

## Series LE-U

- 230 V, 50/60 Hz AC voltage
- 12 V DC voltage
- 24 V DC voltage

Generally our aircirculation ventilation units are made as 19" units from a height of 1HU (1 HU = 43,6 mm).

The customer can choose between 1, 2 or 3 rows of ventilators in the depth. We offer the 230 V AC units with the types of ventilators named A, B or C, the 12 V DC versions with the types named D or E and the 24 V DC versions with the types F or G (see page 41).

The ventilation units series LE are open at the bottom side.

We can offer finger protectors or dust filters for bottom side on request (Finger protectors and dust filters are not available for fan type C).

- Other heights (2HU, 3HU) or other depths on request;

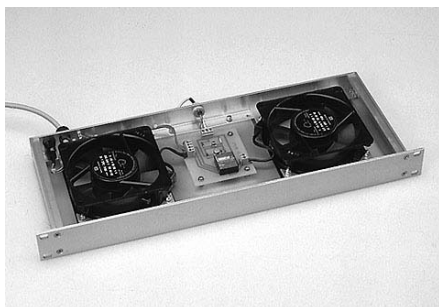
### Air flow direction

Air is sucked from below and is led onto the upper side.

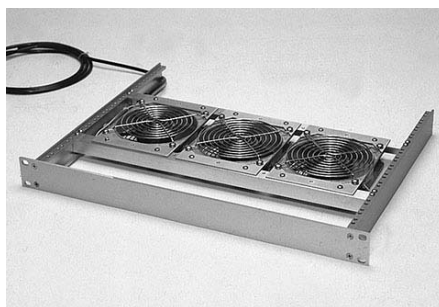
### Typical applications

- Support of natural convection inside of 19" racks
- Forced air cooling of equipment by means of air circulation
- Take off of hot air by mounting the blowers at the top of a unit
- Elimination of heat sections in a rack

### Examples of special custom models



Model LE1-1520-09, 1 HU ventilation unit, 2 fans, TTL alarm circuit for protection of external equipment



Model LE1-3531-15C, 1 HU ventilation unit, 3-6 fans according to customers request



Model LE2-3E-11, 2 HU ventilation unit, 3 fans and 3 mains outlets



### Basic configuration

- Front panel is colourless anodized.
- 19" unit is yellow alodined.
- Rubber connector for 230 V AC includes switch and fuse (power cord is not included with 230 V AC types.).
- 12 V DC or 24 V DC types are delivered with 1,2 m cable inclusive pull relief.
- The number, the model and the position of fans can be specified on demand.
- Unused positions will be closed with a blank plate.
- Please send us your application!

### Options and accessories

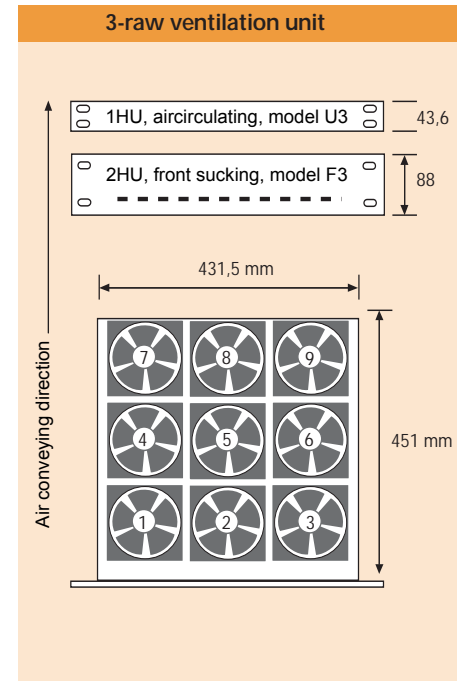
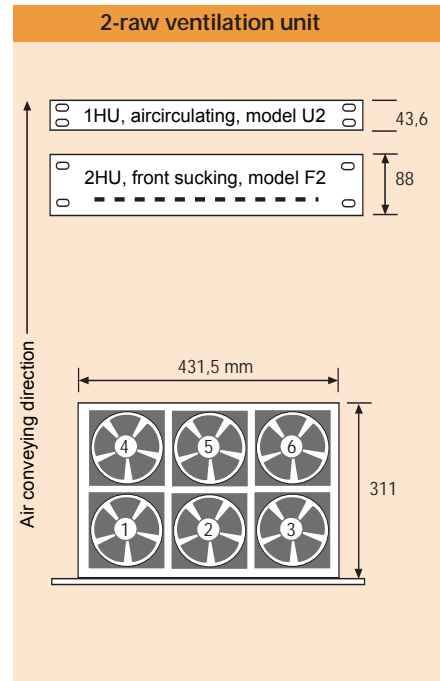
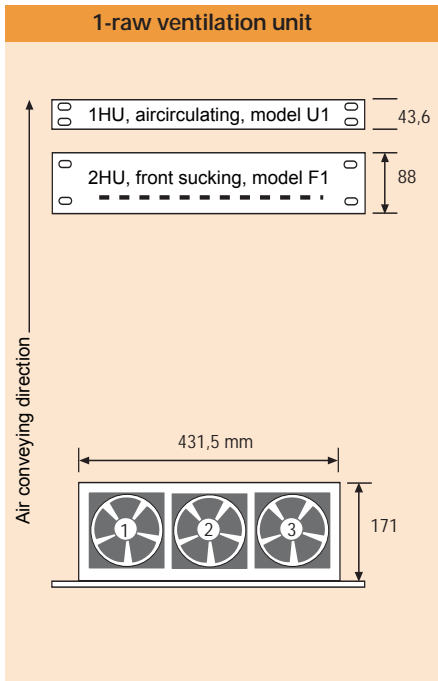
- Rubber socket and cable, 2 m long (230 V AC voltage) (= Option 1)
- Rubber socket and cable, 3 m long (230 V AC voltage) (= Option 2)
- Extra dust filter for 1-row drawer (= Option 3)
- Extra dust filter for 2-row drawer (= Option 4)
- Extra dust filter for 3-row drawer (= Option 5)
- Finger protection at bottom side (= Option 6)
- Custom silk-screen printing on the front panel (= Option 7)

## Series LE-U and LE-F

Please choose the needed parts of the ordering number of a special ventilation unit from the following drawings.

Aircirculation ventilation units are available only with a height of 1HU, front sucking ventilation units with a height of 2HU.

The front panel width of all models is 19" (482,6 mm).



All dimensions in mm.

## Model designation

LE - U1 - A - 0 - 3 - 1/2/3

Position of fans (not necessary if all positions are used)

No. of fans installed (not necessary if all positions are used)

Options

0 = No option (standard)

1 - 7 = See description of the relevant ventilation unit

Supply voltage of the type of fan

A, B, C = 230 V AC

D, E = 12 V DC

F, G = 24 V DC

H = 48 V DC






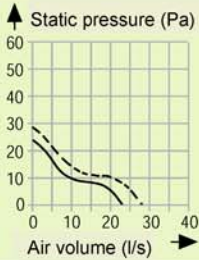
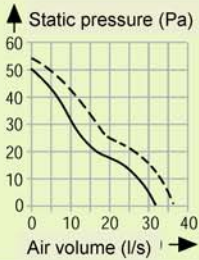
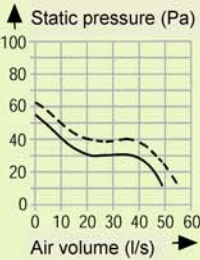
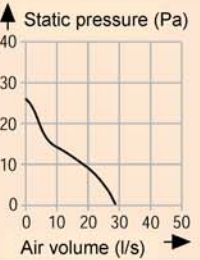
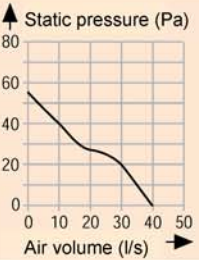
Model selection

U1 to U3 = Aircirculating

F1 to F3 = Front sucking

Basic model description

## Technical data of selectable fans

Voltage	AC voltage models			DC voltage models			
	230 V, 50/60 Hz			12 V	24 V	12 V	24 V
Selection of fans	Model A	Model B	Model C	Model D	Model F	Model E	Model G
							
Pressure / volume curve	 <p>▲ Static pressure (Pa)</p> <p>--- = 60 Hz — = 50 Hz</p> <p>Air volume (l/s) →</p>	 <p>▲ Static pressure (Pa)</p> <p>Air volume (l/s) →</p>	 <p>▲ Static pressure (Pa)</p> <p>Air volume (l/s) →</p>	 <p>▲ Static pressure (Pa)</p> <p>Air volume (l/s) →</p>	 <p>▲ Static pressure (Pa)</p> <p>Air volume (l/s) →</p>		
Dimensions of fans (mm)	119 x 119 x 25	119 x 119 x 25	119 x 119 x 38*	119 x 119 x 25		119 x 119 x 25	
Power consumption	10 W	14 W	18 W	1,7 resp. 2,2 W		5,4 resp. 5,8 W	
Nominal speed	1800 min <sup>-1</sup>	2500 min <sup>-1</sup>	2700 min <sup>-1</sup>	1850 min <sup>-1</sup>		2800 min <sup>-1</sup>	
Air flow max.	84 m <sup>3</sup> /h	117 m <sup>3</sup> /h	150 m <sup>3</sup> /h	99 m <sup>3</sup> /h		150 m <sup>3</sup> /h	
Static pressure max.	23 Pa	48 Pa	58 Pa	27 Pa		57 Pa	
Noise level	33 dB (A)	40 dB (A)	47 dB (A)	29 dB (A)		40 dB (A)	
Bearing	Ball bearing	Ball bearing	Ball bearing	Ball bearing		Ball bearing	

\*Due to the size of the fan, it is not possible to insert filter mats or finger protectors if fan version C is used in aircirculation ventilation units.

**Model "H" 48 V DC only on request!**  
On demand the units can be equipped with blowers of various manufacturers.

## Details

- The mains supply at 230 V models is connected through a rubber connector with integrated fuse and mains switch. Other types (12 V, 24 V, 48 V) are connected with low voltage clamps or custom-specified.
- All ventilation units are equipped with M4 grounding pins.
- All ventilation units are designed for high mechanical stability, for example side panels are made from 4mm thick aluminium.
- The filter mats (option at aircirculators) are replaceable without demounting the ventilation unit from the rack.

