

BIG-2000-N – double stand extraction unit for dry dusts



Purpose

For cleaning the air from dust impurities and optionally for gas contaminations arising during various production processes, is appropriate the BIG-2000-N filtering unit. It is irreplaceable for capturing the dry dust particles arising during welding and other processes where fine dust is emitted. Maximum temperature of the conveyed air should not exceed +60°C. Due to automatically regenerated cartridge filters, dust particles are separated on the outer surface of the filter. By means of impulses of compressed air, the contamination is cyclically struck off from the filter surface.

The BIG-2000-N appliance is manufactured in a mobile version with air recirculation.

Structure

BIG-2000-N filtering unit consists of subsequent elements:

- steel sheet housing,
- radial fan,
- spark catcher,
- cut-off dampers – to cut off the air flow while the fan is switched off,
- high-efficiency cartridge filter – polyester fabric – filtration efficiency 99,9%,
- pneumatic filter regeneration system – compressed air tank, electromagnetic valve,
- waste container for the accumulated dust – capacity 30 litres,
- control unit – to start the device and control its function,
- differential pressure control (pressostat) – to indicate the pollution degree of the filter,
- hour-meter,
- a set of castor wheels.

Operational use

BIG-2000-N is manufactured in a mobile version and there can be installed two extraction arms, of workrange 2, 3 or 4 m and 160 mm diameter.

Prior to the start-up, connect the device to the external compressed air installation of pressure 6–8 bars. When the device is started, the automatic filter regeneration system provides continuous work of the fan and automatic cyclical filter cleaning, by means of compressed air impulses – without work interruption. The filter cleaning grade is controlled by the pressostat (differential pressure control). When the filter is excessively charged with dust (increased flow resistance, drop in flow efficiency), this will be indicated by a yellow signalling lamp.

Moreover, the appliance is equipped with an hour-meter indicating the time of operational use of the device.

Maintenance of filters consists in periodical replacement of the cartridge filter (every 1–2 years).

As option, the appliance can be equipped with activated carbon impregnated spunbond filter – for filtering the gas contamination during the welding processes. The spunbond (nonwoven) must be replaced every several months, depending on the intensity of use.

Technical data

Type	Part no.	Maximum volume flow [m ³ /h] ¹	Maximum vacuum [Pa]	Supply voltage [V]	Motor rate [kW]	Acoustic pressure level [dB(A)] from a distance of:		Compressed air consumption [Nm ³ /h]	Weight [kg]	Quantity of connections for ERGO LUX extraction arms ²
						1 m	5 m			
BIG-2000-N	805U02	2500	2000	3x400	1,5	74	60	0,7	260	2

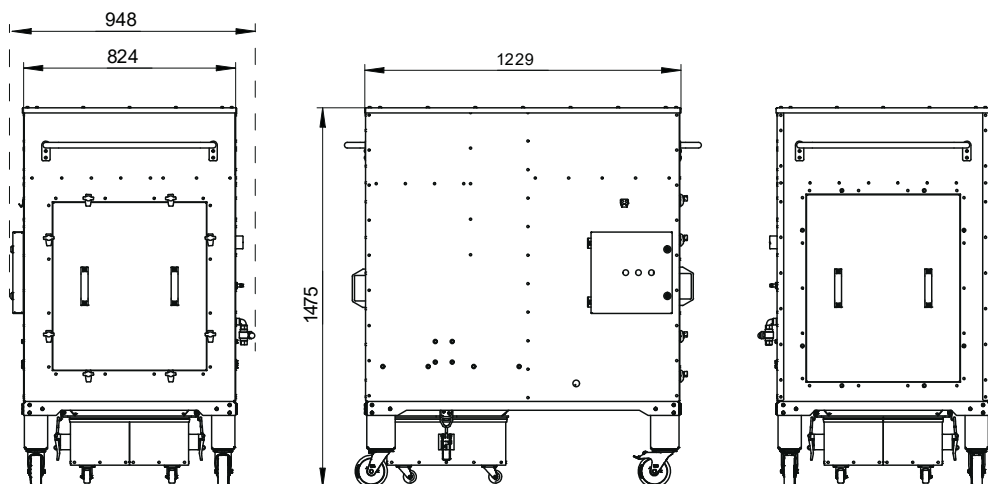
1. Volume flow has been measured at the clean filter.

2. Complete offer of extraction arms is presented on separate catalogue cards.

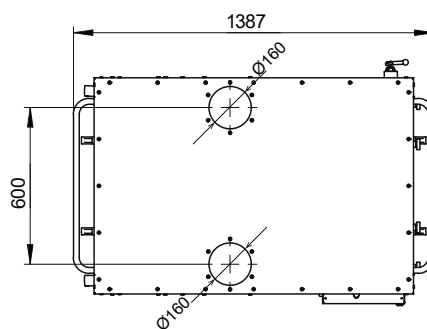
BIG-2000-N

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Front view



Top view



Replaceable cartridge filter

	Type	Part no.	Weight [kg]	Filtration efficiency [%]	Quantity of filters
	PN206638U	800F23	4,2	99,9	1

Additional equipment

Activated carbon impregnated spunbond filter

	Type	Part no.	Weight [kg]	Remarks
	FCR-BIG-2000	838F79	0,6	The complete filter consists of the carbon nonwoven (spunbond) along with the protective net. All these elements are placed inside the cartridge filter.
	WFCR-BIG-2000	838W94	0,3	The carbon nonwoven is a replaceable element of the filter.