Equipment for Service and Maintenance of SF_6 -Switchgear and Circuit -Breaker

Certified acc. EC 305/2008

Adapter set

Adapter set for GTRU-MINI and GTRU-MAXI

Specification:

- Suitable for connection to gas compartment
- F. ex. for DN8, DN20, ABB, Siemens, GE and others

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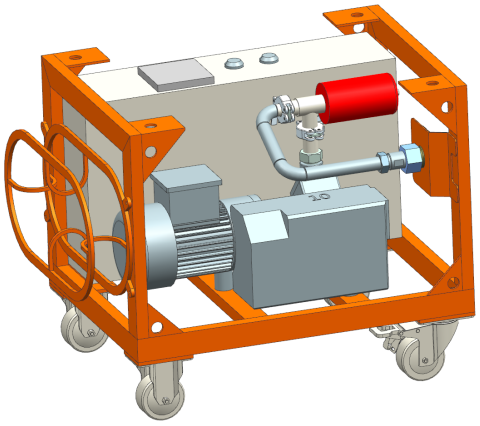
Vacuum Pump Unit

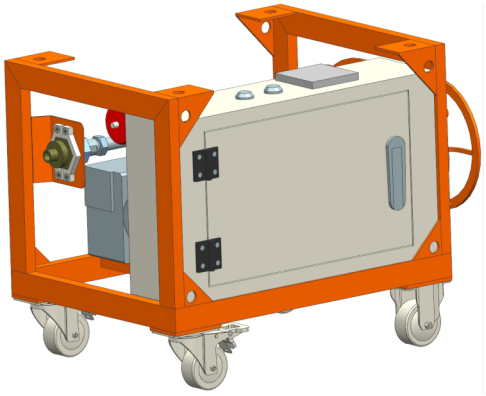
VPRU-25

VPRU-25

Mobile vacuum pumping unit for evacuating, measuring and refilling



SWISS MADE, robust and compact design
Stainless steel tubing
Vacuum pump: 25m^3/h, < 0,5 mbar
Quick closing valve
Pirani vacuum meter (- 1200 … 0) mbar
Max. permissible input pressure 1 bar atmospheric
5m DN20 steel braided or rubber hose
with coupling tongue part on both ends
DN8 connection for refilling and measuring
Steel frame with handle
1ph 220/240 VAC, 4 A, 50 Hz (0.55 kW)
Temperature range: +5 …+40°C
Weight: approx. 35 kg
Dimensions: 800 x 600 x 620 mm



Option:

Rubber hoses instead of metal clad hoses
Customized power supply
Leo Digital vacuum gauge
Adapter w/quick connection to all gas connection DN8,DN20
ALSTOM, ABB, Schneider, AREVA, Sprecher & Schuh
Customized design on request

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SF_6 - gas
Digital pressure gauge

Spezification

Messuring principle:	Sensor based
Range:	0 -...10 bar
Display:	pressure at 20°C
Units:	bar, mbar/hPa, kPa, MPa and PSI
Precision:	Class 0,1
Power supply:	3V battery (included)
Warning:	at low battery capacity
Battery lifetime:	approx. 100 hrs regular operation
Connection:	DN8, DN20—type standardized coupling
Adapter:	for different connections available on request
Packaging:	Robust polymer case

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SF_6 - gas
Digital vacuum gauge

Spezification

Mesuring principle:	Sensor (Pirani)
Material:	Stainless steeel, Epoxy, Wolfram
Range:	1000 - $5x10^{-4}$ mbar
Presisioni:	100 -1000 mbar: Faktor 2
	10 - 100 mbar: 30 %
	$5x10^{-4}$ - 10 mbar: 10 %
Ambient temperature:	+5... +40 °C
Power supply:	Standard 9 V battery (inkl.)
Lifetime:	up to 100 h at regular operation
Vacuum connector:	DN16KF, DN8, DN20
Dimension:	approx. 120 x 60 x 47 mm
Weight:	approx. 195 g, incl. battery
Adapter:	available for all gas connections on demand
Packaging:	Robust polymer casing

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P-32 SF_6 - leak detector

P-32 SF_6—leak detector, based on infrared technology

Applications

Locating and quantifying leakages at SF6 gas filled equipment
Determination of leak rate for final inspection of SF6 gas filled equipment.

Special features

- Smallest concentrations of up to 0.01 ppm_v can be detected
- Responds only to SF6 gas and is therefore not sensitive to humidity and common volatile organic compounds (VOC)
- Easy to use
- Fast response time
- Calibration in the factory using certified test gases

Description

The leak detector is used for the detection of the smallest SF6 gas concentrations and is thus ideal for detecting the place and size of leakages.

Infrared technology

The leak detector is based on the non-dispersive infrared technology (NDIR), offers fast response times and reliable measured values even in case of small leakages.

Simply operation

This instrument is characterised by simple handling and good readability. Both the hand-held instrument and the console case are equipped with a digital indicator which is easy to read. This allows reading the current SF6 gas values from any position.

The leakage detection is carried out using a hand-held instrument which has a movable gooseneck with gas inlet on the front side. An exchangeable filter prevents particles from being sucked in, thus protecting the infrared sensor.

A pump in the console case provides continuous flow of the sucked-in gas mixture through the sample chamber of the infrared sensor.

If the SF6 gas is already present in low concentrations in the measurement environment, this offset can be target to 0 ppm_v at the instrument. It makes the leakage detection easier, as every measured value greater than 0 ppmv represents leakage.

Depending on the version, the leak detector sends an acoustic alarm when a defined concentration is exceeded.

Specifications

Measuring Principle	Infrared (NDIR)
Measuring Range	Standard type: 0-1500ppm (Optional 0-1500ppm)
	Highly sensitive type: 0-50ppm
Sensitivity	Standard type: 1ppm
	Highly sensitive type: 0.01ppm
Accuracy	Standard type: 1ppm
	Highly sensitive type: 0.1ppm
Sampling Mode	Pump
Operating Temperature	-20 ~ 60□
Power Supply	4.2V, internal battery power supply,2200mAh
Response Time(T90)	1sec
Warm-up Time	100sec
Length of Probe Stylus	22cm
Lifespan	＞10 years

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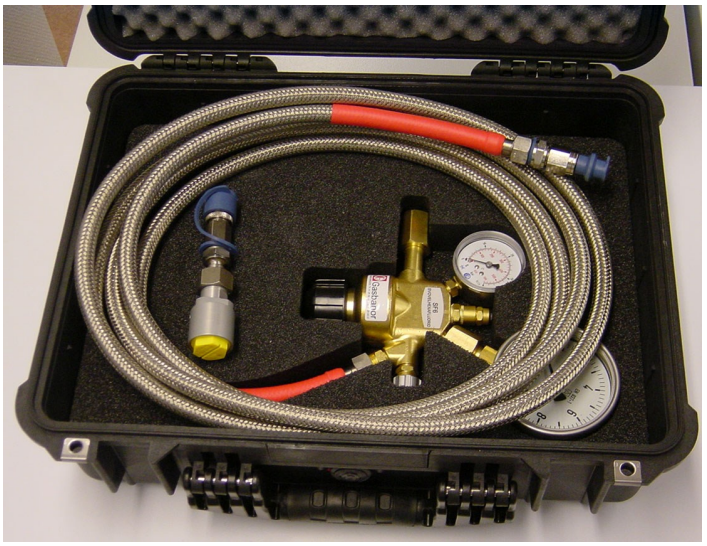
SF_6 - gas refilling device GRD - R01, R02, R03, R04

SF_6 gas refilling device GRD - R01, R02

Specification

- Pressure reducer for SF_6 – gas
- SF_6 – bottle connection W 21,8 x 1/14”
- Bottle manometer 0 — 40 bar
- Working manometer 0—10 bar
- Metal clad hose DN8—5 m
- Pressure in bar
- Adapter DN8 and DN20
- Robust plastic suitcase (R01, R02)



Option:

Rubber hose instead of metal clad hose

	Metal clad hose	Rubber hose
GRD– R01	X	
GRD– R02		X