

Portable SF₆ vacuum compressor

For extracting SF₆ gas

Model GVC-10

WIKA data sheet SP 63.13

Applications

- Module of the instrument series for the maintenance of SF₆ gas-filled equipment.
- Extraction of SF₆ gas

Special features

- Extraction up to residual pressure < 5 mbar abs.
- Free from oil and lubricants
- High leak tightness
- Vibration resistant and quiet
- Cool running in continuous operation



Portable SF₆ vacuum compressor, model GVC-10

Description

Portable service equipment series

The model GVC-10 vacuum compressor is a module of the portable service equipment series.

Modules of the instrument series:

- Portable vacuum pump, model GVP-10
- Portable SF₆ filter unit, model GPF-10
- Portable SF₆ vacuum compressor, model GVC-10
- Portable SF₆ transfer unit, model GTU-10
- Portable SF₆ gas cylinder scale, model GWS-10

Optimised extraction

In order to extract SF₆ gas compartments up to a residual pressure of 5 mbar abs., the model GVC-10 vacuum compressor is combined with the model GTU-10 transfer unit. The extracted SF₆ gas is pumped into a gas tank at the outlet of the module system.

Free from oil and lubricants

A pump which has been specifically optimised for this instrument series runs in the vacuum compressor.

The pump principle is particularly suited for SF₆ gas, as the wetted conveying chamber is completely separated from the pump drive. As a consequence, the process remains free from oil and lubricants.

Safe gas extraction

The self-closing valves at the inlet and outlet ensure a safe gas extraction. Thus, it can be excluded that SF₆ gas escapes into the atmosphere.

Specifications

Pump version

Free from oil and lubricants

Gas flow rate (at reference conditions)

- 3.6 m³/h at 50 Hz / 4.3 m³/h at 60 Hz
- 4.8 m³/h at 50 Hz / 5.8 m³/h at 60 Hz

Permissible inlet and outlet pressure

≤ 12 bar abs. [174 psia]

Starting conditions

Inlet pressure ≤ 1.2 bar abs. [17.4 psia]

Internal bypass

Inlet pressure > 1.2 ... 12 bar abs. [17.4 ... 174 psia]
(Pump will not start)

Residual pressure following extraction

< 5 mbar abs. [0.07 psia]

Power supply

Available versions

Standard	AC 230 V, 50 Hz, ±10 %
Option	AC 115 V, 60 Hz, ±10 %

Permissible ambient temperature

Storage: -20 ... +60 °C [-4 ... 140 °F]
Operation: 5 ... 40 °C [41 ... 104 °F]

Permissible humidity

≤ 90 % r. h. (non-condensing)

Ingress protection

IP20 (per IEC 60529)

Weight

30 kg [66 lbs]

Reference conditions

Inlet pressure

1 bar abs. [14.5 psia]

Outlet pressure

approx. 1 bar abs. [14.5 psia]

Ambient temperature

20 °C [68 °F]

CE conformity

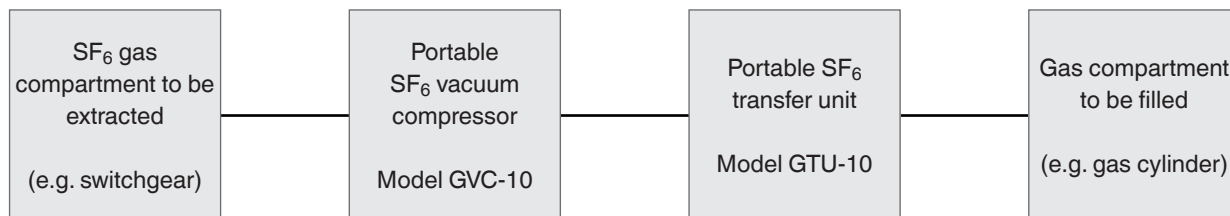
EMC directive

2014/30/EU, EN 61326 emission (group 1, class B) and interference immunity (industrial application)

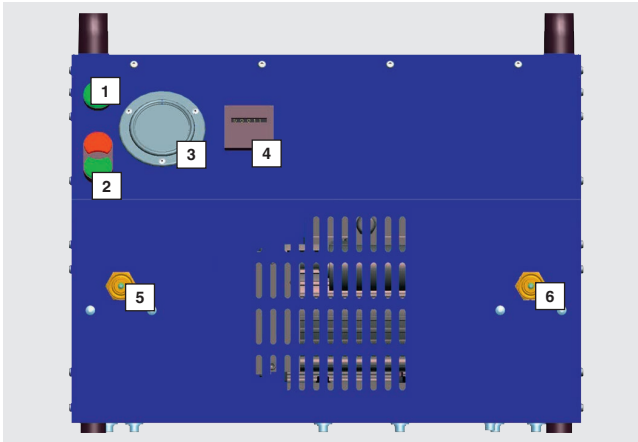
Machinery directive

2006/42/EC

System structure in schematic form

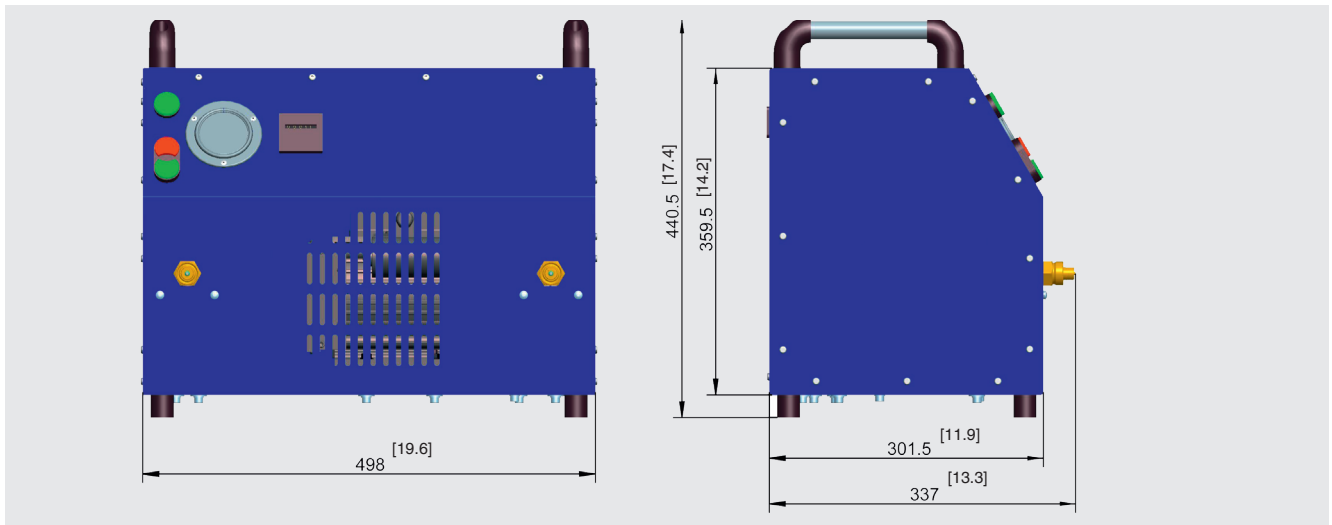


Lettering and controls



- 1 Signal lamp (green), pump in service
- 2 ON/OFF switch (white signal lamp signals readiness for operation)
- 3 Pressure display, inlet pressure
- 4 Operating hours counter
- 5 Valve coupling, inlet, DN 8
- 6 Valve coupling, outlet, DN 8

Dimensions in mm [inch]



Accessories

Designation	Order number
Connecting hose with self-closing valves, DN 8	
Stainless steel, length 3 m (9.8 ft)	14225424
Stainless steel, length 6 m (19.7 ft)	14225507
Stainless steel, length 12 m (39.4 ft)	14225513
Stainless steel, length 15 m (49.2 ft)	14225522
Rubber, length 3 m (9.8 ft)	14064928
Rubber, length 6 m (19.7 ft)	14064929
Rubber, length 12 m (39.4 ft)	14064931
Rubber, length 15 m (49.2 ft)	14064933
Adapter for gas cylinder	
DN 8 to W21.8 x 1/14" per DIN 477 No. 6	14074524
DN 8 to CGA590 0.960" 15/16"	14074523
DN 8 to 1" per DIN 477 No. 8	14074521
DN 8 to G 5/8" per BS 341 No. 6	14074525
Maintenance set vacuum compressor	
Sealing elements for pump room	14100021

Ordering information

Model / Power supply / Accessories

© 2014 WIKA Alexander Wiegand SE & Co. KG, all rights reserved.
The specifications given in this document represent the state of engineering at the time of publishing.
We reserve the right to make modifications to the specifications and materials.

