



# Benchtop

**High Speed** 

Refrigerated Centrifuge

**Labocon Scientific Limited** 

18A Melton Road, Leicester, LE4 5EA, United Kingdom

Phone no: +44 203 3724850 | Email: info@labocon.com

www.labocon.com

Labocon Benchtop High Speed Refrigerated Centrifuge LBHCR-100 Series performs a wide range of separations, offering comprehensive control and set-up options to meet your precise application needs.

They have been designed with integrated refrigeration system, superior temperature control and outstanding product quality. Each centrifuge operates at low noise levels and offers soft-touch lid closure for easy loading and unloading of samples.

#### Features:

- · Adopt advanced CPU control system.
- Microprocessor control of speed, temperature and RCF.
- Maintenance-free frequency conversion motor which can prevent over-speed operation.
- It has been included with protection from over speed, over temperature and imbalance.
- Also it has protection of automatic electronic or mechanical lock to ensure the safety of operators and devices.

## **Applications:**

Labocon Benchtop High Speed Refrigerated Centrifuge delivers efficient sample processing in clinical protocols, cell culture applications, microplate processing and a variety of separation needs.

It is also widely used in the field of blood station, pharmaceutical factory, biochemistry, biological products, etc.



# **Technical Specifications:**

LBHCR-101	LBHCR-102	LBHCR-103
16000	18000	20000
17800	23500	27800
1	4*100 ml	1
Á	-20°C ~ +40°C	
X .	+15 °C	X
	±1 °C	
	5-10 min	
R404A		
±20 rpm		
O-16000rpm		0-20000rpm
50rpm		
0-99mins		
	1 min	4
11/1/1	Microprocessor	I fill
9		
LCD/ Digital		
Frequency Conversion Motor		cor
9 grade		1 18 11
≤60 dB		
	16000 17800 O-16000rpm	16000 18000 17800 23500  4*100 ml  -20°C ~ +40°C  +15 °C  ±1 °C  5-10 min  R404A  ±20 rpm  0-16000rpm  0-18000rpm  50rpm  0-99mins  1 min  Microprocessor  9  LCD/ Digital  Frequency Conversion Moles 9 grade



Power Supply	AC 220V & 110V 50 & 60Hz 18A		
Power Consumption	750 W	950 W	1000 W
Rotor Material		Aluminium Alloy	
Gross Weight		95	
Net Weight	85		
Dimensions (W x D x H) Exterior (For LCD)	610*622*360 mm		
Dimensions (W x D x H) Exterior (For Digital)	410*700*360 mm		
Packing Dimensions (W x D x H)	770*770*550mm		
Catalog No.	9134101541	9134102541	9134103541

Model No.	LBHCR-104	LBHCR-105	
Max. Speed (RPM)	22000	24000	
Max. RCF ( x g)	34700	47800	
Max. Capacity	4*100 ml		
Temperature Range	-20 °C ~ +40 °C		
Ambient Temperature	+15 °C		
Temperature Accuracy	±1 °C		
Cooling time from start up (for Refrigerated Models)	5-10	min	



Refrigerant (for Refrigerated Models)	R404A		
Speed Accuracy	±20 rpm		
Speed Control	0-22000rpm	0-24000rpm	
Set Speed (increments)	50r	pm	
Timer range	0-99	mins	
Set Time (increments)	1 n	nin	
Control System	Micropr	ocessor	
Program Memory	9		
Display	LCD/ Digital		
Motor (DC/ Brushless)	Frequency Conversion Motor		
Acceleration/ Deacceleration Rate	9 grade		
Noise Level	≤60 dB		
Power Supply	AC 220V & 110V 50 & 60Hz 18A		
Power Consumption	1100 W 1200 W		
Rotor Material	Aluminium Alloy		
Gross Weight	95		
Net Weight	85		
V.			



Dimensions (W x D x H) Exterior (For LCD)	610*622*360 mm	
Dimensions (W x D x H) Exterior (For Digital)	410*700*360 mm	
Packing Dimensions (W x D x H)	770*770*550mm	
Catalog No.	9134104541 9134105541	

#### **Accessories**:

#### For LBHCR-105 Model

Model	No. of Tubes x Volume	RPM	RCF(xg)
A	Angle	Rotor	7
AR-1	12x1.5/2 ml	24000	47800xg
AR-2	24x1.5/2.2 ml	13500	17760xg
AR-3	12x10 ml	12000	14800xg
AR-4	8x5 ml	16000	18200xg
AR-5	6x50 ml	13000	17940xg
AR-6	8x50 ml	8000	9800xg
AR-7	4x100 ml	10000	9800xg
AR-8	36x1.5/2 ml	13500	17000xg
Swing Micro-Plate Rotor			
SMR-1	2x2x48 holes	4000	1400xg





Angle Rotor AR-1: 12x1.5/2 ml



Angle Rotor AR-3: 12x10 ml



Angle Rotor AR-4: 8x5 ml

Angle Rotor AR-2: 24x1.5/2 ml



Angle Rotor AR-5: 6x50 ml



Angle Rotor AR-7: 4x100 ml



Angle Rotor AR-6: 8x50 ml



Swing Micro-Plate Rotor SMR-1: 2x2x48 holes







# Benchtop

High Speed

Refrigerated Centrifuge

**Labocon Scientific Limited** 

18A Melton Road, Leicester, LE4 5EA, United Kingdom

Phone no: +44 203 3724850 | Email: info@labocon.com

www.labocon.com

Labocon Benchtop High Speed Refrigerated Centrifuge LBHCR-200 Series performs a wide range of separations, offering comprehensive control and set-up options to meet your precise application needs.

They have been designed with integrated refrigeration system, superior temperature control and outstanding product quality. Each centrifuge operates at low noise levels and offers soft-touch lid closure for easy loading and unloading of samples.

#### Features:

- Adopt advanced CPU control system.
- Microprocessor control of speed, temperature and RCF.
- Maintenance-free frequency conversion motor which can prevent over-speed operation.
- It has been included with protection from over speed, over temperature and imbalance.
- It can meet the requirement of both high speed separation and 4 x 750 ml low speed separation.
- Also it has protection of automatic electronic or mechanical lock to ensure the safety of operators and devices.

#### **Applications:**

Labocon Benchtop High Speed Refrigerated Centrifuge delivers efficient sample processing in clinical protocols, cell culture applications, microplate processing and a variety of separation needs.

It is also widely used in the field of blood station, pharmaceutical factory, biochemistry, biological products, etc.



Model No.	LBHCR-201	
Max. Speed (RPM)	22000	
Max. RCF ( x g)	34700	
Max. Capacity	4*750 ml	
Temperature Range	-20°C ~+40°C	
Ambient Temperature	+15 °C	
Temperature Accuracy	±1 C	
Cooling time from start up	5-10 min	
Refrigerant	R404A	
Speed Accuracy	±20 rpm	
Speed Control	0-22000rpm	
Set Speed (increments)	50rpm	
Timer range	9Hour59min	
Set Time (increments)	2 min	
Control System	Microprocessor	
Program Memory		
Display	LCD/ Digital	
Motor (DC/ Brushless)	Frequency Conversion Motor	
Acceleration/ Deacceleration Rate	10 grade	
Noise Level	≤65 dB	
Power Supply	AC 220V & 110V 50 & 60Hz 18A	



Rotor Material	1200 W	
Power Consumption	95	
Gross Weight	95	
Net Weight	85	
Dimensions (W x D x H) Exterior		
Packing Dimensions (W x D x H)		
Catalog No.	9134201541	

# Accessories:

#### For LBHCR-100 Series

Model	No. of Tubes x Volume	RPM	RCF(xg)
1	Angle	Rotor	/ / /
AR-1	12x1.5/2.2 ml	22000	34700
AR-2	8x5 ml	16500	18360
AR-3	12x10/15 ml	15000	23120
AR-4	6x30 ml	15000	23120
AR-5	6x50 ml	13000	17940
AR-6	8 x 50ml	8000	9800
AR-7	6 x 300ml	10000	18300
	Swing Rotor		
SR-1	4x750 ml	4000 rpm	3500xg





Angle Rotor AR-1: 12x1.5/2.2 ml



Angle Rotor AR-3: 12x10/15 ml



Angle Rotor AR-2: 8x5 ml



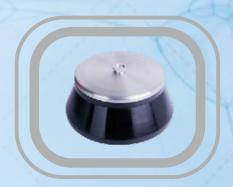
Angle Rotor AR-5: 6x50 ml



Angle Rotor AR-4: 6x30 ml



Swing Rotor SR-1: 4x750 ml



Angle Rotor AR-7: 6 x 300ml



Angle Rotor AR-4: 8x5 ml







# Floor Type

Refrigerated

Low Speed Centrifuge

Labocon Scientific Limited

18A Melton Road, Leicester, LE4 5EA, United Kingdom Phone no: +44 203 3724850 | Email: info@labocon.com

www.labocon.com

Labocon Floor Type Low Speed Refrigerated Centrifuge LFHCR-100 series performs a wide range of separations, offering comprehensive control and set-up options to meet precise application needs.

It have been designed with integrated refrigeration system, superior temperature control and outstanding product quality. Each centrifuge operates at low noise levels and offers soft-touch lid closure for easy loading and unloading of samples.

#### Features:

#### Easy operation:

It is equipped with a touch panel, digital display and programmable application, which can be operated freely with variety of rotors for selection.

#### Superior performance:

Microprocessor control, frequency conversion motor, without carbon dust pollution can extend the working life of the device.

With function of freely setting the acceleration time, deceleration time and automatically calculating RCF can achieve the best centrifugal effect.

#### • Safe and Reliable performance:

It has been included with protection from over speed, over temperature and imbalance.

Also it has protection of automatic electronic or mechanical lock to ensure the safety of operators and devices.

## **Application:**

Labocon Floor Type Low Speed Refrigerated Centrifuge delivers efficient sample processing in clinical protocols, cell culture applications, microplate processing and a variety of separation needs. It is also widely used in the field of blood station, pharmaceutical factory, biochemistry, biological products, etc.



# **Technical Specifications:**

Model No.	LFHCR-101	LFHCR-102	LFHCR-103
Max. Speed (RPM)	10000	21000	22000
Max. RCF ( x g)	18300	52300	53000
Max. Capacity	6*1000 ml	400	O ml
Temperature Range		-20°C ~+40°C	
Ambient Temperature	w/	+15°C	
Temperature Accuracy		±1∘C	3/1
Cooling time from start up		5-10 min	
Refrigerant	R404a		
Speed Accuracy		±50 rpm	
Speed Control	0-10000	0-21000	0-22000
Set Speed (increments)	50 rpm	100	rpm
Timer range	0~23 hours 59mins		
Set Time (increments)	1s		
Control System	Microprocessor		
Program Memory	9	3	5
Display	LCD		X 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Motor (DC/ Brushless)	Frequency Conversion Motor		tor
Acceleration/ Deacceleration Rate	0-9 grade		



Noise Level	≤65 dB		
Rotor Material	Aluminium Alloy Aluminium Alloy/Carbon Fiber		
Power Supply	AC 220V & 110V 50 & 60Hz 5A	AC 220V 50Hz 30A	AC 220V 50Hz 30A
Power Consumption	2200 W	3000 W	3200 W
Gross Weight	330 kg		
Net Weight	260kg		
Dimensions (W x D x H) Exterior	710*820*1200 mm		
Packing Dimensions (W x D x H)	950*1000*1400 mm		
Catalog No.	9138101541	9138102541	9138103541

Model No.	LFHCR-104	LFHCR-105	
Max. Speed (RPM)	24000	26000	
Max. RCF ( x g)	58500	75800	
Max. Capacity	300	O ml	
Temperature Range	-20°C ~+40°C		
Ambient Temperature	+15°C		
Temperature Accuracy	±1°C		
Cooling time from start up	5-10 min		
Refrigerant	R404a		
Speed Accuracy	±100 rpm ±10 rpm		
Speed Control	0-24000	0-26000	



Set Speed (increments)	100 rpm				
Timer range	0~23 hours 59mins				
Set Time (increments)	1	S			
Control System	Micropr	ocessor			
Program Memory	3	5			
Display	LC	CD CD			
Motor (DC/ Brushless)	Frequen	cy Motor			
Acceleration/ Deacceleration Rate	O-9 <u>c</u>	grade			
Noise Level	≤65 dB				
Rotor Material	Aluminium Alloy/Carbon Fiber				
Power Supply	DC 220V & 110	10V 50Hz 30A			
Power Consumption	5000 W	5500 W			
Gross Weight	330 kg				
Net Weight	260kg				
Dimensions (W x D x H) Exterior	710*820*1200 mm				
Packing Dimensions (W x D x H)	950*1000	*1400 mm			
Catalog No.	9138104541	9138105541			



Angle Rotor AR-1: 6×300ml



Angle Rotor AR-2: 6×500ml







Model	No. of Tubes x Volume	RPM	RCF							
Continuous Centrifugal Rotor										
CR-1	1000ml	14000	21500							
CR-1	1000ml	16000	28200							
CR-2	3000ml	8000	9500							
CR-3	3000ml	10000	14800							
	Angle	Rotor								
AR-1	12x1.5 ml	22000	53000g							
AR-2	AR-2 16x10 ml/12x10 ml		50400g							
AR-3	6x50 ml	20000	43000g							
AR-4	8 x 50 ml	18000	37600g							
AR-5	6x70 ml	15000	25700g							



AR-6       8x100 ml       14000       26952g         AR-7       6x250 ml       14000       30200g         AR-8       4x300 ml       12000       22470g         AR-9       6x300 ml       12000       22470g         AR-10       6x500 ml       10000       17800g         AR-11       4 x 1000 ml       8000       12000g         Swing Rotor         SR-1       4x750 ml (500)       4000       5470xg         SR-2       4x300 ml       4000       4210xg         SR-3       48x15 ml       4000       4210xg         Swing Microplate Rotor         SMR-1       2x2x96 holes       4000       2300xg										
AR-8 4x300 ml 12000 22470g  AR-9 6x300 ml 12000 22470g  AR-10 6x500 ml 10000 17800g  AR-11 4x1000 ml 8000 12000g  Swing Rotor  SR-1 4x750 ml (500) 4000 5470xg  SR-2 4x300 ml 4000 4210xg  SR-3 48x15 ml 4000 4210xg  Swing Microplate Rotor	AR-6	8x100 ml	14000	26952g						
AR-9 6x300 ml 12000 22470g  AR-10 6x500 ml 10000 17800g  AR-11 4x1000 ml 8000 12000g  Swing Rotor  SR-1 4x750 ml (500) 4000 5470xg  SR-2 4x300 ml 4000 4210xg  SR-3 48x15 ml 4000 4210xg  Swing Microplate Rotor	AR-7	6x250 ml	14000	30200g						
AR-10 6x500 ml 10000 17800g  AR-11 4x1000 ml 8000 12000g  Swing Rotor  SR-1 4x750 ml (500) 4000 5470xg  SR-2 4x300 ml 4000 4210xg  SR-3 48x15 ml 4000 4210xg  Swing Microplate Rotor	AR-8	4x300 ml	12000	22470g						
AR-11 4 x 1000 ml 8000 12000g  Swing Rotor  SR-1 4x750 ml (500) 4000 5470xg  SR-2 4x300 ml 4000 4210xg  SR-3 48x15 ml 4000 4210xg  Swing Microplate Rotor	AR-9	6x300 ml	12000	22470g						
Swing Rotor           SR-1         4x750 ml (500)         4000         5470xg           SR-2         4x300 ml         4000         4210xg           SR-3         48x15 ml         4000         4210xg           Swing Microplate Rotor	AR-10	6x500 ml	10000	17800g						
SR-1       4x750 ml (500)       4000       5470xg         SR-2       4x300 ml       4000       4210xg         SR-3       48x15 ml       4000       4210xg         Swing Microplate Rotor	AR-11	4 x 1000 ml	8000	12000g						
SR-2       4x300 ml       4000       4210xg         SR-3       48x15 ml       4000       4210xg         Swing Microplate Rotor	\ \	Swir	ng Rotor							
SR-3 48x15 ml 4000 4210xg  Swing Microplate Rotor	SR-1	4x750 ml (500)	4000	5470xg						
Swing Microplate Rotor	SR-2	4x300 ml 4000 4		4210xg						
	SR-3	48x15 ml	4000	4210xg						
SMR-1 2x2x96 holes 4000 2300xg		Swing Microplate Rotor								
	SMR-1	2x2x96 holes	4000	2300xg						

#### Accessories:

#### For LFHCR-104 & LFHCR-105

Model No.	No. of tubes x Volume	RPM	RCF						
Continuous Centrifugal Rotor									
CR-1	1000ml	14000	21500						
CR-2	1000ml	16000	28200						
CR-3	3000ml	8000	9500						



CR-4	3000ml	10000	14800							
Angle Rotor										
AR-1	24×1.5/2.0ml	26000	75800							
SR-2	18×10ml	23000	59250							
AR-3	8×50ml	20000	48380							
SR-4	4×250ml	14000	38600							





# Labocon Benchtop High Speed Refrigerated /Non-Refrigerated Centrifuge Advanced Series LBHCA100 Series







Labocon Benchtop High Speed Refrigerated / Non-Refrigerated Centrifuge LBHCA-100 Series specializes in quality, design, and innovation that comes from a heritage of many years of experience. LBHCA-100 Series offers maximum application versatility including a high-capacity, general-purpose centrifuge for cell harvesting; a high-speed centrifuge for separating cell lysates; and a microcentrifuge for DNA precipitations.

#### **Features**

#### **Performance And Versatility**

- Max. capacity of 4x400ml
- Spin up to 15000rpm/23646xg
- Interchangeable swing-bucket and high-speed fixed-angle rotors
- Broad range of adapters and modular accessories
- Temperature ranges from -10°C to +40°C
- Rotors can be spun at maximum speed and still maintain the setting temperature
- <u>Standby Smart Cooling Function</u> with minimum compressor using with minimalistic electricity consumption to enhance compressor life with less electricity consumption and same time maintains temperature so that as and when require instrument is readyto use without waiting for recoiling with more energy consumption
- RS232 Port /USB Port-Optional

#### **User-friendly Interface**

- Large back-lit LCD display of RCF, time, temperature, acceleration, braking rates anderror messages
- Easy control for parameter setting and precise control by microprocessor
- Short-spin key enables quick runs at your desired rotational speed.
- P1, P2, P3 shortcut function button for easy access to three frequently used programs.
- Save up to 10 individual user programs
- Values can be changed during centrifugation

## **Operation and safety**

- Automatic rotor identification
- Electronic imbalance detection
- The lid is locked by electronic latch automatically
- Complete Powder coating SS-304 Construction
- High quality rotors (aluminum-copper alloys, Aerosol-tight, Autoclavable (121°C, 20min)
- 9 acceleration and ten braking rates for added protection of sensitive sample material
- Powerful motors for short acceleration and brake times
- Drainage



## **Application:**

Labocon Benchtop High Speed Refrigerated/Non-Refrigerated Centrifuge Advanced-100 Series is widely used for applications in PCR, micro-volume protocols like nucleic acid or protein lysatepreparation, separation of biological products and blood sample, pelleting of DNA and RNA samples, pelleting of PCR amplified nucleic acids, separation of antibody and protein precipitates, performing enzymatic tests, removing cell debris from cell homogenates, and achieving bacterial and yeast cell fractionation.

## **Specification:**

Model	LBHCAR-103	LBHCA-103				
Max. speed	150	000rpm				
Min. speed	30	00rpm				
Max. RCF	23	,646xg				
Noise at max. speed	≥	:48dB				
Temperature range	-10 °C ∼ 40 °C	NON-REFRIGERANT				
Step length	In 100rpi	m Increments				
Max. capacity	4x	400ml				
Control	Micropro	cessor control				
Running time	≤9h 59m	in. quick spin				
Accel. / Braking curves		9/9				
Rotor options		10				
Drive	Brushless i	nduction motor				
Power supply	220V/	50Hz-60Hz				
Refrigerant	R404a (CFC-free) NON-REFRIGERANT					
Dimensions (WxDxH) mm	670x410x790 mm	670x410x550 mm				
Net weight without rotor	126Kg	105Kg				



#### **Accessories**:

Model	Capacity	Type	Diameter	Length	Specification	Packed/Unit	Maxi. radius	Maxi. RCF
	Angle Rotor					Adaptor		
AR-1	24x1.5/2ml	Round	ø 11mm	47 mm	On request	On request	8.7cm	28111xg
AR-2	24x0.5ml	Conical	ø 8mm	32 mm	1x0.5ml	24 PCS	7.4cm	23910xg
AR-3	24x0.2ml	Conical	ø 6.5 mm	22 mm	1x0.2ml	24 PCS	6.7cm	21648xg

Note: Fixed angle rotor / 24x2.0 ml, 17000rpm, 28111xg,  $45^{\circ}$ 

Model	Capacity	Туре	Diameter	Length	Specification	Packed/ Unit	Maxi. radius	Maxi. RCF
	A	ngle Rotor			Adapt	cor		
AR-4	6x94ml	Round	ø38mm	116mm	On request	On request	10.1cm	16261xg
AR-5	6x50ml	Conical	ø 29.5mm	116mm	1x50ml	6 PCS	9.5cm	15294xg
AR-6	6x50ml	Round	ø 29mm	115mm	1x50ml	6 PCS	9.7cm	15616xg
AR-7	6x38ml	Round	ø 25.5mm	96mm	1x38ml	6 PCS	8.7cm	14006xg
AR-8	6x16ml	Round	ø 18mm	114mm	1x16ml	6 PCS	9.2cm	14811xg
AR-9	6x15ml	Conical	ø 16mm	120mm	1x15ml	6 PCS	9.1cm	14650xg
AR-10	12x12ml	Round	ø 16mm	112mm	2x12ml	6 PCS	9.9cm	15938xg
AR-11	6x10ml	Round	ø 16mm	82mm	1x10ml	6 PCS	8.7cm	14006xg
AR-12	18x6.5ml	Round	ø 13mm	104mm	3x6.5ml	6 PCS	9.8cm	15777xg
AR-13	12x5ml	Round	ø 13.5mm	52mm	2x5ml	6 PCS	8.1cm	13040xg
AR-14	24x3.5ml	Round	ø 11mm	85mm	4x3.5ml	6 PCS	8.8cm	14167xg
AR-15	24x1.5ml	Conical	ø 11mm	41mm	4x1.5ml	6 PCS	7.1cm	11430xg

Note: Fixed angle rotor / 6x94ml, 12000rpm, 16261xg,  $26^{\circ}$ 



Model	Capacity	Туре	Diameter	Length	Specificati on	Packed /Unit	Maxi. radiu s	Maxi. RCF
	A	ngle Rotor			Ada or	•		
AR-16	8x50ml	Round	ø29mm	112mm	On request	On request	10.7cm	17227xg
AR-17	8x38ml	Round	ø 25.5mm	92mm	1x38ml	8 PCS	9.5cm	15294xg
AR-18	8x16ml	Round	ø 18mm	108mm	1x16ml	8 PCS	10.0cm	16099xg
AR-19	8x15ml	Round	ø 16mm	115mm	1x15ml	8 PCS	10.2cm	16421xg
AR-20	8x12ml	Round	ø 16mm	104mm	1x12ml	8 PCS	9.9cm	15938xg
AR-21	8x10ml	Round	ø 16mm	82mm	1x10ml	8 PCS	9.6cm	15455xg
AR-22	8x6.5ml	Round	ø 13mm	104mm	1x6.5ml	8 PCS	9.7cm	15616xg
AR-23	8x5.0ml	Round	ø 13.5mm	52mm	1x5ml	8 PCS	8.1cm	13040xg
AR-24	24x3.5ml	Round	ø 11mm	82mm	3x3.5ml	8 PCS	9.3cm	14972xg
AR-25	16x1.5ml	Conical	ø 11mm	41mm	2x1.5ml	8 PCS	7.4cm	11913xg

Note: Fixed Angle Rotor/8x50ml, 12000rpm, 17227xg,  $30^\circ$ 

Model	Capacity	L x w x H (mm)	Specification	Packed/Unit	Maxi. RCF	Maxi. RCF
	Microplate rotor		Adaptor			
AR-26	6x96-hole microplate	128x85.6x15	On request	On request	13.6cm	1368xg
AR-27	4x24-hole microplate	128x85.6x21	On request	On request	13.6cm	1368xg
AR-28	2x96-hole deep microplate	128x85.6x45	On request	On request	13.6cm	1368xg

Note: Microplate rotor with 2 rack / 2 microplate, 3000 rpm, 1368 xg,  $90^\circ$  (included2 microplate buckets)

Model	Capacity	Туре	Diameter	Length	Specification	Packed/Unit
		Adar	otor			
AR-29	48x1.5/2ml	Round	ø 11mm	47 mm	On request	On request
AR-30	48x0.5ml	Round	ø 8mm	32 mm	1x0.5ml	48 PCS
AR-31	48x0.2ml	Conical	ø 6.5 mm	22 mm	1x0.2ml	48 PCS

Note: Fixed angle rotor / 48x2ml, 15000rpm, 23646xg, 45°



Model	Capacity	Туре	Diameter	Length	Specification	Packed/Unit
		Angle Rotor	Ada	ptor		
AR-32	8x.0.2ml	Conical	ø 6.5mm	On request	On request	8 PCS
AR-33	64x0.2ml	Conical	ø 6.5 mm	22 mm	On request	64 PCS

Note: Fixed angle rotor / 8x8x0.2ml, 13000rpm, 13604xg,  $45^{\circ}$ 

All Angle Rotors are available with all kind of require adaptor as per standards as well customize requirement with various capacity & angle \* with request

Model	Capacity	Type	Diameter	Length	Specification	Packed/ Unit
		Adaptor				
SR-1	4x400ml	Flat	ø 87 mm	136mm	On request	On request
SR-2	4x210ml	Flat	ø 66 mm	107mm	1x210ml	4 PCS
SR-3	4x180ml	Flat	ø 56mm	119mm	1x180ml	4 PCS
SR-4	4x100ml	Flat	ø 45mm	100mm	1x100ml	4 PCS
SR-5	16x50ml	Conical	ø 29.5mm	116mm	4x50ml	4 PCS
SR-6	40x15ml	Conical	ø 16.5mm	120mm	10x15ml	4 PCS
SR-7	56x10ml	Round	ø 13.5mm	82mm	14x10ml	4 PCS
SR-8	76x7ml	Round	ø 13mm	115mm	19x7ml	4 PCS
SR-9	76x5ml	Round	ø 13mm	≤ 115mm	19x5ml	4 PCS

Note: Swing out Rotor/4x400ml, 4500rpm, 4437xg, 90°

Model	Capacity	Туре	Diameter	Length	Specification	Packed/ Unit
Swing out rotor					Ada	ptor
SR-10	250ml	Conical	ø 59.5mm	163mm	On request	On request
SR-11	50ml	Conical	ø 29.5mm	116mm	1x50ml	4 PCS
SR-12	15ml	Conical	ø 16mm	120mm	3x50ml	4 PCS

Note: Swing out rotor / 4x250 ml, 4000rpm, 3577xg90°

Model	Capacity	Туре	Diameter	Length	Specificati on	Packed/ Unit
	Swing out rotor					ptor
SR-13	4x250ml	Conical	ø 59.5mm	163mm	On request	On request
SR-14	12x50ml	Conical	ø 29.5mm	116mm	3x50ml	4 PCS
SR-15	28x15ml	Conical	ø 16mm	120mm	7x15ml	4 PCS

Note: Swing out rotor / 4x250ml, 3800rpm, 3180xg,  $90^{\circ}$ 





fixed angle rotor



fixed angle rotor



**Fixed Angle Rotor** 



Microplate rotor



**Fixed Angle Rotor** 



**Fixed Angle Rotor** 



Swing out Rotor



**Swing out rotor** 





Labocon Benchtop High Speed Refrigerated /Non-Refrigerated Centrifuge Advanced Series LBHCA/R-100 Series Model: LBHCAR-104/105







Labocon Benchtop High Speed Refrigerated Centrifuge LBHCAR-100 Series: Model: LBHCAR-104 & 105 performs a wide range of separations, offering comprehensive control and set-up options to meet your precise application needs. They have been designed with integrated refrigeration system, superior temperature control and outstanding product quality. Each centrifuge operates at low noise levels and offers soft-touch lid closure for easy loading and unloading of samples.

#### **Features:**

- Universal centrifuge with selectable options (optional fixed-angle rotor, swing-bucket rotor, microplate rotor).
- Silent operation.
- Microprocessor controlled centrifuge with variable speed and time setting.
- LCD display for easy setting and readability across multiple parameters (rotor model, temperature, time, RCF and RPM).
- Soft touch keypad for parameters setting, special key for RCF.
- Brushless AC motor for maintenance free long life.
- Double lids and double locks, lid locking and holding during rotor run for safe operation.
- User programmable-user can save and run up to 20 user-defined programs.
- Adjustable ramp & brake speeds (up to 15 speed selection).
- Count down at set RPM & one touch short spin operation.
- Automatic imbalance detection with audible alarm & overspeed protection.
- User can set parameters when centrifuge is in operation (not program).
- The shortest acceleration/braking time less than 30s.
- Pre-cooling function, quick cooling function- rotor chamber attains 4°C from ambient temperature in 5-7 minutes.
- Stand-by function maintains the constant temperature.
- Danfoss compressor
- Interchangeable swing-bucket and high-speed fixed-angle rotors
- Broad range of adapters and modular accessories
- Temperature ranges from -10°C to +40°C with temperature Accuracy & Uniformity of ± 0.1 degree C
- Rotors can be spun at maximum speed and still maintain the setting temperature
- Standby Smart Cooling Function with minimum compressor using with minimalistic electricity consumption to enhance compressor life with less electricity consumption and same time maintains temperature so that as and when require instrument is ready to use without waiting for recoiling with more energy consumption
- RS232 Port /USB Port-Optional



#### **Operation and safety**

- Automatic rotor identification
- Electronic imbalance detection
- The lid is locked by electronic latch automatically
- Complete Powder coating SS-304 Construction
- High quality rotors (aluminum-copper alloys, 0 ptional: Aerosoltight, Autoclavable (121°C,20min)
- 9 acceleration and ten braking rates for added protection of sensitive sample material
- Powerful motors for short acceleration and brake times
- Drainage

#### **Applications:**

- Labocon Benchtop High Speed Refrigerated Centrifuge delivers efficient sample processing in clinical protocols, cell culture applications, microplate processing and a variety of separation needs.
- It is also widely used in the field of blood station, pharmaceutical factory, biochemistry, biological products, etc.

#### **Specifications:**

Model	LBHCAR-104	LBHCAR-105	
Max Speed	23000 rpm	24000 rpm	
Max RCF	36795×g	40217×g	
Max Capacity	4×300 ml	4×750 ml	
Speed Accuracy	±5 rpm		
Timer	1 s-99 min, continuous operation, one touch short sp		
	operation		
Noise	$\leq 49$	9 dB	
Power Supply	220V	50Hz	
Weight	95 kg	150 kg	
Dimensions (W×D×H)	570×590×490 mm	600×790×890 mm	



#### **Accessories:**

## **Rotors For LBHCAR-104**

Model	Model No. of Tube x Volume		RCF (xg)				
Angle Rotor							
AR-1	12×0.5 ml	23000 rpm	32625×g				
AR-2	24×0.5 ml	18000 rpm	24631×g				
AR-3	48×0.5 ml	16000 rpm	22324×g				
AR-4	32×0.2 ml	12000 rpm	10464×g				
AR-5	12×1.5 ml/2.2 ml	22000 rpm	36795×g				
AR-6	24×1.5 ml/2.2 ml	16500 rpm	25871×g				
AR-7	36×1.5 ml/2.2 ml	14000 rpm	34237×g				
AR-8	12×5 ml	16500 rpm	25871×g				
AR-9	12×10 ml	15000 rpm	22891×g				
AR-10	8×15 ml	12500 rpm	15721×g				
AR-11	6×30 ml	15000 rpm	21885×g				
AR-12	6×50 ml	13000 rpm	19838×g				
AR-13	4×100 ml	12000 rpm	16904×g				
AR-14	6×100 ml	12000 rpm	19320×g				
AR-15	AR-15 0.2ml*4*8 PCR		18848×g				
	Microplate Rotor						
SMR-1	2x2x96	4500 rpm	3781×g				

# **Swing-Out-Rotors SR-1**

0				
Model	No. of Tube x Volume	RPM	RCF (xg)	For Adaptors (Tube Capacity Bottom Type)
		4500 rpm	3781xg	4×25 ml Conical
	4x300 ml			4×100 ml Conical
				8×50 ml Conical
SR-1				12×50 ml Round Bottom
				28×15 ml Conical
				40x10 ml
				76×5 ml
				56×5 ml



## **Rotors For LBHCAR-105**

Model	No. of Tube x Volume	RPM	RCF (xg)				
Angle Rotor							
AR-1	12×0.5 ml	24000 rpm	32625×g				
AR-2	24×0.5 ml	18000 rpm	24631×g				
AR-3	48×0.5 ml	16000 rpm	22324×g				
AR-4	32×0.2 ml	12000 rpm	10464×g				
AR-5	12×1.5 ml/2.2 ml	22000 rpm	36795×g				
AR-6	24×1.5 ml/2.2 ml	16500 rpm	25871×g				
AR-7	36×1.5 ml/2.2 ml	14000 rpm	34237×g				
AR-8	12×5 ml	16500 rpm	25871×g				
AR-9	12×10 ml	15000 rpm	22891×g				
AR-10	8×15 ml	12500 rpm	15721×g				
AR-11	6×30 ml	15000 rpm	21885×g				
AR-12	6×50 ml	13000 rpm	19838×g				
AR-13	4×100 ml	12000 rpm	16904×g				
AR-14	6×100 ml	12000 rpm	19320×g				
AR-15	0.2ml*4*8 PCR	14000 rpm	18848×g				

# **Swing-Out-Rotors SR-1**

Model	No. of Tube x Volume	RPM	RCF (xg)	For Adaptors (Tube Capacity Bottom Type)
			3550×g	4×500 ml nConical
				4×250 ml Conical
				8×100 ml Conical
		4200 rpm		12×100 ml Round Bottom
SR-1	4×750 ml 420			20×50 ml Conical
JIV-1				28×50 ml Round Bottom
				56×15 ml/20 ml Round Bottom
				76×15 ml
				96×5 ml
				148×5 ml





# **Labocon Scientific Limited**

18A Melton Road, Leicester, LE4 5EA, United Kingdom

Phone no: +44 203 3724850 | Email: info@labocon.com

www.labocon.com