

# SF<sub>6</sub> service equipment

## For filling, cleaning and recovery of SF<sub>6</sub> gas

### Models GPU-B-2000 and GPU-B-3000

WIKA data sheet SP 63.15

#### Applications

Filling, cleaning, recovery, evacuation and venting of SF<sub>6</sub> gas-filled switchgear, linear accelerators and other SF<sub>6</sub> gas-filled equipment

#### Special features

- Oil-free compressor and vacuum compressor
- Option for on-site gas filtration to the desired humidity
- Low maintenance effort
- Operation via 10" touchscreen



#### SF<sub>6</sub> service equipment with 300-litre tank

#### Description

##### The right instrument for each application - The GPU platform

The gas-handling equipment of the GPU platform enable the complete process from initial filling to processing to be carried out safely and intuitively.

The platform is available in 4 versions.

- Model GPU-B-2000  
SF<sub>6</sub> service equipment in fully automated basic version
- Model GPU-S-2000  
SF<sub>6</sub> service equipment with additional SIL 2 safety control
- Model GPU-B-3000  
SF<sub>6</sub> service equipment at the highest performance level
- Model GPU-S-3000  
SF<sub>6</sub> service equipment with additional SIL 2 safety control and the highest performance level

##### High standards and quality – model series B

Like the entire product series, the fully automated basic model offers high-performance components and an optimum design. The products have a USB port and an Ethernet port for remote maintenance. The 10" IntelliTouch touchscreen promises a comfortable and intuitive handling.

All models of the GPU platform are available with a filter process that allows the SF<sub>6</sub> gas to be brought to a lower humidity value directly on-site. Optionally, the GPU can be equipped with a WIKA gas humidity sensor, model GDHT-20, which enables filtering to a target value.

The SF<sub>6</sub> service equipment is an efficient and reliable solution that exceeds the current IEC standards for handling SF<sub>6</sub> gas. Low downtimes through long service intervals of more than 2,000 hours, or two years with a max. running time of 600 hours per year, make them an extremely durable product that is always ready for use.

# Specifications

## Voltage supply

- AC 400 V, 3-phase, 50/60 Hz  $\pm 10\%$
- AC 240 V, 3-phase, 50/60 Hz  $\pm 10\%$
- AC 208 V, 3-phase, 50/60 Hz  $\pm 10\%$

Oil-free compressor (SF <sub>6</sub> gas)	
Gas flow rate	Output pressure
<ul style="list-style-type: none"> <li>■ 6 m<sup>3</sup>/h at 50 Hz</li> <li>■ 7.3 m<sup>3</sup>/h at 60 Hz</li> </ul>	50 bar abs.
<ul style="list-style-type: none"> <li>■ 10.2 m<sup>3</sup>/h at 50 Hz</li> <li>■ 12.3 m<sup>3</sup>/h at 60 Hz</li> </ul>	50 bar abs.
<ul style="list-style-type: none"> <li>■ 15 m<sup>3</sup>/h at 50 Hz</li> <li>■ 18.5 m<sup>3</sup>/h at 60 Hz</li> </ul>	50 bar abs.

Oil-free vacuum compressor (SF <sub>6</sub> gas)	
Gas flow rate	Final vacuum
<ul style="list-style-type: none"> <li>■ 4.8 m<sup>3</sup>/h at 50 Hz</li> <li>■ 5.8 m<sup>3</sup>/h at 60 Hz</li> </ul>	< 5 mbar abs.
10 m <sup>3</sup> /h at 50/60 Hz	< 1 mbar abs.
<ul style="list-style-type: none"> <li>■ 15 m<sup>3</sup>/h at 50 Hz</li> <li>■ 18 m<sup>3</sup>/h at 60 Hz</li> </ul>	< 1 mbar abs.
<ul style="list-style-type: none"> <li>■ 35 m<sup>3</sup>/h at 50 Hz</li> <li>■ 42 m<sup>3</sup>/h at 60 Hz</li> </ul>	< 1 mbar abs.

Vacuum pump (air) <sup>1)</sup>	
Gas flow rate	Final vacuum
<ul style="list-style-type: none"> <li>■ 25 m<sup>3</sup>/h at 50 Hz</li> <li>■ 30 m<sup>3</sup>/h at 60 Hz</li> </ul>	< 0.1 mbar abs.
<ul style="list-style-type: none"> <li>■ 40 m<sup>3</sup>/h at 50 Hz</li> <li>■ 48 m<sup>3</sup>/h at 60 Hz</li> </ul>	< 0.1 mbar abs.
<ul style="list-style-type: none"> <li>■ 63 m<sup>3</sup>/h at 50 Hz</li> <li>■ 76 m<sup>3</sup>/h at 60 Hz</li> </ul>	< 0.1 mbar abs.
<ul style="list-style-type: none"> <li>■ 100 m<sup>3</sup>/h at 50 Hz</li> <li>■ 120 m<sup>3</sup>/h at 60 Hz</li> </ul>	< 0.1 mbar abs.

1) Oil-free on request

## Integrated tank, storage capacity

- Without tank
- 300 litres
- 600 litres
- Stowage for 6 gas cylinders
- Stowage for 10 gas cylinders

## Integrated gas cylinder scales

- Without scales
- Without scales with pull-out. fixed to the GPU  
Measuring range: 0 ... 120 kg  
Accuracy:  $\pm 50$  g
- Mobile scales  
Measuring range: 0 ... 136 kg  
Accuracy:  $\pm 68$  g

Connections	
GIS	1 valve DN 20, pressure range 0 ... 10 bar abs.
Gas cylinder	2 valves DN 20, pressure range 0 ... 50 bar abs.
Atmosphere (optional)	1 valve DN 20, pressure range 0 ... 1.2 bar abs.

## Filter element

Molecular sieve, aluminium oxide, particle filter 1  $\mu$ m  
Max. water absorption: 75 g

## Control element

10" touchscreen

## Permissible ambient temperature

Operation: -10 ... +40 °C [14 ... 104 °F]  
Storage: -20 ... +60 °C [-4 ... +140 °F]

## Permissible air humidity

< 95 % r. h. (non-condensing)

## Ingress protection

IP42

Weight	
Without tank	Approx. 665 kg
With empty 300-litre tank	Approx. 1,000 kg
With empty 600-litre tank	Approx. 1,300 kg
With empty stowage for 6 gas cylinders	Approx. 1,050 kg
With empty stowage for 10 gas cylinders	Approx. 1,175 kg


## Tyres

Solid rubber,  $\varnothing$  200 mm, with rollover protection

## Options

- Humidity sensor to measure the humidity content and filtering to a target humidity value
- Additional process connection for the simultaneous evacuation and recovery or filling
- Evaporators

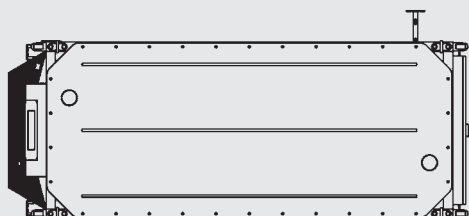
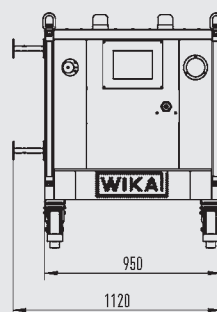
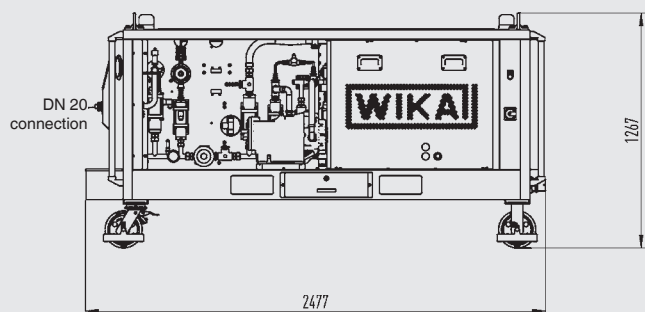
## Approvals

Logo	Description	Country
	<b>EU declaration of conformity</b>	European Union
	EMC directive, EN 61326 emission (group 1, class B) and immunity (industrial application)	
	RoHS directive	
	Machinery directive	

→ For approvals and certificates, see website

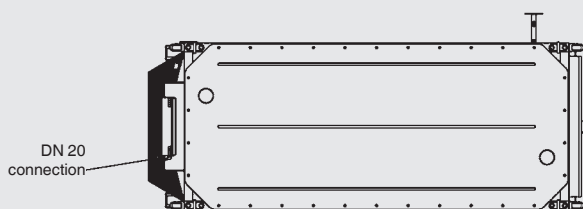
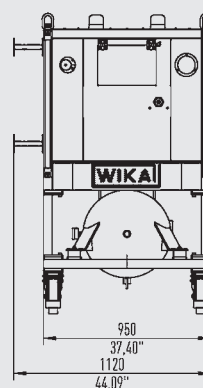
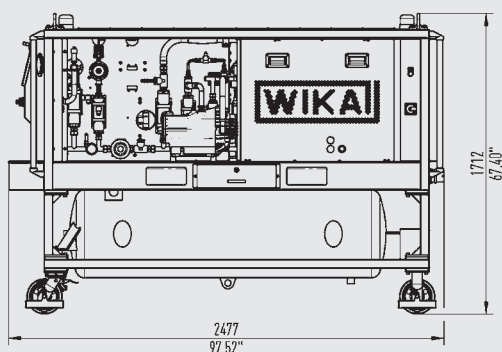
## Dimensions in mm

### Version without tank



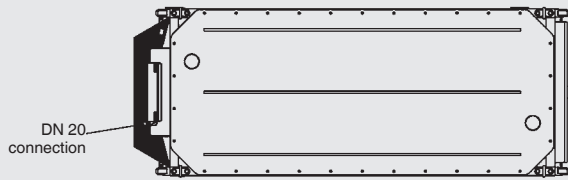
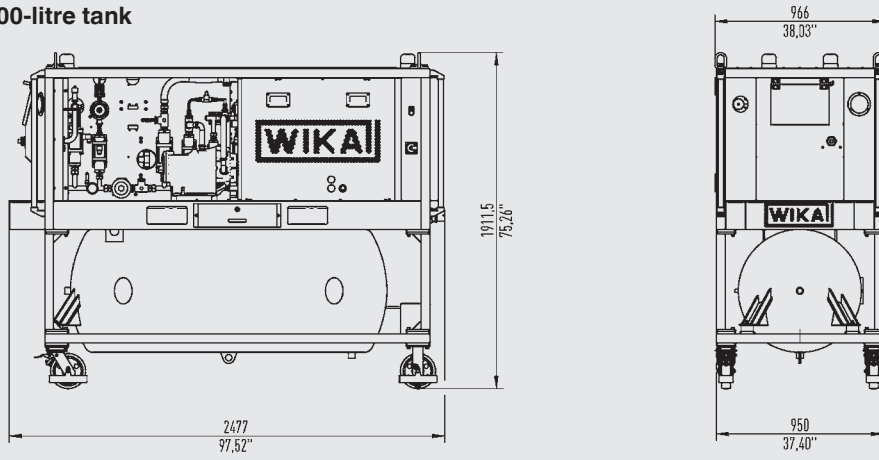
Tare weight: approx. 950 kg

### Version with 300-litre tank



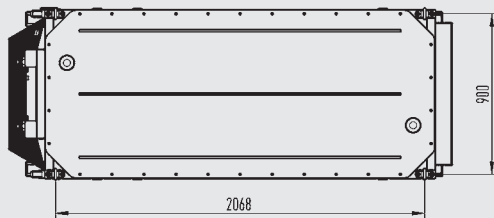
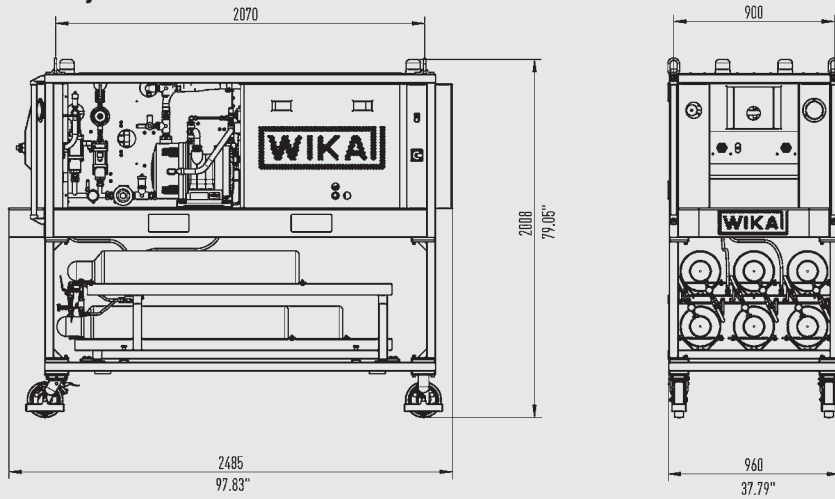
Tare weight: approx. 1,250 kg  
Weight (filled): approx. 1,500 kg

**Version with 600-litre tank**



Tare weight: approx. 1,500 kg  
Weight (filled): approx. 2,000 kg

**Version with 6-cylinder-rack**



Tare weight: approx. 1,050 kg

## Accessories

Hoses		Order number	
Nominal width	Length	Stainless steel	Rubber
DN 8	3 m	14294449	On request
	5 m	14330878	On request
	10 m	14335098	On request
	15 m	14307929	On request
DN 20	3 m	14290070	On request
	5 m	14307900	On request
	10 m	14327574	On request
	15 m	14307926	On request

Adapter	Order number
DN 8 (male) to DN 20 (female), brass	14096583
DN 8 (female) to DN 20 (male), brass	14284870

Spare parts and service kits	Order number
Oil for vacuum pump, 1 litre	On request
GPU-x-x000 filter set	14418175
Service kit for compressor (SF <sub>6</sub> gas)	On request (serial number of the equipment is required)
Service kit for vacuum compressor (SF <sub>6</sub> gas)	On request (serial number of the equipment is required)
Service kit for vacuum pump (air)	On request (serial number of the equipment is required)
Tarpaulin GPU-x-x000	14182499 (only for version with 300-litre tank)
Pavilion with side pieces for outdoor use	14182512
Trailer	On request

### Ordering information

Model / Oil-free vacuum compressor (SF<sub>6</sub> gas) / Vacuum pump (air) / Integrated tank, storage capacity / Accessories

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