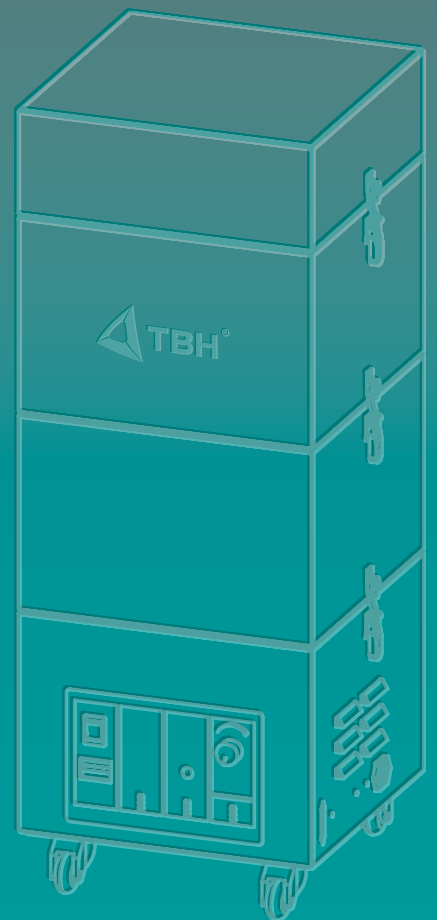
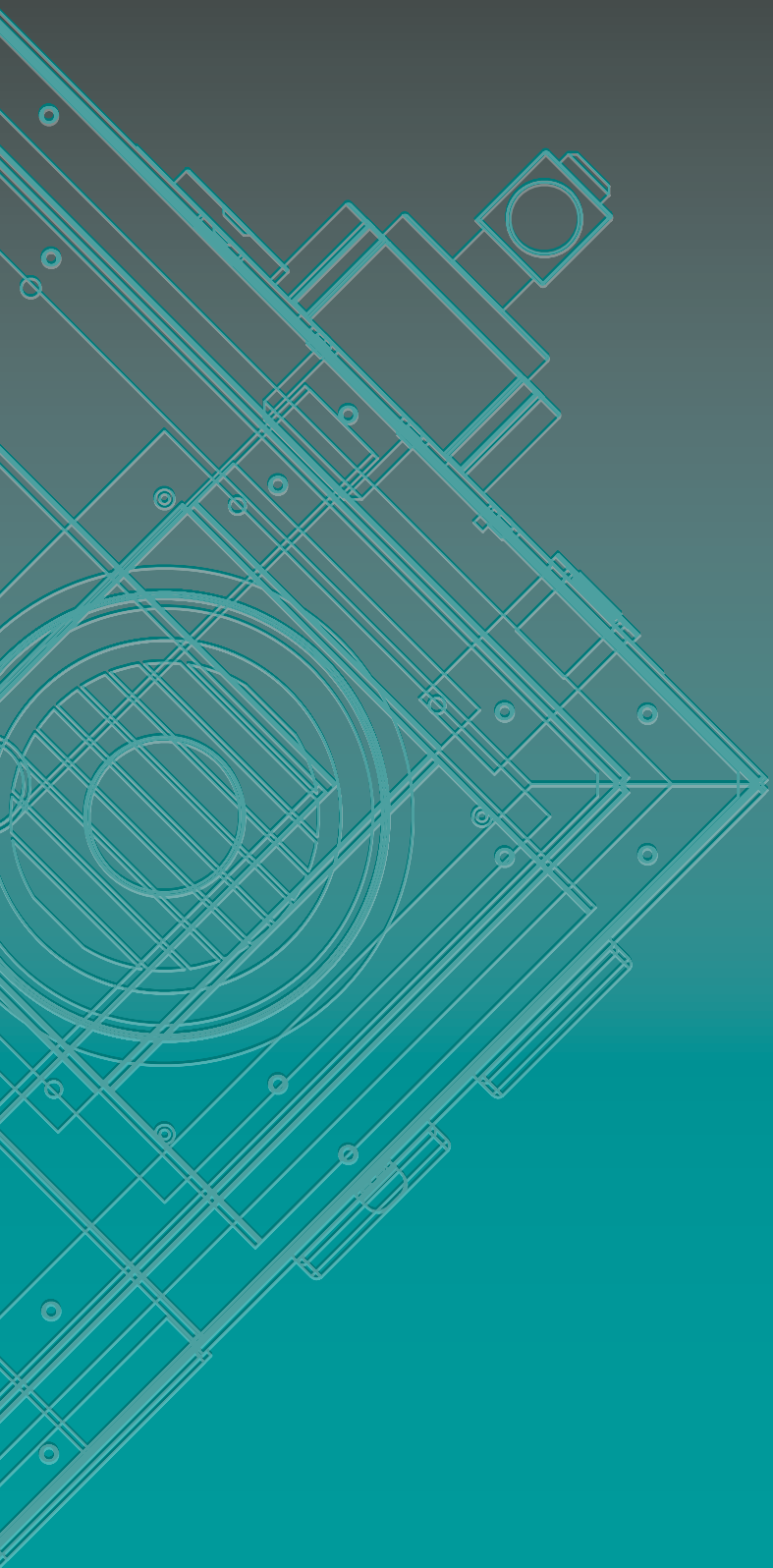


LN 200-SERIES

EXTRACTION / FILTER / POLLUTION CONTROL // TECHNOLOGY



LN 200-SERIES

APPLICATION

The devices in the LN 200 series feature a compact, modular design which allows simple adjustment of the filter configuration for individual applications. Thanks to the special high-power turbine, the units can be arranged in decentralised positions and extract reliably even over long distances.

AREAS OF APPLICATION:

- Soldering (single/multi-site extraction)
- Laser processing (source extraction tubes, or compact laser cabinets)
- Processes for working with adhesive/moist dusts
- Processes for working with vapours/gases



Similar to image

THE SYSTEM INCLUDES NUMEROUS FEATURES:

- Modular design - upgradeable with various filter modules
- Easy filter replacement
- Powerful electronics
- High negative pressure for powerful extraction

FUNCTIONAL PRINCIPLE

The contaminated air is collected by the collection unit (extractor hood, suction arm, hose, etc.) and transported into the filter unit directly or through a pipe or flexible hose. In the filter unit, the contaminant particles are filtered into different filter levels according to their size. Filter units that are equipped with a molecular sieve (for example activated carbon/BAC filters) remove the majority of gaseous contaminants. Afterwards the purified air can either be circulated back into the work area or diverted outdoors through an exhaust duct. Recirculating the air in the work area is a way to easily reduce energy costs.

PRODUCT FEATURES

MODULAR DESIGN - UPGRADEABLE WITH VARIOUS FILTER MODULES

The filter systems of the LN 200 series can be equipped with different filter modules depending on the application. This optimises filter costs and enables the extraction and filter systems to be adjusted to meet changing requirements.



EASY FILTER REPLACEMENT

The filter is replaced by simply removing it from above. This ensures simple, clean filter replacements for the employees or maintenance service staff.



POWERFUL ELECTRONICS

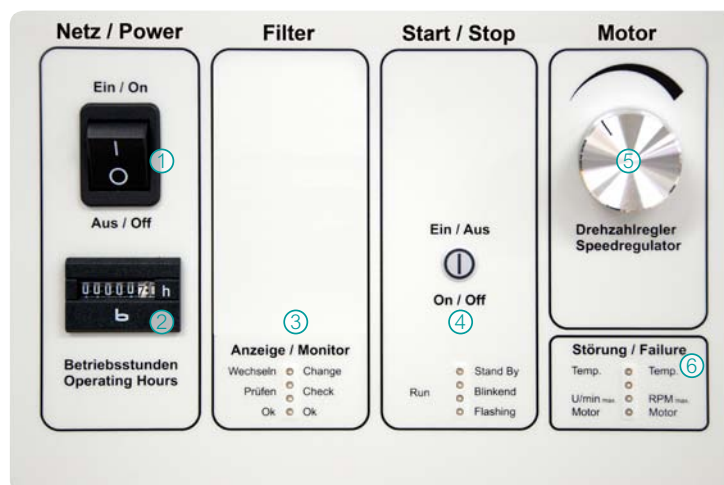
All systems come equipped with a 25-pin D-sub interface. The following functions can be controlled and monitored using both the display and this interface:

- Fully adjustable speed control (automatic readjustment as the filter saturation increases)
- Advance warning when filter saturation reaches 75%
- Visual and acoustic signals when filter is saturated
- Displays notification of malfunctions
- Switching between start and standby modes



OPERATING ELEMENTS:

- 1) Power switch
- 2) Operating hour meter
- 3) Filter saturation indicator
- 4) Switch between run and stand-by modes
- 5) Manual speed control
- 6) Temperature and turbine malfunction indicator



HIGH NEGATIVE PRESSURE FOR POWERFUL EXTRACTION

The devices in the LN 200 series generate especially high negative pressure. This makes them ideal for extracting with small collection elements or even the customer's own equipment or through long extraction ducts. This allows decentralised positioning of the extraction system for multiple extraction sites (for example manual workstations). If you need an effective design for special applications, please contact the TBH sales team.

ADSORPTION OF GASEOUS SUBSTANCES

Two complimentary filter materials are used for the adsorption of gaseous substances. The activated carbon facilitates the physical adsorption process while the BAC granules facilitate a chemical adsorption process. Neutralisation of specific gaseous substances is achieved through chemical binding with the reaction substance that is deposited on the carrier material. Because the physical and chemical adsorption processes are complementary, an extremely wide range of gases and odours can be collected.

Activated carbon



BAC granules



Activated carbon/BAC



TECHNICAL DATA LN 230



Similar to image

AREAS OF APPLICATION:

- Soldering (single/multi-site extraction)
- Laser processing (source extraction tubes, or compact laser cabinets)
- Processes for working with adhesive/moist dusts
- Processes for working with vapours/gases

INCLUDES:

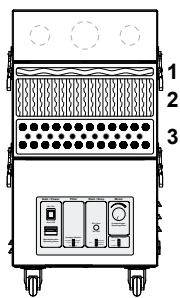
- Fully assembled (incl. the filter configuration of your choice)
- 4 wheels for mobile use
- Power cable

TECHNICAL SPECIFICATIONS	UNIT	STANDARD	Z	A	ZA	TZA	MP
Unimpeded air flow rate	m³/h	max. 320	max. 320	max. 320	max. 320	max. 320	max. 320
Effective air flow rate	m³/h	50-250	50-250	50-250	50-250	50-250	50-250
Max. static pressure	Pa	20000	20000	20000	20000	20000	20000
Voltage	V	230/120	230/120	230/120	230/120	230/120	230/120
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Power input	kW	1.1	1.1	1.1	1.1	1.1	1.1
Protection class	-	1	1	1	1	1	1
Motor and drive system	-	brushless motor					
Noise level	db(A)	ca. 62	ca. 62	ca. 62	ca. 62	ca. 62	ca. 62
Serial interface	D-sub	25-pin	25-pin	25-pin	25-pin	25-pin	25-pin
Weight	kg	ca. 40	ca. 40	ca. 40	ca. 55	ca. 70	ca. 42
Dimensions (Height)	mm	700	700	700	930	1170	875
Dimensions (Width x Depth)	mm	350x350	350x350	350x350	350x350	350x350	350x350
DN 50 intake socket	number	2	2	2	2	2	2
DN 80 intake socket	number	1	1	1	1	1	1
DN 100 intake socket	number	1	1	1	1	1	1
Colour	RAL	7035	7035	7035	7035	7035	7035

FILTER CONFIGURATION

	Pre-filter mat (F5)	✓	-	✓	-	-	-
T	Pocket filter (F5/F6)	-	-	-	-	✓	-
MP	MP-TEC filter (F7)	-	-	-	-	-	✓
Z	Z-line panel filter (F7)	-	✓	-	✓	✓	-
	Particle filter (H13)	✓	✓	-	✓	✓	✓
A	Activated carbon/BAC filter	10 liter	-	18 liter	18 liter	18 liter	-

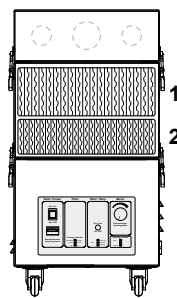
ORDER DATA LN 230



STANDARD

DESCRIPTION	ART.-NO.
LN 230 230V 50/60Hz	90001
LN 230 120V 50/60Hz	90002

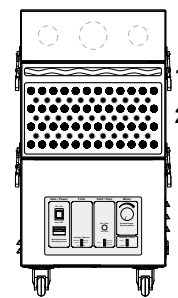
REPLACEMENT FILTERS	
Pre-filter mat	10040 1
Z-line panel filter	-
Particle filter	10013 2
Activated carbon/BAC	10004 3



Z

DESCRIPTION	ART.-NO.
LN 230 230V 50/60Hz	90007
LN 230 120V 50/60Hz	90008

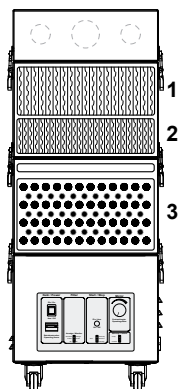
REPLACEMENT FILTERS	
Pre-filter mat	-
Z-line panel filter	14996 1
Particle filter	10013 2
Activated carbon/BAC	-



A

DESCRIPTION	ART.-NO.
LN 230 230V 50/60Hz	90003
LN 230 120V 50/60Hz	90006

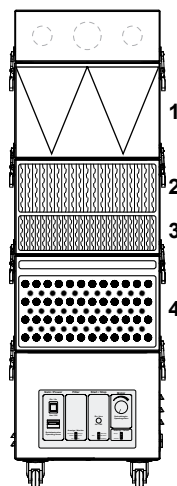
REPLACEMENT FILTERS	
Pre-filter mat	10040 1
Z-line panel filter	-
Particle filter	-
Activated carbon/BAC	10007 2



ZA

DESCRIPTION	ART.-NO.
LN 230 230V 50/60Hz	90009
LN 230 120V 50/60Hz	90010

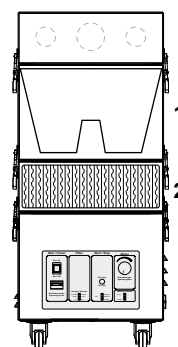
REPLACEMENT FILTERS	
Pocket filter	-
MP-TEC filter	-
Z-line panel filter	14996 1
Particle filter	10013 2
Activated carbon/BAC	10007 3



TZA

DESCRIPTION	ART.-NO.
LN 230 230V 50/60Hz	90011
LN 230 120V 50/60Hz	90012

REPLACEMENT FILTERS	
Pocket filter	12738 1
MP-TEC filter	-
Z-line panel filter	14996 2
Particle filter	10013 3
Activated carbon/BAC	10007 4



MP

DESCRIPTION	ART.-NO.
LN 230 230V 50/60Hz	90287
LN 230 120V 50/60Hz	90288

REPLACEMENT FILTERS	
Pocket filter	-
MP-TEC filter	13333 1
Z-line panel filter	-
Particle filter	10013 2
Activated carbon/BAC	-

TECHNICAL DATA LN 260



Similar to image

AREAS OF APPLICATION:

- Soldering (single/multi-site extraction)
- Laser processing (source extraction tubes, or compact laser cabinets)
- Processes for working with adhesive/moist dusts
- Processes for working with vapours/gases

INCLUDES:

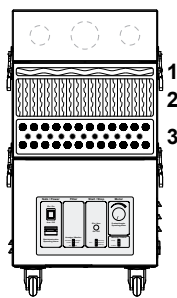
- Fully assembled (incl. the filter configuration of your choice)
- 4 wheels for mobile use
- Power cable

TECHNICAL SPECIFICATIONS	UNIT	STANDARD	Z	A	ZA	TZA	MP
Unimpeded air flow rate	m³/h	max. 320	max. 320	max. 320	max. 320	max. 320	max. 320
Effective air flow rate	m³/h	50-250	50-250	50-250	50-250	50-250	50-250
Max. static pressure	Pa	20000	20000	20000	20000	20000	20000
Voltage	V	230/120	230/120	230/120	230/120	230/120	230/120
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Power input	kW	1.1	1.1	1.1	1.1	1.1	1.1
Protection class	-	1	1	1	1	1	1
Motor and drive system	-	brushless motor					
Noise level	db(A)	ca. 60	ca. 60	ca. 60	ca. 60	ca. 60	ca. 60
Serial interface	D-sub	25-pin	25-pin	25-pin	25-pin	25-pin	25-pin
Weight	kg	ca. 70	ca. 70	ca. 70	ca. 90	ca. 110	ca. 70
Dimensions (Height)	mm	750	750	750	1020	1290	890
Dimensions (Width x Depth)	mm	350x655	350x655	350x655	350x655	350x655	350x655
DN 50 intake socket	number	3	3	3	3	3	3
DN 100 intake socket	number	2	2	2	2	2	2
DN 125 intake socket	number	1	1	1	1	1	1
Colour	RAL	7035	7035	7035	7035	7035	7035

FILTER CONFIGURATION

	Pre-filter mat (F5)	✓	-	✓	-	-	-
T	Pocket filter (F5/F6)	-	-	-	-	✓	-
MP	MP-TEC filter (F7)	-	-	-	-	-	✓
Z	Z-line panel filter (F7)	-	✓	-	✓	✓	-
	Particle filter (H13)	✓	✓	-	✓	✓	✓
A	Activated carbon/BAC filter	26 liter	-	45 liter	45 liter	45 liter	-

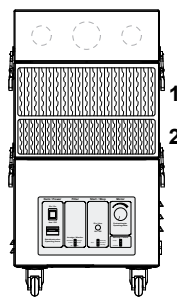
ORDER DATA LN 260



STANDARD

DESCRIPTION	ART.-NO.
LN 260 230V 50/60Hz	90034
LN 260 120V 50/60Hz	90035

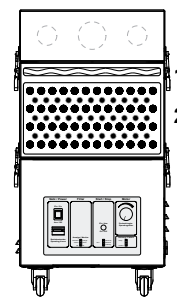
REPLACEMENT FILTERS	
Pre-filter mat	10001 1
Z-line panel filter	-
Particle filter	10009 2
Activated carbon/BAC	10046 3



Z

DESCRIPTION	ART.-NO.
LN 260 230V 50/60Hz	90038
LN 260 120V 50/60Hz	90039

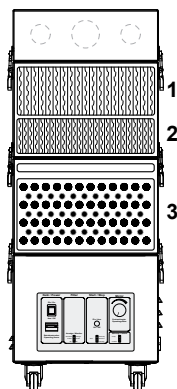
REPLACEMENT FILTERS	
Pre-filter mat	-
Z-line panel filter	14997 1
Particle filter	10009 2
Activated carbon/BAC	-



A

DESCRIPTION	ART.-NO.
LN 260 230V 50/60Hz	90036
LN 260 120V 50/60Hz	90037

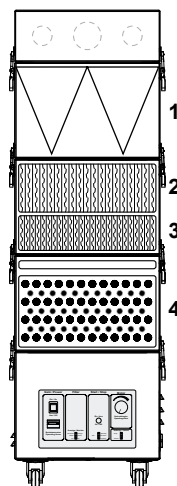
REPLACEMENT FILTERS	
Pre-filter mat	10001 1
Z-line panel filter	-
Particle filter	-
Activated carbon/BAC	12052 2



ZA

DESCRIPTION	ART.-NO.
LN 260 230V 50/60Hz	90040
LN 260 120V 50/60Hz	90041

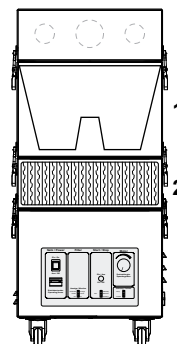
REPLACEMENT FILTERS	
Pocket filter	-
MP-TEC filter	-
Z-line panel filter	14997 1
Particle filter	10009 2
Activated carbon/BAC	12052 3



TZA

DESCRIPTION	ART.-NO.
LN 260 230V 50/60Hz	90042
LN 260 120V 50/60Hz	90044

REPLACEMENT FILTERS	
Pocket filter	12740 1
MP-TEC filter	-
Z-line panel filter	14997 2
Particle filter	10009 3
Activated carbon/BAC	12052 4



MP

DESCRIPTION	ART.-NO.
LN 260 230V 50/60Hz	90289
LN 260 120V 50/60Hz	90290

REPLACEMENT FILTERS	
Pocket filter	-
MP-TEC filter	13310 1
Z-line panel filter	-
Particle filter	10009 2
Activated carbon/BAC	-

TECHNICAL DATA LN 265



Similar to image

AREAS OF APPLICATION:

- Soldering (single/multi-site extraction)
- Laser processing (source extraction tubes, or compact laser cabinets)
- Processes for working with adhesive/moist dusts
- Processes for working with vapours/gases

INCLUDES:

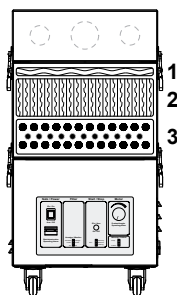
- Fully assembled (incl. the filter configuration of your choice)
- 4 wheels for mobile use
- Power cable

TECHNICAL SPECIFICATIONS	UNIT	STANDARD	Z	A	ZA	TZA	MP
Unimpeded air flow rate	m³/h	max. 800	max. 800	max. 800	max. 800	max. 800	max. 800
Effective air flow rate	m³/h	50-640	50-640	50-640	50-640	50-640	50-640
Max. static pressure	Pa	15000	15000	15000	15000	15000	15000
Voltage	V	230/120	230/120	230/120	230/120	230/120	230/120
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Power input	kW	1.8	1.8	1.8	1.8	1.8	1.8
Protection class	-	1	1	1	1	1	1
Motor and drive system	-	brushless motor					
Noise level	db(A)	ca. 65	ca. 65	ca. 65	ca. 65	ca. 65	ca. 65
Serial interface	D-sub	25-pin	25-pin	25-pin	25-pin	25-pin	25-pin
Weight	kg	ca. 70	ca. 70	ca. 70	ca. 90	ca. 110	ca. 70
Dimensions (Height)	mm	750	750	750	1020	1290	890
Dimensions (Width x Depth)	mm	350x655	350x655	350x655	350x655	350x655	350x655
DN 50 intake socket	number	3	3	3	3	3	3
DN 100 intake socket	number	2	2	2	2	2	2
DN 125 intake socket	number	1	1	1	1	1	1
Colour	RAL	7035	7035	7035	7035	7035	7035

FILTER CONFIGURATION

	Pre-filter mat (F5)	✓	-	✓	-	-	-
T	Pocket filter (F5/F6)	-	-	-	-	✓	-
MP	MP-TEC filter (F7)	-	-	-	-	-	✓
Z	Z-line panel filter (F7)	-	✓	-	✓	✓	-
	Particle filter (H13)	✓	✓	-	✓	✓	✓
A	Activated carbon/BAC filter	26 liter	-	45 liter	45 liter	45 liter	-

ORDER DATA LN 265

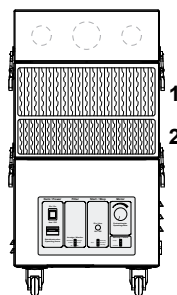


STANDARD

DESCRIPTION	ART.-NO.
LN 265 230V 50/60Hz	90013
LN 265 120V 50/60Hz	90014

REPLACEMENT FILTERS

Pre-filter mat	10001	1
Z-line panel filter	-	
Particle filter	10009	2
Activated carbon/BAC	10046	3

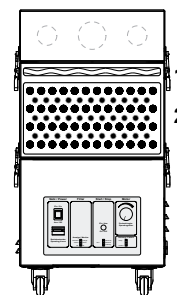


Z

DESCRIPTION	ART.-NO.
LN 265 230V 50/60Hz	90017
LN 265 120V 50/60Hz	90018

REPLACEMENT FILTERS

Pre-filter mat	-	
Z-line panel filter	14997	1
Particle filter	10009	2
Activated carbon/BAC	-	

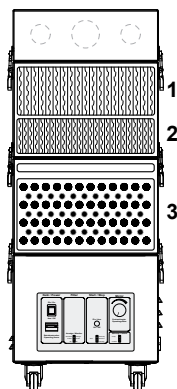


A

DESCRIPTION	ART.-NO.
LN 265 230V 50/60Hz	90015
LN 265 120V 50/60Hz	90016

REPLACEMENT FILTERS

Pre-filter mat	10001	1
Z-line panel filter	-	
Particle filter	-	
Activated carbon/BAC	12052	2

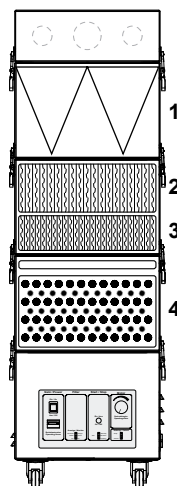


ZA

DESCRIPTION	ART.-NO.
LN 265 230V 50/60Hz	90019
LN 265 120V 50/60Hz	90020

REPLACEMENT FILTERS

Pocket filter	-	
MP-TEC filter	-	
Z-line panel filter	14997	1
Particle filter	10009	2
Activated carbon/BAC	12052	3

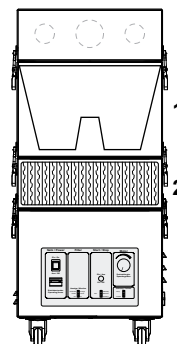


TZA

DESCRIPTION	ART.-NO.
LN 265 230V 50/60Hz	90021
LN 265 120V 50/60Hz	90022

REPLACEMENT FILTERS

Pocket filter	12740	1
MP-TEC filter	-	
Z-line panel filter	14997	2
Particle filter	10009	3
Activated carbon/BAC	12052	4



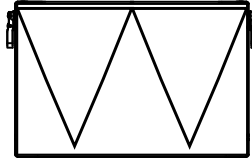
MP

DESCRIPTION	ART.-NO.
LN 265 230V 50/60Hz	90291
LN 265 120V 50/60Hz	90292

REPLACEMENT FILTERS

Pocket filter	-	
MP-TEC filter	13310	1
Z-line panel filter	-	
Particle filter	10009	2
Activated carbon/BAC	-	

ACCESSORIES



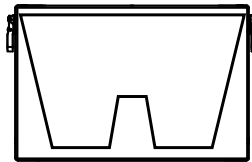
Pocket filter (F5/F6)

FILTER HOUSING MODULE T UPGRADE KIT - POCKET FILTER

For increasing the filter area to increase the service life of the pre-filter in applications with large amounts of coarse dust.

USE	FILTER CLASS	UPGRADE KIT	REPLACEMENT FILTERS
LN 230*	Pocket filter (F5/F6)	12938	12738
LN 260/265**	Pocket filter (F5/F6)	12739	12740

*Adds 240 mm to height **Adds 265 mm to height



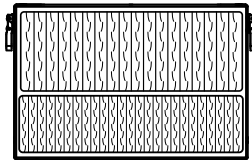
MP-Tec filter (F7/H13)

FILTER HOUSING MODULE MP UPGRADE KIT - MP-TEC FILTER

For increasing the filter area for a longer service life. With filter class F7 to expand the pre-filter area and filter class H13 to expand the particle filter.

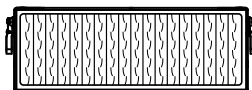
USE	FILTER CLASS	UPGRADE KIT	REPLACEMENT FILTERS
LN 230*	MP-Tec filter (F7)	13344	13333
LN 230*	MP-Tec particle filter (H13)	Upon request	Upon request
LN 260/265**	MP-Tec filter (F7)	13313	13310
LN 260/265**	MP-Tec particle filter (H13)	14625	13322

*Adds 240 mm to height **Adds 265 mm to height

Z-line panel filter (F7)
Particle filter (H13)**FILTER HOUSING MODULE Z** UPGRADE KIT - Z-LINE PANEL FILTER

USE	FILTER CLASS	UPGRADE KIT	REPLACEMENT FILTERS
LN 230*	Z-line panel filter (F7)	12183	14996
	Particle filter (H13)		10013
LN 260/265**	Z-line panel filter (F7)	12217	14997
	Particle filter (H13)		10009

*Adds 235 mm to height **Adds 265 mm to height

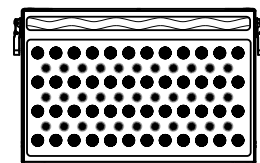


Particle filter (H13)

FILTER HOUSING MODULE UPGRADE KIT - PARTICLE FILTER

USE	FILTER CLASS	UPGRADE KIT	REPLACEMENT FILTERS
LN 230*	H13	14728	10013
LN 260/265*	H13	14729	10009

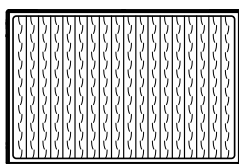
*Adds 85 mm to height

Pre-filter mat (F5)
Activated carbon/BAC filter**FILTER HOUSING MODULE A** UPGRADE KIT - ACTIVATED CARBON/BAC FILTER

USE	FILTER CLASS	UPGRADE KIT	REPLACEMENT FILTERS
LN 230*	18 liter	12114	10007
LN 260/265**	45 liter	12112	12052

*Adds 235 mm to height **Adds 265 mm to height

ACCESSORIES

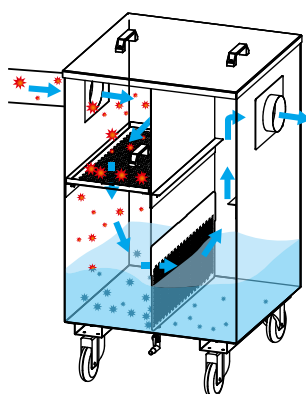


Police filter (H13)

FILTER HOUSING MODULE - POLICE FILTER

- Police filter functions, for example if the filter breaks or in environments with strict safety requirements
- Should be attached to the system's exhaust

USE	FILTER CLASS	UPGRADE KIT	REPLACEMENT FILTERS
LN 230/260/265	H13	14553	13829

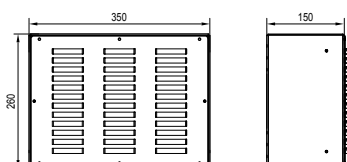


Water pre-separator

WATER PRE-SEPARATOR

DESCRIPTION	USE	ART.-NO.
WBA 30*	DN 160 inlet/outlet opening	13263

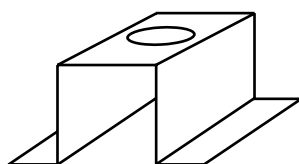
*The system removes smoldering particles from the incoming air current before the air is filtered.



Acoustic insulation module

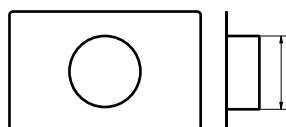
ACOUSTIC INSULATION MODULE

USE	DIMENSIONS (HXWXD) mm	ART.-NO.
LN 230/260/265	260x350x150	12670



BRACKET FOR SUCTION ARM

DN (mm)	LN 230	LN 260/265
50	13191	13194
63	14128	14129
75	13192	13195



EXHAUST PLATE

DN (mm)	USE	ART.-NO.
80	LN 230/260/265	11709
100	LN 230/260/265	12839
125	LN 230/260/265	12232

Connection plate with connection pieces for targeted air removal through the hose

ACCESSORIES



CABLE REMOTE CONTROL UNIT

FUNCTIONS:

- Display "filter blocked"
- Switch Run/Stand-by
- Infinitely adjustable speed controller
- Start position of the extraction system: stand-by-mode

DESCRIPTION	USE	CABLE LENGTH	ART.-NO.
Cable remote control unit	LN 230/260/265	7m	13771

INCLUDES:

- Remote control unit (with cable)



USB REMOTE CONTROL UNIT

FUNCTIONS:

- Switch Run/Stand-by
- Start position of the extraction system: stand-by-mode

DESCRIPTION	USE	CABLE LENGTH	ART.-NO.
USB remote control unit	LN 230/260/265	7m	13830

INCLUDES:

- Remote control unit (with cable)
- Software*

* compatible for Microsoft Windows, no additional drivers required



ELECTRICAL FOOT SWITCH

FUNCTIONS:

- Switch Run/Stand-by
- Start position of the extraction system: stand-by-mode

DESCRIPTION	USE	CABLE LENGTH	ART.-NO.
Electrical foot switch	LN 230/260/265	2m	13772

INCLUDES:

- Foot switch (with cable)

ACCESSORIES

AIR INLET - FLEXIBLE CONNECTION HOSES



DESCRIPTION	DN (mm)	LENGTH (m)	ART.-NO.
Hose set with connection coupling	50	2.5	10008
		5.0	10010
Hose set with nipple and hose clip	80	2.5	13179*
		2.5	13729**
		5.0	13180*
		5.0	14600**
		10.0	13197
		10.0	13197
	100	2.5	13181
		5.0	13182
		10.0	13198
	125	2.5	13183
		5.0	13184
		10.0	13199
160	2.5	13185	
	5.0	13186	
	10.0	13200	

* for the LN 230

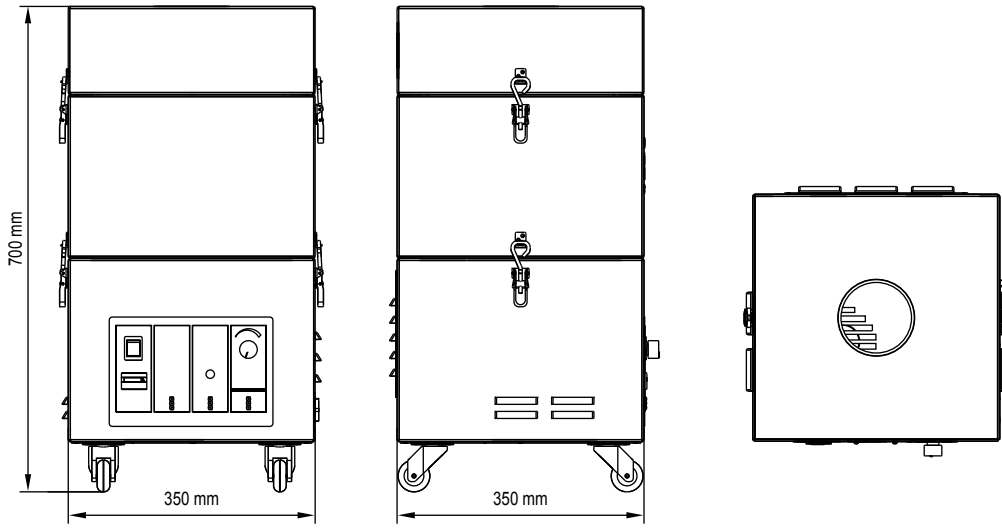
** for the LN 260, 265 (with a reduction from DN 100 to DN 80)

ELECTRONIC CONTROLS

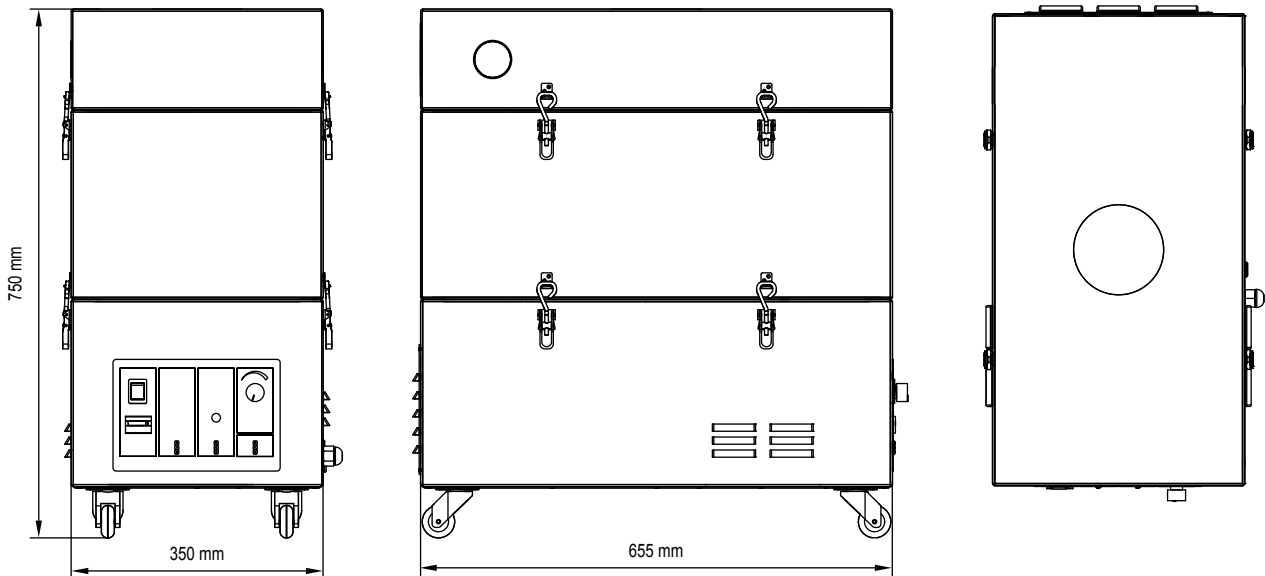
FUNCTION	LN 230	LN 260	LN 265
Fully adjustable speed control	✓	✓	✓
Automatic speed readjustment	✓	✓	✓
Visual advance warning at 30% and 75% saturation	✓	✓	✓
Visual signal when filter is saturated (device switches off)	✓	✓	✓
Real-time operating hour meter	✓	✓	✓
Malfunction notification display (temp./turbine)	✓	✓	✓
Switching and indicator for start and standby modes	✓	✓	✓

INTERFACE FUNCTIONS	LN 230	LN 260	LN 265
Interface	D-sub	D-sub	D-sub
Start/stop operation via interface	✓	✓	✓
Filter saturation signal	✓	✓	✓
Speed control via interface	✓	✓	✓
Notification of malfunctions via interface (temp./turbine/collective fault)	✓	✓	✓

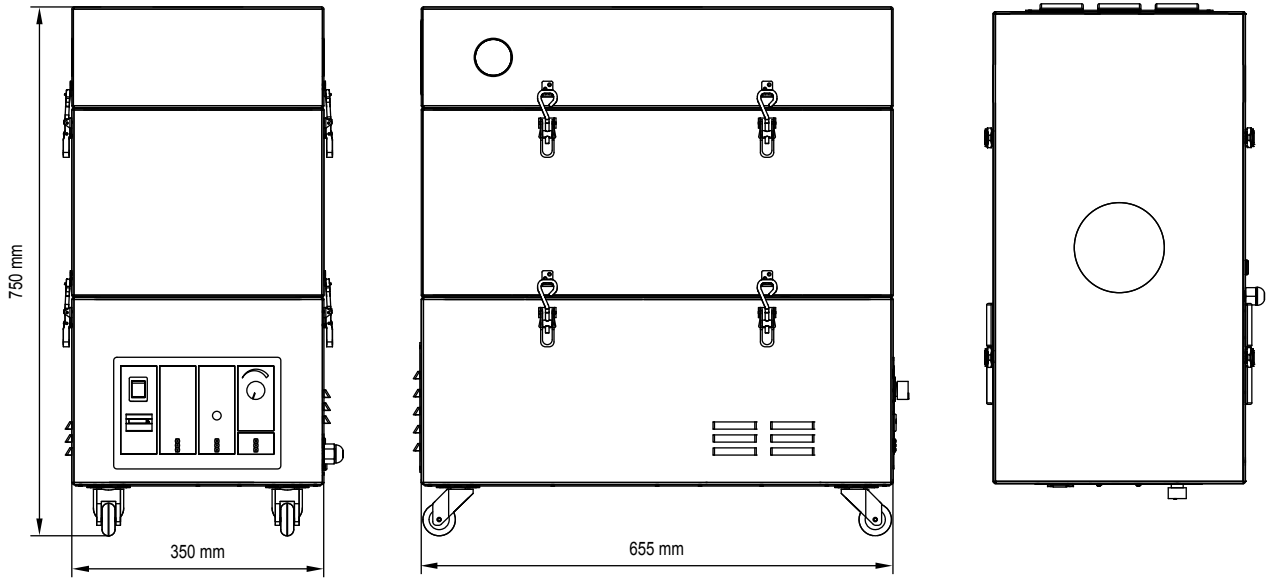
TECHNICAL DRAWINGS



LN 230



LN 260



LN 265



TBH GmbH

EXHAUST- AND FILTRATION TECHNOLOGY

GERMANY

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