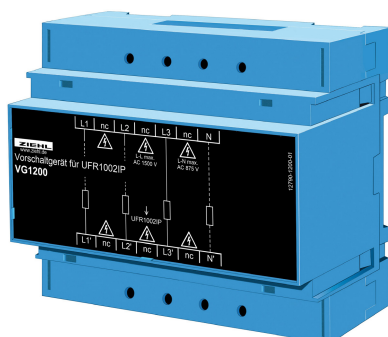# Coupling Device for Voltage Type VG1200
Measuring of voltages up to 1.200V with NA-Box UFR1200IP

Available 1st quarter 2023

VG1200

Part numbers:

VG1200 **S222312**

UFR1002IP **S222301**

In order to achieve higher efficiencies and to reduce line losses, inverters with a higher output voltage than the usual 3AC 400 V are often used in large on-site generation systems.

So that the grid and system protection can monitor this high voltage, it must be reduced. This is usually done with voltage converters.

With the VG1200IP coupling device, an ohmic voltage divider is available that takes on this task. In conjunction with the VG1200 coupling device, the UFR1002IP can measure voltages of up to 1200 V. The display in the UFR1002IP is scalable. This means that the voltages at the input of the VG1200 are displayed and the limits for protection against over- and undervoltage are set accordingly.

Both devices together meet the requirements of VDE-AR-N 4110 (feeding into the medium-voltage grid).

- Measuring of voltage up to 1200 V
- Max. error 2 %
- No voltage converters required
- Display of the correct voltage on the UFR1002IP (scalable)
- No supply voltage required
- Housing V6, 105 mm wide

Accessory:
ZIEHL NA-Box UFR1002IP
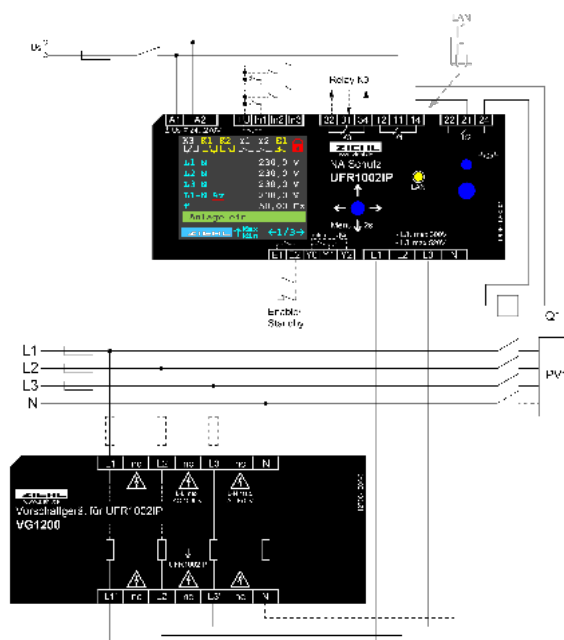
Technical Data

Measurement	3AC + N
Nominal voltage Un L-N	250...690 V
Nominal voltage Un L-L	440...1200 V
Measuring range	0...1,25 Un (continously)
Measurement accuracy UFR1002IP + VG1200	≤ 1,2% of nominal voltage (of UFR1002IP)
Frequency range	AC 45...65 Hz
Overvoltage category	III
Pollution degree	2
Protection category	II (with UFR1002IP)
Rated impulse voltage	10,5 kV
Basic isolation	L1, L2, L3, N
Reinforced isolation	Electronics - Housing
Internal resistance Ri	1,8 MOhm / measuring channel
Residual current (single error)	<0,9 mA @1500 V_{L-L}
Protection class	Housing = IP30 / Terminals = IP20
Perm. ambient temperature	-20...55 °C
Housing	Design V6
Dimensions (H x B x T)	V6: 90x 105 x 58 [mm], Fitting height 55 mm
Attachment	35 mm standard rail according EN 60 715