electro galvanized steel Option - Stainless steel grade 304				
	Door	T. 5mm tempered safety glass sliding door				
Electric supply		110 V 60 Hz or 220 V 50/60 Hz described order				
Net weight (approx.)		220 kg	235 kg	250 kg	290 kg	330 kg
Shipping dimensions (approx.) (W×D×Hmm)		850X900X2000	1150X900X2000	1450X900X2000	1750X900X2000	2100X900X2100
Shipping weight (approx.)		220 kg	235 kg	275 kg	320 kg	350 kg

※Specifications can be changed without prior notice for quality improvement.
※Custom made order is available

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