

MCP-GO

Compact plug and play welding fume extractor



General description

MCP-GO is a compact cartridge dust collector, designed to extract, filter and collect fumes and dusts from welding and related manufacturing processes, such as flame, plasma and laser cutting.

Thanks to very small footprint (less than 1m²) it can be placed almost anywhere in the workshop.

The unit is equipped with 6 patented Uniclean filter cartridges. The filter cartridges are cleaned automatically by an energy saving compressed air reverse pulse system. Cleaning is activated by an integral electronic controller. The filter media is flame retardant and feature nanofiber coating, which permits higher filter load and more effective pulse cleaning.

Filter cabinet is made out of sturdy 2 mm galvanized sheet metal. The unit is delivered as one or two pre-wired components, for very fast and simple installation on site.

Large dust bin and front access to important service areas (bin, cartridges and pressure tank) allow easy maintenance and flexibility in placement of the unit.

Product variants

MCP-GO is available in two basic sizes:

MCP-GO-2-6SL for max filtration capacity 3.000 m³/h

MCP-GO-2-6S for max filtration capacity 4.500 m³/h

Each size can be equipped with basic filter cleaning controller (ECO-ALFA), as well as more advanced Insight Controls, with large interactive HMI and remote monitoring with cloud connectivity. Each variant can be further equipped with variable frequency drive (VFD), to adjust fan performance and reduce energy consumption.



Main components description

Components of the main item number	Description
Housing	Made of 2mm galvanized sheet metal, bolted and sealed.
Filter cartridges	SC178: Nederman patented square cartridges with Uniclean, filter media of flame retardant cellulose/polyester blend with nanofibre. Efficiency: ISO 16890 ePM1 80%, EN 60335-2-69:2015 Class M & ASHRAE 52.2 MERV 14
Dirty air inlet	Located on the back of the unit, equipped with solid baffle plate that protects filter cartridges from direct impact of hot and abrasive particles; multiple transition pieces available as accessories.
Extraction fan	Heavy duty industrial fan, fully welded impeller with backwards inclined blades. Fan static efficiency up to 82%. The fan complies with EcoDesign – EU Regulation 327/2011 Category C
Fan and motor silencer	Fan and motor sound enclosure, lined with acoustic foam, reduce the fan noise below 75 dB(A)
Clean air outlet	Clean air is exhausted vertically away from operations avoiding disruption and reducing noise levels. Allows for ducted exhaust connection or additional in-line silencer to further reduce sound level.
Compressed air tank and nozzle pipes	The compressed air tank contains compressed air which is used to regenerate the filter cartridge. There is a pipes with nozzle above each filter. Compressed air is blown through the nozzles in impulses, which cleans the filter cartridge.
Dust bin	Large 65 liter dust bin, equipped with simple to operate locking / sealing mechanism with large lever

Specification of control system components

Components of the main item number	Description
Basic controls with ECO-ALFA cleaning controller	Operates the fan and filter cleaning including on-demand and sequential filter cleaning and remote stop. Downtime cleaning and function to clean filters at low filter load. Simple alphanumeric LCD display with main filter parameters.
Variable Frequency Drive	With built-in dP sensor to directly regulate fan performance based on the underpressure in the dirty air duct
Insight Controls *	Advanced control system with remote digital monitoring and cloud connectivity, larger full-color HMI for easier operation. Energy-saving filter cleaning algorithms including IntelliPulse.

* Insight Controls is not mounted on the unit and delivered pre-wired, it needs to be mounted next to the filter and installed by the qualified electrician.

Technical data

Specification		Unit	MCP-GO-2-6SL (Low version)	MCP-GO-2-6S (High version)
Number of valves/ number of filter modules		-	2/2	2/2
Filter	Type	-	SC178-84F	SC178-132F
	Material	-	SC178: cellulose/polyester blend with nanofibre, flame retardant	SC178: cellulose/polyester blend with nanofibre, flame retardant
	Number of filter cartridges	-	6	6
	Diameter	mm	191	191
	Length	mm	875	1355
	Filtration area	m ²	8,4	13,2
	Total filter area	m ²	50,4	79,2
Compressed air consumption *		-	34,8 NI / cleaning puls 417 NI/min 20m ³ /h compressed air demand for the dust collector	34,8 NI / cleaning puls 417 NI/min 20m ³ /h compressed air demand for the dust collector
Fan	Motor Rated Power	kW	4,0	5,5
	Motor Frequency [H	Hz	50	50
	Motor Voltage	V	400/690	400/690
	Motor Synch.Speed	rpm	3000	3000
Fan efficiency (static)		-	82%	82%
Maximum recommended air flow		m ³ /h	3000	4500
Weight		kg	Max 329	Max 378
Ambient temperature		°C	-20~+40	-20~+40
Operating temperature		°C	+5~+70	+5~+70
Noise level **		dB(A)	75	71
Placement		-	Indoor	Indoor
Dust bin		l	65	65

*At standard parameter settings of the controller.

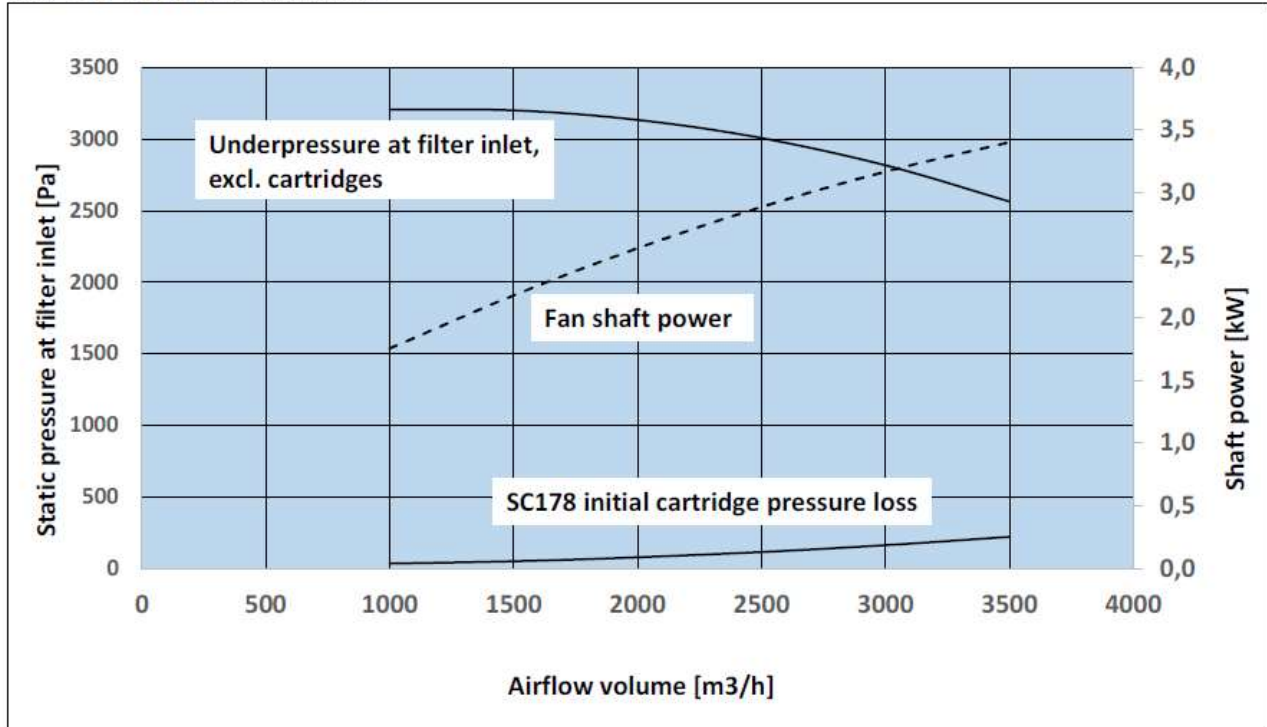
**Measurement in open space in 1m distance and 1,6m height to the unit

List of available models

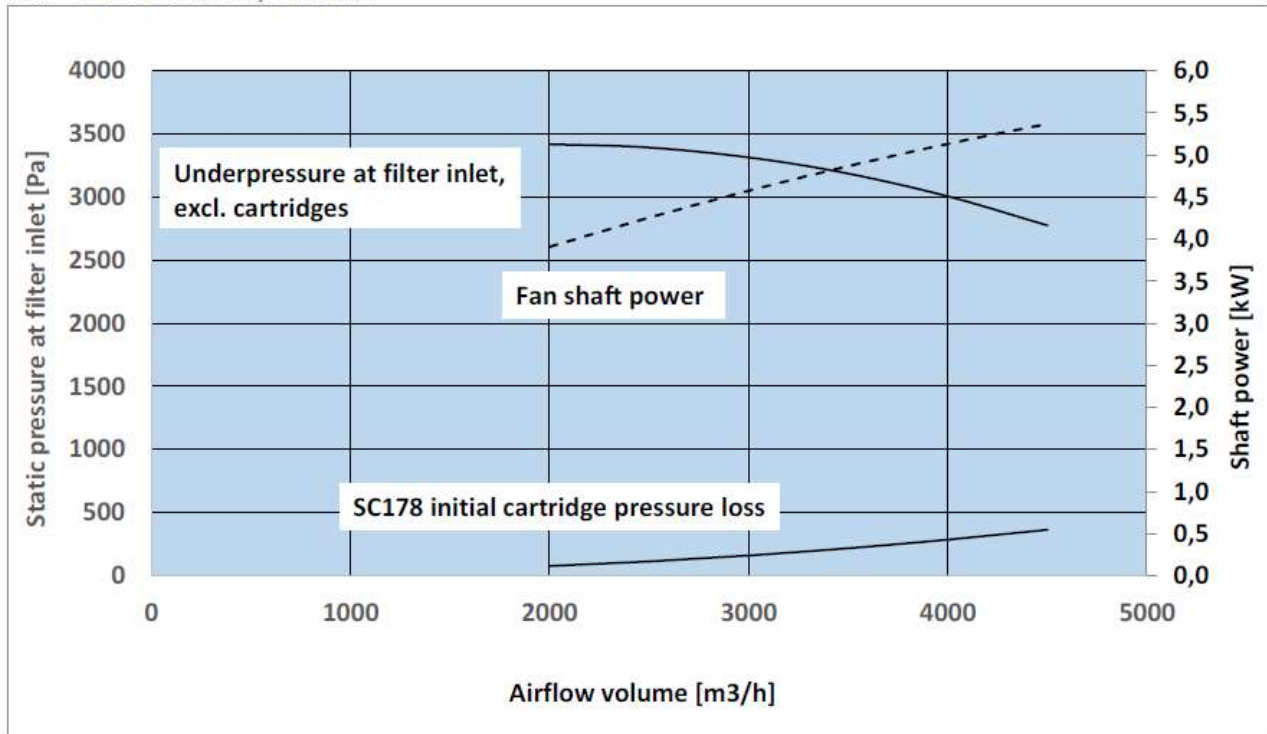
Item No.	Model name	Description
73009310	MCP-GO-2-6SL Std SC178 4kW	4,0kW, no VFD, no Insight / 3000 m ³ /h unit equipped with 4,0kW fan, with 6 short SC178 cartridges (3 per valve)
73009366	MCP-GO-2-6SL Std SC178 4kW inverter	4,0kW, VFD, no Insight / 3000 m ³ /h unit equipped with 4,0kW fan, with 6 short SC178 cartridges (3 per valve)
73009417	MCP-GO-2-6SL Std SC178 4kW with Insight Control Panel	4,0kW, no VFD (DOL) , Insight (Basic) / 3000 m ³ /h unit equipped with 4,0kW fan, with 6 short SC178 cartridges (3 per valve)
73009419	MCP-GO-2-6SL Std SC178 4kW inverter with Insight Control Panel	4,0kW, VFD, Insight (Standard) / 3000 m ³ /h unit equipped with 4,0kW fan, with 6 short SC178 cartridges (3 per valve)
73009317	MCP-GO-2-6S Std SC178 5,5kW	5,5kW, no VFD, no Insight / 4500 m ³ /h unit equipped with 5,5kW fan, with 6 long SC178 cartridges (3 per valve)
73009365	MCP-GO-2-6S Std SC178 5,5kW inverter	5,5kW, VFD, no Insight / 4500 m ³ /h unit equipped with 5,5kW fan, with 6 long SC178 cartridges (3 per valve)
73009418	MCP-GO-2-6S Std SC178 5,5kW with Insight Control Panel	5,5kW, no VFD (DOL) , Insight (Basic) / 4500 m ³ /h unit equipped with 5,5kW fan, with 6 long SC178 cartridges (3 per valve)
73009420	MCP-GO-2-6S Std SC178 5,5kW inverter with Insight Control Panel	5,5kW, VFD, Insight (Standard) 4500 m ³ /h unit equipped with 5,5kW fan, with 6 long SC178 cartridges (3 per valve)

Fan pressure curves

MCP-GO-2-6SL with 4,0 kW fan



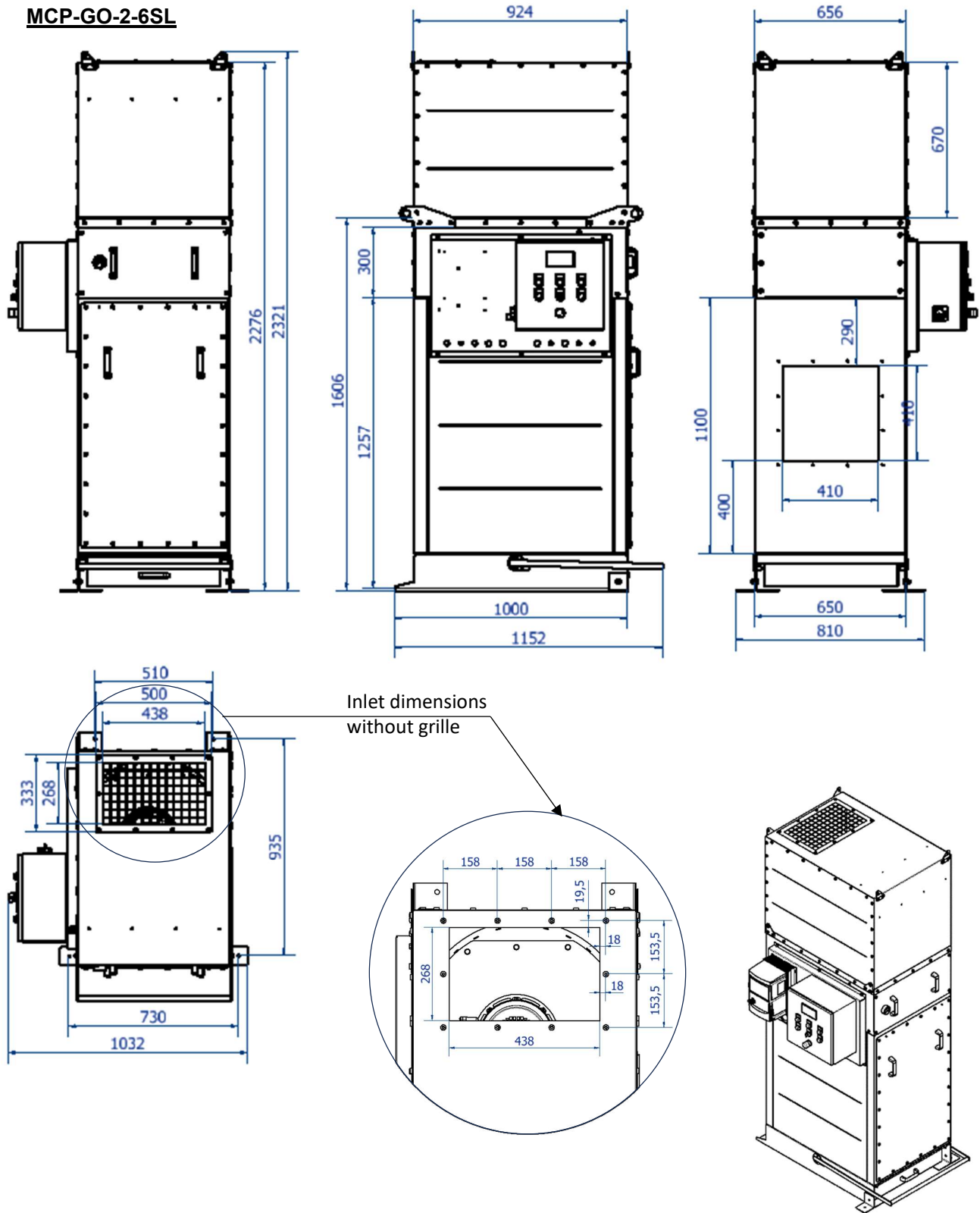
MCP-GO-2-6S with 5,5 kW fan



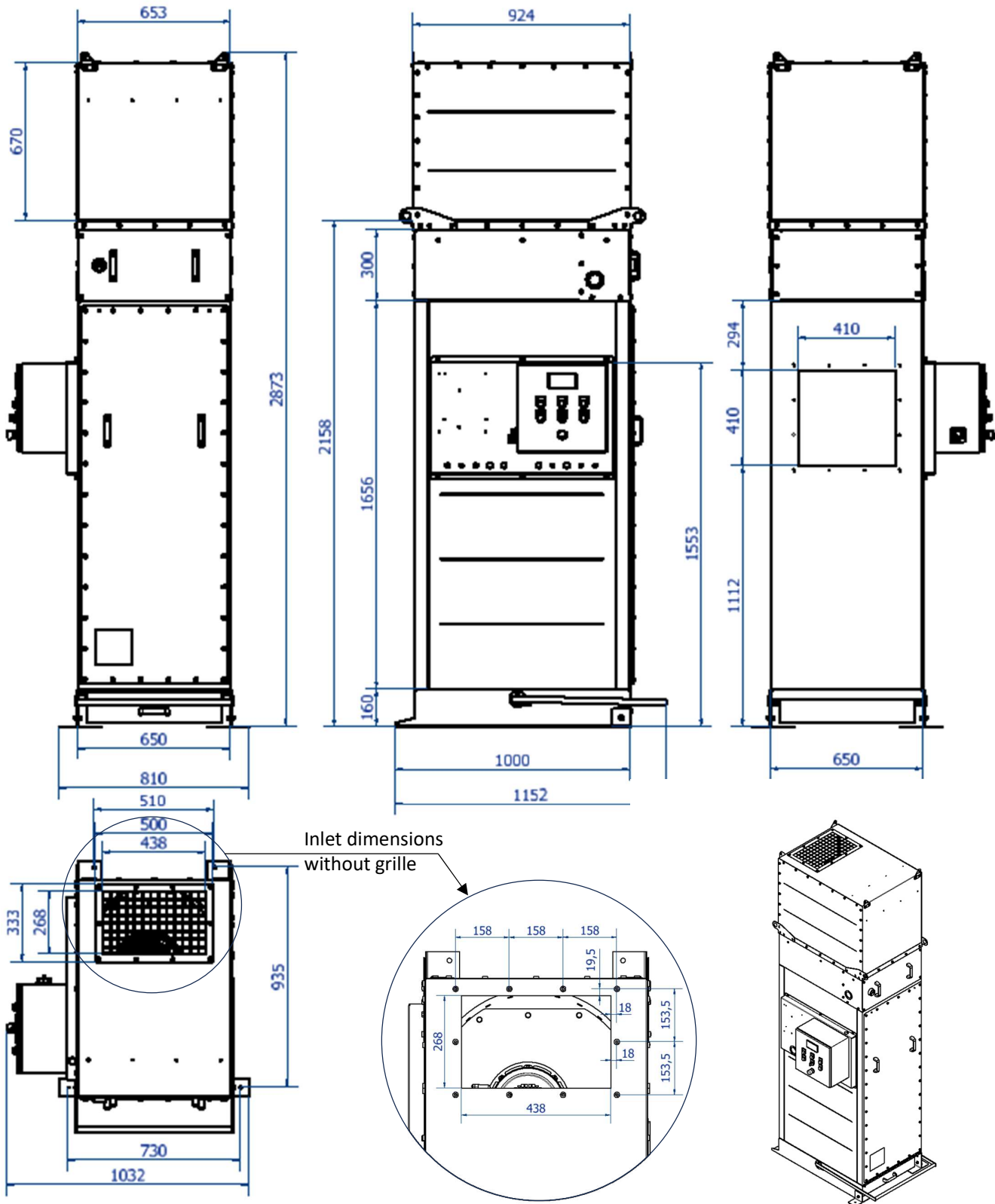
- MCP-GO-2-6S with 5,5kW fan, if not used with VFD, must have a manual damper installed on the duct prior to the filter
- The above charts (for both units) are with straight inlet (horizontal duct). Please allow 100-150 Pa (depending on airflow) pressure loss in case the 90° inlet elbow is used

MCP-GO Filter dimensions

MCP-GO-2-6SL



MCP-GO-2-6S



Accessories list

Accessory	Item No.	Image
Inlet complete, Ø315 QF Inlet complete, Ø250 QF	7945586 7945587	
Inlet flat, Ø250 QF Inlet flat, Ø315 QF	7945588 7945589	
Inlet complete, Ø315 plain/spiro Inlet complete, Ø250 plain/spiro	7946011 7946012	
Inlet flat, Ø250 plain/spiro Inlet flat, Ø315 plain/spiro	7946013 7946014	
Filter regulator	55999315	
Assembly/Locking Tool For SC Filter Cartridges	7943692	